|    |                |             | T          | RailTel response to Pre-bid queries: VSS  | Tender ( no. RailTel/Tender/OT/CO/P/2017-18/VSS)  | <u>/432)</u>       |  |
|----|----------------|-------------|------------|---|---|--------------------|--|
| SN | Section<br>No. | Page<br>No. | Point No.  | Content of RFP Requiring Clarification  | Points of clarification required  | Query raised<br>by | RailTel Response   |
| 1  | 2              | 8           | SOR HEAD I | SCHEDULE 'A'  | 9U Rack Qty. is not mentioned in the SOR.Please clarify.  | SSTL               | Please refer SOR Head-I item no. 6(e) and 6 (f) of packages.   |
| 2  | 2              | 39          | IV         | RailTel is also implementing Wi-Fi work at railway stations, therefore, the existing available infrastructure may be utilized by the purchaser for implementation of VSS system and such items used may not be considered as a part of Supply orders.           | Please clarify the type of material i.e Active/passive can be utilized from the Wi-Fi infrastructure and the tentative items that can be utilized from Wi-Fi infrastructure.    | SSTL               | Clause is self explainatory. Bidder is required to quote quantity as per SOR.  |
| 3  | 2              | 41          | XVII       | Rack Space at Datacenters and associated charges: RailTel will provide Racks at Gurugram and Hyderabad datacenter for hosting VSS Cloud infrastructure as defined in the tender. Bidders are requested to optimize the number of racks requirement in the datac | Please clarify the in which head the data centre rack cost will be taken and the number of years the cost will be added ass per clause the Rack cost will taken as /Annum/Rack. |                    | Please see the corrigendum. All clarifications are given there.  |
| 4  | 3.A.1.         | 48          | 3.A.1.6    | The bidder shall be responsible for transportation and storage of Equipment and all other items required for Installation and Commissioning of the network to RailTel's stores/sites as advised.  | Please Clarify whether Railtel/Railway will provide store room at each station for storage of Material during I&C period.   | SSTL               | Bidder is required to arrange their own store for the same.  |
| 5  | 3.A.1.         | 50          | 3.A.1.10   | To provide professional training and development services at each stage of the project viz. installation, testing, operation and maintenance  | Please clarify the training location is centralized or need to provide at different locations in a region.  | SSTL               | Centralized as well as distributed locations<br>such as Stations, Region HQ, RPF Chowkis<br>etc. as per requirement. |
| 6  | 3.A.1.         | 51          | 3.A.1.11   | The VSS shall be considered to be commissioned only after successful completion of the SAT, trial Run, successful completion of 12 months of Maintenance Supervision after issue of PAC and after issue of Final Acceptance Certificate (FAC).                  | Can bidder apply for Station wise PAC or need to apply for all stations in one go.  | SSTL               | Please refer tender clause 3.D.7 (Provisional Acceptance Certificate).   |
| 7  | 3.B.2          | 54          |            | A 12 core fiber cable will start from this termination point of 2 cores of 12 core cable at aggregation location and connect each access switch location on that platform in ring topology physically and star topology logically.                              | Please clarify that Fiber cable & UTP cable can be layed through same PVC Pipe or seprate PVC pipe will be used for fiber & utp cables.   | SSTL               | Same may be used.  |
| 8  | 3.B.2          | 54          |            | If there is a requirement to connect more access switches for platform extension, any other locations or any other services aggregation switch will have sufficient ports available. Also there will be sufficient fiber core available to make this connectivi | Please clarify that how many ports will be left in each access switch for further expansion of the system as there is no guideline for expansion.                               | SSTL               | Bidder to quote quantity of switches as per SOR.   |
| 9  | 3.B.3          | 55          | 3.B.3.1    | Network Design for A1 Type stations   | Please clarify the connectivity type i.e. ethernet or fiber for common Areas, ticket Counter etc and also please specify the payment method of the same.                        | SSTL               | Please refer clause 3.A.1.4.2 of Chapter-3.  |
| 10 | 3.B.2          | 54-55       |            | 4 sq.mm 3 core power cables will also be drawn from this UPS systems to each access switch location.  | In Diagram 2.5 Sqmm Cable mention.Please clarify.   | SSTL               | Dimension of cable in typical diagram are indicative in nature, bidder to quote as per SOR.                          |
| 11 | 3.B.2          | 54-55       |            | A 12 core fiber cable will start from 24 port FDMS/LIU towards each platform and will ter-minate to same 24 port FDMS/LIU on same location after completing a physical ring of ca-ble. First 2 cores of this 12 core fiber cable will be terminated at aggregat | In Diagram 24 Core Fibre Cable mention. Please clarify  | SSTL               | Dimension of cable in typical diagram are indicative in nature, bidder to quote as per SOR.                          |

| 12 | 3.B.2 &<br>3.B.3.1 | 54-55 |                        | 3.B.2 Further, IP Cameras will connect on CAT-6 STP cables to these access switches to provide video service     3.B.3.1 Further IP Surveillance Cameras, Wi-Fi Access Points and Information Display Units will connect on Cat5e/Cat6 UTP cables  | Please clarify Type of Cable required for Switch To IP<br>Camera Connectivity. As CAT-6 STP & Cat5e/Cat6 UTP<br>cables are mentioned.  | SSTL | STP CAT-6 will be used for Switch to<br>Camera Connectivity. Please also refer SOR<br>Head-I Item no.7 of packages where STP<br>CAT-6 has been asked. |
|----|--------------------|-------|------------------------|--|--|------|---|
| 13 | 3.B.8              | 64-65 | 3.B.8.2                | The Panic Switches shall be installed at each Platform. The potential free contact of the Panic Switch shall be connected to the Alarm Input of the IP Fixed or PTZ Camera installed nearby wherein Panic Switch is in the Field of View of the Camera.  | Specific Location/Minimum-Maximum Distance / for<br>Installation of Panic Switch.  | SSTL | This shall as per approved site plan. Please refer tender clause 3.A.1.4.2 of Chapter-3.  |
| 14 | 3.D.3              | 70    | 3.D.3.3                | On arrival of such cleared equipment in India, sample tests covering only visual and functional parameters shall be undertaken by RDSO.  | Please clarify that all equipment will undergo Visual & Functional Parameter test by RDSO.   | SSTL | Please refer Annexure-V of Chapter-7 for inspection procedure.  |
| 15 | 3.D.5.             | 71    | 3.D.5.                 | A list of Pre-Commissioning tests (same as approved by the Purchaser/Engineer for site acceptance testing) and activities shall be prepared by bidder and the test shall be carried out by the bidder on his own. After the tests have been conducted to the bi  | Please clarify the Site Acceptance Testing will be offered to Zonal Level or at Station Level or Regional level.   | SSTL | Please refer tender clause 3.D.6 (Site Acceptance Test).  |
| 16 | 4.A.4              | 80-81 | 4.A.4.1                | The first phase of deliverable also includes a Pilot and only after approval from the Indian Railways/RailTel, bidder shall be allowed to implement the solution further.  | Please clarify the approval Timeline on further phase target depend upon Phase 1 Approval.   | SSTL | Nominal time shall be taken for approval. However, if there is a delay on account of approval, same shall be looked into by Competent Authority.      |
| 17 | 4.A.4.6            | 83    | 4.A.4.6.1              | Submission of Design Document for proposed video surveillance system indication all the components of the Edge infrastructure of VSS system including cameras, servers, Video Recording & Processing Units, switches, etc. for RailTel's approval  | Time line for approval as delay may impact on next phase target date.completion Target.  | SSTL | Nominal time shall be taken for approval. However, if there is a delay on account of approval, same shall be looked into by Competent Authority.      |
| 18 | 4.A.14             | 94-95 | 4.A.14.1 , SI.<br>No.1 | The bidder should be Original Equipment Manufacturer (OEM) of Camera (as indicated in Bid Data Sheet (BDS) of Chapter 5) for at least past three years in the country from where the proposed equipment are planned to be manufactured for supply. The OEM should have proven facilities for Engineering, manufacture, assembly, integration and testing of VSS system and basic facilities with respect to space, Engineering, Personnel, Test equipment, Manufacture, Training, Logistic Supports for at least past three years in the country from where the proposed equipment are planned to manufacture for supply for this work.  Orl  The bidder should be a Company registered in India under the Companies Act (India) with their registered office in India should have been operating in the System Integration services for the last three years. | There is clause in tender defining Similar Work as "Works entailing completion of Supply, Installation, Testing and Commissioning of a project in the field of Security/IT/Telecom hence  We request that Clause "The bidder should be a Company registered in India under the Companies Act (India) with their registered office in India should have been operating in the System Integration services for the last three years" may be mended as  "The bidder should be a Company registered in India under the Companies Act (India) with their registered office in India should have been operating in the System Integration services/ Telecom Business for the last three years" | SSTL | Clause as per tender/corrigendum prevails.  |
| 19 | 4.A.14             | 95    | 4.A.14.1 , SI.<br>No.3 | The bidder should have received a minimum cumulative contract amount from the Security/IT/Telecom business in the last three financial years plus current year up to the date of opening of tender.  | We request that clause may be mended to  "The bidder should have received a minimum cumulative contract amount/ Annual Turnover from the Security/IT/Telecom business in the last three financial years plus current year up to the date of opening of tender.   | SSTL | Clause as per tender/corrigendum prevails.  |

| 20 | 4.A.14 | 96  | 4.A.14.1 , SI.<br>No.4 | The bidder should have a positive net worth  (Net Worth of the company would be computed as on 31st March 2018 as the summation of share capital, reserves and surpluses less accumulated losses held by the company)  [Note:- In case of Consortia/JV, Net worth]   | 1. Majority of Telecom Companies are non- profit making due to stiff Competition , which impacts their Positive Networth .  2. The large companies applying Ind -AS accounting standard is classifying the promotor preference capital as financial liability and therefore making net worth as negative in certain cases  3. The criteria of paid up capital is more appropriate along with liquidity condition to access the financial ability of company to perform contract  It may please be appreciated that Companies has made huge investment and execute large scale project , Hence Companies capability should not be doubted upon and following Points in regards to networth may please be considered .  a. The criteria of paid up capital of 500 Crore should be considered or  b. Credentials of Parent Company should be considered while computing Net worth . | SSTL   | Clause as per tender/corrigendum prevails.                          |
|----|--------|-----|------------------------|--|--|--------|---|
| 21 | 4.A.15 | 96  | 4.A.14.1 , SI.<br>No.5 | The bidder should have completed  II. Package II: Western  a.) At least one similar work# worth of INR 47.63 crores in last three financial years plus current year up to the date of opening of tender.  OR  b.) Two similar works# worth of INR 27.22 Crores   | We may request in Pre- Bid that Telecom Business experience has been allowed in Similar work experience hence Deployments made by Telecom Service Provider for their captive use may be considered for Fulfillment and Balance sheet of past 3 years depicting Plant and machinery under tangible assets may be treated as supporting document  Credentials of Group company should be considered for qualifying fulfillment of this criteria  | SSTL   | Clause as per tender/corrigendum prevails.                          |
| 22 | 8.18.  | 231 | 2                      | Video Recording & Processing Unit shall be installed at each <b>Platform/Station</b> and shall have Software for Video Management, Video Recording and Analytics as defined in Tender Clause 8.3. In case of MPLS/IP Network Connectivity failure, Video Stream and Alarms would be stored locally at the Video Recording & Pro-cessing Unit for that duration and would transfer these data automatically to RPF/GRP Thana/Post when the network recovers without any impact on the sys-tem operations. | Please clarify that the Software for Video Management,<br>Video Recording and Analytics is required at each Platform<br>or Station or RPF Thana Chowki.  | SSTL   | Please refer to tender/ corrigendum which will prevai and is clear. |
| 23 | 8.3    | 211 | 8.3.2.3.1.3            | The FRS will get the UHD feed from Recording Server at RPF/GRP Thana/Post for running Face Recognition algorithm and send alarms to designated clients at RPF/Div. HQ (Control Room)/others.   | Please specify whether only 4k UHD cameras to be used for FRS or feed from other lower resolution cameras will be used for FRS as well   | IDEMIA | Clause is self explainatory.  |
| 24 | 8.3    | 211 | 8.3.2.3.1.3            | The FRS will get the UHD feed from Recording Server at RPF/GRP Thana/Post for running Face Recognition algorithm and send alarms to designated clients at RPF/Div. HQ (Control Room)/others.   | Please specify bandwidth, format and resolution of feed from camera at each station to cluster.  | IDEMIA | Please refer tender clause 8.3.2.3 along with corrigendum.          |
| 25 | 8.3    | 211 | 8.3.2.3.1.3            | The FRS will get the UHD feed from Recording Server at RPF/GRP Thana/Post for running Face Recognition algorithm and send alarms to designated clients at RPF/Div. HQ (Control Room)/others.   | Please specify bandwidth, format and resolution of feed from video recorder to FRS Server.   | IDEMIA | Clause is self explainatory.  |

|    |     |     |             | The FRS will get the UHD feed from Recording   |  |        |  |
|----|-----|-----|-------------|--|--|--------|--|
| 26 | 8.3 | 211 | 8.3.2.3.1.3 | Server at RPF/GRP Thana/Post for running Face<br>Recognition algorithm and send alarms to<br>designated clients at RPF/Div. HQ (Control<br>Room)/others. | Please specify bandwidth available from FRS Server to FRS workstation  | IDEMIA | FRS matching server and Workstation<br>both are Co-located at RPF/GRP<br>Thana/Post in the same local network.   |
| 27 | 8.3 | 209 | 8.3.1.1.3   | This Central Watchlist shall be in sync with each individual RPF/GRP Thana/ Post local FRS servers as per daily schedule.                                | Please specify how many watch list needs to be supported at central and cluster level. It will help in designing the solution and server sizing.   | IDEMIA | Please refer clause 8.3.1.1.3 of Chapter-<br>8 & RDSO specs.   |
| 28 | 8.3 | 209 | 8.3.1.1.3   | This Central Watchlist shall be in sync with each individual RPF/GRP Thana/ Post local FRS servers as per daily schedule.                                | Please specify maximum size of watch lists.  | IDEMIA | As per RDSO Specification.   |
| 29 | 8.3 | 209 | 8.3.1.1.3   | This Central Watchlist shall be in sync with each individual RPF/GRP Thana/ Post local FRS servers as per daily schedule.                                | Please specify whether cluster watchlist will be same<br>as central watchlist or central watchlist will<br>accumulate watchlists created at cluster level.   | IDEMIA | Please refer clause 8.3.1.1.3 of Chapter-<br>8 & RDSO specs  |
| 30 | 8.3 | 209 | 8.3.1.1.3   | This Central Watchlist shall be in sync with each individual RPF/GRP Thana/ Post local FRS servers as per daily schedule.                                | Please specify will the watchlist be created at central level and then pushed to each cluster OR it can be created/amended at cluster level too and then synchronized with central and from central to other clusters  | IDEMIA | Clause as per tender/corrigendum prevails.   |
| 31 | 8.3 | 209 | 8.3.1.1.3   | This Central Watchlist shall be in sync with each individual RPF/GRP Thana/ Post local FRS servers as per daily schedule.                                | Please specify will it be allowed to delete images from watch list at cluster level. Because this will be synchronized with Central watchlist and thereafter with all cluster level watch lists. This could create a security issue if someone tampers with watch lists at cluster level. If some or all images of watchlist at cluster level are deleted, after synchronization, the images will be deleted from central and other clusters watchlists as well. It is recomended to allow deletion of images from central watch list only | IDEMIA | Clause as per tender/corrigendum prevails.   |
| 32 | 8.3 | 209 | 8.3.1.1.3   | Bidder to propose Database server for Facial<br>Recognition system in High Availability (HA) mode<br>in RailTel Datacenter.                              | Please specify if FRS will be installed in both DC or DR to manage watchlists and alerts.  | IDEMIA | Database server for FR shall be hosted in RailTel Datacenter in HA mode (Gurugram/Secunderabad) for each Region. |
| 33 | 8.3 | 209 | 8.3.1.1.3   | Bidder to propose Database server for Facial<br>Recognition system in High Availability (HA) mode<br>in RailTel Datacenter.                              | Please specify what will be the redundancy ratio for FRS in HA mode in DC  | IDEMIA | Clause is self explainatory.   |
| 34 | 8.3 | 209 | 8.3.1.1.3   | Bidder to propose Database server for Facial<br>Recognition system in High Availability (HA) mode<br>in RailTel Datacenter.                              | Please specify what will be the redundancy ratio for FRS in HA mode in DR  | IDEMIA | Database server for FR shall be hosted in RailTel Datacenter in HA mode (Gurugram/Secunderabad) for each Region. |
| 35 | 8.3 | 209 | 8.3.1.1.3   | Bidder to propose Database server for Facial<br>Recognition system in High Availability (HA) mode<br>in RailTel Datacenter.                              | Please specify if HA configuration of FRS servers is required in both DC and DR OR HA should be considered as primary server in DC and redundant in DR   | IDEMIA | Database server for FR shall be hosted in RailTel Datacenter in HA mode (Gurugram/Secunderabad) for each Region. |

| 36 | 8.3 | 209 | 8.3.1.1.3 | Bidder to propose Database server for Facial<br>Recognition system in High Availability (HA) mode<br>in RailTel Datacenter.   | Please specify what will be the alerts and watchlist synchronization schedule between DC and DR servers                               | IDEMIA | Database server for FR shall be hosted in RailTel Datacenter in HA mode (Gurugram/Secunderabad) for each Region.                           |
|----|-----|-----|-----------|---|---|--------|--|
| 37 | 8.3 | 208 | 8.3.1.1.1 | For implementation of the proposed system, it is assumed that there would be 552 Clusters constituting RPF/GRP Thana/Post receiving video feeds from group of stations based on jurisdiction of that respective RPF/GRP Thana/Post through MPLS/ IP network. Therefore, bidder is required to propose a cluster based solution constituting Servers, Storage, Switches and Video applications etc. at RPF/GRP Thana/Post locations on the basis of following design parameters  | Please share FRS will be installed on how many<br>clusters.   | IDEMIA | All 552 clusters. Please refer tender<br>clause 8.3 of Chapter-8.  |
| 38 | 8.3 | 208 | 8.3.1.1.1 | For implementation of the proposed system, it is assumed that there would be 552 Clusters constituting RPF/GRP Thana/Post receiving video feeds from group of stations based on jurisdiction of that respective RPF/GRP Thana/Post through MPLS/ IP network. Therefore, bidder is required to propose a cluster based solution constituting Servers, Storage, Switches and Video applications etc. at RPF/GRP Thana/Post locations on the basis of following design param-eters | Please share the distance between stations and<br>RPF/GRP Thana/Post cluster location for each cluster<br>where FRS will be installed | IDEMIA | The list of stations is being uploaded with corrigendum. May please take distances as per stations which varies from one to other station. |
| 39 | 8.3 | 208 | 8.3.1.1.1 | For implementation of the proposed system, it is assumed that there would be 552 Clusters constituting RPF/GRP Thana/Post receiving video feeds from group of stations based on jurisdiction of that respective RPF/GRP Thana/Post through MPLS/ IP network. Therefore, bidder is required to propose a cluster based solution constituting Servers, Storage, Switches and Video applications etc. at RPF/GRP Thana/Post locations on the basis of following design param-eters | Please share the list of cluster wise stations with category to calculate number of cameras per cluster.                              | IDEMIA | The list of stations is being uploaded with corrigendum.   |

| 40 | 8.3    | 208 | 8.3.1.1.1                                     | For implementation of the proposed system, it is assumed that there would be 552 Clusters constituting RPF/GRP Thana/Post receiving video feeds from group of stations based on jurisdiction of that respective RPF/GRP Thana/Post through MPLS/ IP network. Therefore, bidder is required to propose a cluster based solution constituting Servers, Storage, Switches and Video applications etc. at RPF/GRP Thana/Post locations on the basis of following design param-eters | Please specify the number of users to be supported by FRS server at each cluster and at central level   | IDEMIA    | As per RDSO Specifications and solution requirement of offered solution.  |
|----|--------|-----|---|---|---|-----------|---|
| 41 | 8.3    | 211 | 8.3.2.3.1.3                                   | The FRS will get the UHD feed from Recording Server at RPF/GRP Thana/Post for running Face Recognition algorithm and send alarms to designated clients at RPF/Div. HQ (Control Room)/others.  | Please specify if it is required to integrate and send alarms from FRS to VMS   | IDEMIA    | Yes.  |
| 42 | 8.3    | 211 | 8.3.2.3.1.3                                   | The FRS will get the UHD feed from Recording Server at RPF/GRP Thana/Post for running Face Recognition algorithm and send alarms to designated clients at RPF/Div. HQ (Control Room)/others.  | Please specify what are the other designated clients  | IDEMIA    | Other could be clients at Command and control center, stations etc. Bidder is required to ensure sufficient numbers of client licenses as per solution requirement. |
| 43 |        |     | Clause No.<br>19.25 (b):<br>RDSO<br>Specs FRS | Face recognition shall have false negative identification Rate (FNIR) with Rank-1, shall be less than or equal to 10% in passenger gate dataset type (Semi Non- cooperative) with N=480 and less than or equal to 70% with high near field of view criteria in sports Arena dataset type (Non-cooperative) with N= 480 of latest NIST report (Face in video Evaluation).  | Above-mentioned point is specifically favoring specific FRS OEM . There are other vendors also who have participated in "Face in Video Evaluation (FIVE) Face Recognition of Non-Cooperative Subjects" and the report was published in March 2017. The report is publically available. But by specifically putting this one test out of so many tests in complete NIST report, is just favouring vendor and is not allowing other vendors to participate. Ideally, Overall NIST Report results should be considered. Such a requirement to have one specific algorithms match the criteria is favoring just 1 vendor and is not vendor neutral. | l         | As per RDSO Specification.  |
| 44 | 8.14.1 | 221 | 5.1   | Solution must be capable of passively gathering information about network   | NGFW sits at perimeter hence it is difficult to keep a watch on endpoints –hence request to amend this specific point to not include end points   | SONICWALL | NFGW is not proposed at Thana/post in corrigendum-2 but only at DC & DR.  |
| 45 | 8.14   | 222 | 5.16  | Solution should support the capability to configure the access policy on the basis of IP Address, User ID/Group, VLAN, Network, Objects, Device type, Location, Ports, Protocols, etc.  | Various ways to write access control policy – e.g IP address, usereID/Group, VLAN, network objects, Port /Protocol are enough to have stringent access control, device can be an optional component.  Request to make device type as optional for access control Policy.  | SONICWALL | NFGW is not proposed at Thana/post in corrigendum but only at DC & DR.  |

| 46 | Chapter-2 -<br>Schedule of<br>requirement<br>: PACKAGE-I:<br>NORTHERN<br>REGION -<br>Schedule A           | 9   | 2 (b)                      | PC Workstation as defined in clause 8.6 of chapter 8 for viewing, monitoring and system management including 24" monitor, all required licensed software, spike buster 500VA UPS with backup for 30 minutes power failure without interruption, and all other | "Specifications of 500VA UPS Systems has not been specified in the RFP. Request to kindly share the  | Tritronics | 1. UPS should back up for 30 minutes power failure without interruption. 2. Yes, UPS is required with inbuilt surge protection. 3. Warranty as per Tender. |
|----|---|-----|----------------------------|---|--|------------|--|
| 47 | Chapter-2 -<br>Schedule of<br>requirement<br>: <u>PACKAGE-</u><br><u>II: WESTERN</u> -<br>Schedule A      | 17  | 2 (b)                      | required accessories  | technical Specifications of the same. Also, it is requested to kindly clarify 500 VA UPS required is   | Tritronics | UPS should back up for 30 minutes power failure without interruption.     Yes, UPS is required with inbuilt surge protection.     Warranty as per Tender.  |
| 48 | Chapter-2 -<br>Schedule of<br>requirement<br>: <u>PACKAGE-</u><br><u>III: EASTERN</u> -<br>Schedule A     | 24  | 2 (b)                      |   | 500 VA UPS. Does it imply that 500 VA UPS is required with inbuilt surge protection device (SPD)?  Warranty on batteries for UPS may be considered for 1 year/ 2 years being a consumable item." | Tritronics | UPS should back up for 30 minutes power failure without interruption.     Yes, UPS is required with inbuilt surge protection.     Warranty as per Tender.  |
| 49 | Chapter-2 -<br>Schedule of<br>requirement<br>: <u>PACKAGE-<br/>IV:</u><br><u>SOUTHERN</u> -<br>Schedule A | 32  | 2 (b)                      |   |  | Tritronics | 1. UPS should back up for 30 minutes power failure without interruption. 2. Yes, UPS is required with inbuilt surge protection. 3. Warranty as per Tender. |
| 50 | Chapter-8 -<br>Technical,<br>Functional<br>Requireme<br>nts &<br>Specificatio<br>ns                       | 227 | 8.16.1.<br>1KVA- S.<br>No1 | Capacity - 1KVA/800 W, better as per actual requirement   | It is requested to kindly amend the clause to read as<br>1 KVA/ 700W i.e. Output Factor - 0.7 Lag, which is as<br>per industry standards   | Tritronics | Clause as per tender/corrigendum prevails.   |
| 51 | Chapter-8 -<br>Technical,<br>Functional<br>Requireme<br>nts &<br>Specificatio<br>ns                       | 227 | 8.16.1.<br>1KVA- S.<br>No5 | Input power factor correction - 0.99  | It is requested to kindly amend the Input Power Factor to ≥ 0.9, which is as per industry standards.   | Tritronics | Corrigendum uploaded.  |

|    |   |     |                              | Output Power factor - 0.8 or better      |   |            |  |
|----|---|-----|------------------------------|--|---|------------|--|
| 52 | Chapter-8 -<br>Technical,<br>Functional<br>Requireme<br>nts &<br>Specificatio<br>ns             | 227 | 8.16.1.<br>1KVA- S.<br>No7   | output rower factor 6.6 or setter        | It is requested to kindly amend the clause to read as "Output Factor - 0.7 Lag", which is as per industry standards   | Tritronics | Clause as per tender/corrigendum prevails. |
| 53 | Chapter-8 -<br>Technical,<br>Functional<br>Requireme<br>nts &<br>Specificatio<br>ns             | 227 | 8.16.1.<br>1KVA- S.<br>No9   | Frequency (output) - 50Hz/60Hz frequency | Kindly amend Output Frequency to 50Hz (± <b>0.5%)</b> as 60 Hz is not relevant for Indian Power Conditions.   | Tritronics | Corrigendum uploaded.                      |
| 54 | Chapter-<br>8 -<br>Technica<br>I,<br>Function<br>al<br>Require<br>ments &<br>Specifica<br>tions | 227 | 8.16.1.<br>1KVA - S.<br>No10 | Voltage Range (Bypass) - 120VAC~288VAC   | It is requested to kindly amend the clause to read as:  "Input Voltage Range - 160V AC-270V AC" which is as per industry standards & covers the voltage variation issues prevalent in Indian Sub Continent. | Tritronics | Corrigendum uploaded.                      |
| 55 | Chapter-<br>8 -<br>Technica<br>I,<br>Function<br>al<br>Require<br>ments &<br>Specifica<br>tions | 227 | 8.16.1.<br>1KVA - S.<br>No12 | PF - >=0.99                              | It is requested to kindly amend the Input Power Factor to ≥ 0.9, which is as per industry standards.  | Tritronics | Corrigendum uploaded.                      |
| 56 | Chapter-<br>8 -<br>Technica<br>I,<br>Function<br>al<br>Require<br>ments &<br>Specifica<br>tions | 227 | 8.16.1.<br>1KVA - S.<br>No21 | Port - USB                               | USB/ RS 232 may kindly be allowed.  | Tritronics | Clause as per tender/corrigendum prevails. |

| 57 | Chapter-<br>8 -<br>Technica<br>I,<br>Function<br>al<br>Require<br>ments &<br>Specifica<br>tions | 227 &<br>228 | 8.16.1.<br>1KVA- S.<br>No22/ 23 | Battery Type - SMF<br>Battery backup - 1 Hrs. on full load (Single bank) | It is requested to kindly specify Minimum VAH capacity. This will provide common platform to all prospective bidders.  "Suggested Minimum VAH: 1500 VAH". Also, warranty on batteries may be specified for 2 years being a consumable item.                                   | Tritronics | Clause as per tender/corrigendum prevails. |
|----|---|--------------|---------------------------------|--|---|------------|--|
| 58 | Chapter-<br>8 -<br>Technica<br>I,<br>Function<br>al<br>Require<br>ments &<br>Specifica<br>tions | 228          | 8.16.1.<br>1KVA-<br>S. No24 C   | Tel line surge protection - inbuilt                                      | It is strongly recommended to consider UPS with Inbuilt transformer to enable galvanic isolation between input & output (as per GEM/ DGS&D/ NIC Specifications) in order to provide adequate protection to sensitive loads from the variations of input power s               | Tritronics | Corrigendum uploaded.                      |
| 59 | Chapter-<br>8 -<br>Technica<br>I,<br>Function<br>al<br>Require<br>ments &<br>Specifica<br>tions | 228          | 8.16.1.<br>1KVA-<br>S. No24 F   | Size - not more than 2U rack mountable                                   | It is requested <b>Tower Type</b> may be considered. Tower Type UPS are easy in transportation & for rugged use. Rack type arrangement may not be ideally suited for rugged use. Hence it is requested to kindly amend the UPS requirement to <b>Tower</b> Type/ Rack type UP | Tritronics | Clause as per tender/corrigendum prevails. |
| 60 | Chapter-<br>8 -<br>Technica<br>I,<br>Function<br>al<br>Require<br>ments &<br>Specifica<br>tions | 228          | 8.16.2 UPS<br>2KVA: S.<br>No1   | Capacity - 2KVA/1600 W   | It is requested to kindly amend the clause to read as 2 KVA/ 1400W i.e. Output Factor - 0.7 Lag, which is as per industry standards   | Tritronics | Clause as per tender/corrigendum prevails. |

| 61 | Chapter-<br>8 -<br>Technica<br>I,<br>Function<br>al<br>Require<br>ments &                       | 228 | 8.16.2 UPS<br>2KVA: S.<br>No5  | Input power factor correction - 0.99     | It is requested to kindly amend the Input Power Factor to ≥ 0.9, which is as per industry standards.                | Tritronics | Corrigendum uploaded.                      |
|----|---|-----|--------------------------------|--|---|------------|--|
| 62 | Specifica<br>tions  Chapter- 8 - Technica I, Function al Require ments &                        | 228 | 8.16.2 UPS<br>2KVA:<br>S. No7  | Output Power factor - 0.8 or better      | It is requested to kindly amend the clause to read as "Output Factor - 0.7 Lag", which is as per industry standards | Tritronics | Clause as per tender/corrigendum prevails. |
| 63 | Specifica<br>tions  Chapter- 8 - Technica I, Function al Require ments & Specifica tions        | 228 | 8.16.2 UPS<br>2KVA:<br>S. No9  | frequency (output) - 50Hz/60Hz frequency | Kindly amend Output Frequency to 50Hz (± 0.5%) as 60 Hz is not relevant for Indian Power Conditions.                | Tritronics | Corrigendum uploaded.                      |
| 64 | Chapter-<br>8 -<br>Technica<br>I,<br>Function<br>al<br>Require<br>ments &<br>Specifica<br>tions | 228 | 8.16.2 UPS<br>2KVA: S.<br>No11 | PF - >=0.99                              | It is requested to kindly amend the Input Power Factor to ≥ 0.9, which is as per industry standards.                | Tritronics | Corrigendum uploaded.                      |

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|----|---|-----|-----------------------------------|--|--|------------|--|
| 65 | Chapter-<br>8 -<br>Technica<br>I,<br>Function<br>al<br>Require<br>ments &<br>Specifica<br>tions | 229 | 8.16.2 UPS<br>2KVA: S.<br>No20    | Port - USB   | USB/ RS 232 may kindly be allowed.   | Tritronics | Clause as per tender/corrigendum prevails. |
| 66 | Chapter-8 - Technica I, Function al Require ments & Specifica tions                             | 229 | 8.16.2 UPS<br>2KVA: S.<br>No21/22 | Battery Type - SMF<br>Battery backup - 1 Hrs. with full load | It is requested to kindly specify Minimum VAH capacity. This will provide common platform to all prospective bidders.  "Suggested Minimum VAH: 3000 VAH" Also, warranty on batteries may be specified for 2 years being a consumable item.   | Tritronics | Clause as per tender/corrigendum prevails. |
| 67 | Chapter-<br>8 -<br>Technica<br>I,<br>Function<br>al<br>Require<br>ments &<br>Specifica<br>tions | 229 | 8.16.2 UPS<br>2KVA: S.<br>No23 C  | EPO function - Yes   | It is requested to kindly make this requirement OPTIONAL & specify MCB at input/ output in lieu.   | Tritronics | Clause as per tender/corrigendum prevails. |
| 68 | Chapter-<br>8 -<br>Technica<br>I,<br>Function<br>al<br>Require<br>ments &<br>Specifica<br>tions | 229 | 8.16.2 UPS<br>2KVA: S.<br>No23 D  |  | It is strongly recommended to consider UPS with Inbuilt transformer to enable galvanic isolation between input & output (as per GEM/ DGS&D/ NIC Specifications) in order to provide adequate protection to sensitive loads from the variations of input power supply prevalent in many parts of the country. | Tritronics | Corrigendum uploaded.                      |

| 69 | Chapter-<br>8 -<br>Technica<br>I,<br>Function<br>al<br>Require<br>ments &<br>Specifica<br>tions | 229 | 8.16.2 UPS<br>2KVA: S.<br>No23 G   |  | It is requested <b>Tower Type</b> may be considered. Tower Type UPS are easy in transportation & for rugged use. Rack type arrangement may not be ideally suited for rugged use. Hence it is requested to kindly amend the UPS requirement to <b>Tower Type /Rack Type UPS Systems.</b> | Tritronics | Clause as per tender/corrigendum prevails. |
|----|---|-----|--|--|---|------------|--|
| 70 | Chapter-<br>8 -<br>Technica<br>I,<br>Function<br>al<br>Require<br>ments &<br>Specifica<br>tions | 229 | 8.16.3 2X<br>10KVA<br>connected<br>in parallel<br>redundant<br>mode in<br>separate<br>chassis:           | 2 x 10 KVA connected in parallel redundant mode in separate chasis | Two UPS in Hot standby (1+1) configuration is most suitable & result in considerable cost saving with redundancy & may be considered if appropriate.  | Tritronics | As per tender.                             |
| 71 | Chapter-<br>8 -<br>Technica<br>I,<br>Function<br>al<br>Require<br>ments &<br>Specifica<br>tions | 229 | 8.16.3 2X<br>10KVA<br>connected<br>in parallel<br>redundant<br>mode in<br>separate<br>chassis: S.<br>No1 | Capacity - 10000VA/9000 W  | It is requested to kindly amend the clause to read as<br>10 KVA/ 7000W i.e. Output Factor - 0.7 Lag, which is<br>as per industry standards  | Tritronics | As per tender.                             |
| 72 | Chapter-<br>8 -<br>Technica<br>I,<br>Function<br>al<br>Require<br>ments &<br>Specifica<br>tions | 229 | 8.16.3 2X<br>10KVA<br>connected<br>in parallel<br>redundant<br>mode in<br>separate<br>chassis: S.<br>No5 | Voltage Range - 305-470 VAC (3-phase) @ 100% load                  | It is requested to kindly amend the clause to read as:  "Input Voltage Range - 330V AC-460V AC" which is as per industry standards & covers the voltage variation issues prevalent in Indian Sub Continent.   | Tritronics | Corrigendum uploaded.                      |

| 73 | Chapter-<br>8 -<br>Technica<br>I,<br>Function<br>al<br>Require<br>ments &<br>Specifica<br>tions | 229 | 8.16.3 2X<br>10KVA<br>connected<br>in parallel<br>redundant<br>mode in<br>separate<br>chassis: S.<br>No16 &<br>17   | Output Frequency @ Line mode - 46 ~ 54 Hz<br>@50Hz system<br>Output Frequency@ Battery mode - 46 ~ 54 Hz<br>@50Hz system   | Output frequency from 47-53 Hz as per Indian industrial standards in sync. Mode.  On battery mode it should be 50 Hz ± 0.5 Hz. Hence, it is requested to kindly amned the same accordingly.   | Tritronics | Corrigendum uploaded.                      |
|----|---|-----|---|--|---|------------|--|
| 74 | Chapter-<br>8 -<br>Technica<br>I,<br>Function<br>al<br>Require<br>ments &<br>Specifica<br>tions | 229 | 8.16.3 2X<br>10KVA<br>connected<br>in parallel<br>redundant<br>mode in<br>separate<br>chassis: S.<br>No18           | Frequency Converter Mode (CVCF) - 50/60Hz  | It should be an optional feature. All Online double conversion UPS works as 50 Hz frequency independent mode.   | Tritronics | Corrigendum uploaded.                      |
| 75 | Chapter-<br>8 -<br>Technica<br>I,<br>Function<br>al<br>Require<br>ments &<br>Specifica<br>tions | 230 | 8.16.3 2X<br>10KVA<br>connected<br>in parallel<br>redundant<br>mode in<br>separate<br>chassis: S.<br>No28           | Battery backup - 2 Hrs. on full load with each UPS<br>System   | It is requested to kindly specify Minimum VAH capacity. This will provide common platform to all prospective bidders.  "Suggested Minimum VAH: 24000 VAH" with each UPS.  Also, warranty on batteries may be specified for 2 years being a consumable item. | Tritronics | Clause as per tender/corrigendum prevails. |
| 76 | Chapter-<br>8 -<br>Technica<br>I,<br>Function<br>al<br>Require<br>ments &<br>Specifica<br>tions | 230 | 8.16.3 2X<br>10KVA<br>connected<br>in parallel<br>redundant<br>mode in<br>separate<br>chassis: S.<br>No<br>39,40,41 | ESD - IEC/EN61000-4-2 Level 4 or equivalent BIS/IS standard Safety - IEC/EN62040-1-1 or equivalent BIS/IS standard Leakage Current - IEC/EN62040-1-1 or equivalent BIS/IS standard | It is requested that this should be considered as either IEC/ BIS/ CE certification of UPS because all certifications is related to safety of the system.   | Tritronics | Clause as per tender/corrigendum prevails. |

| 77 | 4.A.14.1.<br>3<br>Eligibility<br>Criteria<br>Require<br>ments<br>for<br>OEM's:                | Page<br>101-<br>102       | Point 4  | Software should have supplied for at least one project in a Mass Rapid Transport system e.g. Metro, Railways, Mono Rail, Airport etc. in India or abroad in last 3 financial years (i.e. current year and three previous financial years) from the date of opening of tender. The same should | Since the end clients like Railways, Airport etc. generally not give any declaration directly to OEMs as they interact with System integrators as there main contractor is System Integrators and not OEMs.  Kindly accept satisfactory letters from SI with supply inspection certificate/Factory acceptance test from RDSO/AAI etc.   | Mirasys | Clause as per tender/corrigendum prevails.   |
|----|---|---------------------------|--|---|---|---------|--|
| 78 | 8.3.2. Function al and Technica I Require ment 3.B.7 Architect ure of VSS system for stations | Page<br>210<br>Page<br>64 | 8.3.2.1 General Below is the tentative VSS architectur e for system to be deployed at Stations: 3.B.7 Architectur e of VSS system for stations | days at any given point of time at the RPF/GRP Thana/Post. The recording and playback availability should not be affected in case of failure of any server at RPF/GRP Thana/Post. The Recordings of last 30 days should be available through redundant server(s) in case of a server failure. | Both the statements are contradictory. There is no failover mentioned at RPF chowki/thana architecture(page 54) and on page 210 there is recording of last 30 days availability through redundant server(s) in case of a server failure asked.  Kindly clarify whether we need to consider the failover at RPF/GRP Thana/Posts. if yes then what should be the failover configuration N:1 or N:N or 10:1. | Mirasys | There is no contradiction in statement. Architecture shown at Page no. 64 is tentative. Bidder is required to quote as per SOR and solution requirement as defined under clause 8.3 of chapter-8 of tender document. |
| 79 | PACKAG<br>E IV:<br>SOUTHE<br>RN   | Page<br>35                | SOR HEAD I: IP BASED VIDEO SURVEILLA NCE WORK AT STATIONS  | 9 ,   | Kindly Clarify What is the role of Category F station as it is not discussed in tender any where.   | Mirasys | Category F stations are not covered under scope of this tender. Please refer amendment.  |

| 80 | PACKAG E II: WESTER N PACKAG E III: EASTERN PACKAG E IV: SOUTHE RN                               | Page<br>19<br>Page<br>27<br>Page<br>35 | SOR HEAD<br>I: IP BASED<br>VIDEO<br>SURVEILLA<br>NCE WORK<br>AT<br>STATIONS | ii. For Category C (others), D and E stations C (oth<br>the te<br>Kindly<br>(subu | tender BOQ Category C (Sub-urban) and Category others) mentioned but not discussed anywhere in etender.  dly Clarify What is difference between Category C burban) and C (others). | Mirasys | There is no difference in terms of camera count, network topolgy and VSS architecture. |
|----|--|--|---|---|--|---------|--|
| 81 | CHAPTER-<br>8  | Page<br>209<br>Page<br>169             | 8.3.1. 2<br>Server and<br>Storage<br>System<br>sizing                       | category,Region wise camera breakup.  i. As iii. As iii. As per s                 |  | Mirasys | Bidder to quote quantity of cameras as per SOR.  |
| 82 | CHAPTER-<br>2<br>SCHEDUL<br>E OF<br>REQUIRE<br>MENT<br>PACKAG<br>E I :<br>NORTHE<br>RN<br>REGION | Page<br>11                             | PACKAGE I<br>:<br>NORTHERN<br>REGION  | , ,   | e the Divisional HQ Clients are included in this<br>Q item of NR?<br>me query for WR,ER and SR.  | Mirasys | Bidder to quote as per SOR.  |

| 83 | CHAPTER-<br>8 | Page<br>209 | 8.3.1.1<br>General<br>Parameters                          | Management servers with 1:1 redundancy (HA mode) in RailTel Datacenter.   | One of the roles of management server is to manage the failover functionality by receiving the signal from recorder server of failure and giving the signals to failover servers to get active.  As per design all the recording servers and Failover servers will be placed at RPF/GRP Thana/Posts and their management server will be at RailTel Data center.  If any recording server gets fail and at that particular time if the MPLS connectivity is also down from that RPF/GRP Thana/Post to RailTel Datacenter then How can we achieve the failover as the Management will not get the alert for this failure? | Mirasys | Clause as per tender/corrigendum prevails. |
|----|---------------|-------------|---|---|---|---------|--|
| 84 | CHAPTER-<br>8 | Page<br>211 | 8.3.2.3<br>Recording<br>Parameters                        | (B) On other stations:  | You are considering dual recording for station category C,D &E at RPF/GRP Thana/Post(with Failover) and stations itself on VRU(video recording and Processing Unit) however single recording for station category A1,A & B at RPF/GRP Thana/Post(with Failover). Kindly Clarify.  | Mirasys | Clause is self explainatory.               |
| 85 | CHAPTER-<br>3 | Page<br>60  | 3.B.3.6<br>Surveillanc<br>e VPN on<br>RailTel<br>Backbone | sensitive service. To ensure proper functioning of this project, network architecture must have features like Multicast VLAN Registration, IP SLA, Auto-QoS, Auto Ports configuration to detect end device type connected to port and configuring QoS automatically on basis of device. Network should have IPv4 and IPv6 port and time based access list with time ranges. | ,   | Mirasys | Clause as per tender/corrigendum prevails. |

| 86 | CHAPTER-<br>8 | Page<br>208 | 8.3. Video<br>Surveillanc<br>e System<br>(VSS) for<br>Stations |  | Kindly consider: This includes Video Management Software, Video Recording Software, Video Analytic Software, GUI Client Software, Facial Recognition System (FRS) etc. for IP based Video Surveillance at stations. Also the software platforms should be a certified partner of OS provider like Microsoft for tight integration and stability of the overall system.                      | Mirasys | Clause as per tender/corrigendum prevails.   |
|----|---------------|-------------|--|--|---|---------|--|
| 87 | CHAPTER-<br>3 | Page<br>59  |  | 3.B.3.6 Surveillance VPN on RailTel Backbone   | Kindly consider: As Cyber security threat is common these days. We suggest to add the data encryption from server to server and server to client. The VMS software should have data encryption of 256 bit AES and video should export in SEF(Secured Export Format) with password protection of up to 20 alphanumeric characters.   | Mirasys | Clause as per tender/corrigendum prevails.   |
| 88 | 8.16.1/2      | 227-228     |  | Size-not more than 2U rack mountable   | Please provide bidder size deviation of +/- 0.5U ,As Rack mount UPS OEMs sizes may vary   | Eaton   | Clause as per tender/corrigendum prevails.   |
| 89 |               | 227-228     |  | 1 Hrs. on full load (Single bank)  | As per tender Battery Backup is demanded 1 Hour on full load, please confirm what kind of battery is required 1. Rack Mountable or Floor Mounted or 2. Installed in separate wall mounted cabinet.  3. how we are going to manage the security and safety of Batteries.if batteries are external please confirm rack type Open rack or closed cabinet  Please specify VAH and Battery Makes | Eaton   | Please refer to the tender/corrigendum   |
| 90 |               | 227-228     |  | Communication-SNMP V1/V2   | Please confirm SNMP to be part of offering or optional .Also sugget functionality required  | Eaton   | Tender clause is clear. It is not mentioned as optional. SNMP will be required for monitoring, management etc. from EMS. |
| 91 |               | NA          |  | As per tender environmental operating conditions are not specified for the batteries                         | Please specify  | Eaton   | Bidder to propose batteries suitable for Railway stations environmental conditions and compatible with UPS.              |
| 92 | 8.16.3        | 229         |  | As per tender 10 kVA UPS system requested for 3-Phase Input<br>and 1-Phase Output, as output remains 1 Phase | can bidder supply 1-phase input and 1-Phase output system   | Eaton   | Clause as per tender/corrigendum prevails.   |
| 93 |               | 230         |  | As per tender efficiency is demanded 90% for 3 phase input and 1 phase output,                               | if bidder provides 1-phase input and 1-phase output it is possible to achieve 95% efficiency. Can we modify tender specification.   | Eaton   | Clause as per tender/corrigendum prevails.   |

| 94 | CHAPT<br>ER- 3 | 77  | Clause<br>3.A.1.4.1.1<br>2/13/14 | RPF/GRP Thana/Post.  3.A.1.4.13 Warranty period of 24 months from the date of expiry of mainte-nance supervision period of installed system at no cost to Railways/RailTel.  3.A.1.4.14 AMC (including repair / replacement of all consumables) for 5 years after the completion of 24 months of   | since warranty is required for 36 month which is<br>further divided into 12 month supervision and 24<br>month warranty. Delay in PAC will add to the<br>warranty cost. Any delay due to SNR will be<br>bourne by RAILTEL. | Netapp | Clause as per tender/corrigendum prevails.                    |
|----|----------------|-----|----------------------------------|--|---|--------|---|
| 95 | CHAPT<br>ER- 3 | 77  | Clause<br>3.A.1.4.1.1<br>2/13/14 | warranty period.  3.A.1.4.12 Maintenance supervision period of 12 months from the date of award of PAC of the RPF/GRP Thana/Post.  3.A.1.4.13 Warranty period of 24 months from the date of expiry of mainte-nance supervision period of installed system at no cost to Railways/RailTel.  3.A.1.4.14 AMC (including repair / replacement of all consumables) for 5 years after the completion of 24 months of warranty period.  | since warranty is required for 36 month which is further divided into 12 month supervision and 24 month warranty. Delay in PAC will add to the warranty cost. Any delay due to SNR will be bourne by RAILTEL.             | Netapp | Clause as per tender/corrigendum prevails.                    |
| 96 | CHAPTE<br>R- 4 | 106 | 4.A.24                           | RailTel would also enter into Rate Contract with the firm to whom the con-tract is awarded for catering to additional requirement of Cameras, Switches, Servers, Stor-ages, Rack, UPS, FMS, VMS software & Other associated equipments of Schedule of re-quirements (SOR) as and when arise in future. Rate Contract on the successful tenderer would be placed separately and would be operative from the date of PAC of the first Sta-tion/RPF/GRP Chowki/Thana/Post and would be valid for a period of 12 months. | Please calrify whether Exchnage Rate Variation (ERV) Clause would be applicable to this.  | Netapp | This will be governed as per terms & conditions of RC tender. |
| 97 | CHAPTE<br>R- 5 | 211 | 8.3.2.3.1.1                      | (B) On other stations: i) One Full HD stream (@1080P and @25FPS) from Full HD Camera on H.265 and ii) One UHD stream at resolution 3840x2160 and @15FPS from 4K UHD Camera on H.265 should be recorded for 7 days in Video Recording & Processing Unit. iii) One HD stream (@720P and @25FPS) from Full HD Camera on H.265 and iv) One FHD stream (@1080P and @15FPS from 4K UHD Camera on H.265 should be recorded for 30 days in external storage at RPF/GRP Thana/Post.   | We may request you to kindly maintain the recording parameter similar to RPF Thana/Chowki to ensure that quality of image doesn't impact on the investigation once any breach is found after 7 days.                      | Netapp | Corrigendum uploaded.   |

| 98  | CHAPTE<br>R- 5 |     | 8.3.2.3.1.1 | (B) On other stations: i) One Full HD stream (@1080P and @25FPS) from Full HD Camera on H.265 and ii) One UHD stream at resolution 3840x2160 and @15FPS from 4K UHD Camera on H.265 should be recorded for 7 days in Video Recording & Processing Unit. iii) One HD stream (@720P and @25FPS) from Full HD Camera on H.265 and iv) One FHD stream (@1080P and @15FPS from 4K UHD Camera on H.265 should be recorded for 30 days in external storage at RPF/GRP Thana/Post. | Please clarify what percentage of compression need to be used?   | Netapp | Clause is self explainatory.  |
|-----|----------------|-----|-------------|--|--|--------|---|
| 99  | Chapter-<br>4  | 113 | 4.A.45.     | Preference to Domestic Manufacturers   | Please whether this is as per DIPP/Miety Approved Products   | Netapp | Tender clause is clear.   |
| 100 | CHAPTE<br>R- 2 | 11  | SOR         | Storage System for recording of alerts, alarms of cameras of analyt-ics and other applications require-ment as defined in clause 8.3 and 8.4 of chapter 8. Detailed Bill of Material (BoM) shall be prepared and submitted along with the Bid as per SOR Note-VII.   | Please clarify whether this storage would be used for EMS generated logs also, if yes then how long the logs to be maintained.   | Netapp | Please refer to tender document/<br>corrigendum clause No. 8.3.1.1.5<br>which is clear in itself. |
| 101 | CHAPTE<br>R- 2 | 11  | SOR         | Storage System for recording of alerts, alarms of cameras of analyt-ics and other applications require-ment as defined in clause 8.3 and 8.4 of chapter 8. Detailed Bill of Material (BoM) shall be prepared and submitted along with the Bid as per SOR Note-VII.   | Please clarify whether any redundancy need to be maintain to other datacentre by replicating this data.  | Netapp | Clause as per tender/corrigendum prevails.  |
| 102 | CHAPTE<br>R- 2 | 11  | SOR         | Storage System for recording of alerts, alarms of cameras of analyt-ics and other applications require-ment as defined in clause 8.3 and 8.4 of chapter 8. Detailed Bill of Material (BoM) shall be prepared and submitted along with the Bid as per SOR Note-VII.   | Please clarify whether any redundancy need to be maintain to other datacentre by replicating this data.  | Netapp | Clause as per tender/corrigendum prevails.  |
| 103 | CHAPTE<br>R- 2 | 11  | SOR         | Category A1, A & B Station   | We understand these staions will not have full fledge DC hence any frequent components failure because of corrosion due to gaseous contamination need to looked by your goodoffice.  As it leads to failure of Devices/Components. | Netapp | Design by bidder should be as per site environment. Maintenance as per tender clauses.            |
| 104 | CHAPTE<br>R- 2 | 11  | SOR         | Category C,D&E Station Distribution  | Please provide the details of C,D&E station would fall under each category of A1, A, B for effective solution sizing.  | Netapp | Tentative list of stations is being uploaded with the corrigendum.                                |
| 105 | CHAPTE<br>R- 2 | 11  | SOR         |  | Please clarify whether information need to be provided if any additional compoent required to complete the solution which is not specified in the SOR  | Netapp | Clause as per tender/corrigendum prevails. Please also refer to clause No. 3.A.1.11 also.         |

|     |           |    |       | ,   |  |         |  |
|-----|-----------|----|-------|---|--|---------|--|
| 106 | Section I | 8  | 2 (a) | VSS Server Hardware and all accessories required for installation purposes for Video recording, Video Analytic and Facial Recognition system as defined in clause 8.2 and 8.3 of chapter 8. Detailed Bill of Material (BoM) shall be prepared and submitted along with the Bid as per SOR Note-VII.   | i) Video Recording, Video analytics and Facial recognition are three different software and have different quantity requirements i.e. Not every camera have VA and/FR. So we suggest to split this line item in three sub parts.   | Qognify | As per tender.   |
| 107 | Section I | 10 | 3 (a) | VSS Server Hardware for Video Management and Facial Recognition database system as defined in clause 8.2, 8.3 of chapter 8 and all accessories required for installation purposes. Detailed Bill of Material (BoM) shall be prepared and submitted along with the Bid as per SOR Note-VII.  | So we understand that each region will have independent management system, and this line item is for servers required in regional headquarter. please confirm.   | Qognify | Each Region will have their own Video<br>Management System and Facial<br>Recognition Database system installed<br>at RailTel Datacenter. |
| 108 | Section I | 11 | 4     | Supply, Installation, Testing and commissioning of software (per camera basis) for Video management, Video recording, Video Analytic and Facial Recognition system for the server hardware quoted in Item no. A.2(a) as defined in clause 8.3 of chapter 8. Detailed Bill of Material (BoM) shall be prepared and submitted along with the Bid as per SOR Note-VII. | i) Video management, Video analytics and Facial recognition are three different software and have different quantity requirements i.e. Not every camera have VA and/FR. So we suggest to split this line item in three sub parts. Ii) Discription says the license has to be per camera basis, however quantity mentioned is of number of clusters? We suggest to consider it on per camera basis as the breakup of licenses to various clusters can be done even before implementation. | Qognify | As per tender.   |
| 109 |           | 41 | XIX   | Central Command control center has been provisioned in Northern Region package. Therefore, all successful bidder of other packages are required to share API of their quoted VMS to ensure integration with central command and control center to achieve desired functionality as mentioned in the tender document.  | i) Can you please confirm which line items in<br>Northern region package belong to said<br>provisioned Commanad and Control Center? Ii)<br>Please provide the detailed functional<br>specification of Command and Control Center<br>software.  | Qognify | Please refer SOR Head-II item no.3 of<br>Northern Package and tender clause<br>8.26 of Chapter-8.  |
| 110 |           | 41 | XX    | Bidder may also propose a software based Digital Key-Board (joystick) against SOR Head-I, 2 (c) of packages without any loss in the functionality and performance of the system.  | What does this mean? Every VMS provide onscreen control for PTZ, however hardware keyboard provides completely different experience and can not be compaired. We suggest to delete this clause or delete Joystick line item for BOQ to keep the clarity.   | Qognify | Please refer tender document/<br>corrigendum which will prevail.   |

| 111 |    | 41                 | XVII      | Rack Space at Datacenters and associated charges: RailTel will provide Racks at Gurugram and Hyderabad datacenter for hosting VSS Cloud infrastructure as defined in the tender. Bidders are requested to optimize the number of racks requirement in the datacenters. Rack requirements shall be associated with cost and bidder will be charged INR 8 Lacks/annum/rack for their rack requirements. The Bidder must provide rack space requirements in their technical offer keeping load available on each rack (<=5KVA) for the complete solution (for DC & DR) for all components like Server, Switching, Routers, Storage etc. | We understand that this point relates to hosting of servers/storage mentioned in BOQ line no. 3 of all regions. However please clarify whether every component in DC need to be replicated in DR? If so, where it is captured in BOQ? Line item 3 looks to be considering BOQ for DC only?   | Qognify | Only EMS will be replicated in DC and DR.       |
|-----|----|--------------------|-----------|--|--|---------|---|
| 112 |    | 63                 | 3.B.7     | Proposed solution has to provide seamless recording/ Playback of all cameras for last 30 days at any given point of time at the RPF/GRP thana/Post. The recording and playback availability should not be affected in case of failure of any server at RPF/GRP Thana/Post. The Recordings of last 30 days should be available through redundant server(s) in case of a server failure.   | Redundant recording will also double the storage requirement. As we understand videos are already being recorded at every station Video recording and processing unit (for 7 days), it act as a redundant recording already. Generally If there is any critical incident, it will come to the notice within 7 days. So please reconsider the redundant recording requirement ar RPF/GRP thana/post which will double the overall server as well as storage cost. | Qognify | Clause as per tender/corrigendum prevails.      |
| 113 | 10 | 167,<br>68,1<br>69 | Chapter 7 | Total camera quantity mismatch   | If we calculate the total number of Fixed bullet cameras from BOQ of four region it comes to 72182, however we calculate the same from various tables given on page 167, 168 and 169 it comes to 72451 causing a difference of 269 cameras. Can you please cross check are correct accordingly.  | Qognify | Bidder to quote quantity of cameras as per SOR. |

|     |           |     |           | <u> </u>                                       |   |          | 1   |
|-----|-----------|-----|-----------|--|---|----------|---|
|     |           |     |           | For implementation of the proposed system,     | i) Please provide the list of 552 cluster locations |          |   |
|     |           |     |           | it is assumed that there would be 552          | along with other details i.e. Station name,         |          |   |
|     |           |     |           | Clusters constituting RPF/GRP Thana/Post       | Railway, Division, category of station etc Also     |          |   |
|     |           |     |           | receiving video feeds from group of stations   | provide the information about how many              |          |   |
|     |           |     |           | based on jurisdiction of that respective       | stations of which category will be connected        |          |   |
|     |           |     |           | RPF/GRP Thana/Post through MPLS/ IP            | each of these 552 cluster locations. This           |          |   |
| 114 |           | 208 | 8.3.1.1.1 | network.                                       | information is very important as we have to         | Qognify  | The tentative list of all stations is also                                |
|     |           |     |           |  | estimate the server, storage, Video processing      | ,        | being uploaded with the corrigendum                                       |
|     |           |     |           |  | unit quantities accordingly. ii) As per our         |          |   |
|     |           |     |           |  | understanding there wont be any video               |          |   |
|     |           |     |           |  | recording and processor unit on these 552           |          |   |
|     |           |     |           |  | locations, and videos of these station will record  |          |   |
|     |           |     |           |  | only on local RFP/GRP thana servers-storage.        |          |   |
|     |           |     |           |  | please confirm.                                     |          |   |
|     |           |     |           | Bidder to also propose an external storage     | i) Datacenter need to keep only the metadata of     |          |   |
|     |           |     |           | solution at RailTel Datacenter for keeping     | flagged/marked video, FRS & VA alerts across all    |          |   |
|     |           |     |           | flagged/marked video data by RPF/GRP           | the stations or the actual videos associated with   |          | 1. Classes is salf associated as  |
|     |           |     |           | personnel for longer retention, FRS & VA       | it as well? Please note moving videos for all such  |          | Clause is self explainatory.     RailTel has invited tender in four       |
| 115 | Section I | 209 | 8.3.1.1.5 | alerts across all stations within the          | events to central datacenter will be huge           | Qognify  | packages i.e. Northern Region,  |
| 110 | Section   | 203 | 0.5.1.1.5 | jurisdiction of RailTel Region for 30 days,    | process. Also, it will be a big task to decide      | Qogimy   | Western Region, Eastern Region and  |
|     |           |     |           | Audit trail logs, application data etc. as per | which video need to be deleted and who will         |          | Southern Region.  |
|     |           |     |           | solution requirement and sizing as per SOR.    | decide to delete it finally, else central storage   |          | ooue  |
|     |           |     |           |  | will be full very soon. ii)What is mean by RailTel  |          |   |
|     |           |     |           |  | region?   |          |   |
|     |           |     |           | Video feed from cameras of group of stations   | H.265 being a heavely compressed video, it          |          |   |
|     |           |     |           | (cluster) shall be stored in ex-               | saves a bit on storage requirements. However        |          |   |
|     |           |     |           | ternal storage for 30 days on <b>H.265</b> at  | on the other side it pose lot of challenges on      |          |   |
|     |           |     |           | RPF/GRP Thana/Post.                            | decoding on client stations as the client           |          |   |
|     |           |     |           |  | machines can decode much less H.265 streams         |          |   |
|     |           |     |           |  | compaired to H.264. Most of the analytics           |          | Diago votos to the covidendum Dath  |
| 116 | Section I | 209 | 8.3.1.2   |  | solutions are also not yet proven on H.265          | Qognify  | Please refer to the corrigendum Both H.264/H.265 may be used in line with |
| ''' | Section   | 209 | 0.3.1.2   |  | compressed videos as it lose lot of details within  | Qugilliy | RDSO Specification.   |
|     |           |     |           |  | the image during compression. In order to run       |          | ND30 Specification.   |
|     |           |     |           |  | analytics on H.265 streams even servers will        |          |   |
|     |           |     |           |  |   |          |   |
|     |           |     |           |  | need to have too costly Graphics cards (CUDA).      |          |   |
|     |           |     |           |  | So we request to keep it H.264 which is proven      |          |   |
|     |           |     |           |  |   |          |   |

| 117 | Section I | 209 | 8.3.1.2                  | At each such cluster i.e. RPF/GRP Thana/Post location, bidder to size storage, server requirement and propose a single server considering recording of 200 FHD cameras, analytics on 40 cameras, FRS with local matching capability with the watchlist database on up to 8 cameras stream at each RPF/GRP Thana/Post locations without any impact on the performance of the system and overall solution requirement. | It will not be practical to record 200 cameras, analytics as well as FRS on a single server, please consider revising the clause.  | Qognify | Clause as per tender if read full is clear and prevails.  |
|-----|-----------|-----|--------------------------|--|--|---------|---|
| 118 | Section I | 209 | 8.3.1.2                  | Bidder to also propose a redundant server per<br>RPF/GRP Thana/Post location to ensure<br>uninterrupted services as mentioned in above<br>para in case of failure of main server.  | i) Does this mean we need to have Redundant (1:1) recorder servers or N:1 ? Ii) Redundant servers shall have storage for 30 days or 7 days is acceptible?  | Qognify | Cluase is self explanatory. Bidder to propose Redundant server(s) to ensure uninterrupted services i.e. Recording, Analytics and FRS) at RPF/GRP Thana/Post in case of faiure of main server(s) in N:1. |
| 119 | Section I | 211 | 8.3.2.3.1.1<br>(A) & (B) | (A) On Station collocated with RPF/GRP Thana/Post: i) One Full HD stream (@1080P and@25FPS) from Full HD Camera on H.265 and ii) One UHD stream at resolution 3840x2160 and@ 15FPS from 4K UHD Camera on H.265 should be recorded for 30 days in external storage at RPF/GRP Thana/Post.   | H.265 being a heavely compressed video, it saves a bit on storage requirements. However on the other side it pose lot of challenges on decoding on client stations as the client machines can decode much less H.265 streams compaired to H.264. Most of the analytics solutions are also not yet proven on H.265 compressed videos as it lose lot of details within the image during compression. In order to run analytics on H.265 streams even servers will need to have too costly Graphics cards (CUDA). So we request to keep it H.264 which is proven solution for last few years. | Qognify | Please refer to corrigendum   |
| 120 | Section I | 211 | 8.3.2.3.1.1<br>B         | On other stations: i) One Full HD stream (@1080P and @25FPS) from Full HD Camera on H.265 and ii) One UHD stream at resolution 3840x2160 and @15FPS from 4K UHD Camera on H.265 should be recorded for 7 days in Video Recording & Processing Unit.  | As per this requirement One stream will be configured with HD1080P & HD720P and 4K & HD1080P for Full HD and 4K camera respectively. However video analytics and Face recognition software generally require 4CIF stream for processing. So we request to modify this requirement as HD1080P & 4CIF and 4K & 4CIF for Full HD and 4K camera respectively.  | Qognify | Clause as per tender and corrigendum prevails.  |

| 121 | Section I | 211 | 8.3.2.3.1.1<br>B | On other stations: i) One Full HD stream (@1080P and @25FPS) from Full HD Camera on H.265 and ii) One UHD stream at resolution 3840x2160 and @15FPS from 4K UHD Camera on H.265 should be recorded for 7 days in Video Recording & Processing Unit. iii) One HD stream (@720P and @25FPS) from Full HD Camera on H.265 and iv) One FHD stream (@1080P and @15FPS from 4K UHD Camera on H.265 should be recorded for 30 days in external storage at RPF/GRP Thana/Post.                          | i) As we understand from 8.1.3.2 RPF thana server and storage shall be sized for 200 cameras, similarly is there any sizing requirement for Video recording and processing unit. Ii) As per this clause only HD720 & HD1080P stream shall be recorded from other stations to RFP/GRP thana server/storage for Full HD and 4K cameras respectively, however as per RDSO all the recordings shall be Full HD and 4K resolution, please confirm what should be considered? iii) If we have to go with HD720P and HD1080P recording for other stations cameras on RPF/GRP thana, do we need to calculate storage ourself or need to follow RDSO clause no. 2.8 ? | Qognify | Clause is self explainatory. Numbers of cameras to be deployed at C, D and E category stations have been defined in the tender document. Please refer Chapter-7 and corrigendum. |
|-----|-----------|-----|------------------|---|--|---------|--|
| 122 | Section I | 231 | 8.18.2           | Video Recording & Processing Unit shall be installed at each platform/station and shall have Software for Video Management, Video Recording and Analytics as defined in Tender Clause 8.3. In case of MPLS/IP network connectivity failure, video stream and alarms would be stored locally at the Video Recording & Processing Unit for that duration and would transfer these data automatically to RPF/GRP Thana/Post when the network recovers without any impact on the system operations. | i) As per the architecture explained above management servers will be at Regional HQ, whereas Thana/RPF will have recording and analytics infrastructure. So, alarms can be transferred to central management on realtime basis as there is no local management servers which can hold this data. Alarm management is an activity carried by management servers. So, request to reconsider the requirement of sending alarm data to HQ post network reconnection. ii)  | Qognify | Please refer to the tender/<br>corrigendum condition which are<br>self explanatory.  |
| 123 | Section I | 231 | 8.18.5           | Bidder to propose single unit hardware on each platform/station of Railway Station to achieve the functionalities as defined above.   | It will not be advisable to load analytics application on platform/station units considering the processing power limitations of such edge devices. Non availability of analytics for a brief period of network failure will not have much impact on overall utility of the surveillance system, however if this load affects the performance of edge devices, it will impact the system functioning irrespective of failures.   | Qognify | As per tender.   |

| 124 |  | 60 | 3.B.3.6  | IP Video Surveillance is traffic hungry and delay sensitive service. To ensure proper functioning of this project, network architecture must have features like Multicast VLAN Registration, IP SLA, Auto-QoS, Auto Ports configuration to detect end device type connected to port and configuring QoS automatically on basis of device.   | Please confirm that backbone network provided by Railtel will support Multicast communications across the stations/DHQ/National HQ etc. and configuration of the same will be in RAILTEL scope.  | Qognify | Configuration requirement of RailTel<br>Backbone network will be under<br>RailTel scope only.   |
|-----|--|----|--|---|--|---------|---|
| 125 | RDSO<br>Specifica<br>tion                          |    | 2.8<br>(Ammend<br>ment No.<br>1.0)   | In case implementation is done as per<br>Diagram-2, Video data and Alarms shall be<br>stored for at least 30 days (7 days where<br>Cloud is connected) at RPF/GRP Thana/Posts.  | As per this clause of RDSO we need to do recording for only 7 days in RPF/GRP Thana if cloud is connected. However as per our understanding of the tender requirement, we need to record for 7 days at every remote station (No local RPF/GRP) on edge device and for 30 days on servers on stations with RPF/GRP thana. Please confirm this is correct and will supersede RDSO.                       | Qognify | As per tender. Please refer Note-1 of chapter-8 (Technical, Functional requirements & specifications).  |
| 126 | RDSO<br>Specifica<br>tion                          |    | 2.8<br>(Ammend<br>ment No.<br>1.0)   | The approximate storage capacities per<br>Camera with H.264 Video Compression shall<br>be as under  | i) Should this be considered as minimum benchmark for storage sizing requirement? ii) As per RDSO clause 4.2.2 ammendment 1, bandwidth for 4K shall be less than 3 times (8Mbps) than Full HD (3Mbps) camera. However the storage requirement for 4K is shown 4 times than Full HD. So, can you please confirm 4TB shall be considered or should be calculated as per 8Mbps bandwidth (Less than 3TB)? | Qognify | As per tender. Please refer Note-1 of chapter-8 (Technical, Functional requirements & specifications).  |
| 127 | RDSO<br>Specifica<br>tion and<br>RAILTEL<br>Tender |    | 3.6<br>(Ammend<br>ment No.<br>1.0), 18.1.2<br>and 8.18.1<br>of RAILTEL<br>Tender | Vendors shall have option to quote either Server based solution or NVR based solution in accordance with Clause no. 10.0 and Clause no. 12.0 for Video Management and Video Recording or a combination of both the solutions for both the implementation schemes as per Diagram-1 & Diagram-2. Software capabilities and Storage capacities shall be same for both the solutions. AND "The network video management software shall be licensed and shall operate on open architecture and shall require no proprietary IT hardware". And  "Bidder to propose an Open (Non- proprietary) hardware-based unit to be installed at Stations." | As per RAILTEL tender requirement all the hardware is supposed to be Non-proprietary which will supersead the RDSO clause NVR. So we consider that propriotery NVR based solution will not be accepted. Please confirm.  | Qognify | As per main tender document & corrigendums. Please refer Note-1 of chapter-8 (Technical, Functional requirements & specifications). Bidder to quote as per SOR. |

| 128 | RDSO<br>Specifica<br>tion and<br>RAILTEL<br>Tender | 3.9<br>(Ammend<br>ment No.<br>1.0) and<br>8.3.1.2 of<br>RAILTEL<br>tender | A failover Server/NVR shall be provided at Stations under Scheme-1 and at RPF/GRP Thana/Posts under Scheme-2. Failover system shall support defined number of Servers/NVRs in N: 1 configuration (Value of N to be specified by the purchaser). The failover Server/NVR shall take over the operation smoothly without any impact on the operation. For data stored and computed at Cloud, the Cloud shall provide failover system for protection of data and operation.  AND  Bidder to also propose a redundant server per RPF/GRP Thana/Post location to ensure uninterrupted services as mentioned in above para in case of failure of main server. | i) RDSO clause further demand N:1 failover, RAILTEL tender clause further ask for Redundant server. Please note Redundant and Failover are two different functionalities. Please confirm you need Failover or Redundant? Also note Station cameras are already getting recorded in local video processing unit, then it also get recorded in RPF/GRP thana. Do we really need to provide third layer of recording? ii) We consider the CLOUD here as a RAILTEL datacenter in Gurgaon and Hyderabad and the management | Qognify | As per tender. Please refer Note-1 of chapter-8 (Technical, Functional requirements & specifications). Bidder to quote as per SOR.          |
|-----|--|---|---|---|---------|---|
| 129 | RDSO<br>Specifica<br>tion                          | 4.2.3<br>(Ammend<br>ment No.<br>1.0)                                      | The Edge Devices shall be capable of buffering the Video data and Alarms to its internal storage when connection to the MPLS/ IP network is temporarily unavailable. When the network recovers, the data on Edge devices shall automatically be transferred to the Server/NVR installed at respective RPF/GRP Thana/Post without any impact on the system operations.   | Backfilling of lost video data to recording server is managed through Camera Edge recording (SD card recording) and does not have any role of Edge Devices. So we consider the same is acceptible as functional requirement is still met.   | Qognify | As per tender. Please refer Note-1 of chapter-8 (Technical, Functional requirements & specifications). Bidder to quote as per SOR.          |
| 130 | RDSO<br>Specifica<br>tion                          | 4.2.5<br>Ammendm<br>ent no. 1   | Server/NVR for Video management and Video Recording shall be provided at RPF/GRP Thana/Post for viewing, monitoring and recording of cameras aggregated from cluster of stations. The Video and Alarm data of minimum 30 days (7 days where Cloud is connected) shall be stored at RPF/GRP Thana/Post. The Video and Alarms of selected cameras/locations shall also be accessible to Divisional HQ/any other centralized location or other clients through MPLS/ IP network as per requirement of purchaser for monitoring and viewing.  | i) In contradiction to this clause, from RAILTEL document clause no. 8.3.2.3.1.1 (A) & (B) we need to record for 30 days on RFP/GRP thana eventhough cloud is in use. So, we understand that the expected architecture is mixture of Diagram 1 and Diagram 2. Please confirm the understanding is correct. ii) Cloud (Gurgaon/Hyderabad datacenter) will not have any video recording, and will only have management databases and event related exported video clips. Please confirm the understandings are correct. | Qognify | As per tender. Please refer Note-1 of<br>chapter-8 (Technical, Functional<br>requirements & specifications). Bidder<br>to quote as per SOR. |

| 131 | RDSO<br>Specifica<br>tion | 4.2.8<br>Ammendm<br>ent no. 1  | Video Analytics and Face Recognition System & Storage shall be deployed at the Cloud. System at RPF/GRP Thana/Post shall provide video streams of requisite no. of cameras to the Cloud for running Video Analytics and Face Recognition Software. In case VMS is required for operation of Video Analytics and Face Recognition Software at Cloud, same may be provided at Cloud or as specified by the purchaser. All Video data and alarms generated by Video Analytics and Face Recognition Software at the Cloud shall be available at RPF/GRP Thana/Posts and Divisional HQ/ any other centralized location or any other clients through Cloud. | AS per our understanding from BOQ line item. 2 a and 3 a, VA and FRS processing will happen locally at RPF/GRP thana and only metadata will be sent to management servers in datacenter. Please confirm this is correct understanding?  | Qognify | As per tender. Please refer Note-1 of<br>chapter-8 (Technical, Functional<br>requirements & specifications). Bidder<br>to quote as per SOR. |
|-----|---------------------------|--------------------------------|---|---|---------|---|
| 132 | RDSO<br>Specifica<br>tion | 4.2.10<br>Ammendm<br>ent no. 1 | Edge Device shall have the following minimum specifications or otherwise as specified by the purchaser:-  | In many cases RFP/GRP thana will be on A1/A type station, and will host the recording for nearby A, B,C,D & E stations. Type A, B, C and D have 60, 38 & 26 cameras respectively and further 10% spare capacity as per requirement. So, it will be a good solution to provision a single high configuration server on these locations with aircooled cabinets in equipment room rather than multiple devices on platforms. This will simplify installation, mantainance and physical security of the core processing component. Please allow such option. | Qognify | As per tender. Please refer Note-1 of chapter-8 (Technical, Functional requirements & specifications). Bidder to quote as per SOR.          |
| 133 | RDSO<br>Specifica<br>tion | 10.1.3.(c)                     | One Server each is required for Video<br>Analytics for 32 nos. of cameras.  | With some solutions VA can be managed within Video Recording servers without needing dedicated servers for the same. Also, as per clause no. 18.4.7 analytics can be at firmware level as well, which will avoid the server requirement. We consider that such optimization is acceptible as it is design based solution. Please confirm.   | Qognify | As per tender. Please refer Note-1 of chapter-8 (Technical, Functional requirements & specifications). Bidder to quote as per SOR.          |

| 134 | RDSO<br>Specifica<br>tion |             | 18.4.1 &<br>18.4.7 &<br>20.4 & 20.6<br>XVII | Possible applications of analytics software over the IP based video surveillance system, for specified number of cameras for specific stations, as defined by purchaser shall include the following minimum video analytics software. i) Intrusion Detection ii) Left Object Detection iii) Overcrowding iv)  Camera Tampering | Please specify the quantity of analytics for each type of analytics for each type of station, so as we can quote accordingly. Considering the commercial weitage of the analytics licensing we strongly suggest to provide fixed quantity of analytics for each type of station which will ensure fair commercial evaluation. | Qognify | As per tender. Please refer clause 8.3.1.2 of chapter-8 (Technical, Functional requirements & specifications). Bidder to quote as per SOR. |
|-----|---------------------------|-------------|---|--|---|---------|--|
| 135 | SECTIO<br>N I             | 55 to<br>60 | 3.B.3                                       | 3.B.3 Network Design for Different Type of Stations  | As per SOR, there are 17373 numbers Type-I switch and 7180 numbers Type-II Switch. However, as per network design in the section 3.B.3, the count of Type I switch (40 for A1, 18 for A,9 for B, 6 for C, 2 for D&E) is coming 20611 and Type-II switch (5 f  | Cisco   | Bidder to quote quantity of switches as per SOR.   |
| 136 | SECTIO<br>N I             | 171         | 3   | 3.0 Technical Support Service:-  | Please confirm that the proposed solution<br>should support 24x7x365 TAC Support from<br>OEM and advanced Next business Day Hardware<br>replacement   | Cisco   | As per tender.   |
| 137 | SECTIO<br>N I             | 208         | 8.2   | 8.2. Server As per RDSO Specification of IP Based Video Surveillance System Specification no. RDSO/SPN/TC/65/2016 Revision 4.0 or latest with all amendments and as specified in tender document. Server Processor Cache: 20 MB  | Instead of 20 MB Cache, We would recommend<br>to have Latest Intel Processor CPU-4110 for 8<br>Core, 2.1 GHz Processor. (2.1 GHz 4110/85W<br>8C/11MB Cache/DDR4 2400MHz)  | Cisco   | As per tender/corrigendum.   |
| 138 | SECTIO<br>N I             | 212         | 8.8.2.3                                     | Bidder to propose switch having Operating<br>Temperature and Storage Temper-ature as<br>per environmental requirement  | We would recommend to mention the<br>Temperature @ 50 DegreeC for Type-I Switch as<br>per Environmental condition at Station platform   | Cisco   | As per tender.   |
| 139 | SECTIO<br>N I             | 212         | 8.8.1                                       | RDSO Specifications 6.2.3 The LAN switch shall support minimum 4000 MAC address  | We would recommend minimum 8000 MAC address, to connect the more devices in the LAN   | Cisco   | As per tender.   |
| 140 | SECTIO<br>N I             | 212         | 8.8.1                                       | RDSO Specifications 6.2.4 The LAN switch shall have 255 IGMP groups  | We would recommend minimum 512 Groups to support, multiple audi, Video and Data streams   | Cisco   | As per tender.   |
| 141 | SECTIO<br>N I             | 212         | 8.8.1                                       | RDSO Specifications 7.4 7.4 The operating personnel shall be protected against shock hazards as per IS 8473 (1993) – Guide on the effects of current passing through the human body (equivalent to IEC publications 479 – 1984).   | Kindly clarify that "RoHS including Directive 2011/65/EU" compliance is acceptable against this shock hazard requirement described in this clauses  | Cisco   | As per tender.   |

| 142 | SECTIO<br>N I | 212 | 8.8                | Type-I Switch IPv6 Feature                        | To implement the IPv6 network, Switch should be IPv6 certified/logo ready from day 1, which    | Cisco | As per tender.                             |
|-----|---------------|-----|--------------------|---|--|-------|--|
|     | INI           |     |                    |   | gone through Testing by standard Body  |       |  |
|     |               |     |                    | Type-I Switch                                     | Please include "OEM should be having valid ISO   |       |  |
|     |               |     |                    |   | 9001 & ISO 14001 certification on the date of  |       |  |
|     |               |     |                    |   | opening of bid"  |       |  |
| 143 | SECTIO        | 212 | 8.8                |   | AND  | Cisco | As per tender.                             |
|     | ΝI            | 212 | 0.0                |   | "OEM should have figured in the latest Magic   |       | 7.5 per tenden.                            |
|     |               |     |                    |   | Quadrant for Wired and Wireless LAN Access   |       |  |
|     |               |     |                    |   | published by Gartner." (Documentary support to   |       |  |
|     |               |     |                    |   | be submitted)  |       |  |
| 1   |               |     |                    | Should have minimum 12 x GE SFP based             | To ensure future requirement , specifically in   |       |  |
| 144 | SECTIO        | 212 | 8.9, Sr.           | ports.  | A1, A and B type stations, we would recommend  | Cisco | As per tender.                             |
|     | NI            |     | no 1               |   | to have at least 16 number of GE Fiber ports in  |       |  |
|     |               |     |                    |   | Type-II Switch. Kindly clarify   |       |  |
|     | SECTIO        |     | 8.9, Sr. no.       | Type-II Switch: IPv6 feature should be ready      | To implement the IPv6 network, Switch should   |       |  |
| 145 | ΝI            | 213 | 23                 | from day 1.                                       | be IPv6 certified/logo ready from day 1, which   | Cisco | As per tender.                             |
|     |               |     |                    |   | gone through Testing by standard Body  |       |  |
|     |               |     |                    | Type-II Switch                                    | "OEM should have a :   |       |  |
|     |               |     |                    | "OEM should have a:                               | i) valid ISO 9001 & ISO 14001 certification on   |       |  |
|     |               |     |                    | i) valid ISO 9001 & ISO 14001 certification on    | the date of opening of bid"  |       |  |
| 440 | SECTIO        |     | 8.9, Sr. no.       | the date of opening of bid"                       | AND  |       |  |
| 146 | ΝI            | 213 | 25                 | OR  | ii) should have figured in the latest Magic  | Cisco | As per tender.                             |
|     |               |     |                    | ii) should have figured in the latest Magic       | Quadrant for Wired and Wire-less LAN Access  |       |  |
|     |               |     |                    | Quadrant for Wired and Wire-less LAN Access       | published by Gartner." (Documentary support to   |       |  |
|     |               |     |                    | published by Gartner." (Documentary support       | be submit-ted)<br>Th   |       |  |
|     |               |     |                    | to be Type-II Switch: Should support ITU-T G.8032 | 122  |       |  |
|     | SECTIO        |     | 00 65 50           | Ethernet Ring Protection designed for loop        | Kindly clarify that to get standardized Metro Ethernet Features, CE2.0 certificate at the time |       |  |
| 147 | NI            | 213 | 8.9, Sr. no.<br>19 | pro-tection and fast convergence times (sub       | of supply in Type-II Switch is mandatory   | Cisco | Clause as per tender/corrigendum prevails. |
|     | INI           |     | 19                 | 50 ms) in ring topologies.                        | requirement  |       | prevails.                                  |
|     |               |     |                    | Should have at least 88 Gbps switching fabric.    | requirement  |       |  |
|     |               |     |                    | Switches should have dedicated ports (other       |  |       |  |
| 148 | SECTIO        | 214 | 8.10, Sr.          | than asked uplink ports) for minimum 40           | Kindly clarify Instead of 40 GBps statcking  | Cisco | Clause as per tender/corrigendum           |
| 140 | ΝI            | 214 | no. 4              | Gbps stacking band-width with necessary           | Bandwidth, it should be 48 Gbps  | Cisco | prevails.                                  |
|     |               |     |                    | cables from day 1.                                |  |       |  |
|     |               |     |                    | Type-III Switch: IPv6 feature should be ready     | To implement the IPv6 network, Switch should   |       |  |
| 149 | SECTIO        | 215 | 8.10, Sr.          | from day 1.                                       | be IPv6 certified/logo ready from day 1, which   | Cisco | Clause as per tender/corrigendum           |
|     | ΝI            |     | no. 22             |   | gone through Testing by standard Body  |       | prevails.                                  |
|     |               |     | 1                  | 1   | gane and again to an a pour  |       |  |

| 150 | SECTIO<br>N I | 215 | 8.10, Sr.<br>no. 26 | Type-III Switch "OEM should have a: i) valid ISO 9001 & ISO 14001 certification on the date of opening of bid" OR should have figured in the latest Magic Quadrant for Wired and Wireless LAN Access published by Gartner." (Documentary support to be submitt | Please include "OEM should be having valid ISO 9001 & ISO 14001 certification on the date of opening of bid"  AND  "OEM should have figured in the latest Magic Quadrant for Wired and Wireless LAN Access published by Gartner." (Documentary support to be submitted) | Cisco | Clause as per tender/corrigendum prevails. |
|-----|---------------|-----|---------------------|--|---|-------|--|
| 151 | SECTIO<br>N I | 218 | 8.11, Sr.<br>no. 17 | Type-IV Switch: vi. IPv6 feature should be ready from day 1.   | To implement the IPv6 network, Switch should be IPv6 certified/logo ready from day 1, which gone through Testing by standard Body   | Cisco | Clause as per tender/corrigendum prevails. |
| 152 | SECTIO<br>N I | 218 | 8.11, Sr.<br>no. 18 | Type-IVSwitch "OEM should have a: i) valid ISO 9001 & ISO 14001 certification on the date of opening of bid" OR should have figured in the latest Magic Quadrant for Wired and Wireless LAN Access published by Gartner." (Documentary support to be submitted | Please include "OEM should be having valid ISO 9001 & ISO 14001 certification on the date of opening of bid"  AND  "OEM should have figured in the latest Magic Quadrant for Wired and Wireless LAN Access published by Gartner." (Documentary support to be submitted) | Cisco | Clause as per tender/corrigendum prevails. |
| 153 | SECTIO<br>N I | 219 | 8.12, Sr.<br>no. 21 | DC Switch: Switch shall be IPv6<br>Certified/Ready.  | To implement the IPv6 network, Switch should be IPv6 certified/logo ready from day 1, which gone through Testing by standard Body   | Cisco | Clause as per tender/corrigendum prevails. |
| 154 | SECTIO<br>N I | 219 | 8.12, Sr.<br>no. 23 | DC Switch "OEM should have a: i) valid ISO 9001 & ISO 14001 certification on the date of opening of bid" OR should have figured iin latest Gartner Report in field of Ethernet Switches"   | Please include "OEM should be having valid ISO 9001 & ISO 14001 certification on the date of opening of bid"  AND  "OEM should have figured in the latest Magic Quadrant for Wired and Wireless LAN Access published by Gartner." (Documentary support to be submitted) | Cisco | Clause as per tender/corrigendum prevails. |
| 155 | SECTIO<br>N I | 222 | 5.11                | Should be capable of dynamically tuning IDS/IPS sensors (e.g., selecting rules, configuring policies, updating policies, etc.).  | Please confirm whether the proposed solution should support more than 20000 IPS signatures to cover the breadth of today's attack   | Cisco | Clause as per tender/corrigendum prevails. |
| 156 | SECTIO<br>N I | 223 | 5.22                | Should support more than 3000 application layer and risk-based controls that can invoke tailored intrusion prevention system (IPS) threat detection policies to optimize security effectiveness.   | Please confirm whether the proposed solution should be able to aggreagate these 3000 applications in more than 40 categories for ease of security operations  | Cisco | Clause as per tender/corrigendum prevails. |

| 157 | SECTIO<br>N I | 224         | 2.2                | The appliance should have at least 8 * 1 GE and 8*10G ports from day one   | To ensure that proposed solution meet the future growth by clustering multiple appliances together to increase overall throughput, please confirm whether the proposed appliance should support 6x40GE in future  | Cisco         | Clause as per tender/corrigendum prevails.   |
|-----|---------------|-------------|--------------------|--|---|---------------|--|
| 158 | SECTIO<br>N I | 224         | 4.5                | Firewall should have integrated redundant power supply without any external adaptors   | Since this is a data centre Firewall, Please confirm, whether proposed appliance appliance should support both PSU redundancy and FAN module redundancy along with hot swapable capability of both PSU and FAN from Day-1                                     | Cisco         | Clause as per tender/corrigendum prevails.   |
| 159 | SECTIO<br>N I | 225         | 5.11               | Should be capable of dynamically tuning IDS/IPS sensors (e.g., selecting rules, configuring policies, updating policies, etc.).  | Please confirm whether the proposed solution<br>should support more than 20000 IPS signatures<br>to cover the breadth of today's attack   | Cisco         | Clause as per tender/corrigendum prevails.   |
| 160 | SECTIO<br>N I | 225         | 5.22               | Should support more than 3000 application layer and risk-based controls that can invoke tailored intrusion prevention system (IPS) threat detection policies to optimize security effectiveness.   | Please confirm whether the proposed solution<br>should be able to aggreagate these 3000<br>applications in more than 40 categories for ease<br>of security operations   | Cisco         | Clause as per tender/corrigendum prevails.   |
| 161 | Chapter 3     | 49          | 3.A.1.7.1          | Following is indicated in the Para:  "Railways shall provide AC power supply at station/cabin/panel room/mid-section buildings for carrying out the awarded work. The successful bidder will have to pay the nominal charges for the power supply as per the existing Railways Norms". | Power supply connection has following charges:  1.Power supply connection and including meter charges.  2. Power consumption charges  It should be clarified if both or part is to be paid by the bidder over the entire service period.                      | TCIL          | For doing work (initially), complete electricity charges (if electricity required to do the work), shall be payable by the bidder to Railways. However electric connection charges as well as consumption charges for running of the network is not to be payable by the bidder. |
| 162 | Chapter<br>4  | 96          | 4.A.14.1(S<br>N:5) | Similar work experience(Technical capability): Completed work of similar nature of requisite value has been asked for each package.  | There are very big projects of similar nature which are undertaking by TCIL. Such works have long duration of completion period. However, part completed work is morethan the requisite value of similar work experience which should be permissible.         | TCIL          | As per tender.   |
| 163 | SECTIO<br>N I | 55 to<br>60 | 3.B.3              | 3.B.3 Network Design for Different Type of<br>Stations   | As per SOR, there are 17373 numbers Type-I switch and 7180 numbers Type-II Switch. However, as per network design in the section 3.B.3, the count of Type I switch (40 for A1, 18 for A, 9 for B, 6 for C, 2 for D&E) is coming 20611 and Type-II switch (5 f | Intec Infonet | Bidder to quote quantity of switches as per SOR.   |

|     |               |     |                  |  | 5   |               |                |
|-----|---------------|-----|------------------|--|---|---------------|----------------|
| 164 | SECTIO<br>N I | 171 | 3                | 3.0 Technical Support Service:-  | Please confirm that the proposed solution<br>should support 24x7x365 TAC Support from<br>OEM and advanced Next business Day Hardware<br>replacement   | Intec Infonet | As per tender. |
| 165 | SECTIO<br>N I | 208 | 8.2              | 8.2. Server  As per RDSO Specification of IP Based Video Surveillance System Specification no.  RDSO/SPN/TC/65/2016 Revision 4.0 or latest with all amendments and as specified in tender document.  Server Processor Cache: 20 MB | Instead of 20 MB Cache, We would recommend<br>to have Latest Intel Processor CPU-4110 for 8<br>Core, 2.1 GHz Processor. (2.1 GHz 4110/85W<br>8C/11MB Cache/DDR4 2400MHz)  | Intec Infonet | As per tender. |
| 166 | SECTIO<br>N I | 212 | 8.8.2.3          | Bidder to propose switch having Operating<br>Temperature and Storage Temper-ature as<br>per environmental requirement  | We would recommend to mention the Temperature @ 50 DegreeC for Type-I Switch as per Environmental condition at Station platform   | Intec Infonet | As per tender. |
| 167 | SECTIO<br>N I | 212 | 8.8.1            | RDSO Specifications 6.2.3 The LAN switch shall support minimum 4000 MAC address  | We would recommend minimum 8000 MAC address, to connect the more devices in the LAN   | Intec Infonet | As per tender. |
| 168 | SECTIO<br>N I | 212 | 8.8.1            | RDSO Specifications 6.2.4 The LAN switch shall have 255 IGMP groups  | We would recommend minimum 512 Groups to support, multiple audi, Video and Data streams   | Intec Infonet | As per tender. |
| 169 | SECTIO<br>N I | 212 | 8.8.1            | RDSO Specifications 7.4 7.4 The operating personnel shall be protected against shock hazards as per IS 8473 (1993) – Guide on the effects of current passing through the human body (equivalent to IEC publications 479 – 1984).   | Kindly clarify that "RoHS including Directive 2011/65/EU" compliance is acceptable against this shock hazard requirement described in this clauses  | Intec Infonet | As per tender. |
| 170 | SECTIO<br>N I | 212 | 8.8              | Type-I Switch IPv6 Feature   | To implement the IPv6 network, Switch should be IPv6 certified/logo ready from day 1, which gone through Testing by standard Body   | Intec Infonet | As per tender. |
| 171 | SECTIO<br>N I | 212 | 8.8              | Type-I Switch  | Please include "OEM should be having valid ISO 9001 & ISO 14001 certification on the date of opening of bid"  AND  "OEM should have figured in the latest Magic Quadrant for Wired and Wireless LAN Access published by Gartner." (Documentary support to be submitted along with Technical Bid). This will help to get best of class equipment from Industry. Kindly clarify | Intec Infonet | As per tender. |
| 172 | SECTIO<br>N I | 212 | 8.9, Sr.<br>no 1 | Should have minimum 12 x GE SFP based ports.   | To ensure future requirement, specifically in A1, A and B type stations, we would recommend to have at least 16 number of GE Fiber ports in Type-II Switch. Kindly clarify  | Intec Infonet | As per tender. |

|      |        |     |              | T 116 21-1 1B 6 foot 1- 1-11 1                 | To the elementary of the late |                |                             |
|------|--------|-----|--------------|--|---|----------------|-----------------------------|
| 470  | SECTIO | 242 | 8.9, Sr. no. | Type-II Switch: IPv6 feature should be ready   | To implement the IPv6 network, Switch should  |                |                             |
| 173  | NI     | 213 | 23           | from day 1.                                    | be IPv6 certified/logo ready from day 1, which  | Intec Infonet  | As per tender.              |
|      |        |     |              |  | gone through Testing by standard Body   |                |                             |
|      |        |     |              | Type-II Switch                                 | "OEM should have a:   |                |                             |
|      |        |     |              | "OEM should have a :                           | i) valid ISO 9001 & ISO 14001 certification on  |                |                             |
|      |        |     |              | i) valid ISO 9001 & ISO 14001 certification on | the date of opening of bid"   |                |                             |
|      |        |     |              | the date of opening of bid"                    | AND   |                |                             |
| 174  | SECTIO | 213 | 8.9, Sr. no. | OR   | ii) should have figured in the latest Magic   | Intec Infonet  | As per tender/corrigendum.  |
| 17-7 | ΝI     | 213 | 25           | ii) should have figured in the latest Magic    | Quadrant for Wired and Wire-less LAN Access   | mittee milonet | 713 per tender/corrigendum. |
|      |        |     |              | Quadrant for Wired and Wire-less LAN Access    | published by Gartner." (Documentary support to  |                |                             |
|      |        |     |              | published by Gartner." (Documentary support    | be submit-ted)  |                |                             |
|      |        |     |              | to be Submitted)                               | This will Help to get best class equipment from   |                |                             |
|      |        |     |              |  | Industry.   |                |                             |
| 1    |        |     |              | Type-II Switch: Should support ITU-T G.8032    | Kindly clarify that to get standardized Metro   |                |                             |
| 175  | SECTIO | 213 | 8.9, Sr. no. | Ethernet Ring Protection designed for loop     | Ethernet Features, CE2.0 certificate at the time  | Intec Infonet  | As per tender/corrigendum.  |
| 173  | ΝI     | 213 | 19           | pro-tection and fast convergence times (sub    | of supply in Type-II Switch is mandatory  | mitec imonet   | As per tender/corrigendum.  |
|      |        |     |              | 50 ms) in ring topologies.                     | requirement   |                |                             |
|      |        |     |              | Should have at least 88 Gbps switching fabric. |   |                |                             |
|      | SECTIO |     | 8.10, Sr.    | Switches should have dedicated ports (other    | Kindly clarify Instead of 40 GBps statcking   |                |                             |
| 176  | NI     | 214 | 1            | than asked uplink ports) for minimum 40        | Bandwidth, it should be 48 Gbps   | Intec Infonet  | As per tender/corrigendum.  |
|      | IN I   |     | no. 4        | Gbps stacking band-width with necessary        | Balluwidth, it should be 48 Gbps  |                |                             |
|      |        |     |              | cables from day 1.                             |   |                |                             |
|      | SECTIO |     | 8.10, Sr.    | Type-III Switch: IPv6 feature should be ready  | To implement the IPv6 network, Switch should  |                |                             |
| 177  | NI     | 215 | no. 22       | from day 1.                                    | be IPv6 certified/logo ready from day 1, which  | Intec Infonet  | As per tender.              |
|      | INI    |     | 110. 22      |  | gone through Testing by standard Body   |                |                             |
|      |        |     |              | Type-III Switch                                | Please include "OEM should be having valid ISO  |                |                             |
|      |        |     |              | "OEM should have a :                           | 9001 & ISO 14001 certification on the date of   |                |                             |
|      |        |     |              | i) valid ISO 9001 & ISO 14001 certification on | opening of bid"   |                |                             |
|      |        |     |              | the date of opening of bid"                    | AND   |                |                             |
| 178  | SECTIO | 215 | 8.10, Sr.    | OR   | "OEM should have figured in the latest Magic  | <br>           | As nontondon                |
| 1/0  | ΝI     | 215 | no. 26       | should have figured in the latest Magic        | Quadrant for Wired and Wireless LAN Access  | Intec Infonet  | As per tender.              |
|      |        |     |              | Quadrant for Wired and Wireless LAN Access     | published by Gartner." (Documentary support to  |                |                             |
|      |        |     |              | published by Gartner." (Documentary support    | be submitted along with Technical Bid). This will   |                |                             |
|      |        |     |              | to be submitted)                               | help to get best of class equipment from  |                |                             |
|      |        |     |              |  | Industry. Kindly clarify  |                |                             |
|      | CECTIC |     | 0.11 C:-     | Type-IV Switch: vi. IPv6 feature should be     | To implement the IPv6 network, Switch should  |                |                             |
| 179  | SECTIO | 218 | 8.11, Sr.    | ready from day 1.                              | be IPv6 certified/logo ready from day 1, which  | Intec Infonet  | As per tender.              |
| ı    | NI     |     | no. 17       | ·  | gone through Testing by standard Body   |                |                             |

|     |               |     |                     | Type-IVSwitch   | Please include "OEM should be having valid ISO   | 1             |                |
|-----|---------------|-----|---------------------|---|--|---------------|----------------|
| 180 | SECTIO<br>N I | 218 | 8.11, Sr.<br>no. 18 | "OEM should have a: i) valid ISO 9001 & ISO 14001 certification on the date of opening of bid" OR should have figured in the latest Magic Quadrant for Wired and Wireless LAN Access published by Gartner." (Documentary support to be submitted) | 9001 & ISO 14001 certification on the date of opening of bid" AND "OEM should have figured in the latest Magic Quadrant for Wired and Wireless LAN Access published by Gartner." (Documentary support to be submitted along with Technical Bid). This will help to get best of class equipment from Industry. Kindly clarify)  | Intec Infonet | As per tender. |
| 181 | SECTIO<br>N I | 219 | 8.12, Sr.<br>no. 21 | DC Switch: Switch shall be IPv6<br>Certified/Ready.   | To implement the IPv6 network, Switch should be IPv6 certified/logo ready from day 1, which gone through Testing by standard Body  | Intec Infonet | As per tender. |
| 182 | SECTIO<br>N I | 219 | 8.12, Sr.<br>no. 23 | DC Switch "OEM should have a: i) valid ISO 9001 & ISO 14001 certification on the date of opening of bid" OR should have figured iin latest Gartner Report in field of Ethernet Switches"  | Please include "OEM should be having valid ISO 9001 & ISO 14001 certification on the date of opening of bid"  AND  "OEM should have figured in the latest Magic Quadrant for Wired and Wireless LAN Access published by Gartner." (Documentary support to be submmitted along with Technical Bid). This will help to get best of class equipment from Industry. Kindly clarify | Intec Infonet | As per tender. |
| 183 | SECTIO<br>N I | 222 | 5.11                | Should be capable of dynamically tuning IDS/IPS sensors (e.g., selecting rules, configuring policies, updating policies, etc.).   | Please confirm whether the proposed solution<br>should support more than 20000 IPS signatures<br>to cover the breadth of today's attack  | Intec Infonet | As per tender. |
| 184 | SECTIO<br>N I | 223 | 5.22                | Should support more than 3000 application layer and risk-based controls that can invoke tailored intrusion prevention system (IPS) threat detection policies to optimize security effectiveness.  | Please confirm whether the proposed solution should be able to aggreagate these 3000 applications in more than 40 categories for ease of security operations   | Intec Infonet | As per tender. |
| 185 | SECTIO<br>N I | 224 | 2.2                 | The appliance should have at least 8 * 1 GE and 8*10G ports from day one  | To ensure that proposed solution meet the future growth by clustering multiple appliances together to increase overall throughput, please confirm whether the proposed appliance should support 6x40GE in future   |               | As per tender. |
| 186 | SECTIO<br>N I | 224 | 4.5                 | Firewall should have integrated redundant power supply without any external adaptors  | Since this is a data centre Firewall, Please confirm, whether proposed appliance appliance should support both PSU redundancy and FAN module redundancy along with hot swapable capability of both PSU and FAN from Day-1  | Intec Infonet | As per tender. |

| 187 | SECTIO<br>N I   | 225                               | 5.11             | Should be capable of dynamically tuning IDS/IPS sensors (e.g., selecting rules, configuring policies, updating policies, etc.).   | Please confirm whether the proposed solution should support more than 20000 IPS signatures to cover the breadth of today's attack  | Intec Infonet | As per tender.                             |
|-----|---|-----------------------------------|------------------|---|--|---------------|--|
| 188 | SECTIO<br>N I   | 225                               | 5.22             | Should support more than 3000 application layer and risk-based controls that can invoke tailored intrusion prevention system (IPS) threat detection policies to optimize security effectiveness.  | Please confirm whether the proposed solution<br>should be able to aggreagate these 3000<br>applications in more than 40 categories for ease<br>of security operations  | Intec Infonet | As per tender.                             |
| 189 | Chapter -<br>3<br>Clause<br>No :<br>4.A.48  | RFP<br>Page<br>No:<br>117-<br>118 | Make In<br>India | Bidder may note that their acceptance of the "Make in India" Clause described below is a mandatory requirement for considering the bidder eligible. The bidder is free to choose all products from either Indian Manufacturer or from Foreign | This Clause is contradictory to clause No: 4.A.45 (Domestic Manufactrur). PMA is required the manufacturing set up at the time of bidding. This can't be declare in future after award of contrat. Please ask to declare % of Make In India at the time of bid | ACER          | Clause as per tender/corrigendum prevails. |
| 190 | RDSO/SP<br>N/TC/65/<br>2016 /<br>Page No<br>: 21-22 /<br>Clause<br>No :           | Opera<br>ting<br>Syste<br>m       | Server           | Windows Operating System or Linux, latest with minimum 3 Client licenses  | Linux doesn't have the client license however<br>windows has client license. Hence we request you to<br>remove the clent license from Linux.   | ACER          | Clause as per tender/corrigendum prevails. |
| 191 | 10.1.1<br>RDSO/SP<br>N/TC/65/<br>2016 /<br>Page No<br>: 21-22 /<br>Clause<br>No : | Hard<br>Disk<br>Drive             | Server           | Hot Pluggable SAS HDD, 4x600 GB, 7200 RPM or higher with minimum 06 nos. or higher internal drive bays.   | Please clarify whether 10K RPM is accepteble ?   | ACER          | Clause is self explainatory.               |
| 192 | RDSO/SP<br>N/TC/65/<br>2016 /<br>Page No<br>: 21-22 /<br>Clause<br>No :<br>10.1.1 | Graph<br>ic<br>Card               | Server           | One no. GPU card of NVIDIA Tesla/Quadro series or AMD Fire pro or similar.  | It is mandotry to provide graphic card?  | ACER          | Clause as per tender/corrigendum prevails. |
| 193 | RDSO/SP<br>N/TC/65/<br>2016 /<br>Page No<br>: 21-22 /<br>Clause<br>No : 11.2      | Frequ<br>ency                     | Workstatio<br>n  | 2.4 GHz or higher   | Please clarify whether lower clock speed and higher nos of core are allowed ?  | ACER          | As per tender.                             |

|     | RDSO/SP   |                             |                                   | 10 MB  |   |      |   |
|-----|---|-----------------------------|-----------------------------------|--|---|------|---|
| 194 | N/TC/65/<br>2016 /<br>Page No<br>: 21-22 /<br>Clause                                    | Cache                       | Workstatio<br>n                   |  | We understand the 10 MB cache can be offered either through one processor or dual processor.  Request you to clarify this.  | ACER | As per tender   |
| 195 | No: 11.2<br>RDSO/SP<br>N/TC/65/<br>2016 /<br>Page No<br>: 21-22 /<br>Clause<br>No: 11.2 | Opera<br>ting<br>Syste<br>m | Workstatio<br>n                   | Windows Operating System or Linux, latest with minimum 3 Client licenses   | Linux doesn't have the client license however<br>windows has client license. Hence we request you to<br>remove the clent license from Linux.  | ACER | As per tender.  |
| 196 | RDSO/SP<br>N/TC/65/<br>2016 /<br>Page No<br>: 21-22 /<br>Clause<br>No : 11.2            | Graph<br>ics<br>Card        | Workstatio<br>n                   | One no. of dual Port 4 GB NVIDIA Graphic Card or better.   | Please clarify whether this is mandatory or optional.   | ACER | Clause is self explainatory.  |
| 197 | RFP Page<br>No : 106-<br>107 /<br>Clause<br>No :<br>4.A.24.                             | Small                       | Micro and<br>Enterprises<br>MSEs) | RailTel would also enter into Rate Contract with<br>the firm to whom the contract is awarded for<br>catering to additional requirement of Cameras,<br>Switches, Servers, Storages, Rack, UPS, FMS, VMS<br>software & Other associated equipments of<br>Schedule of requirement | Please clarify whether this would be applicable at component level also.  | ACER | Clause is self explainatory.  |
| 198 | Open<br>Tender<br>Notice  | 3                           |                                   | RailTel Corporation of India Limited, New Delhi.   | a) As the amount of EMD is above INR 50 Lacs for each region, please allow bidders to submit EMD in form of Bank Guarantee also.      b) Request you to share requisite format of Bank Guarantee for EMD.   | HFCL | Clause is self explanatory. Request cant be considered.   |
| 199 | Chapter 2   | 40                          | V                                 | applies to items viz. different types of cameras, servers,<br>Video Record-ing & Processing Unit, workstation,<br>storage, large format display monitors, VMS Softwares<br>including VA and FRS, switches (each Type sep   | By this clause we understand that for one item, bidder can propose only one make & model. However: a) For different types of cameras can we quote different make / models (but one make & model for one line item) b) Can we quote multiple make & models for other products such as SFPs, Racks, HDPE pipe etc | HFCL | Clause is self explanatory. Only swicthes are exemption.  |
| 200 | Chapter 3   | 48                          | 3.A.1.14                          | , , , ,  | Please remove the consumable from the bidder's scope as consumable is based on the usage and need to be clearly mentioned for cost calculation.   | HFCL | Tender/ corrigendum clause shall prevail.   |
| 201 | Chapter 3   | 49                          | 3.A.1.7.1                         | The Executive Director/Regional General Manager of respective Region of RailTel would be the executing Officer Head of the project. The concerned RGM/ED   | Being vast geograhical area, division wise contact details should be provided. Please provide organization matrix division wise.  | HFCL | Please refer to chapter-3.A.1. More RailTel is devided into four regions and more details may be obtained from website where organisation chart is too available. |

| 202 | Chapter 3 | 49  | 3.A.1.7.9          | by Railways, if available, at the lease cost as per the<br>latest norms of Railways.  | Detail of necessary lease cost is required for costing purpose.  Please explain the rationale behind the charges as this project is being executed by bidder in behalf of Railtel only for the railways. Also request you to please quantify the lease cost?  | HFCL | Cost is different for diferent places and is as per Railway commercial rates. The cost is required to be paid for the requirement of the bidder only and not at required to be paid for ROW.         |
|-----|-----------|-----|--------------------|---|---|------|--|
| 203 | Chapter 3 | 50  | 3.A.1.9 b)         | The bidder shall be fully responsible for Quality Assurance of equipment & other network elements and supervision of following:- b) Integration with existing network/system  | For Design, BoQ finalization and compatibility purpose - Please provide the detail of existing network containing information of type of equipment's & interface details.   | HFCL | The existing network of Railtel is standard MPLS network   |
| 204 | Chapter 3 | 50  | 3.A.1.10.4         | Continous training and re-training - As and when required by RailTel  | Kindly elaborate the term 'Continous training'  | HFCL | On field training to executives as and when required.  |
| 205 | Chapter 3 | 51  | 3.A.1.4.11         | Final Commissioning - The VSS shall be considered to<br>be commissioned only after successful completion of<br>the SAT, trial Run, successful completion of 12 months<br>of Maintenance Supervi-sion after issue of PAC and<br>after issue of Final Acceptance Certificate                | Any delay due to dependancey on customer, SI should not be pennalised and payment should be released on SAT certificate after consultation with customer.  Incase FAT is not poosible because of any reason attributable to RailTel or Railway Authority, SAT should be considered for VSS Commissioning.   | HFCL | Clause as per tender/ corrigendum shall prevail.   |
| 206 | Chapter 3 | 68  | 3.D.1.             | Inspection will be carried by RDSO for all the items for which RDSO specifi-cations are referred. For other items the inspection will be carried out by RailTel or its authorized agency.   | For non-RDSO spcified items, what will be the procedure of Inspection to be done by Railtel.  | HFCL | The clause is self explanatory. Procedure is ame for RDSO as well as non RDSO inspection.  |
| 207 | Chapter 4 | 81  | 4.A.4.1<br>4.A.4.2 | The first phase of deliverable also includes a Pilot and only after approval from the Indian Railways/RailTel, bidder shall be allowed to implement the solution further.  In case the Pilot is declared unsuccessful, either on the  | a) Pilot here should be described in detail. b) If a bidder is declared L1 in two or more regions, we understand Pilot in only one division of a region is required in such case.  Please confirm.  | HFCL | Pilot means first set of stations where<br>the work is completed. "Pilot" shall be<br>different for different regions of<br>RailTel.   |
| 208 | Chapter 4 | 112 | 4.A.36.5(b)        | hasis of delay in imple-m Part-II "Price Bid" Shall contain (i) the offer letter (ii) the price bid for "Sched-ule of requirements" as per part I of Chapter 2 along with "Bill of Material" for each item quoted exactly according to the proforma, as also submitted along with "Creden | In case a bidder wants to bid for all four packages - Please clarify whether four separate ID given for each packages or four separate files need to be uploaded under one single tender ID on e-tender portal?  Please confirm.  | HFCL | The part of the tender documents which are different for different regions such as SOR are required to be uploaded as separate though they shall be opened simultaneously ( Part-I & II separately). |
| 209 | Chapter 4 | 122 | 4.B.9              | Eligibility criteria related documents as applicable shall also be scanned and submitted ONLINE. Copy of these documents shall also be submitted in RailTel before Tender opening date & time. Bids without these off line submissions are liable to be rejecte                           | As Technical doc are also part of the 'CREDENTIAL BID', please clarify wheter complete 'CREDENTIAL BID', TECHNICAL BID' need to be submitted offline or only few selected Eligibility criteria related documents (please spacify) need to be submitted.  Generally, in all E-tenders, bidders are asked to submit only few documents offline such as EMD, Integrity Pact, cost of tender document, pass phrase etc.  Request you to allow the bidder to submit CREDENTIAL BID / TECHNICAL BID on-line only. However, documents such as EMD, Integrity Pact, cost of tender document, pass phrase etc. could be submitted offline. | HFCL | Clause of the tehder is clear.   |

| 210 | Se-II<br>Chapter 4 | 256 | JOINTING<br>AND<br>TERMINATIO<br>N OF FIBRE<br>OPTIC CABLE |   | For optimisation of network, we understand that in railway premises, where digging is not possible fiber overhead laying could be considered.  Please confirm.  | HFCL | The works are required to be carried out as per feasibilty which shall be as per the guidance of the "Engineer Incharge". |
|-----|--------------------|-----|--|---|---|------|---|
| 211 | Chapter-4          | 113 | 4.A.45.  | The provisions of the Public Procurement (Preference to Make in India) Order 2017 dated June 15, 2017 (and subsequent amendments, if any) by Department of Industrial Policy and Promotion, GoI shall apply to this tender to the extent feasible. The local ma | (a) Provisions of the Public Procurement (Preference to Make in India) Order 2017 dated June 15, 2017 apply to this tender.Kindly elaborate on the tender evaulauation procedure that will be adopted in the events of bids containing different types and quantities of items seeking prefrence to make in india. For example in the following cases which bid will be considered fully compliant for preference under Make in India.  (i) Bid containing all items under Make in India category as part of the proposal.  (ii) Bid containing only 50% items under Make in India category as part of the proposal.  (iii) Bid containing only 25% items under Make in India category as part of the proposal.  (b) Also, confirmed which all items out of the total supplies sort under this tender will be considered for preference under Make in India.  (c) We understand that the provenness and commercial buissness having been done criteria is exempt for items qualifying under Make in India. Kindly confirm | HFCL | Tender clauses are self explanatory.  |
| 212 | Chapter-           | 47  | 3.A.1.4.8  | Bidder may also be required to extend fiber/network connectivity from the nearest station to the RPF/GRP Thana/Post   | (a) Please specify how many such scenrios of extending fiber would be there (b) What would be the distance to be considered for this type of connectivity for design considerations   | HFCL | Kindly refer to revised SOR. Item to be payable as per actual lengths of items.   |
| 213 | Chapter-           | 47  | 3.A.1.4.8  | Bidder may also be required to extend fiber/network connectivity from the nearest station to the RPF/GRP Thana/Post   | (a) Please specify how many such scenrios of extending fiber would be there (b) What would be the distance to be considered for this type of connectivity for design considerations   | HFCL | Kindly refer to revised SOR. Item to be payable as per actual lengths of items.   |
| 214 | Chapter-8          | 208 | 8.3.1.1.1  | For implementation of the proposed system, it is assumed that there would be 552 Clusters constituting RPF/GRP Thana/Post   | Stations per Cluster is not mentioned in the Tender   | HFCL | The average Nos. of station/cluster is 12.  |
| 215 | Chapter-8          | 209 | 8.3.1.2  | Approximate number of cameras considered across<br>6124 Railway Sta-tions are 89844 units. Refer Chapter-<br>7 Annexure-I for station category, Region wise camera<br>breakup   | Please provide exact count of Platforms in each station.  | HFCL | Please refer to tender clause 3.B.3   |
| 216 | Chapter-8          | 230 | 8.18   | Video Recording & Processing Unit for non RPF Stations  | Please provide the details of Video Recording and Processing Unit at Station Level (Not mentioned in BOQ region wise.)  | HFCL | Please refer to clause 6 (a) of all the packages/regions.   |

| 217 | Chapter-8     | 209 | 8.3.1.2     | At each such cluster i.e. RPF/GRP Thana/Post location, bidder to size storage, server requirement and propose a single server considering re-cording of 200 FHD cameras, analytics on 40 cameras, FRS with local matching capability with the watchlist databas                | Please provide the details of Cameras count per Station for Sizing & Storage.   | HFCL       | Tender/ corrigendum clauses are clear and shall prevail.    |
|-----|---------------|-----|-------------|--|---|------------|---|
| 218 | Chapter-4     | 101 | 4.A.14.1.3  | The OEM for proposed IP cameras and VMS Software should have supplied for at least one project in a Mass Rapid Transport system e.g. Metro, Railways, Mono Rail, Airport etc. in India or abroad in last 3 financial years (i.e. cur-rent year and three previ                 | Please clarify on IP Camera and VMS Software can be from two different OEMs.  | HFCL       | Please refer to note-V on Page-40 of tender document        |
| 219 | Chapter-<br>8 | 211 | 8.3.2.3.1.1 | On Station collocated with RPF/GRP Thana/Post:   | Please specify the count of stations collocated with Thana per region.  | HFCL       | Tender/ corrigendum clauses are clear and shall prevail.    |
| 220 | Chapter-<br>3 | 47  | 3.A.1.4.8   | Bidder may also be required to extend fiber/network connectivity from the nearest station to the RPF/GRP Thana/Post  | <ul><li>(a) Please specify how many such scenrios of extending fiber would be there</li><li>(b) What would be the distance to be considered for this type of connectivity for design considerations</li></ul>           | HFCL       | Please refer to the revised SOR where details are provided. |
| 221 | 4.A.22        | 105 | 4.A.22.1    | The bidder shall furnish a sum as given in Bid Data<br>Sheet (BDS) Chapter 5 as Ear-nest Money in the<br>form of Demand Draft from any scheduled bank<br>in India in fa-vour of "RailTel Corporation of India<br>Limited" payable at New Delhi which should<br>remain valid fo | Request you to Kindly Consider EMD in the form of DD  | Quess Corp | Clause as per tender/corrigendum prevails.                  |
| 222 | 4.A.5         | 83  | 4.A.5.1.3   | 15% payment of the value of items of Schedule – A shall be made by RailTel on installation & commissioning of stations/sites including at the concerned RPF/GRP Thana/Post of the cluster for CCTV at stations   | Request you to kindly release the 15% payment of the value of items of Schedule – A on installation & commissioning at stations/sites including at the concerned RPF/GRP Thana/Post of the cluster for CCTV at stations | Quess Corp | Clause as per tender/corrigendum prevails.                  |
| 223 | 4.A.5         | 83  | 4.A.5.1.3   | 5% payment on issue of Provision-al Acceptance<br>Certificate (PAC) and the last 5% payment shall be<br>made by Rail-Tel/REL on issue of Final Acceptance<br>Certificate (FAC)   | In the event of delay in issue of FAC due to reasons not attributable to the contractor, request you to kindly release the 5% Payment against equivalent BG valid up to the receipt of FAC                              | Quess Corp | As per tender.  |
| 224 | 4.A.5.1       | 84  | 4.A.5.1.3   | For spares 15% + 5% will be made after issue of PAC of the first RPF/GRP Thana/Postfor CCTV at stations and remaining 5% on issue of FAC of the same   | Request you to kindly release payment for Mandatory spares as below: 100% of Payment shall be made on delivery at site after requisite certifications   | Quess Corp | As per tender.  |

| 225 | 3.A.1  | 51 | 3.A.1.11  | The VSS shall be considered to be commissioned only after successful completion of the SAT, trial Run, successful completion of 12 months of Maintenance Supervi-sion after issue of PAC and after issue of Final Acceptance Certificate (FAC).   | Taking over of stations & 12 months of superivision maintenance shall commence as and when the network infrastucture of station with necessary software applications, Computing & storage requirements are implemented at the respective GRP station. Necessary PAC & FAC for respective station as well as payment against the same shall be released after SAC & Trial run. This shall not be linked with commissioning of all cluster stations linked with GRP & monitoring of the stations from EMS at DC  | Quess Corp | Clause as per tender/corrigendum prevails.   |
|-----|--|----|-----------|---|--|------------|--|
| 226 | Chapter<br>2-<br>Schedule<br>of<br>Require<br>ment,<br>Schedule<br>A | 8  | 1         | SITC of IP Cameras at Stations  | Since equipments like Surveillance Cameras, Switches are Unit Rate items, in the even of extension of platform length & thereby implementation of additional cameras on existing rates are required by the authority, the associated accessories for implementation will also vary based on the same. Thereby request you to add a line item for all necessary hardware accessories required for implementation per camera, which can be used to govern in the case of qty variation. Further Cost of storage & computing as required as shall be paid at mutually discussed and agreed rate | Quess Corp | Clause as per tender/corrigendums prevails.  |
| 227 | 3.A.1.7  | 49 | 3.A.1.7.1 | Railways shall provide AC power supply at station/cabin/panel room/mid-section buildings for carrying out the awarded work. The successful bidder will have to pay the nominal charges for the power supply as per the exist-ing Railways Norms   | Overall LT Power consumption shall be metered & paid by Railtel throughout the course of AMC since estimation of actual consumption at prevailing & possible revised tariff is ahenious task   | Quess Corp | Clause is related to carrying out of the work during implementatin phase only. Payment towards AC Power supply after installation of equipments is not under bidder scope. |
| 228 | Chapter=<br>3,<br>Propose<br>d<br>Architect<br>ure for<br>VSS        | 54 | 3.B.1     | To implement video surveillance solution, each station should have robust, secure and scalable network architecture implemented which will cover all platforms and other areas such as waiting halls, ticket counters, entry, exit, refreshment area, and foot over bridge, parking area etc. of a railway station. | Request you to kindly share the tentative Layout, Station elevation covering all platforms & various rooms, parkings, Foot over Bridge etc for all station categories (A1, A, B, C, D, E) as well as tentative distances of nearest POP to the stations. This is a necessity to arrive at all necessary quantity, cost of Fiber and other accessories for implementation   | Quess Corp | The tentative list of all stations is also being uploaded with the corrigendum. Bidders can assess the work of the stations.   |
| 229 | 3.A.1.7  | 49 |           | Site Preparation  | Request you to kindly share the detailed List of all<br>Railway stations across various regions demarcating<br>against A1, A, B, C, D,E categories covered under this<br>project to undertake sample site surveys  | Quess Corp | The tentative list of all stations is also being uploaded with the corrigendum.  Bidders can assess the work of the stations.  |

|     | 1   |    |           |  | I  | I          | Т  |
|-----|---|----|-----------|--|--|------------|--|
| 230 | 3.A.1.7   | 49 |           | Site Preparation   | Request you to kindly provide the detailed lists of all GRPs, RPF Offices of all the regions along with cluster of stations of various categories (A1, A, B.C.D,E) coming under a GRP  | Quess Corp | The tentative list ofstations is also being uploaded with the corrigendum. |
| 231 | Chapter=<br>3,<br>Propose<br>d<br>Architect<br>ure for<br>VSS | 54 | 3.B.2     | Power & Fiber Distribution Design for Railway<br>Stations  | We understang that scope of contractor's work in all stations will commence from 24 Ports FDMS/ LIUs and Outgoing of ACDB Panels for Networking & Power Circuit. Please confirm  | Quess Corp | Clause as per tender/corrigendum prevails.                                 |
| 232 | 3.A.1.4   | 47 | 3.A.1.4.8 | Bidder may also be required to extend fiber/network connectivity from the nearest station to the RPF/GRP Thana/Post.   | Since the tentative backbone architecture as well as soil characteristics are unclear, request you to kindly exclude the scope of 24 F connectivity between stations & GRP offices shall be excluded from the scope of work          | Quess Corp | Clause as per tender/corrigendum prevails.                                 |
| 233 | 3.A.1.4   | 47 | 3.A.1.4.8 | Remote operation and monitoring of a cluster of stations from RPF/GRP Thana/Post through the RailTel/Railways TCP/IP network. Bidder is required to plan sufficient number of VMS/EMS licenses, IT equipments to facilitate the same | We understand that the No of EMS Licenses for viewing will be equal to number of GRP/RPF Offices.  Please confirm  | Quess Corp | Clause as per tender/corrigendum prevails.                                 |
| 234 | 4.A.8   | 88 | 4.A.8.1   | SLA & Penalties  | Any Downtime resulting due to Railtel or 3rd Party<br>Bandwidth providers shall not be Linked with<br>contractor's SLAs. Kindly confirm  | Quess Corp | Clause is self explainatory.   |
| 235 | 3.B   | 61 | 3.B.6.1   | Railtel Data Centres   | We understand that GRP/RPF offices of cluster stations of North & East region as well as South & West regions will be integrated with Railtel's Gurugram & Secunderabad Data Centers respectively. Kindly confirm our understanding. | Quess Corp | Clause is self explanatory.  |

|     |   |     |            | Support from Indian Railways  |  |            |   |
|-----|---|-----|------------|---|--|------------|---|
| 236 | 3.A.1.7   | 49  | 3.A.1.7.1  |   | Necessary Rail Clears & approvals for undertrack fiber laying works for interconnection of aggregation switches between platforms shall be provided by Railtel. Further all necessary cost for track rail lifting, welding, metal filling and all other works for dismantling & restoration shall be paid at actuals by Railtel  Further, in the event of necessity of chipping of non load bearing walls, floor & any structure resulting in extensive breakage due to ageing shall be restored at mutually agreed rates    | Quess Corp | Clause as per tender/corrigendum<br>prevails. |
|     |   |     |            |   | In the event of malfunctioning of Cameras or any edge devices & network switches due to induction from Traction circuits, the same shall be replaced by the contractor with addiditional cost implication in the vent of non insurance coverage. Please confirm  |            |   |
| 237 | Section II-<br>Chapter<br>5   | 263 |            | Maintenance Free Earthing   | MFCE based Earth Pit consumes high volume of copper rods, bare copper conductors as well as filling Compound since No of pits required is linked to the acceptable soil resistivity value which inturn depends on the soil conditions of various regions. Thereby request you to kindly provide the tentative prevailing & acceptable soil resistivity values of sample stations across various regions.  Further request you to kindly add Earth Pit in the SOR as unit rate items to ensure factoring of appropriate costs | Quess Corp | Clause as per tender/corrigendum prevails.    |
| 238 | 4.8.14.1 -<br>Eligibility<br>Criteria<br>Require<br>ments<br>for<br>Bidders | 99  | 4.A.14.1.1 | In case the tenderer wants to quote for multiple packages i.e. Northern, Western, Southern and Eastern, the financial and technical criterion given above will have to be met separately for each package and cumulatively for all packages being quoted combin | In order to facilitate enhanced participation of competitive Sis & OEMs, request you to kindly consider evaluation on Cumulative Turn over & Experience basis only and not cumulative & individual TO & experience based evaluation  | Quess Corp | Clause as per tender/corrigendum prevails.    |

|     |   |             |            | Evaluation methodology: Bidding for more than   |  |            |   |
|-----|---|-------------|------------|---|--|------------|---|
|     |   |             |            | one packages  | Kindly clarify the mode of evaluation if there is a bidder quoting for multiple packages & a bidder quotes for a single package. Pls clarify whether the evaluation will bebased on least individual bid values or least of cumulative package values  |            |   |
| 239 | 4.A.14.1                                      | 99          | 4.A.14.1.1 |   | In case of evaluation based on least of cumulative package values, then the bidder quoting for single package will be at a disadvantage since there are all posssible chances of Implementation & AMC costs of bidder quoting for multiple package to have been front loaded in a different package. | Quess Corp | Clause is self explainatory.  |
|     |   |             |            |   | Thereby request you to provide a cap of 5% on AMC<br>Cost per annum  |            |   |
| 240 | 3.A.1.7                                       | 49          | 3.A.1.7.1  | Support from Indian Railways  | We understand that all necessary way leaves, & other statutory approvals from various bodies shall be provided by Railtel  | Quess Corp | Clause as per tender/corrigendum prevails.                                      |
| 241 | 3.A.1.7                                       | 49          | 3.A.1.7.1  | Support from Indian Railways  | Necessary Site Infra Structure/Ware House areas shall be provided by Railtel & cost towards the same shall be re-imbursed at actuals.  | Quess Corp | Clause as per tender/corrigendum prevails.                                      |
| 242 | Form<br>No22 to<br>24                         | 161-<br>164 |            | Tripatriate Agreement & Undertaking to provide for the support to quoted product                                      | We understand that a specific OEM executing a Tripatriate agreement with Railtel & a bidder can execute another Tripatriate agreement with Railtel & another bidder. Kindly confirm  | Quess Corp | Clause is self explainatory.  |
| 243 | Form<br>No22 to<br>24                         | 161-<br>164 |            | Tripatriate Agreement & Undertaking to provide for the support to quoted product                                      | We understand that a OEM being a lead bidder can execute another Tripatriate agreement with railtel & another lead bidder. Kindly confirm  | Quess Corp | Clause is self explainatory.  |
| 244 | Chapter<br>3,E                                | 75          | 3.E.1      | Training  | One Time Training shall be provided for maximum<br>15 officials of Railtel. Any further training<br>requirement shall have financial implication. Kindly<br>confirm  | Quess Corp | Clause as per tender/corrigendum prevails.                                      |
| 245 | Amendm<br>ent No<br>1.0                       | 9           | 29         | Schematic Diagram-2, Cloud based architecture for Video Surveillance  | It can be seen from the architecture that, data<br>transfer of video feeds to cloud is from the Edge<br>devices. Kindly confirm whether the Data Transfer to<br>cloud shall be from Edge devices or GRPs or Data<br>Centres  | Quess Corp | Clause as per tender/corrigendum prevails.                                      |
| 246 | RDSO<br>Specifica<br>tion                     |             |            | Technical & Functional Requirement  | Request you to kindly provide the technical & functional requirement for Servers   | Quess Corp | Clause as per tender/corrigendum prevails.                                      |
| 247 | Chapter<br>4-<br>Clause<br>4.A.22 -<br>4.A.23 | 105-<br>106 |            | Eligible MSEs are exempted from cost of Tender documents and EMD, more details are given in clause 4.A.23, Chapter 4. | In case of Consortium Bid, if the primary bidder is not MSE while the secondry bidder is MSE then will the consortium bidder be exempted from cost of tender documents and EMD.  | BECIL      | No. (Unless specifically allowed through applicable Govt. Of India guidelines.) |

| 248 | Chapter<br>7<br>Annexur<br>e -III<br>Consorti<br>um Bids             | 188 | 1.2       | 1.2 The Lead Bidder should have experience of execution of turnkey similar projects/Works (Definition of similar work is as per the clause 4.A.14 of chapter 4). In their own interest the tenderers who form such a consortia mare advised to investigate cap  | In case of Consortium Bid, kindly allow the work experience of Secondry Bidder to be considered as a proof of work executed.   | BECIL | Clause as per tender/corrigendum prevails.    |
|-----|--|-----|-----------|---|--|-------|---|
| 249 | Chapter<br>7<br>Annexur<br>e -III<br>Consorti<br>um Bids             | 188 | 1.2       |   | In case of Consortium Bid, kindly allow the work experience of both the parties jointly to be considered as a proof of work executed.  | BECIL | Clause as per tender/corrigendum prevails.    |
| 250 | CHAPTE R-8  TECHNI CAL, FUNCTI ONAL REQUIR EMENTS & SPECIFI CATION S | 208 | 8.3       | Broadly, the system functionality, technical requirement and hardware specifica-tions shall be as per RDSO Specification of IP Based Video Surveillance System Specification no. RDSO/SPN/TC/65/2016 Revision 4.0 or latest with all amend-ments for IP based CCTV at stations. HOWEVER, IN CASE OF THE SOLUTION DESIGN PARAMETERS, SYSTEM FUNCTIONAL REQUIREMENTS AND TECHNICAL SPECIFICATION OF A SYSTEM/ITEM BETWEEN RDSO SPECIFICATION AND THE TENDER CONDITIONS WILL PREVAIL OVER RDSO SPECIFICATIONS. | Clarification required on- If some Specification proposed and accepted for External Storage with the combination of Secondary Storage as LTO Tape Library on Datacenter side for Keeping the Flagged Data for longer duration for 1 Year will be accepted if found better and cost effective compare to the External Disk storage, as its written as "THE TENDER CONDITIONS WILL PREVAIL OVER RDSO SPECIFICATIONS."  | BECIL | Clause as per tender/corrigendum<br>prevails. |
| 251 | CHAPTE R-8  TECHNI CAL, FUNCTI ONAL REQUIR EMENTS & SPECIFI CATION S | 209 | 8.3.1.1.5 | Bidder to also propose an external storage solution at RailTel Datacenter for keeping flagged/marked video data by RPF/GRP personnel for longer reten-tion, FRS & VA alerts across all stations within the jurisdiction of RailTel Region for 30 days, Audit trail logs,application data etc. as per solution requirement and sizing as per SOR.  | We offer the Secondary LTO Tape Storage for keeping the Flagged Data for 1 Year of time. As we all know the Flagged Data can be required to keep for min. 5 to 10 Years or more as per the Criticality of the Data and required to be produce as a Evidence. Evidence Management plays critical role in CCTV Video surveillance, as in case of Evidense required to be keep for more than the disk storage life span.LTO Tape as a secondary storage can provide the much higher life span than Disk Storage.  Hence, we request to kindly allow the secondary storage as LTO Tape with automatic & Instant archival from primary external SAN Storage to support evidence management. | BECIL | Clause as per tender/corrigendum<br>prevails. |

| 252 | CHAPTE R-8  TECHNI CAL, FUNCTI ONAL REQUIR EMENTS & SPECIFI CATION S                   |     |          | New Line Item - Tape Library for Backup the Data Center Appliccations, Operating System, and Database along with Backup Software.  Min. 4 Nos. of LTO-8 Drives along with 120 Tape Slot License, Redundant Power Supply, Redundant Encryption appliance for Encryption Keys.  | We request to include the Tape Library for Backup the Data Center Appliccations, Operating System, and Database along with Backup Software. Min. 4 Nos. of LTO-8 Drives along with 120 Tape Slot License, Redundant Power Supply, Redundant Encryption appliance for Encryption Keys. | BECIL | As per tender                                 |
|-----|--|-----|----------|---|---|-------|---|
| 253 | Amend<br>ment<br>No. 1.0<br>to RDSO<br>Spec of<br>VSS                                  | 1   | 2.3      | "2.3 In IP based Video Surveillance System, the Cameras shall be provided at different locations so that the output is available as Ethernet and connected to the Servers/NVRs. Servers/NVRs in turn connected to the backbone IP Network.  For Cloud based Architecture,   | We would request to provide camera details of the stations under each RPF/Thana Post  | BECIL | Clause as per tender & corrigendum only.      |
| 254 | Amend<br>ment<br>No. 1.0<br>to RDSO<br>Spec of<br>VSS                                  | 3   | 3.6      | 3.6 Vendors shall have option to quote either Server based solution or NVR based solution in accordance with Clause no. 10.0 and Clause no. 12.0 for Video Management and Video Recording or a combination of both the solutions for both the implementation scheme as per Diagram-1 & Diagram-2. software capabilities and storage capacities shall be same for the solutions. | We would request if only Server with external<br>Storage should be allowed , as the VSS System is<br>huge and needs high reliability and<br>performance.  | BECIL | Clause as per tender & corrigendum only.      |
| 255 | Amend<br>ment<br>No. 1.0<br>to RDSO<br>Spec of<br>VSS                                  | 6   | 19.25(a) | Clause No. 19.25 (a): The Face Recognition Algorithm vendor should have participated in the latest NIST (National Institute of Standards and Technology, U.S. Department of Commerce), Face In Video Evaluation (FIVE) report.  | We would request if other global certifications could also be acknowledged by RailTel.  | BECIL | Clause as per tender & corrigendum only.      |
| 256 | Tender No.<br>RailTel/Ten<br>der/OT/CO<br>/P/2017-<br>18/VSS<br>/432 dated<br>29-03-18 | 243 | 8.26     | The proposed system should be able to leverage and integrate with existing & new CCTV cameras supporting ONVIF profile 'S' and video management systems either through camera level or VMS level, to provide an integrated video surveillance at the command ce   | Would request the quantities of the existing cameras as we would have to include necessary hardwrae and license cost for the same.  | BECIL | Bidder to quote camera quantities as per SOR. |

| 257 |  |             |   |   | Does the analytics alarm & FRS Alarms needs to be showcased on Command and Control Solutions.  Please suggest the number of Video Analytics  | BECIL | As per tender  Please refer Clause 8.3.1.2 of Chapter- |
|-----|--|-------------|---|---|--|-------|--|
| 258 |  |             |   |   | license for all the stations?  | BECIL | 8.   |
| 259 | SPECIFI<br>CATION<br>NO.<br>RDSO/S<br>PN/TC/6<br>5/2016<br>Revision<br>4.0 | 21          | 10.1 Server Hardware: Server hardware for Video Management, Recording and Video Analytics shall have the minimum following specifications:- | ProcessorIntel Xeon Processor No. of Cores8 No. of Thereads16 Frequency2.1GHz or higher Cache20MB No. of Processors2 QPI (Quick Path Interconnect) Links2 | The processor mentioned here is older generation processor and is very low end to handle the workload for this project. Hence request you to change the processor as below:  * Please change the number of cores from 8 to 18  * Please change the no. of theread  | BECIL | Clause as per tender/corrigendum prevails.             |
| 260 | SPECIFI<br>CATION<br>NO.<br>RDSO/S<br>PN/TC/6<br>5/2016<br>Revision<br>4.0 | 21          | 10.1.2 Server specifications for Face Recognition Software will be same as per clause no. 10.1.1 with following additional item:-           | ProcessorIntel Xeon Processor No. of Cores8 No. of Thereads16 Frequency2.1GHz or higher Cache20MB No. of Processors2 QPI (Quick Path Interconnect) Links2 | The Servers for Facial Recognition Software will require more processing power and clockspeed than the one mentioned in this clause, hence request you to please change the  * Number of Cores from 8 to 18  * No. of Threads from 16 to 36  * Frequency from 2.1G | BECIL | Clause as per tender/corrigendum prevails.             |
| 261 | SPECIFICAT<br>ION NO.<br>RDSO/SPN/<br>TC/65/2016<br>Revision<br>4.0        | 21          | 10.1.2 Server specifications for Face Recognition Software will be same as per clause no. 10.1.1 with following additional item:-           | Memory - 32 GB or higher, DDR3/DDR4<br>SDRAM or latest.   | The Servers for Facial Recognition Software will require more performance hence requst you to change the memory from 32GB to 128GB   | BECIL | Clause as per tender/corrigendum prevails.             |
| 262 | SPECIFICAT<br>ION NO.<br>RDSO/SPN/<br>TC/65/2016<br>Revision<br>4.0        | 25          | 12.0<br>External<br>Storage<br>Device:  | Cache - 16GB Per Controller   | A storage with 16GB cache controller might not be able to handle the workload for this project hence request you to change the cache from 16GB per controller to 32GB per controller.  | BECIL | Clause as per tender/corrigendum prevails.             |
| 263 | SECTIO<br>N I  | 55 to<br>60 | 3.B.3   | 3.B.3 Network Design for Different Type of<br>Stations  | As per SOR, there are 17373 numbers Type-I switch and 7180 numbers Type-II Switch. However, as per network design in the section 3.B.3, the count of Type I switch (40 for A1, 18 for A,9 for B, 6 for C, 2 for D&E) is coming 20611 and Type-II switch (5 fo      | BECIL | Bidder to quote Switches quantities as per SOR.        |

| 264 | SECTIO<br>N I | 171 | 3                | 3.0 Technical Support Service:-  | Please confirm that the proposed solution<br>should support 24x7x365 TAC Support from<br>OEM and advanced Next business Day Hardware<br>replacement  | BECIL | Clause as per tender/corrigendum prevails.  |
|-----|---------------|-----|------------------|--|--|-------|---|
| 265 | SECTIO<br>N I | 208 | 8.2              | 8.2. Server  As per RDSO Specification of IP Based Video Surveillance System Specification no.  RDSO/SPN/TC/65/2016 Revision 4.0 or latest with all amendments and as specified in tender document.  Server Processor Cache: 20 MB | Instead of 20 MB Cache, We would recommend to have Latest Intel Processor CPU-4110 for 8 Core, 2.1 GHz Processor. (2.1 GHz 4110/85W 8C/11MB Cache/DDR4 2400MHz)  | BECIL | Clause as per tender/ corrigendum prevails. |
| 266 | SECTIO<br>N I | 212 | 8.8.2.3          | Bidder to propose switch having Operating<br>Temperature and Storage Temper-ature as<br>per environmental requirement  | We would recommend to mention the Temperature @ 50 DegreeC for Type-I Switch as per Environmental condition at Station platform  | BECIL | As per tender.                              |
| 267 | SECTIO<br>N I | 212 | 8.8.1            | RDSO Specifications 6.2.3 The LAN switch shall support minimum 4000 MAC address  | We would recommend minimum 8000 MAC address, to connect the more devices in the LAN  | BECIL | As per tender.                              |
| 268 | SECTIO<br>N I | 212 | 8.8.1            | RDSO Specifications 6.2.4 The LAN switch shall have 255 IGMP groups  | We would recommend minimum 512 Groups to support, multiple audi, Video and Data streams  | BECIL | As per tender.                              |
| 269 | SECTIO<br>N I | 212 | 8.8.1            | RDSO Specifications 7.4 7.4 The operating personnel shall be protected against shock hazards as per IS 8473 (1993) – Guide on the effects of current passing through the human body (equivalent to IEC publications 479 – 1984).   | Kindly clarify that "RoHS including Directive 2011/65/EU" compliance is acceptable against this shock hazard requirement described in this clauses   | BECIL | As per tender.                              |
| 270 | SECTIO<br>N I | 212 | 8.8              | Type-I Switch IPv6 Feature   | To implement the IPv6 network, Switch should be IPv6 certified/logo ready from day 1, which gone through Testing by standard Body  | BECIL | As per tender.                              |
| 271 | SECTIO<br>N I | 212 | 8.8              | Type-I Switch  | Please include "OEM should be having valid ISO 9001 & ISO 14001 certification on the date of opening of bid"  AND  "OEM should have figured in the latest Magic Quadrant for Wired and Wireless LAN Access published by Gartner." (Documentary support to be submitted along with Technical bid). This will help to get best of class equipment from industry. Kindlt clarify. | BECIL | As per tender.                              |
| 272 | SECTIO<br>N I | 212 | 8.9, Sr.<br>no 1 | Should have minimum 12 x GE SFP based ports.   | To ensure future requirement , specifically in A1, A and B type stations, we would recommend to have at least 16 number of GE Fiber ports in Type-II Switch. Kindly clarify  | BECIL | As per tender.                              |

| 273 | SECTIO<br>N I | 213 | 8.9, Sr. no.<br>23  | Type-II Switch: IPv6 feature should be ready from day 1.  | To implement the IPv6 network, Switch should be IPv6 certified/logo ready from day 1, which gone through Testing by standard Body  | BECIL | As per tender. |
|-----|---------------|-----|---------------------|---|--|-------|----------------|
| 274 | SECTIO<br>N I | 213 | 8.9, Sr. no.<br>25  | Type-II Switch "OEM should have a: i) valid ISO 9001 & ISO 14001 certification on the date of opening of bid" OR ii) should have figured in the latest Magic Quadrant for Wired and Wire-less LAN Access published by Gartner." (Documentary support to be submitted) | "OEM should have a: i) valid ISO 9001 & ISO 14001 certification on the date of opening of bid" AND ii) should have figured in the latest Magic Quadrant for Wired and Wire-less LAN Access published by Gartner." (Documentary support to be submit-ted) This will help to get best of class equipment from industry.  | BECIL | As per tender. |
| 275 | SECTIO<br>N I | 213 | 8.9, Sr. no.<br>19  | Type-II Switch: Should support ITU-T G.8032 Ethernet Ring Protection designed for loop pro-tection and fast convergence times (sub 50 ms) in ring topologies.   | Kindly clarify that to get standardized Metro Ethernet Features, CE2.0 certificate at the time of supply in Type-II Switch is mandatory requirement  | BECIL | As per tender  |
| 276 | SECTIO<br>N I | 214 | 8.10, Sr.<br>no. 4  | Should have at least 88 Gbps switching fabric. Switches should have dedicated ports (other than asked uplink ports) for minimum 40 Gbps stacking band-width with necessary cables from day 1.   | Kindly clarify Instead of 40 GBps statcking<br>Bandwidth, it should be 48 Gbps   | BECIL | As per tender  |
| 277 | SECTIO<br>N I | 215 | 8.10, Sr.<br>no. 22 | Type-III Switch: IPv6 feature should be ready from day 1.   | To implement the IPv6 network, Switch should<br>be IPv6 certified/logo ready from day 1, which<br>gone through Testing by standard Body  | BECIL | As per tender. |
| 278 | SECTIO<br>N I | 215 | 8.10, Sr.<br>no. 26 | Type-III Switch "OEM should have a: i) valid ISO 9001 & ISO 14001 certification on the date of opening of bid" OR should have figured in the latest Magic Quadrant for Wired and Wireless LAN Access published by Gartner." (Documentary support to be submitted).    | Please include "OEM should be having valid ISO 9001 & ISO 14001 certification on the date of opening of bid"  AND  "OEM should have figured in the latest Magic Quadrant for Wired and Wireless LAN Access published by Gartner." (Documentary support to be submitted along with technical bid). This will help to get best of class equipment from industry. Kindly clarify. | BECIL | As per tender. |
| 279 | SECTIO<br>N I | 218 | 8.11, Sr.<br>no. 17 | Type-IV Switch: vi. IPv6 feature should be ready from day 1.  | To implement the IPv6 network, Switch should<br>be IPv6 certified/logo ready from day 1, which<br>gone through Testing by standard Body  | BECIL | As per tender. |

|     |               |     |                     | Type-IVSwitch  | Please include "OEM should be having valid ISO   |       |                |
|-----|---------------|-----|---------------------|--|--|-------|----------------|
| 280 | SECTIO<br>N I | 218 | 8.11, Sr.<br>no. 18 | "OEM should have a: i) valid ISO 9001 & ISO 14001 certification on the date of opening of bid" OR should have figured in the latest Magic Quadrant for Wired and Wireless LAN Access published by Gartner." (Documentary support to be submitted). | 9001 & ISO 14001 certification on the date of opening of bid"  AND  "OEM should have figured in the latest Magic Quadrant for Wired and Wireless LAN Access published by Gartner." (Documentary support to be submitted along with technical bid). This will help to get best of class equipment from industry. Kindly clarify.  | BECIL | As per tender. |
| 281 | SECTIO<br>N I | 219 | 8.12, Sr.<br>no. 21 | DC Switch: Switch shall be IPv6<br>Certified/Ready.  | To implement the IPv6 network, Switch should be IPv6 certified/logo ready from day 1, which gone through Testing by standard Body  | BECIL | As per tender. |
| 282 | SECTIO<br>N I | 219 | 8.12, Sr.<br>no. 23 | DC Switch "OEM should have a: i) valid ISO 9001 & ISO 14001 certification on the date of opening of bid" OR should have figured iin latest Gartner Report in field of Ethernet Switches"   | Please include "OEM should be having valid ISO 9001 & ISO 14001 certification on the date of opening of bid"  AND  "OEM should have figured in the latest Magic Quadrant for Wired and Wireless LAN Access published by Gartner." (Documentary support to be submitted along with technical bid). This will help to get best of class equipment from industry. Kindly clarify. | BECIL | As per tender. |
| 283 | SECTIO<br>N I | 222 | 5.11                | Should be capable of dynamically tuning IDS/IPS sensors (e.g., selecting rules, configuring policies, updating policies, etc.).  | Please confirm whether the proposed solution should support more than 20000 IPS signatures to cover the breadth of today's attack  | BECIL | As per tender. |
| 284 | SECTIO<br>N I | 223 | 5.22                | Should support more than 3000 application layer and risk-based controls that can invoke tailored intrusion prevention system (IPS) threat detection policies to optimize security effectiveness.   | Please confirm whether the proposed solution should be able to aggreagate these 3000 applications in more than 40 categories for ease of security operations   | BECIL | As per tender. |
| 285 | SECTIO<br>N I | 224 | 2.2                 | The appliance should have at least 8 * 1 GE and 8*10G ports from day one   | To ensure that proposed solution meet the future growth by clustering multiple appliances together to increase overall throughput , please confirm whether the proposed appliance should support 6x40GE in future  | BECIL | As per tender. |
| 286 | SECTIO<br>N I | 224 | 4.5                 | Firewall should have integrated redundant power supply without any external adaptors   | Since this is a data centre Firewall, Please confirm, whether proposed appliance appliance should support both PSU redundancy and FAN module redundancy along with hot swapable capability of both PSU and FAN from Day-1  | BECIL | As per tender. |

| 287 | SECTIO<br>N I  | 225  | 5.11  | Should be capable of dynamically tuning IDS/IPS sensors (e.g., selecting rules, configuring policies, updating policies, etc.).  | Please confirm whether the proposed solution should support more than 20000 IPS signatures to cover the breadth of today's attack  | BECIL | As per tender. |
|-----|----------------|------|---|--|--|-------|----------------|
| 288 | SECTIO<br>N I  | 225  | 5.22  | Should support more than 3000 application layer and risk-based controls that can invoke tailored intrusion prevention system (IPS) threat detection policies to optimize security effectiveness.   | Please confirm whether the proposed solution should be able to aggreagate these 3000 applications in more than 40 categories for ease of security operations   | BECIL | As per tender. |
| 289 | 4.A.14.1<br>.3 | 101  | 2   | The OEM (s) whose products have been offered in the bid should have a minimum cumulative turnover of INR 360 Crores for OEMs supplying camera, INR 100 Crores for OEMs of switches and INR 225 Crores for OEMs of IT hardware (server and storage) each in last financial years.   | The tender is permitting participation of MSME/MSE OEMs who are producing domestically manufacturing electronic products. According to the notificationand circulars issued to Governments departments and PSU's etc. the eligiblity conditions including matters like turnover, production capability and financial strength should not result in unreasonable exclusions of local suppliers who would otherwise be eligible. We therefore request you to kindly do not insist upon for OEMs who are local producers or mention it as equivalent to that of OEM for switches at 100 crores cumulative turnover for 3 years. | BECIL | As per tender. |
| 290 | 4.A.14.1<br>.3 | 101  | 4   | The OEM for proposed IP cameras and VMS Software should have supplied for at least one project in a Mass Rapid Transport System e.g. Metro, Railways, Mono Rail, Airport etc. in Indiaor abroad in last 3 financial years (i.e current year and three previous financial years) from the date of opening of tender.The same should have been working satisfactorily for at least six (6) months. | The criteria proposed for OEMs is respective and in favor of global OEMs. The criteria may kindly be modified to include OEM who have supplied IP cameras for any public institutions, Government departments, Smart City projects tendered by Municipal corporation & institutions,police departments, public sector banks etc.  The above modifications will result in wider and healthy competition to be benefit of a Gov. institution like RailTel.   | BECIL | As per tender. |
| 291 | 1              | RDSO | RDSO<br>Amendme<br>nt 1:<br>Clause No.<br>19.25 | 19.25 (a). The Face Recognitiom Algorithm vendor should have participated in the latest NIST (National Institute of Standards and Technology, U.S. Department of Commerce), Face In Video Evaluation (FIVE) report.  | Request to modify as "The Face Recognitiom<br>Algorithm vendor should have participated in<br>the latest NIST (National Institute of Standards<br>and Technology, US, Department of Commerce),<br>Face Recognition Vendor Test (FRVT) report."   | BECIL | As per tender. |

| 292 | 8.8 | 212 | 8.8.2.3 | 8.8.2.3 Bidder to propose switch having Operating Temperature and Storage Temperature as per environmental requirement.   | To ensure all bidders quote comparitive solution, we request you to define operating temperature. Considering climatic conditions, we request you to consider switch with min operating temperature of 65C.It is necessarily   | Godrej | As per tender.                              |
|-----|-----|-----|---------|---|--|--------|---|
| 293 | 8.8 | 212 | 8.8     | requirement.  | required as it will be installed at platforms.  Request for addition:  Request you to consider OEM's featured in  Gartner Magic Quadrant for wired and wirless  access as minimum qualification criteria to  ensure quality products   | Godrej | As per tender.                              |
| 294 | 8.8 | 212 | 8.8     |   | Request for addition: The networks are moving on open standard SDN technology. As it will be a huge network, we request you to consider SDN openflow v1.3 open protocol to ensure investement protection   | Godrej | As per tender.                              |
| 295 | 8.9 | 213 | 24      | Bidder to propose switch having Operating Temperature and Storage Temperature as per environmental requirement.   | To ensure all bidders quote comparitive solution, we request you to define operating temperature. Considering climatic conditions, we request you to consider switch with min operating temperature of 65C. It is necessarily required as it will be installed at platforms. | Godrej | As per tender.                              |
| 296 | 8.9 | 213 | 25      | "OEM should have a: i) valid ISO 9001 & ISO 14001 certification on the date of opening of bid" OR ii) should have figured in the latest Magic Quadrant for Wired and Wireless LAN Access published by Gartner." (Documentary support to be submitted) | Request you to consider OEM's featured in Gartner Magic Quadrant for wired and wirless access as minimum qualification criteria to ensure quality products   | Godrej | As per tender.                              |
| 297 | 8.9 | 213 | 2       | Should have minimum 2 nos. SFP+ based 10 GE ports.  | The type-2 switch will be used as aggregtaion switch, so we request you to consider:  1) Switch with 4x1G/10G SFP ports to ensure 2 ports as spare  2) With internal Redundant power supplies like the way Type-3 has been considered for higher avaliability                | Godrej | As per tender (includes corrigendums also). |
| 298 | 8.9 | 213 | 19      | Should support ITU-T G.8032 Ethernet Ring Protection designed for loop protection and fast convergence times (sub 50 ms) in ring topologies.  | 1 switch for sub 50ms ring protection? Please  | Godrej | Clause is clear                             |

| 299 | 8.9  | 213 | 21 | Should support following security features viz.: i) SSL (HTTPS)/SSH, ii) Broadcast/Multicast/Unicast Storm Control, iii) DoS Attack Prevention/ DAI   | DAI, IP source guard, are essential features to mitigate Man-in Middle attcakes, we consider these features as mandatory rather than optional with DoS attack.  | Godrej | As per tender. |
|-----|------|-----|----|---|---|--------|----------------|
| 300 | 8.9  | 214 |    |   | Request for addition: The networks are moving on open standard SDN technology. As it will be a huge network, we request you to consider SDN openflow v1.3 open protocol to ensure investement protection  | Godrej | As per tender. |
| 301 | 8.10 | 214 | 5  |   | Request for addition: The networks are moving on open standard SDN technology. As it will be a huge network, we request you to consider SDN openflow v1.3 open protocol to ensure investement protection  | Godrej | As per tender. |
| 302 | 8.10 | 215 | 26 | "OEM should have a: i) valid ISO 9001 & ISO 14001 certification on the date of opening of bid" OR should have figured in the latest Magic Quadrant for Wired and Wireless LAN Access published by Gartner." (Documentary support to be submitted) | Request you to consider OEM's featured in Gartner Magic Quadrant for wired and wirless access as minimum qualification criteria to ensure quality products  | Godrej | As per tender. |
| 303 | 8.11 | 215 |    | Switches Type-IV  | On Stations type-D, E, the Type-2 switches are directly termination on Railtel PoP, then same way on other stations, Type-2 switches can directly terminate on Railtel PoP. Pratically, the Type-4 switches can be avoided in architecture and huge cost of thousands of Type-4 switches can be saved. We recommend to consider Type-2 switch at other stations as well in place of Type-4 switch | Godrej | As per tender. |
| 304 | 8.12 | 218 | 23 | OEM should have a: i) valid ISO 9001 & ISO 14001 certification on the date of opening of bid" OR should have figured in latest Gartner Report in field of Ethernet Switches"  | Request you to consider OEM's featured in Gartner Magic Quadrant for wired and wirless access as minimum qualification criteria to ensure quality products  | Godrej | As per tender. |

| 305 | 8.12          | 218         | 25      | Switch shall be PCI/EAL2/NDPP/FIPS certified from common criteria organization.   | Only specific OEM is having these cerfication for required switch, so we request you to relax these certifications to ensure open competition.  | Godrej | As per tender.  |
|-----|---------------|-------------|---------|---|---|--------|---|
| 306 | SECTIO<br>N I | 55 to<br>60 | 3.B.3   | 3.B.3 Network Design for Different Type of Stations   | As per SOR, there are 17373 numbers Type-I switch and 7180 numbers Type-II Switch. However, as per network design in the section 3.B.3, the count of Type I switch (40 for A1, 18 for A, 9 for B, 6 for C, 2 for D&E) is coming 20611 and Type-II switch (5 for A1, 3 for A &B, 1 for C, D &E) is coming 7252 numbers  Kindly clarify Whether SOR number is the final | Godrej | Please note that network design are tentative as also mentioned in the tender document. Bidder to quote as per SOR. |
|     |               |             |         |   | count for Type-II and Type I Switches   |        |   |
| 307 | SECTIO<br>N I | 171         | 3       | 3.0 Technical Support Service:-   | Please confirm that the proposed solution<br>should support 24x7x365 TAC Support from<br>OEM and advanced Next business Day Hardware<br>replacement   | Godrej | Clause as per tender/corrigendum prevails.  |
| 308 | SECTIO<br>N I | 208         | 8.2     | 8.2. Server As per RDSO Specification of IP Based Video Surveillance System Specification no. RDSO/SPN/TC/65/2016 Revision 4.0 or latest with all amendments and as specified in tender document. Server Processor Cache: 20 MB   | Instead of 20 MB Cache, We would recommend<br>to have Latest Intel Processor CPU-4110 for 8<br>Core, 2.1 GHz Processor. (2.1 GHz 4110/85W<br>8C/11MB Cache/DDR4 2400MHz)  | Godrej | Clause as per tender/corrigendum prevails.  |
| 309 | SECTIO<br>N I | 212         | 8.8.2.3 | Bidder to propose switch having Operating<br>Temperature and Storage Temper-ature as<br>per environmental requirement   | We would recommend to mention the Temperature @ 50 DegreeC for Type-I Switch as per Environmental condition at Station platform   | Godrej | As per tender.  |
| 310 | SECTIO<br>N I | 212         | 8.8.1   | RDSO Specifications 6.2.3 The LAN switch shall support minimum 4000 MAC address   | We would recommend minimum 8000 MAC address, to connect the more devices in the LAN   | Godrej | As per tender.  |
| 311 | SECTIO<br>N I | 212         | 8.8.1   | RDSO Specifications 6.2.4 The LAN switch shall have 255 IGMP groups   | We would recommend minimum 512 Groups to support, multiple audi, Video and Data streams   | Godrej | As per tender.  |
| 312 | SECTIO<br>N I | 212         | 8.8.1   | RDSO Specifications 7.4 7.4 The operating personnel shall be protected against shock hazards as per IS  8473 (1993) – Guide on the effects of current passing through the human body (equivalent to IEC publications 479 – 1984). | Kindly clarify that "RoHS including Directive 2011/65/EU" compliance is acceptable against this shock hazard requirement described in this clauses  | Godrej | As per tender.  |

| 313 | SECTIO<br>N I | 212 | 8.8                 | Type-I Switch IPv6 Feature   | To implement the IPv6 network, Switch should be IPv6 certified/logo ready from day 1, which gone through Testing by standard Body  | Godrej | As per tender. |
|-----|---------------|-----|---------------------|--|--|--------|----------------|
| 314 | SECTIO<br>N I | 212 | 8.8                 | Type-I Switch  | Please include "OEM should be having valid ISO 9001 & ISO 14001 certification on the date of opening of bid"  AND  "OEM should have figured in the latest Magic Quadrant for Wired and Wireless LAN Access published by Gartner." (Documentary support to be submitted along with Technical Bid).                    | Godrej | As per tender. |
|     |               |     |                     |  | This will help to get best of class equipment from Industry. Kindly clarify  |        |                |
| 315 | SECTIO<br>N I | 212 | 8.9, Sr.<br>no 1    | Should have minimum 12 x GE SFP based ports.   | To ensure future requirement, specifically in A1, A and B type stations, we would recommend to have at least 16 number of GE Fiber ports in Type-II Switch. Kindly clarify   | Godrej | As per tender. |
| 316 | SECTIO<br>N I | 213 | 8.9, Sr. no.<br>23  | Type-II Switch: IPv6 feature should be ready from day 1.   | To implement the IPv6 network, Switch should be IPv6 certified/logo ready from day 1, which gone through Testing by standard Body  | Godrej | As per tender. |
| 317 | SECTIO<br>N I | 213 | 8.9, Sr. no.<br>25  | Type-II Switch "OEM should have a: i) valid ISO 9001 & ISO 14001 certification on the date of opening of bid" OR ii) should have figured in the latest Magic Quadrant for Wired and Wire-less LAN Access published by Gartner." (Documentary support to be submit-ted) | "OEM should have a: i) valid ISO 9001 & ISO 14001 certification on the date of opening of bid" AND ii) should have figured in the latest Magic Quadrant for Wired and Wire-less LAN Access published by Gartner." (Documentary support to be submit-ted) This will help to get best of class equipment from Industry | Godrej | As per tender. |
| 318 | SECTIO<br>N I | 213 | 8.9, Sr. no.<br>19  | Type-II Switch: Should support ITU-T G.8032 Ethernet Ring Protection designed for loop pro-tection and fast convergence times (sub 50 ms) in ring topologies.  | Kindly clarify that to get standardized Metro Ethernet Features, CE2.0 certificate at the time of supply in Type-II Switch is mandatory requirement  | Godrej | As per tender. |
| 319 | SECTIO<br>N I | 214 | 8.10, Sr.<br>no. 4  | Should have at least 88 Gbps switching fabric. Switches should have dedicated ports (other than asked uplink ports) for minimum 40 Gbps stacking band-width with necessary cables from day 1.  | Kindly clarify Instead of 40 GBps statcking<br>Bandwidth, it should be 48 Gbps   | Godrej | As per tender. |
| 320 | SECTIO<br>N I | 215 | 8.10, Sr.<br>no. 22 | Type-III Switch: IPv6 feature should be ready from day 1.  | To implement the IPv6 network, Switch should<br>be IPv6 certified/logo ready from day 1, which<br>gone through Testing by standard Body  | Godrej | As per tender. |

| 321 | SECTIO<br>N I | 215 | 8.10, Sr.<br>no. 26 | Type-III Switch "OEM should have a: i) valid ISO 9001 & ISO 14001 certification on the date of opening of bid" OR should have figured in the latest Magic Quadrant for Wired and Wireless LAN Access published by Gartner." (Documentary support to be submitted) | Please include "OEM should be having valid ISO 9001 & ISO 14001 certification on the date of opening of bid"  AND  "OEM should have figured in the latest Magic Quadrant for Wired and Wireless LAN Access published by Gartner." (Documentary support to be submitted along with Technical Bid).  This will help to get best of class equipment from Industry. Kindly clarify | Godrej | As per tender. |
|-----|---------------|-----|---------------------|---|--|--------|----------------|
| 322 | SECTIO<br>N I | 218 | 8.11, Sr.<br>no. 17 | Type-IV Switch: vi. IPv6 feature should be ready from day 1.  | To implement the IPv6 network, Switch should be IPv6 certified/logo ready from day 1, which gone through Testing by standard Body  | Godrej | As per tender. |
| 323 | SECTIO<br>N I | 218 | 8.11, Sr.<br>no. 18 | Type-IVSwitch "OEM should have a: i) valid ISO 9001 & ISO 14001 certification on the date of opening of bid" OR should have figured in the latest Magic Quadrant for Wired and Wireless LAN Access published by Gartner." (Documentary support to be submitted)   | Please include "OEM should be having valid ISO 9001 & ISO 14001 certification on the date of opening of bid"  AND  "OEM should have figured in the latest Magic Quadrant for Wired and Wireless LAN Access published by Gartner." (Documentary support to be submitted along with Technical Bid).  This will help to get best of class equipment from Industry. Kindly clarify | Godrej | As per tender. |
| 324 | SECTIO<br>N I | 219 | 8.12, Sr.<br>no. 21 | DC Switch: Switch shall be IPv6<br>Certified/Ready.   | To implement the IPv6 network, Switch should be IPv6 certified/logo ready from day 1, which gone through Testing by standard Body  | Godrej | As per tender. |
| 325 | SECTIO<br>N I | 219 | 8.12, Sr.<br>no. 23 | DC Switch "OEM should have a: i) valid ISO 9001 & ISO 14001 certification on the date of opening of bid" OR should have figured iin latest Gartner Report in field of Ethernet Switches"  | Please include "OEM should be having valid ISO 9001 & ISO 14001 certification on the date of opening of bid"  AND  "OEM should have figured in the latest Magic Quadrant for Wired and Wireless LAN Access published by Gartner." (Documentary support to be submitted along with Technical Bid).  This will help to get best of class equipment from Industry. Kindly clarify | Godrej | As per tender. |
| 326 | SECTIO<br>N I | 222 | 5.11                | Should be capable of dynamically tuning IDS/IPS sensors (e.g., selecting rules, configuring policies, updating policies, etc.).   | Please confirm whether the proposed solution should support more than 20000 IPS signatures to cover the breadth of today's attack  | Godrej | As per tender. |
| 327 | SECTIO<br>N I | 223 | 5.22                | Should support more than 3000 application layer and risk-based controls that can invoke tailored intrusion prevention system (IPS) threat detection policies to optimize security effectiveness.  | Please confirm whether the proposed solution should be able to aggreagate these 3000 applications in more than 40 categories for ease of security operations   | Godrej | As per tender. |

| 328 | SECTIO<br>N I   | 224 | 2.2  | The appliance should have at least 8 * 1 GE and 8*10G ports from day one  | To ensure that proposed solution meet the future growth by clustering multiple appliances together to increase overall throughput, please confirm whether the proposed appliance should support 6x40GE in future          | Godrej | As per tender. |
|-----|-----------------|-----|------|---|---|--------|----------------|
| 329 | SECTIO<br>N I   | 224 | 4.5  | Firewall should have integrated redundant power supply without any external adaptors  | Since this is a data centre Firewall, Please confirm, whether proposed appliance appliance should support both PSU redundancy and FAN module redundancy along with hot swapable capability of both PSU and FAN from Day-1 | Godrej | As per tender. |
| 330 | SECTIO<br>N I   | 225 | 5.11 | Should be capable of dynamically tuning IDS/IPS sensors (e.g., selecting rules, configuring policies, updating policies, etc.).   | Please confirm whether the proposed solution should support more than 20000 IPS signatures to cover the breadth of today's attack   | Godrej | As per tender. |
| 331 | SECTIO<br>N I   | 225 | 5.22 | Should support more than 3000 application layer and risk-based controls that can invoke tailored intrusion prevention system (IPS) threat detection policies to optimize security effectiveness.  | Please confirm whether the proposed solution should be able to aggreagate these 3000 applications in more than 40 categories for ease of security operations  | Godrej | As per tender. |
| 332 | 8.3.1.1.<br>5   | 209 |      | New Cluase  | In this Requirement Video Management System is very critical. So request you add Prequalication for VMS.  | Godrej | As per tender. |
| 333 | 8.3.2.3.<br>1.1 | 211 | В)   | Recording Parameters: on non RFP station Recorded for i) One Full HD stream (@1080P and @25FPS) from Full HD Camera on H.265 and ii) One UHD stream at resolution 3840x2160 and @15FPS from 4K UHD Camera on H.265 7 days in Video Recording & Processing Unit. | Kinldy confirm this recording shall be done on<br>Video Recording & Processing Unit for non RPF<br>Stations As per RDSO Specification Clause 4.2.10   | Godrej | As per tender. |

|     | 8.3.2.3.       |     |    | (A) On Station collocated with RPF/GRP Thana/Post:  i) One Full HD stream (@1080P and@25FPS) from Full HD Camera on H.265 and  | This clause will make bidder to quote external storge only. Please give a option to bidder to store Video Data at RPF location on Internal storage of   |        |   |
|-----|----------------|-----|----|--|---|--------|---|
| 334 | 1.1            | 211 | A) | ii) One UHD stream at resolution 3840x2160 and@ 15FPS from 4K UHD Camera on H.265 should be recorded for 30 days in external storage at RPF/GRP Thana/Post.  | recording server. As there are open architeture Server based solutions which can cater higher throughput on recording within internal stoarge.  | Godrej | As per tender.  |
|     |                |     |    | each such cluster i.e. RPF/GRP Thana/Post location, bidder to size   |   |        |   |
|     |                |     |    | storage, server requirement and propose a single server considering recording  |   |        |   |
| 335 | 8.3.1. 2       |     |    | of 200 FHD cameras, analytics on 40 cameras, FRS with local matching capability with the watchlist database on up to 8 cameras stream at each RPF/GRP Thana/Post locations without any impact on the performance of the system and overall solution requirement. | This point is biased towards single OEM who can<br>offer VMS,VAS and FRS. Since different OEM<br>shall not allow to club in single server. Kidly<br>separate server for above listed products   | Godrej | Cluase is self explainatory. Bidder to quote as per tender. |
| 336 | CHAP<br>TER- 2 | 40  | V  | Bidder should submit the soft copy<br>(Word/Excel/PDFs format) of offer in<br>DVDs/USB's. Bill of Material (BOM)<br>must be in PDF as well as Excel format.  | Since RailTel invites E-tenders, we request for the soft copy offer (scan copy offer) shall be submitted ONLINE. Also we request for Bill of material (BOM) shall be in PDF only and submitted ONLINE. Kindly Confirm. No hard copy is required to be submitted apart from mentioned in 4.B.8 Offline Submission. | L&T    | As per tender.  |

| 337 | CHAP<br>TER- 2                   | 39          | IV             | work at railway stations, therefore, the existing available infrastructure may be utilized by the purchaser for implementation of VSS system and such items used may not be considered as a part of Supply orders.   | Please provide the details of existing infrastructure viz.  1. Availability of Power Supply from existing UPS/DCPS  2. Junction box, cabling along with protection  3. PoE switch port availability  4. Make,model, interface available with existing system  5. Nos. of sites where existing system are available and can be used | L&T | Vendor to quote as per SOR. Tentative list of VSS stations is being uploaded. Wi-Fi stations work is completed almost at all A1/A stations and some B, C D& E stations (approx. 600+ stations, Names of stations are available on RailTel website). |
|-----|----------------------------------|-------------|----------------|--|--|-----|---|
| 338 | Chapte<br>r 6 &<br>Chapte<br>r 3 | 162<br>& 80 | 5-2 &<br>4.A.4 | throughout the entire duration of this project, starting with bid preparation process up until project implementation and maintenance of the same. The project duration comprises of 90 days of implementation, 12 months of maintenance supervision period, 2 years for warranty and 5 years for AMC starting from date | follow for Design, Supply, Installation and Commissioning. We request you increase the implementation schedule to 15months to complete the entire activity which shall encourage participation of bidders without any overloading of bid.  | L&T | Tender/ corrigendum clause shall<br>prevail.  |

| 339 | CHAP<br>TER- 2 | 40 | V         | Bidder is allowed to quote only for a single Make/Model of the quoted items along with the offer. Offers without particulars of Make/Model or multiple OEMs of same item shall be liable to summarily rejected. | Since as System Integrator, We are responsible to meet the technical specification and SLA levels for the entire technical Solution, we request you not to insist for single make /model in the contract. Alternatively, you may kindly approve at least three makes and models for each of the equipment to be provided for this project.  This will help the SI to offer a very competitive price to the customer by taking aggressive risks on their costs, which will totally benefit the customer. If only one make is insisted the vendor does not support the Si in times and therefore the cost go up considerably.  For your Kind information, in almost all of the government contracts there is a list of Compendium of Suppliers approved for each of the item required for the Project. This list is made part of the contract. During execution of the contract, the SI/Contractor shall have to supply materials of makes/OEMs who are mentioned in that list only. This is followed in MPMKVVCL/ GoMPRD/ PGCIL/ NTPC/ NPCIL/DoIT-GoMP/ MPTD. None of the government project were vigilance/RTI is applicable have single make to be provided during bid submission Hence we request you to kindly accept the same. | L&T | Clause as per tender/corrigendum prevails. |
|-----|----------------|----|-----------|---|--|-----|--|
| 340 | CHAP<br>TER-3  | 49 | 3.A.1.7.1 | at station/cabin/panel room/midsection<br>buildings for carrying out the awarded<br>work. The successful bidder will have to<br>pay the nominal charges for the power   | We understand that Railways will provide construction power supply for execution on chargeable basis. However, Recurring charges of electricity during 8 years (1 Year Supervised Maintenance + 2 Years warranty + 5 Years AMC) support shall be borne by Railways. Kindly confirm.  | L&T | Clause is self explainatory.               |
| 341 | CHAP<br>TER-3  | 49 | 3.A.1.7.2 | Railways shall provide for the space and power supply for the systems in-stalled in the RPF Thana/Chowkis, Control Rooms and other locations at stations.   | We understand that Railways will provide site office and warehouse space at Railway Stations for execution on free of cost basis.  | L&T | Clause is self explainatory.               |

| 342 | CHAP<br>TER-3 | 49 | 3.A.1.7.9 | made available by Railways, if available, at the lease cost as per the latest norms of Railways.   | 1. Please confirm that all permission / licenses / local approval and ROW shall be made available to the Contractor by Client.  2. All the charges including lease cost shall be paid over and above the contract price by Railways to bidder including statutory payment to be made to authorities. Bidder shall only be responsible for co-ordination with concerned authorities. Please Confirm.  3. Delay on account of getting such permission shall be considered for time extension. Please confirm.  4. Also, the payment to the bidders shall be made over and above contactor price if there is delay on account of client for unforeseen reasons and bidders has to consider for extended stay. | L&T | Clause is self explainatory.               |
|-----|---------------|----|-----------|--|--|-----|--|
| 343 | CHAP<br>TER 4 | 80 | 4.A.3.3   | OEM or Bidder specifically authorized by t<br>OEM by RailTel. A fresh Bank Guarantee v<br>for a value of 10% of the value of the r<br>AMC contract's 5 years value valid for a a | fresh Bank Guarantee for a value of 10% of<br>the value of the AMC contract's 5 years<br>value, valid for a period of 64 Months (4<br>months beyond the AMC period of 5 years)<br>and the same shall be reduced yearly after<br>payment has been made for that year till   | L&T | Clause as per tender/corrigendum prevails. |

| 344 | CHAP<br>TER 4        | 83,84 | 4.A.5.1.1 | 4.A.5.1 Payment Terms for Supply portion of items supplied under Schedule – 'A' of SOR-Head-I of packages as per BOM and Price Schedule details (Chapter- 2, SOR, Note-VII and Annexure-A & B) submitted along with price bid.  4.A.5.1.1 F   | 10% of payment as mobilization advance against equivalent Bank Guarantee. (This                  | L&T | Clause as per tender/corrigendum<br>prevails. |
|-----|----------------------|-------|-----------|---|--|-----|---|
| 345 | CHAP<br>TER-4        | 103   | 4.A.15.1  | required, will be released/ provided to   |  | L&T | Tender clause is clear and prevails           |
| 346 | CHAP<br>TER-2<br>& 4 | 99    | 4.A.15.1  | required, will be released/ provided to the contractor in connection with this contract. Part of Schedule (for imported items) can be quoted in any of the major foreign currencies viz USD, British Pound, EURO or Japanese YEN etc. In such a case, bidder should clearly specify the components of Foreign exchange and Indian currency for each item. | Please provide revised schedule of requirement in FC (Foreign Currency) and LC (Local Currency). | L&T | Tender clause is self explanatory             |

| 347 | CHAP<br>TER-4  | 113  | 4.B.9   | applicable shall also be scanned and<br>submitted<br>ONLINE. Copy of these documents shall<br>also be submitted in RailTel before Tender<br>opening   | Since RailTel invites E-tenders, we request for Eligibility criteria related documents as applicable shall only be scanned and submitted ONLINE. Hard copy will not be submitted. Kindly confirm. No hard copy is required to be submitted apart from the ones mentioned in 4.B.8 Offline Submission.           | L&T | Clause is self explainatory and prevails.   |
|-----|----------------|------|---------|---|---|-----|---|
| 348 | CHAP<br>TER 5  | 129  | 4.A.19  | Purchaser's Right to Vary Quantities - up to a maximum extent of +/- 30% of contract quantity.  | <ol> <li>Please confirm that the variation of scope of work under this clause shall be limited to ± 10% only, beyond which the quoted price shall be subject to variation.</li> <li>Also please confirm that such variation shall be communicated within 30 days from the date of award of contract.</li> </ol> | L&T | Clause as per tender/corrigendum prevails.  |
| 349 | General        |      |         | BILL of QUANTITY  | As supply to be done for respective States,<br>Billing schedule shall be issued State-wise<br>for better clarity on taxes. Please confirm.  | L&T | May be agreed   |
| 350 | CHAP<br>TER 4  | 87   | 4.A.7.2 | Bidder shall issue valid tax invoice to RailTel for availing proper credit of CGST/SGST/IGST/UTGST incase of award of Contract. GST will not be reimbursed in the absence of valid tax invoice. | In case GST credit is not available to Railtel on account of delay in payment beyond 180 days from the date of invoice as per Section 16 of CGST Act /similar provisions of State Act or for any other reason attributable to client, GST paid shall have to be reimbursed to the contractor. Please Confirm.   | L&T | Clause as per tender/corrigendum prevails.  |
| 351 | CHAP<br>TER 4  | 87   | 4.A.7.1 |   | It is mentioned in the tender that HSN /<br>SAC is to be indicated in the bid. However it<br>shall be noted that same may change during<br>execution of the project. Kindly confirm.  | L&T | Any such change on account of GST deptt. may be taken care of at the time of billing. |
| 352 | CHAP<br>TER- 2 | 8-39 |         | SCHEDULE OF REQUIREMENT   | In schedule of requirement for certain items bifurcation of supply and installation is available whereas for certain activities the value is to be mentioned for SITC. Kindly modify to provide separate value for supply and installation.   | L&T | Bidder to quote as per SOR and provide breakup in BOM where ever asked for.           |

| 353 | CHAP<br>TER 4 | 77    | 4.A.2.1 | The supplier shall be responsible for any defects that may develop under the conditions provided by the contract and under proper use, arising from faulty materials, design or workmanship such as corrosion, inadequate quantity of material to meet equipment requirements, inadequate contact protection, deficiencies in design and/ or otherwise and shall remedy such defects at his own cost when called upon to do so by the Purchaser who shall state in writ-ing in what respect the stores are faulty.  We propose modification as follow: The supplier shall be solely responsible for any defect that may develop due to supplier's fault under the conditions provided by the contract and under proper use, arising from faulty materials, design or workmanship such as corrosion, inadequate quantity of material to meet equipment requirements, inadequate contact protection, deficiencies in design and/ or otherwise and shall remedy such defects at his own cost when called upon to do so by the Purchaser who shall state in writing in what respect the stores are faulty. | L&T | Clause as per tender/corrigendum prevails. |
|-----|---------------|-------|---------|--|-----|--|
| 354 | CHAP<br>TER 4 | 93-94 | 4.A.11. | The timely delivery is the essence of this tender. Liquidated damages will be applicable at the rate of half percent per week or part thereof for undelivered portion of SOR subject to a maximum of 10% of the cost of Purchase order/LOA for any rea-son whatsoever attributed to failure of bidder. RailTel will have the right to cancel the order, place order on alternative source besides levying the liquidated damages as above.  We proposed modification as follow:  The timely delivery is the essence of this tender. Liquidated damages will be applicable at the rate of half percent per week or part thereof for undelivered portion of SOR subject to a maximum of 10% of the cost of Purchase order/LOA for any failure of bidder. RailTel will have the right to cancel the order, place order on alternative source besides levying the liquidated damages as above.   | L&T | Clause as per tender/corrigendum prevails. |

| 355 | CHAP<br>TER 4              | 110 | 4.A.32  | If the contractor fails to deliver the equipment or honor the contractual commitment within the period fixed for such delivery in the contract, the Purchaser may terminate the LOA/ contract in whole or in part, the Purchaser may proceed to purchase, upon such terms and in such manner as it deems appropriate, goods similar to those undelivered at no risk and cost to contractor. However, the security deposit of bidder shall be forfeited/ Performance Bank Guarantee shall be encashed. The failed bidder shall not be permitted to take part in the tender for balance work.  The Maximum Liability of bidder to any Loss/Damages to RailTel including Liquidity Damages and Performance Guarantee shall be limited to 100% of Value of contract.  We propose modification as follows:  If the contractor fails to deliver equipment or commits material breach contractal commitment solely due to gross or willful negligence within contract, the Purchaser may terminate LOA/ contract in whole or in part, Purchaser may proceed to purchase, upon such terms and in such manner as it deems appropriate, goods similar to the undelivered at no risk and cost contractor. However, the security deposite bidder shall be forfeited/ Performance Ball be forfeited/ Performance Ball be encashed giving working days prior written intimation. If a failed bidder shall not be permitted to the loss/Damages and Performance Guarantee shall be limited to 100% of Value of contract.  Loss/Damages to RailTel including Liquidity Damages and Performance Guarantee shall be limited to 100% of Value of contract. | of ne ne ne ne ne ne ne ns se to of L&T nk 5 ne se te | Clause as per tender/corrigendum prevails. |
|-----|----------------------------|-----|---------|---|---|--|
| 356 | General<br>Conditi<br>ons: | 186 | 7.16 b) | The Engineer or Engineer's Representative shall be entitled to take possession of any materials, tools, implements, machinery or buildings on the works or on the property on which these are being or ought to have been executed, and to retain the employ the same in further execution of the works without the contractor being entitled to any compensation for the use and employment thereof or for wear and tear or destruction thereof.  We proposed modification as follow:  The Engineer or Engineer's Representat shall be entitled to take possession of a materials, tools, implements, machinery buildings on the works or on the proper on which these are being or ought to have been executed, and to retain the employ same in further execution of the works we the contractor being entitled to any compensation for the use and employment thereof or for wear and tear or destruct thereof.   | ny<br>or<br>ty<br>ve<br>ne L&T<br>th<br>ny            | Clause as per tender/corrigendum prevails. |

| 357 | General<br>Conditi<br>ons: | 187 | 7.17      | upto Rs. 10 lakhs. The arbitrator will be appointed by the Managing Director of RailTel Corporation of India Ltd. If the value of claim or amount under dispute is more than Rs. 10 lakhs, the matter shall be referred to the adjudication of arbitral council. Man-aging Director/RailTel shall furnish a panel of three names to the contractor, out of which the contractor will recommend one name to be his | The arbitral tribunal shall consist of the sole Arbitrator if the value of claim is up to Rs. 10 lakhs. The arbitrator will be mutually appointed by the Managing Director of RailTel Corporation of India Ltd and the bidder. If the value of claim or amount under dispute is more than Rs. 10 lakhs, the matter shall be referred to arbitral tribunal consisting of three arbitrators with each Party nominating its arbitrator and both the arbitrators appointing the third and presiding arbitrator. | L&T | Clause as per tender/corrigendum<br>prevails. |
|-----|----------------------------|-----|-----------|---|---|-----|---|
| 358 | CHAP<br>TER 8              | 207 | Note 3    | All the IP cameras as quoted by the bidder against SORChapter-2 must be sourced from the same OEM.  | Request you to kindly amend the clause as "All the IP cameras as quoted by the bidder against SORChapter-2 must be sourced from multiple OEM's" considering the challenging implementation schedule and competitiveness of the bid .  | L&T | Clause as per tender/corrigendum prevails.    |
| 359 | CHAP<br>TER 4              | 108 | 4.A.28.1. | If during the Agreement, the performance in whole or in part, by either party, of any obligation under this is prevented or delayed, by reason beyond the control of the parties including war, hostility, acts of the public enemy, civic commotion, sabotage,   | The Contract does not provide for extension of time or any claim to be raised for consequences faced during Force majeure event. This is also applicable during Annual Maintenance period as under the AMC.  Request to please include the same.  | L&T | Clause as per tender/corrigendum prevails.    |

| 360 | CHAP<br>TER 6 | 131 | 4              | PROFORMA FOR PERFORMANCE BANK GUARANTEE BOND 4 it shall continue to be enforceable till all the dues of the RailTel under or by virtue of the said Agreement have been fully paid and its claims satisfied or discharged or till RailTel certifies that the terms and conditions of the said Agreement have been fully and properly carried out by the said Contractor(s) and accordingly discharges this Guarantee." | The Performance BG in effect may prove to be open-ended. Therefore, we kindly  | L&T | Clause as per tender/corrigendum prevails.     |
|-----|---------------|-----|----------------|---|--|-----|--|
| 361 | Form          | 159 | Form<br>No.20: | Parent Company Guarantee  | We understand that the Parent Company<br>guarantee is only applicable if bidding<br>entity is foreign entity. Please confirm.  | L&T | Clause is self explainatory.                   |
| 362 | General       |     |                |   | Tender does not provide for Employer's default and pursuant compensation / Extension of time for the same. Kindly clarify  | L&T | As per tender document.                        |
| 363 | General       |     |                | Additional proposed clause to payment terms : Assignment Clause   | Request you to put additional Clause which shall enable the bidders early realization of payment: The employer hereby consents / permits the Contractor to assign the certified receivables to banks/Financial Institution/NBFC's etc. for discounting or factoring as the case may be for early realization of its payment. The details of arrangement of discounting and factoring will be a bilateral one between the Contractor and the discounting/factoring agency." | L&T | Not Agreed.                                    |
| 364 | Chapte r 3    | 46  | 3.A.1.3        | The project envisages to provide high level security vigilance and improve the ensuing action in case of an alert by adding state of art functions like motion detection, quick review and intrusion detection.   | Please elaborate on the intrusion detection, motion detection and quick review functionalities. Also clarify, if the bidder has to consider these functionalities under the device (camera) edge analytics or under the central video analytics software.  | L&T | RDSO Specs and Tender condition is very clear. |

| 365 | Chapte<br>r 3  | 47 | 3.A.1.4.2 | showing exact location of different type of cameras, switches etc. at various locations like parking areas, entrance/exit points, platforms, yards, waiting halls, ticket counters, offices, foot over bridges,   | As per industrial practice, Site plan will be provided by the successful bidder after award of contract, hence we request you to allow us to give the plan after award of contract, since the time is short doing site survey at all stations will be difficult. |     | Tender condition is very clear. No<br>change is proposed. |
|-----|--|----|-----------|---|--|-----|---|
| 366 | Amend ment No. 1.0 to RDSO Specific ation no. RDSO/SPN/T C/65/2 016, Revisio n 4.0 for IP Based Video Surveill ance System | 1  | 2.3       | "2.3 In IP based Video Surveillance System, the Cameras shall be provided at different locations so that the output is available as Ethernet and connected to the Servers/NVRs. Servers/NVRs in turn connected to the backbone IP Network. For Cloud based Architecture, Camera output on Ethernet shall be connected to the MPLS/ IP network through Edge devices. Cluster of stations through Edge devices shall be aggregated at nearest RPF/GRP Thana/Post through MPLS/ IP network. RPF/GRP Thana/Post in turn connected to the Cloud through MPLS/ IP network." | We would request to provide camera details<br>of the stations under each RPF/Thana Post  | L&T | As per tender conditions                                  |

| 367 | Tender<br>No.<br>RailTel<br>/Tende<br>r/OT/<br>CO/P/<br>2017-<br>18/VSS<br>/432<br>dated<br>29-03-<br>18 | 243 |  | The proposed system should be able to leverage and integrate with existing & new CCTV cameras supporting ONVIF profile 'S' and video management systems either through camera level or VMS level, to provide an integrated video surveillance at the command center. | Would request the quantities of the existing cameras as we would have to include necessary hardwrae and license cost for the same.  | L&T | Bidder to quote as per SOR.   |
|-----|--|-----|--|--|---|-----|---|
| 368 |  |     | 1  | Additional Queries   | Does the analytics alarm & FRS Alarms needs to be showcased on Command and Control Solutions.   | L&T | Yes.  |
| 369 |  |     | I  | Additional Queries   | Please suggest the number of Video Analytics license for all the stations?  | L&T | Please refer clause 8.3.1.2 of Chapter-8 of tender document.  |
| 370 | SPECIF<br>ICATI<br>ON<br>NO.<br>RDSO/<br>SPN/T<br>C/65/2<br>016<br>Revisio<br>n 4.0                      | 21  | 10.1 Server Hardwar e: Server hardware for Video Manage ment, Recordin g and Video Analytics shall have the minimu m following specificat ions:- | QPI (Quick Path Interconnect) Links2   | The processor mentioned here is older generation processor and is very low end to handle the workload for this project. Hence request you to change the processor as below:  * Please change the number of cores from 8 to 18  * Please change the no. of thereads from 16 to 36  * Cache from 20MB to 24MB  The latest generation processors from Intel comes with latest generation of UPI links instead of QPI links, hence please remove the clause numbers 7 and 8 related to QPI links.  The Servers for Facial Recognition Software will require more performance hence requst you to change the memory from 32GB to 128GB | L&T | Specifications mentioned in the tender document are minimum specifications. Bidder can offer a higher specification server as per solution requirement. |

| 371 | SPECIF<br>ICATI<br>ON<br>NO.<br>RDSO/<br>SPN/T<br>C/65/2<br>016<br>Revisio<br>n 4.0           | 21        | 10.1.2 Server specification s for Face Recognition Software will be same as per clause no. 10.1.1 with following additional item:-             | ProcessorIntel Xeon Processor No. of Cores8 No. of Thereads16 Frequency2.1GHz or higher Cache20MB No. of Processors2 QPI (Quick Path Interconnect) Links2   | The Servers for Facial Recognition Software will require more processing power and clockspeed than the one mentioned in this clause, hence request you to please change the  * Number of Cores from 8 to 18  * No. of Threads from 16 to 36  * Frequency from 2.1G | L&T | Specifications mentioned in the tender document are minimum specifications. Bidder can offer a higher specification server as per solution requirement. |
|-----|---|-----------|--|---|--|-----|---|
| 372 | SPECIF<br>ICATI<br>ON<br>NO.<br>RDSO/<br>SPN/T<br>C/65/2<br>016<br>Revisio<br>n 4.0           | 25        | 12.0<br>External<br>Storage<br>Device:   | Cache - 16GB Per Controller   | A storage with 16GB cache controller might<br>not be able to handle the workload for this<br>project hence request you to change the<br>cache from 16GB per controller to 32GB per<br>controller or higher   | L&T | Specifications mentioned in the tender document are minimum specifications. Bidder can offer a higher specification server as per solution requirement. |
| 373 | 8.3.2. Functio nal and Technic al Require ment 3.B.7 Archite cture of VSS system for stations | 210<br>64 | 8.3.2.1 General Below is the tentative VSS architectu re for system to be deployed at Stations: 3.B.7 Architect ure of VSS system for stations | □ Proposed solution has to provide seamless recording/ Playback of all cameras for last 30 days at any given point of time at the RPF/GRP Thana/Post. The recording and playback availability should not be affected in case of failure of any server at RPF/GR | Both the statements are contradictory. There is no failover mentioned at RPF chowki/thana architecture(page 54) and on page 210 there is recording of last 30 days availability through redundant server(s) in case of a server failure asked.  Kindly clarify     | L&T | Tender condition is very clear. No<br>change is proposed. Please refer to<br>corrigendum also.  |

|     |   |                |  |   | I  |     | 1  |
|-----|---|----------------|--|---|--|-----|--|
| 374 | PACK<br>AGE<br>IV:<br>SOUT<br>HERN                                  | 35             | SOR HEAD I: IP BASED VIDEO SURVEIL LANCE WORK AT STATIO NS | iii. For Category F stations  | Kindly Clarify What is the role of Category F station as it is not discussed in tender any where.  | L&T | Category F stations are not covered under scope of this tender. Please refer to corrigendum. |
| 375 | PACK AGE II: WESTE RN PACK AGE III: EASTE RN PACK AGE IV: SOUT HERN | 19<br>27<br>35 | SOR HEAD I: IP BASED VIDEO SURVEIL LANCE WORK AT STATIO NS | i.For Category C (Sub-urban) plat-forms ii. For Category C (others), D and E stations | In tender BOQ Category C (Sub-urban) and Category C (others) mentioned but not discussed anywhere in the tender.  Kindly Clarify What is difference between Category C (suburban) and C (others).  | L&T | There is no difference in terms of camera count, network topolgy and VSS architecture.       |
| 376 | CHAP<br>TER- 8  | 209<br>169     | 8.3.1. 2<br>Server<br>and<br>Storage<br>System<br>sizing   |   | In this clause total cameras are 89844 however as per BOQ and total station and number of cameras per station calculations (page 169) it is coming different. i. As per this clause it is 89844 ii. As per BOQ it is 89845 iii. As per calculation with number of cameras per station and total stations it is 90114 Kindly clarify. | L&T | Bidder to quote quantity of cameras as per SOR as per corrigendum.                           |

| 377 | CHAP TER- 2 SCHED ULE OF REQUI REME NT PACK AGE I: NORT HERN REGIO N | 11  | PACKAG<br>E I :<br>NORTHE<br>RN<br>REGION  | 5. Supply, Installation, Testing and commissioning of Graphical User Interface based Client Software (per workstation basis) for workstation as quoted in Item no. A.2(b) along with as defined in clause 8.3 of chapter 8. | Are the Divisional HQ Clients included in<br>this BOQ item of NR? Same query goes for<br>WR,ER and SR. Please confirm  | L&T | Bidder to quote as per SOR.                |
|-----|--|-----|--|---|--|-----|--|
| 378 | CHAP<br>TER- 8   | 209 | 8.3.1.1<br>General<br>Paramete<br>rs       | 8.3.1.1.2 Bidder to propose server(s) as Video Management servers with 1:1 redundancy (HA mode) in RailTel Datacenter.  | One of the roles of management server is to manage the failover functionality by receiving the signal from recorder server of failure and giving the signals to failover servers to get active.  As per design all the recording servers and Failover servers will be placed at RPF/GRP Thana/Posts and their management server will be at RailTel Data center.  If any recording server fails and at that particular time if the MPLS connectivity is also down from that RPF/GRP Thana/Post to RailTel Datacenter then How should we achieve the failover as the Management will not get the alert for this failure, please clarify. | L&T | Clause as per tender/corrigendum prevails. |
| 379 | CHAP<br>TER- 8   | 211 | 8.3.2.3<br>Recordin<br>g<br>Paramete<br>rs | (A) On Station collocated with RPF/GRP Thana/Post: (B) On other stations:   | We understand that here you are considering dual recording for station category C,D &E at RPF/GRP Thana/Post(with Failover) and stations itself on VRU(video recording and Processing Unit) however single recording for station category A1,A & B at RPF/GRP Thana/Post(with Failover). Kindly Clarify.   | L&T | Clause is self explainatory.               |

| 380 | CHAP<br>TER-3   | 59 |       | 3.B.3.6 Surveillance VPN on RailTel<br>Backbone   | Kindly consider: As Cyber security threat is common these days. We suggest to add the data encryption from server to server and server to client. The VMS software should have data encryption of 256 bit AES and video should export in SEF(Secured Export Format) with password protection of up to 20 alphanumeric characters.        | L&T | Clause as per tender/corrigendum prevails.   |
|-----|---|----|-------|---|--|-----|--|
| 381 | Chapte r-2 - Schedu le of require ment: PACK AGE-I: NORT HERN REGIO N - Schedu le A | 9  | 2 (b) | PC Workstation as defined in clause 8.6 of chapter 8 for viewing, monitoring and system management including 24" monitor, all required licensed software, spike buster 500VA UPS with backup for 30 minutes power failure without interruption, and all other required accessories. |  | L&T | 1. Specs of the UPS to to meet the minimum requirement. 2. UPS should have back up for 30 minutes (appropriate battery size) to meet this requirement. 3. Yes, UPS is required with inbuilt surge protection. 4. Warranty and rest as per tender conditions. |
| 382 | Chapte r-2 - Schedu le of require ment: PACK AGE- II: WEST ERN - Schedu le A        | 17 | 2 (b) | PC Workstation as defined in clause 8.6 of chapter 8 for viewing, monitoring and system management including 24" monitor, all required licensed software, spike buster 500VA UPS with backup for 30 minutes power failure without interruption, and all other required accessories  | Specifications of 500VA UPS Systems has not been specified in the RFP. Request to kindly share the technical Specifications of the same. Also, it is requested to kindly clarify 500 VA UPS required is Offline or Online type & battery backup required for 500 VA UPS with 'VAH' Capacity.  Also kindly clarify the meaning of "spike" | L&T | 1. Specs of the UPS to to meet the minimum requirement. 2. UPS should have back up for 30 minutes (appropriate battery size) to meet this requirement. 3. Yes, UPS is required with inbuilt surge protection. 4. Warranty and rest as per tender conditions. |

| 383 | Chapte r-2 - Schedu le of require ment: PACK AGE- III: EASTE RN - Schedu le A | 24  | 2 (b)  | system management including 24" monitor, all required licensed software, spike buster 500VA UPS with backup for 30 minutes power failure without interruption, and all other required accessories  | buster" 500 VA UPS. Does it imply that 500 VA UPS is required with inbuilt surge protection device (SPD)?  Warranty on batteries for UPS may be considered for 1 year/ 2 years being a consumable item. | L&T | 1. Specs of the UPS to to meet the minimum requirement. 2. UPS should have back up for 30 minutes (appropriate battery size) to meet this requirement. 3. Yes, UPS is required with inbuilt surge protection. 4. Warranty and rest as per tender conditions. |
|-----|---|-----|--|--|---|-----|--|
| 384 | Chapte r-2 - Schedu le of require ment: PACK AGE- IV: SOUT HERN Schedu le A   | 32  | 2 (b)  | PC Workstation as defined in clause 8.6 of chapter 8 for viewing, monitoring and system management including 24" monitor, all required licensed software, spike buster 500VA UPS with backup for 30 minutes power failure without interruption, and all other required accessories |   | L&T | 1. Specs of the UPS to to meet the minimum requirement. 2. UPS should have back up for 30 minutes (appropriate battery size) to meet this requirement. 3. Yes, UPS is required with inbuilt surge protection. 4. Warranty and rest as per tender conditions. |
| 385 | 8.3.1. 2<br>Server<br>and<br>Storage<br>System<br>sizing                      | 209 | 8.3.1. 2<br>Server<br>and<br>Storage<br>System<br>sizing | Server and Storage System sizing   | Please clarify how many analytics are required in total in all cameras.   | L&T | Tender clauses are very clear.   |
| 386 | PACK AGE IV: SOUT HERN  | 35  | PACKAG<br>E IV:<br>SOUTHE<br>RN                          | iii. For Category F stations   | Kindly clarify the F stations   | L&T | Please refer to corrigendum  |

| 387 | 8.3.1.1<br>General<br>Parame<br>ters | 209 | 8.3.1.1<br>General<br>Paramete<br>rs | 8.3.1.1.5 Bidder to also propose an external storage solution at RailTel Datacenter for keeping flagged/marked video data by RPF/GRP personnel for longer reten-tion, FRS & VA alerts across all stations within the jurisdiction of RailTel Region for 30 days | Kindly clarify How much flagged/marked data will be considered for storage.  | L&T | Tender clause with corrigendum is clear.   |
|-----|--------------------------------------|-----|--------------------------------------|---|--|-----|--|
| 388 | 3.B.6.1                              | 60  |                                      | At RailTel Datacenters (Gurugram and Secunderabad)  | Please suggest if we have to consider only EMS infrastructure at each data center or archiving data needs to be considered. Also, whether recording camera is needed in DC or not. Please clarify. | L&T | Tender clauses are very clear.   |
| 389 | 11.0 PC<br>Workst<br>ation           | 310 | 4                                    | Frequency - 2.4 GHz or higher   | Request you to change it to 3.7 GHz or higher  | L&T | Bidder may offer higher specs to meet<br>the end objective. Otherwise tender<br>clause prevails for minimum specs. |
| 390 | 11.0 PC<br>Workst<br>ation           | 310 | 10                                   | Hard Disk Drive - SAS HDD, 2x450 GB,<br>10000 RPM or higher   | Request you to change it to 2X512GB SSD or higher  | L&T | Clause as per tender/corrigendum prevails.   |

| 391 | Chapte<br>r 7 | 187 | 7.17 | of India Ltd and the bidder. If the value of<br>claim or amount under dispute is more<br>than Rs. 10 lakhs, the matter shall be | There are two clauses on arbitration. Please clarify which clause shall govern. Further, please confirm that the procedure of appointment of arbitrator shall be made as the Arbitration & Conciliation Act, 1996 and amendments thereto. Therefore, the employees of a party cannot be an arbitrator and the Parties shall mutually appoint, in case of sole arbitrator; Each party shall appoint one arbitrator and the two arbitrators shall appoint the third to preside, in case of three arbitrators. | L&T | Both the clauses are same. In case of any ambiguity, clause No. 7.17 of the tender shall prevail. |
|-----|---------------|-----|------|---|---|-----|---|
| 392 | General       |     |      |   | Request you to add a termination clause- the Contractor shall terminate the contract in the event of a material breach by Railtel. In such an event of termination, the contractor shall be entitled to accrued rights till the date of termination- please con   | L&T | Clause as per tender/corrigendum prevails.  |
| 393 | General       |     |      |   | Please clarify the events which entitle the contractor to seek for an extension of time-in case of delay by Railtel, force majeure etc.   | L&T | Clause as per tender/corrigendum prevails.  |

|     |   |     |   | OEM(s) should have either direct presence in India or through their authorized registered   | Considering the magnitude of the project we strongly request that OEM's should be directly   |      |  |
|-----|---|-----|---|---|--|------|--|
| 394 | 4.A.14.1.<br>3<br>Eligibility<br>Criteria<br>Require<br>ments<br>for OEM' | 101 | 1 | partner in India for last 3 years or OEM(s) should have been working for last 3 years in their country of origin. Further, they should have Indian Technical Support Centre, Repair and RMA centre in India either directly or through their authorized registered partner for last 3 years or should give an undertaking for setting up a Technical Support Center and an office in India within 3 months after award of contract. | present In India with its registered office in India for more than 3 years(Not as Joint venture, Partnership firms or any other association).  OEM should have self owned repair centre and its own RMA setup in India for the last 3 years.  This ensures support capability for the large projects at such extent.                                     | Тусо | Clause as per tender/corrigendum prevails. |
| 395 | 4.A.14.1.<br>3<br>Eligibility<br>Criteria<br>Require<br>ments<br>for OEM' | 101 | 2 | The OEM(s) whose products have been offered in the bid should have a mini-mum cumulative turnover of INR 360 crores for OEMs supplying camera, INR 100 crores for OEMs of switches and INR 225 crores for OEMs of IT hardware (server and storage) each in last 3 financial years (i.e. current year and three pre-vious financial years) from the date of opening of tender.   | We request that OEM(s) supplying the CCTV Cameras should have the minimum average turnover of INR 1000 Crores in last 3 financial Years. Cumulative turnover shall also be changed to Average turnover. Considering the magnitude and stringent timelines of this project this criteria will help and encourage the large reputed OEM(s) to participate. | Тусо | Clause as per tender/corrigendum prevails. |
| 396 | 4.A.14.1.<br>3<br>Eligibility<br>Criteria<br>Require<br>ments<br>for OEM' | 101 | 3 | The OEM(s) should be a profit making company and should have a positive net worth (Net Worth of the company would be com-putted as on 31st March 2018 as the summa-tion of share capital, reserves and surpluses less accumulated losses held by the company  | We request that The OEM(s) should be a profit making company and should have a positive net worth from last three financial Years. Herein the profitability and net worth is requested for last year only  | Тусо | Clause as per tender/corrigendum prevails. |
| 397 | 4.A.14.1.<br>3<br>Eligibility<br>Criteria<br>Require<br>ments<br>for OEM' | 101 | 4 | The OEM for proposed IP cameras and VMS Software should have supplied for at least one project in a Mass Rapid Transport system e.g. Metro, Railways, Mono Rail, Airport etc. in India or abroad in last 3 financial years (ie. cur-rent year and three previous financial years) from the date of opening of tender. The same should have been working satisfactorily for at least six (6) months.                                 | The Project reference shall be of an Indian Company only and no foreign references shall be acknowledged and the operation, Maintenance and even the procurement process is quite unique and different in Indian Market scenarios. Hence request to kindly accept the Indian References only   | Тусо | Clause as per tender/corrigendum prevails. |
| 398 | New<br>Clause to<br>be<br>incorpor<br>ated                                |     |   | OEM of CCTV camera must be ISO 9001:2008<br>and ISO 14001 certified   | Copy of Certificates to be furnishes along with the bid  | Тусо | Clause as per tender/corrigendum prevails. |

| 399 | New<br>Clause to<br>be<br>incorpor<br>ated          |     |                              | The CCTV Company should have created enough Job opportunities in India as per the current PMO directive and should have minimum 1500 employees on its payroll in India. Any OEM which is part of a larger group company but meeting the 1500 employee criterion is also eligible. This is to justify that CCTV OEM has made substantial investment in India and is serious about its business in India which will ensure long term after sales support and spare support from the OEM. | Declaration letter from the HR to be submitted<br>along with the bid  | Тусо   | Clause as per tender/corrigendum prevails.                        |
|-----|---|-----|------------------------------|--|---|--------|---|
| 400 | New<br>Clause to<br>be<br>incorpor<br>ated          |     |                              | The CCTV OEM should have its toll free number in India for any technical support query from the SI or end customer which is very much required for such a big project.   | The CCTV OEM should have its toll free number in India for any technical support query from the SI or end customer which is very much required for such a big project.  | Тусо   | Clause as per tender/corrigendum prevails.                        |
| 401 | 8.3.2.3<br>Recordin<br>g<br>Paramet<br>ers          | 211 | (B)                          | On other stations: i) One Full HD stream (@1080P and @25FPS) from Full HD Camera on H.265 and ii) One UHD stream at resolution 3840x2160 and @15FPS from 4K UHD Camera on H.265 should be recorded for 7 days in Video Recording & Processing Unit.  | Video recording unit and Processing unit On other stations: (Type C, D, E) is an extra component which will add the overall cost for Servers and VMS licenses. Hence we request you to remove the recording parameters of 7 days recording in Video recording and processing unit and keep the 30 days recording only at rpf Thana itself.  | Тусо   | Clause as per tender/corrigendum prevails.                        |
| 402 | RDSO/<br>SPN/TC<br>/65/201<br>6<br>Revisio<br>n 4.0 | 208 | Server<br>Specificati<br>ons | Server Specifications  | It is important to share that RDSO specifications are based on previous Generation architecture which is about to become EoL, if we intent to offer latest architecture based Servers the there will be several parameters which will not be exactly matched with the specifications currently listed by RDSO despite the fact that performance of new architecture based servers will be higher than the listed specifications. Kindly Clarify | Netweb | The specs are minimum, higher specs may be offered by the bidder. |
| 403 | 4.A.45-   | 113 |                              | Preference to Domestic Manufacturers- "Bidders seeking Purchase preference (linked with Local content) (PPP-MII) shall be required to meet/exceed the target of Local Content (LC) of _50%%.   | Reference - MEITY Notification No<br>F.No.33(1)/2017-IPHW and DIPP Notification<br>No.P-45021/2/2017-B.EII dated 15.06.2017<br>Above cited notification clearly states<br>Percentage Domestic Value Addition in terms of<br>Bill of Material for SERVER Item to qualify as<br>domestically manufactured is 40% whereas your<br>RFP / Tender document mentions 50% Local<br>Content to be considered as PMA compliant<br>OEM.                    | Netweb | Tender condition is very clear and shall prevail.                 |

|     |   |                    | C No 6 DC Warkstation Chapitis - +:   |  |        |  |
|-----|---|--------------------|---|--|--------|--|
| 405 | RDSO/<br>SPN/TC<br>/65/201<br>6<br>Revisio<br>n 4.0 | Page<br>No.21<br>2 | S.No.6 PC Workstation Specifications  | It is important to share that RDSO specifications are based on previous Generation architecture which is about to become EoL , if we intent to offer latest architecture based Workstation the there will be several parameters which will not be exactly matched with the specifications currently listed by RDSO despite the fact that performance of new architecture based servers will be higher than the listed specifications. Kindly Clarify   | Netweb | The specs are minimum, higher specs<br>may be offered by the bidder. |
| 406 | 4.A.45-   | Page<br>No.11<br>3 | Preference to Domestic Manufacturers- "Bidders seeking Purchase preference (linked with Local content) (PPP-MII) shall be required to meet/exceed the target of Local Content (LC) of _50%%.  | Reference - MEITY Notification No<br>F.No.33(1)/2017-IPHW and DIPP Notification<br>No.P-45021/2/2017-B.EII dated 15.06.2017<br>Above cited notification clearly states<br>Percentage Domestic Value Addition in terms of<br>Bill of Material for WORKSTATION (which is a<br>Server Class Product as based on the same<br>platform) Item to qualify as domestically<br>manufactured is 40% whereas your RFP /<br>Tender document mentions 50% Local Content<br>to be considered as PMA compliant OEM. | Netweb | Tender condition is very clear and shall prevail.                    |
| 407 |   |                    |   |  |        |  |
| 408 | 4.A.45-<br>1.3(2)                                   | Page<br>No.11<br>4 | Preference to Domestic Manufacturers- "Eligible (techno-commercially qualified) LC bidder shall be granted a purchase pref- erence to 20% i.e. where the evaluated price is within 20% of the evaluated lowest price of Non Local Content (NLC) bidder,other things being equal. Accordingly, purchase preference shall be granted to the eligible (techno-commercially qualified) LC bidder concerned, at the lowest valid i.e. NLC price bid" | Above cited notification clearly states preference must be reserved for 50% of the total order value of the item to be awarded. Whereas in your RFP just the Purchase Preference Margin has been specified and there has been no   | Netweb | Tender condition is very clear and shall prevail.                    |
| 409 |   |                    |   |  |        |  |

| 410 | Chapter-<br>3 -<br>3.A.1.7-<br>Site<br>Preparati<br>on   | 49 | 3.A.1.7.1 | Railways shall provide AC power supply at station/cabin/panel room/mid-section buildings for carrying out the awarded work. The successful bidder will have to pay the nominal charges for the power supply as per the exist-ing Railways Norms.   | Please share the existing Railways Norms before the bidding date.  We request for the following inclusion:  Also in case of time to time upward changes in Railways Norms wrt this clause, the same shall be compensated to successful bidder in same proportion.   | M/s. Sterling<br>and Wilson<br>Pvt. Ltd | Railway rates vary from place to place<br>and are same/slightly higher than the<br>prevailing commercial rates. |
|-----|--|----|-----------|--|---|---|---|
| 411 | Chapter-<br>3 -<br>3.A.1.7-<br>Site<br>Preparati<br>on   | 49 | 3.A.1.7.8 | Temporary depot for tools and equipment of any kind can only be opened within the Railway's premises after a prior permission has been granted by the authorized Railway personnel.  | We request for amendment in clause as below:  Temporary depot for tools and equipment of any kind can only be opened within the Railway's premises after a prior permission has been granted by the authorized Railway personnel on FOC Basis.  | M/s. Sterling<br>and Wilson<br>Pvt. Ltd | Clause as per tender/corrigendum prevails.  |
| 412 | Chapter-<br>3 -<br>3.A.1.7-<br>Site<br>Preparati<br>on   | 49 | 3.A.1.7.9 | Any land required by the bidder may be made available by Railways, if available, at the lease cost as per the latest norms of Railways.  | Please share the existing lease cost as per the latest norms of Railways before the bidding date.  We request for the following inclusion:  Also in case of time to time upward changes in Railways Norms wrt this clause, the same shall be compensated to successful bidder in same proportion.         | M/s. Sterling<br>and Wilson<br>Pvt. Ltd | Rates vary from place to place and may<br>be estimated by the bidder from field<br>and subject to availability. |
| 413 | Chapter-<br>3 -3.B.2-<br>Power<br>and<br>Fiber<br>Distributi<br>on<br>Design<br>for<br>Railway<br>Stations | 54 |           | If there is a requirement to connect more access switches for platform extension, any other locations or any other services aggregation switch will have sufficient ports available. Also there will be sufficient fiber core available to make this connectivity possible from scalability point of view. | We understand that all the locations/ more specific to "Any other Location" shall be within the Railways premises/ land and all the necessary approvals for Right of Way (RoW) shall be provided by Railtel/ Railways without any extra cost to bidder.  Please confirm, if our understanding is correct. | M/s. Sterling<br>and Wilson<br>Pvt. Ltd | Clause is self explainatory.  |

| 414 | Chapter-<br>3 -3.D.3-<br>Inspectio<br>n/Factor<br>y<br>Acceptan<br>ce Test | 70 | 3.D.3.4 | On successful visual and functional tests as above, the equipment may be considered to be in conformance with RDSO specification. However, the vendor shall submit special bank guarantee equivalent to 10% of the value of the equipments inspected by third party abroad & valid for a period of one year (in addition to Performance Guar-antee) and undertaking to the purchaser that the equipment supplied shall meet all the requisite parameters of the specification and shall work satisfactorily failing which bank guarantee may be encashed. Firm shall also submit suitable undertaking regard-ing satisfactory repair /service support to the purchaser. | We reqest for the following amendment in the clause in the interet of the project:  On successful visual and functional tests as above, the equipment may be considered to be in conformance with RDSO specification.  However, the vendor shall submit special bank guarantee equivalent to 10% of the value of the equipments inspected by third party abroad & valid for a period of one year (in addition to Performance Guarantee) and undertaking from Bidder & OEM to the purchaser that the equipment supplied shall meet all the requisite parameters of the specification and shall work satisfactorily failing which bank guarantee may be encashed. Firm & OEM shall also submit suitable undertaking regarding satisfactory repair /service support to the purchaser. | M/s. Sterling<br>and Wilson<br>Pvt. Ltd | Clause as per tender/corrigendum prevails. |
|-----|--|----|---------|---|--|---|--|
| 415 | Chapter-<br>4 -<br>4.A.11<br>Liquidat<br>ed<br>Damage<br>§                 | 93 | 4.A.11  | The timely delivery is the essence of this tender. Liquidated damages will be applicable at the rate of half percent per week or part thereof for undelivered portion of SOR subject to a maximum of 10% of the cost of Purchase order/LOA for any rea-son whatsoever attributed to failure of bidder. RailTel will have the right to cancel the order, place order on alternative source besides levying the liquidated damages as above.  | The timely delivery is the essence of this tender. Liquidated damages will be applicable at the rate of half percent per week or part thereof for undelivered portion of SOR subject to a maximum of 5% of the cost of Purchase order/LOA for any rea-son whatsoever attributed to failure of bidder. RailTel will have the right to cancel the order, place order on alternative source besides levying the liquidated damages as above.  | M/s. Sterling<br>and Wilson<br>Pvt. Ltd | Clause as per tender/corrigendum prevails. |

| 416 | Chapter-4 - 4.A.14.1-Eligibility Criteria Require ments for Bidders - Financial Capabilit Y                         | 95 | 4.A.14.1<br>(3) | cumulative contract amount from the Security/IT/Telecom business in the last three financial years plus current year upto the date of opening of tender. For Package-I: Northern Re-gion: Rs. 365.31 Crores For Package-II: Western Re-gion: Rs. 235.18 Crores For Package-III: Eastern Re-gion: Rs. 386.97 Crores For Package-IV: Southern Re-gion: Rs. 314.27 Crores Note:- In case of Consortium/JV, each member's relevant turnover combined together shall be considered against the above mentioned financial capability criteria | The bidder should have received a minimum cumulative contract amount from the Security/IT/Signals & Telecom business/ Data Center Design & Build/Electrical & Mechnical Infra works in the last three financial years plus current year upto the date of opening of tender. For Package-I: Northern Re-gion: Rs. 365.31 Crores For Package-II: Western Re-gion: Rs. 235.18 Crores For Package-III: Eastern Re-gion: Rs. 386.97 Crores For Package-IV: Southern Re-gion: Rs. 314.27 Crores Note:- In case of Consortium/JV, each member's relevant turnover combined together shall be considered against the above mentioned financial capability criteria  | M/s. Sterling<br>and Wilson<br>Pvt. Ltd | Tender clause including corrigendum<br>shall prevail. |
|-----|---|----|-----------------|---|---|---|---|
| 417 | Chapter-4-4.A.14.1-Eligibility Criteria Require ments for Bidders-Similar Work Experien ce (Technic al capabilit y) | 96 |                 | 2. Past Experience Form as per Form No.19 of Chapter 6. (The set of document(s) submitted should clearly certify elgibility criteria and should be verifiable from the user/customer)   | This is wrt to the large size projects, the final completion may delay due to various external reasons. Infect the work executed to near completition and payments received to the tune of more than the RFP order qualifying criterias.  In view of the above facts, we request to consider the on going projects with the the value of the projects executed/ payment received worth more than the desired RFP project values and suggest the following amendment:  1. Completion certificates from the User Organizations is required to be submitted. (In case of Ongoing projects minimum 80% of the project Value has been completed. Client Certificate to be provided)  AND  2. Past Experience Form as per Form No.19 of Chapter 6. (The set of document(s) submitted should clearly certify elgibility cri-teria and should be verifiable from the user/customer) | M/s. Sterling<br>and Wilson<br>Pvt. Ltd | Clause as per tender/corrigendum<br>prevails.         |

| 418 | Chapter-4-4.A.14.1-Eligibility Criteria Require ments for Bidders - | 99           | Similar<br>Works | Works entailing completion of Supply, Installation, Testing and Commissioning of a a project in the field of Security/IT/Telecom for central government or any state government or semi/quasi-government entities or Public Sector Units or private enterprises having turnover of at least 500 crores. | project of Railways. We further request to   | M/s. Sterling<br>and Wilson<br>Pvt. Ltd | Tender Clause is clear and doesn't<br>need any change.   |
|-----|---|--------------|------------------|---|--|---|--|
| 419 | Chapter-<br>4 - 4.A.5.<br>Payment<br>Terms                          | 84           | 4.A.5.1.3        | and the last 5% payment shall be made by RailTel/REL on issue of Final Acceptance Certificate (FAC) and remaining 5% on issue of FAC. and remaining 5% on issue of FAC of the same.   | We request to release remaining 5% against the PBG of the equivalent amount in all the cases with issuance of PAC                | M/s. Sterling<br>and Wilson<br>Pvt. Ltd | Clause as per tender/corrigendum prevails.   |
| 420 | Chapter-4- 4.A.5.2 Payment Terms for Service protion                | 85           | 4.A.5.2.1        | and final 5% on issue of Final Acceptance<br>Certificate.   | We request to release final 5% against the PBG of the equivalent amount with issuance of PAC                                     | M/s. Sterling<br>and Wilson<br>Pvt. Ltd | Clause as per tender/corrigendum prevails.   |
| 421 | Agreeme<br>nts  | 195 &<br>198 |                  | Form B & Form C   | We request the agreements should be signed by Authorised Signatory, in whose favour the POA has been issued by the organization. | M/s. Sterling<br>and Wilson<br>Pvt. Ltd | Authorised signatory duly authorised through notorised POA is permitted to sign such documents |

| 422 | Chapter- 2 - Schedule of requirem ent: PACKAG E-I: NORTHE RN REGION Schedule A | 9  | 2 (b) | PC Workstation as defined in clause 8.6 of chapter 8 for viewing, monitoring and system management including 24" monitor, all required licensed software, spike buster 500VA UPS with backup for 30 minutes power failure without interruption, and all other r |  | M/s. Sterling<br>and Wilson<br>Pvt. Ltd | UPS should back up for 30 minutes power failure without interruption.     Yes, UPS is required with inbuilt surge protection.     Warranty as per Tender.   |
|-----|--|----|-------|---|--|---|---|
| 423 | Chapter- 2 - Schedule of requirem ent: PACKAG E-II: WESTER N - Schedule A      | 17 | 2 (b) | PC Workstation as defined in clause 8.6 of chapter 8 for viewing, monitoring and system management including 24" monitor, all required licensed software, spike buster 500VA UPS with backup for 30 minutes power failure without interruption, and all other r | Specifications of 500VA UPS Systems has not been specified in the RFP. Request to kindly share the technical Specifications of the same. Also, it is requested to kindly clarify 500 VA UPS required is Offline or Online type & battery backup required for 500 VA UPS with 'VAH' Capacity. | M/s. Sterling<br>and Wilson<br>Pvt. Ltd | 1. The minimum specs. of commercial UPS may be met. 2. UPS should have back up for 30 minutes power failure without interruption. 2. Yes, UPS is required with inbuilt surge protection. 3. Warranty as per Tender. |
| 424 | Chapter- 2 - Schedule of requirem ent: PACKAG E-III: EASTERN - Schedule A      | 24 | 2 (b) | PC Workstation as defined in clause 8.6 of chapter 8 for viewing, monitoring and system management including 24" monitor, all required licensed software, spike buster 500VA UPS with backup for 30 minutes power failure without interruption, and all other r | Also, kindly clarify the meaning of "spike buster" 500 VA UPS. Does it imply that 500 VA UPS is required with inbuilt surge protection device (SPD)?  Warranty on batteries for UPS may be considered for 1 year/ 2 years being a consumable item.   | M/s. Sterling<br>and Wilson<br>Pvt. Ltd | 1. The minimum specs. of commercial UPS may be met. 2. UPS should have back up for 30 minutes power failure without interruption. 2. Yes, UPS is required with inbuilt surge protection. 3. Warranty as per Tender. |

| 425 | Chapter-2 - Schedule of requirem ent: PACKAG E-IV: SOUTHE RN - Schedule A                       | 32  | 2 (b)                      | PC Workstation as defined in clause 8.6 of chapter 8 for viewing, monitoring and system management including 24" monitor, all required licensed software, spike buster 500VA UPS with backup for 30 minutes power failure without interruption, and all other r |  | M/s. Sterling<br>and Wilson<br>Pvt. Ltd | 1. The minimum specs. of commercial UPS may be met. 2. UPS should have back up for 30 minutes power failure without interruption. 2. Yes, UPS is required with inbuilt surge protection. 3. Warranty as per Tender. |
|-----|---|-----|----------------------------|---|--|---|---|
| 426 | Chapter-<br>8 -<br>Technica<br>I,<br>Function<br>al<br>Require<br>ments &<br>Specifica<br>tions | 227 | 8.16.1.<br>1KVA- S.<br>No1 | Capacity - 1KVA/800 W, better as per actual requirement   | It is requested to kindly amend the clause to read as<br>1 KVA/ 700W i.e. Output Factor - 0.7 Lag, which is as<br>per industry standards |   | Clause as per tender/corrigendum prevails.  |
| 427 | Chapter-<br>8 -<br>Technica<br>I,<br>Function<br>al<br>Require<br>ments &<br>Specifica<br>tions | 227 | 8.16.1.<br>1KVA- S.<br>No5 | Input power factor correction - 0.99  | It is requested to kindly amend the Input Power<br>Factor to ≥ 0.9, which is as per industry standards.                                  | M/s. Sterling<br>and Wilson<br>Pvt. Ltd | Clause as per tender/corrigendum prevails.  |
| 428 | Chapter-<br>8 -<br>Technica<br>I,<br>Function<br>al<br>Require<br>ments &<br>Specifica<br>tions | 227 | 8.16.1.<br>1KVA- S.<br>No7 | Output Power factor - 0.8 or better   | It is requested to kindly amend the clause to read as "Output Factor - 0.7 Lag", which is as per industry standards                      | M/s. Sterling<br>and Wilson<br>Pvt. Ltd | Clause as per tender/corrigendum prevails.  |

|     | I a   | ı   | I                            | frequency (output) - 50Hz/60Hz frequency |   |   |  |
|-----|---|-----|------------------------------|--|---|---|--|
| 429 | Chapter-<br>8 -<br>Technica<br>I,<br>Function<br>al<br>Require<br>ments &<br>Specifica<br>tions | 227 | 8.16.1.<br>1KVA- S.<br>No9   | requency (output) - sonz/ounz frequency  | Kindly amend Output Frequency to 50Hz (± 0.5%) as 60 Hz is not relevant for Indian Power Conditions.  | M/s. Sterling<br>and Wilson<br>Pvt. Ltd | Clause as per tender/corrigendum prevails. |
| 430 | Chapter-<br>8 -<br>Technica<br>I,<br>Function<br>al<br>Require<br>ments &<br>Specifica<br>tions | 227 | 8.16.1.<br>1KVA - S.<br>No10 | Voltage Range (Bypass) - 120VAC~288VAC   | It is requested to kindly amend the clause to read as:  "Input Voltage Range - 160V AC-270V AC" which is as per industry standards & covers the voltage variation issues prevalent in Indian Sub Continent. | M/s. Sterling<br>and Wilson<br>Pvt. Ltd | Clause as per tender/corrigendum prevails. |
| 431 | Chapter-<br>8 -<br>Technica<br>I,<br>Function<br>al<br>Require<br>ments &<br>Specifica<br>tions | 227 | 8.16.1.<br>1KVA - S.<br>No12 | PF - >=0.99                              | It is requested to kindly amend the Input Power Factor to ≥ 0.9, which is as per industry standards.  | M/s. Sterling<br>and Wilson<br>Pvt. Ltd | Clause as per tender/corrigendum prevails. |
| 432 | Chapter-<br>8 -<br>Technica<br>I,<br>Function<br>al<br>Require<br>ments &<br>Specifica<br>tions | 227 | 8.16.1.<br>1KVA - S.<br>No21 | Port - USB                               | USB/ RS 232 may kindly be allowed.  | M/s. Sterling<br>and Wilson<br>Pvt. Ltd | Clause as per tender/corrigendum prevails. |

| 433 | Chapter-<br>8 -<br>Technica<br>I,<br>Function<br>al<br>Require<br>ments &<br>Specifica<br>tions | 227 &<br>228 | 8.16.1.<br>1KVA- S.<br>No22/ 23 | Battery Type - SMF<br>Battery backup - 1 Hrs. on full load (Single bank) | It is requested to kindly specify Minimum VAH capacity. This will provide common platform to all prospective bidders.  "Suggested Minimum VAH: 1500 VAH".  Also, warranty on batteries may be specified for 2 years being a consumable item.   | M/s. Sterling<br>and Wilson<br>Pvt. Ltd | Clause as per tender/corrigendum prevails. |
|-----|---|--------------|---------------------------------|--|--|---|--|
| 434 | Chapter-<br>8 -<br>Technica<br>I,<br>Function<br>al<br>Require<br>ments &<br>Specifica<br>tions | 228          | 8.16.1.<br>1KVA-<br>S. No24 C   |  | It is strongly recommended to consider UPS with Inbuilt transformer to enable galvanic isolation between input & output (as per GEM/ DGS&D/ NIC Specifications) in order to provide adequate protection to sensitive loads from the variations of input power supply prevalent in many parts of the country. | M/s. Sterling<br>and Wilson<br>Pvt. Ltd | Clause as per tender/corrigendum prevails. |
| 435 | Chapter-<br>8 -<br>Technica<br>I,<br>Function<br>al<br>Require<br>ments &<br>Specifica<br>tions | 228          | 8.16.1.<br>1KVA-<br>S. No24 F   | Size - not more than 2U rack mountable                                   | It is requested <b>Tower Type</b> may be considered. Tower Type UPS are easy in transportation & for rugged use. Rack type arrangement may not be ideally suited for rugged use. Hence it is requested to kindly amend the UPS requirement to <b>Tower Type/ Rack type UPS Systems.</b>                      | M/s. Sterling<br>and Wilson<br>Pvt. Ltd | Clause as per tender/corrigendum prevails. |
| 436 | Chapter-<br>8 -<br>Technica<br>I,<br>Function<br>al<br>Require<br>ments &<br>Specifica<br>tions | 228          | 8.16.2 UPS<br>2KVA: S.<br>No1   | Capacity - 2KVA/1600 W   | It is requested to kindly amend the clause to read as 2 KVA/ 1400W i.e. Output Factor - 0.7 Lag, which is as per industry standards  | M/s. Sterling<br>and Wilson<br>Pvt. Ltd | Clause as per tender/corrigendum prevails. |

|     | Chapter-  |     |                                | Input power factor correction - 0.99     |   |   |  |
|-----|---|-----|--------------------------------|--|---|---|--|
| 437 | 8 - Technica I, Function al Require ments & Specifica tions                                     | 228 | 8.16.2 UPS<br>2KVA: S.<br>No5  |  | It is requested to kindly amend the Input Power Factor to ≥ 0.9, which is as per industry standards.                | M/s. Sterling<br>and Wilson<br>Pvt. Ltd | Clause as per tender/corrigendum prevails. |
| 438 | Chapter-<br>8 -<br>Technica<br>I,<br>Function<br>al<br>Require<br>ments &<br>Specifica<br>tions | 228 | 8.16.2 UPS<br>2KVA:<br>S. No7  | Output Power factor - 0.8 or better      | It is requested to kindly amend the clause to read as "Output Factor - 0.7 Lag", which is as per industry standards | M/s. Sterling<br>and Wilson<br>Pvt. Ltd | Clause as per tender/corrigendum prevails. |
| 439 | Chapter-<br>8 -<br>Technica<br>I,<br>Function<br>al<br>Require<br>ments &<br>Specifica<br>tions | 228 | 8.16.2 UPS<br>2KVA:<br>S. No9  | frequency (output) - 50Hz/60Hz frequency | Kindly amend Output Frequency to 50Hz (± 0.5%) as 60 Hz is not relevant for Indian Power Conditions.                | M/s. Sterling<br>and Wilson<br>Pvt. Ltd | Clause as per tender/corrigendum prevails. |
| 440 | Chapter-<br>8 -<br>Technica<br>I,<br>Function<br>al<br>Require<br>ments &<br>Specifica<br>tions | 228 | 8.16.2 UPS<br>2KVA: S.<br>No11 | PF - >=0.99                              | It is requested to kindly amend the Input Power Factor to ≥ 0.9, which is as per industry standards.                | M/s. Sterling<br>and Wilson<br>Pvt. Ltd | Clause as per tender/corrigendum prevails. |

|     | a   |     | I                                  | Port - USB   |  |   |  |
|-----|---|-----|------------------------------------|--|--|---|--|
| 441 | Chapter-<br>8 -<br>Technica<br>I,<br>Function<br>al<br>Require<br>ments &<br>Specifica<br>tions | 229 | 8.16.2 UPS<br>2KVA: S.<br>No20     | ruit - USB   | USB/ RS 232 may kindly be allowed.   | M/s. Sterling<br>and Wilson<br>Pvt. Ltd | Clause as per tender/corrigendum prevails. |
| 442 | Chapter-<br>8 -<br>Technica<br>I,<br>Function<br>al<br>Require<br>ments &<br>Specifica<br>tions | 229 | 8.16.2 UPS<br>2KVA: S.<br>No21/ 22 | Battery Type - SMF<br>Battery backup - 1 Hrs. with full load | It is requested to kindly specify Minimum VAH capacity. This will provide common platform to all prospective bidders.  "Suggested Minimum VAH: 3000 VAH" Also, warranty on batteries may be specified for 2 years being a consumable item.   | M/s. Sterling<br>and Wilson<br>Pvt. Ltd | Clause as per tender/corrigendum prevails. |
| 443 | Chapter-<br>8 -<br>Technica<br>I,<br>Function<br>al<br>Require<br>ments &<br>Specifica<br>tions | 229 | 8.16.2 UPS<br>2KVA: S.<br>No23 C   | EPO function - Yes   | It is requested to kindly make this requirement OPTIONAL & specify MCB at input/ output in lieu.   | M/s. Sterling<br>and Wilson<br>Pvt. Ltd | Clause as per tender/corrigendum prevails. |
| 444 | Chapter-<br>8 -<br>Technica<br>I,<br>Function<br>al<br>Require<br>ments &<br>Specifica<br>tions | 229 | 8.16.2 UPS<br>2KVA: S.<br>No23 D   |  | It is strongly recommended to consider UPS with Inbuilt transformer to enable galvanic isolation between input & output (as per GEM/ DGS&D/ NIC Specifications) in order to provide adequate protection to sensitive loads from the variations of input power supply prevalent in many parts of the country. | M/s. Sterling<br>and Wilson<br>Pvt. Ltd | Clause as per tender/corrigendum prevails. |

|     | . I   |     | I  | Size - not more than 2U rack mountable                             |   |   |  |
|-----|---|-----|--|--|---|---|--|
| 445 | Chapter-<br>8 -<br>Technica<br>I,<br>Function<br>al<br>Require<br>ments &<br>Specifica<br>tions | 229 | 8.16.2 UPS<br>2KVA: S.<br>No23 G   |  | It is requested <b>Tower Type</b> may be considered. Tower Type UPS are easy in transportation & for rugged use. Rack type arrangement may not be ideally suited for rugged use. Hence it is requested to kindly amend the UPS requirement to <b>Tower Type /Rack Type UPS Systems.</b> | M/s. Sterling<br>and Wilson<br>Pvt. Ltd | Clause as per tender/corrigendum prevails. |
| 446 | Chapter-<br>8 -<br>Technica<br>I,<br>Function<br>al<br>Require<br>ments &<br>Specifica<br>tions | 229 | 8.16.3 2X<br>10KVA<br>connected<br>in parallel<br>redundant<br>mode in<br>separate<br>chassis:           | 2 x 10 KVA connected in parallel redundant mode in separate chasis | Two UPS in Hot standby (1+1) configuration is most suitable & result in considerable cost saving with redundancy & may be considered if appropriate.  | M/s. Sterling<br>and Wilson<br>Pvt. Ltd | Clause as per tender/corrigendum prevails. |
| 447 | Chapter-<br>8 -<br>Technica<br>I,<br>Function<br>al<br>Require<br>ments &<br>Specifica<br>tions | 229 | 8.16.3 2X<br>10KVA<br>connected<br>in parallel<br>redundant<br>mode in<br>separate<br>chassis: S.<br>No1 | Capacity - 10000VA/9000 W  | It is requested to kindly amend the clause to read as<br>10 KVA/ 7000W i.e. Output Factor - 0.7 Lag, which is<br>as per industry standards  |   | Clause as per tender/corrigendum prevails. |
| 448 | Chapter-<br>8 -<br>Technica<br>I,<br>Function<br>al<br>Require<br>ments &<br>Specifica<br>tions | 229 | 8.16.3 2X<br>10KVA<br>connected<br>in parallel<br>redundant<br>mode in<br>separate<br>chassis: S.<br>No5 | Voltage Range - 305-470 VAC (3-phase) @ 100%<br>load               | It is requested to kindly amend the clause to read as:  "Input Voltage Range - 330V AC-460V AC" which is as per industry standards & covers the voltage variation issues prevalent in Indian Sub Continent.   |   | Clause as per tender/corrigendum prevails. |

| 449 | Chapter-<br>8 -<br>Technica<br>I,<br>Function<br>al<br>Require<br>ments &<br>Specifica<br>tions | 229 | 8.16.3 2X<br>10KVA<br>connected<br>in parallel<br>redundant<br>mode in<br>separate<br>chassis: S.<br>No16 &<br>17   | Output Frequency @ Line mode - 46 ~ 54 Hz<br>@50Hz system<br>Output Frequency@ Battery mode - 46 ~ 54 Hz<br>@50Hz system   | Output frequency from 47-53 Hz as per Indian industrial standards in sync. Mode.  On battery mode it should be 50 Hz ± 0.5 Hz. Hence, it is requested to kindly amned the same accordingly.   | M/s. Sterling<br>and Wilson<br>Pvt. Ltd | Clause as per tender/corrigendum prevails. |
|-----|---|-----|---|--|---|---|--|
| 450 | Chapter-<br>8 -<br>Technica<br>I,<br>Function<br>al<br>Require<br>ments &<br>Specifica<br>tions | 229 | 8.16.3 2X<br>10KVA<br>connected<br>in parallel<br>redundant<br>mode in<br>separate<br>chassis: S.<br>No18           | Frequency Converter Mode (CVCF) - 50/60Hz  | It should be an optional feature. All Online double<br>conversion UPS works as 50 Hz frequency<br>independent mode.   | M/s. Sterling<br>and Wilson<br>Pvt. Ltd | Clause as per tender/corrigendum prevails. |
| 451 | Chapter-<br>8 -<br>Technica<br>I,<br>Function<br>al<br>Require<br>ments &<br>Specifica<br>tions | 230 | 8.16.3 2X<br>10KVA<br>connected<br>in parallel<br>redundant<br>mode in<br>separate<br>chassis: S.<br>No28           | Battery backup - 2 Hrs. on full load with each UPS<br>System   | It is requested to kindly specify Minimum VAH capacity. This will provide common platform to all prospective bidders.  "Suggested Minimum VAH: 24000 VAH" with each UPS.  Also, warranty on batteries may be specified for 2 years being a consumable item. | M/s. Sterling<br>and Wilson<br>Pvt. Ltd | Clause as per tender/corrigendum prevails. |
| 452 | Chapter-<br>8 -<br>Technica<br>I,<br>Function<br>al<br>Require<br>ments &<br>Specifica<br>tions | 230 | 8.16.3 2X<br>10KVA<br>connected<br>in parallel<br>redundant<br>mode in<br>separate<br>chassis: S.<br>No<br>39,40,41 | ESD - IEC/EN61000-4-2 Level 4 or equivalent BIS/IS standard Safety - IEC/EN62040-1-1 or equivalent BIS/IS standard Leakage Current - IEC/EN62040-1-1 or equivalent BIS/IS standard     | It is requested that this should be considered as either IEC/ BIS/ CE certification of UPS because all certifications is related to safety of the system.   | M/s. Sterling<br>and Wilson<br>Pvt. Ltd | Clause as per tender/corrigendum prevails. |
| 453 | 8.9. Type-<br>II Switch   | 213 | 13  | Should have AC power supply arrangement as given below in chassis without any external adaptors with internal redundant power supply AC power supply 100 to 240 V AC with 50 to 60 Hz: | Requested to be changed to "Should have AC power supply arrangement as given below in chassis for redundant power supply: AC power supply 100 to 240 V AC with 50 to 60 Hz."  | D-Link                                  | As per tender.                             |

| 454 | 8.10.<br>Switches<br>Type-III                              | 214 | 14  | Should have AC power supply arrangement as given below in chassis without any external adaptors with internal redundant power supply: AC power supply 100 to 240 V AC with 50 to 60 Hz.   | Requested to be changed to "Should have AC power supply arrangement as given below in chassis for redundant power supply: AC power supply 100 to 240 V AC with 50 to 60 Hz."  | D-Link                    | As per tender.                       |
|-----|--|-----|---|---|---|---------------------------|--------------------------------------|
| 455 | RailTel/Te<br>nder/OT/<br>CO/P/201<br>7-<br>18/VSS/4<br>32 | 40  | Note  | The above stipulation of single OEM Make/Model applies to items viz. different types of cameras, servers, Video Record-ing & Processing Unit , workstation, storage, large format display monitors, VMS Softwares including VA and FRS, switches (each Type sep | We understand from the clause that Single OEM for one individual type of equipment/ switch is permitted to be quoted. For example - One OEM adressing Type-I switch is to be quoted in all packages. Kindly confirm.  | Tejas<br>Networks<br>Ltd. | Clause is self explainatory.         |
| 456 | RailTel/Te<br>nder/OT/<br>CO/P/201<br>7-<br>18/VSS/4<br>32 | 113 | 4.A.45.<br>Preference<br>to Domestic<br>Manufacture<br>rs | to Make in India) Order 2017 dated June 15, 2017 (and<br>subsequent amendments, if any) by Department of<br>Industrial Policy and Promotion, GoI shall apply to this<br>tender to the extent feasible.  | DIPP refers to the notification issued by Nodal ministry for calculating the percentage of value addition, percentage of applicable PMA and Purchase preference. For the tendered items such as switches, routers etc there are guidelines issued by DOT which is a nodal ministry for Telecom products. Kindly confirm that latest guidelines issued by DOT are duly applicable to arrive at PMA for this tender.  | Tejas<br>Networks<br>Ltd. | Tender clause is clear and prevails. |
| 457 | RailTel/Te<br>nder/OT/<br>CO/P/201<br>7-<br>18/VSS/4<br>32 | 114 | 4.A.45.<br>Preference<br>to Domestic<br>Manufacture<br>rs | content) (PPP-MII) shall be required to meet/exceed the target of Local Content (LC) of _50%%.  | DIPP refers to the notification issued by Nodal ministry for calculating the percentage of value addition, percentage of applicable PMA and Purchase preference. For the tendered items such as switches, routers etc there are guidelines issued by DOT which is a nodal ministry for Telecom products. For each product there is different value addition defined by the ministry and not fixed at 50%. Kindly confirm that latest guidelines issued by DOT are duly applicable to arrive at PMA for this tender. | Tejas<br>Networks<br>Ltd. | Tender clause is clear and prevails. |

| d. Guidelines issued by DeitY vide No. 33(7)/2015-IPHW dated 16 Nov 2015. |
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| 459 | RailTel/Te<br>nder/OT/<br>CO/P/201<br>7-<br>18/VSS/4<br>32 | 115, | 7.3.2.2<br>Determining<br>of Local<br>Content: | provision: Working equipment produced in the country  | As per PMA policy, the purchase preference is applicable in individual goods and services offered. The services such as I&C or O&M may not be considered to calcualate the LC. There is a formula to calculate the VA in India based on components, IPR, Assembly, Taxes duties and other expense.  As per Annexure VII the product cost is only one of the parts for local content by which local content criteria can be achieved even without using the domestically manufactured equipment which is which is a violation of DIPP policy and respective PMA policy issued by nodal ministry.  In order to ensure clarity on local content, DIPP refers to the notification issued by Nodal ministry for calculating the percentage of value addition. for all the tendered items such as switches, routers etc. There are guidelines issued by DOT which is a nodal ministry for Telecom products. Kindly confirm that latest guidelines issued by DOT are duly applicable to arrive at PMA for this tender as below:  a. Department of Electronics and Information Technology (Deity) Notification No. 8(78)/2010-IPHW | Tejas<br>Networks<br>Ltd. | Tender clause is clear and prevails. |
|-----|--|------|--|---|--|---------------------------|--------------------------------------|
|     |  |      |  |   | a. Department of Electronics and Information Technology (Deity) Notification No. 8(78)/2010-IPHW dated 10 Feb 2012. b. Department of Telecommunications (DoT) Notification No.18- 07/2010-IP dated 05 Oct 2012. c. Guidelines issued by Deity vide No. 33(3)/2013-IPHW dated 23 Dec 2013. d. Guidelines issued by Deity vide No. 33(7)/2015-IPHW   |                           |                                      |
| 460 | RailTel/Te<br>nder/OT/<br>CO/P/201<br>7-<br>18/VSS/4<br>32 | 118  | 4.A.48.<br>Make in<br>India:                   | The foreign manufacturer/OEM (Original Equipment Manufacturer)/OSSP (Original Software Service Provider), of the successful bidder, in case of each offered item, is required to set up the manufacturing/development facility in India within 2 years from the | 1. As per the PMA or DIPP guidelines the equipment to be used in the implementation of the project has to be domestically manufactured and as this project need to completed in fixed timeframe, only OEM meeting VA on the date of bidding will be considered as domestic manufacturers.  2. Forcing foreign vendor to start manufacturing in India is good initiative, there is a mention of Penalty for bidder/OEM not able to meet the desired criteria. Kindly confirm how much and what methodology will be adopted to calculate the Penalty.  | Tejas<br>Networks<br>Ltd. | Tender clause is clear and prevails. |
| 461 | RailTel/Te<br>nder/OT/<br>CO/P/201<br>7-<br>18/VSS/4<br>32 | 118  | 4.A.48.<br>Make in<br>India:                   | to Make in India) Order 2017 dated June 15, 2017 (and   | DIPP refers to the notification issued by Nodal ministry for calculating the percentage of value addition, percentage of applicable PMA and Purchase preference. For the tendered items such as switches, routers etc there are guidelines issued by DOT which is a nodal ministry for Telecom products. Kindly confirm that latest guidelines issued by DOT are duly applicable to arrive at PMA for this tender.   | Tejas<br>Networks<br>Ltd. | Tender clause is clear and prevails. |

| 462 | RailTel/Te<br>nder/OT/<br>CO/P/201<br>7-<br>18/VSS/4<br>32 | 206 | Annexure -<br>VII<br>CALCULATIO<br>N OF LOCAL<br>CONTENT | % LC Combination = Total domestic components cost of<br>goods (A.I.3.a) + Total domestic components cost of<br>services (A.II.5.a)<br>X 100<br>Total Cost (A.III.c)                                 | As per PMA policy, the purchase preference is applicable in individual goods and services offered. The services such as I&C or O&M may not be considered to calcualate the LC. There is a formula to calculate the VA in India baed on components, IPR, Assembly, Taxes duties and other expense. Accordingly, the local content in each goods and services needs to be calculated and considered more than 50% ensuring contribution from Domestic Industry.  Kindly confirm, this evaluation will be done per cost component in the annexure seperately which should be more than 50%.             | Tejas<br>Networks<br>Ltd. | Tender clause is clear and prevails. |
|-----|--|-----|--|---|--|---------------------------|--------------------------------------|
| 463 | RailTel/Te<br>nder/OT/<br>CO/P/201<br>7-<br>18/VSS/4<br>32 | 212 | 8.8. Type-I<br>Switch:                                   | Temperature and Storage Temper-ature as per environmental requirement.  | We understand the switches shall be deployed in the open field environment. In order to ensure a seamless network deployment and SLA maintenance which is mandate as a part of the tender, we request to kindly consider Industrial Grade switches for the requirement. The temperature and storage range should be specified ensuring uniformity of solution across bidders and OEMs. <u>Kindly confirm to amend the clause as "Bidder to propose switch having Operating Temperature -40 C to +75 C and Storage Temperature as -40C to +85 C to survive the harsh environmental requirement.".</u> | Tejas<br>Networks<br>Ltd. | As per tender.                       |
| 464 | RailTel/Te<br>nder/OT/<br>CO/P/201<br>7-<br>18/VSS/4<br>32 | 213 | 8.9. Type-II<br>Switch                                   | 24 I) Bidder to propose switch having Operating<br>Temperature and Storage Temperature as per<br>environmental requirement.   | We understand it is critical to ensure SLAs are met as per the tender requirement. However the clause for temperature is open and doesn't ensure temperature related risks are mitigated. In order to ensure seamless network deployment and uniformity across offered products, we request to specify the temperature range of the product. Kindly confirm to amend the clause as "Bidder to propose switch having Operating Temperature 0 C to 50 C and Storage Temperature as 0 C to 75 C to meet the environmental requirement."   | Tejas<br>Networks<br>Ltd. | As per tender.                       |
| 465 | RailTel/Te<br>nder/OT/<br>CO/P/201<br>7-<br>18/VSS/4<br>32 | 213 | 8.9. Type-II<br>Switch                                   | 13 Should have AC power supply arrangement as given<br>below in chassis without any external adaptors with<br>internal redundant power supply:<br>AC power supply 100 to 240 V AC with 50 to 60 Hz. | We understand there are both types of inputs available at stations i.e. AC and DC. In order to ensure better SLAs, we recommend the consider both type of power sources to power the switches which will withstand supply issues in any types of source either AC or DC. We request to ammend the clause as "  Should have AC and DC power supply arrangement as given below in chassis without any external adaptors with internal redundant power supply:  AC power supply 100 to 240 V AC with 50 to 60 Hz. and DC 48V DC "Kindly confirm"  | Tejas<br>Networks<br>Ltd. | As per tender.                       |
| 466 | RailTel/Te<br>nder/OT/<br>CO/P/201<br>7-<br>18/VSS/4<br>32 | 213 | 8.9. Type-II<br>Switch                                   | 13 Should have AC power supply arrangement as given<br>below in chassis without any external adaptors with<br>internal redundant power supply:<br>AC power supply 100 to 240 V AC with 50 to 60 Hz. | In case AC and DC recommednation is not accepted, we request to kindly consider field replaceable supplies. In line to same we request to amend the clause as "Should have AC power supply arrangement as given below in chassis without any external adaptors with internal field replaceable redundant power supply:  AC power supply 100 to 240 V AC with 50 to 60 Hz.  Kindly Confirm.   | Tejas<br>Networks<br>Ltd. | As per tender.                       |

| 467 | RailTel/Te<br>nder/OT/<br>CO/P/201<br>7-<br>18/VSS/4<br>32 | 213 | 8.9. Type-II<br>Switch        | 28 Switch should have SAFETY CERTIFICATE of UL  | We would like to bring in your kind notice that UL is a specifc laboratory. The certifications for safety standards are EN 60950-1, IEC 60950-1. In line to same, we request you to amend the clause as "Switch should meet Safety Standards specified in EN 60950-1, IEC 60950-1". Kindly confirm.  | Tejas<br>Networks<br>Ltd. | As per tender. |
|-----|--|-----|-------------------------------|---|--|---------------------------|----------------|
| 468 | RailTel/Te<br>nder/OT/<br>CO/P/201<br>7-<br>18/VSS/4<br>32 | 214 | 8.10.<br>Switches<br>Type-III | 14 Should have AC power supply arrangement as given<br>below in chassis without any external adaptors with<br>internal redundant power supply:<br>AC power supply 100 to 240 V AC with 50 to 60 Hz. | We understand it is critical to have field repleable power supplies so that in case on failure they can be replaced without affecting the network services. Kindly consider to amend the clause as "Should have AC power supply arrangement as given below in chassis without any external adaptors with internal field replaceable redundant power supply:  AC power supply 100 to 240 V AC with 50 to 60 Hz.  Kindly Confirm   | Tejas<br>Networks<br>Ltd. | As per tender. |
| 469 | RailTel/Te<br>nder/OT/<br>CO/P/201<br>7-<br>18/VSS/4<br>32 | 215 | 8.10.<br>Switches<br>Type-III | 24 Bidder to propose switch having Operating<br>Temperature as per environ-mental requirement at<br>Indian Railway Stations.  | We understand it is critical to ensure SLAs are met as per the tender requirement. However the clause for temperature is open and doesn't ensure temperature related risks are mitigated. In order to ensure seamless network deployment and uniformity across offered products, we request to specify the temperature range of the product. Kindly confirm to amend the clause as "Bidder to propose switch having Operating Temperature as 0 C to 50 C per environ-mental                | Tejas<br>Networks<br>Ltd. | As per tender. |
| 470 | RailTel/Te<br>nder/OT/<br>CO/P/201<br>7-<br>18/VSS/4<br>32 | 215 | 8.10.<br>Switches<br>Type-III | 25 Bidder to propose switch having Storage<br>Temperature as per environ-mental requirement.  | We understand it is critical to ensure SLAs are met as per the tender requirement. However the clause for temperature is open and doesn't ensure temperature related risks are mitigated. In order to ensure seamless network deployment and uniformity across offered products, we request to specify the temperature range of the product. Kindly confirm to amend the clause as "Bidder to propose switch having Storage Temperature as 0 C to 75 C as per environ-mental requirement." | Tejas<br>Networks<br>Ltd. | As per tender. |
| 471 | RailTel/Te<br>nder/OT/<br>CO/P/201<br>7-<br>18/VSS/4<br>32 | 215 | 8.10.<br>Switches<br>Type-III | 9 Switch should have SAFETY CERTIFICATE of UL.  | We would like to bring in your kind notice that UL is a specifc laboratory. The certifications for safety standards are EN 60950-1, IEC 60950-1. In line to same, we request you to amend the clause as "Switch should meet Safety Standards specified in EN 60950-1, IEC 60950-1". Kindly confirm.  | Tejas<br>Networks<br>Ltd. | As per tender. |
| 472 | RailTel/Te<br>nder/OT/<br>CO/P/201<br>7-<br>18/VSS/4<br>32 | 215 | 8.11.<br>Switches<br>Type-IV  | 4 Should have AC/DC power supply arrangement as given below without any external adaptors with redundant power supply:  i) AC power supply 100 to 240 V AC with 50 to 60 Hz  ii) -48 V DC supply    | We understand it is critical to have field repleable power supplies so that in case on failure they can be replaced without affecting the network services. Kindly consider to amend the clause as "Should have AC/DC power supply arrangement as given below without any external adaptors with internal field replaceable redundant power supply:  i) AC power supply 100 to 240 V AC with 50 to 60 Hz ii) -48 V DC supply.  Kindly Confirm  | Tejas<br>Networks<br>Ltd. | As per tender. |

| 473 | RailTel/Te<br>nder/OT/<br>CO/P/201<br>7-<br>18/VSS/4<br>32 | 216 | 8.11.<br>Switches<br>Type-IV           | 10 Bidder to propose switch having Operating and Storage Temperature as per environmental requirement  1 Should have 24x SFP+ based ports with 240 Gbps of | We understand it is critical to ensure SLAs are met as per the tender requirement. However the clause for temperature is open and doesn't ensure temperature related risks are mitigated. In order to ensure seamless network deployment and uniformity across offered products, we request to specify the temperature range of the product. Kindly confirm to amend the clause as "Bidder to propose switch having Operating Temperature 0 C to 50 C and Storage Temperature as 0 C to 75 C to meet the environmental requirement."  We would like to bring in your kind notice that this is a   | Tejas<br>Networks<br>Ltd. | As per tender including corrigendum.   |
|-----|--|-----|--|--|---|---------------------------|--|
| 474 | RailTel/Te<br>nder/OT/<br>CO/P/201<br>7-<br>18/VSS/4<br>32 | 218 | 8.12. Core<br>Switch for<br>Datacenter | stacking bandwidth with dedicated stacking ports.  | product specific requirement. To cater to the requirement of data center, minimal capacity of 240Gbps of stacking shall be available. In data center switches, higher no. of uplink ports can be provided realising the need to stacking bandwidth and they are equivalent to dedicated stacking ports. Kindly confirm our understanding and Kindly confirm to amend the clause as "Should have minimum 24x SFP+ based ports offering 240 Gbps of stacking bandwidth in addition to the offered ports capacity.".   | Tejas<br>Networks<br>Ltd. | As per tender.                         |
| 475 | RailTel/Te<br>nder/OT/<br>CO/P/201<br>7-<br>18/VSS/4<br>32 | 219 | 8.12. Core<br>Switch for<br>Datacenter | 22 Bidder to propose switch having Operating and Storage Temperature as per environmental requirement at Indian Railway Stations.                          | We understand it is critical to ensure SLAs are met as per the tender requirement. However the clause for temperature is open and doesn't ensure temperature related risks are mitigated. In order to ensure seamless network deployment and uniformity across offered products, we request to specify the temperature range of the product. Kindly confirm to amend the clause as "Bidder to propose switch having Operating.  Temperature 0 C to 50 C and Storage Temperature as 0 C to 75 C to meet the environmental requirement at Indian Railway Stations."   | Tejas<br>Networks<br>Ltd. | As per tender (including corrigendum). |
| 476 | RailTel/Te<br>nder/OT/<br>CO/P/201<br>7-<br>18/VSS/4<br>32 | 219 | 8.12. Core<br>Switch for<br>Datacenter | 25 Switch shall be PCI/EAL2/NDPP/FIPS certified from common criteria organization.   | As the PMA policy is implemented on the tender, clause 5.4 of the PMA guidelines No. 8(78)/2010-IPHW dated 12th June,2013 mandates that the tender conditions should encourage the participation of domestic manufacturers and there should not be any restrictive conditions of prior experience and Foreign Product specifications for the domestic manufacturers. In view of the same,please confirm that self certification against the requirements of PCI/EAL2/NDPP/FIPS is acceptable for domestic manufacturers as this is otherwise a restrictive condition for the participation of domestic manufacturers. It is important to mention that even RDSO specs for switches does not ask for certifications and only asks for compliances against the mentioned standards. Please confirm. | Tejas<br>Networks<br>Ltd. | As per tender.                         |

| 477 | RailTel/Te<br>nder/OT/<br>CO/P/201<br>7-<br>18/VSS/4<br>32 | 220 | 8.13.1. SFP-<br>BX (10 KM)<br>Single Fiber:           | 9 Operating Temperature of the SFP Should be mini 0 to 65 °C (23 to 149 °F)   | We understand that these SFPs will be used for Type-I switches primarily and they are envisaged to be industrial grade with temperature withstanding capability of 65 C. In order to have such functionality it is deemed that industrial grade switches with temperature sensitivity of up to 65C is mandatorily required to be quoted for Type-I switches under 8.8 clause. Kindly confirm.   | Tejas<br>Networks<br>Ltd. | As per tender.                       |
|-----|--|-----|---|---|---|---------------------------|--------------------------------------|
| 478 | 4.A.14.1.<br>3   | 101 |   | The OEM for proposed IP cameras and VMS Software should have supplied for at least one project in a Mass Rapid Transport system e.g. Metro, Railways, Mono Rail, Airport etc. in India or abroad in last 3 financial years (i.e. current year and three previous financial years) from the date of opening of tender. The same should have been working satisfactorily for at least six (6) months. | Kindly amend the clause to allow more competition "The OEM for proposed IP cameras and VMS Software should have supplied for at least one project in a Mass Rapid Transport system e.g. Metro, Railways, Mono Rail, Airport, Outdoor surveillance, City surveillance, Community surveillance etc. in India or abroad in last 3 financial years (i.e. current year and three previous financial years) from the date of opening of tender. The same should have been working satisfactorily for at least six (6) months. | C P Plus                  | As per tender including corrigendum. |
| 479 | 4.A.14.1.<br>3   | 102 | 5   | The OEM should not have been blacklisted currently by Central Govt./State Govt./CPSU in India.  | The OEM should not have been blacklisted currently by any govt department Globally  | C P Plus                  | As per tender.                       |
| 480 | 4.A.48   | 113 |   | The foreign manufacturer/OEM (Original Equipment Manufacturer)/OSSP (Original Software Service Provider), of the successful bidder, in case of each offered item, is required to set up the manufacturing / development facility in India within 2 years  | The foreign manufacturer/OEM (Original Equipment Manufacturer)/OSSP (Original Software Service Provider), of the successful bidder, in case of each offered item, is required to set up the manufacturing / development facility in India within 3-6 months To ensure Foreign OEM's seriousness to maintain the strict timelines of this project  | C P Plus                  | As per tender.                       |
| 481 | 8.3.1. 2<br>Server<br>and<br>Storage<br>System<br>sizing   | 209 | 8.3.1. 2<br>Server and<br>Storage<br>System<br>sizing | Server and Storage System sizing  | It is not clear from tender how many analytics<br>are required in total everystation. Is it required<br>in all cameras?   | C P Plus                  | Clause is self explainatory.         |

| 482 | 8.3.1.1<br>General<br>Paramet<br>ers                           | 208 | General<br>Parameter               | 8.3.1.1.1 For implementation of the proposed system, it is assumed that there would be 552 Clusters constituting RPF/GRP Thana/Post receiving video feeds from group of stations based on jurisdiction of that respective RPF/GRP Thana/Post through MPLS/ IP network. Therefore, bidder is required to propose a cluster based solution constituting Servers, Storage, Switches and Video applications etc. at RPF/GRP Thana/Post locations on the basis of following design parameters.           | Corresponding RPF/GRP Thana/Post for a group of C, D and E stations is not clear. This is required for server and storage size calculations.  We require how many stations(C,D,E) are grouped under which RPF?  | C P Plus | Tender document including<br>corrigendum is clear.       |
|-----|--|-----|------------------------------------|---|---|----------|--|
| 483 | 8.18. Video Recordin g & Processi ng Unit for non RPF Stations | 231 | I HUH NEE                          | 2. Video Recording & Processing Unit shall be installed at each platform/station and shall have Software for Video Management, Video Recording and Analytics as defined in Tender Clause 8.3. In case of MPLS/IP network connectivity failure, video stream and alarms would be stored locally at the Video Recording & Pro-cessing Unit for that duration and would transfer these data automatically to RPF/GRP Thana/Post when the network recovers without any impact on the system operations. | Do we have to do analytics of C,D,E stations in processing unit athe station or the related RPF   | C P Plus | Please refer to tender document<br>including corrigendum |
| 484 | 8.3.2.3<br>Recordin<br>g<br>Paramet<br>ers                     | 211 | 8.3.2.3<br>Recording<br>Parameters | 8.3.2.3.1.2 In case of MPLS/IP network connectivity failure, video stream and alarms would be stored locally at the Video Recording & Processing Unit for that duration and would transfer these data automatically to RPF/GRP Thana/Post when the network recovers without any impact on the system operations.  | According to tender, local recording of C,D,E stations will be done at processing unit at High Quality(1080p) and corresponding RPF server at low Quality(720p). But in case of nework disconnect-connect again between RPF and stations, recording data will be copied from processing unit to RPF server. So how should we calculate recording size at RPF. Based on 1080p or 720p? | C P Plus | Please refer to tender document<br>including corrigendum |
| 485 | PACKAG<br>E IV:<br>SOUTHE<br>RN                                | 35  | PACKAGE<br>IV:<br>SOUTHERN         | iii. For Category F stations  | Kindly clarify the F stations   | C P Plus | Please refer to tender document including corrigendum    |

| 486 | 8.3.1.1<br>General<br>Paramet<br>ers   | 209 | 0 2 1 1   | 8.3.1.1.5 Bidder to also propose an external storage solution at RailTel Datacenter for keeping flagged/marked video data by RPF/GRP personnel for longer reten-tion, FRS & VA alerts across all stations within the jurisdiction of RailTel Region for 30 days, Audit trail logs, application data etc. as per solution re-quirement and sizing as per SOR.  | How much flagged/marked data will be<br>considered for storage?  | C P Plus                | Bidder to quote Storage for Datacenter as defined in SOR. |
|-----|--|-----|---|---|--|-------------------------|---|
| 487 | 8.3.1. 2<br>Server<br>and<br>Storage<br>System<br>sizing                               | 209 | 8.3.1. 2<br>Server and<br>Storage<br>System<br>sizing | Server and Storage System sizing  | It is not clear from tender how many analytics<br>are required in total at every station. Is it<br>required in all cameras?  | i2V Systems<br>Pvt. Ltd | Please refer to tender document including corrigendum     |
| 488 | 8.3.1.1<br>General<br>Paramet<br>ers   | 208 | General<br>Parameter                                  | 8.3.1.1.1 For implementation of the proposed system, it is assumed that there would be 552 Clusters constituting RPF/GRP Thana/Post receiving video feeds from group of stations based on jurisdiction of that respective RPF/GRP Thana/Post through MPLS/ IP network. Therefore, bidder is required to propose a cluster based solution constituting Servers, Storage, Switches and Video applications etc. at RPF/GRP Thana/Post locations on the basis of following design parameters. | Corresponding RPF/GRP Thana/Post for a group of C, D and E stations is not clear. This is required for server and storage size calculations. We require how many stations(C,D,E) are grouped under which RPF? Even if we consider maximum 200 cameras in single server at every RPF, we do not know how many are coming from C,D,E stations? | i2V Systems<br>Pvt. Ltd | Tentative list of stations is uploaded with corrigendum.  |
| 489 | 8.18.<br>Video<br>Recordin<br>g &<br>Processi<br>ng Unit<br>for non<br>RPF<br>Stations | 231 | HOH KPF   | 2. Video Recording & Processing Unit shall be installed at each platform/station and shall have Software for Video Management, Video  | Do we have to do analytics of C,D,E stations in processing unit at the station or the related RPF  | i2V Systems<br>Pvt. Ltd | Please refer to tender document<br>including corrigendum  |

| 490 | 8.3.2.3<br>Recordin<br>g<br>Paramet<br>ers | 211 | 8.3.2.3<br>Recording<br>Parameters | 8.3.2.3.1.2 In case of MPLS/IP network connectivity failure, video stream and alarms would be stored locally at the Video Recording & Processing Unit for that du-ration and would transfer these data automatically to RPF/GRP Thana/Post when the network rec | According to tender, local recording of C,D,E stations will be done at processing unit at High Quality(1080p) and corresponding RPF server at low Quality(720p). But in case of nework disconnect-connect again between RPF and stations, recording data will be copied from processing unit to RPF server. So how should we calculate recording size at RPF. Based on 1080p or 720p? | i2V Systems<br>Pvt. Ltd                         | Please refer to tender document<br>including corrigendum  |
|-----|--|-----|------------------------------------|---|---|---|---|
| 491 | PACKAG<br>E IV:<br>SOUTHE<br>RN            | 35  | PACKAGE<br>IV:<br>SOUTHERN         | iii. For Category F stations  | Kindly clarify the F stations   | i2V Systems<br>Pvt. Ltd                         | Please refer to tender document including corrigendum     |
| 492 | 8.3.1.1<br>General<br>Paramet<br>ers       | 209 | 8.3.1.1<br>General<br>Parameters   | 8.3.1.1.5 Bidder to also propose an external storage solution at RailTel Datacenter for keeping flagged/marked video data by RPF/GRP personnel for longer reten-tion, FRS & VA alerts across all stations within the jurisdiction of RailTel Region for 30 days | How much flagged/marked data should be considered for storage?  | i2V Systems<br>Pvt. Ltd                         | Bidder to quote Storage for Datacenter as defined in SOR. |
| 493 |  |     |                                    | Front door:   | Being situated at the height on the platform that too   | Marushika<br>Technology<br>Advisors<br>Pvt. Ltd | Clause as per tender/corrigendum prevails.                |
| 494 | CHAPTER-<br>8- Clause<br>8.21              | 233 | 4                                  | Rack should have front door tough and transparent   | exposed to open weather condition which will cause<br>the door to be jammed at a sooner stage itself. So<br>we request you to have Mini-comfort handle with   | Marushika<br>Technology<br>Advisors<br>Pvt. Ltd | Clause as per tender/corrigendum prevails.                |
| 495 |  |     |                                    | glass fitted on MS/CRCA sheet on sides with Lock  | security lock in front door   | Marushika<br>Technology<br>Advisors<br>Pvt. Ltd | Clause as per tender/corrigendum prevails.                |
| 496 | CHAPTER-<br>8- Clause                      | 233 | 6                                  | Fan module  | should we consider fan and rack from same OEM for<br>better construction and SLA or it is allowed to use  | Marushika<br>Technology<br>Advisors<br>Pvt. Ltd | Clause as per tender/corrigendum prevails.                |
| 497 | 8.21                                       | 255 | 0                                  | Compact fan module of 90 CFM working on 230V AC 2 nos. with each rack properly fitted at top of   | different OEM for fan and rack.   | Marushika<br>Technology<br>Advisors<br>Pvt. Ltd | Clause as per tender/corrigendum prevails.                |
| 498 | CHAPTER-<br>8- Clause                      | 233 | 10                                 | Material used   | Being situated at the height on the platform that too exposed to open weather condition which will cause the insects to enter in the equipments. As there are no details of prevention from insect, it is recommended to use PU Foam seal on door with single sheet construction.   | Marushika<br>Technology<br>Advisors<br>Pvt. Ltd | Clause as per tender/corrigendum prevails.                |
| 499 | 8.21                                       |     |                                    | CRCA/MS with Thickness varying from 1.6 Mm to 2.0 mm  | you are requested to amend the clause as under:   | Marushika<br>Technology<br>Advisors<br>Pvt. Ltd | Clause as per tender/corrigendum prevails.                |

| 500 |                               |     |    |  | CRCA/MS with Thickness varying from 1.6 Mm to 2.0 mm and shall have PU Foam seal on door with single sheet construction.   | Marushika<br>Technology<br>Advisors<br>Pvt. Ltd | Clause as per tender/corrigendum prevails. |
|-----|-------------------------------|-----|----|--|--|---|--|
| 501 | CHAPTER-<br>8- Clause 233     | 233 | 10 | Material used  |  | Marushika<br>Technology<br>Advisors<br>Pvt. Ltd | Clause as per tender/corrigendum prevails. |
| 502 | 8.21                          |     | 10 | CRCA/MS with Thickness varying from 1.6 Mm to 2.0 mm   | size across different requirement it should be 1.5 mm.   | Marushika<br>Technology<br>Advisors<br>Pvt. Ltd | Clause as per tender/corrigendum prevails. |
| 503 | CHAPTER-<br>8- Clause<br>8.21 | 233 | 12 | Painting   | Being situated at the height on the platform that too exposed to open weather condition & as there is going to be harsh environment at sites so we request to use Nano ceramic Coated, electrophoretic (EC) dip coat primed to 20 microns and then powder coated to RAL 7035 textured pure polyester (PP) to average 80 to 120 microns you are requested to amend the clause as under: | Marushika<br>Technology<br>Advisors<br>Pvt. Ltd | Clause as per tender/corrigendum prevails. |
| 504 |                               |     |    | The good quality powder coating light grey in colour shall be used for painting of the rack. | The good quality powder coating light grey in colour shall be used for painting of the rack with Nano ceramic Coated, electro-phoretic (EC) dip coat primed to 20 microns and then powder coated to RAL 7035 textured pure polyester (PP) to average 80 to 120 microns.  | Marushika<br>Technology<br>Advisors<br>Pvt. Ltd | Clause as per tender/corrigendum prevails. |
| 505 |                               |     |    | Certification  | The IT Enclosure / Racks are also of the equal importance as of the Active Components hosted inside it, because if the enclosure itself gets damaged or unable to effectively protect the equipment hosted inside, the whole performance of the project will be compromised.   | Marushika<br>Technology<br>Advisors<br>Pvt. Ltd | Clause as per tender/corrigendum prevails. |
| 506 | CHAPTER-<br>8- Clause<br>8.21 | 233 | 14 | OEM should have a valid ISO 9001 certification on the date of opening of bid                 | As per specs shared by RAILTEL along with RDSO Specs there is no details for Rack certifications.  | Marushika<br>Technology<br>Advisors<br>Pvt. Ltd | Clause as per tender/corrigendum prevails. |
| 507 |                               |     |    |  | Therefore you are requested to please ask all the relevant & requisite important certificates and amend the clause the clause as under:  | Marushika<br>Technology<br>Advisors<br>Pvt. Ltd | Clause as per tender/corrigendum prevails. |
| 508 |                               |     |    |  | OEM should have a valid ISO 9001, 14001, 18001, comply with EIA 310 ,DIN 41494 , IEC 297 standards and UL 2416 certification on the date of opening of bid.  | Marushika<br>Technology<br>Advisors<br>Pvt. Ltd | Clause as per tender/corrigendum prevails. |
| 509 | CHAPTER-                      | 22/ | 3  | Front Door   | Being situated at the height on the platform that too exposed to open weather condition which will cause the door to be immed at a cooper stage itself. So   | Marushika<br>Technology<br>Advisors<br>Pvt. Ltd | Clause as per tender/corrigendum prevails. |

| 510 | 8.22                          | ۷۷4 | ی  | Rack should have front door tough and transparent glass fitted on MS/CRCA sheet on sides with Lock | we request you to have Ergoform S Hanle-comfort handle with security lock in front door.  | Marushika<br>Technology<br>Advisors<br>Pvt. Ltd | Clause as per tender/corrigendum prevails. |
|-----|-------------------------------|-----|----|--|---|---|--|
| 511 | CHAPTER-<br>8- Clause<br>8.22 | 234 | 6  | Fan Modules  | should we consider fan and rack from same OEM for<br>better construction and SLA or it is allowed to use<br>different OEM for fan and rack.   | Marushika<br>Technology<br>Advisors<br>Pvt. Ltd | Clause as per tender/corrigendum prevails. |
| 512 | CHAPTER-<br>8- Clause         | 234 | 10 | Material used  | Being situated at the height on the platform that too exposed to open weather condition which will cause the insects to enter in the equipments. As there are no details of prevention from insect, it is recommended to use PU Foam seal on door with single sheet construction.   | Marushika<br>Technology<br>Advisors<br>Pvt. Ltd | Clause as per tender/corrigendum prevails. |
| 513 | 8.22                          |     |    | CRCA/MS with Thickness varying from 1.6 Mm to 2.0 mm   | you are requested to amend the clause as under:   | Marushika<br>Technology<br>Advisors<br>Pvt. Ltd | Clause as per tender/corrigendum prevails. |
| 514 |                               |     |    |  | CRCA/MS with Thickness varying from 1.6 Mm to 2.0 mm and shall have PU Foam seal on door with single sheet construction.  | Marushika<br>Technology<br>Advisors<br>Pvt. Ltd | Clause as per tender/corrigendum prevails. |
| 515 | CHAPTER-<br>8- Clause         | 234 | 10 | Material used  | It's not CRC/MS, instead it is CRCA/MS as mentioned in point no' 5 above in RFP which are contradictory and it's not 1.6 mm but being the std.  | Marushika<br>Technology<br>Advisors<br>Pvt. Ltd | Clause as per tender/corrigendum prevails. |
| 516 | 8.22                          | 254 | 10 | CRCA/MS with Thickness varying from 1.6 Mm to 2.0 mm   | size across different requirement it should be 1.5 mm.  | Marushika<br>Technology<br>Advisors<br>Pvt. Ltd | Clause as per tender/corrigendum prevails. |
| 517 | CHAPTER:                      |     |    | Painting   | Being situated at the height on the platform that too exposed to open weather condition & as there is going to be harsh environment at sites so we request to use Nano ceramic Coated, electrophoretic (EC) dip coat primed to 20 microns and then powder coated to RAL 7035 textured pure polyester (PP) to average 80 to 120 microns. | Marushika<br>Technology<br>Advisors<br>Pvt. Ltd | Clause as per tender/corrigendum prevails. |
| 518 | 8- Clause<br>8.22             | 234 | 13 | The good quality powder coating light grey in colour shall be used for painting of the rack.       | you are requested to amend the clause as under:   | Marushika<br>Technology<br>Advisors<br>Pvt. Ltd | Clause as per tender/corrigendum prevails. |
| 519 |                               |     |    |  | The good quality powder coating light grey in colour shall be used for painting of the rack with Nano ceramic Coated, electro-phoretic (EC) dip coat primed to 20 microns and then powder coated to RAL 7035 textured pure polyester (PP) to average 80 to 120 microns.   | Marushika<br>Technology<br>Advisors<br>Pvt. Ltd | Clause as per tender/corrigendum prevails. |

|     |                               |     |  | Certification  |  |   |  |
|-----|-------------------------------|-----|--|--|--|---|--|
| 520 |                               |     |  | Certification  | The IT Enclosure / Racks are also of the equal importance as of the Active Components hosted inside it, because if the enclosure itself gets damaged or unable to effectively protect the equipment hosted inside, the whole performance of the project will be compromised.   | Marushika<br>Technology<br>Advisors<br>Pvt. Ltd | Clause as per tender/corrigendum prevails. |
| 521 | CHAPTER-<br>8- Clause<br>8.22 | 234 | 16   | OEM should have a valid ISO 9001 certification on the date of opening of bid | As per specs shared by RAILTEL along with RDSO Specs there is no details for Rack certifications.  | Marushika<br>Technology<br>Advisors<br>Pvt. Ltd | Clause as per tender/corrigendum prevails. |
| 522 |                               |     |  |  | Therefore you are requested to please ask all the relevant & requisite important certificates and amend the clause the clause as under:  | Marushika<br>Technology<br>Advisors<br>Pvt. Ltd | Clause as per tender/corrigendum prevails. |
| 523 |                               |     |  |  | OEM should have a valid ISO 9001, 14001, 18001, comply with EIA 310 ,DIN 41494 , IEC 297 standards and UL 2416 certification on the date of opening of bid.  | Marushika<br>Technology<br>Advisors<br>Pvt. Ltd | Clause as per tender/corrigendum prevails. |
| 524 |                               |     |  | Load Bearing Capacity  | No Details have been mentioned in the specification for the very important parameter of load bearing capacity.   | Marushika<br>Technology<br>Advisors<br>Pvt. Ltd | Clause as per tender/corrigendum prevails. |
| 525 | CHAPTER-<br>8- Clause<br>8.22 | 234 | 16   |  | Therefore, you are requested to please include followings:   | Marushika<br>Technology<br>Advisors<br>Pvt. Ltd | Clause as per tender/corrigendum prevails. |
| 526 |                               |     |  |  | Load Bearing Capacity : 1400 KG as per industry standard   | Marushika<br>Technology<br>Advisors<br>Pvt. Ltd | Clause as per tender/corrigendum prevails. |
| 527 |                               |     | 4.A.14.1<br>Eligibility<br>Criteria<br>Requireme<br>nts for<br>Bidders |  | There is a very stringent Bidder qualification criteria has been specified. Firstly the different criteria have been specified for financial capability 235 Cr to 365 Cr for respective packages. Then experience in video surveillance has also been mentioned 27 Cr to 78 Cr for respective packages.  Then finally the main criteria has been specified for bidders bidding in more than one package. As per this the one particular experience of its respective category will be taken into consideration only for one package value, for remaining packages and their respective values separate experience certificate have to be arranged.  This will be very stringent to have criteria over one criteria and superimposing the same from one packet to other packet.  This will result into the restriction of the competition and will result into very limited participation for very few qualified bidders. This will bar the Railtel from having a competitive most techno-commercial offers from other qualified vendors.  Therefore you are requested to please re-consider the same and incorporate the suitable criteria to encourage the competition. | Marushika<br>Technology<br>Advisors<br>Pvt. Ltd | Clause as per tender/corrigendum prevails. |

|     |        | ı   |     | Figure II asketical effected for a OFNA and the st  | In the Marie Overdonat Development Co.  |   |   |
|-----|--------|-----|-----|---|---|---|---|
| 528 | 8.14.1 | 221 | 1.1 | Firewall solution offered from OEM must be there in the latest Magic Quadrant for Enterprise Network Firewall published by Gartner                | In the Magic Quadrant Report Network Firewalls there are four parts: Leaders, Challengers, Visionaries, Niche Players. While looking at the prestige of this project the target firewall shall belong to Leaders section of the Magic Quadrant. Further to ensure the success of the project and to evaluate the asked firewall on a proven platform, In the Firewall solution offered from OEM must be there in the leader's Quadrant of the Magic Quadrant for Enterprise Network Firewall published by Gartner for consequetive 5 years (2013, 2014, 2015, 2016 & 2017).  So clause shall be amended as under: Firewall solution offered from OEM must be there in the Leaders section of the Magic Quadrant for past 5 years (2013 to 2017) for Enterprise Network Firewall published by Gartner. | Marushika<br>Technology<br>Advisors<br>Pvt. Ltd | Clause as per tender including<br>corrigendum prevails. |
| 529 | 8.14.1 | 221 | 3.2 | NG Firewall should support at least 4,00,000 concurrent sessions  | Looking at the voluminous operational requirments of the Project with no. of stations to the tune 6000(+), NG Firewall should support at least 2,000,000 concurrent sessions.  So clause shall be amended as under: NG Firewall should support at least 2,000,000 concurrent sessions.  | Marushika<br>Technology<br>Advisors<br>Pvt. Ltd | Clause as per tender including corrigendum prevails.    |
| 530 | 8.14.1 | 221 | 3.3 | NG Firewall should support at least 15,000 connections per second   | Looking at the voluminous operational requirments of the Project with no. of stations to the tune 6000(+), NG Firewall should support at least 100,000 connections per second.  So clause shall be amended as under:  NG Firewall should support at least 100,000 connections per second.   | Marushika<br>Technology<br>Advisors<br>Pvt. Ltd | Clause as per tender including corrigendum prevails.    |
| 531 | 8.14.1 | 222 | 4.2 | Firewall should support 802.3ad ether channel functionality for the failover control & date interfaces for provide additional level of redundancy | Ether Channel is a OEM specific word and the Ehernet standard is IEEE 802.3ad/LACP. Pls remove the word 'ether channel'.  So clause shall be amended as under:  Firewall should support 802.3ad functionality for the failover control & date interfaces for p  | Marushika<br>Technology<br>Advisors<br>Pvt. Ltd | Clause as per tender including corrigendum prevails.    |

| 532 | 8.14.1 | 222 | 4.4  | Firewall should support 802.3ad Ether channel functionality to increase the bandwidth for a segment.   | Ether Channel is a OEM specific word and the Ehernet standard is IEEE 802.3ad/LACP. Pls remove the word 'ether channel'.  So clause shall be amended as under:  Firewall should support 802.3ad functionality to increase the bandwidth for a segment.  | Marushika<br>Technology<br>Advisors<br>Pvt. Ltd | Clause as per tender including corrigendum prevails.    |
|-----|--------|-----|------|--|---|---|---|
| 533 | 8.14.1 | 223 | 5.22 | Should support more than 3000 application layer and risk-based controls that can invoke tailored intrusion prevention system (IPS) threat detection policies to optimize security effectiveness.   | In this era of application, managing and suporting 3000 applications is very less, instead Railtel should ask for supporing more than 7K applications through the proposed security gateway.  So clause shall be amended as under:  Should support more than 7000 application layer and risk-based controls that can invoke tailored intrusion prevention system (IPS) threat detection policies to optimize security effectiveness.  | Marushika<br>Technology<br>Advisors<br>Pvt. Ltd | Clause as per tender including<br>corrigendum prevails. |
| 534 | 8.14.1 | 223 | 5.23 | Should support the capability (by purchasing license) of providing networkbased detection of malware by checking the disposition of unknown files in the cloud using the SHA-256 file-hash as they transit the network and capability to do dynamic analysis on premise (if required in future) on purpose builtappliance. | The Anti-APT / Advanced Sandboxing feature should be there from day 1 in the NGFW soluion, which would ensure prevention from unknown threats in real time.  So clause shall be amended as under:  Should have the capability (by purchasing license) of providing networkbased detection of malware by checking the disposition of unknown files in the cloud using the SHA-256 file-hash as they transit the network and capability to do dynamic analysis and must prevent in real time unkown malware patient-0 in email and web. | Marushika<br>Technology<br>Advisors<br>Pvt. Ltd | Clause as per tender including<br>corrigendum prevails. |

| 535 | 8.14.1 | 223 | 9.1 | The management platform must be accessible via a web-based interface and ideally with no need for additional client software       | Client based software management & control will provide additional level of security. Therefore asking only for web-based interface will not just deprive the system from added advantages of client based software and it will introduce restrictiveness for solutions being offered.  So clause shall be amended as under: The management platform must be accessible via a web-based interface or client software.   | Marushika<br>Technology<br>Advisors<br>Pvt. Ltd | Clause as per tender including<br>corrigendum prevails. |
|-----|--------|-----|-----|--|---|---|---|
| 536 | 8.14.2 | 224 | 1.1 | Firewall solution offered from OEM must be there in the latest Magic Quadrant for Enterprise Network Firewall published by Gartner | In the Magic Quadrant Report Network Firewalls there are four parts: Leaders, Challengers, Visionaries, Niche Players. While looking at the prestige of this project the target firewall shall belong to Leaders section of the Magic Quadrant. Further to ensure the success of the project and to evaluate the asked firewall on a proven platform, In the Firewall solution offered from OEM must be there in the leader's Quadrant of the Magic Quadrant for Enterprise Network Firewall published by Gartner for consequetive 5 years (2013, 2014, 2015, 2016 & 2017).  So clause shall be amended as under: Firewall solution offered from OEM must be there in the Leaders section of the Magic Quadrant for past 5 years (2013 to 2017) for Enterprise Network Firewall published by Gartner. | Marushika<br>Technology<br>Advisors<br>Pvt. Ltd | Clause as per tender/corrigendum<br>prevails.           |
| 537 | 8.14.2 | 224 | 3.1 | Should support at least 10 Gbps of NGFW Real<br>world performance (includes FW, Application<br>Visibility & IPS) from day one.     | Since the NGFW will be connected to the Core DC switch on multiple 10 Gig interfaces and will be the central monitoring and mangaement control station, so its imperative to implement a firewall of higher capacity to take care of the load of traffic which will be running through the firewall. So request Railtel to increase NGFW performance as stated.  So clause shall be amended as under: Should support at least 20 Gbps of NGFW Real world performance (includes FW, Application Visibility & IPS) from day one.  | Marushika<br>Technology<br>Advisors<br>Pvt. Ltd | Clause as per tender/corrigendum prevails.              |

| 538 | 8.14.2 | 224 | 3.2 | NG Firewall should support at least 4,00,000 concurrent sessions   | Since the NGFW will be connected to the Core DC switch on multiple 10 Gig interfaces and will be the central monitoring and mangaement control station, and there will be multiple sessions opened in a single location. The current numbers on concurrent sessions and connections are very less to handle this kind of load. So, request Railtel to increase the concurrent sessions and connections per second numbers for better performanceSo clause shall be amended as under:NG Firewall should support at least 8,000,000 concurrent sessions        | Marushika<br>Technology<br>Advisors<br>Pvt. Ltd | Clause as per tender/corrigendum prevails.              |
|-----|--------|-----|-----|--|--|---|---|
| 539 | 8.14.2 | 224 | 3.3 | NG Firewall should support at least 50,000 connections per second  | Since the NGFW will be connected to the Core DC switch on multiple 10 Gig interfaces and will be the central monitoring and mangaement control station, and there will be multiple sessions opened in a single location. The current numbers on concurrent sessions and connections are very less to handle this kind of load. So, request Railtel to increase the concurrent sessions and connections per second numbers for better performance.  So clause shall be amended as under:  NG Firewall should support at least 200,000 connections per second. | Marushika<br>Technology<br>Advisors<br>Pvt. Ltd | Clause as per tender/corrigendum prevails.              |
| 540 | 8.14.2 | 224 | 4.2 | Firewall should support 802.3ad ether channel<br>functionality for the failover control & date<br>interfaces for provide additional level of<br>redundancy | Ether Channel is a OEM specific word and the Ehernet standard is IEEE 802.3ad/LACP. Pls remove the word 'ether channel'.  So clause shall be amended as under:  Firewall should support 802.3ad functionality for the failover control & date interfaces for provide additional level of redundancy.   | Marushika<br>Technology<br>Advisors<br>Pvt. Ltd | Clause as per tender including<br>corrigendum prevails. |
| 541 | 8.14.2 | 224 | 4.4 | Firewall should support 802.3ad Ether channel functionality to increase the bandwidth for a segment.   | Ether Channel is a OEM specific word and the Ehernet standard is IEEE 802.3ad/LACP. Pls remove the word 'ether channel'.  So clause shall be amended as under:  Firewall should support 802.3ad functionality to increase the bandwidth for a segment.   | Marushika<br>Technology<br>Advisors<br>Pvt. Ltd | Clause as per tender including<br>corrigendum prevails. |

| 542 | 8.14.2 | 225 | 5.22 | Should support more than 3000 application layer and risk-based controls that can invoke tailored intrusion prevention system (IPS) threat detection policies to optimize security effectiveness.   | In this era of application, managing and suporting 3000 applications is very less, instead Railtel should ask for supporing more than 7K applications through the proposed security gateway.  So clause shall be amended as under:  Should support more than 7000 application layer and risk-based controls that can invoke tailored intrusion prevention system (IPS) threat detection policies to optimize security effectiveness.  | Marushika<br>Technology<br>Advisors<br>Pvt. Ltd | Clause as per tender/corrigendum prevails.              |
|-----|--------|-----|------|--|---|---|---|
| 543 | 8.14.2 | 225 | 5.23 | Should support the capability (by purchasing license) of providing networkbased detection of malware by checking the disposition of unknown files in the cloud using the SHA-256 file-hash as they transit the network and capability to do dynamic analysis on premise (if required in future) on purpose builtappliance. | The Anti-APT / Advanced Sandboxing feature should be there from day 1 in the NGFW soluion, which would ensure prevention from unknown threats in real time.  So clause shall be amended as under:  Should have the capability (by purchasing license) of providing networkbased detection of malware by checking the disposition of unknown files in the cloud using the SHA-256 file-hash as they transit the network and capability to do dynamic analysis and must prevent in real time unkown malware patient-0 in email and web.   | Marushika<br>Technology<br>Advisors<br>Pvt. Ltd | Clause as per tender including<br>corrigendum prevails. |
| 544 | 8.14.2 | 226 | 9.1  | The management platform must be accessible via a web-based interface and ideally with no need for additional client software   | In the Magic Quadrant Report Network Firewalls there are four parts: Leaders, Challengers, Visionaries, Niche Players. While looking at the prestige of this project the target firewall shall belong to Leaders section of the Magic Quadrant. Further to ensure the success of the project and to evaluate the asked firewall on a proven platform, In the Firewall solution offered from OEM must be there in the leader's Quadrant of the Magic Quadrant for Enterprise Network Firewall published by Gartner for consequetive 5 years (2013, 2014, 2015, 2016 & 2017)So clause shall be amended as under:Firewall solution offered from OEM must be there in the Leaders section of the Magic Quadrant for past 5 yeasr (2013 to 2017) for Enterprise Network Firewall published by Gartner. | Marushika<br>Technology<br>Advisors<br>Pvt. Ltd | Clause as per tender/corrigendum<br>prevails.           |

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|-----|---|---|---|--|--|---|-------------|
| 545 |   |   | 1 | Additional Clause to be added in NGFW Firewall | The following new clause gives a real time sanitized version of the file, while at the back end the file is checked for any threat intent. This is the real time threat prevention which customer should look into their network. Request Railtel to include this point. You are requested to add the following new clause: The NGFW appliance should be able to eliminate threats and remove exploitable content, including active content and embedded objects and should be able to reconstruct files with known safe elements. The solution should reconstruct downloaded files, delivering sanitized risk-free files to users in real-time. | Marushika<br>Technology<br>Advisors<br>Pvt. Ltd | Not agreed. |
| 546 |   |   | 2 | Additional Clause to be added in NGFW Firewall | N+1 clustering is important to provide additional scalability for security gateways along with load balancing across multiple security gateways.  Request Railtel to include this point.  You are requested to add the following new clause:  The NGFW appliance should support N+1 clustering, supporting high-availability/clustering for more than 2 devices.   | Marushika<br>Technology<br>Advisors<br>Pvt. Ltd | Not agreed. |
| 547 |   |   | 3 | Additional Clause to be added in NGFW Firewall | Feature of holding multiple versions of OS is an important functionality wrt to configuration of security gateways. Request Railtel to include this point.  You are requested to add the following new clause:  The NGFW appliance shall have a feature of holding multiple versions of OS to support resilience and easy rollbacks during the version upgrades.   | Marushika<br>Technology<br>Advisors<br>Pvt. Ltd | Not agreed. |

| 548 |     | 4         | Additional Clause to be added in NGFW Firewall   | In a single pane of glass, Railtel can view their security status on regulatory standards and security best practices. It can also fine tune, monitor and optimize security best practices. Request Railtel to include this point.  You are requested to add the following new clause: The NGFW appliance must have an option to Provide actionable recommendations to improve regulatory compliance (PCI-DSS,HiPPA,SOX etc) in the same hardware.   | Marushika<br>Technology<br>Advisors<br>Pvt. Ltd | Not agreed.  |
|-----|-----|-----------|--|--|---|--|
| 549 |     | 5         | Additional Clause to be added in NGFW Firewall   | Railtel will have a single pane of glass management for all security gateways & APTs thereby increasing simplicity and reducing complex management system. Request Railtel to include this point.  You are requested to add the following new clause:  Management should be a separate dedicated Appliance/Hardware for security management and monitoring with tired architecture for security movement and security gateway. The management server should be able to manage and monitor NGFWs, Network APT and Endpoint APT from a single console.   | Marushika<br>Technology<br>Advisors<br>Pvt. Ltd | Not agreed.  |
| 550 | 208 | 8.3.1.1.1 | For implementation of the proposed system, it is assumed that there would be 552 Clusters constituting RPF/GRP Thana/Post receiving video feeds from group of stations based on jurisdiction of that respective RPF/GRP Thana/Post through MPLS/ IP network. | i) Please provide the list of 552 cluster locations along with other details i.e. Station name, Railway, Division, category of station etc Also provide the information about how many stations of which category will be connected each of these 552 cluster locations. This information is very important as we have to estimate the server, storage, Video processing unit quantities accordingly. ii) As per our understanding there wont be any video recording and processor unit on these 552 locations, and videos of these station will record only on local RFP/GRP thana servers-storage. please confirm. | Marushika<br>Technology<br>Advisors<br>Pvt. Ltd | Tentative list of stations is uploaded with corrigendum. |

| 551 | Section I | 209 | 8.3.1.1.5 | Bidder to also propose an external storage solution at RailTel Datacenter for keeping flagged/marked video data by RPF/GRP personnel for longer retention, FRS & VA alerts across all stations within the jurisdiction of RailTel Region for 30 days, Audit trail logs, application data etc. as per solution requirement and sizing as per SOR.                    | i) Datacenter need to keep only the metadata of flagged/marked video, FRS & VA alerts across all the stations or the actual videos associated with it as well? Please note moving videos for all such events to central datacenter will be huge process. Also, it will be a big task to decide which video need to be deleted and who will decide to delete it finally, else central storage will be full very soon. ii)What is mean by RailTel region?                                  | Marushika<br>Technology<br>Advisors<br>Pvt. Ltd | 1. Clause is self explainatory. 2. RailTel has invited tender in four packages i.e. Northern Region, Western Region, Eastern Region and Southern Region. |
|-----|-----------|-----|-----------|---|--|---|--|
| 552 | Section I | 11  | 4         | Supply, Installation, Testing and commissioning of software (per camera basis) for Video management, Video recording, Video Analytic and Facial Recognition system for the server hardware quoted in Item no. A.2(a) as defined in clause 8.3 of chapter 8. Detailed Bill of Material (BoM) shall be prepared and submitted along with the Bid as per SOR Note-VII. | i) Video management, Video analytics and Facial recognition are three different software and have different quantity requirements i.e. Not every camera have VA and/FR. So we suggest to split this line item in three sub parts. Ii) Discription says the license has to be per camera basis, however quantity mentioned is of number of clusters? We suggest to consider it on per camera basis as the breakup of licenses to various clusters can be done even before implementation. | Marushika<br>Technology<br>Advisors<br>Pvt. Ltd | Clause as per tender/corrigendum prevails.   |
| 553 |           | 41  | XIX       | Central Command control center has been provisioned in Northern Region package. Therefore, all successful bidder of other packages are required to share API of their quoted VMS to ensure integration with central command and control center to achieve desired functionality as mentioned in the tender document.  | i) Can you please confirm which line items in<br>Northern region package belong to said provisioned<br>Commanad and Control Center? Ii) Please provide<br>the detailed functional specification of Command<br>and Control Center software.   | Marushika<br>Technology<br>Advisors<br>Pvt. Ltd | Please refer SOR Head-II item no.3 of<br>Northern Package and tender clause<br>8.26 of Chapter-8.  |
| 554 | Section I | 8   | 2 (a)     | VSS Server Hardware and all accessories required for installation purposes for Video recording, Video Analytic and Facial Recognition system as defined in clause 8.2 and 8.3 of chapter 8. Detailed Bill of Material (BoM) shall be prepared and submittedalong with the Bid as per SOR Note-VII.  | i) Video Recording, Video analytics and Facial recognition are three different software and have different quantity requirements i.e. Not every camera have VA and/FR. So we suggest to split this line item in three sub parts.   | Marushika<br>Technology<br>Advisors<br>Pvt. Ltd | Clause as per tender/corrigendum prevails.   |
| 555 | Section I | 10  | 3 (a)     | VSS Server Hardware for Video Management and Facial Recognition database system as defined in clause 8.2, 8.3 of chapter 8 and all accessories required for installation purposes. Detailed Bill of Material (BoM) shall be prepared and submitted along with the Bid as per SOR Note-VII.  | So we understand that each region will have independent management system, and this line item is for servers required in regional headquarter. please confirm.   | Marushika<br>Technology<br>Advisors<br>Pvt. Ltd | Each Region will have their own Video<br>Management System and Facial<br>Recognition Database system installed<br>at RailTel Datacenter.                 |

| 556 | 41                  | xx        | Bidder may also propose a software based Digital Key-Board (joystick) against SOR Head-I, 2 (c) of packages without any loss in the functionality and performance of the system.   | What does this mean? Every VMS provide onscreen control for PTZ, however hardware keyboard provides completely different experience and can not be compaired. We suggest to delete this clause or delete Joystick line item for BOQ to keep the clarity.  | Marushika<br>Technology<br>Advisors<br>Pvt. Ltd | Tender/ corrigendum clause shall prevail.         |
|-----|---------------------|-----------|--|---|---|---|
| 557 | 41                  | XVII      | Rack Space at Datacenters and associated charges: RailTel will provide Racks at Gurugram and Hyderabad datacenter for hosting VSS Cloud infrastructure as defined in the tender. Bidders are requested to optimize the number of racks requirement in the datacenter. Rack requirements shall be associated with cost and bidder will be charged INR 8 Lacks/annum/rack for their rack requirements. The Bidder must provide rack space requirements in their technical offer keeping load available on each rack (<=5KVA) for the complete solution (for DC & DR) for all components like Server, Switching, Routers, Storage etc | We understand that this point relates to hosting of servers/storage mentioned in BOQ line no. 3 of all regions. However please clarify whether every component in DC need to be replicated in DR? If so, where it is captured in BOQ? Line item 3 looks to be replicated in DR? If so, where it is captured in BOQ? Line item 3 looks to be considering BOQ for DC only?  | Marushika<br>Technology<br>Advisors<br>Pvt. Ltd | Only EMS will be replicated in DC and DR.         |
| 558 | 63                  | 3.B.7     | Proposed solution has to provide seamless recording/ Playback of all cameras for last 30 days at any given point of time at the RPF/GRP thana/Post. The recording and playback availability should not be affected in case of failure of any server at RPF/GRP Thana/Post. The Recordings of last 30 days should be available through redundant server(s) in case of a server failure.   | Redundant recording will also double the storage requirement. As we understand videos are already being recorded at every station Video recording and processing unit (for 7 days), it act as a redundant recording already. Generally If there is any critical incident, it will come to the notice within 7 days. So please reconsider the redundant recording requirement ar RPF/GRP thana/post which will double the overall server as well as storage cost | Marushika<br>Technology<br>Advisors<br>Pvt. Ltd | Clause as per tender/corrigendum prevails.        |
| 559 | 167,<br>168,1<br>69 | Chapter 7 | Total camera quantity mismatch   | If we calculate the total number of Fixed bullet cameras from BOQ of four region it comes to 72182, however we calculate the same from various tables given on page 167, 168 and 169 it comes to 72451 causing a difference of 269 cameras. Can you please cross check are correct accordingly.   | Marushika<br>Technology<br>Advisors<br>Pvt. Ltd | Bidder to quote quantities of cameras as per SOR. |

| 560 | Section I | 209 | 8.3.1.2                  | Video feed from cameras of group of stations<br>(cluster) shall be stored in ex-<br>ternal storage for 30 days on <b>H.265</b> at RPF/GRP<br>Thana/Post.  | H.265 being a heavely compressed video, it saves a bit on storage requirements. However on the other side it pose lot of challenges on decoding on client stations as the client machines can decode much less H.265 streams compaired to H.264.Most of the analytics solutions are also not yet proven on H.265 compressed videos as it lose lot of details within the image during compression. In order to run analytics on H.265 streams even servers will need to have too  | Marushika<br>Technology<br>Advisors<br>Pvt. Ltd | Clause as per tender/ corrigendum prevails.  |
|-----|-----------|-----|--------------------------|---|--|---|--|
|     |           |     |                          |   | costly Graphics cards (CUDA). So we request to keep it H.264 which is proven solution for last few years and is in line with RDSO specifications.  |   |  |
| 561 | Section I | 209 | 8.3.1.2                  | At each such cluster i.e. RPF/GRP Thana/Post location, bidder to size storage, server requirement and propose a <b>single server</b> considering recording of 200 FHD cameras, analytics on 40 cameras, FRS with local matching capability with the watchlist database on up to 8 cameras stream at each RPF/GRP Thana/Post locations without any impact on the performance of the system and overall solution requirement. | It will not be practical to record 200 cameras,<br>analytics as well as FRS on a single server, please<br>consider revising the clause.  | Marushika<br>Technology<br>Advisors<br>Pvt. Ltd | Clause as per tender/ corrigendum prevails.  |
| 562 | Section I | 209 | 8.3.1.2                  | Bidder to also propose a redundant server per<br>RPF/GRP Thana/Post location to ensure<br>uninterrupted services as mentioned in above<br>para in case of failure of main server.   | i) Does this mean we need to have Redundant (1:1) recorder servers or N:1? Ii) Redundant servers shall have storage for 30 days or 7 days is acceptible?   | Marushika<br>Technology<br>Advisors<br>Pvt. Ltd | Cluase is self explanatory. Bidder to propose Redundant server(s) to ensure uninterrupted services |
| 563 | Section I | 211 | 8.3.2.3.1.1<br>(A) & (B) | (A) On Station collocated with RPF/GRP Thana/Post: i) One Full HD stream (@1080P and@25FPS) from Full HD Camera on H.265 and ii) One UHD stream at resolution 3840x2160 and@ 15FPS from 4K UHD Camera on H.265 should be recorded for 30 days in external storage at RPF/GRP Thana/Post.  | H.265 being a heavely compressed video, it saves a bit on storage requirements. However on the other side it pose lot of challenges on decoding on client stations as the client machines can decode much less H.265 streams compaired to H.264. Most of the analytics solutions are also not yet proven on H.265 compressed videos as it lose lot of details within the image during compression. In order to run analytics on H.265 streams even servers will need to have too costly Graphics cards (CUDA). So we request to keep it H.264 which is proven solution for last few years. | Marushika<br>Technology<br>Advisors<br>Pvt. Ltd | Clause as per tender/ corrigendum prevails.  |

| 564 | Section I  | 211 | 8.3.2.3.1.1<br>B   | On other stations: i) One Full HD stream (@1080P and @25FPS) from Full HD Camera on H.265 and ii) One UHD stream at resolution 3840x2160 and @15FPS from 4K UHD Camera on H.265 should be recorded for 7 days in Video Recording & Processing Unit.   | As per this requirement One stream will be configured with HD1080P & HD720P and 4K & HD1080P for Full HD and 4K camera respectively. However video analytics and Face recognition software generally require 4CIF stream for processing. So we request to modify this requirement as HD1080P & 4CIF and 4K & 4CIF for Full HD and 4K camera respectively.  | Marushika<br>Technology<br>Advisors<br>Pvt. Ltd | Clause as per tender/ corrigendum prevails.  |
|-----|--|-----|--|---|--|---|--|
| 565 | RDSO<br>Specifica<br>tion                          |     | 2.8<br>(Ammend<br>ment No.<br>1.0)   | The approximate storage capacities per Camera with H.264 Video Compression shall be as under  | i) Should this be considered as minimum benchmark for storage sizing requirement? ii) As per RDSO clause 4.2.2 ammendment 1, bandwidth for 4K shall be less than 3 times (8Mbps) than Full HD (3Mbps) camera. However the storage requirement for 4K is shown 4 times than Full HD. So, can you please confirm 4TB shall be considered or should be calculated as per 8Mbps bandwidth (Less than 3TB)? | Marushika<br>Technology<br>Advisors<br>Pvt. Ltd | As per tender. Please refer Note-1 of chapter-8 (Technical, Functional requirements & specifications). |
| 566 | RDSO<br>Specifica<br>tion and<br>RAILTEL<br>Tender |     | 3.6<br>(Ammend<br>ment No.<br>1.0), 18.1.2<br>and 8.18.1<br>of RAILTEL<br>Tender | Vendors shall have option to quote either Server based solution or NVR based solution in accordance with Clause no. 10.0 and Clause no. 12.0 for Video Management and Video Recording or a combination of both the solutions for both the implementation scheme as per Diagram-1 & Diagram-2. Software capabilities and Storage capacities shall be same for both the solutions.  AND  "The network video management software shall be licensed and shall operate on open architecture and shall require no proprietary IT hardware". And  "Bidder to propose an Open (Non-proprietary) hardware-based unit to be installed at Stations." | As per RAILTEL tender requirement all the hardware is supposed to be Non-proprietary which will supersead the RDSO clause NVR. So we consider that propriotery NVR based solution will not be accepted. Please confirm.  | Marushika<br>Technology<br>Advisors<br>Pvt. Ltd | Clause as per tender/ corrigendum<br>prevails  |

| 567 | Section I | 211 | 8.3.2.3.1.1<br>B | On other stations: i) One Full HD stream (@1080P and @25FPS) from Full HD Camera on H.265 and ii) One UHD stream at resolution 3840x2160 and @15FPS from 4K UHD Camera on H.265 should be recorded for 7 days in Video Recording & Processing Unit. iii) One HD stream (@720P and @25FPS) from Full HD Camera on H.265 and iv) One FHD stream (@1080P and @15FPS from 4K UHD Camera on H.265 should be recorded for 30 days in external storage at RPF/GRP Thana/Post.                          | i) As we understand from 8.1.3.2 RPF thana server and storage shall be sized for 200 cameras, similarly is there any sizing requirement for Video recording and processing unit. Ii) As per this clause only HD720 & HD1080P stream shall be recorded from other stations to RFP/GRP thana server/storage for Full HD and 4K cameras respectively, however as per RDSO all the recordings shall be Full HD and 4K resolution, please confirm what should be considered? iii) If we have to go with HD720P and HD1080P recording for other stations cameras on RPF/GRP thana, do we need to calculate storage ourself or need to follow RDSO clause no. 2.8 ? | Marushika<br>Technology<br>Advisors<br>Pvt. Ltd | Clause as per tender/corrigendum<br>prevails.  |
|-----|-----------|-----|------------------|---|--|---|--|
| 568 | Section I | 231 | 8.18.2           | Video Recording & Processing Unit shall be installed at each platform/station and shall have Software for Video Management, Video Recording and Analytics as defined in Tender Clause 8.3. In case of MPLS/IP network connectivity failure, video stream and alarms would be stored locally at the Video Recording & Processing Unit for that duration and would transfer these data automatically to RPF/GRP Thana/Post when the network recovers without any impact on the system operations. | i) As per the architecture explained above management servers will be at Regional HQ, whereas Thana/RPF will have recording and analytics infrastructure. So, alarms can be transferred to central management on realtime basis as there is no local management servers which can hold this data. Alarm management is an activity carried by management servers. So, request to reconsider the requirement of sending alarm data to HQ post network reconnection.  | Marushika<br>Technology<br>Advisors<br>Pvt. Ltd | Clause as per tender/corrigendum prevails.   |
| 569 | Section I | 231 | 8.18.5           | Bidder to propose single unit hardware on each platform/station of Railway Station to achieve the functionalities as defined above.   | It will not be advisable to load analytics application on platform/station units considering the processing power limitations of such edge devices. Non availability of analytics for a brief period of network failure will not have much impact on overall utility of the surveillance system, however if this load affects the performance of edge devices, it will impact the system functioning irrespective of failures.   | Marushika<br>Technology<br>Advisors<br>Pvt. Ltd | Clause as per tender/corrigendum prevails.   |
| 570 |           | 60  | 3.B.3.6          | IP Video Surveillance is traffic hungry and delay sensitive service. To ensure proper functioning of this project, network architecture must have features like Multicast VLAN Registration, IP SLA, Auto-QoS, Auto Ports configuration to detect end device type connected to port and configuring QoS automatically on basis of device.   | Please confirm that backbone network provided by Railtel will support Multicast communications across the stations/DHQ/National HQ etc. and configuration of the same will be in RAILTEL scope.  | Marushika<br>Technology<br>Advisors<br>Pvt. Ltd | Configuration requirement of RailTel<br>Backbone network will be under<br>RailTel scope only and meet all basic<br>requirements. |

| 571 | RDSO<br>Specifica<br>tion                          | 2.8<br>(Ammend<br>ment No.<br>1.0)  | In case implementation is done as per Diagram-2,<br>Video data and Alarms shall be stored for at least<br>30 days (7 days where Cloud is connected) at<br>RPF/GRP Thana/Posts.  | As per this clause of RDSO we need to do recording for only 7 days in RPF/GRP Thana if cloud is connected. However as per our understanding of the tender requirement, we need to record for 7 days at every remote station (No local RPF/GRP) on edge device and for 30 days on servers on stations with RPF/GRP thana. Please confirm this is correct and will supersede RDSO.  | Marushika<br>Technology<br>Advisors<br>Pvt. Ltd | Clause as per tender/corrigendum prevails. |
|-----|--|---|---|---|---|--|
| 572 | RDSO<br>Specifica<br>tion and<br>RAILTEL<br>Tender | 3.9<br>(Ammend<br>ment No.<br>1.0) and<br>8.3.1.2 of<br>RAILTEL<br>tender | A failover Server/NVR shall be provided at Stations under Scheme-1 and at RPF/GRP Thana/Posts under Scheme-2. Failover system shall support defined number of Servers/NVRs in N: 1 configuration (Value of N to be specified by the purchaser). The failover Server/NVR shall take over the operation smoothly without any impact on the operation. For data stored and computed at Cloud, the Cloud shall provide failover system for protection of data and operation.  AND  Bidder to also propose a redundant server per RPF/GRP Thana/Post location to ensure uninterrupted services as mentioned in above para in case of failure of main server. | i) RDSO clause further demand N:1 failover, RAILTEL tender clause further ask for Redundant server. Please note Redundant and Failover are two different functionalities. Please confirm you need Failover or Redundant? Also note Station cameras are already getting recorded in local video processing unit, then it also get recorded in RPF/GRP thana. Do we really need to provide third layer of recording? ii) We consider the CLOUD here as a RAILTEL datacenter in Gurgaon and Hyderabad and the management application installed in Gurgaon should have Hyderabad as a Failover. Please confirm. | Marushika<br>Technology<br>Advisors<br>Pvt. Ltd | Clause as per tender/corrigendum prevails. |
| 573 | RDSO<br>Specifica<br>tion                          | 4.2.3<br>(Ammend<br>ment No.<br>1.0)                                      | The Edge Devices shall be capable of buffering the Video data and Alarms to its internal storage when connection to the MPLS/ IP network is temporarily unavailable. When the network recovers, the data on Edge devices shall automatically be transferred to the Server/NVR installed at respective RPF/GRP Thana/Post without any impact on the system operations.   | Backfilling of lost video data to recording server is managed through Camera Edge recording (SD card recording) and does not have any role of Edge Devices. So we consider the same is acceptible as functional requirement is still met.   | Marushika<br>Technology<br>Advisors<br>Pvt. Ltd | Clause as per tender/corrigendum prevails. |
| 574 | RDSO<br>Specifica<br>tion                          | 10.1.3.(c)  | One Server each is required for Video Analytics for 32 nos. of cameras.   | With some solutions VA can be managed within Video Recording servers without needing dedicated servers for the same. Also, as per clause no. 18.4.7 analytics can be at firmware level as well, which will avoid the server requirement. We consider that such optimization is acceptible as it is design based solution. Please confirm.   | Marushika<br>Technology<br>Advisors<br>Pvt. Ltd | Clause as per tender/corrigendum prevails. |

| 575 | RDSO<br>Specifica<br>tion | 18.4.1 &<br>18.4.7 &<br>20.4 & 20.6<br>XVII | Possible applications of analytics software over the IP based video surveillance system, for specified number of cameras for specific stations, as defined by purchaser shall include the following minimum video analytics software.  i) Intrusion Detection ii) Left Object Detection iii) Overcrowding iv) Camera Tampering  | Please specify the quantity of analytics for each type of analytics for each type of station, so as we can quote accordingly. Considering the commercial weitage of the analytics licensing we strongly suggest to provide fixed quantity of analytics for each type of station which will ensure fair commercial evaluation.   | Marushika<br>Technology<br>Advisors<br>Pvt. Ltd | As per tender. Please refer Note-1 of chapter-8 (Technical, Functional requirements & specifications). Bidder to quote as per SOR. |
|-----|---------------------------|---|---|---|---|--|
| 576 | RDSO<br>Specifica<br>tion | 4.2.5<br>Ammendm<br>ent no. 1               | Server/NVR for Video management and Video Recording shall be provided at RPF/GRP Thana/Post for viewing, monitoring and recording of cameras aggregated from cluster of stations. The Video and Alarm data of minimum 30 days (7 days where Cloud is connected)shall be stored at RPF/GRP Thana/Post. The Video and Alarms of selected cameras/locations shall also be accessible to Divisional HQ/any other centralized location or other clients through MPLS/ IP network as per requirement of purchaser for monitoring and viewing.   | i) In contradiction to this clause, from RAILTEL document clause no. 8.3.2.3.1.1 (A) & (B) we need to record for 30 days on RFP/GRP thana eventhough cloud is in use. So, we understand that the expected architecture is mixture of Diagram 1 and Diagram 2. Please confirm the understanding is correct. ii) Cloud (Gurgaon/Hyderabad datacenter) will not have any video recording, and will only have management databases and event related exported video clips. Please confirm the understandings are correct. | Marushika<br>Technology<br>Advisors<br>Pvt. Ltd | Clause as per tender/corrigendum prevails.   |
| 577 | RDSO<br>Specifica<br>tion | 4.2.8<br>Ammendm<br>ent no. 1               | Video Analytics and Face Recognition System & Storage shall be deployed at the Cloud. System at RPF/GRP Thana/Post shall provide video streams of requisite no. of cameras to the Cloud for running Video Analytics and Face Recognition Software. In case VMS In case VMS is required for operation of Video Analytics and Face Recognition Software at Cloud, same may be provided at Cloud or as specified by the purchaser. All Video data and alarms generated by Video Analytics and Face Recognition Software at the Cloud shall be available at RPF/GRP Thana/Posts and Divisional HQ/ any other centralized location or any other clients through Cloud. | AS per our understanding from BOQ line item. 2 a and 3 a, VA and FRS processing will happen locally at RPF/GRP thana and only metadata will be sent to management servers in datacenter. Please confirm this is correct understanding?  | Marushika<br>Technology<br>Advisors<br>Pvt. Ltd | Clause as per tender/corrigendum prevails.   |

| 578 | RDSO<br>Specifica<br>tion |     | 4.2.10<br>Ammendm<br>ent no. 1 | Edge Device shall have the following minimum specifications or otherwise as specified by the purchaser:-   | In many cases RFP/GRP thana will be on A1/A type station, and will host the recording for nearby A, B,C,D & E stations. Type A, B, C and D have 60, 38 & 26 cameras respectively and further 10% spare capacity as per requirement. So, it will be a good solution to provision a single high configuration server on these locations with aircooled cabinets in equipment room rather than multiple devices on platforms. This will simplify installation, mantainance and physical security of the core processing component. Please allow such option. | Marushika<br>Technology<br>Advisors<br>Pvt. Ltd | Clause as per tender/corrigendum prevails.  |
|-----|---------------------------|-----|--------------------------------|--|---|---|---|
| 579 | 8.3                       | 209 | 8.3.1.1.3                      | This Central Watchlist shall be in sync with each individual RPF/GRP Thana/ Post local FRS servers as per daily schedule.  | Please specify how many watch list needs to be supported at central and cluster level. It will help in designing the solution and server sizing.  | Marushika<br>Technology<br>Advisors<br>Pvt. Ltd | Please refer clause 8.3.1.1.3 of Chapter-8  |
| 580 | 8.3                       | 209 | 8.3.1.1.3                      | This Central Watchlist shall be in sync with each individual RPF/GRP Thana/ Post local FRS servers as per daily schedule.  | Please specify maximum limit per watch list.  | Marushika<br>Technology<br>Advisors<br>Pvt. Ltd | As per RDSO Specification.  |
| 581 | 8.3                       | 209 | 8.3.1.1.3                      | This Central Watchlist shall be in sync with each individual RPF/GRP Thana/ Post local FRS servers as per daily schedule.  | Please specify whether cluster watchlist will be same<br>as central watchlist or central watchlist will<br>accumulate watchlists created at cluster level.  | Marushika<br>Technology<br>Advisors<br>Pvt. Ltd | Please refer clause 8.3.1.1.3 of Chapter-8.   |
| 582 | 8.3                       | 209 | 8.3.1.1.3                      | This Central Watchlist shall be in sync with each individual RPF/GRP Thana/ Post local FRS servers as per daily schedule.  | Please specify will the watchlist be created at central level and then pushed to each cluster OR it can be created/amended at cluster level too and then synchronized with central and from central to other clusters   | Marushika<br>Technology<br>Advisors<br>Pvt. Ltd | Please refer clause 8.3.1.1.3 of Chapter-8.   |
| 583 | 8.3                       | 209 | 8.3.1.1.3                      | This Central Watchlist shall be in sync with each individual RPF/GRP Thana/ Post local FRS servers as per daily schedule.  | Please specify will it be allowed to delete images from watch list at cluster level? Because this will be synchronized with Central and thereafter with all cluster level watch lists. This could create a security issue if someone tampers with watch lists.  | Marushika<br>Technology<br>Advisors<br>Pvt. Ltd | Clause as per tender/corrigendum prevails.  |
| 584 | Chapter<br>3              | 66  | 8.3.1.1.3                      | Bidder to propose Database server for Facial<br>Recognition system in High Availability (HA) mode<br>in RailTel Datacenter.  | Please specify if HA configuration of FRS servers is required in both DC and DR OR HA should be considered as primary server in DC and redundant in DR  | Marushika<br>Technology<br>Advisors<br>Pvt. Ltd | Database server for FR shall be hosted<br>in RailTel Datacenter in HA mode<br>(Gurugram/Secunderabad) for each<br>Region. |
| 585 | 8.3                       | 208 | 8.3.1.1.1                      | For implementation of the proposed system, it is assumed that there would be 552 Clusters constituting RPF/GRP Thana/Post receiving video feeds from group of stations based on jurisdiction of that respective RPF/GRP Thana/Post through MPLS/ IP network. Therefore, bidder is required to propose a cluster based solution constituting Servers, Storage, Switches and Video applications etc. at RPF/GRP Thana/Post locations on the basis of following design parameters | Please share the list of cluster wise stations with category to calculate number of cameras per cluster   | Marushika<br>Technology<br>Advisors<br>Pvt. Ltd | Tentative list of stations is uploaded with corrigendum.  |

| 586 |      | 73           | Clause No.<br>19.25 (b):<br>RDSO<br>Specs FRS | Face recognition shall have false negative identification Rate (FNIR) with Rank-1, shall be less than or equal to 10% in passenger gate dataset type (Semi Non-cooperative) with N=480 and less than or equal to 70% with high near field of view criteria in sports Arena dataset type (Non-cooperative) with N= 480 of latest NIST report (Face in video Evaluation). | Above-mentioned point is specifically favoring SPECIFIC FRS OEM . There are other vendors also who have participated in "Face in Video Evaluation (FIVE) Face Recognition of Non-Cooperative Subjects" and the report was published in March 2017. The report is publically available at http://nvlpubs.nist.gov/nistpubs/ir/2017/NIST.IR.81 73.pdf .  But by specifically putting this one test out of so many tests in complete NIST report, is just favouring vendor and is not allowing other vendors to participate. Ideally, Overall NIST Report results should be considered. | Marushika<br>Technology<br>Advisors<br>Pvt. Ltd | Clause as per tender/corrigendum prevails. |
|-----|------|--------------|---|---|--|---|--|
| 587 | 8.20 | Page-<br>232 | A (x)   | (A) FMS (12/24 Fiber) x) Pigtails shall be color coded similar to the fiber color coding.   | All pigtails come in single color, ferruling/labeling is used for fiber core identification. Please change that pigtails shall be similar to the fiber color coding or single color.   | Marushika<br>Technology<br>Advisors<br>Pvt. Ltd | Clause as per tender/corrigendum prevails. |
| 588 | 8.20 | Page-<br>232 | A (xiv)                                       | (A) FMS (12/24 Fiber)<br>xiv) Insertion Loss: ≤ 0.2 dB  | As per standard insertion loss of pigtails should be ≤ 0.35dB, please change.  | Marushika<br>Technology<br>Advisors<br>Pvt. Ltd | Clause as per tender/corrigendum prevails. |
| 589 | 8.20 | Page-<br>232 | B (i)   | (B) Specifications of Patch Cords i) Operating Temperature: -60ºC to +85ºC.   | Asked temprature is not required for indian weather, It should be -10°C to +60°C. Please change.   | Marushika<br>Technology<br>Advisors<br>Pvt. Ltd | Clause as per tender/corrigendum prevails. |
| 590 | 8.20 | Page-<br>232 | В (а)   | <ul> <li>(B) Specifications of Patch Cords</li> <li>a) Insertion Loss of complete patch cord including<br/>adapter when tested from each direction<br/>in all conditions of operations: ≤ 0.3 dB</li> </ul>   | As per standard insertion loss of patch cord should be ≤ 0.35dB, please change.  | Marushika<br>Technology<br>Advisors<br>Pvt. Ltd | Clause as per tender/corrigendum prevails. |
| 591 | 8.20 | Page-<br>232 | B (v)   | (B) Specifications of Patch Cords V) The connectors must be make of reputed OEMs 3M, Huber-Shuner, R&M, TE Connectivity/Raychem.  | All manufacturer come with own connector, please consider Schneider also.  | Marushika<br>Technology<br>Advisors<br>Pvt. Ltd | Clause as per tender/corrigendum prevails. |

| 592 | Chapter<br>2 SOR             | Page-<br>13 | Chapter 2<br>SOR  | 7. Supply, Blowing/Pulling/laying of OFC, data cable, electrical cables, PVC pipe and GI pipe for work at Stations (STP CAT-6, 12 Core metal strengthened outdoor un-armored Optic Fiber Cable (ITU-T G.652.D), PVC insulated 3 core 4 Sq. mm (1.1 KV grade) outdoor strengthened Copper Cable for UPS supply distribution (as per BIS/ISI standards), 32mm PVC conduit pipe (ISI mark), 32mm PVC flexi-ble pipe, 40mm dia. HDPE pipe, GI pipe with accessories on wall or structure etc. along with all accessories required for installation, laying, fixing, clamping and cutting as per specification as defined in chapter 8) | Please share the details for fiber cable length<br>calculation.  | Marushika<br>Technology<br>Advisors<br>Pvt. Ltd | Please refer to revised SOR being<br>uploaded with SOR. |
|-----|------------------------------|-------------|-------------------|--|--|---|---|
| 593 | 8.9. Type-<br>II Switch      | 212         | 1                 | Should have minimum 12 x GE SFP based ports.   | Should have minimum 24 x GE SFP based ports.   | HPE   | As per tender/ corrigendum.                             |
| 594 | 8.9. Type-<br>II Switch      | 212         | 19                | Should support ITU-T G.8032 Ethernet Ring Protection designed for loop pro-tection and fast convergence times (sub 50 ms) in ring topologies.  | Please modify the clause as "Should support ITU-T<br>G.8032 or Equivelant Ethernet Ring Protection<br>designed for loop protection and fast convergence<br>times (sub 50 ms) in ring topologies"             | HPE   | As per tender/ corrigendum.                             |
| 595 | 8.11.<br>Switches<br>Type-IV | 216         | 14- (x.)          | It shall also support SYNC Ethernet and SNMPv3.  | Pls remove this specs.   | HPE   | As per tender/ corrigendum.                             |
| 596 | 8.11.<br>Switches<br>Type-IV | 210         | 15-(xxi.)         | ITU-T G.8032 Ethernet Ring Protection designed for loop protection and fast convergence times (sub 50 ms) in ring topologies   | Request you to kindly modify this clause as "Should support ITU-T G.8032 or Equivalent Ethernet Ring Protection designed for loop protection and fast convergence times (sub 50 ms) in ring topologies."     | HPE   | As per tender/ corrigendum.                             |
| 597 | 8.11.<br>Switches<br>Type-IV | 210         | 15-(xxii          | xxii. Should support multiple Ring up to 8 ring (Main and Sub Ring ) protection failover within 50 ms (up to 10 Switches in ring) or ITU-T G.8032 v2 (Confirmed roadmap within a year time is also acceptable for ITU-T G.8032 v2 with no additional cost to Ra  | Request you to modify the clause as "should support<br>multiple Ring up to 8 ring (Main and Sub Ring )<br>protection failover within 50 ms (up to 10 Switches<br>in ring) or ITU-T G.8032 v2 or equivelent". | HPE   | As per tender/ corrigendum.                             |
| 598 | 8.11.<br>Switches<br>Type-IV | 210         | 15-(xxv.)         | Traffic prioritization: Flow-based QoS with internal and external (a.k.a., remarking) prioritization   | Request you to kindly change this clause as "Traffic prioritization: Flow-based QoS with internal and external prioritization"   | HPE   | As per tender/ corrigendum.                             |
| 599 | 8.11.<br>Switches<br>Type-IV | 217         | 15-(xxviii)-<br>2 | Transparent LAN Services with Service VLAN (SVLAN) and Customer VLAN (CVLAN) concept.  | Request you to kindly modify this clause as "<br>Transparent LAN Services with Service VLAN (SVLAN)<br>and Customer VLAN (CVLAN) concept or Q-in-Q"  | HPE   | As per tender/ corrigendum.                             |

|     | 1  |     |                   | CVI AN to SVI AN translation and manning  |   |     |                             |
|-----|--|-----|-------------------|---|---|-----|-----------------------------|
| 600 | 8.11.<br>Switches<br>Type-IV                     | 217 | 15-(xxviii)-<br>3 | CVLAN to SVLAN translation and mapping  | Request you to kindly modify this clause as " CVLAN to SVLAN translation and mapping or Q-in-Q"   | HPE | As per tender/ corrigendum. |
| 601 | 8.11.<br>Switches<br>Type-IV                     | 217 | 15-(xxviii)-<br>4 | IEEE 802.1ag Ethernet OAM: Connectivity Fault Management (Support 32 MEPs).   | Request you to kindly modify this clause as " IEEE 802.1ag Ethernet OAM: Connectivity Fault Management (Support 16 MEPs)."  | HPE | As per tender/ corrigendum. |
| 602 | 8.11.<br>Switches<br>Type-IV                     | 217 | 15-(xxviii)-<br>6 | ITU-T G.8032 Ethernet Ring Protection designed for loop protection and fast convergence times (sub 50 ms) in ring topologies. | Request you to kindly modify this clause as "ITU-T<br>G.8032 Ethernet Ring Protection designed for loop<br>protection or equivalent and fast convergence times<br>(sub 50 ms) in ring topologies or equivelent" | HPE | As per tender/ corrigendum. |
| 603 | 8.11.<br>Switches<br>Type-IV                     | 218 | 15-(xxviii)-<br>9 | L2 Protocol Tunneling.  | Request you to kindly modify this clause as " L2<br>Protocol Tunneling or equivalent"   | HPE | As per tender/ corrigendum. |
| 604 | 8.11.<br>Switches<br>Type-IV                     | 218 | 16-(xiii.)        | ITU-T G.8032/Y.1344 2010: Ethernet Ring   | Request you to kindly modify this clause as "ITU-T<br>G.8032/Y.1344 2010: Ethernet Ring or equivalent"  | HPE | As per tender/ corrigendum. |
| 605 | 8.11.<br>Switches<br>Type-IV                     | 218 | 17- (i.)          | The model of the Switches series shall have MEF-(9 & 14)/CE2.0 or higher certification from authorized agencies.              | Request you to kindly remove this clause.   | HPE | As per tender/ corrigendum. |
| 606 | 8.11.<br>Switches<br>Type-IV                     | 218 | 17- (ii.)         | Switches should be NEBS certified.  | Request you to kindly remove this clause.   | HPE | As per tender/ corrigendum. |
| 607 | 8.12.<br>Core<br>Switch<br>for<br>Datacent<br>er | 219 | 1                 | Should have 24x SFP+ based ports with 240 Gbps of stacking bandwidth with dedicated stacking ports.                           | Should have 24x SFP+ based ports with 160<br>Gbps of stacking bandwidth with dedicated<br>stacking ports.   | HPE | As per tender/ corrigendum. |
| 608 | 8.13.1.<br>SFP-BX<br>(10 KM)<br>Single<br>Fiber: | 220 |                   | 8.13.1. SFP-BX (10 KM) Single Fiber:  | Please modify as "8.13.1. SFP-BX (10 KM) /SFP (<br>10Km) Single Fiber: "  | HPE | As per tender/ corrigendum. |
| 609 | 8.13.1.<br>SFP-BX<br>(10 KM)<br>Single<br>Fiber: | 220 | 1                 | SFP modules should comply with multi-source agreement (MSA), enabling compatibility with other vendors equipment.             | Please modify the cluase as "SFP modules should communicate with other vendors SFP module"  | HPE | As per tender/ corrigendum. |

| 610 | 8.13.2.<br>SFP+ (10<br>Km)   | 220 | 1 | SFP modules should comply with multi-source agreement (MSA), enabling compatibility with other vendors equipment.  | Please modify the cluase as "SFP modules should communicate with other vendors SFP module"  | HPE                     | As per tender/ corrigendum. |
|-----|--|-----|---|--|---|-------------------------|-----------------------------|
| 611 | 8.13.3.<br>SFP+ (80<br>Km):  | 220 | 1 | SFP modules should comply with multi-source agreement (MSA), enabling compatibility with other vendors equipment.  | Please modify the cluase as "SFP modules should communicate with other vendors SFP module"  | HPE                     | As per tender/ corrigendum. |
| 612 | 8.13.4.<br>SFP+<br>(350mtrs  | 221 | 1 | SFP modules should comply with multi-source agreement (MSA), enabling compatibility with other vendors equipment.  | Please modify the cluase as "SFP modules should communicate with other vendors SFP module"  | HPE                     | As per tender/ corrigendum. |
| 613 | Server<br>Hardwar<br>e: 10.1   | 21  | 1 | Processor - Intel Xeon Processor   | Processor - Intel Xeon Processor or AMD EYPC processor  | HPE                     | As per tender/ corrigendum. |
| 614 | Server<br>Hardwar<br>e: 10.1   | 21  | 5 | CPU Cache - 20 MB  | CPU Cache - 11 MB or higher   | HPE                     | As per tender/ corrigendum. |
| 615 | 8.4.<br>Storage  | 211 | 9 | RDSO - 12.0 External Storage Device: 12.1<br>External Storage device shall have minimum<br>following specifications:- S.No. 9 RAID<br>configuration - RAID 5/6 | Clarification Required  | HPE                     | As per tender/ corrigendum. |
| 616 | Addition<br>al Point   |     |   |  | EMS Solution should be included in a single package along with DC &DR as a common EMS would avoid interoperability issues or the technically qualified EMS Solution which is lowest priced across 4 packages should be rolled out across the packages   | HPE                     | As per tender/ corrigendum. |
| 617 | 4.A.14.1<br>.3<br>Eligibilit<br>y<br>Criteria<br>Require<br>ments<br>for<br>OEM's: | 101 | 2 | OEMs of IT hardware (server and storage) each in last 3 finan-cial years (i.e. current year  | Software component is equally important as hardware because final output of the hardware comes from the software. We request you to please put PQ for face recognition software OEM also. Please add-  1. FRS Software OEM should be registered company in india since atleast last 10 years.  2. FRS OEM should be CMMI level 5 company.  3. Proposed FRS software should have been deployed in India in atleast 3 safe city surveillnace project and should be running successfully. FRS OEM shall submit the relevent PO copy of the work. | NEC<br>Technologie<br>s | As per tender/ corrigendum. |

| 618 | RDSO<br>latest<br>specific<br>ation for<br>CCTV<br>system |     |             | Face Recognition Algorithm shall have False Negative Identification Rate (FNIR) with Rank-1 (R=1), shall be less than or equal to 10% in Passenger Gate dataset type (Semi Non-Cooperative) with N = 480 and less than or equal to 70% with High Near Field of view criteria in Sports Arena dataset type (Non- | Measurement of biometric solution is based on FAR and FPR which tells the accuracy and performance of the Biometric solution like Face recognition. Mentioned accuracy in clause 19.25 b is very less, please increase the accuracy upto 95% in case of passenger gate dataset type and upto 50% atleast in case of sports arena datastet type. This shall ensure implementation of a fruitful and good system in Railways.    | NEC<br>Technologie<br>s              | As per tender/ corrigendum. |
|-----|---|-----|-------------|---|--|--------------------------------------|-----------------------------|
| 619 | 8.3.2.3<br>Recordi<br>ng<br>Paramet<br>ers                | 211 | 8.3.2.3.1.3 | Server at RPF/GRP Thana/Post for running Face Recognition algorithm and send alarms to desig-nated clients at RPF/Div. HQ (Control Room)/others.  | There are few other methods also to perform face recognition without affecting accuracy and perfomance of the FRS system. Please allow solution provider(FRS OEM) to provide the solution as per their design. It may help in reducing and optimize the hardware requirement hence cost. Please suggest.   | NEC<br>Technologie<br>s              | As per tender/ corrigendum. |
| 620 | 8.3.2.3<br>Recordi<br>ng<br>Paramet<br>ers                | 211 | 8.3.2.3.1.3 | Server at RPF/GRP Thana/Post for running Face Recognition algorithm and send alarms to desig-nated clients at RPF/Div. HQ (Control Room)/others.  | Also, FRS does not need necessarely UHD feed for face matching. 2 MP resolution is more than enough to provide good accuracy of FRS result. Also, UHD cameras for FRS shall increase the cost of the solution unnecessarily. Hence we request to change FRS cameras from UHD to FHD else allow bidders to submit their FRS solution either with UHD or FHD without comproising the accuracy and performance of the FRS system. | NEC<br>Technologie<br>s              | As per tender/ corrigendum. |
| 621 | 8.3.2.3<br>Recordi<br>ng<br>Paramet<br>ers                | 211 | 8.3.2.3.1.3 | Face Recognition algorithm and send alarms to desig-nated clients at RPF/Div. HQ (Control Room)/others.   | shall be there on each RPF/GRP Thana/Post.<br>Should we consider 8 FRS camera license at   | NEC<br>Technologie<br>s              | As per tender/ corrigendum. |
| 622 | 8.14.1  | 1.1 | 221         | there in the latest Magic Quadrant for<br>Enterprise Network Firewall published by<br>Gartner   | Firewall solution offered from OEM must be there in the leader's Quadrant of the Magic Quadrant for Enterprise Network Firewall published by Gartner for consequetive 3 years (2015, 2016 & 2017)  | Check point<br>Software<br>Pvt. Ltd. | As per tender/ corrigendum. |
| 623 | 8.14.1  | 3.2 | 221         | NG Firewall should support at least 4,00,000 concurrent sessions  | NG Firewall should support at least 2,000,000 concurrent sessions  | Check point<br>Software<br>Pvt. Ltd. | As per tender/ corrigendum. |
| 624 | 8.14.1  | 3.3 | 221         | NG Firewall should support at least 15,000 connections per second   | NG Firewall should support at least 100,000 connections per second   | Check point<br>Software<br>Pvt. Ltd. | As per tender/ corrigendum. |

| 625 | 8.14.1 | 4.2  | 222 | functionality for the failover control & date interfaces for provide additional level of redundancy   | Firewall should support 802.3ad functionality for the failover control & date interfaces for provide additional level of redundancy  | Check point<br>Software<br>Pvt. Ltd. | As per tender/ corrigendum. |
|-----|--------|------|-----|---|--|--------------------------------------|-----------------------------|
| 626 | 8.14.1 | 4.4  | 222 | Firewall should support 802.3ad Ether channel functionality to increase the bandwidth for a segment.  | Firewall should support 802.3ad functionality to increase the bandwidth for a segment.   | Check point<br>Software<br>Pvt. Ltd. | As per tender/ corrigendum. |
| 627 | 8.14.1 | 5.22 | 223 | Should support more than 3000 application layer and risk-based controls that can invoke tailored intrusion prevention system (IPS) threat detection policies to optimize security effectiveness.  | Should support more than 7000 application layer and risk-based controls that can invoke tailored intrusion prevention system (IPS) threat detection policies to optimize security effectiveness.   | Check point<br>Software<br>Pvt. Ltd. | As per tender/ corrigendum. |
| 628 | 8.14.1 | 5.23 | 223 | Should support the capability (by purchasing license) of providing networkbased detection of malware by checking the disposition of unknown files in the cloud using the SHA-256 file-hash as they transit the network and capability to do dynamic analysis on premise (if required in future) on purpose builtappliance | Should have the capability (by purchasing license) of providing networkbased detection of malware by checking the disposition of unknown files in the cloud using the SHA-256 file-hash as they transit the network and capability to do dynamic analysis and must prevent in real time unkown malware patient-0 in email and web. | Check point<br>Software<br>Pvt. Ltd. | As per tender/ corrigendum. |
| 629 | 8.14.1 | 9.1  | 223 | The management platform must be accessible via a web-based interface and ideally with no need for additional client software  | The management platform must be accessible via a web-based interface or client software.   | Check point<br>Software<br>Pvt. Ltd. | As per tender/ corrigendum. |
| 630 | 8.14.2 | 1.1  | 224 | Firewall solution offered from OEM must be<br>there in the latest Magic Quadrant for<br>Enterprise Network Firewall published by<br>Gartner   | Firewall solution offered from OEM must be there in the leader's Quadrant of the Magic Quadrant for Enterprise Network Firewall published by Gartner for consequetive 3 years (2015, 2016 & 2017)  | Check point<br>Software<br>Pvt. Ltd. | As per tender/ corrigendum. |
| 631 | 8.14.2 | 3.1  | 224 | Should support at least 10 Gbps of NGFW Real world performance (includes FW, Application Visibility & IPS) from day one.  | Should support at least 20 Gbps of NGFW Real world performance (includes FW, Application Visibility & IPS) from day one.   | Check point<br>Software<br>Pvt. Ltd. | As per tender/ corrigendum. |
| 632 | 8.14.2 | 3.2  | 224 | NG Firewall should support at least 4,00,000 concurrent sessions  | NG Firewall should support at least 8,000,000 concurrent sessions  | Check point<br>Software<br>Pvt. Ltd. | As per tender/ corrigendum. |
| 633 | 8.14.2 | 3.3  | 224 | NG Firewall should support at least 50,000 connections per second   | NG Firewall should support at least 200,000 connections per second   | Check point<br>Software<br>Pvt. Ltd. | As per tender/ corrigendum. |
| 634 | 8.14.2 | 4.2  | 224 | Firewall should support 802.3ad ether channel functionality for the failover control & date interfaces for provide additional level of redundancy   | Firewall should support 802.3ad functionality for the failover control & date interfaces for provide additional level of redundancy  | Check point<br>Software<br>Pvt. Ltd. | As per tender/ corrigendum. |
| 635 | 8.14.2 | 4.4  | 224 | Firewall should support 802.3ad Ether channel functionality to increase the bandwidth for a segment.  | Firewall should support 802.3ad functionality to increase the bandwidth for a segment.   | Check point<br>Software<br>Pvt. Ltd. | As per tender/ corrigendum. |

|     | 0.44.2 | I = 22 I | 225 | Ch  | Charled are and as an about 7000 and lighting large  |                                      |                             |
|-----|--------|----------|-----|---|--|--------------------------------------|-----------------------------|
| 636 | 8.14.2 | 5.22     | 225 | and risk-based controls that can invoke tailored intrusion prevention system (IPS) threat detection policies to optimize security effectiveness.  | Should support more than 7000 application layer and risk-based controls that can invoke tailored intrusion prevention system (IPS) threat detection policies to optimize security effectiveness.   | Check point<br>Software<br>Pvt. Ltd. | As per tender/ corrigendum. |
| 637 | 8.14.2 | 5.23     | 225 | Should support the capability (by purchasing license) of providing networkbased detection of malware by checking the disposition of unknown files in the cloud using the SHA-256 file-hash as they transit the network and capability to do dynamic analysis on premise (if required in future) on purpose builtappliance | Should have the capability (by purchasing license) of providing networkbased detection of malware by checking the disposition of unknown files in the cloud using the SHA-256 file-hash as they transit the network and capability to do dynamic analysis and must prevent in real time unkown malware patient-0 in email and web. | Check point<br>Software<br>Pvt. Ltd. | As per tender/ corrigendum. |
| 638 | 8.14.2 | 9.1      | 226 | The management platform must be accessible via a web-based interface and ideally with no need for additional client software  | The management platform must be accessible via a web-based interface or client software.   | Check point<br>Software<br>Pvt. Ltd. | As per tender/ corrigendum. |
| 639 |        | SI. No.  |     | Additional Clause to be added :   |  | Check point<br>Software<br>Pvt. Ltd. |                             |
| 640 |        | 1        |     | The NGFW appliance should be able to eliminate threats and remove exploitable content, including active content and embedded objects and should be able to reconstruct files with known safe elements. The solution should reconstruct downloaded files, delivering sanitized risk-free files to users in real-time       |  | Check point<br>Software<br>Pvt. Ltd. | Not agreed.                 |
| 641 |        | 2        |     | The NGFW appliance should support N+1 clustering, supporting high-availability/clustering for more than 2 devices.  |  | Check point<br>Software<br>Pvt. Ltd. | Not agreed.                 |
| 642 |        | 3        |     | The NGFW appliance shall have a feature of holding multiple versions of OS to support resilience and easy rollbacks during the version upgrades.  |  | Check point<br>Software<br>Pvt. Ltd. | Not agreed.                 |
| 643 |        | 4        |     | The NGFW appliance must have an option to Provide actionable recommendations to improve regulatory compliance (PCI-DSS,HiPPA,SOX etc) in the same hardware.   |  | Check point<br>Software<br>Pvt. Ltd. | Not agreed.                 |

| 644 |   | 5   |   | Management should be a separate dedicated Appliance/Hardware for security management and monitoring with tired architecture for security movement and security gateway. The management server should be able to manage and monitor NGFWs, Network APT and Endpoint APT from a single console. |   | Check point<br>Software<br>Pvt. Ltd. | Not agreed.  |
|-----|---|-----|---|---|---|--------------------------------------|--|
| 645 | Chapte<br>r 2 -<br>Schedu<br>le of<br>Require<br>ments  | ### |   |   | Kindly clarity if the succesful bidder shall be issued Separate orders for Local Supply (Indian entity) and Imported Supply (Foreign Entity) and Local Services (Indian Entity)? Or a Composite order be given to the sucessful bidder? | Honeywell                            | Normally a composite order is issued against a work.   |
| 646 | Chapter- 2 Package I - Northern ( Relevant Sections for other package s - Package 2, Package 3 and Package 4) | 15  | 2 | Training of personnel over and above the on-site training, during the installation, maintenance and supervision period as detailed in the tender document. 1510 man weeks   | We need details on number of training/locations.  | Honeywell                            | Centralized as well as distributed locations such as Stations, Region HQ, RPF Chowkis etc. as per requirement. |
| 647 | Chapter-2 Package I- Northern ( Relevant Sections for other package s- Package 2, Package 3 and Package 4)    | 15  | 2 | per annum rate of Rs.3,00000/-) - Man-<br>Years 302*  | Kindly share the breakup of this number across locations (if any) , The man years mentioned herewith is total for a period of 3 years (2- Warranty + 1 Maintenance Supervision). Need clarity on same                                   | Honeywell                            | As per SOR   |

| 648 | Chapte<br>r 2 -<br>Schedu<br>le of<br>Require<br>ments  | 41 | Note:<br>Point b)              | phased manner strictly in line with the progress of the work. Successful bidder is required to discuss project progress and planning of supply material in consultation with the purchaser. Dumping of material shall not be permitted and no  |   | Honeywell | Material after inspection is to be despatched to the work place directly by bidder. Tentative list of station is being provided and final shall be given to successful bidder before the works of stations. |
|-----|---|----|--------------------------------|--|---|-----------|---|
| 649 | Chapter - 3 Technic al Require ments, Scope And Architec ture Of Video Surveilla nce System                               | 47 | 3.A.1.4.5:<br>Scope of<br>Work | Supply of any other equipment/infrastructure or services required for the proper installation, testing, commissioning, operation, and maintenance of the Edge Infrastructure of the video surveillance solution as per the approved design.  | We request any item required to complete the project over and above tender BOQ must be on payable basis   | Honeywell | As per tender /corrigendum.   |
| 650 | Chapter-3<br>Technical<br>Requirem<br>ents,<br>Scope<br>And<br>Architect<br>ure Of<br>Video<br>Surveillan<br>ce<br>System | 47 | 3.A.1.4.8                      | Remote operation and monitoring of a cluster of stations from RPF/GRP Thana/Post through the RailTel/Railways TCP/IP network. Bidder is required to plan sufficient number of VMS/EMS licenses, IT equipments to facilitate the same. Bidder may also be required to extend fiber/network connectivity from the nearest station to the RPF/GRP Thana/Post. | RailTel should provide permission for road, footpath etc cutting/digging/refilling from PWD/Jal Nigam/Electricity department if required.         | Honeywell | As per tender /corrigendum.   |
| 651 |   |    |                                |  |   | Honeywell |   |
| 652 |   |    |                                |  | Kindly also share the List of RPF<br>Chowkis/Thana/Post along with covered<br>stations within the cluster of respective RPF<br>Chowki/Thana/Post. | Honeywell | Tentative list is being shared.   |
| 653 |   |    |                                |  | Also, are all the stations ready or few are under construction?   | Honeywell | These are all existing working stations as on date.   |

| 654 | Chapter - 3 Technical Requirem ents, Scope And Architectu re Of Video Surveillanc | 48 | 3.A.1.4.10 | training to the Railways/Railtel staff for the VSS System to be installed and commissioned.   |  | Honeywell | Centralized as well as distributed locations such as Stations, Region HQ, RPF Chowkis etc. as per requirement. |
|-----|---|----|------------|---|--|-----------|--|
| 655 | Chapter - 3 Technical Requirem ents, Scope And Architecture Of Video Surveillanc  | 50 | 3.A.1.10   | Timelines for Training and Development<br>are as follows: Point No 4 - Continuous<br>training and retraining As and when<br>required by RailTel | Need clarity on frequency of training/ year  | Honeywell | Tender clause is clear.  |
| 656 | Chapte<br>r 4 -<br>Comm<br>ercial<br>Terms<br>and<br>Conditi<br>ons               | 80 | 4.A.4      | and Commissioning from the date of award of the Contract (LOA) are tabulated as under.  | Since most of the equipment's are imported and have longer lead time, also the geography of the stations is very wide therefore Completion of the project as per time table where D= Date of Award of LOA which not practically feaseable. We request Railtel to extend the completion of project timelines for to be atleast 5 months from the date of successful inspection and acceptance of all components by RDSO (D= on receipts of Successful inspection certificate from RDSO) | Honeywell | As per tender/ corrigendums.   |
| 657 | Chapte<br>r 4 -<br>Comm<br>ercial<br>Terms<br>and<br>Conditi<br>ons               | 80 | 4.A.3.5    |   | We request the monthly payment against AMC   | Honeywell | As per tender/ corrigendums.   |

| 658 | Chapte<br>r 4 -<br>Comm<br>ercial<br>Terms<br>and<br>Conditi<br>ons | 83  | 4.A.5                        | Payment Terms  | Kindly confirm the Supply payment shall be<br>on prorate basis station/site wise/RPF<br>Thana/Chowki basis   | Honeywell | Clause as per tender/corrigendum prevails. |
|-----|---|-----|------------------------------|--|--|-----------|--|
| 659 | Chapte<br>r 4 -<br>Comm<br>ercial<br>Terms<br>and<br>Conditi<br>ons | 83  | 4.A.5                        | Payment Terms  | Capping on PAC and FAC is not mentioned if site front is not available/delayed or delay for any reason whatsoever beyond the scope of the contractor. Request if the same can be capped at 30 days from date of request from the contractor. | Honeywell | Clause as per tender/corrigendum prevails. |
| 660 |   |     |                              |  |  | Honeywell |  |
| 661 |   |     |                              |  | Also request you to kindly facilitate the payment against BG submission of equivalent percentage.  | Honeywell | Clause as per tender/corrigendum prevails. |
| 662 | Chapte<br>r 4 -   | 94  | 4.A.13.                      | These will be made at source as per the rules prevalent in the area of work.   | Need Details Clairty on statutory Deduction ? WCT should not deducted for all Inter-   | Honeywell | Clause as per tender/corrigendum prevails. |
| 663 | Comm<br>ercial<br>Terms<br>and<br>Conditi                           |     | (Statutory<br>Deductio<br>n) |  | state material and Imported Material -<br>Request you to please confirm the same.  | Honeywell | Clause as per tender/corrigendum prevails. |
| 664 | Chapte r 4 - Comm ercial Terms and Conditi ons                      | 93  | 4.A.11                       | The timely delivery is the essence of this tender. Liquidated damages will be applicable at the rate of half percent per week or part thereof for undelivered portion of SOR subject to a maximum of 10% of the cost of Purchase order/LOA for any rea-son whatsoever attributed to failure of bidder. RailTel will have the right to cancel the order, place order on alternative source besides levying the liquidated damages as above. | We request you to get this reduced to 5% on Undelivered Portion  | Honeywell | Clause as per tender/corrigendum prevails. |
| 665 | Chapte<br>r 4 -   | 94  | 4.A.12.                      | The rates quoted should be CIP destination. The destination shall be   | Need More Clairty on End location ?  | Honeywell |  |
| 666 | Comm  |     | (Transport ation)            | defined POP / nominated office of RailTel  |  | Honeywell | As per tender/corrigendum                  |
| 667 | Chapte<br>r 4 -<br>Comm   | 108 | 4.A.27.2                     | Pre-shipment / pre-dispatch inspection shall be carried out at manufacturer's / bidder's works by RailTel's authorized   | How it will be handled for imported and HSS<br>Material ?  | Honeywell | As per tender/corrigendum                  |
| 668 | ]   |     |                              | romanistic Atlantant fith  |  | Honeywell |  |

| 669 | erciai<br>Terms<br>and<br>Conditi                                   |     |               | representative. At least part of the material should be offered for inspection within 30 days of issue of confirmed Purchase Order/LOA. Traveling, lodging &  | Also Kindly confirm whether High Sea Sales be allowed for the imported materials?   | Honeywell | As per tender/corrigendum               |
|-----|---|-----|---------------|---|---|-----------|---|
| 670 | Chapte<br>r 4 -<br>Comm<br>ercial<br>Terms<br>and<br>Conditi<br>ons | 109 | 4.A.29        | SETTLEMENT OF DISPUTES: In case of any dispute concerning this order both the bidder and RailTel/REL shall try to settle the same amicably through mutual discussion/negotiations. Any unset-tled dispute shall be settled in terms of Indian | New legislation has been enacted in India amending the current Arbitration and Conciliation Act of 196 to ensure the neutrality of arbitrators any person who is an employee, consultant or adviser or who has had past or present relationships with a party is ineligible to act as an arbitrator. We request you to ammend the clause accordingly. | Honeywell | As per tender/corrigendum               |
| 671 | Chapte<br>r 4 -<br>Comm<br>ercial<br>Terms<br>and<br>Conditi<br>ons | 110 | 4.A.32        | Risk and Cost: The Maximum Liability of<br>bidder to any Loss/Damages to RailTel<br>including Li-quidity Damages and<br>Performance Guarantee shall be limited<br>to 100% of Value of contract.   | We request you to explicitly exclude consequential and indirect damages from our overall liability.   | Honeywell | As per tender/corrigendum               |
| 672 | Chapte<br>r 4 -   | 11  | 4.A.36.5      | •   | We understand that there are two parts of the bid submissions:  | Honeywell | As per tender/corrigendum               |
| 673 | Comm  |     |               | Commercial Bid) & Part-II – Price Bid as per instructions given in chapter-4B   | Part 1 - Credential/Techno-commercial bid   | Honeywell | As per tender/corrigendum               |
| 674 | Terms<br>and  |     |               |   | Part 2 - Price Bid  | Honeywell | As per tender/corrigendum               |
| 675 | Conditi<br>ons  |     |               |   | In case the bidder bids for more than one package, please confirm whether Part 1 of the bid for all four packages be submitted seperately for all 4 packages or do we submit one composite technical bid for all packages. Kindly confirm.  | Honeywell | As per tender/corrigendum               |
| 676 | Chapte<br>r 6 -<br>Form<br>No.23                                    | 165 | Form<br>No.23 | This letter should be on the letterhead of<br>the OEM duly signed by an authorized<br>signatory   | Its contradicting since it has been asked to submit the Bidder's signature in OEM letter head. Kindly confirm whether the letter need to be submitted on OEM or bidder letter head or both.   | Honeywell | Tender/corrigendum clause shall prevail |

| 677 | Section 7 - Annexu re II: Deatile d Standar d Conditi ons applic able for the Annual Mainte nance Contra ct | 185 | 7.14 | shall be entitled to deter-mine and terminate the contract at any time, should in the RailTel's opinion, the cessation of the work becomes necessary owing to paucity of funds or from any other cause whatever, in which case the value of approved materials at site and of work done to date by the Contractor will be paid for in full at the rate specified in the con-tract. Notice in writing from the | Owing to paucity of funds or any reason thereof, if Railtel decides to determine the contact post the design of the sytem is approved by RAILTEL and subsequently the material ordered by the contractor, the contractor is should be entitled for claims expendire incurred by him on this account and any loss of profit in anticipation of this contract. The decision regarding this shall be mutually agreed between both parties and in case of any disputes shall be subject to the Clause 7.17 - Settlement of Disputed and Arbitration | Honeywell | Tender/corrigendum clause shall<br>prevail                    |
|-----|---|-----|------|---|---|-----------|---|
| 678 | 1   |     |      | Downson to a determination of contract  | Also go su cak vo v ko al suife de la fall suita s  | Honeywell |   |
| 679 |   |     |      |   | Also request you to <u>clarify the following auestions on account of funds for this project</u> :   | Honeywell | As under  |
| 680 |   |     |      |   | Are the funds already available with RailTel? Please clarify.   | Honeywell | P.O. is placed only after the funds availabilty.              |
| 681 |   |     |      | , , , , , , , , , , , , , , , , , , ,   | 2. Who is the funding authority for this project ? Please clarify.  | Honeywell | It is the Railway ministry work and to be funded by ministry. |
| 682 |   |     |      |   | 3. Who would be the fund sanctioning authority? Please clarify.   | Honeywell | Competent authority of Ministry of Railways.                  |
| 683 |   |     |      |   | 4. How is the fund utilization for this project? Please clarify.  | Honeywell | For VSS work.   |

| 684 |                                  |                    |         |   | 5. As per RFP project completion is 31-March-2018 (which we have requested for extension). Is there a dependency on 31.03.2018 on account that the fund will lapse post this date? Will budget revalidation be required post 31st March 2018? Please clarify. | Honeywell | It is internal matter of ministry and work extensions are given and funds too are made available beyond financial years as per requirement. |
|-----|----------------------------------|--------------------|---------|---|---|-----------|---|
| 685 | Chapte<br>r-7,<br>Chapte<br>r 4, | 85 <i>,</i><br>181 | 4.A.6.1 | submit a Performance Bank Guarantee<br>(PBG) within 15 days of the issue of LOA as<br>per BDS (chapter-5) for the satisfactory  | delivery period/ AMC by RailTel if such extension is due to reasons not attributable  | Honeywell |   |
| 686 |                                  |                    | 7.2     |   |   | Honeywell |   |
| 687 |                                  |                    |         |   |   | Honeywell |   |
| 688 |                                  |                    |         | Section 7: The contractor is required to submit a Performance Bank Guarantee (PBG) to respec-tive Executive Director/Regional General Manager within 15 days from the date of is-sue of LOA for AMC @ 10% of the value of the AMC contract's annual value valid for a period of 64 months (4 months beyond the AMC period of 5 years) from the date of issue of LOA. The Performa for PBG is given in Form No. 1 of Chapter 6 of this tender document. If the AMC period got extended, the PBG will also be extended accordingly. |   | Honeywell | Tender/ corrigendum clause prevails.  |
| 689 | ]                                |                    |         |   |   | Honeywell |   |
| 690 |                                  |                    |         | The Performance Bank Guarantee will bear no interest  |   | Honeywell |   |
| 691 |                                  |                    |         |   |   | Honeywell |   |

| 692 | Additio<br>nal | NA | New<br>Clause |   | Please confirm whether the Monitoring<br>Station is already available at all<br>stations/RPF Chowkis/GRP<br>Chowki/Thana/Post or the same is to be<br>under construction?  | Honeywell | Available                  |
|-----|----------------|----|---------------|---|--|-----------|----------------------------|
| 693 | Additio<br>nal | NA | New<br>Clause |   | How the invoices be validated? Will Invoice validation be Station-wise OR Zone-wise OR from HQ? Please clarify.  | Honeywell | As per tender/ corrigendum |
| 694 | Chapte<br>r-2  | 8  |               | General   | VA & FRS and associated servers as mentioned in the RDSO latest guidelines are not mentioned in the SOR. Kindly clarify.   | Honeywell | As per tender/ corrigendum |
| 695 | Chapte<br>r-2  | 8  |               | General   | Storage for 30 days as mentioned in the RDSO latest guidelines is not mentioned in the SOR. Kindly clarify.  | Honeywell | As per tender/ corrigendum |
| 696 | Chapte<br>r-2  | 8  |               | SOR   | Pls clarify if we can utilize Edge Devices as<br>Video Management System Servers or<br>separate servers to be provided for the<br>Video Management System at all stations. | Honeywell | As per tender/ corrigendum |
| 697 | Chapte<br>r-2  | 8  |               | SOR   | Pls clarify if bidder has to consider 7 days storage inside the Edge Devices at stations.  | Honeywell | As per tender/ corrigendum |
| 698 | Chapte<br>r-2  | 8  |               | SOR   | Since Cameras, Video Management System<br>Servers and Storage will form a complete<br>CCTV solution. Kindly clarify the purpose of<br>the Edge Devices at all stations.    | Honeywell | As per tender/ corrigendum |
| 699 | Chapte<br>r-2  | 12 | 33            | Supply of Video Management Sys-tem (Video Management & Video Recording) server hardware and all accessories required for installation purposes as defined in clause 8.2 of chapter 8. | It is not clear from the SOR that if the Video<br>Management System Hardware has to be<br>installed at all stations or at only RPF/ FRP<br>Chowki/ Thana/ Post.            | Honeywell | As per tender/ corrigendum |
| 700 | Chapte<br>r-4  | 95 | 4.A.14.1      | OEM undertaking to sign MoU/Teaming<br>Agreement with SI  | We understand that against this requirement we will get Form-10 signed from the respective OEMs (Form No10 is the proforma for undertaking to sign tripartite agreement.   | Honeywell | As per tender/ corrigendum |

| 701 | Chapte<br>r-2 | 42 | I    | capacity of storage system supplied at the Station should be supplied with an additional 50% capacity over and above the capacity required for 7 days recording computed on the basis of cameras given for respec-tive station from day one.    | A1 Type Station- 43 Cameras<br>A Type Station- 30 Cameras<br>B Type Station- 18 Cameras   | Honeywell | As per tender/ corrigendum                                |
|-----|---------------|----|------|---|---|-----------|---|
|     | Chapte<br>r-2 | 42 | IV   |   | Kindly specify which all items in available infrastructure will be utilized.  | Honeywell | Existing OFC network, switches etc.<br>whatever available |
|     | Chapte<br>r-2 | 42 | ٧    | Make/Model applies to items viz. different types of cameras, servers, edge devices, workstation, storage, large video displays units, VMS Software, switches (Type-I, II, III and IV separately), Firewall and NMS.                             | "cameras, servers, edge devices,<br>workstation, storage, large video displays  | Honeywell | As per tender/ corrigendum. Clause is clear in itself.    |
|     | Chapte<br>r-2 | 43 | XIII | tool including all hardware and software in a centralized set-up in the Region. The monitoring services at all stations/RPF Chowki/Thana under the region will be provided from the centralized set-up through the clients installed at all the | Kindly clarify which one would be the central location in each region.  We understand that NMS client application shall be installed on the CCTV workstation At the Stations/ RPF Chowki/ Thana and no additional Workstation hardware needs to be offered. Kindly clarify. | Honeywell | As per tender/ corrigendum. Clause is clear in itself.    |

| 705 | Chapte<br>r-3 | 50 | 3.A.1.4.2  | of cameras, switches etc. at various<br>locations like parking are-as,<br>entrance/exit points, platforms, yards,  | We understand that this exercise shall be done by succesfull bidder during detailed designing before execution. Any variation in quantities of Cameras, Switches, Servers, VMS Licenses and associated infrastructure from the RFP SOR, during detailed designing shall be paid by the customer on prorata basis for the SITC of the additional quantities. | Honeywell | As per tender/ corrigendum.   |
|-----|---------------|----|------------|--|---|-----------|---|
| 706 | Chapte<br>r-3 | 50 | 3.A.1.4.6  | Supply of all software/licenses for the solution including periph-eral applications, middleware, environmental software or any oth-er related software/licenses as required in the proposed solution (Including AMC and Warranty).   | SOR does not have any line item for the<br>Software. Kindly clarify how the Software<br>licenses will be considered in the bid.   | Honeywell | Bidder to quote as per SOR. Bidder is required to offer the complete solution along with BOM(s) as asked for. |
| 707 | Chapte<br>r-3 | 50 | 3.A.1.4.8  | Remote operation and monitoring of a cluster of stations from RPF Thana/Chowkis through the RailTel/Railways TCP/IP net-work. Bidder is required to plan sufficient number of VMS/NMS licenses, IT equipments to facilitate the same. Bidder may also be required to extend fiber/network connectivity from the nearest station to the RPF Chowki. | Kindly provide the details of Stations and RFP Cowkies where bidder has to extend Fiber/ Network Connectivity. It is required to estimate the correct cost for implementation.  | Honeywell | Tentaive list of stations is being uploaded.  |
| 708 | Chapte<br>r-3 | 50 | 3.A.1.4.11 | To demonstrate the functioning of all the modules of software and features of hardware component as and when required by Railways.   | Kindly clarify the meaning of "as and when required".   | Honeywell | Clause is self explainatory.  |
| 709 | Chapte<br>r-3 | 51 | 3.A.1.7.1  | buildings for carrying out the awarded   | Kindly provide the per unit charges or lumpsum charges per month for the power supply at each station to be paid by the bidder to Railways.   | Honeywell | Clause is self explainatory. Charges vary from time place to place and broadly are as per commercial rates.   |

| 710 | Chapte<br>r-3 | 52 | 3.A.1.7.3 | Indian Railways shall give permission to install video Surveillance related infrastructure in Railway area subject to non-interference with the existing devices and to the rail users.  | Kindly clarify if the installation work can be carried out on 24/7 basis in Day and Night with the permission of Railways.  | Honeywell | Clause is self explainatory.  |
|-----|---------------|----|-----------|--|---|-----------|---|
| 711 | Chapte<br>r-3 | 53 | 3.A.1.10  | Continuous training and retraining     -As and when required by RailTel  | Kindly clarify total no. of training sessions and how many people to be trained per session throughout the contract duration.   | Honeywell | As per tender/ corrigendum clauses<br>and as per requirement/slots<br>available |
| 712 | Chapte<br>r-3 | 55 | 3.A.1.16  | All OEMs of Edge Servers, Edge Devices,<br>Cameras, Network equipment, Work-<br>stations and etc. should give an<br>undertaking that all licenses supplied by<br>them would be registered in favor of M/s<br>REL or its nominated agency.  | Pls note that Workstations, Cameras,<br>Network Equipments etc comes with pre-<br>installed OEM software licenses and it is<br>licenced to whom so ever the equipment is<br>sold to.  | Honeywell | Clause as per tender/corrigendum prevails.                                      |
| 713 | Chapte<br>r-3 | 57 | 3.B.1     | To implement video surveillance solution, each station should have robust, secure and scala-ble network architecture implemented which will cover all platforms and other areas such as waiting halls, ticket counters, entry, exit, refreshment area, and foot over bridge, parking area etc. of a railway station. | Since the quantities of the cameras has already been defined in the SOR, we understand that coverage of all of these areas has already been considered while arriving to the camera quantities. Any increas in the camera quantities and associated ICT equipment and accessories shall be paid by the purchaser to the bidder on prorata basis.  Earlier Tender in Yr.2016 was having more no. of cameras at each type of stations as compared to the latest tender in Yr.2017. Since there is a significant reduction in the camera qty at each station, Pls clarify which all locations/ areas has been removed from the camera coverage in the latest tender. | Honeywell | Bidder to quote as per SOR.   |
| 714 | Chapte<br>r-3 | 57 | 3.B.2     | any other locations or any other services aggregation switch will have sufficient ports available. Also there will be  | We understand that the offer has to be submitted as per technical specifications and SOR quantities mentioned in the tender. Therefore availability of spare ports on any switch and spare fiber core in OFC cable shall be limited to the offerd qty only. Any increase in switch, fiber and associated active & passive network quantities shall be paid by the purchaser at prorata basis.   | Honeywell | Bidder to quote as per SOR.   |

| 715 | Chapte<br>r-3 |    | 3.B.4   | Railway Refreshment Room, Low ceiling Entry /Exits should be covered by Dome cameras with vari-focal lens d) PTZ should be mounted for bigger open areas, where Pan, Zoom & Tilt functionality will be used  | Camera Quantities at each type of station as defined in the tender are not sufficient to provide full coverage of the areas mentioned in this clause. Kindly clarify if additional cameras, software licenses, servers, storage and Network infra shall be purchased seperatly. | Honeywell | Bidder to quote as per SOR. |
|-----|---------------|----|---------|--|---|-----------|-----------------------------|
| 716 | Chapte<br>r-3 | 62 | 3.B.4.2 | B Type Railway Station will have approx.  18 to 20 IP cameras depending on size of Railway stations to begin with. However, as depending upon coverage requirement this may be 30 to 40 IP cameras, the design of platform/station infrastructure shall be kept ready accordingly. IP cameras should be connecting to RPF Chowki through CCTV network.   | We understand that the SOR quantities given in the tender takes care of the additional infrastructure requirement in case camera quantities increases at B Type Stations.   | Honeywell | Bidder to quote as per SOR. |
| 717 | Chapte<br>r-3 | 62 | 3.B.4.3 | A1/A Type Railway Station will have approx. 30 to 50 IP cameras depending on size of Railway stations to begin with. However, as depending upon coverage requirement this may be 60 to 90 IP cameras, the design of platform/station infrastructure shall be kept ready accordingly. IP cameras should be connecting to Division level through CCTV network. Divi-sion level station may be same location or should connect all A Type Railway station of that RPF Chowki. | We understand that the SOR quantities given in the tender takes care of the additional infrastructure requirement in case camera quantities increases at A1/A Type Stations.  | Honeywell | Bidder to quote as per SOR. |

| 718 | Chapte<br>r-3  | 62  | 3.B.4.4                          |  | Positioning of Firewall and IPS at all stations doesn't seems to be correct. Kindly review the same.  | Honeywell | Clause as per tender/ corrigendum prevails. |
|-----|----------------|-----|----------------------------------|--|---|-----------|---|
| 719 | Chapte<br>r-3  | 67  | 3.C                              |  | Since NMS is already a part of this tender, A separate ITSM tool will not be required for Network Switches and UPS. We request you to kindly remove the same.   | Honeywell | Clause as per tender/ corrigendum prevails. |
| 720 | CHAPT<br>ER- 3 | 77  | Clause<br>3.A.1.4.1.1<br>2/13/14 | 3.A.1.4.12 Maintenance supervision period of 12 months from the date of award of PAC of the RPF/GRP Thana/Post. 3.A.1.4.13 Warranty period of 24 months from the date of expiry of mainte-nance supervision period of installed system at no cost to Railways/RailTel. 3.A.1.4.14 AMC (including repair / replacement of all consumables) for 5 years after the completion of 24 months of warranty period.  | since warranty is required for 36 month which is further divided into 12 month supervision and 24 month warranty. Delay in PAC will add to the warranty cost. Any delay due to SNR will be bourne by RAILTEL. | Honeywell | Clause as per tender/corrigendum prevails.  |
| 721 | CHAPTE<br>R- 4 | 106 | 4.A.24                           | RailTel would also enter into Rate Contract with the firm to whom the con-tract is awarded for catering to additional requirement of Cameras, Switches, Servers, Stor-ages, Rack, UPS, FMS, VMS software & Other associated equipments of Schedule of re-quirements (SOR) as and when arise in future. Rate Contract on the successful tenderer would be placed separately and would be operative from the date of PAC of the first Sta-tion/RPF/GRP Chowki/Thana/Post and would be valid for a period of 12 months. | Please calrify whether Exchnage Rate Variation (ERV) Clause would be applicable to this.  | Honeywell | Clause as per tender/corrigendum prevails.  |

| 722 | CHAPTE<br>R- 5  |                     | 8.3.2.3.1.1 | (B) On other stations: iii) One HD stream (@720P and @25FPS) from Full HD Camera on H.265 and iv) One FHD stream (@1080P and @15FPS from 4K UHD Camera on H.265 should be recorded for 30 days in external storage at RPF/GRP Thana/Post.                          | We may request you to kindly maintain the recording parameter similar to RPF Thana/Chowki to ensure that quality of image doesn't impact on the investigation once any breach is found after 7 days.   | Honeywell              | Clause as per tender/ corrigendums prevails.   |
|-----|---|---------------------|-------------|--|--|------------------------|--|
| 723 | Chapte<br>r-4   | 113                 | 4.A.45.     | Preference to Domestic Manufacturers   | Please whether this is as per DIPP/Miety<br>Approved Products  | Honeywell              | Clause as per tender/ corrigendums prevails and is clear.                                |
| 724 | CHAPTE<br>R- 2  | 11                  | SOR         | Storage System for recording of alerts, alarms of cameras of analyt-ics and other applications require-ment as defined in clause 8.3 and 8.4 of chapter 8. Detailed Bill of Material (BoM) shall be prepared and submitted along with the Bid as per SOR Note-VII. | Please clarify whether this storage would be used for EMS generated logs also, if yes then how long the logs to be maintained.   | Honeywell              | Tender document including corrigendum is clear. Please also refer to clause No. 83.1.1.5 |
| 725 | SPECIFI<br>CATION<br>NO.<br>RDSO/S<br>PN/TC/6<br>5/2016,<br>revision<br>4.0 | page<br>14 of<br>45 | 5.4.1-(i)   |  | Request to kindly consider and give relaxation of +/-0.1mm for lens. Each OEM has its own set of lens and lens specs varies with each OEM. +/-0.1 mm will not have much impact hence there will be no impact on desired output or functional requirement. We are offering 4.2 -25.2 mm lens in 4K UHD model. | Panasonic<br>India Ltd | Clause as per tender/ corrigendum prevails.  |
| 726 | SPECIFI<br>CATION<br>NO.<br>RDSO/S<br>PN/TC/6<br>5/2016,<br>revision<br>4.0 | 18<br>out of<br>45  | 7.1         | P/T/Z (Pan/Tilt/Zoom) IP Colour Camera specification. There is no IR LED requirement is mentioned in specs.  | There is no IR LED requirement is mentioned in specs. Do we have to consider PTZ camera with no inbuilt IR LED. Please confirm.  | Panasonic<br>India Ltd | Clause as per tender/ corrigendums prevails.   |
| 727 | SPECIFI<br>CATION<br>NO.<br>RDSO/S<br>PN/TC/6<br>5/2016,<br>revision<br>4.0 | 17<br>out of<br>45  | 7.1-(xxix)  | Enclosure Protection: Vandal proof and Impact<br>resistant Aluminium enclosure with IP66 or NEMA-4 or<br>better.   | We assume that IK 10 rating for PTZ camera is<br>optional and the camera should be IP66 and<br>Vandal Proof. Please confirm  | Panasonic<br>India Ltd | Clause as per tender/ corrigendums prevails.   |
| 728 | General   |                     |             | EMD  | we request for accpetance of BG gurantee in place of DD only   | SIEMENS                | Clause as per tender/ corrigendums prevails.   |

| 729 | RailTel/Te<br>nder/OT/<br>CO/P/201<br>7-18/VSS<br>/432<br>dated 29-<br>03-18                         |     | 4.A.14.<br>Qualificati<br>on Criteria |  | we assume that if the we have one single PO<br>worth 300 Crore then the bidder is qualified for<br>all 4 region packages. Please confirm   | SIEMENS | Tender clause is self explainatory.  |
|-----|--|-----|---------------------------------------|--|--|---------|--|
| 730 | RailTel/Te<br>nder/OT/<br>CO/P/201<br>7-<br>18/VSS/4<br>32<br>PACKAGE<br>IV:<br>SOUTHER<br>N 6 a iii | 35  | 6 a (iii)                             | For Category F stations                      | Kindly clarify the category F stations   | SIEMENS | Category F stations are not covered<br>under scope of this tender. Please<br>refer tender/ corrigendums. |
| 731 | 3.A.1.16<br>SUPPLY<br>OF<br>SOFTWAR<br>E   | 52  | 3.A.1.16                              | should give an undertaking that all licenses | Is the procurement of same software license key for each region is allowed? Base license for VMS will remain 1. Channel licenses shall be dependent on no of cameras. Same Base license can be used for VMS as far as Legal Entity remains same. | SIEMENS | Clause as per tender/ corrigendums prevails.   |
| 732 | 4.A.5.<br>Payment<br>Terms   | 83  | 4.A.5.<br>Payment<br>Terms            | Payment Terms                                | We request for 10% Mobilization Advance  | SIEMENS | Clause as per tender/ corrigendums prevails.   |
| 733 | 4.A.5.<br>Payment<br>Terms   | 84  | 4.A.5.<br>Payment<br>Terms            |  | Kindly define the credit period after submission of documents  | SIEMENS | Clause as per tender/ corrigendums prevails.   |
| 734 | RailTel/Te<br>nder/OT/<br>CO/P/201<br>7-18/VSS<br>/432<br>dated 29-<br>03-18                         | 168 | CHAPTER-<br>7<br>Annexure<br>1        |  | As per the estimated calculation based on inuts in Chapter 7, total HD Bullet Camera Qty is not matching with BOM. Total Estimated Qty is 72451 for 4 regions  | SIEMENS | Bidder to quote camera quantities as per SOR.  |

| 735 | RailTel/Te<br>nder/OT/<br>CO/P/201<br>7-18/VSS<br>/432<br>8.3.1.1<br>General<br>Paramete<br>rs  | 208 | 1  | network. Therefore, bidder is required to propose a cluster based solution constituting Servers, Storage, Switches and Video applications etc. at RPF/GRP Thana/Post locations on the basis of following design param-eters.   | Corresponding RPF/GRP Thana/Post for a group of C, D and E stations is not clear. This is required for server and storage size calculations. We require Qty of Station (C,D,E) which are grouped under which RPF?   | SIEMENS | Please refer clause 8.3.1.2 of<br>chapter-8 along with corrigendums<br>of tender document.              |
|-----|---|-----|--|--|---|---------|---|
| 736 | RailTel/Te<br>nder/OT/<br>CO/P/201<br>7-18/VSS<br>/432<br>8.3.2.3<br>Recording<br>Paramete<br>rs  | 211 | 8.3.2.3<br>Recording<br>Parameter<br>S                       | connectivity failure, video stream and alarms<br>would be stored locally at the Video<br>Recording & Processing Unit for that du-<br>ration and would transfer these data<br>automatically to RPF/GRP Thana/Post when  | According to tender, local recording of C,D,E stations will be done at processing unit at High Quality(1080p) and corresponding RPF server at low Quality(720p). But in case of nework disconnect-connect again between RPF and stations, recording data will be copied from processing unit to RPF server. So how should we calculate recording size at RPF. Based on 1080p or 720p? | SIEMENS | Tender/corrigendum clauses shall prevail.   |
| 737 | RailTel/Te<br>nder/OT/<br>CO/P/201<br>7-<br>18/VSS/4<br>32<br>8.3.1.1<br>General<br>Paramete<br>rs  | 209 | 8.3.1.1  | 8.3.1.1.5 Bidder to also propose an external storage solution at RailTel Datacenter for keeping flagged/marked video data by RPF/GRP personnel for longer reten-tion, FRS & VA alerts across all stations within the jurisdiction of RailTel Region for 30 days, Audit trail logs, application data etc. as per solution re-quirement and sizing as per SOR. | How much flagged/marked data will be considered for storage?  | SIEMENS | Bidder to quote Storage for<br>Datacenter as mentioned in the<br>SOR and tender/ corrigendum<br>clauses |
| 738 | RailTel/Te<br>nder/OT/<br>CO/P/201<br>7-18/VSS<br>/432 8.18.<br>Video<br>Recording<br>&<br>Processin<br>g Unit for<br>non RPF<br>Stations | 231 | 8.18. Video Recording & Processing Unit for non RPF Stations |  | Do we have to do analytics of C,D,E stations in processing unit at the station or the related RPF   | SIEMENS | Please refer to tender/ corrigendum clauses.  |

| 739 | RDSO SPECIFICATI ON OF IP BASED VIDEO SURVEILLAN CE SYSTEM. RDSO/SPN/T C/65/2016 Rev 4.0 2.0 SYSTEM DESCRIPTIO N | 7  | 2.13                          | Typically minimum two nos. of 4K UHD Fixed Box Cameras need to be provided on each platform with Face Recognition Software in addition to one such camera each on entry and exit points to the station or any other location as decided by purchaser as per site requirement. | Does Face Recogntion software require at entry or exit points also? If so please specy the Qty on which Face Recognistion or Analstics required        | SIEMENS   | Please refer to tender/ corrigendum clauses.   |
|-----|--|----|-------------------------------|---|--|-----------|--|
| 740 | RDSO SPECIFICATI ON OF IP BASED VIDEO SURVEILLAN CE SYSTEM. RDSO/SPN/T C/65/2016 Rev 4.0 20.0 Software License:  | 38 | 20.4                          | Licensing of various types of Video Analytics Software as mentioned in Clause no. 18.4 depending upon numbers of cameras are to be specified.   | Kindly specifiy the quantification of each type of licenses required.  | SIEMENS   | As per clauses of tender/<br>corrigendums/ RDSO specification<br>and solution requirement. |
| 741 | General  |    | General                       | General   | We request for 1 month Extention for bid<br>Submission, as the given time is not sufficent to<br>prepare quality bid for the scope of work<br>involved | SIEMENS   | Clause as per tender/ corrigendums prevails.   |
| 742 |  |    | Railtel RFP<br>Page No<br>207 | IP Cameras of Fixed Bullet type, Fixed Dome<br>type, P/T/Z type and 4K UHD Bullet type IP<br>colour camera at stations:   | All camera shall be equipped with Infra red illuminator with range 20 m or more.   | HikVision | Clause as per tender/ corrigendums prevails.   |
| 743 |  |    | Railtel RFP<br>Page No<br>207 | IP Cameras of Fixed Bullet type, Fixed Dome<br>type, P/T/Z type and 4K UHD Bullet type IP<br>colour camera at stations:   | All camera shall be equipped with Infra red illuminator with range 20 m or more.   | HikVision | Clause as per tender/ corrigendums prevails.   |
| 744 | RDSO<br>Amend<br>ment<br>No 3  | 4  |                               | Bullet camera<br>Motorized Varifocal Lens   | Motorized Varifocal IR corrected Lens suitable<br>for 2 Mega<br>Pixel Full HD Camera   | HikVision | Clause as per tender/ corrigendums prevails.   |
| 745 | RDSO<br>Amend<br>ment<br>No 3  | 4  |                               | 4K Bullet camera<br>Motorized Varifocal Lens  | Motorized Varifocal IR corrected Lens suitable for 2 Mega<br>Pixel Full HD Camera  | HikVision | Clause as per tender/ corrigendums prevails.   |

|     | VSS-   |     |     | Eligibility criteria for OEM   |   |  |  |
|-----|--|-----|-----|--|---|--|--|
| 746 | Stations<br>,4.A.14.<br>1.3  | 101 |     |  | Request for OEM Criteria Eligibility  | HikVision                                      | Clause as per tender/ corrigendums prevails.                               |
| 747 | VSS-<br>Stations<br>,4.A.14.<br>1.3  | 101 |     | Eligibility criteria for OEM   | The OEM(s) whose products have been offered in the bid should have a mini-mum cumulative turnover of INR 360 crores for OEMs supplying camera         | HikVision                                      | Clause as per tender/ corrigendums prevails.                               |
| 748 | Amendm<br>ent No.<br>1.0 to<br>RDSO<br>Specifica<br>tion no.<br>RDSO/S<br>PN/TC/6<br>5/2016,<br>Revision<br>4.0 for<br>IP Based<br>Video<br>Surveilla<br>nce<br>System | 1   | 2.3 | "2.3 In IP based Video Surveillance System, the Cameras shall be provided at different locations so that the output is available as Ethernet and connected to the Servers/NVRs. Servers/NVRs in turn connected to the backbone IP Network.  For Cloud based Architecture, Camera output on Ethernet shall be connected to the MPLS/ IP network through Edge devices. Cluster of stations through Edge devices shall be aggregated at nearest RPF/GRP Thana/Post through MPLS/ IP network. RPF/GRP Thana/Post in turn connected to the Cloud through MPLS/ IP network." | We would request to provide camera details of the stations under each RPF/Thana Post  | Hitachi<br>Systems<br>Micro Clinic<br>Pvt. Ltd | Please refer clause 8.3.1.2 of chapter-8/ corrigendums of tender document. |
| 749 | Amendm<br>ent No.<br>1.0 to<br>RDSO<br>Specifica<br>tion no.<br>RDSO/S<br>PN/TC/6<br>5/2016,<br>Revision<br>4.0 for<br>IP Based<br>Video<br>Surveilla<br>nce<br>System | 3   | 3.6 | 3.6 Vendors shall have option to quote either Server based solution or NVR based solution in accordance with Clause no. 10.0 and Clause no. 12.0 for Video Management and Video Recording or a combination of both the solutions for both the implementation schemes as per Diagram-1 & Diagram-2. Software capabilities and Storage capacities shall be same for both the solutions.  | We would request if only Server with external Storage<br>should be allowed , as the VSS System is huge and<br>needs high reliability and performance. | Hitachi<br>Systems<br>Micro Clinic<br>Pvt. Ltd | Clause as per tender/ corrigendums prevails.                               |

| 750 | Amendm<br>ent No.<br>1.0 to<br>RDSO<br>Specifica<br>tion no.<br>RDSO/S<br>PN/TC/6<br>5/2016,<br>Revision<br>4.0 for<br>IP Based<br>Video<br>Surveilla<br>nce<br>System | 6   | 19.25(a)  | Clause No. 19.25 (a): The Face Recognition Algorithm vendor should have participated in the latest NIST (National Institute of Standards and Technology, U.S. Department of Commerce), Face In Video Evaluation (FIVE) report.                                       | We would request if other global certifications could also be acknowledged by RailTel.  | Hitachi<br>Systems<br>Micro Clinic<br>Pvt. Ltd | Clause as per tender/ corrigendums prevails.  |
|-----|--|-----|---|--|---|--|---|
| 751 | Tender<br>No.<br>RailTel/T<br>ender/OT<br>/CO/P/20<br>17-<br>18/VSS<br>/432<br>dated 29-<br>03-18  | 243 | 8.26  | The proposed system should be able to leverage and integrate with existing & new CCTV cameras supporting ONVIF profile 'S' and video management systems either through camera level or VMS level, to provide an integrated video surveillance at the command center. | Would request the quantities of the existing cameras as we would have to include necessary hardwrae and license cost for the same.  | Hitachi<br>Systems<br>Micro Clinic<br>Pvt. Ltd | Bidder to quote camera quantities as per SOR.   |
| 752 |  |     |   |  | Does the analytics alarm & FRS Alarms needs to be showcased on Command and Control Solutions.   | Hitachi<br>Systems<br>Micro Clinic<br>Pvt. Ltd | Yes.  |
| 753 |  |     |   |  | Please suggest the number of Video Analytics license for all the stations?  | Hitachi<br>Systems<br>Micro Clinic<br>Pvt. Ltd | Please refer clause 8.3.1.2/<br>corrigendums of chapter-8 of<br>tender document.      |
| 754 | SPECIFI<br>CATION<br>NO.<br>RDSO/S<br>PN/TC/6<br>5/2016<br>Revision<br>4.0   | 21  | 10.1 Server Hardware: Server hardware for Video Manageme nt, Recording and Video Analytics shall have the minimum following specificatio ns:- | ProcessorIntel Xeon Processor No. of Cores8 No. of Thereads16 Frequency2.1GHz or higher Cache20MB No. of Processors2 QPI (Quick Path Interconnect) Links2  | The processor mentioned here is older generation processor and is very low end to handle the workload for this project. Hence request you to change the processor as below:  * Please change the number of cores from 8 to 18  * Please change the no. of thereads from 16 to 36  * Cache from 20MB to 24MB  The latest generation processors from Intel comes with latest generation of UPI links instead of QPI links, hence please remove the clause numbers 7 and 8 related to QPI links.  The Servers for Facial Recognition Software will require more performance hence requst you to change the memory from 32GB to 128GB | Hitachi<br>Systems<br>Micro Clinic<br>Pvt. Ltd | Tender ask for minimum specifications may be offered as per the solution requirement. |

|     | SPECIFI<br>CATION<br>NO.<br>RDSO/S   |    | 10.1.2<br>Server<br>specificatio<br>ns for Face<br>Recognition<br>Software<br>will be  | Processor Intel Xeon Processor No. of Cores8 No. of Thereads16 Frequency2.1GHz or higher Cache20MB No. of Processors2 QPI (Quick Path Interconnect) Links2  | The Servers for Facial Recognition Software will require more processing power and clockspeed than the one mentioned in this clause, hence request you to please change the  * Number of Cores from 8 to 18  * No. of Threads from 16 to 36   | Hitachi<br>Systems                             | Tender ask for minimum specifications  |
|-----|--|----|--|---|---|--|--|
| 755 | PN/TC/6<br>5/2016<br>Revision<br>4.0                                       | 21 | same as per clause no. 10.1.1 with following additional item:-   |   | * Frequency from 2.1GHz to 3.0 GHz  The latest generation processors from Intel comes with latest generation of UPI links instead of QPI links, hence please remove the clause numbers 7 and 8 related to QPI links.  | Micro Clinic<br>Pvt. Ltd                       | may be offered as per the solution requirement.  |
| 756 | SPECIFI<br>CATION<br>NO.<br>RDSO/S<br>PN/TC/6<br>5/2016<br>Revision<br>4.0 | 21 | 10.1.2 Server specificatio ns for Face Recognition Software will be same as per clause no. 10.1.1 with following additional item:- | Memory - 32 GB or higher, DDR3/DDR4 SDRAM or latest.  | The Servers for Facial Recognition Software will require more performance hence requst you to change the memory from 32GB to 128GB  | Hitachi<br>Systems<br>Micro Clinic<br>Pvt. Ltd | Clause as per tender/corrigendum prevails.   |
| 757 | SPECIFI<br>CATION<br>NO.<br>RDSO/S<br>PN/TC/6<br>5/2016<br>Revision<br>4.0 | 25 | 12.0<br>External<br>Storage<br>Device:   | Cache - 16GB Per Controller   | A storage with 16GB cache controller might not be able to handle the workload for this project hence request you to change the cache from 16GB per controller to 32GB per controller.   | Hitachi<br>Systems<br>Micro Clinic<br>Pvt. Ltd | Higher specifications may be offered to meet the end objective. Clause as per tender/corrigendum prevails. |
| 758 | 3.A.1.4<br>SCOPE<br>OF<br>WORK   | 47 | 3.A.1.4.8<br>3.A.1.4.9   | Remote operation and monitoring of a cluster of stations from RPF/GRP Thana/Post through the RailTel/Railways TCP/IP network. Bidder is required to plan sufficient number of VMS/EMS licenses, IT equipment's to facilitate the same. Bidder may also be required to extend fiber/network connectivity from the nearest station to the RPF/GRP Thana/Post.  RailTel shall provide the interconnection facility at their POP to integrate the station network. However, the bidder is expected to mention the bandwidth requirement at each station in their tech-nical bid proposal. | As per the statements, we understand the RailTel/Railways will provide the required connectivity between Stations and RPF/GRP Thana/Post.  We request you to please clarify the bidders scope of work to address the "requirement of extending fiber/network connectivity from the nearest station to the RPF/GRP Thana/Post" and who will borne the associated cost. | Hitachi<br>Systems<br>Micro Clinic<br>Pvt. Ltd | Clause of tender/ corrigendum is self explainatory.  |

| 759 | 3.A.1.4<br>SCOPE<br>OF<br>WORK   | 48 | 3.A.1.4.12 | Maintenance supervision period of 12 months from the date of award of PAC of the RPF/GRP Thana/Post.  | Kindly elaborate SoW / activities to be done during the supervision period along with service window e.g. 24x7, 365 days or 9-5, Mon-Fri.   | Hitachi<br>Systems<br>Micro Clinic<br>Pvt. Ltd | Clause is self explainatory.  |
|-----|--|----|------------|---|---|--|---|
| 760 | 3.A.1.7<br>SITE<br>PREPARA<br>TION,<br>3.A.1.7.1<br>Support<br>from<br>Indian<br>Railways<br>/ RailTel | 49 | 3.A.1.7.1  | Railways shall provide AC power supply at station/cabin/panel room/mid-section buildings for carrying out the awarded work. The successful bidder will have to pay the nominal charges for the power supply as per the exist-ing Railways Norms.  | Kindly provide the UNIT rate for AC power supply and the mode of payment.   | Hitachi<br>Systems<br>Micro Clinic<br>Pvt. Ltd | Clause is self explainatory. Rates<br>vary from station to station and are<br>braodly commercial rates as<br>applicable at station. |
| 761 | 3.A.1.10<br>TRAININ<br>G OF<br>PURCHA<br>SER'S<br>PERSON<br>NEL AND<br>CHANGE<br>MANAGE-<br>MENT       | 50 | NA         | For successful implementation and monitoring of the video surveillance solution, the successful bidder will need to identify training needs for Indian Railways/ RailTel. To provide professional training and development services at each stage of the project viz. installation, testing, operation and maintenance.  The successful bidder shall provide hands on training with detailed course material on the installed equipment and software        | Kindly clarify/suggest the location/s of the said trainings. Will it be at central location where all Railways/RailTel personal will attend the training?   | Hitachi<br>Systems<br>Micro Clinic<br>Pvt. Ltd | On field training at Thana/ Command<br>& cotrol cetnre/ Data Centre etc. to<br>executives as and when required.                     |
| 762 | 3.B.3.6<br>Surveilla<br>nce VPN<br>on<br>RailTel<br>Backbon<br>e                                       | 59 | NA         | A separate VRF instance will be created on Type-IV Switch for different type of services (Surveillance, <b>Wi-Fi etc</b> ). Access switches will separate these services in form of unique VLANs and maintain logical segregation between these services. This will maintain each service separately from traffic flow and QoS implementation perspective and improve network performance along with securing and isolating these services from each other. | As per our understanding Wi-Fi is not part of scope of the said tender and the required equipment will only be used for implementation of CCTV Surveillance. Kindly clarify                                   | Hitachi<br>Systems<br>Micro Clinic<br>Pvt. Ltd | Clause is self explainatory.  |
| 763 | 3.B.3.6<br>Surveilla<br>nce VPN<br>on<br>RailTel<br>Backbon<br>e                                       | 59 | NA         | A separate VRF instance may be created on Type-IV switch for Railway Police Force users in addition to mentioned services in B type station. Railway Police Force users will have a <b>secure client</b> for monitoring stations through IP surveillance cameras.   | Kindly clarify / elaborate the Secure client mentioned in the statement. Does this refers to the workstation attached with RailTel MPLS network or secure VPN/IPSEC connectivity is required at the location? | Hitachi<br>Systems<br>Micro Clinic<br>Pvt. Ltd | P.C. work station along with anti<br>virus software as per the SOR of the<br>tender.  |

| 764 | 3.B.4 IP<br>surveilla<br>nce<br>solution<br>for<br>Different<br>Type of<br>Stations | 60 | NA        | IP based cameras could be Dome type, PTZ Type and Fixed Bullet and 4K UHD Cameras. Below are major listed areas, which will cover by various type of cameras:  a) Platform, Foot over areas should be covered by Fixed Bullet cameras  b) Entry/Exit should be covered by 4K UHD Bullet cameras. c) Ticketing Counter, Waiting, Food Plaza, Railway Refreshment Room, Low ceiling Entry /Exits should be covered by Dome cameras d) PTZ should be mounted for bigger open areas, where Pan, Zoom & Tilt functionality will be used The above arrangement is only tentative in nature and bidder may be asked to commission a camera(s) on any other locations as decided by purchaser as per site requirement. | Since Zone wise Qty of cameras is already mentioned in the RFP, please clarify how addition/deletion of the cameras as per site requirement will be addressed both technically and commercially   | Hitachi<br>Systems<br>Micro Clinic<br>Pvt. Ltd | Tender/ corrigendum clause is clear.       |
|-----|---|----|-----------|--|---|--|--|
| 765 | 4.A.2.4<br>Warrant<br>y<br>Support  | 78 | 4.A.2.4.3 | During the free warranty maintenance period, contractor should stabilize the work-ing of the system. Purchaser has the right to extend the period of supervision of the maintenance free of cost till the system stabilizes and works satisfactorily for a reasonable period of time.  | We request you to please delete the clause of extending the period of supervision of the maintenance free of cost.  | Hitachi<br>Systems<br>Micro Clinic<br>Pvt. Ltd | Clause as per tender/corrigendum prevails. |
| 766 | 4.A.2.4<br>Warrant<br>Y<br>Support  | 79 | 4.A.2.4.3 | A penalty as per clause 4.A.8 of down time of network shall be imposed on the contractor for not meeting the down time prescribed. The Contractor's Engineer shall be responsible to identify the fault and advise corrective measures and ensure that defective cards are replenished.  | As per our understanding RailTel will provide the required bandwidth hence bidder should not be penalized for network non-avilability / downtime due to network link.   | Hitachi<br>Systems<br>Micro Clinic<br>Pvt. Ltd | Clause is self explainatory.               |
| 767 | 4.A.9.1.1<br>0<br>General<br>Terms<br>and<br>Conditio<br>ns<br>Applicabl<br>e       | 93 | i)        | RailTel will nominate their officer/s for interviewing the candidates.   | As per our understanding Contractor jointly with RailTel will only interview the L2 support engineer in to be positioned at RailTel Datacenter and L1 support engineer for Field will be interviewed by the contractor only. Pl clarify | Hitachi<br>Systems<br>Micro Clinic<br>Pvt. Ltd | Clause is self explainatory.               |

| 768 | 4.A.19. Purchase r's Right to Vary Quantiti es | 105         | NA                        | The purchaser shall be at liberty to enhance or reduce the quantity mentioned in the LOA as indicated in Bid Data Sheet (BDS) Chapter 5 without assigning any rea-sons. The bidder shall comply with such modifications unconditionally provided these are made before completion of the deliveries under the purchase order/LOA. Any such change in quantity shall have no impact on the rates mentioned in the purchase order/LOA for any such item | We request you to kindly provide Quantity variation in % for addition or reduction.   | Hitachi<br>Systems<br>Micro Clinic<br>Pvt. Ltd | Please refer Chapter-5 (Bid Data<br>Sheet).  |
|-----|--|-------------|---------------------------|---|---|--|--|
| 769 |  | 229         | 8.16.3(2X<br>10kva)       | 4 - Output Power Factor - 0.9 or better   | Request you to make it 0.8 for 10kva UPS as well. It is as per tender specs for 1 & 2kva UPS System asked @ 0.8 Power Factor.  OR else make the same 0.9 O/p PF for all three ratings(i.e 1, 2 & 10kva) of UPS Systems.   | Delta Power<br>Solutions<br>India Pvt<br>Ltd   | Tender/ corrigendum clause prevails.   |
| 770 |  | 66 &<br>235 | EMS for<br>equipmen<br>ts | EMS for equipments  | Request you to pl clarify whether a Central EMS from System Integrator(SI) is required which shall be capable of monitoring all UPS Systems across India on their console. Or separate EMS from CCTV/UPS/Switech etc is required from OEMs.  However, SNMP traps from UPS can be provided for integration in System Integrator(SI) EMS software   | Delta Power<br>Solutions<br>India Pvt<br>Ltd   | EMS as asked in SOR shall also<br>monitor UPS being installed at<br>stations & RPF/GRP Thana/Post. |
| 771 |  | 48          | Warranty                  | AMC (including repair / replacement of all consumables) for 5 years after the completion of 24 months of warranty period.   | PI clarify whether Batteries are also required to be replaced in AMC contract.  | Delta Power<br>Solutions<br>India Pvt<br>Ltd   | Yes. The tender clause is clear.   |
| 772 | 4.A.14.1.<br>3                                 | 101         | 2                         | The OEM(s) whose products have been offered in the bid should have a minimum cumulative turnover of INR 360 crores for OEMs supplying camera, INR 100 crores for OEMs of switches and INR 225 crores for OEMs of IT hardware (server and storage) each in last 3 financial years (i.e. current year and three previous financial years) from the date of opening of tender.   | Request you to change it to: - The OEM(s) whose products have been offered in the bid should have a minimum cumulative turnover of INR 30 crores for OEMs supplying camera, INR 30 crores for OEMs of switches and INR 225 crores for OEMs of IT hardware (server and storage) each in last 3 financial years (i.e. current year and three previous financial years) from the date of opening of tender. (Higher turnover will reduce the competition and the low turnover will give the chance to small OEMs to become the part of this prestigious project) | Plexonics                                      | Clause as per tender/corrigendum prevails.   |

| 773 | 4.A.5         | 83 | 1 | Payment Terms for Supply portion of items supplied under Schedule – 'A' of SOR-Head-I of packages as per BOM and Price Schedule details (Chap-ter-2, SOR, Note-VII and Annexure-A & B) submitted along with price bid.   | We request you to consider 20% from total bid value as Advance after release of LOA  | ASHOKA<br>BUILDCON<br>LTD | Clause as per tender/corrigendum prevails.  |
|-----|---------------|----|---|--|--|---------------------------|---|
| 774 | 4.A.5.1       | 83 | 1 | For hardware items, payments will be made on the basis of stations covered under a RPF/GRP Thana/Post for the material supplied in stages for various items supplied. 75% payment of the items would be made on receipt of material by the consignee duly inspected and on submission of the following documents subject to any deductions or recovery which RailTel/REL may be entitled to make under the contract:   | For hardware items, payments will be made on the basis of For hardware items, payments will be made on the basis of Railway stations covered under a RPF/GRP Thana/Post for the material supplied in stages for various items supplied. We would request you to consisder 55% payment of the items on receipt of material by the consignee duly inspected and on submission of the following documents subject to any deductions or recovery which RailTel/REL may be entitled to make under the contract: | ASHOKA<br>BUILDCON<br>LTD | Clause as per tender/corrigendum prevails.  |
| 775 | 4.A.5.1.<br>3 | 84 | 1 | 15% payment of the value of items of Schedule – A shall be made by RailTel on installation & commissioning of stations/sites including at the concerned RPF/GRP Thana/Post of the cluster for CCTV at stations, 5% payment on issue of Provision-al Acceptance Certificate (PAC) and the last 5% payment shall be made by Rail-Tel/REL on issue of Final Acceptance Certificate (FAC) which will be issued by respective Executive Director of the concerned region. In case of foreign currency, payment will be paid through TT/Wire Transfer (SWIFT) from Corporate Office.  (15% + 5%) payment of value % of items of Schedule – A which could not be installed for want of site readiness or as per the decision of Executive Director/Regional General Manager of the region, will be made on issue of PAC of the last RPF/GRP Thana/Post for CCTV at stations and remaining 5% on issue of FAC .  For spares 15% + 5% will be made after issue of PAC of the first RPF/GRP Thana/Post for | We would request you to consisder 25% payment made on pro rata basis made by RailTel on installation & commissioning of stations/sites including at the concerned RPF/GRP Thana/Post of the cluster for CCTV at stations which will be issued by respective Executive Director of the concerned region. In case of foreign currency, payment will be paid through TT/Wire Transfer (SWIFT) from Corporate Office.  | ASHOKA<br>BUILDCON<br>LTD | Clause as per tender/corrigendums prevails. |

| 776 | 4.A.14.1 | 95 | 3 | or opening or tender.   | The bidder should have received a minimum cumulative contract amount from the Security / IT / Telecom / infrastructure business in the last three financial years plus current year upto the date of opening of tender.  For Package-I: Northern Region: Rs. 365.31 Crores  For Package-II: Western Region: Rs. 235.18 Crores  For Package-III: Eastern Region: Rs. 386.97 Crores  For Package-IV: Southern Region: Rs. 314.27 Crores  Note:- In case of Consortium/JV, each member's relevant turnover combined together shall be considered against the above mentioned financial capability criteria. | ASHOKA<br>BUILDCON<br>LTD | Clause as per tender/corrigendums prevails. |
|-----|----------|----|---|---|--|---------------------------|---|
| 777 |          |    |   | The bidder should have completed  I. Package I: Northern  a.) At least one similar work# worth of INR  73.95 crores in last three financial years plus current year upto the date of opening of tender.  OR  b.) Two similar works# worth of INR 42.26  Crores each in last three financial years plus cur- rent year upto the date of opening of tender.  OR  c.) Three similar works# worth of INR 31.69  Crores each in last three financial years plus cur- rent year upto the date of opening of tender. | The bidder should have completed  I. Package I: Northern  a.) At least one similar work# worth of INR 73.95 crores in last three financial years plus current year upto the date of opening of tender.  OR  b.) Two similar works# worth of INR 42.26 Crores each in last three financial years plus cur- rent year upto the date of opening of tender.  OR  c.) Three similar works# worth of INR 31.69 Crores each in last three financial years plus cur- rent year upto the date of opening of tender.   | ASHOKA<br>BUILDCON<br>LTD | Clause as per tender/corrigendums prevails. |

| 778 |             |   | II. Package II: Western  a.) At least one similar work# worth of INR  47.63 crores in last three financial years plus current year upto the date of opening of tender.  OR  b.) Two similar works# worth of INR 27.22  Crores each in last three financial years plus current year upto the date of opening of tender.  OR  c.) Three similar works# worth of INR 20.41  Crores each in last three financial years plus cur- rent year upto the date of opening of tender. | II. Package II: Western a.) At least one similar work# worth of INR 47.63 crores in last three financial years plus current year upto the date of opening of tender.  OR b.) Two similar works# worth of INR 27.22 Crores each in last three financial years plus current year upto the date of opening of tender.  OR c.) Three similar works# worth of INR 20.41 Crores each in last three financial years plus current year upto the date of opening of tender.     | ASHOKA<br>BUILDCON<br>LTD | Clause as per tender/corrigendums prevails. |
|-----|-------------|---|--|--|---------------------------|---|
| 779 | 4.A.14.1 96 | 5 | a.) At least one similar work# worth of INR 78.37 crores in last three financial years plus current year upto the date of opening of tender.  OR  b.) Two similar works# worth of INR 44.78 Crores each in last three financial years plus cur- rent year upto the date of opening of tender.  OR  c.) Three similar works# worth of INR 33.59 Crores each in last three financial years plus cur- rent year upto the date of opening of tender.                           | III. Package III: Eastern a.) At least one similar work# worth of INR 78.37 crores in last three financial years plus current year upto the date of opening of tender. OR b.) Two similar works# worth of INR 44.78 Crores each in last three financial years plus cur- rent year upto the date of opening of tender. OR c.) Three similar works# worth of INR 33.59 Crores each in last three financial years plus cur- rent year upto the date of opening of tender. | ASHOKA<br>BUILDCON<br>LTD | Clause as per tender/corrigendums prevails. |

| 780 |          |     |      | 63.74 crores in last three financial years plus current year upto the date of opening of tender.  OR  b.) Two similar works# worth of INR 36.42 Crores each in last three financial years plus cur- rent year upto the date of opening of tender.  OR  c.) Three similar works# worth of INR 27.31 Crores each in last three financial years plus cur- rent year upto the date of opening of tender.  Note: In case of Consertium (IV) apply lead | IV. Package IV: Southern a.) At least one similar work# worth of INR 63.74 crores in last three financial years plus current year upto the date of opening of tender.  OR b.) Two similar works# worth of INR 36.42 Crores each in last three financial years plus cur- rent year upto the date of opening of tender.  OR c.) Three similar works# worth of INR 27.31 Crores each in last three financial years plus cur- rent year upto the date of opening of tender.  Note:- In case of Consortium/JV, Lead bidder or any member of the consortium experience shall be considered against the above mentioned criteria of similar work experience. | ASHOKA<br>BUILDCON<br>LTD | Clause as per tender/corrigendums prevails. |
|-----|----------|-----|------|---|---|---------------------------|---|
| 781 | 4.A.22.1 | 105 | 1    | in the form of Demand Draft from any<br>scheduled bank in India in favour of "RailTel<br>Corporation of India Limited" payable at New<br>Delhi which should remain valid for 45 days  | The bidder shall furnish a sum as given in Bid Data Sheet (BDS) Chapter 5 as Ear-nest Money in the form of Demand Draft / bank Guarantee from any scheduled bank in India in favour of "RailTel Corporation of India Limited" payable at New Delhi which should remain valid for 180 days beyond the bid opening date.  | ASHOKA                    | Clause as per tender/corrigendums prevails. |
| 782 | Annx 3   | 189 | 1.11 | Each consortium member shall make equal contribution towards the total PBG amount to be submitted along with acceptance of LOA.   | Each consortium member shall make equal contribution towards the total PBG amount to be submitted along with acceptance of LOA or lead bidder or any member of the consortium can provide the PBG amount to be submitted along with acceptance of LOA.  | ASHOKA                    | Clause as per tender/corrigendums prevails. |

| 783 | 4.A.14.1<br>.3 | 101 | 4 | one project in a Mass Rapid Transport system e.g. Metro, Railways, Mono Rail, Airport etc. in India or abroad in last 3 financial years (i.e. cur-rent year and three previous financial years) from the date of opening of tender. The same should have been working sat- isfactorily for at least six (6) months. | As per clause 4.A.48. Make in India (The provisions of the Public Procurement (Preference to Make in India) Order 2017 dated June 15, 2017 (and subsequent amendments, if any) by Department of Industrial Policy and Promotion, GoI shall apply to this tender to the extent feasible. The domestic Suppliers are exempted from experience and past performance criteria, and average annual turnover re-quirement under financial standing. Local suppliers are not required to provide any proof of supply. The criteria for Capability, Equipment and Manufacturing facilities as well as net worth under the financial standing eligibility criteria shall be applicable to local suppliers also.)  Domestic/Local suplpliers are exempted from experience and past performance.  So, we request you to delet this clause or ammend this clause for VMS software as "The OEM for proposed IP cameras and VMS Software should have supplied for at least one project in any goverment/Enterprise system." | ASHOKA<br>BUILDCON<br>LTD | Clause as per tender/corrigendums prevails. |
|-----|----------------|-----|---|---|---|---------------------------|---|
|-----|----------------|-----|---|---|---|---------------------------|---|

| 784 | Ammen<br>dment 1<br>IP based<br>VSS | 3   | 6.<br>Clause no.<br>3.2 in RFP  | interface of network video product (ONVIF – Open Network Video Interface Forum). The quoted models should appear on the ONVIF website and a confirmation certificate for the offered models to be provided for the same. | The mission of ONVIF is to provide and promote standardized interfaces for effective interoperability of IP-based physical security products like Cameras. It is more for a hardware protocol. The intention of ONVIF are:  1. Standardization of communication between IP-based physical security products  3. Interoperability regardless of brand  3. Openness to all companies and organizations and software developers can provide self-certification that they are compliance to ONVIF protocol.  The ONVIF is more to do with hardware/protocol and VMS developers can provide self-certification. Hence self-certification for the VMS developers could be allowed. Kindly amend the clause to "VMS developers should prodive self-certification for ONVIF compliance" | ASHOKA<br>BUILDCON<br>LTD | Clause as per tender/corrigendums prevails. |
|-----|-------------------------------------|-----|---------------------------------|--|---|---------------------------|---|
| 785 | 8.8                                 | 212 | Type I<br>Switch                |  | PI clarify the Type I switches shall be IP rating or commercial grade switch  | ASHOKA<br>BUILDCON<br>LTD | Clause is self explainatory.                |
| 786 | 8.9                                 | 213 | Type II<br>Switch               |  | PI clarify whether DC Power supply is required or nomarl AC power   | ASHOKA<br>BUILDCON<br>LTD | Clause is self explainatory.                |
| 787 | 8.1.14                              | 221 | Next<br>Generatio<br>n Firewall |  | PI clarify whether OEM can be present in any magic Quadrant   | ASHOKA<br>BUILDCON<br>LTD | Clause is self explainatory.                |
| 788 | 8.2                                 | 208 | Server                          | · · · · · · · · · · · · · · · · · · ·  | Can we propose Virtualization solution for effectivie utilization of hardware   | ASHOKA<br>BUILDCON<br>LTD | Clause as per tender/corrigendums prevails. |

|     | T       |     | T         | T =  |  | OLIANITURA.        | T                                 |
|-----|---------|-----|-----------|--|--|--------------------|-----------------------------------|
|     | CHAPTE  | 208 | 8.3       | Broadly, the system functionality, technical     | Clarification required on- If some Specification   | QUANTUM<br>STORAGE |                                   |
|     | R- 8    |     |           |  | proposed and accepted for External Storage         | INDIA              |                                   |
|     |         |     |           | shall be as per RDSO Specification of IP Based   | with the combination of Secondary Storage as       |                    |                                   |
|     | TECHNI  |     |           | Video Surveillance System Specification no.      | LTO Tape Library on Datacenter side for Keeping    |                    |                                   |
|     | CAL,    |     |           | RDSO/SPN/TC/65/2016 Revision 4.0 or latest       | the Flagged Data for longer duration for 1 Year    |                    |                                   |
|     | FUNCTI  |     |           | with all amend-ments for IP based CCTV at        | will be accepted if found better and COst          |                    |                                   |
|     | ONAL    |     |           | Stations.  | effective compare to the External DIsk Storage,    |                    |                                   |
| 789 | REQUIR  |     |           | HOWEVER, IN CASE OF ANY CONFLICT ON              | as its written as "THE TENDER CONDITIONS WILL      |                    | Clause as per tender/corrigendums |
|     | EMENTS  |     |           | THE SOLUTION DE-SIGN PARAMETERS,                 | PREVAIL OVER RDSO SPECIFICATIONS."                 |                    | prevails.                         |
|     | &       |     |           | SYSTEM FUNCTIONAL REQUIREMENTS AND               |  |                    |                                   |
|     | SPECIFI |     |           | TECHNICAL SPECIFICATION OF A                     |  |                    |                                   |
|     | CATION  |     |           | SYSTEM/ITEM BETWEEN RDSO                         |  |                    |                                   |
|     | S       |     |           | SPECIFICATION AND THE TENDER                     |  |                    |                                   |
|     |         |     |           | CONDITIONS, THE TENDER CONDITIONS WILL           |  |                    |                                   |
|     |         |     |           | PREVAIL OVER RDSO SPECIFICATIONS.                |  |                    |                                   |
|     | CHAPTE  | 209 | 8.3.1.1.5 | Bidder to also propose an external storage       | We offer the LTO Tape Storage for keeping the      | QUANTUM            |                                   |
|     | R- 8    |     |           | solution at RailTel Datacenter for keeping       | Flagged Data for Long Term i.e. min. 1 Year of     | STORAGE<br>INDIA   |                                   |
|     |         |     |           | flagged/marked video data by RPF/GRP             | time. As we all know the Flagged Data can be       | INDIA              |                                   |
|     | TECHNI  |     |           | personnel for longer reten-tion, FRS & VA alerts | required to keep for min. 5 to 10 Years or more    |                    |                                   |
|     | CAL,    |     |           | across all stations within the jurisdiction of   | as per the Criticality of the Data and required to |                    |                                   |
|     | FUNCTI  |     |           | RailTel Region for 30 days, Audit trail logs,    | be produce as a Evidence. Evidence Managemnt       |                    |                                   |
|     | ONAL    |     |           | application data etc. as per solution re-        | plays critical role in CCTV Video Surveillance, as |                    |                                   |
|     | REQUIR  |     |           | quirement and sizing as per SOR.                 | in case of Evidence required to be keep for more   |                    |                                   |
| 700 | EMENTS  |     |           |  | than the DIsk Storage Life Span. LTO Tape as a     |                    | Clause as per tender/corrigendums |
| 790 | &       |     |           |  | Secondary Storage can provide the much higher      |                    | prevails.                         |
|     | SPECIFI |     |           |  | life Span than Disk Storage.                       |                    |                                   |
|     | CATION  |     |           |  |  |                    |                                   |
|     | S       |     |           |  | Hence, We request you to kindly allow the          |                    |                                   |
|     |         |     |           |  | Secondary storage as LTO Tape with Automatic       |                    |                                   |
|     |         |     |           |  | & Instant Archival from Primary External SAN       |                    |                                   |
|     |         |     |           |  | Storage to Support Evidence Management.            |                    |                                   |
|     |         |     |           |  |  |                    |                                   |
|     |         |     |           |  |  |                    |                                   |
|     |         |     |           | 1  |  |                    |                                   |

| 791 | CHAPTE R- 8  TECHNI CAL, FUNCTI ONAL REQUIR EMENTS & SPECIFI CATION S | 247 | 8.26.2<br>Mobile<br>App for<br>VSS<br>system | flagged or tagged for the purpose of investigation as a proof and store in an external Hard drive/CD etc.  | We request to allow LTO Tape Library also along with Hard drive/ CD. For the matter of fact on keeping the flagged data for longer period of critical data which will be required for Judiciary purpose and should be kept for the unknown period. LTO Tape library is the best Storage for this requirement for Evidence management of Flagged Data | QUANTUM<br>STORAGE<br>INDIA | Clause as per tender/corrigendums prevails. |
|-----|---|-----|--|--|--|-----------------------------|---|
| 792 | CHAPTE R- 8  TECHNI CAL, FUNCTI ONAL REQUIR EMENTS & SPECIFI CATION S |     |  | New Line Item - Tape Library for Backup the Data Center Appliccations, Operating System, and Database along with Backup Software. Min. 4 Nos. of LTO-8 Drives along with 120 Tape Slot License, Redundant Power Supply, Redundant Encryption appliance for Encryption Keys.  | We request to include the Tape Library for Backup the Data Center Appliccations, Operating System, and Database along with Backup Software.  Min. 4 Nos. of LTO-8 Drives along with 120 Tape Slot License, Redundant Power Supply, Redundant Encryption appliance for Encryption Keys.   | QUANTUM<br>STORAGE<br>INDIA | Clause as per tender/corrigendums prevails. |
| 793 | CHAPTE R-8  TECHNI CAL, FUNCTI ONAL REQUIR EMENTS & SPECIFI CATION S  |     |  | New Line Item - Tape Library for Backup the Data Center Appliccations, Operating System, and Database along with Backup Software.  Min. 4 Nos. of LTO-8 Drives along with 120 Tape Slot License, Redundant Power Supply, Redundant Encryption appliance for Encryption Keys. | We request to include the Tape Library for Backup the Data Center Appliccations, Operating System, and Database along with Backup Software. Min. 4 Nos. of LTO-8 Drives along with 120 Tape Slot License, Redundant Power Supply, Redundant Encryption appliance for Encryption Keys.  | QUANTUM<br>STORAGE<br>INDIA | Clause as per tender/corrigendums prevails. |
| 794 |   |     |  |  | This is a letter of submission against the inclusion of the NIST standard for procurement of Face Recognition Software   | Innefu Labs<br>Pvt. Ltd     | Clause as per tender/corrigendums prevails. |

|     | <br>  |                         |   |
|-----|---|-------------------------|---|
| 795 | NIST is essentially an American Standards Organization, designed to further the development and adherence of Systems development for a different operating & ambient environment, none of their tests will simulate usage of equipment software, in Indian High humidity, High temperature, high volume based situations  | Innefu Labs<br>Pvt. Ltd | Clause as per tender/corrigendums prevails. |
| 796 | The Organization is trying to cover thousands of technology areas, and their expertise and due diligence over the certification any one system, is highly suspect.  | Innefu Labs<br>Pvt. Ltd | Clause as per tender/corrigendums prevails. |
| 797 | Our facial recognition software on the other hand has been trained on over 3 lakh South Asian faces, which would be well near impossible for most companies from Overseas   | Innefu Labs<br>Pvt. Ltd | Clause as per tender/corrigendums prevails. |
| 798 | The organization has been accused of accommodation of backdoor entries of the NSA, thereby rendering this as a Security risk matter, where their authorized systems may have openings and ways to relay information to US agencies. You can read more about this in Wikipedia at https://en.wikipedia.org/wiki/National_Instit ute_of_Standards_and_Technology in the Section entitled "Controversial Backdoored NIST Standard" | Innefu Labs<br>Pvt. Ltd | Clause as per tender/corrigendums prevails. |
| 799 | The government of India had announced a Preferred Market Access (PMA) policy for Cyber Security & data gathering products through an order notifying the Public Procurement (Preference to Make in India). This has nowhere been provisioned for in the invitation to bid.  | Innefu Labs<br>Pvt. Ltd | Clause as per tender/corrigendums prevails. |
| 800 | It is therefore submitted that NIST evaluation report may be removed/discarded in the E- Tender No. RailTel/Tender/OT/CO/P/2017- 18/VSS/432   | Innefu Labs<br>Pvt. Ltd | Clause as per tender/corrigendums prevails. |

| 801 | 4.A.14.1<br>Eligibility<br>Criteria<br>Require<br>ments<br>for<br>Bidders | 96 | 5. Similar<br>Work<br>Experience<br>(Technical<br>ca-pability) | The bidder should have completed. Package I: Northern  a.) At least one similar work# worth of INR 73.95 crores in last three financial years plus current year upto the date of opening of tender.OR b.) Two similar works# worth of INR 42.26 Crores each in last three financial years plus current year upto the date of open-ing of tender.OR c.) Three similar works# worth of INR 31.69 Crores each in last three financial years plus current year upto the date of open-ing of tender. | We request amend this cluase as I. Package I: Northern a.) At least one similar work# worth of INR 50 crores in last three financial years plus current year upto the date of opening of tender OR b.) Two similar works# worth of INR 42.26 Crores each in last three financial years plus cur- rent year upto the date of open-ing of tender. OR c.) Three similar works# worth of INR 31.69 Crores each in last three financial years plus current year upto the date of opening of tender and Please Consider experience of Consortium partners       | KARVY | Clause as per tender/corrigendums prevails. |
|-----|---|----|--|---|---|-------|---|
| 802 | 4.A.14.1<br>Eligibility<br>Criteria<br>Require<br>ments<br>for<br>Bidders | 97 | 5. Similar<br>Work<br>Experience<br>(Technical<br>ca-pability) | II. Package II: Western a.) At least one similar work# worth of INR 47.63 crores in last three financial years plus current year upto the date of opening of tender.b.) Two similar works# worth of INR 27.22 Crores each in last three financial years plus current year upto the date of opening of tender.c.) Three similar works# worth of INR 20.41 Crores each in last three financial years plus cur- rent year upto the date of open- ing of tender                                     | We request amend this cluase as II. Package II: Western a.) At least one similar work# worth of INR 30 crores in last three financial years plus current year upto the date of opening of tender.  OR b.) Two similar works# worth of INR 27.22 Crores each in last three financial years plus cur- rent year upto the date of open-ing of tender.  OR c.) Three similar works# worth of INR 20.41 Crores each in last three financial years plus cur- rent year upto the date of opening of tender and Please Consider experience of Consortium partners | KARVY | Clause as per tender/corrigendums prevails. |
| 803 | 4.A.14.1<br>Eligibility<br>Criteria<br>Require<br>ments<br>for<br>Bidders | 97 | 5. Similar<br>Work<br>Experience<br>(Technical<br>ca-pability) | III. Package III: Eastern a.) At least one similar work# worth of INR 78.37 crores in last three financial years plus current year upto the date of opening of tender. OR b.) Two similar works# worth of INR 44.78 Crores each in last three financial years plus current year upto the date of open- ing of tender. OR c.) Three similar works# worth of INR 33.59 Crores each in last three financial years plus current year upto the date of opening of tender.                            | We request amend this cluase as III. Package III: Eastern a.) At least one similar work# worth of INR 50 crores in last three financial years plus current year upto the date of opening of tender. OR b.) Two similar works# worth of INR 44.78 Crores each in last three financial years plus cur- rent year upto the date of open-ing of tender. OR c.) Three similar works# worth of INR 33.59 Crores each in last three financial years plus current year upto the date of open-ing of tender and Please Consider experience of Consortium partners. | KARVY | Clause as per tender/corrigendums prevails. |

|     |   |     |  | IV. Package   |  |                    |   |
|-----|---|-----|--|---|--|--------------------|---|
| 804 | 4.A.14.1<br>Eligibility<br>Criteria<br>Require<br>ments<br>for<br>Bidders | 97  | 5. Similar<br>Work<br>Experience<br>(Technical<br>ca-pability) | IV: Southern  a.) At least one similar work# worth of INR 63.74 crores in last three financial years plus current year upto the date of opening of tender  OR  b.) Two similar works# worth of INR 36.42 Crores each in last three financial years plus current year upto the date of opening of tender.  OR  c.) Three similar works# worth of INR 27.31 Crores each in last three financial years plus current year upto the date of opening of tender.  Note:- In case of Consorti- um/JV, only Lead bidder experience shall be consideredagainst the above mentioned criteria of similar work experience. | We request amend this cluase as IV. Package IV: Southern  a.) At least one similar work# worth of INR 50 crores in last three financial years plus current year upto the date of opening of tender.  OR  b.) Two similar works# worth of INR 36.42 Crores each in last three financial years plus cur- rent year upto the date of open-ing of tender  OR  c.) Three similar works# worth of INR 27.31 Crores each in last three financial years plus cur- rent year upto the date of open-ing of tender. Note:- In case of Consortium/JV,  only Lead bidder expe-rience shall be considered against the above mentioned criteria of similar work experience and Please Consider experience of Consortium partners. | KARVY              | Clause as per tender/corrigendums prevails. |
| 805 | 4.A.22.<br>Earnest<br>Money<br>Deposit<br>(EMD)/<br>Bid<br>Security       | 105 | 4.A.22.1   | The bidder shall furnish a sum as given in Bid Data<br>Sheet (BDS) Chapter 5 as Ear-nest Money in the<br>form of Demand Draft from any scheduled bank<br>in India in fa-vour of "RailTel Corporation of India<br>Limited" payable at New Delhi which should<br>remain valid for 45 days beyond the bid opening<br>date  | We request change this clause as The bidder shall<br>furnish a sum as given in Bid Data Sheet (BDS)<br>Chapter 5 as Ear-nest Money in the form of Demand<br>Draft/Bank Guarantee (BG) from any scheduled bank<br>in India in favour of "RailTel Corporation of India<br>Limited" payable at New Delhi which should remain<br>valid for 45 days beyond the bid opening date   | KARVY              | Clause as per tender/corrigendums prevails. |
| 806 | 8.23  | 235 | EMS  | single operations bridge that allows NOC operator quickly identify the cause of the IT incident, reduces duplication of effort and decreases the time it takes to rectify IT issues.    Days   Full HD Camera   4K UHD Camera   30 Days   1 TB after RAID 5/6   4 TB after RAID 5/6   | For wider participation request you to kindly rephrase it as " Consolidate IT events & alarms into a single dashboard and allow NOC operator to quickly identify the cause of the IT incident, reduces duplication of effort and decreases the time it takes to rectify IT issues."  | CA<br>Technologies | Tender/ corrigendum clause shall prevail.   |
| 807 |   | 235 |  | solution shall be the manager of managers and capable of receiving events/alerts from multiple monitoring systems including system, network, storage, hardware, and application   | Do you require any application monitoring also as part of the project if not request you to kindly rephrase it as " Consolidated dashboard of the proposed EMS solution shall be the manager of managers window and capable of receiving events/alerts from multiple monitoring systems including system, network, storage, hardware"  | CA<br>Technologies |   |
| 808 | 8.23  | 235 | Consolidat<br>ed<br>Dashboar<br>d                              |   | We understand from this point that a business<br>service for Video Surveillance is to be created &<br>monitored for Service levels based on its<br>infrastructure, kindly confirm  | CA                 | Clause is self explanatory.                 |

| 809 | 8.23 | 235 | Consolidat<br>ed<br>Dashboar<br>d | Offer relevant tools, run books, graphs in context of a selected event   | For wider participation request you to kindly rephrase it as " The tool should offer relevant trouleshooting tools, graphs in context of a selected event/inetrface,Root cause analysis & probable causes for an incident"  | CA<br>Technologies |   |
|-----|------|-----|-----------------------------------|--|---|--------------------|---|
| 810 | 8.23 | 235 | Consolidat<br>ed<br>Dashboar<br>d | Instruction Text (knowledge base) integrated into events   | For wider participation request you to kindly rephrase it as "Instruction Text (knowledge base) integrated into events/alarm for which incident tickets were created with ability to define trobleshooting steps"   | CA<br>Technologies |   |
| 810 | 8.23 | 235 | Consolidat<br>ed<br>Dashboar<br>d | Tool should be able to highlight Priority of an event. Priority is based on both the event severity and the business impact. CI Business Impact is calculated based on Business Criticality of all affected business services, applications and business process CIs and eg. SLAs  | For wider participation request you to kindly rephrase it as " Tool should be able to highlight root cause/ Priority of an event. Priority/Root cause is based on both the event severity and the business service impact. The tool should be able to provide performance information metrices, Business service metrices and SLAs"                       | CA<br>Technologies | Clause as per tender/ corrigendum prevails. |
| 811 | 8.23 | 237 |                                   | Should be able to generate a graphical representation of your network. Identify which devices are inactive or out of compliance. Detecting noncompliance, issuing alerts and proposing remedial action. In a misconfiguration, rollback should be automated. The ability to compare configurations is invaluable; system changes must be logged. | For wider participation request you to kindly rephrase it as "Should be able to generate a graphical representation of your network. Identify which devices are inactive or out of compliance. Detecting noncompliance, issuing alerts. The ability to compare configurations is invaluable; system configuration changes must be logged."                | CA Took polosies   | Tender/ corrigendum clause shall prevail    |
| 812 | 8.23 | 237 | Network<br>Automatio<br>n         | Recording every access to a device including not only scripted and automated access, but a full keystroke log. Who made what change, the reason for the change and associated ticket number must be captured.  | For wider participation We understand that you need to manage the access control on network devices with complete logs on the commands executed on devices , We understand that the SI can club & propose a third party solution to manage your complete requirement for Authentication, Authorization & Accounting, Kindly confirm                       | CA<br>Technologies | Clause is self explainatory.                |
| 813 | 8.23 | 237 | Network<br>Automatio<br>n         | Manage device access and authorization through a centralized control model that is integrated with your standard workflow and approval processes.  | For wider participation request you to kindly rephrase it as "Manage device access and authorization through a centralized control model, the configuration access on network devices should be authenticated from the same authorized user as configured in authorization tool and approval process should follow the ITIL Change management processes". | CA<br>Technologies | Clause as per tender/ corrigendum prevails. |

| 814 | 8.23 | 237 | Network<br>Automatio<br>n                    | Automate routine configuration tasks for updates, such as password or community string changes. Reduce the time needed to build automation scripts and increase accuracy with auto-generated scripts derived from device sessions.                                   | For wider participation request you to kindly rephrase it as " Automate routine configuration tasks for updates, such as password or community string changes, Configuration upload & Download, compare configs, bulk configuration, config backup."  |                    | Clause as per tender/ corrigendum prevails. |
|-----|------|-----|--|--|---|--------------------|---|
| 815 | 8.23 | 240 |  | Support for port aggregation protocols like LACP (Link Aggregation Control Protocol), MLT (Multi-Link Trunking), and SMLT (Split MLT), including visual map-based views & automatic impact assessment based on the relationships between physical and virtual links. | Are you still using older technologies like SMLT, MLT in your enviroment, with newer tecnologies like LACP, PAGP this will not be required, Request you to kindly remove  | CA<br>Technologies | Clause as per tender/corrigendum            |
| 816 | 8.23 | 240 | Network<br>Performan<br>ce<br>Managem<br>ent | A variety of reports summarizing the data including: Home page summary, Calendar, Heat chart, Headline, Dashboard, Managed inventory report, Top ten, Most changed, Data explorer  | For wider participation request you to kindly rephrase it as " A variety of reports summarizing the data including: Trend Summary, Top N, Calendar, Heat chart, Dashboards, Managed inventory report, Top ten, Most changed or occuring events, Capacity planning etc   | CA                 | Clause as per tender/corrigendum            |
| 817 | 8.23 | 240 | Network<br>Performan<br>ce<br>Manageme<br>nt | Store as-polled data for up to 24 months   | Storing as-polled data for longer periods results in an increase in the Disk requiremnet and degrades the performance of the system, as per industry best practices data is rolled up to maintain sanity and performance of the system, for Wider participation request you to remove this clause or reduce it to 3 months."          | CA<br>Technologies | Clause as per tender/ corrigendum prevails. |
| 818 | 8.23 | 235 | EMS  | Consolidated dashboard of the proposed EMS solution shall be the manager of managers and capable of receiving events/alerts from multiple monitoring systems including system, network, storage, hardware, and application   | Do you require any application monitoring also as part of the project if not request you to kindly rephrase it as " Consolidated dashboard of the proposed EMS solution shall be the manager of managers window and capable of receiving events/alerts from multiple monitoring systems including system, network, storage, hardware" | CA<br>Technologies | Clause as per tender/corrigendum            |
| 819 | 8.23 | 235 | ed   | Tool should allow to browse performance metrics<br>by selecting CIs or events. New Performance<br>Perspectives allow you to compare graphs of<br>different CIs in the Model Explorer.  | For wider participation request you to kindly rephrase it as "Tool should allow to browse performance metrics by selecting Device/CIs or events. The tools should allow to compare different performance metrices of a device/CI in GUI."   | CA<br>Technologies | Clause as per tender/corrigendum            |
| 820 | 8.23 | 236 | Service<br>Level<br>Reporter                 | Should provide reports that can prove IT service quality levels, such as application response times and server resource consumption in the same report   | For wider participation request you to kindly rephrase it as "Should provide reports that can prove IT service quality levels, such as application response times and server resource consumption."   | CA<br>Technologies | Clause as per tender/corrigendum            |

| 821 | 8.23 | 236 | Service<br>Level<br>Reporter  | Server reporting tool should be able to collect and collate specific information regarding the relationships between the IT elements and the business services.   | The requirement asked does not provide much detail on specification, For Wider participation request you to kindly rephrase it as "Server reporting tool should be able to collect and collate metric information regarding the resource utilization, relationship of a business service with Infrastructure elements and its SLA performance".  | CA<br>Technologies | Clause as per tender/corrigendum |
|-----|------|-----|---|---|--|--------------------|----------------------------------|
| 822 | 8.23 | 236 | Service<br>Level<br>Reporter  | Tool should provide a library of predefined reports that can be cross-launched in the context of business services  | For wider Participation kindly rephrase it as "Tool should provide a library of predefined reports/Dashbaords that can be cross-launched in the context of business services".   | CA<br>Technologies | Clause as per tender/corrigendum |
| 823 | 8.23 | 236 | Service<br>Level<br>Reporter  | Tool should allow to configure downtime for Configuration Items and view the configured downtime in the reports   | For wider participation request to kindly rephrase it as " Tool should allow to configure downtime/maintenance window for Configuration Items/Devices and view or remove the configured downtime in the reports"   | CA<br>Technologies | Clause as per tender/corrigendum |
| 824 | 8.23 | 237 | Network<br>Automatio<br>n   | Enforce change processes in real time. Model complex approval processes with flexible rules. Force approvals for changes, including changes made by a direct command line interface (CLI) session   | For wider participation request to kindly rephrase it as "Enforce change processes in real time. Model complex approval processes with flexible rules. Force approvals for changes."   | CA<br>Technologies | Clause as per tender/corrigendum |
| 825 | 8.23 | 238 | Network<br>Fault<br>Manageme<br>nt                                    | The NMS application should provide a Unified Fault, Availability and Performance function from a single station only to reduce network and device loads with unified fault & performance polling.   | For wider participation request to kindly rephrase it as "The NMS application should provide a Unified Fault, Availability and Performance function from a single integrated/unified station".   | CA<br>Technologies | Clause as per tender/corrigendum |
| 826 | 8.23 | 238 | Service<br>Manageme<br>nt (Help<br>Desk) and<br>SLA<br>Manageme<br>nt | The proposed Helpdesk tool should be Axelos Gold level certified on at least 11 ITIL 2011 processes on all the 15 ITIL processes that are the most mature way to demonstrate that at least three IT organizations: Incident management, Problem Management, Change Management, Knowledge Management, Service Level Management, Service Asset and Configuration management, Service Catalogue and Request Fulfilment, etc. The certification copy to be submitted. | Pink Elephant is the independent ITIL verfication agency which certify solution on ITIL processes, please use the open criteria for this and rephrase it to:  • The proposed Helpdesk tool should I certified on at least on 11 ITIL 2011 processes of all the ITIL processes that are the most mature way to demonstrate that at least three IT organizations: Incident management, Problem Management, Change Management, Knowledge Management, Service Level Management, Service Asset and Configuration management, Service Catalogue and Request Fulfilment, etc. The certification copy to be submitted. | CA<br>Technologies | Clause as per tender/corrigendum |

| 827 | 8.23 | 241 | Asset<br>Manageme<br>nt   | Asset Manager enables IT organizations to manage the physical, financial and contractual aspects of all IT assets—from request and procurement to retirement and disposal—making it easy to optimize costs, mitigate security and compliance risks and drive busi-ness decisions. It should automatically discover and inventory enterprise IT assets which reduces compliance risks, enable software license optimization & chargeback & constant-ly track changing asset configurations | Suggest to keep asset management limited to IT Hardware Assets as it need specific skills and more audit and compliance process to be in place before implementation of the tool. Hence, suggest to remove it. | CA<br>Technologies | Clause as per tender/corrigendum |
|-----|------|-----|---------------------------|---|--|--------------------|----------------------------------|
| 828 | 8.23 | 241 | Asset<br>Manageme<br>nt   | AM should provide a built-in workflow to<br>suggest to the software asset managers in user<br>organization that they should request more<br>licenses or remove installed software that is not<br>in use or assign rights to others users rather than<br>procuring more licenses   | Suggest to keep asset management limited to IT Hardware Assets as it need specific skills and more audit and compliance process to be in place before implementation of the tool. Hence, suggest to remove it. | CA<br>Technologies | Clause as per tender/corrigendum |
| 829 | 8.23 | 241 |                           | • AM will directly alert users whenever a software installation exceeds the purchased vol- ume. AM will also automatically ensure that no additional users are able to subscribe to that software until additional licenses are made available  | Suggest to keep asset management limited to IT Hardware Assets as it need specific skills and more audit and compliance process to be in place before implementation of the tool. Hence, suggest to remove it. | CA<br>Technologies | Clause as per tender/corrigendum |
| 830 | 8.23 | 241 |                           | o Provide a general tab that stores specific information about the device depending on the device type.   | Please rephrase it to:  Provide capability to store specific information about the device depending on the device type.  | CA<br>Technologies | Clause as per tender/corrigendum |
| 831 | 8.23 | 241 | Asset<br>record<br>detail | o Provide a Components tab that stores sub-<br>components information of the asset. E.g. ID,<br>Serial Number, Licenses, Version, Status,<br>Category, Type, Item.  | Please rephrase it to:  Provide capability to store sub-components information of the asset. E.g. ID, Serial Number, Licenses, Version, Status, Category, Type, Item.  | CA<br>Technologies | Clause as per tender/corrigendum |
| 832 | 8.23 | 241 | Asset<br>record<br>detail | o Provide an Additional Details tab that stores various types of detail for the respec- tive type of asset. E.g. how much memory the printer has which might assist in a Help Desk call.  | Please rephrase it to:  Provide capability to store various types of detail for the respec- tive type of asset. E.g. how much memory the printer has which might assist in a Help Desk call.                   | CA<br>Technologies | Clause as per tender/corrigendum |

|     |   |     |                    |   | Please rephrase it to:  |                                       |   |
|-----|---|-----|--------------------|---|---|---------------------------------------|---|
| 833 | 8.23  | 241 | record             | o Provide a Contracts tab that stores different<br>types of contracts: Lease, Support, Warranty,<br>Software, Maintenance   | Provide capability to store different types of contracts: Lease, Support, Warranty, Software, Maintenance   | CA<br>Technologies                    | Clause as per tender/corrigendum  |
| 834 | 8.23  | 242 | record             | Provide a People tab that stores individuals or groups who are owners and users of the asset.   | Please rephrase it to:  Provide capability to store individuals or groups who are owners and users of the asset.  | CA<br>Technologies                    | Clause as per tender/corrigendum  |
| 835 | 8.23  | 242 | record<br>detail   | o Provide a Financials tab that stores associated costs by cost center, budget code, project. Static and incident costs. Provide Straight line depreciation cost calcula- tion.   | Please rephrase it to:  Provide capability to store associated costs by cost center, budget code, project. Static and incident costs. Provide Straight line depreciation cost calculation.  | CA<br>Technologies                    | Clause as per tender/corrigendum  |
| 836 | 8.23  | 242 | Auto-<br>Discovery | o Proposed solution should have the auto-<br>discovery tool, which should have tight<br>Integration with the proposed ITAM (IT Asset<br>Management) solution.   | Please rephrase it to:  Proposed solution should have the discovery mechanism which should be able to be imported by the proposed ITAM (IT Asset Management) solution.  | CA<br>Technologies                    | Clause as per tender/corrigendum  |
| 837 | 3.A.1.4<br>SCOPE<br>OF<br>WORK  | 48  | 3.A.1.4.16         | Provision of maintenance free earth with earth value less than 1 $\Omega$ .   | As per standard electrical practices, Provision of maintenance free earth with earth value less than 5 $\Omega$ is sufficient for infrastructure at field area. We request to revise the clause accordingly. Also, value depends on the soil condition. At some of soil conditions it would difficult to receive the value less than 1 Ohm. | Allied Digital<br>Services<br>Limited | Clause as per tender/corrigendum prevails.  |
| 838 | 3.A.1.7.<br>1<br>Support<br>from<br>Indian<br>Railway<br>s /<br>RailTel | 49  | 3.A.1.7.1          | Railways shall provide AC power supply at station/cabin/panel room/mid-section buildings for carrying out the awarded work. The successful bidder will have to pay the nominal charges for the power supply as per the existing Railways Norms. | We request to provide the AC power supply at no cost. Also, request to clarify the method of calculation for units consumed for the said work and tariff rate of Railway to be paid by the bidder.  | Allied Digital<br>Services<br>Limited | Tender clause prevails. Rates are as per Railway tarrif and vary from place to place (commercial rates) |

| 839 | 3.A.1.7.<br>1<br>Support<br>from<br>Indian<br>Railway<br>s /<br>RailTel               | 49 | 3.A.1.7.5 | nignt.  | We request to provide approx calculation of extimate of night hours neeeded. Night work incures higher manpower cost which needs to be incorporated and considered in to the financial/commercial bid proposal. Alternatively, allow the bidder with sufficient time for the site survey to make the estimate of approx night hours required before the submission of the bid. | Allied Digital<br>Services<br>Limited | Clause as per tender/corrigendum prevails.   |
|-----|---|----|-----------|---|--|---------------------------------------|--|
| 840 | 3.A.1.7.<br>1<br>Support<br>from<br>Indian<br>Railway<br>s /<br>RailTel<br>3.A.1.9    | 49 |           | Any land required by the bidder may be made<br>available by Railways, if available, at the lease<br>cost as per the latest norms of Railways. | We request to waive of the charges for the land<br>to be used by the bidder. Also, clarify the<br>cost/rent of land per square feet.   | Allied Digital<br>Services<br>Limited | Clause as per tender/corrigendum prevails.   |
| 841 | INSTALLA TION, INTEGRAT ION, TESTING, TRIAL RUN AND COMMISS IONING OF NETWOR K/SYSTEM | 50 | NA        | b) Integration with existing network/system   | We request to provide the complete technical details of existing network/system  | Allied Digital<br>Services<br>Limited | Te existing system is non proprietry and details may be provided to the successful vendor during commissioning of the station. |
| 842 | 3.A.1.10 TRAINING OF PURCHAS ER'S PERSONN EL AND CHANGE MANAGE- MENT                  | 50 | NA        | Completion of IT awareness training D + 3Months   | We reugest to extend the schedule up to D + 6<br>Months  | Allied Digital<br>Services<br>Limited | Clause as per tender/corrigendum prevails.   |

| 843 | 3.D.3.<br>Inspecti<br>on/Fact<br>ory<br>Accepta<br>nce Test | 70 | 3.D.3.4 | On successful visual and functional tests as above, the equipment may be considered to be in conformance with RDSO specification. However, the vendor shall submit special bank guarantee equivalent to 10% of the value of the equipments inspected by third party abroad & valid for a period of one year (in addition to Performance Guar-antee) and undertaking to the purchaser that the equipment supplied shall meet all the requisite parameters of the specification and shall work satisfactorily failing which bank guarantee may be encashed. Firm shall also submit suitable undertaking regard-ing satisfactory repair /service support to the purchaser. | We request to waive off the additional special<br>bank guarantee equivalent to 10% of the value<br>of the equipments inspected by third party<br>abroad. Bidder would be already providing<br>normal bank guaratnee for the project. | Allied Digital<br>Services<br>Limited | Clause as per tender/corrigendum prevails. |
|-----|---|----|---------|---|--|---------------------------------------|--|
| 844 | 4.A.4 Delivery /Implem entation timeline s                  | 80 | NA      | Phase I, II and III to be completed within D + 15 Months  | We request revise the total project completion timelines up to D + 21 Months.  | Allied Digital<br>Services<br>Limited | Clause as per tender/corrigendum prevails. |

| 845 | 4.A.8<br>Service<br>Level<br>Agreem<br>ent<br>(SLA)<br>and<br>Penaltie<br>s    | 89  | 4.A.8.10        | No payment for the month would be made for the station where the station down time observed would be more than 20%. Down time for station would be defined as follows:  a) For A-1 category station, the station would be considered as down for the time when more than 15 cameras are defective or out of service  b) For A category station, the station would be considered as down for the time when more than 12 cameras are defective or out of service  c) For B category station, the station would be considered as down for the time when more than 8 cameras are defective or out of service d) For C category station, the station would be considered as down for the time when more than 5 cameras are defective or out of service  e) For D & E category station, the station would be considered as down for the time when more than 2 cameras are defective or out of service | We request to revise the clause as below.  No payment for the month would be made for the station where the station down time observed would be more than 60%. Down time for station would be defined as follows:  a) For A-1 category station, the station would be considered as down for the time when more than 60% cameras are defective or out of service  b) For A category station, the station would be considered as down for the time when more than 60% cameras are defective or out of service  c) For B category station, the station would be considered as down for the time when more than 60% cameras are defective or out of service  d) For C category station, the station would be considered as down for the time when more than 60% cameras are defective or out of service  e) For D & E category station, the station would be considered as down for the time when more than 60% cameras are defective or out of service | Allied Digital<br>Services<br>Limited | Clause as per tender/corrigendum prevails. |
|-----|--|-----|-----------------|---|---|---------------------------------------|--|
| 846 | 4.A.14.1<br>Eligibilit<br>Y<br>Criteria<br>Require<br>ments<br>for<br>Bidders: | 94  | Legal<br>Entity | The bidder should be a Compa-ny registered in India under the Companies Act (India) with their registered office in India should have been operating in the System Integration services for the last three years  | We request to allow a foreign company who is having the business in IT/Security/Telecom or the OEM who has not presence in India to participate as a consortium partner, with the Indian company who is the lead bidder.  Also, request to clarify the documents to be submitted for such a foreign company/OEM who participate as a Consortium Partner.  | Allied Digital<br>Services<br>Limited | Clause as per tender/corrigendum prevails. |
| 847 | 8.8 Type-<br>I Switch  | 212 | 8.8.2.3         | Bidder to propose switch having Operating<br>Temperature and Storage Temperature as per<br>environmental requirement  | Kindly clarify the expected Opertaing temperature and storage temperature? Can we assume it will be with in 0 to 45 celecius operating temperature and -20 to 70 celecius for storage temperature as all leading brand of enterprise switches support it.   | DELL                                  | Clause as per tender/corrigendum prevails. |

| 848 | 8.9.<br>Type-II<br>Switch          | 213 | 19    | Should support ITU-T G.8032 Ethernet Ring Protection designed for loop protection and fast convergence times (sub 50 ms) in ring topologies. | Dell Supports IEEE802.1w sub second raing failover which interopetaes with multivendor Switches in Ring which might not be with Implemnetation of Specific sub 50 msec failover technologies. Tequest to accept IEEE 802.1W RSTP as sub second Failover technology | DELL | Clause as per tender/corrigendum prevails. |
|-----|------------------------------------|-----|-------|--|--|------|--|
| 849 | 8.9.<br>Type-II<br>Switch          | 213 | 24    | I) Bidder to propose switch having Operating Temperature and Storage Temperature as per environmental requirement.                           | Kindly clarify the expected Opertaing temperature and storage temperature? Can we assume it will be with in 0 to45 celecius operating temperature and -20 to 70 celecius for storage temperature as all leading brand of enterprise switches support it.           | DELL | Clause as per tender/corrigendum prevails. |
| 850 | 8.10.<br>Switche<br>s Type-<br>III | 215 | 24    | Bidder to propose switch having Operating Temperature as per environ-mental requirement at Indian Railway Stations.                          | Kindly clarify the expected Opertaing temperature and storage temperature? Can we assume it will be with in 0 to45 celecius operating temperature and -20 to 70 celecius for storage temperature as all leading brand of enterprise switches support it.           | DELL | Clause as per tender/corrigendum prevails. |
| 851 | 8.10.<br>Switche<br>s Type-<br>III | 215 | 25    | Bidder to propose switch having Storage<br>Temperature as per environ-mental<br>requirement.   | Kindly clarify the expected Opertaing temperature and storage temperature? Can we assume it will be with in 0 to45 celecius operating temperature and -20 to 70 celecius for storage temperature as all leading brand of enterprise switches support it.           | DELL | Clause as per tender/corrigendum prevails. |
| 852 | 8.11.<br>Switche<br>s Type-<br>IV  | 216 | 10    | Bidder to propose switch having Operating and Storage Temperature as per environmental requirement   | Kindly clarify the expected Opertaing temperature and storage temperature? Can we assume it will be with in 0 to45 celecius operating temperature and -20 to 70 celecius for storage temperature as all leading brand of enterprise switches support it.           | DELL | Clause as per tender/corrigendum prevails. |
| 853 | 8.11.<br>Switche<br>s Type-<br>IV  | 216 | 14 .3 | Shall also support MPLS with RSVP and LDP signaling. It shall support MPLS FRR and L3VRF with upto 64 VRF.                                   | Router can provide detailed MPLS feature as asked in the specification. Kindly confirm it's a optional requirement or router and switch can be combined for Switch type -IV.   | DELL | Clause as per tender/corrigendum prevails. |
| 854 | 8.11.<br>Switche<br>s Type-<br>IV  | 216 | 14.5  | Shall support at least 1K MPLS labels.   | Router can provide detailed MPLS feature as asked in the specification. Kindly confirm it's a optional requirement or router and switch can be combined for Switch type -IV.   | DELL | Clause as per tender/corrigendum prevails. |

| 855 | 8.11.<br>Switche<br>s Type-<br>IV | 216 | 14.7  | It shall support LSP ping and trace.  | Router can provide detailed MPLS feature as asked in the specification. Kindly confirm it's a optional requirement or router and switch can be combined for Switch type -IV.  | DELL | Clause as per tender/corrigendum prevails. |
|-----|-----------------------------------|-----|-------|---|---|------|--|
| 856 | 8.11.<br>Switche<br>s Type-<br>IV | 216 | 14.9  | Shall support MPLS based L3 and L2 VPN services.  | Router can provide detailed MPLS feature as asked in the specification. Kindly confirm it's a optional requirement or router and switch can be combined for Switch type -IV.  | DELL | Clause as per tender/corrigendum prevails. |
| 857 | 8.11.<br>Switche<br>s Type-<br>IV | 217 | 15.21 | ITU-T G.8032 Ethernet Ring Protection designed for loop protection and fast convergence times (sub 50 ms) in ring topologies  | Dell Supports IEEE802.1w sub second raing<br>failover which interopetaes with multivendor<br>Switches in Ring which might not be with<br>Implemnetation of Specific sub 50 msec failover<br>technologies. Tequest to accept IEEE 802.1W<br>RSTP as sub second Failover technology | DELL | Clause as per tender/corrigendum prevails. |
| 858 | 8.11.<br>Switche<br>s Type-<br>IV | 217 | 15.22 | Should support multiple Ring up to 8 ring (Main and Sub Ring) protection failover within 50 ms (up to 10 Switches in ring) or ITU-T G.8032 v2 (Confirmed roadmap within a year time is also acceptable for ITU-T G.8032 v2 with no additional cost to RailTel).   | Dell Supports IEEE802.1w sub second raing failover which interopetaes with multivendor Switches in Ring which might not be with Implemnetation of Specific sub 50 msec failover technologies. Tequest to accept IEEE 802.1W RSTP as sub second Failover technology                | DELL | Clause as per tender/corrigendum prevails. |
| 859 | 8.11.<br>Switche<br>s Type-<br>IV | 217 | 15.28 | The following Metro Ethernet features should support:  1. IEEE 802.1ad Provider Bridge. 2. Transparent LAN Services with Service VLAN (SVLAN) and Customer VLAN (CVLAN) concept. 3. CVLAN to SVLAN translation and mapping 4. IEEE 802.1ag Ethernet OAM: Connectivity Fault Management (Support 32 MEPs). 5. Ethernet OAM compliant with IEEE 802.3ah. 6. ITU-T G.8032 Ethernet Ring Protection designed for loop protec-tion and fast convergence times (sub 50 ms) in ring topologies. 7. Should support Optical Transceiver Digital Diagnostic Monitor-ing. 8. Switch should support minimum of 4000 Ethernet flow points (EFP) or equivalent functionality. 9. L2 Protocol Tunneling. | Dell supports Double Vlan taggingand 802.1ag<br>Connectivity fault manangemnet features.<br>Request to accept IEEE 802.1W RSTP sub scond<br>failover against G.8032 Sub 50 Msec as each<br>oem has specfic implemnetation   | DELL | Clause as per tender/corrigendum prevails. |

| 860 | 8.11.<br>Switche<br>s Type-<br>IV                | 217         | 17      | i. The model of the Switches series shall have MEF-(9 & 14)/CE2.0 or higher certification from authorized agencies. | Request for acceptance for Emnterprise<br>Switches   | DELL                                       | Clause as per tender/corrigendum prevails. |
|-----|--|-------------|---------|---|--|--|--|
| 861 | 8.12.<br>Core<br>Switch<br>for<br>Datacen<br>ter | 219         | 25      | Switch shall be PCI/EAL2/NDPP/FIPS certified from common criteria organiza-tion.                                    | Since PCI/EAL2/NDPP/FIPS are the common criteria certifion for secuity. The common criteria certificate doesn't ensure the better security, its ensure the better documentation.  Request you to kindly remove so that leading OEM can participate.  Request you to kindly remove this clause. | НРЕ  | Clause as per tender/corrigendum prevails. |
| 862 | 11.0<br>PC<br>Workst<br>ation                    | 310         | 4       | Frequency - 2.4 GHz or higher   | Request you to change it to 3.7 GHz or higher  | Hewlett<br>Packard India<br>Sales Pvt. Ltd | Clause as per tender/corrigendum prevails. |
| 863 | 11.0<br>PC<br>Workst<br>ation                    | 310         | 10      | Hard Disk Drive - SAS HDD, 2x450 GB,<br>10000 RPM or higher   | Request you to change it to 2X512GB SSD or higher  | Hewlett<br>Packard India<br>Sales Pvt. Ltd | Clause as per tender/corrigendum prevails. |
| 864 |  |             | 3.B.3.1 |   |  | NVT<br>Phybridge<br>India                  | Clause as per tender/corrigendum prevails. |
| 865 |  |             | 3.B.3.2 | O mant Daff annua suitah an uili ba danlamad  | The successful bidder will be allowed to use POE   | NVT<br>Phybridge<br>India                  | Clause as per tender/corrigendum prevails. |
| 866 |  | 55,<br>56   | 3.B.3.3 | 8 port PoE access switches will be deployed on each platform to cover required length of platform.                  | extenders wherever the distance of IP end points like IP cameras from the 8-port switch is   | NVT<br>Phybridge<br>India                  | Clause as per tender/corrigendum prevails. |
| 867 |  |             | 3.B.3.4 | <b>F</b> ************************************   | more than 100 metres   | NVT<br>Phybridge<br>India                  | Clause as per tender/corrigendum prevails. |
| 868 |  |             | 3.B.3.5 |   |  | NVT<br>Phybridge<br>India                  | Clause as per tender/corrigendum prevails. |
| 869 |  | 212         | 8.8     | 8 Port Layer 2 switch suitable for end locations as per RDSO Specification no.                                      | The successful bidder will be allowed to use POE extenders wherever the distance of IP end   | NVT<br>Phybridge<br>India                  | Clause as per tender/corrigendum prevails. |
| 870 |  | 212         | 0.0     | RDSO/SPN/TC/83/2014 Revision 1.0 or latest with all amendments.   | points like IP cameras from the 8-por tswitch is more than 100 metres  | NVT<br>Phybridge<br>India                  | Clause as per tender/corrigendum prevails. |
| 871 | Amendm<br>ent No.<br>03                          | 9 of<br>10  | 16      | Processor – Intel Core i7 or similar or higher  | Request to include AMD by Name to enhance competition, only 02 global manufacturers of Microprocessors are available worldwide   | AMD INDIA<br>PVT LTD                       | Clause as per tender/corrigendum prevails. |
| 872 | Amendm<br>ent No.<br>04                          | 10 of<br>10 | 16      | No. of Cores – 02   | The latest generation i7 and AMD R7 processors have core counts of 6 & 8 respectively. So, Based on the current technology availability, request to mention 6 Core or higher to accommodate all.   | AMD INDIA<br>PVT LTD                       | Clause as per tender/corrigendum prevails. |
| 873 | Amendm<br>ent No.<br>05                          | 11 of<br>10 | 16      | Cache 4 MB  | Current processors of the desired standard do have<br>at least 12 MB of cache. Therefore, request to<br>mention 12 MB cache or higher to ensure latest<br>products to be quoted  | AMD INDIA<br>PVT LTD                       | Clause as per tender/corrigendum prevails. |

|     |   |             | 1                                |                                   |  |  |  |
|-----|---|-------------|----------------------------------|-----------------------------------|--|--|--|
| 874 | RDSO<br>specifica<br>tion of IP<br>based<br>Video<br>Surveilla<br>nce<br>system | 21 of<br>45 | 10.1.1 –<br>Server<br>Hardware   | Processor – Intel Xeon            | Request to incorporate AMD EPYC as an option at the component level. | AMD INDIA<br>PVT LTD                       | Clause as per tender/corrigendum prevails. |
| 875 | RDSO<br>specifica<br>tion of IP<br>based<br>Video<br>Surveilla<br>nce<br>system | 22 of<br>45 | 10.1.1 –<br>Server<br>Hardware   | QPI                               | Proprietary Term – Request to remove the same to allow all to bid    | AMD INDIA<br>PVT LTD                       | Clause as per tender/corrigendum prevails. |
| 876 | RDSO<br>specifica<br>tion of IP<br>based<br>Video<br>Surveilla<br>nce<br>system | 23 of<br>45 | 10.1.1 –<br>Server<br>Hardware   | System Bus / QPI Speed            | Proprietary Term – Request to remove the same to allow all to bid    | AMD INDIA<br>PVT LTD                       | Clause as per tender/corrigendum prevails. |
| 877 | Specific<br>ations<br>of<br>Display<br>Wall                                     |             | Display Wall<br>Screen Size      | 70"                               |  | Delta<br>Displays<br>solutions<br>Business | Clause as per tender/corrigendum prevails. |
| 878 | Specific<br>ations<br>of<br>Display<br>Wall                                     |             | Projection<br>Technology         | DLP Rear Projection Display Cubes |  | Delta<br>Displays<br>solutions<br>Business | Clause as per tender/corrigendum prevails. |
| 879 | Specific<br>ations<br>of<br>Display<br>Wall                                     |             | Native<br>Resolution<br>per cube | 1920×1080                         |  | Delta<br>Displays<br>solutions<br>Business | Clause as per tender/corrigendum prevails. |
| 880 | Specific<br>ations<br>of<br>Display<br>Wall                                     |             | Aspect Ratio                     | 16:9                              |  | Delta<br>Displays<br>solutions<br>Business | Clause as per tender/corrigendum prevails. |

|     | C:¢: .   | No. of       | 4 [ 2 ( Columns ) x 2 ( Rows ) ]                    |   | I                     |                                  |
|-----|----------|--------------|---|---|-----------------------|----------------------------------|
|     | Specific | Modules      | 4 [ 2 ( COlumns ) x 2 ( ROWS ) ]                    |   |                       |                                  |
|     | ations   | iviodules    |   |   | Delta                 | Clause as per tender/corrigendum |
| 881 | of       |              |   |   | Displays              | prevails.                        |
|     | Display  |              |   |   | solutions             | prevans.                         |
|     | Wall     |              |   |   | Business              |                                  |
|     | Specific | Light Source | LED (R/G/B)   | Please chagne to:                                   |                       |                                  |
|     | ations   |              |   | LED Clusture  |                       |                                  |
|     | of       |              |   |   | Delta                 | Clause as per tender/corrigendum |
|     | l l      |              |   |   | Displays              | prevails.                        |
|     | Display  |              |   |   | solutions             |                                  |
|     | Wall     |              |   |   | Business              |                                  |
|     | Specific | Brightness   | Minimum 300 cd/m2                                   |   |                       |                                  |
|     | ations   |              |   |   |                       |                                  |
| 883 | of       |              |   |   | Delta                 | Clause as per tender/corrigendum |
|     | Display  |              |   |   | Displays              | prevails.                        |
|     | Wall     |              |   |   | solutions<br>Business |                                  |
|     |          | Brightness   | 95%   |   | Dusiness              |                                  |
|     | Specific | Uniformity   | 33%   |   |                       |                                  |
|     | ations   | Omormicy     |   |   | Delta                 | Clause as per tender/corrigendum |
|     | of       |              |   |   | Displays              | prevails.                        |
|     | Display  |              |   |   | solutions             | prevans.                         |
|     | Wall     |              |   |   | Business              |                                  |
|     | Specific | Contrast     | Typical 1600:1                                      |   |                       |                                  |
|     | ations   | ratio        |   |   |                       | _                                |
|     | of       |              |   |   | Delta                 | Clause as per tender/corrigendum |
|     | l        |              |   |   | Displays              | prevails.                        |
|     | Display  |              |   |   | solutions             |                                  |
|     | Wall     |              |   |   | Business              |                                  |
|     | Specific |              | Automatic inbuilt sensors for Contionous colour and | Proprietary specs. Please change to:                |                       |                                  |
|     | ations   | Calibration  | brightness management mechanism to be provided.     | Automatic inbuilt sensors for colour and brightness |                       | Clause as per tender/corrigendum |
| 886 | of       |              |   | management mechanism to be provided                 | Delta                 | 1                                |
|     | Display  |              |   |   | Displays solutions    | prevails.                        |
|     | Wall     |              |   |   | Business              |                                  |
|     | Specific | Connectivity | Each display Module shall support 4HD @ 30Hz inputs | Remove this   |                       |                                  |
|     | ations   | ,            |   |   |                       |                                  |
|     | l l      |              |   |   | Delta                 | Clause as per tender/corrigendum |
|     | of       |              |   |   | Displays              | prevails.                        |
|     | Display  |              |   |   | solutions             | p. 6 s a                         |
|     | Wall     |              |   |   | Business              |                                  |
|     | Specific | Full viewing | 180°  |   |                       |                                  |
|     | ations   | angle        |   |   |                       |                                  |
| 888 |          |              |   |   | Delta                 | Clause as per tender/corrigendum |
|     | Display  |              |   |   | Displays              | prevails.                        |
|     |          |              |   |   | solutions             |                                  |
|     | Wall     | Lifotime     | Normal mode: 60 000h                                |   | Business              |                                  |
|     | Specific | Lifetime     | Normal mode: 60,000h                                |   |                       |                                  |
|     | ations   |              |   |   | Dalt-                 | Clause as per tender/corrigendum |
| 889 | of       |              |   |   | Delta<br>Displays     | prevails.                        |
|     | Display  |              |   |   | solutions             | prevails.                        |
|     | Wall     |              |   |   | Business              |                                  |

|     | Specific |             | Eco mode: 80,000h                                     |   | 1                     |                                  |
|-----|----------|-------------|---|---|-----------------------|----------------------------------|
|     | ations   |             | 200,00011   |   |                       |                                  |
| 000 |          |             |   |   | Delta                 | Clause as per tender/corrigendum |
| 890 | of       |             |   |   | Displays              | prevails.                        |
|     | Display  |             |   |   | solutions             | ·                                |
|     | Wall     |             |   |   | Business              |                                  |
|     | Specific | Inputs      | Dual link DVI-D in/out                                | Proprietary specs. Please change to:                                  |                       |                                  |
|     | ations   |             |   | Single link DIV In/Out for wider participation                        |                       | Clause as per tender/serrigendum |
| 891 | of       |             |   |   | Delta                 | Clause as per tender/corrigendum |
|     | Display  |             |   |   | Displays solutions    | prevails.                        |
|     | Wall     |             |   |   | Business              |                                  |
|     | Specific | Power       | 100 - 240 VAC, 60 - 50Hz, (below values are for 230V; | Proprietary specs. Please change to:                                  |                       |                                  |
|     | ations   |             | 110V +5%)   | 100 - 240 VAC, 60 - 50Hz  |                       |                                  |
| 892 | of       |             |   |   | Delta                 | Clause as per tender/corrigendum |
| 032 | Display  |             |   |   | Displays              | prevails.                        |
|     | Wall     |             |   |   | solutions             |                                  |
|     |          | Fd-         | th 420 W-++   | Duranistani ang Plana akana ta  | Business              |                                  |
|     | Specific | Eco mode    | Less than 120 Watt                                    | Proprietary specs. Please change to: Max 270W for wider participation |                       |                                  |
|     | ations   |             |   | liviax 270W for wider participation                                   | Delta                 | Clause as per tender/corrigendum |
|     | of       |             |   |   | Displays              | prevails.                        |
|     | Display  |             |   |   | solutions             | p. 6 va                          |
|     | Wall     |             |   |   | Business              |                                  |
|     | Specific | Heat        |   |   |                       |                                  |
|     | ations   | Dissipation |   |   |                       |                                  |
| 894 | of       |             |   |   | Delta                 | Clause as per tender/corrigendum |
|     | Display  |             |   |   | Displays              | prevails.                        |
|     | Wall     |             |   |   | solutions<br>Business |                                  |
|     | Specific | Eco mode    | Less Than 400 BTU/h                                   | Proprietary specs. Please change to:                                  |                       |                                  |
|     | ations   |             |   | Max 900 BTU/h for wider participation                                 |                       |                                  |
| 895 |          |             |   |   | Delta                 | Clause as per tender/corrigendum |
| 093 |          |             |   |   | Displays              | prevails.                        |
|     | Display  |             |   |   | solutions             |                                  |
|     | Wall     |             |   |   | Business              |                                  |
|     | Specific | Operating   |   |   |                       |                                  |
|     | ations   | conditions  |   |   |                       | Clause as per tender/corrigendum |
| 896 | of       |             |   |   | Delta<br>Displays     | prevails.                        |
|     | Display  |             |   |   | solutions             | prevails.                        |
|     | Wall     |             |   |   | Business              |                                  |
|     | Specific | Humidity    | Up to 80% non-condensing                              |   |                       |                                  |
|     | ations   |             |   |   |                       |                                  |
| 897 | of       |             |   |   | Delta                 | Clause as per tender/corrigendum |
|     | Display  |             |   |   | Displays              | prevails.                        |
|     | Wall     |             |   |   | solutions<br>Business |                                  |
|     | Specific | Temperatur  | 10°C-40°C   50°F-105°F                                |   | Dusilless             |                                  |
|     | I -      | e           |   |   |                       |                                  |
| 000 | ations   |             |   |   | Delta                 | Clause as per tender/corrigendum |
| 898 | of       |             |   |   | Displays              | prevails.                        |
|     | Display  |             |   |   | solutions             |                                  |
|     | Wall     |             |   |   | Business              |                                  |

|     |                               | Storing               |  |  | Delta                 |                                  |
|-----|-------------------------------|-----------------------|--|--|-----------------------|----------------------------------|
|     | ations                        | conditions            |  |  | Displays              | Clause as per tender/corrigendum |
| 899 | of                            |                       |  |  | solutions             | prevails.                        |
|     | Display<br>Specific           |                       |  |  | Business              | ·                                |
|     |                               | Temperatur            | 0°C-40°C   32°F-105°F  |  | Delta                 |                                  |
| 900 | ations                        | е                     |  |  | Displays solutions    | Clause as per tender/corrigendum |
|     | of                            |                       |  |  | Business              | prevails.                        |
|     | Display                       |                       |  |  | - I.                  |                                  |
|     | ations                        | Remote                | Remote management through IP for parameter   |  | Delta<br>Displays     | Clause as per tender/corrigendum |
| 901 | of                            | t through IP          | adjustment. Each cube should have built-in web server  |  | solutions             | ·                                |
|     | Display                       | t till ough ir        |  |  | Business              | prevails.                        |
|     | -                             | Access                | Rear of the Video Wall only  |  | Delta                 |                                  |
| 902 | ations                        |                       | ,  |  | Displays              | Clause as per tender/corrigendum |
|     | of                            |                       |  |  | solutions             | prevails.                        |
|     | Display                       |                       |  |  | Business              | ·                                |
|     | ations                        | Pixel clock           | 320 Mhz  | Proprietary specs. Please change to:                     | Delta                 | Clause as per tender/corrigendum |
| 903 | of                            |                       |  | 162 Mhz for wider participation                          | Displays<br>solutions | ·                                |
|     | Display                       |                       |  |  | Business              | prevails.                        |
|     | ations                        | Signal                | Each cube should have cropping/scaling capability  |  | Delta                 |                                  |
| 904 | of                            | Processing            |  |  | Displays              | Clause as per tender/corrigendum |
|     | -                             |                       |  |  | solutions             | prevails.                        |
|     | Display                       |                       |  |  | Business              |                                  |
|     | ations                        | Screen Half-          | Hor: 28 degrees +/- 3  |  | Delta                 | Clause as per tender/corrigendum |
| 905 | of                            | gain Viewing<br>Angle |  |  | Displays<br>solutions | I                                |
|     | Display                       | Aligie                |  |  | Business              | prevails.                        |
|     | ations                        |                       | Ver: 13 degrees +/- 3  |  | Delta                 |                                  |
| 906 | of                            |                       |  |  | Displays              | Clause as per tender/corrigendum |
|     |                               |                       |  |  | solutions             | prevails.                        |
|     | Display<br>Specific           |                       | The control of the co |  | Business              |                                  |
|     | ations                        | Layouts               | The software should be able to pre configure various display lay- outs and access them at any time with a  |  | Delta                 |                                  |
| 907 | of                            |                       | simple mouse click or schedule/timer based.  |  | Displays              | Clause as per tender/corrigendum |
|     | Display                       |                       | simple mouse eller of serieudic, timer susea.  |  | solutions<br>Business | prevails.                        |
|     | Specific                      | Sources               | The software should be able to display multiple sources  |  | Dusilless             |                                  |
|     | ations                        | Sources               | anywhere on the video wall & in any size.  |  | Delta                 | Clause as per tender/corrigendum |
| 908 | of                            |                       | any mere on the video man a many size.   |  | Displays<br>solutions | prevails.                        |
|     | Display                       |                       |  |  | Business              | prevails.                        |
|     | Specification                 | Remote                | The video wall content will be able to show live on any  | Proprietary specs. Please remove for wider pariticpation | Delta                 |                                  |
| 000 | s of Display                  | Viewing               | remote display Mobile with IE  |  | Displays              | Clause as per tender/corrigendum |
| 909 | Wall<br>Managemen             |                       |  |  | solutions             | prevails.                        |
|     | t Software                    |                       |  |  | Business              | ·                                |
|     | Specification<br>s of Display | User                  | Key features of Video Wall Management Software   |  | Delta<br>Displays     | Clause as per tender/corrigendum |
| 910 | Wall                          | managemen             |  |  | solutions             |                                  |
|     | Managemen                     | ļ <sup>t</sup>        |  |  | Business              | prevails.                        |
|     | Specification                 |                       | Central configuration database   |  |                       |                                  |
|     | s of Display<br>Wall          |                       |  |  |                       |                                  |
| 911 | Managemen                     |                       |  |  | Delta                 | Clause as per tender/corrigendum |
|     | t Software                    |                       |  |  | Displays              | prevails.                        |
|     |                               |                       |  |  | solutions<br>Business |                                  |
|     |                               |                       | 1  |  | Dusilless             |                                  |

|     | Specification  |                      | Browser based user interface   | Please change this to  | Delta                                      |  |
|-----|--|----------------------|--|------------------------|--|--|
| 912 | s of Display<br>Wall<br>Managemen<br>t Software                          |                      | Browser based user interface   | browser / server based | Displays<br>solutions<br>Business          | Clause as per tender/corrigendum prevails. |
| 913 | Specifica<br>tions of<br>Display<br>Wall<br>Manage<br>ment<br>Software   |                      | Auto-detection of network sources  |                        | Delta<br>Displays<br>solutions<br>Business | Clause as per tender/corrigendum prevails. |
| 914 | Specific<br>ations<br>of<br>Display<br>Wall<br>Manage<br>ment<br>Softwar |                      | Online configuration of sources, displays and system variables   |                        | Delta<br>Displays<br>solutions<br>Business | Clause as per tender/corrigendum prevails. |
| 915 | Specificatio<br>ns of<br>Display<br>Wall<br>Manageme<br>nt Software      | Software<br>features | Video Wall Control Software shall allow commands on wall level or cube level or a selection of cubes :   |                        | Delta<br>Displays<br>solutions<br>Business | Clause as per tender/corrigendum prevails. |
| 916 | Specificatio<br>ns of<br>Display<br>Wall<br>Manageme<br>nt Software      |                      | Switching the entire display wall on or off.   |                        | Delta<br>Displays<br>solutions<br>Business | Clause as per tender/corrigendum prevails. |
| 917 | Specificatio<br>ns of<br>Display<br>Wall<br>Manageme<br>nt Software      |                      | Setting all projection modules to a common brightness target, which can be either static (fixed) or dynamic to always achieve maximum (or minimum) common brightness between projection modules. |                        | Delta<br>Displays<br>solutions<br>Business | Clause as per tender/corrigendum prevails. |
| 918 | Specificati<br>ons of<br>Display<br>Wall<br>Managem<br>ent<br>Software   |                      | Fine-tune colour of each cube  |                        | Delta<br>Displays<br>solutions<br>Business | Clause as per tender/corrigendum prevails. |

|     | Specificati | Client &     | Should support Multiple clients / Consoles to control |  |                       |                                   |
|-----|-------------|--------------|---|--|-----------------------|-----------------------------------|
|     | ons of      | Server based | the Wall lay- outs                                    |  |                       |                                   |
|     | Display     | Architecture | ,   |  |                       | Clause as non ton don/somigen dum |
| 919 | Wall        |              |   |  | Delta                 | Clause as per tender/corrigendum  |
|     | Managem     |              |   |  | Displays              | prevails.                         |
|     | ent         |              |   |  | solutions             |                                   |
|     | Software    |              |   |  | Business              |                                   |
|     | Specificati | Collaboratio | The Software should be able to share layouts          |  |                       |                                   |
|     | ons of      | n            | comprising of multiple sources with workstations /    |  |                       |                                   |
|     | Display     |              | Displays over LAN for remote monitoring               |  |                       |                                   |
| 920 | Wall        |              | Displays over LAN for remote monitoring               |  | 5.1.                  | Clause as per tender/corrigendum  |
| 920 | Managem     |              |   |  | Delta                 | prevails.                         |
|     | ent         |              |   |  | Displays              | ·                                 |
|     | Software    |              |   |  | solutions<br>Business |                                   |
|     | Joitware    | C - II       | Coft and the Hamiltonian Control Control Control      |  | busilless             |                                   |
|     |             | Scaling      | Software should enable the user to display multiple   |  |                       |                                   |
|     |             |              | sources (both local & remote) up to any size and      |  |                       |                                   |
|     | Specifica   |              | anywhere on the display walls (both local & remote).  |  |                       |                                   |
|     | tions of    |              |   |  |                       |                                   |
| 921 | 1           |              |   |  |                       | Clause as per tender/corrigendum  |
| 921 | Display     |              |   |  |                       | prevails.                         |
|     | Wall        |              |   |  | Delta                 |                                   |
|     | Manage      |              |   |  | Displays              |                                   |
|     | ment        |              |   |  | solutions             |                                   |
|     | Software    |              |   |  | Business              |                                   |
|     |             | Display      | The software should be able to create layouts and     |  |                       |                                   |
|     |             |              | launch them as and when desired                       |  |                       |                                   |
|     |             |              | ladiicii tileiii as alid wileii desiled               |  |                       |                                   |
|     | Specifica   |              |   |  |                       |                                   |
|     | tions of    |              |   |  |                       |                                   |
| 922 | Display     |              |   |  |                       | Clause as per tender/corrigendum  |
|     | Wall        |              |   |  |                       | prevails.                         |
|     | 1           |              |   |  | Delta                 |                                   |
|     | Manage      |              |   |  | Displays              |                                   |
|     | ment        |              |   |  | solutions             |                                   |
|     | Software    |              |   |  | Business              |                                   |
|     |             | Remote       | The Display Wall and sources (both local & remote)    | Please remve the red hilighted portion for wider |                       |                                   |
|     |             |              | should be controlled from Remote PC through LAN       | participation                                    |                       |                                   |
|     |             |              | without the use of KVM Hardware. All Video wal        | [  |                       |                                   |
|     | Specifica   |              | control to be also seamlessly integrated with smart   |  |                       |                                   |
|     | tions of    |              | keyboard console with touch screen.                   |  |                       | Clause as per tender/corrigendum  |
| 923 | Display     |              | neyboard console with toden selection                 |  |                       |                                   |
|     | Wall        |              |   |  |                       | prevails.                         |
|     | Manage      |              |   |  | Delta                 |                                   |
|     |             |              |   |  | Displays              |                                   |
|     | ment        |              |   |  | solutions             |                                   |
|     | Software    |              |   |  | Business              |                                   |

|     | la .c. l  | le . |                | C. C  | 1 |           |                                  |
|-----|-----------|------|----------------|---|---|-----------|----------------------------------|
|     | Specific  |      |                | Software should support display of Alarms   |   |           |                                  |
|     | ations    | ivie | eta Data       |   |   |           |                                  |
|     | of        |      |                |   |   |           |                                  |
|     | Display   |      |                |   |   |           |                                  |
| 924 | Wall      |      |                |   |   |           | Clause as per tender/corrigendum |
|     | Manage    |      |                |   |   |           | prevails.                        |
|     | ment      |      |                |   |   | Delta     |                                  |
|     | Softwar   |      |                |   |   | Displays  |                                  |
|     |           |      |                |   |   | solutions |                                  |
|     | e         |      |                | <del>-</del>  |   | Business  |                                  |
|     | Specific  |      |                | The software should provide at least 2 layer of authentication, software & hardware through |   |           |                                  |
|     | ations    | on   |                | username and password on the oper- ator smart   |   |           |                                  |
|     | of        |      |                | console with touchscreen  |   |           |                                  |
|     | Display   |      |                | console with touchstreen  |   |           |                                  |
| 925 | Wall      |      |                |   |   |           | Clause as per tender/corrigendum |
|     | Manage    |      |                |   |   |           | prevails.                        |
|     | ment      |      |                |   |   | Delta     |                                  |
|     |           |      |                |   |   | Displays  |                                  |
|     | Softwar   |      |                |   |   | solutions |                                  |
|     | e         |      |                |   |   | Business  |                                  |
|     | Specific  | Sce  |                | Software should able to Save and Load desktop layouts                                       |   |           |                                  |
|     | ations    |      |                | from Lo- cal or remote machines   |   |           |                                  |
|     | of        |      |                |   |   |           |                                  |
|     | Display   |      |                |   |   |           |                                  |
| 926 | Wall      |      |                |   |   |           | Clause as per tender/corrigendum |
|     | Manage    |      |                |   |   |           | prevails.                        |
|     | ment      |      |                |   |   | Delta     |                                  |
|     | Softwar   |      |                |   |   | Displays  |                                  |
|     | Joitwai   |      |                |   |   | solutions |                                  |
|     | e         | 1    |                | All the Lavarite and he adeled all and a second and a second and                            |   | Business  |                                  |
|     | Specific  |      | out<br>neduler | All the Layouts can be scheduled as per user convince.                                      |   |           |                                  |
|     | ations    | 3011 | ledulei        |   |   |           |                                  |
|     | of        |      |                |   |   |           |                                  |
|     | Display   |      |                |   |   |           |                                  |
| 927 | Wall      |      |                |   |   |           | Clause as per tender/corrigendum |
|     | Manage    |      |                |   |   |           | prevails.                        |
|     | ment      |      |                |   |   | Delta     |                                  |
|     | Softwar   |      |                |   |   | Displays  |                                  |
|     |           |      |                |   |   | solutions |                                  |
|     | e<br>cifi | Lave | vout.          | Software should support auto launch of Lavoute  |   | Business  |                                  |
|     | Specific  |      | out<br>neduler | Software should support auto launch of Layouts according to specified time event by user    |   |           |                                  |
|     | ations    | John | icuulei        | according to specifica time event by user   |   |           |                                  |
|     | of        |      |                |   |   |           |                                  |
|     | Display   |      |                |   |   |           | Clause as per tender/serrigend   |
| 928 | Wall      |      |                |   |   |           | Clause as per tender/corrigendum |
|     | Manage    |      |                |   |   |           | prevails.                        |
|     | ment      |      |                |   |   | Delta     |                                  |
|     | Softwar   |      |                |   |   | Displays  |                                  |
|     |           |      |                |   |   | solutions |                                  |
|     | е         |      |                |   |   | Business  |                                  |

|     | T . T           | 1.           | La restate de la companya della companya della companya de la companya della comp |   |                       |                                  |
|-----|-----------------|--------------|--|---|-----------------------|----------------------------------|
|     | Specific ations |              | It should be possible to create layouts comprising of screen scrapped content of Workstations, DVI inputs,   |   |                       |                                  |
|     | 1               |              | Web sources, URLs configured as sources. Layouts can   |   |                       |                                  |
|     | of              |              | be pre configured or changed in real time  |   |                       |                                  |
|     | Display         |              |  |   |                       | Clause as per tender/corrigendum |
| 929 | Wall            |              |  |   |                       | prevails.                        |
|     | Manage          |              |  |   | Delta                 | p. c. a                          |
|     | ment            |              |  |   | Deita                 |                                  |
|     | Softwar         |              |  |   | solutions             |                                  |
|     | e               |              |  |   | Business              |                                  |
|     | Specific        |              | Can be pre configured or changed in real time  |   |                       |                                  |
|     | ations          | Configuratio |  |   |                       |                                  |
|     | of              | n            |  |   |                       |                                  |
|     | Display         |              |  |   |                       |                                  |
| 930 | Wall            |              |  |   |                       | Clause as per tender/corrigendum |
|     | Manage          |              |  |   |                       | prevails.                        |
|     | ment            |              |  |   | Delta                 |                                  |
|     | Softwar         |              |  |   | Displays              |                                  |
|     | e               |              |  |   | solutions<br>Business |                                  |
|     | Specific        | Scheduling   | It should be possible to schedule specific Layout based  |   | Dusiliess             |                                  |
|     | ations          |              | on time range  |   |                       |                                  |
|     | of              |              | -  |   |                       |                                  |
|     | -               |              |  |   |                       |                                  |
| 024 | Display         |              |  |   |                       | Clause as per tender/corrigendum |
| 931 | Wall            |              |  |   |                       | prevails.                        |
|     | Manage          |              |  |   | Delta                 | ·                                |
|     | ment            |              |  |   | Displays              |                                  |
|     | Softwar         |              |  |   | solutions             |                                  |
|     | е               |              |  |   | Business              |                                  |
|     | Specific        |              |  | Please change this to:  |                       |                                  |
|     | ations          |              | LAN/WAN Network with Display in Meeting room or on   |   |                       |                                  |
|     | of              |              | Remote Workstations con- nected on LAN/WAN Network   | network with workstations connected to meeting room or other workstations connected to same LAN / WAN |                       |                                  |
|     | Display         |              | Network  | network   |                       |                                  |
| 932 | Wall            |              |  |   |                       | Clause as per tender/corrigendum |
|     | Manage          |              |  |   |                       | prevails.                        |
|     | ment            |              |  |   | Delta                 |                                  |
|     | Softwar         |              |  |   | Displays              |                                  |
|     | e               |              |  |   | solutions<br>Business |                                  |
|     | Specific        | Soft KVM     | The system shall include complete Soft KVM to permit   | Please remve the red hilighted portion for wider  |                       |                                  |
|     | ations          |              |  | participation   |                       |                                  |
|     | of              |              | Displays, Screen Scrapped applications and DVI source.   |   |                       |                                  |
|     | Display         |              | All wall management software func- tionalities to be   |   |                       |                                  |
| 022 |                 |              | triggered by operator smart console with touch screen  |   |                       | Clause as per tender/corrigendum |
| 933 | Wall            |              |  |   |                       | prevails.                        |
|     | Manage          |              |  |   | Delta                 |                                  |
|     | ment            |              |  |   | Displays              |                                  |
|     | Softwar         |              |  |   | solutions             |                                  |
|     | е               |              |  |   | Business              |                                  |

| 934 | Specific<br>ations<br>of<br>Display<br>Wall<br>Manage<br>ment<br>Softwar<br>e | Ticker                  | It should be possible to create two separate Tickers which run con- currently . These can be positioned at top or bottom and can run independently .The Ticker can be picked from data source through screen scrapping or through typing specific incidence, manually. | Please change to: It should be possible to create two separate Tickers which run con- currently . These can be positioned at top or bottom and can run independently . The Ticker can be picked from any text file or through typing manually. | Delta<br>Displays<br>solutions<br>Business | Clause as per tender/corrigendum prevails. |
|-----|---|-------------------------|--|--|--|--|
| 935 | Specific ations of Display Wall Manage ment Softwar e                         | OEM<br>Certification    | All features and functionality should be certified by the OEM.   |  | Delta<br>Displays<br>solutions<br>Business | Clause as per tender/corrigendum prevails. |
| 936 |   |                         | The Display Modules, Display Controller & Software should be from a single OEM.  |  | Delta<br>Displays<br>solutions<br>Business | Clause as per tender/corrigendum prevails. |
| 937 | Specific<br>ations<br>of<br>Display<br>Wall<br>Controll<br>ers                | Item                    | Specifications   |  | Delta<br>Displays<br>solutions<br>Business | Clause as per tender/corrigendum prevails. |
| 938 | Specific<br>ations<br>of<br>Display<br>Wall<br>Controll<br>ers                | Display<br>controller   | Controller to be able to control cubes   |  | Delta<br>Displays<br>solutions<br>Business | Clause as per tender/corrigendum prevails. |
| 939 | Specific<br>ations<br>of<br>Display<br>Wall<br>Controll<br>ers                | Redundant<br>Controller | The controller should be based on the latest architecture .  |  | Delta<br>Displays<br>solutions<br>Business | Clause as per tender/corrigendum prevails. |

|     | I I      | 1 | 51.16        | luii 1   |                       |                                   |
|-----|----------|---|--------------|--|-----------------------|-----------------------------------|
|     | Specific |   |              | Windows Xeon Quad core 3 Ghz or Core i7 3 Ghz  |                       |                                   |
|     | ations   |   |              | above  |                       |                                   |
|     | of       |   |              |  |                       |                                   |
| 940 | Display  |   |              |  |                       | Clause as per tender/corrigendum  |
|     | Wall     |   |              |  | Delta                 | prevails.                         |
|     | 1        |   |              |  | Displays              |                                   |
|     | Controll |   |              |  | solutions             |                                   |
|     | ers      |   |              |  | Business              |                                   |
|     | Specific |   | Processor    | Intel Xeon   |                       |                                   |
|     | ations   |   |              |  |                       |                                   |
|     | of       |   |              |  |                       |                                   |
| 941 | Display  |   |              |  |                       | Clause as per tender/corrigendum  |
|     | Wall     |   |              |  | Delta                 | prevails.                         |
|     | 1        |   |              |  | Displays              |                                   |
|     | Controll |   |              |  | solutions             |                                   |
|     | ers      |   |              |  | Business              |                                   |
|     | Specific |   | RAM          | 32 GB  |                       |                                   |
|     | ations   |   |              |  |                       |                                   |
|     | of       |   |              |  |                       |                                   |
| 942 | Display  |   |              |  |                       | Clause as per tender/corrigendum  |
|     | Wall     |   |              |  | Delta                 | prevails.                         |
|     | Controll |   |              |  | Displays              |                                   |
|     | 1        |   |              |  | solutions             |                                   |
|     | ers      |   | 0            | 10110  | Business              |                                   |
|     | Specific |   | Chassis Type | 19" Rack mount industrial chassis  |                       |                                   |
|     | ations   |   |              |  |                       |                                   |
|     | of       |   |              |  |                       | Clause as non tondon/as missondum |
| 943 | Display  |   |              |  |                       | Clause as per tender/corrigendum  |
|     | Wall     |   |              |  | Delta                 | prevails.                         |
|     | Controll |   |              |  | Displays              |                                   |
|     | ers      |   |              |  | solutions<br>Business |                                   |
|     |          |   | Network      | 2 Network Ports  | busilless             |                                   |
|     | Specific |   | Network      | 2 Network Ports  |                       |                                   |
|     | ations   |   |              |  |                       |                                   |
|     | of       |   |              |  |                       | Clause as per tender/corrigendum  |
| 944 | Display  |   |              |  |                       |                                   |
|     | Wall     |   |              |  | Delta                 | prevails.                         |
|     | Controll |   |              |  | Displays solutions    |                                   |
|     | ers      |   |              |  | Business              |                                   |
|     | Specific |   | Resolution   | Minimum 1920 x 1080 or higher  | 243.71633             |                                   |
|     |          |   | Support For  | The state of the s |                       |                                   |
|     | ations   |   | Outputs      |  |                       |                                   |
|     | of       |   |              |  |                       | Clause as per tender/corrigendum  |
| 945 | Display  |   |              |  |                       | prevails.                         |
|     | Wall     |   |              |  | Delta                 | pievalis.                         |
|     | Controll |   |              |  | Displays solutions    |                                   |
|     | ers      |   |              |  | Business              |                                   |
| L   | 15.5     |   |              |  |                       |                                   |

|     | [c c ]   | Ticker      | There should be a possibility in the controller to exact  |                    |                    |                                  |
|-----|----------|-------------|---|--------------------|--------------------|----------------------------------|
|     | Specific | Ticker      | There should be a possibility in the controller to create |                    |                    |                                  |
|     | ations   |             | user defined multiple tickers. It should also be possible |                    |                    |                                  |
|     | of       |             | to place these tickers anywhere on the wall               |                    |                    |                                  |
| 946 | Display  |             |   |                    |                    | Clause as per tender/corrigendum |
| 340 | 1        |             |   |                    | Delta              | prevails.                        |
|     | Wall     |             |   |                    | Displays           |                                  |
|     | Controll |             |   |                    | solutions          |                                  |
|     | ers      |             |   |                    | Business           |                                  |
|     | Specific | Scalability | The system should be able to add additional inputs as     |                    |                    |                                  |
|     | ations   |             | re- quired in the future                                  |                    |                    |                                  |
|     | of       |             |   |                    |                    |                                  |
|     |          |             |   |                    |                    | Clause as per tender/corrigendum |
| 947 | Display  |             |   |                    | D 11               | prevails.                        |
|     | Wall     |             |   |                    | Delta              | prevans.                         |
|     | Controll |             |   |                    | Displays solutions |                                  |
|     | ers      |             |   |                    | Business           |                                  |
|     | Specific | Control     | The system should have the capabilities of interacting    | Please change to:  |                    |                                  |
|     | l '      | Control     | (Monitoring & Control) with various applications on       | Control: Over LAN  |                    |                                  |
|     | ations   |             | different network through the single Operator             | Control over 2 tiv |                    |                                  |
|     | of       |             | Workstation. It shall be possible to launch layouts,      |                    |                    | Clause as per tender/corrigendum |
| 948 | Display  |             | change layouts in real time using physical hot keys on    |                    |                    | -                                |
|     | Wall     |             | smart operator keyboard or Touch screen, tablet etc.      |                    | Delta              | prevails.                        |
|     | Controll |             | smart operator regionard or roden screen, tablet etc.     |                    | Displays           |                                  |
|     |          |             |   |                    | solutions          |                                  |
|     | ers      |             |   |                    | Business           |                                  |
|     | Specific | Redundancy  | Redundant Hot SwappableHDD in RAID 1 Configuration        |                    |                    |                                  |
|     | ations   |             |   |                    |                    |                                  |
|     | of       |             |   |                    |                    |                                  |
| 949 | Display  |             |   |                    |                    | Clause as per tender/corrigendum |
| 3.3 | Wall     |             |   |                    | Delta              | prevails.                        |
|     | 1        |             |   |                    | Displays           |                                  |
|     | Controll |             |   |                    | solutions          |                                  |
|     | ers      |             |   |                    | Business           |                                  |
|     | Specific | Redundancy  | Redudnant Hot Swappable Power Supply                      |                    |                    |                                  |
|     | ations   |             |   |                    |                    |                                  |
|     | of       |             |   |                    |                    |                                  |
| 950 | Display  |             |   |                    |                    | Clause as per tender/corrigendum |
| 930 |          |             |   |                    | Delta              | prevails.                        |
|     | Wall     |             |   |                    | Displays           | •                                |
|     | Controll |             |   |                    | solutions          |                                  |
|     | ers      |             |   |                    | Business           |                                  |
|     | Specific | Keyboard &  | Keyboard and Mouse along with mechanism to extend         |                    |                    |                                  |
|     | ations   | Mouse       | them to 20 Mtrs. operator desk from display controller    |                    |                    |                                  |
|     | of       | Extension   | to be provided  |                    |                    |                                  |
| 1 _ |          |             |   |                    |                    | Clause as per tender/corrigendum |
| 951 | Display  |             |   |                    | 5                  | prevails.                        |
|     | Wall     |             |   |                    | Delta              | picvaiis.                        |
|     | Controll |             |   |                    | Displays solutions |                                  |
|     | ers      |             |   |                    | Business           |                                  |
| L   | L 1 3    |             |   |                    | Dasificas          |                                  |

|     | Specific   |     | 24 x 7               | The controller shall be designed for 24 x 7 operation   |   |  |  |
|-----|--|-----|----------------------|---|---|--|--|
|     | ations of Display Wall Controll ers                            |     | operation            |   |   | Delta<br>Displays<br>solutions<br>Business | Clause as per tender/corrigendum prevails. |
| 953 | Specific<br>ations<br>of<br>Display<br>Wall<br>Controll<br>ers |     | Others               | The Video Wall and the Controller should be of the same make to ensure better performance and compatibility   |   | Delta<br>Displays<br>solutions<br>Business | Clause as per tender/corrigendum prevails. |
| 954 | Specific<br>ations<br>of<br>Display<br>Wall<br>Controll<br>ers |     | OEM<br>Certification | All features and functionality should be certified by the OEM. The Display Modules, Display Controller & Software should be from a single OEM.  |   | Delta<br>Displays<br>solutions<br>Business | Clause as per tender/corrigendum prevails. |
| 955 | 8.9  | 213 | 8                    | Should support Auto MDI-II/MDI-X uplink for all the twisted pair ports.   | There are no twisted pair copper ports requested for Type-II switch   | Targustech                                 | Clause as per tender/corrigendum prevails. |
| 956 | 8.9  | 213 | 15                   | i.) IGMP Snooping, MLD Snooping v1/v2   | MLD snooping does not have versions, MLD protocol have versions v1, v2  | Targustech                                 | Clause as per tender/corrigendum prevails. |
| 957 | 8.14   | 222 | 5.1                  | Solution must be capable of passively gathering information about network hosts and their activities, such as operating system, services, open ports, client applications, and vulnerabilities, to assist with multiple activities, such as in-trusion event data correlation, elimination of false positives, and policy compliance. | Collecting information regarding endpoint host OS, services, ports etc and performing corelation activity is not the task of NGFW and requires additional layer on top to perform these functionalities.                  | Targustech                                 | Clause as per tender/corrigendum prevails. |
| 958 | 8.14.1   | 222 |                      | Firewall should support Nat66 (IPv6-to-IPv6),<br>Nat44 (IPv4 to IPv4) and IPv6 to IPv4 to IPv6<br>for translation/tunneling functionality.  | IPv6 does not require NAT. There is no use case for IPv6-IPv6 NAT and this is just in an experimental phase   | Targustech                                 | Clause as per tender/corrigendum prevails. |
| 959 | 8.14.1   | 222 | 5.9                  | address, authentication status, location and  | Please explain the use case in detail. Does this mean that NGFW should integrate with NAC/Radius like device? In such a case the 3rd party NAC/Radius would be using information such as device username/ip, location etc | Targustech                                 | Clause as per tender/corrigendum prevails. |

| 960 | 8.14.1 | 222 | 5.16    | Solution should support the capability to configure the access policy on the basis of IP Address, User ID/Group, VLAN, Network, Objects, Device type, Location, Ports, Protocols, etc.  | Policy enforcement on the basis of location, device type is functionality of NAC and not NGFW.  | Targustech | Clause as per tender/corrigendum prevails. |
|-----|--------|-----|---------|---|---|------------|--|
| 961 | 8.14.1 | 223 | 8.2     | Firewall/ Firewall's Operating System should be USGv6/IPv6 Certified/IPv6 logo ready  | IPv6 certification/ IPv6 logo ready is not an industry standard. The device does not have to be IPv6 certified/logo ready to support IPv6 features.   | Targustech | Clause as per tender/corrigendum prevails. |
| 962 | 8.14.2 | 225 | 5.1     | Solution must be capable of passively gathering information about network hosts and their activities, such as operating system, services, open ports, client applications, and vulnerabilities, to assist with multiple activities, such as in-trusion event data correlation, elimination of false positives, and policy compliance. | Collecting information regarding endpoint host OS, services, ports etc and performing corelation activity is not the task of NGFW and requires additional layer on top to perform these functionalities.                  | Targustech | Clause as per tender/corrigendum prevails. |
| 963 | 8.14.2 | 225 | 5.6     | Firewall should support Nat66 (IPv6-to-IPv6),<br>Nat44 (IPv4 to IPv4) and IPv6 to IPv4 to IPv6<br>for translation/tunneling functionality.  | IPv6 does not require NAT. There is no use case for IPv6-IPv6 NAT and this is just in an experimental phase   | Targustech | Clause as per tender/corrigendum prevails. |
| 964 | 8.14.2 | 225 | 5.9     | address, authentication status, location and  | Please explain the use case in detail. Does this mean that NGFW should integrate with NAC/Radius like device? In such a case the 3rd party NAC/Radius would be using information such as device username/ip, location etc | Targustech | Clause as per tender/corrigendum prevails. |
| 965 | 8.14.2 | 225 | 5.16    | Solution should support the capability to configure the access policy on the basis of IP Address, User ID/Group, VLAN, Network, Objects, Device type, Location, Ports, Protocols, etc.  | Policy enforcement on the basis of location, device type is functionality of NAC and not NGFW.  | Targustech | Clause as per tender/corrigendum prevails. |
| 966 | 8.14.2 | 226 | 8.2     | Firewall/ Firewall's Operating System should be USGv6/IPv6 Certified/IPv6 logo ready  | IPv6 certification/ IPv6 logo ready is not an industry standard. The device does not have to be IPv6 certified/logo ready to support IPv6 features.   | Targustech | Clause as per tender/corrigendum prevails. |
| 967 | 8.11   | 216 | 15 (iv) | Support for IEEE 802.1 D spanning tree protocol   | ERPS is supported for ring topologies for 50 ms convergence. 802.1d STP is is an old enterprise protocol not suited for metro networks  | Targustech | Clause as per tender/corrigendum prevails. |
| 968 | 8.11   | 216 | 15 (v)  | Support for IEEE 802.1 s MSTP   | ERPSv2 is supported for ring topologies for 50 ms convergence. 802.1d STP is is an old enterprise protocol not suited for metro networks  | Targustech | Clause as per tender/corrigendum prevails. |

|     |        |     |                   | T  | 1   |            | 1  |
|-----|--------|-----|-------------------|--|---|------------|--|
| 969 | 8.11   | 217 | 15 (xxviii)<br>9. | L2 Protocol Tunneling  | Please elaborate on the use case. This is a switch based protocol. Since router based solution is allowed request you to please relax this requirement  | Targustech | Clause as per tender/corrigendum prevails. |
| 970 | 8.11   | 218 | 16 (I)            | I. IEEE 802.1D (STP)   | ERPS is supported for ring topologies for 50 ms convergence. 802.1d STP is is an old enterprise protocol not suited for metro networks  | Targustech | Clause as per tender/corrigendum prevails. |
| 971 | 8.11   | 218 | 16 (V)            | V. IEEE 802.1s (MSTP)  | ERPSv2 is supported for ring topologies for 50 ms convergence. 802.1d MSTP is is an old enterprise protocol not suited for metro networks   | Targustech | Clause as per tender/corrigendum prevails. |
| 972 | 8.11   | 218 | 17(iii)           | CE/FCC   | CE/FCC is a private cetification and not a global standard like NEBS  | Targustech | Clause as per tender/corrigendum prevails. |
| 973 |        |     |                   | 8.13.4. SFP+ (350mtrs)   |   | Targustech | Clause as per tender/corrigendum prevails. |
| 974 | 8.13.4 | 221 | 2                 | Should support 10 km optical distance (1550/1310 nm).  | This requirement is for SFP+ for short range 350 mtrs as per title. Short range SFP will work at 850 nm and not 1550/1310 nm. This clause conflicts with clause 4 where MMF is requested but here distanc asked is 10Km | Targustech | Clause as per tender/corrigendum prevails. |
| 975 | 8.13.4 | 221 | 4                 | Should have 10 Gigabit Ethernet capacities on multi-mode fiber   | This clause conflicts with clause 2. MMF cannot drive 10Km  | Targustech | Clause as per tender/corrigendum prevails. |
| 976 |        |     |                   | RDSO/SPN/TC/83/2014  |   | Targustech | Clause as per tender/corrigendum prevails. |
| 977 | 6      | 23  | 6.3.2             | It shall support for Automatic Negotiation of Trunking Protocol, to help minimize the configuration & errors.  | This requirement maps to DTP Dynamic Trunking Protocol is a cisco proprietary protocol. You do not require DTP to create trunk links. Also manual trunk configuration is the recommended best practice.                 | Targustech | Clause as per tender/corrigendum prevails. |
| 978 | 6      | 25  | 6.5.8             | It shall support MAC address notification to allow administrators to be notified of users added to or removed from the network.  | MAC address entries can be tracked by checking<br>the "mac-address table" which is a standard<br>table maintained by all switches, mac-<br>notification feature is specific to some OEMs<br>and not a standard feature  | Targustech | Clause as per tender/corrigendum prevails. |
| 979 | 7      | 27  | 7.4               | The operating personnel shall be protected against shock hazards as per IS 8473 (1993) – Guide on the effects of current passing through the human body (equivalent to IEC publications 479 – 1984). | Protection of personnel is delivered throguh a framework of equipmemnt installation practices where grounding, wrist straps, operational guidelines etc play a role. It is not device specific.                         | Targustech | Clause as per tender/corrigendum prevails. |

| 980 | UPS - 1<br>KVA            | of<br>266<br>of<br>Volu<br>me 3                | defined on what paramters and in what kind of dashboard the output should be obtained and reports can be send over email etc. | SNMP Card for connecting the UPS to LAN thru Ethernet port & monitoring thru NMS should be available (The cost of SNMP Card / NMS software to be quoted separately). The software Dashboard & Reporting System it should allow auto scheduling of these Reports to user defined email ids via client's SMTP server attaching reports to the email in any of the following formats: PDF, WORD AND READ-ONLY EXCEL. Client may choose either one of these formats but the system should be capable of doing all formats mentioned in the requirement. | Schneider | Clause as per tender/corrigendum prevails. |
|-----|---------------------------|--|---|---|-----------|--|
| 981 | UPS - 1<br>KVA<br>voltage | Page<br>227<br>of<br>266<br>of<br>Volu<br>me 3 | Voltage range for bypass from 120 - 288 V seems to be vendor specific.  | hence suggest voltage range for bypass from 170 - 260 V   | Schneider | Clause as per tender/corrigendum prevails. |
| 982 | UPS - 1<br>KVA V          | Page<br>227<br>of<br>266<br>of<br>Volu<br>me 3 | The V threshold limit 2%max full linear load,5% max on Nonlin-ear load seems to be vendor specific.                           | Hence suggest V threshold <3% for full linear load & <6% for full non-linear load   | Schneider | Clause as per tender/corrigendum prevails. |
| 983 | 8.16.1<br>UPS - 1<br>KVA  | Page<br>227<br>of<br>266<br>of<br>Volu<br>me 3 | Tel line surge protection - this feature is model specific and hence vendor specific.   | Kindly remove this feature  | Schneider | Clause as per tender/corrigendum prevails. |
| 984 | UPS - 1<br>KVA            | of<br>266<br>of<br>Volu<br>me 3                | Safety - EN   | Recommend to add EN / IEC as few OEM's comply with IEC standard   | Schneider | Clause as per tender/corrigendum prevails. |
| 985 | 8.16.1<br>UPS - 1<br>KVA  | Page<br>227<br>of<br>266<br>of<br>Volu<br>me 3 | Size : not more than 2U rack mountable  | Rack mount UPS comes with inbuilt batteries and hence since you require large back up time, UPS should be tower mount. Hence request you to change it to tower type.  | Schneider | Clause as per tender/corrigendum prevails. |

| 986 | 8.16.1<br>UPS - 2<br>KVA         | Page<br>227<br>of<br>266<br>of<br>Volu         | The V threshold limit 2%max full linear load,5% max on Nonlin-ear load seems to be vendor specific. | Hence suggest V threshold <3% for full linear load & <6% for full non-linear load  |           | Clause as per tender/corrigendum prevails. |
|-----|----------------------------------|--|---|--|-----------|--|
|     |                                  | me 3   |   |  | Schneider |  |
| 987 | UPS - 2<br>KVA                   | Page<br>227<br>of<br>266<br>of<br>Volu<br>me 3 | EPO function - this is model specific and hence vendor specific feature                             | Kindly remove this feature   | Schneider | Clause as per tender/corrigendum prevails. |
| 988 | 8.16.1<br>UPS - 2<br>KVA         | Page<br>227<br>of<br>266<br>of<br>Volu<br>me 3 | Tel line surge protection - this feature is model specific and hence vendor specific.               | Kindly remove this feature   | Schneider | Clause as per tender/corrigendum prevails. |
| 989 | 8.16.1<br>UPS - 2<br>KVA         | Page<br>227<br>of<br>266<br>of<br>Volu<br>me 3 | Size : not more than 2U rack mountable  | Rack mount UPS comes with inbuilt batteries and hence since you require large back up time, UPS should be tower mount. Hence request you to change it to tower type. | Schneider | Clause as per tender/corrigendum prevails. |
| 990 | 8.16.1<br>UPS - 2<br>x 10<br>KVA | Page<br>227<br>of<br>266<br>of<br>Volu<br>me 3 | Overload memory : Default : yes this is a vendor specific function                                  | Kindly remove this feature   | Schneider | Clause as per tender/corrigendum prevails. |
| 991 | UPS - 2<br>x 10<br>KVA           | of<br>266<br>of<br>Volu<br>me 3                | Battery Charger Nominal recharging current 12 A (1+-10%) is vendor specific.                        | For 1 hour back up on each ups and to get batteryies charged within 8 - 10 hours maximum of 10 A charger is required. Hence suggest this should be made as 10 Amp    | Schneider | Clause as per tender/corrigendum prevails. |
| 992 | UPS - 2                          | Page<br>227<br>of<br>266<br>of<br>Volu<br>me 3 | Certification : CE  | In India BIS is mandetary and required for ups hence suggest to add CE / BIS, CE certificate are only with specific OEM's  | Schneider | Clause as per tender/corrigendum prevails. |

| 993 | m Rack<br>(9U,<br>19",<br>Wall<br>mounte<br>d) | Page<br>233<br>of<br>266 | There are two different type of doors mentoined at the front i.e. Rack should have front door tough and transparent glass fitted on MS/CRCA sheet on sides with Lock and key, and, MS/CRCA door plain having ventilation holes bottom side with dust filters. | For Outdoor application, steel door with ventilation holes and filter at front is recommended. The height of the cabinet suggested is 15U, owing to Battery, UPS, Switch, Battery and other components which gets mounted on it. | Schneider | Clause as per tender/corrigendum prevails.                                    |
|-----|--|--------------------------|---|--|-----------|---|
| 994 | m Rack<br>(9U,                                 | Page<br>233<br>of<br>266 | Cable entry provisiong required at both top and bottom? Please share the number of cables with cable size at both the ends for provisioning cable glands of appropirate size.   | CRCA Sheet shall be of 513 Grade Steel.<br>Roxtec/PG Glands to be used for Cable Entry<br>without effecting the IP Rating.   | Schneider | Clause as per tender/corrigendum prevails (as per site requirement)           |
| 995 | 1/4/1  | Page<br>233<br>of<br>266 | What type of earthing is required?  | Earthing kit with split wires or Horizontal Copper Earthing Bar. Please suggest the details of copper earthing bar if required for wallmount.  | Schneider | Appropriate copper earthing bar<br>(horizontal or as per site<br>requirement) |
| 996 | m Rack   | Page<br>233<br>of<br>266 | Vertical Cable Manager in Wallmount Rack of<br>9U height is not possibile.  | 3 Nos. of 1U Cable loops can be provided at both side wall at front.   | Schneider | Clause as per tender/corrigendum prevails.                                    |

|      | ı   | 1                        |                           |  | <u> </u>   |           |  |
|------|---|--------------------------|---------------------------|--|--|-----------|--|
| 997  | l   | Page<br>233<br>of<br>266 | Powder Coa<br>confirmed.  | ating Micron Level to be   | OEM to have inhouse Nano-Ceramic Powder<br>Coating Facility. Powder Coating upto 80-100<br>Micron.         | Schneider | Clause as per tender/corrigendum prevails.                               |
| 998  | 8.21.13<br>INDIAN<br>RAILWAYS<br>LOGO<br>(Telecom<br>Rack (9U,<br>19", Wall<br>mounted) | 233<br>of<br>266         | Location an               | d font to be specified   |  | Schneider | On the centre top of the rack with appropriate font size/approved design |
| 999  | 8.21.14<br>Certifica<br>tions   | Page<br>233<br>of<br>266 | Only ISO 90               | 001 Certificatoin.   | ISO 9001:2015, ISO 14001: 2015, OHSAS<br>18000:2007, ROHS Compliant  | Schneider | Clause as per tender/corrigendum prevails.                               |
| 1000 | 8.21.15 IP<br>54<br>Protectio<br>n  | Page<br>234<br>of<br>266 |                           |  | FIP (Foam In Place) type of gasket to be used for any open space to enhance the cabinet and IP protection. | Schneider | Clause as per tender/corrigendum prevails.                               |
| 1001 | ns (19"   | Page<br>234<br>of<br>266 | Dimensions required.      | s including Width and Depth are  | 42U 600W 1000D, as per server storage minimum Depth recommended is 1000mm.                                 | Schneider | Clause as per tender/corrigendum prevails.                               |
| 1002 | 8.22.2<br>Side<br>Panels<br>(19" 42U<br>Rack)   | Page<br>234<br>of<br>266 | I                         | with latching arrangement is not ded in IP54 Cabinet.  | Screw-On Type Side Panels are recommended.   | Schneider | Clause as per tender/corrigendum prevails.                               |
| 1003 |   | Page<br>234<br>of<br>266 | I                         | uired is IP54, rear door can't be ith perforation.   | Rear Side fixed plain panel or door is suggested.  | Schneider | Clause as per tender/corrigendum prevails.                               |
| 1004 | 8.22.5<br>Top &<br>Bottom<br>(19" 42U<br>Rack)  | Page<br>234<br>of<br>266 | and bottom<br>cables with | provisiong required at both top<br>n? Please share the number of<br>cable size at both the ends for<br>g cable glands of appropirate size. | Also CRCA Sheet shall be of 513 Grade Steel.   | Schneider | Clause as per tender/corrigendum prevails.                               |

|      | 8.22.7<br>Earthing     | Page                     |   | Earthing kit with split wires or Copper Earthing   |           | Appropriate copper earthing bar                                |
|------|------------------------|--------------------------|---|--|-----------|--|
| 1005 | Provisions<br>(19" 42U | 234<br>of<br>266         | What type of earthing is required?  | Bar. Please suggest the details of copper earthing bar, mentioning horizontal or vertical.                 | Schneider | (horizontal or as per site requirement)                        |
| 1006 | (PDLI)                 | Page<br>234<br>of<br>266 | Kindly confirm on the type and number of sockets required in the PDU with MCB Rating. Please confirm on what exactly is meant by electronically controlled circuits for surge and spike protection, does the PDU required is intelligent PDU, or standard dump (Non Intelligent) PDU? | Approvals / Testings - BS 546, CE  | Schneider | Clause as per tender/corrigendum prevails.                     |
| 1007 | 4211                   | Page<br>234<br>of<br>266 | Kindly confirm does dual source power supply distribution board, mean 2 PDU's for redundancy purpose. Also confirm on the required PDU type.  |  | Schneider | Tender clause is clear   |
| 1008 | (Teleco<br>m Rack      | Page<br>234<br>of<br>266 | Location and font to be specified   |  | Schneider | May be provided to the successful bidders at appropriate time. |
| 1009 |                        | Page<br>234<br>of<br>266 |   | FIP (Foam In Place) type of gasket to be used for any open space to enhance the cabinet and IP protection. | Schneider | Clause as per tender/corrigendum prevails.                     |

| 1010 | 4.A.14.1<br>.3 | 101 |       | OEM(s) should have either direct presence in India or through their authorized registered partner in India for last 3 years or OEM(s) should have been working for last 3 years in their country of origin. Further, they should have Indian Technical Support Centre, Repair and RMA centre in India either directly or through their authorized registered partner for last 3 years or should give an undertaking for setting up a Technical Support Center and an office in India within 3 months after award of contract. | This clause to be waived off for thevendors quoting in PMA Category   | Make IP<br>System               | Clause as per tender/corrigendum prevails. |
|------|----------------|-----|-------|---|---|---------------------------------|--|
| 1011 | 4.A.14.1<br>.3 | 101 |       | The OEM(s) whose products have been offered in the bid should have a minimum cumulative turnover of INR 360 crores for OEMs supplying camera, INR 100 crores for OEMs of switches and INR 225 crores for OEMs of IT hardware (server and storage) each in last 3 financial years (i.e. current year and three previous financial years) from the date of opening of tender.   | This clause to be waived off for thevendors quoting in PMA Category   | Make IP<br>System               | Clause as per tender/corrigendum prevails. |
| 1012 | 8.14.1         | 221 |       | Firewall solution offered from OEM must be<br>there in the latest Magic Quadrant for<br>Enterprise Network Firewall published by<br>Gartner   | This clause to be waived off for thevendors quoting in PMA Category   | Make IP<br>System               | Clause as per tender/corrigendum prevails. |
| 1013 | 8.14.1         | 223 |       | Firewall shall conform to UL 60950 or IEC 60950 or CSA 60950 or EN 60950 Standards for Safety requirements of Information Technology Equipment.   | This clause to be waived off for thevendors quoting in PMA Category   | Make IP<br>System               | Clause as per tender/corrigendum prevails. |
| 1014 | 8.14.1         | 223 |       | A/B or CISPR22 Class A/B or CE Class A/B or FCC Class A/B Standards for EMC (Electro Magnetic Compatibility) requirements.  | This clause to be waived off for thevendors quoting in PMA Category   | Make IP<br>System               | Clause as per tender/corrigendum prevails. |
| 1015 | 8.14.1         | 223 |       | Firewall/ Firewall's Operating System should<br>be tested and certified for EAL 4/NDPP or<br>above under Common Criteria Certification or<br>FIPS Level 2 Certifications  | This clause to be waived off for thevendors quoting in PMA Category   | Make IP<br>System               | Clause as per tender/corrigendum prevails. |
| 1016 | 8.14.1         | 223 |       | Firewall/ Firewall's Operating System should<br>be USGv6/IPv6 Certified/IPv6 logo ready   | This clause to be waived off for thevendors quoting in PMA Category   | Make IP<br>System               | Clause as per tender/corrigendum prevails. |
| 1017 | 8.8            | 212 | 8.8.1 | RDSO/SPN/TC/83/2014 Revision 1.0 or latest  | Considering the critical nature of information travelling over the switches should support MACsee(802.1AE) to prevent link tapping and information tampering. Hence we request 802.1AE to be included as a mandatory requiremeent for uplink ports on the switch. | Nivetti<br>systems pvt.<br>Ltd. | Clause as per tender/corrigendum prevails. |

|      |      |     |        |   | Considering the critical nature of information |                      |                                  |
|------|------|-----|--------|---|--|----------------------|----------------------------------|
|      |      |     |        |   | travelling over the switches should support    |                      |                                  |
|      |      |     |        |   | MACsee(802.1AE) to prevent link tapping and    |                      | Clause as per tender/corrigendum |
| 1018 |      |     | 8.9.2  |   | information tampering. Hence we request        |                      | prevails.                        |
|      |      |     |        | Should have minimum 2 nos. SFP+ based 10          | 802.1AE to be included as a mandatory          | Nivetti              | prevans.                         |
|      | 8.9  | 212 |        | GE ports.   | requiremeent for uplink ports on the switch.   | systems pvt.<br>Ltd. |                                  |
|      | 0.9  | 212 |        | GE ports:   | · · · · · · · · · · · · · · · · · · ·          | Lta.                 |                                  |
|      |      |     |        |   | Considering the critical nature of information |                      |                                  |
|      |      |     |        |   | travelling over the switches should support    |                      |                                  |
| 1019 |      |     |        |   | MACsee(802.1AE) to prevent link tapping and    |                      | Clause as per tender/corrigendum |
|      |      |     |        | Shavild have 24 marks 40/400/4000 Mhara           | information tampering. Hence we request        | Nivetti              | prevails.                        |
|      | 0.40 |     |        | Should have 24 ports 10/100/1000 Mbps             | 802.1AE to be included as a mandatory          | systems pvt.         |                                  |
|      | 8.10 | 214 | 8.10.2 |   | requiremeent for uplink ports on the switch.   | Ltd.                 |                                  |
|      |      |     |        | Switch shall have 6 Nos. of Gigabit SFP ports     | Considering the critical nature of information |                      |                                  |
|      |      |     |        | and 4 Nos. 10/100/1000 Base –TX with 4            | travelling over the switches should support    |                      |                                  |
|      |      |     |        | Nos. of 10 Gigabit SFP+ ports complying to        | MACsee(802.1AE) to prevent link tapping and    |                      | Clause as per tender/corrigendum |
| 1020 |      |     |        | IEEE 802.3, IEEE 802.3u and 802.3ab               | information tampering. Hence we request        |                      | prevails.                        |
|      |      |     |        | standard, supporting half duplex mode, full       | 802.1AE to be included as a mandatory          | Nivetti              | <b>,</b>                         |
|      |      |     |        | duplex mode and auto negotiation on each          | requiremeent for uplink ports on the switch.   | systems pvt.         |                                  |
|      | 8.11 | 216 | 8.11.6 | port of 1G to optimize bandwidth                  | requirement of aprilia parts on the statement  | Ltd.                 |                                  |
| 1021 |      |     |        | Why this points need to be added:                 |  |                      |                                  |
|      |      |     |        | - Since in this tender asked                      |  |                      |                                  |
|      |      |     |        | scalability with the capacity to handle 80,000    |  |                      |                                  |
|      |      |     |        | devices from Day 1 without major architectural    |  |                      |                                  |
|      |      |     |        | changes . That why solution provide / OEM         |  |                      |                                  |
|      |      |     |        | should have implemented more then 50000 Plus      |  |                      |                                  |
|      |      |     |        | devices monitoring that will give proof of        |  |                      |                                  |
|      |      |     |        | scalability . kindly add the below mention        |  |                      |                                  |
|      |      |     |        | 1.The solution should be scalable to monitor &    |  |                      |                                  |
|      |      |     |        | manage more than 50000 plus devices and           |  | EverestIMS           |                                  |
|      |      |     |        | minimum 3 reference case studies should be        |  | Technologies         | Clause as per tender/corrigendum |
|      |      |     |        | provided.   |  | pvt.ltd.             | prevails.                        |
|      |      |     |        | 2.The solution should be capable of running in    |  |                      |                                  |
|      |      |     |        | Linux platform with open source database as       |  |                      |                                  |
|      |      |     |        | backend   |  |                      |                                  |
|      |      |     |        | 3. The solution should provide views for any      |  |                      |                                  |
|      |      |     |        | type of device including Networking devices,      |  |                      |                                  |
|      |      |     |        | firewalls, servers, applications, IP Cameras, Wi- |  |                      |                                  |
|      |      |     |        | Fi, VSAT's, RF devices                            |  |                      |                                  |
|      |      |     |        | 4.System should support VM, Hypervisor and        |  |                      |                                  |
|      |      |     |        | Cluster monitoring from different vendors like    |  |                      |                                  |
|      |      |     |        | VMWare, Xen Server, Nutanix                       |  |                      |                                  |
|      |      |     |        |   | •  | •                    |                                  |

|      |  | 1                     | T  | ·   |           | 1  |
|------|--|-----------------------|--|---|-----------|--|
| 1022 |  | Sizing of<br>the rack | According to tender description you demanded for a 9U rack | we suggest that the capital height should be 15U minimum because the battary installed inside itself needs at least 6U space and the equipment installed inside the rack generates heat, which affects the performance of the product and therefore a more spacious rack will be able to exhaust the heat and give better performance and life  | Schneider | Clause as per tender/corrigendum prevails. |
| 1023 |  |                       | For longitivity of the product:                            | We would also suggest that it should be made of stainless steel(SS) instead of CRC to avoid rusting as many of your railway stations are near the coastal area and the product will be installed in open atmosphere   | Schneider | Clause as per tender/corrigendum prevails. |
| 1024 |  |                       |  | During yesterday pre-bid it has been observed that a person has been pushing to include the NVR for RPF Thana/Chowki which we felt is his personal ambition without having any Technical understanding on the project requirement and also enforcing a limitation of a proprietary based architecture of NVR. Railtel has called for an industry meeting on 19th of April 2018 to finalized the best suitable architecture for this project to bring consensus across all OEM's . The meeting was attended by leading Camera and Software OEM's (Tyco, Infinova, Vivotek, Hanwha, Microsoft, Mirasys etc) alongwith VMS & IT Hardware Vendors' and it was deliberated in detail and discussed on the NVR usage in the meeting and finally everyone agreed that NVR is not a fit solution for this project due to various limitation of Technical front like restricting Open Standard requirements and integration with various other type of applications including Facial Recognition. The project of such magnitude requires a different kind of deployment/architecture methodology to sustain long term project requirement. |           | Clause as per tender/corrigendum prevails. |
| 1025 |  |                       |  | There are many project which has been executed in past in India not having scale of your project like Safe city Project Mumbai Safe City, Hyderabad, Rajasthan State City Surveillance, Gujrat Surveillance Project, Airports, Metros etc but none of these projects has ever evaluated/deployed NVR based solution due to proprietary architecture.  | Infinova  | Clause as per tender/corrigendum prevails. |

| 1031 | 9,17,24<br>,32 | 2(b) | PC Work station as defined in clause 8.6 of chapter 8 for viewing, monitoring and system management including 24" monitor, all required licensed software, spike buster 500 VA UPS with backup for 30 minutes power failure without interruption, and all other required accessories | PC Workstation as defined in clause 8.6 of chapter 8 for viewing, monitoring and system management including 24" monitor, all required licensed software, and all other required accessories.   | TEMA     | Clause as per tender/corrigendum prevails. |
|------|----------------|------|--|---|----------|--|
| 1030 | 207            | 8.1  | type and 4K UHD Bullet type IP colour camera at stations: As per RDSO Specifications of IP Based Video   | IP Cameras of Fixed Box type, fixed Dome type, P/T/Z type and 4k UHD Box type IP colour camera at stations: As per RDSO Specification No .RDSO/SPN/TC/65/2016 Revision 4.0 or latest with all amendments.   |          | Clause as per tender/corrigendum prevails. |
| 1029 |                |      |  | Also we would want to have a clarity on Make in India percentage, as per the tender you have asked for 50%, however the policy being effective 15June 2017, is into its 2nd year of implementation, and the manufacturers are allowed to increase as per year of their establishment of manufacturing, so for first year the localisation is less than 15%, and 2nd year its around 25%, so on and so far, so is the same applicable to this or you need minimum 50% localisation.                        | Infinova | Clause as per tender/corrigendum prevails. |
| 1028 |                |      |  | Also please confirm on the recording parameter, as the one's defined on page 211, will not be able to meet the failover criteria, since the failover will only be filled by the same resolution recording which are stored on the edge, and thus requires recalculation of storage for such large architecture  | Infinova | Clause as per tender/corrigendum prevails. |
| 1027 |                |      |  | Also in sync with the same we had advised to have a standardisation of Server specifications for optimum performance so that all solutions can be evaluated on the same hardware grounds, all improvisations would then be left with the softwares to offer. Hence we suggest that whether in RPF Thana or edge location, there should be server's only considering the durability and long run of the devices and project duration performance guarantee for 8 years                                     | Infinova | Clause as per tender/corrigendum prevails. |
| 1026 |                |      |  | We Infinova are also a leading CCTV OEM's deals in all kind of solution like NVR too, and have been part of some of the above mentioned projects like Mumbai and Hyderabad Safe City, almost 70 airports in the country are with our cameras and software VMS but we have felt that Technically NVR is not a feasible solution in such kind of large and distributed environment, which may restrict any addition/upgradation of features/functionally in future thus leading to vendor lock in situation | Infinova | Clause as per tender/corrigendum prevails. |

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|--------|-----------------------|---|---|--------|--|
| 1032   | 9,17,24 2 (e)<br>, 32 | Storage System at RPF/GRP Thana/Post sites for recording of cameras from cluster of stations for 30 days as defined in clause 8.3, 8.4 of chapter 8 and all accessories required for installation purposes. Detailed Bill of Material (BoM) shall be prepared and submitted along with the Bid as per SOR Note-VII.   | Delete  | TEMA   | Clause as per tender/corrigendum prevails. |
| 1033   | 39 Note (I)           | The bidder must ensure that the capacity of storage system supplied at the RPF/GRP Thana/Post should be supplied with an additional 10% capacity over and above the capacity required for 30 days recording computed on the basis of cameras mentioned for RPF/GRP Thana/Post from day one (refer clause 8.3 and 8.4 of Chapter-8. The storage capacity should be calculated considering RAID6 configuration.   | The bidder must ensure that the capacity of storage system supplied at the stations should be supplied with an additional 10% capacity over and above the capacity required for 30 days recording computed on the basis of cameras mentioned for stations from day one (refer clause 8.3 and 8.4 of Chapter-8). The storage capacity should be calculated considering RAID5/6 configuration.  | ТЕМА   | Clause as per tender/corrigendum prevails. |
| 1034   | 40 Note (V)           | Bidder should submit the soft copy (Word./Excel/PDFs format) of offer in DVDs/USBs. Bill of Material (BoM) must be in PDF as well as Excel format (except price bid). Bidder is allowed to quote only for a single Make/Model of the quoted items along with the offer. The above stipulation of single OEM Make/Model applies to items viz. different types of cameras, servers, Video Recording & Processing Unit, workstation, storage, large format, display monitors, VMS Software including VA and FRS, switches (each Type separately), Firewall and EMS DIFFERENT OEM(S) ACROSS PACKAGES IS NOT PERMITTED. OFFERS WITHOUT PARTICULARS OF MAKE/MODEL OR MULTIPLE OEMS OF SAME ITEM SHALL BE LIABLE TO SUMMARILY REJECTED | above stipulation of single OEM Make/Model applied to items viz. different types of cameras, servers, Video Recording & Processing Unit, workstation, storage, large format display monitors, VMS Software, VA and FRS,   | TEMA   | Clause as per tender/corrigendum prevails. |
| 1035   | 63 3.B.7              | Architecture of VSS Systems for stations: Proposed solution has to provide seamless recording/Playback of all cameras for last 30 days at any given point of time at the RPF/GRP Thana/Post. The recording and playback availability should not be affected in case of failure of any server at RPF/.GRP Thana/Post. The Recordings of last 30 days should be available through redundant server(s) in case of a server failure.  | Architecture of VSS Systems for stations: Proposed solution has to provide seamless recording/Playback of all cameras for last 30 days at any given point of time at the stations and allow streaming of video on demand to the RPF/GRP Thana/Post. The recording and playback availability should not be affected in case of failure of any VRPU at stations. Recordings of last 30 days should be available through redundant VRPU(S) kept at RPF in case of a VRPU failure at stations on N:1 basis. | TEMA   | Clause as per tender/corrigendum prevails. |
| 1036   | 215 8.11              | Switches- Type IV   | Railtel needs to make sure that they alter the specs. to include at three OEM manufacturers for Type-IV switch with 100% compliance.  | TEMA   | Clause as per tender/corrigendum prevails. |

| 1037 | 2          | 211  | 8.14.1     | Next Generation Firewall for RPF/GRP Thana/Post locations.  | Required only at Data centre at Delhi and Secunderabad.   | TEMA |  |
|------|------------|------|------------|---|---|------|--|
|      |            |      |            | locations.  |   |      | Clause as per tender/corrigendum prevails. |
| 1038 | 2          | 214  | 8.14.2     | Next Generation Firewall for data Centre location   | Required only at Data center at Delhi and Secunerabad.  | TEMA | Clause as per tender/corrigendum prevails. |
| 1039 |            | 227  | 8.16.1     | Tel line surge protection - inbuilt   | Tel line surge protection - Not Required.   | TEMA | Clause as per tender/corrigendum prevails. |
| 1040 |            | 233  | 8.21(10)   | Material used - CRCA/MS with Thickness varying from 1.6 Mm to 2.0 mm  | Material used - Stainless Steel   | TEMA | Clause as per tender/corrigendum prevails. |
| 1041 |            | 233  |            | OEM should have a valid ISO 9001 certification on the date of opening of bid.   | OEM should have a valid ISO 9001 & UL certification on the date of opening of bid.  | TEMA | Clause as per tender/corrigendum prevails. |
| 1042 | 2          | 209  |            | Video feed from cameras of group of stations (cluster) shall be stored in external storage for 30days on H.265 at RPF/GRP Thana/Post.   | Video feed from cameras of group of stations (cluster) shall be stored in internal/External storage or combination of both for 30 days on H.265/H.264 at stations.  | TEMA | Clause as per tender/corrigendum prevails. |
| 1043 | 1          | 01   | 4.a.14.1.3 | Eligibility Criteria Requirement for OEM: PQ for FRS is missing   | FRS vendor should have experience of FRS implementation in similar environments.  | TEMA | Clause as per tender/corrigendum prevails. |
| 1044 | 8,1<br>,32 | 6,24 |            | VSS Server Hardware and all accessories required for installation purposes for Video recording, Video Analytic and Facial Recognition system as defined in clause 8.2 and 8.3 of chapter 8. Detailed Bill of Material (BoM) shall be prepared and submitted along with the Bid as per | VSS Server Hardware and all accessories required for installation purposes for Video Analytic and Facial Recognition system as defined in clause 8.2 and 8.3 of chapter 8. Detailed Bill of Materials (BoM) shall be prepared and submitted along with the Bid as per SOR Note-VII151 | TEMA | Clause as per tender/corrigendum prevails. |

| 1045  8.18 Video Recording & Processing Unit for Non RPF   Video Recording & Processing Unit shall have the following minimum specifications: Functional Requirement 1. Bidder to propose an Open (Non-proprietary) hardware-based unit to be installed at stations. 2. Video Recording & Processing Unit shall be installed at stations supporting ONVF as per RDSO   Video Recording & Processing Unit shall be installed at station and shall have Software for Video Management, Video Recording and Analytics at Station and shall have Software for Recording Viewing & Processing Unit shall be installed at station and shall have Software for Recording Viewing & Processing Unit shall be installed at station and shall have Software for Recording Viewing & Processing Unit shall be installed at station and shall have Software for Recording Viewing & Processing Unit shall be installed at station and shall have Software for Video Management, Video Recording & Recording Viewing & Processing Unit shall be installed at each station and shall have Software for Video Management of Video Recording & Video Recording & Recording Viewing & Processing Unit shall be installed at each station and shall have Software for Video Management of Video Recording & Recording Viewing & Processing Unit of the Video Recording & MPLS/IP Network. It should have the capability to display the Alert data automatically to RPF/GRP Thana/Post when the network recovers without any impact on the system to respective RPF Thana/Post upon the expenditions. 3. Video Recording & Processing Unit shall send alerts be expendited to the system of the policy of the Video Recording & Processing Unit for Non RPF Stations:  No respective RPF Thana/Post when the policy of the Video Recording & Processing Unit for Non RPF Stations:  No respective RPF Thana/Post when the policy of the Video Recording & Processing Unit for Non RPF Stations:  No respective RPF Thana/Post when the policy of the Video Recording & Processing Unit for Non RPF Stations:  No respective RPF Thana/Post when t | 104E | 220 | 0.40 Mides December 9 December 10th for New DDF Video December 9 December 10th for New DDF Continues                    | TEMA |                                  |
|--|------|-----|---|------|----------------------------------|
| The Wideo Recording & Processing Unit shall have the following minimum specifications: Functional Requirement 1. Bidder to propose an Open (Non-proprietary) hardware-based unit to be installed at stations.  2. Video Recording & Processing Unit shall be installed at stations.  2. Video Recording & Processing Unit shall be installed at each platform' station and shall have Software for Video Management, Video Recording and Analytics at 3. Video Recording and Analytics at 3. Video Recording and Processing Unit shall be installed at each station and shall have Software for Video Management, Video Recording and Analytics at 3. Video Recording Jack Processing Unit shall receive FRS alerts in defined in Tender Clause 8.3. In case of MPLS/IP relating from RPF Thana/Post. Divisional PRO (Cortori Room) network connectivity failure, video stream and alarms would be stored locally at the Video Recording & Processing Unit shall receive FRS alerts in defined by the Video Recording & Processing Unit for that duration and would transfer these data automatically to RPF/GRP Thana/Post when the network recovers without any impact on the system operations.  3. Video Recording & Processing Unit shall send alerts per solution requirement. The processing Unit shall send alerts per solution requirement. Video Recording & Processing Unit shall send alerts per solution requirement. Video Recording & Processing Unit shall be hosted on this platform as per solution requirement.  Video Recording & Processing Unit for Non RPF Stations:  5. Bidder to propose single unit hardware on each platform/station of Railway Station to achieve the functionalities as defined above.  6. Technical Requirements: As per RDSO Specification clause 4.210 of IP Based Video Surveillance System specification Non Reprocessing Video Revision 4.0 or latest with all amendments.  8. Bidders may quote for 64/32/16 Channel system keeping different categories of stations in mind to optimize the cost.   | 1045 | 230 |   |      |                                  |
| following minimum specifications: Functional Requirement 1. Bidder to propose an Open (Non-proprietary) hardware-based unit to be installed at stations.  2. Video Recording & Processing Unit shall be installed at stations.  2. Video Recording & Processing Unit shall be installed at each platform/ station and shall have Software for Video Management, Video Recording and Analytics at 3. Video Recording in the Video Management, Video Recording and Analytics at 3. Video Recording & Processing Unit shall be evere PRS alerts in defined in Tender Clause 8.3. In case of MPLS/IIP and stream of the Control of the Stored Installed at each platform/ station and shall have Software for Video Management, Video Recording and Analytics at 3. Video Recording & Processing Unit from the Video Recording & Processing Unit from the Video Recording & Processing Unit for that duration and would transfer these data automatically to RPF/GRP Thana/Post when the network recovers without any impact on the system operations.  3. Video Recording & Processing Unit shall send alerts through the available MPLS/IIP Network. It is stought never the client monitor connected to it as periodicified in the altimor to the client monitor connected to it as periodicified in the altimor to the client monitor connected to it as periodicified in the altimor to the client monitor connected to it as periodicified in the altimor to applications and Video Analytic spatement systems and Video Analytic spatement systems and Video Analytic spatement systems and Video Analytic spatement. Video Recording & Processing Unit for Non RPF Stations:  1. The Video Recording & Processing Unit for Non RPF Stations:  2. The Video Recording & Processing Unit for Non RPF Stations:  3. Video Recording & Processing Unit for Non RPF Stations:  3. Video Recording & Processing Unit for Non RPF Stations:  4. Video Management system and Video Analytic and Video Analytic spatement systems and Video Analytic spatements.  3. Video Recording & Processing Unit for Non RPF Stations of Reco |      |     |   |      |                                  |
| Functional Requirement 1. Bidder to propose an Open (Non-proprietary) hardware-based unit to be installed at stations.  2. Video Recording & Processing Unit shall be installed at each platform/ station and shall have Software for Recording & Processing Unit shall be installed at each platform/ station and shall have Software for Video Management, Video Management, Video Recording and Analytics at 3. Video Management, Video Recording and Analytics at 3. Video Recording & Processing Unit shall be installed at stations and shall have Software for Video Management, Video Management, Video Recording & Processing Unit shall receive FRS alerts in defined in Tender Clause 8.3. In case of MPLS/IP Palment MPR FT hanal/Post. Divisional HQ (Control Room) and Centralized locations on real time basis through the available methods from the MPLS/IP Palment when the network recovers without any impact on the system operations.  3. Video Recording & Processing Unit shall send alerts the demonstration of the demonstratio |      |     | The Video Recording & Processing Unit shall have the Initiational Requirement   |      |                                  |
| Into to be installed at stations supporting ONVIF as per RDSO (Non-proprietary) hardware-based unit to be installed at stations.  2. Video Recording & Processing Unit shall be installed at stations.  2. Video Recording & Processing Unit shall be installed at each platform/ station and shall have Software for Yedow Management, Video Recording and Analytics at Video Management, Video Recording and Analytics at Video Management, Video Recording and Analytics at Video Management, Video Recording & Processing Unit shall be installed at each platform/ station and shall have Software for Yedow Management, Video Recording and Analytics and Video Management video Stream and alarms would be stored locally at the Video Recording & Recording & Processing Unit for that duration and would transfer these data automatically to RPF/GRP Thana/Post when the network recovers without any impact on the system operations.  3. Video Recording & Processing Unit shall send alerts to respective form that we would be stored for the video Recording & Processing Unit shall be hosted on this platform as processing Unit shall be installed at each stations or real time from RPF Thana/Post. Divisional HO (Control Room) and Centralized locations when the network recovers without any impact on the system of the processing Unit shall be installed at each stations.  3. Video Recording & Processing Unit shall send alerts to respective RPF Thana/Post. Divisional HO (Control Room) and Centralized locations on real time basis per bidder offer.  4. Video Management system and Video Analytic and Video Analytic system etc. applications on real time basis processing Unit for Non RPF Stations:  5. Bidder to propose single unit hardware on each platform/station of Railways Station to achieve the functionalities as defined above.  6. Technical Requirements: As per RDSO Specification (All 20) of IP Based Video Surveillance System second platform/station of Railways Station to achieve the functionalities as defined above.  6. Technical Requirements: As per RDSO |      |     |   |      |                                  |
| (Non-proprietary) hardware-based unit to be installed at stations.   2. Video Recording & Processing Unit shall be installed at each station and shall have Software for Video Management, Video at each platform station and shall have Software for Pocessing Unit shall receive FRS alerts in defined in Tender Clause 8.3. In case of MPLS/IIP leads to the stored locally at the Video Recording & Processing Unit shall receive FRS alerts in defined in Tender Clause 8.3. In case of MPLS/IIP leads and the processing Unit for that duration and would transfer these data automatically to RPF/GRP Thana/Post when the network recovers without any impact on the system network netwo   |      |     | IFUNCTIONAL REQUIREMENT 1. Bigger to propose an Openi   |      |                                  |
| 2. Video Recording & Processing Unit shall be installed at each platform/ station and shall have Software for Video Management, Video Recording and Analytics at 3. Video Management video Recording and Management would be stored locally at the Video Recording A Processing Unit for that duration and would transfer these data automatically to RPF/GRP Thana/Post when the network recovers without any impact on the system operations.  3. Video Recording & Processing Unit shall send alers to respective RPF Thana/Post. Divisional HQ (Control Video Management system and Video Analytic and the control of the system operations.  3. Video Recording & Processing Unit for Non RPF Network.  4. Video Management system and Video Analytic and Video Analytic system etc. applications on real time basis before on this platform as per solution requirement. Video Recording & Processing Unit for Non RPP Stations:  5. Bidder to propose single unit hardware on each platform/station of Railway Station to achieve the functionalities as defined above.  6. Technical Requirements: As per RDSO Specification and Railway Station to achieve the functionalities as defined above.  8. Bidders may quote for 64/32/16 Channel system keeping different categories of stations in mind to optimize the cost.  8. Bidders may quote for 64/32/16 Channel system keeping different categories of stations in mind to optimize the cost.  |      |     | (Non-proprietary) hardware-based unit to be installed at specifications   |      |                                  |
| 2. Video Recording & Processing Unit shall be installed station and shall have Software for Video Management, Video at each platform/station and shall have Software for cording ewing & playback as per Fender Clause 8.3.  Video Management, Video Recording and Analytics at 3. Video Recording & Processing Unit shall receive FRS alerts in defined in Tender Clause 8.3. In case of MPLS/IP network contentively failure, video stream and alarms and Centralized locations on real time basis through the available would be stored locally at the Video Recording & Processing Unit for that duration and would transfer these data automatically to RPF/GRP Thana/Post when the network recovers without any impact on the system operations.  3. Video Recording & Processing Unit shall send allerts to respective RPF Thana/Post. Divisional HQ (Control Video Management system and Video Analytic and Video Analytic system etc. applications shall be hosted on this platform as per solution requirement. Video Analytic system etc. applications shall be hosted on this platform as per solution requirement. Video Recording & Processing Unit for Non RPF Stations:  5. Bidder to propose single unit hardware on each platform/station with internal (external storage or combination of both as per RDSO Specification at Railway Station to achieve the functionalities as defined above.  5. Bidder to propose single unit hardware on each platform/station with internal (external storage or combination of Sailway Station to achieve the functionalities as defined above.  6. Technical Requirements: As per RDSO Specification at Railway Station to achieve the functionalities as defined above.  8. Bidders may quote for 64/32/16 Channel system keeping different categories of stations in mind to optimize the cost.  8. Bidders may quote for 64/32/16 Channel system keeping different categories of stations in mind to optimize the cost.  |      |     |   |      |                                  |
| at each platform/ station and shall have Software for Recording viewing & playback as per Tender Clause 8.3.  Video Management, Video Recording and Analytics at defined in Tender Clause 8.3. In case of MPLS/IP network connectivity failure, video stream and alarms would be stored locally at the Video Recording & Processing Unit for that duration and would transfer these data automatically to RPF/GRP Thana/Post when the network recovers without any impact on the system operations.  3. Video Recording & Processing Unit shall send allerts to respective RPF Thana/Post. Divisional HQ (Control Video Recording & Processing Unit shall send allerts to respective RPF Thana/Post. Divisional HQ (Control Video Recording & Processing Unit shall send allerts to respective RPF Thana/Post. Divisional HQ (Control Video Recording & Processing Unit for Non RPF Stations: a bidder to propose single multiple unit hardware on each platform/station with internal /external storage or combination of both shall be hosted on this platform as per solution requirement.  Video Recording & Processing Unit for Non RPF Stations:  Stations:  5. Bidder to propose single unit hardware on each platform/station of Railway Station to achieve the functionalities as defined above.  6. Technical Requirements: As per RDSO Specification to achieve the functionalities as defined above.  6. Technical Requirements: As per RDSO Specification clause 4.210 of IP Based Video Surveillance System specification or Clause 4.210 of IP Based Video Surveillance System specification No. RDSO/SPN/TC/ 65/206 Revision 4.0 or clause 4.210 of IP Based Video Surveillance System specification or Clause 4.210 of IP Based Video Surveillance System specification or Clause 4.210 of IP Based Video Surveillance System specification or Clause 4.210 of IP Based Video Surveillance System specification or Clause 4.210 of IP Based Video Surveillance System specification or Clause 4.210 of IP Based Video Surveillance System specification or Clause 4.210 of IP Based Video S                   |      |     | 2. Video Recording & Processing Unit shall be installed station and shall have Software for Video Management Video      |      |                                  |
| Video Management, Video Recording and Analytics at 3. Video Recording & Processing Unit shall receive FRS alerts in defined in Tender Clause 8.3. In case of MPLS/II network connectivity failure, video stream and alarms would be stored locally at the Video Recording & Processing Unit for that duration and would transfer these data automatically to RPF/GRP Thanal/Post when the network recovers without any impact on the system operations.  3. Video Recording & Processing Unit shall send alerts to respective RPF Thanal/Post Unit shall send alerts to respective RPF Thanal/Post. Divisional HQ (Control Room) and Centralized locations on real time basis through the available MPLS/IIP Network. It should have the capability to display the Alert data automatically to RPF/GRP Thanal/Post when the network recovers without any impact on the system operations.  3. Video Recording & Processing Unit shall send alerts to respective RPF Thanal/Post. Divisional HQ (Control Room) and Centralized locations on real time basis through the available MPLS/IIP Network.  4. Video Management system and Video Analytic and Video Analytic and Video Analytic system etc. applications shall be hosted on this platform as per solution requirement.  Video Recording & Processing Unit for Non RPF Stations:  5. Bidder to propose single unit hardware on each platform/station with internal /external storage or combination of validitions of Railway Station to achieve the functionalities as defined above.  6. Technical Requirements: As per RDSO Specification (aluse 4.210 of IP Based Video Surveillance System specification Non RDSO/SPN/TC/ 65/206 Revision 4.0 or fails with all amendments.  8. Bidders may quote for 64/32/16 Channel system keeping different categories of stations in mind to optimize the cost.   |      |     | at each platform/ station and shall have Software for Recording viewing & playback as per Tender Clause 8.3.            |      |                                  |
| defined in Tender Clause 8.3. In case of MPLS/IP real time from RPF Thanai/Post. Divisional HQ (Control Room) network connectivity failure, video stream and alarms would be stored locally at the Video Recording & Processing Unit for that duration and would transfer these data automatically to RPF/GRP Thanai/Post when the network recovers without any impact on the system and video Analytic and operations.  3. Video Recording & Processing Unit shall send alerts to respective RPF Thanai/Post. Divisional HQ (Control Room) and Centralized locations on real time basis through the available MPLS/IP Network.  4. Video Management system and Video Analytic and Video Analytic system etc. applications shall be hosted on this platform as per solution requirement.  Video Analytic system etc. applications shall be hosted on the platform shall be fore solution requirement.  Video Analytic system etc. applications shall be hosted on the platform shall be hosted on the platform shall be hosted on the platform as per solution requirement.  Video Analytic system etc. applications shall be hosted on the platform as per solution requirement.  Video Recording & Processing Unit for Non RPF Stations:  5. Bidder to propose single unit hardware on each platform/station of Railway Station to achieve the functionalities as defined above.  6. Technical Requirements: As per RDSO Specification of Railway Station to achieve the functionalities as defined above.  6. Technical Requirements: As per RDSO Specification of Railway Station to achieve the network by the administrator.  8. Bidders may quote for 64/32/16 Channel system keeping different categories of stations in mind to optimize the cost.  8. Bidders may quote for 64/32/16 Channel system keeping different categories of stations in mind to optimize the cost.   |      |     |   |      |                                  |
| network connectivity failure, video stream and alarms would be stored locally at the Video Recording & Processing Unit for that duration and would transfer the Video Recording & Processing Unit for that duration and would transfer the Video Reviews data automatically to RPF/GRP Thana/Post when the network recovers without any impact on the system and video Analytic and Video Recording & Processing Unit for Non RPF Stations:  Signature of the available MPLS/IP Network.  4. Video Management system and Video Analytic and Video Recording & Processing Unit for Non RPF Stations:  Signature of the All Station of Analytic and Video Analytic and Video Analytic and Video Recording & Processing Unit for Non RPF Stations:  Signature of the Video Recording & Processing Unit for Non RPF Stations:  Signature of the Video Recording & Processing Unit for Non RPF Stations:  Signature of the Video Recording & Processing Unit for Non RPF Stations:  Signature of the Video Recording & Processing Unit for Non RPF Stations:  Signature of the Video Recording & Processing Unit for Non RPF Stations:  Signature of the Video Recording & Processing Unit for Non RPF Stations:  Signature of the Video Recording & Processing Unit for Non RPF Stations:  Signature of the Video Recording & Processing Unit for Non RPF Stations:  Signature of the Video Recording & Processing Unit for Non RPF Stations:  Signature of the Video Recording & Processing Unit for Non RPF Stations:  Signature of the Video Recording & Processing Unit for Non RPF Stations:  Signature of the Video Recording & Processing Unit for Non RPF Stations:  Signature of the Video Recording & Processing Unit for Non RPF Stations:  No |      |     | defined in Tender Clause 8.3. In case of MPI S/IP real time from RPF Thanal Post. Divisional HQ (Control Room)          |      |                                  |
| would be stored locally at the Video Recording & Processing Unit for that duration and would transfer these data automatically to RPF/GRP Thana/Post when the network recovers without any impact on the system operations.  3. Video Recording & Processing Unit shall send alerts to respective RPF Thana/Post. Divisional HQ (Control) Video Recording & Processing Unit shall send alerts to respective RPF Thana/Post. Divisional HQ (Control) Video Recording & Processing Unit shall send alerts through the available MPLS/IP Network.  4. Video Management system etc. applications on real time that the video Analytic and Video Analytic and Video Analytic and Analytic and Analytic system etc. applications shall be hosted on this platform as per solution requirement.  4. Video Management system etc. applications on real time to propose single multiple unit hardware on each platform/station with internal /external storage or combination of both as per RDSO Specification at Railway Station to achieve the functionalities as defined above.  5. Bidder to propose single unit hardware on each platform/station of Railway Station to achieve the functionalities as defined above.  6. Technical Requirements: As per RDSO Specification at Railway Station to achieve the functionalities as defined above.  7. The VRPU should support 2 Factor Authorization so that users can be given rights on the fly to perform specific tasks across the network by the administrator.  8. Bidders may quote for 64/32/16 Channel system keeping different categories of stations in mind to optimize the cost.   |      |     | network connectivity failure video stream and alarms and Centralized locations on real time basis through the available |      |                                  |
| Processing Unit for that duration and would transfer these data automatically to RPF/GRP Thana/Post when the network recovers without any impact on the system per to perations.  3. Video Recording & Processing Unit shall send alerts to respective RPF Thana/Post. Divisional HQ (Control Video Management system and Video Analytic and Video Analytic system etc. applications shall be hosted on the platform as per solution requirement.  4. Video Management system and Video Analytic and Video Analytic system etc. applications shall be hosted on this platform as per solution requirement.  4. Video Management system and Video Analytic and Video Management system and Video Analytic system etc. applications on real time basis through the available MPLS/IP Network.  4. Video Management system and Video Analytic and Video Analytic system etc. applications shall be hosted on this platform as per solution requirement.  Video Analytic system etc. applications shall be hosted on this platform as per solution requirement.  Video Analytic system etc. applications shall be hosted on this platform as per solution requirement.  Video Recording & Processing Unit for Non RPF Stations:  1. 1 & 10.2 of IP Based Video Surveillance System specification clause 10.1 & 10.2 of IP Based Video Surveillance System specific tasks across the platform/station of Railway Station to achieve the functionalities as defined above.  5. Bidder to propose single unit hardware on each platform/station of Railway Station to achieve the functionalities as defined above.  6. Technical Requirements: As per RDSO Specification clause 4.210 of IP Based Video Surveillance System specific tasks across the network by the administrator.  8. Bidders may quote for 64/32/16 Channel system keeping different categories of stations in mind to optimize the cost.   |      |     | would be stored locally at the Video Recording & MPLS/IP Network. It should have the capability to display the Alert    |      |                                  |
| data automatically to RPF/GRP Thana/Post when the network recovers without any impact on the system operations.  3. Video Recording & Processing Unit shall send alerts to respective RPF Thana/Post. Divisional HQ (Control Video Recording & Processing Unit for Non RPF Stations:  Room) and Centralized locations on real time basis through the available MPLS/IP Network.  4. Video Management system and Video Analytic and Video Analytic system etc. applications shall be hosted on this platform as per solution requirement.  Video Recording & Processing Unit for Non RPF Stations:  1. The VRPU should support 2 Factor Authorization so that users can be given rights on the fly to perform specification of clause 4.210 of IP Based Video Surveillance System specification No. RDSO/SPN/TC/ 65/206 Revision 4.0 or latest with all amendments.  2. The VRPU should support 2 Factor Authorization so that users can be given rights on the fly to perform specific tasks across the network by the administrator.  8. Bidders may quote for 64/32/16 Channel system keeping different categories of stations in mind to optimize the cost.   |      |     | I Idata from EPS with photograph to appear on the monitor that move   |      |                                  |
| network recovers without any impact on the system operations.  3. Video Recording & Processing Unit shall send alerts to respective RPF Thana/Post. Divisional HQ (Control) Video Recording & Processing Unit for Non RPF Stations:  Room) and Centralized locations on real time basis through the available MPLS/IP Network.  4. Video Management system and Video Analytic and Video Recording & Processing Unit for Non RPF Stations:  5. Bidder to propose single unit hordware on each platform./station or Railway Station to achieve the functionalities as defined above.  6. Technical Requirements: As per RDSO Specification at Railway Station to achieve the functionalities as defined above.  6. Technical Requirements: As per RDSO Specification at the system specification of Railway Station to achieve the functionalities as defined above.  6. Technical Requirements: As per RDSO Specification at the system specification of Railway Station to achieve the functionalities as defined above.  6. Technical Requirements: As per RDSO Specification at the system specification of Railway Station to achieve the functionalities as defined above.  8. Bidders may quote for 64/32/16 Channel system keeping different categories of stations in mind to optimize the cost.  |      |     | data automatically to PDF/CPD Thana/Post, when the  |      |                                  |
| Analytic system etc. applications shall be hosted on this platform as per solution requirement.  Noom) and Centralized locations on real time basis through the available MPLS/IP Network.  Video Management system and Video Analytic and Video Analytic system etc. applications shall be hosted on this platform sper solution requirement.  Video Management system and Video Analytic and Video Analytic system etc. applications shall be hosted on this platform sper solution requirement.  Video Recording & Processing Unit for Non RPF Stations:  Stations:  The VRPU should support 2 Factor Authorization so that users are solution requirements.  The VRPU should support 2 Factor Authorization so that users are solution real time basis.  The VRPU should support 2 Factor Authorization so that users are per solution requirements.  The VRPU should support 2 Factor Authorization so that users are per solution requirements.  Sidder sa per tender/corrigent per solution requirement.  Video Recording & Processing Unit for Non RPF Stations:  The VRPU should support and the specification shall be hosted on this platform as per solution requirement.  Sidder to propose single multiple unit hardware on each platform./station of a platform./station of a platform./station of a platform specification.  No. RDSO/SPN/T C/65/206 Revision 4.0 or latest with all amendments.  The VRPU should support 2 Factor Authorization so that users are be given rights on the fly to perform specific tasks across the network by the administrator.  Bidders may quote for 64/32/16 Channel system keeping different categories of stations in mind to optimize the cost.   |      |     | uata automatically to KFF/GKF Maharost when the   |      |                                  |
| 3. Video Recording & Processing Unit shall send alerts to respective RPF Thana/Post. Divisional HQ (Control) Video Recording & Processing Unit for Non RPF Stations: Room) and Centralized locations on real time basis 5. Bidder to propose single multiple unit hardware on each platform/station with internal /external storage or combination of both as per RDSO Specification at Railway Station to achieve the functionalities as defined above.  4. Video Management system and Video Analytic and Video Analytic system etc. applications shall be hosted on this platform as per solution requirement.  Video Recording & Processing Unit for Non RPF Stations:  5. Bidder to propose single unit hardware on each platform/station of Railway Station to achieve the functionalities as defined above.  6. Technical Requirements: As per RDSO Specification to achieve the platform/station of Railway Station to achieve the functionalities as defined above.  6. Technical Requirements: As per RDSO Specification to achieve the functionalities as defined above.  8. Bidders may quote for 64/32/16 Channel system keeping different categories of stations in mind to optimize the cost.  8. Bidders may quote for 64/32/16 Channel system keeping different categories of stations in mind to optimize the cost.  |      |     | network recovers without any impact on the system 4. Video Management system and Video Analytic and Video               |      |                                  |
| to respective RPF Thanai/Post. Divisional HQ (Control) Video Recording & Processing Unit for Non RPF Stations:  Room) and Centralized locations on real time basis through the available MPLS/I/P Network.  4. Video Management system and Video Analytic and Video Analytic system etc. applications shall be hosted on this platform as per solution requirement.  Video Recording & Processing Unit for Non RPF Stations:  5. Bidder to propose single unit hardware on each platform/station of Railway Station to achieve the platform/station of Railway Station to achieve the functionalities as defined above.  5. Bidder to propose single unit hardware on each platform/station of Railway Station to achieve the functionalities as defined above.  6. Technical Requirements:  7. The VRPU should support 2 Factor Authorization so that users can be given rights on the fly to perform specific tasks across the network by the administrator.  8. Bidders may quote for 64/32/16 Channel system keeping different categories of stations in mind to optimize the cost.  8. Bidders may quote for 64/32/16 Channel system keeping different categories of stations in mind to optimize the cost.   |      |     |   |      | Clause as per tender/corrigendum |
| Room) and Centralized locations on real time basis through the available MPLS/IP Network.  4. Video Management system and Video Analytic and Video Analytic system etc. applications shall be hosted on this platform as per solution requirement.  Video Recording & Processing Unit for Non RPF Stations:  5. Bidder to propose single unit hardware on each platform./station with internal /external storage or combination of both as per RDSO Specification at Railway Station to achieve the functionalities as defined above.  6. Technical Requirements: As per RDSO Specification No. RDSO/SPN/ TC/65/206 Revision 4.0 or latest with all amendments.  7. The VRPU should support 2 Factor Authorization so that users can be given rights on the fly to perform specific tasks across the network by the administrator.  8. Bidders may quote for 64/32/16 Channel system keeping different categories of stations in mind to optimize the cost.  8. Bidders may quote for 64/32/16 Channel system keeping different categories of stations in mind to optimize the cost.   |      |     |   |      | , , ,                            |
| through the available MPLS/IP Network.  4. Video Management system and Video Analytic and Video Analytic system etc. applications shall be hosted on this platform as per solution requirement.  Video Recording & Processing Unit for Non RPF Stations:  5. Bidder to propose single unit hardware on each platform./station of Railway Station to achieve the functionalities as defined above.  6. Technical Requirements: As per RDSO Specification (No. RDSO/SPN/TC/65/206 Revision 4.0 or latest with all amendments.  7. The VRPU should support 2 Factor Authorization so that users can be given rights on the fly to perform specific tasks across the network by the administrator.  8. Bidders may quote for 64/32/16 Channel system keeping different categories of stations in mind to optimize the cost.  |      |     | to respective RPF Thana/Post. Divisional HQ (Control Video Recording & Processing Unit for Non RPF Stations:            |      | prevails.                        |
| 4. Video Management system and Video Analytic and Video Analytic system etc. applications shall be hosted on this platform as per solution requirement.  Video Recording & Processing Unit for Non RPF Stations:  10.1 & 10.2 of IP Based Video Surveillance System specification Video Recording & Processing Unit for Non RPF Stations:  11.1 & 10.2 of IP Based Video Surveillance System specification Video Revision 4.0 or latest with all amendments.  12.1 The VRPU should support 2 Factor Authorization so that users are be given rights on the fly to perform specific tasks across the network by the administrator.  13. Bidders may quote for 64/32/16 Channel system keeping different categories of stations in mind to optimize the cost.  14. Video Management system and Video Analytic and Video Surveillance System specification to achieve the functionalities as defined above.  10.1 & 10.2 of IP Based Video Surveillance System and Video Surveillance System and Video Surveillance System and Video Surveillance System and Video Surveillance System specification to achieve the functionalities as defined above.  15. Tchnical Requirements As per RDSO Specification to achieve the functionalities as defined above.  16. Technical Requirements As per RDSO Specification at Railway Station to achieve the functionalities as defined above.  16. Technical Requirements As per RDSO Specification at Railway Station at As per RDSO Specification at Railway Station at Asperiments.  17. The VRPU should support 2 Factor Authorization so that users |      |     |   |      |                                  |
| Video Analytic system etc. applications shall be hosted on this platform as per solution requirement.  Video Recording & Processing Unit for Non RPF Stations:  5. Bidder to propose single unit hardware on each platform./station of Railway Station to achieve the functionalities as defined above.  6. Technical Requirements: As per RDSO Specification Vol. & 10.2 of IP Based Video Surveillance System specific tasks across the network by the administrator.  7. The VRPU should support 2 Factor Authorization so that users can be given rights on the fly to perform specific tasks across the network by the administrator.  8. Bidders may quote for 64/32/16 Channel system keeping different categories of stations in mind to optimize the cost.  |      |     | beth as an BDCC Consideration at Britain to achieve the   |      |                                  |
| on this platform as per solution requirement. Video Recording & Processing Unit for Non RPF Stations:  5. Bidder to propose single unit hardware on each platform./station of Railway Station to achieve the functionalities as defined above.  6. Technical Requirements: As per RDSO Specification (ause 4.210 of IP Based Video Surveillance System specification No. RDSO/SPN/TC/ 65/206 Revision 4.0 or Requirements: As per RDSO Specification (ause 4.210 of IP Based Video Surveillance System specification No. RDSO/SPN/TC/ 65/206 Revision 4.0 or RDSO/SPN/TC/ 65/206 Revision 4.0 or Requirements: As per RDSO Specification (ause 4.210 of IP Based Video Surveillance System specification No. RDSO/SPN/TC/ 65/206 Revision 4.0 or RDSO/SPN/TC       |      |     |   |      |                                  |
| on this platform as per solution requirement. Video Recording & Processing Unit for Non RPF Stations:  10.1 & 10.2 of IP Based Video Surveillance System specification No. RDSO/SPN/ TC/65/206 Revision 4.0 or latest with all amendments. 7. The VRPU should support 2 Factor Authorization so that users can be given rights on the fly to perform specific tasks across the network by the administrator.  8. Bidders may quote for 64/32/16 Channel system keeping different categories of stations in mind to optimize the cost.  8. Bidders may quote for 64/32/16 Channel system keeping different categories of stations in mind to optimize the cost.   |      |     |   |      |                                  |
| Video Recording & Processing Unit for Non RPF Stations:  No. RDSO/SPN/ TC/65/206 Revision 4.0 or latest with all amendments. 7. The VRPU should support 2 Factor Authorization so that users can be given rights on the fly to perform specific tasks across the platform./station of Railway Station to achieve the functionalities as defined above.  8. Bidders may quote for 64/32/16 Channel system keeping different categories of stations in mind to optimize the cost.  8. Bidders may quote for 64/32/16 Channel system keeping different categories of stations in mind to optimize the cost.   |      |     |   |      |                                  |
| Stations:  5. Bidder to propose single unit hardware on each platform./station of Railway Station to achieve the functionalities as defined above.  6. Technical Requirements: As per RDSO Specification clause 4.210 of IP Based Video Surveillance System specification No. RDSO/SPN/TC/ 65/206 Revision 4.0 or  |      |     |   |      |                                  |
| 7. The VRPU should support 2 Factor Authorization so that users can be given rights on the fly to perform specific tasks across the network by the administrator.  6. Technical Requirements: As per RDSO Specification clause 4.210 of IP Based Video Surveillance System specification No. RDSO/SPN/TC/ 65/206 Revision 4.0 or   |      |     |   |      |                                  |
| 5. Bidder to propose single unit hardware on each platform./station of Railway Station to achieve the functionalities as defined above.  6. Technical Requirements: As per RDSO Specification clause 4.210 of IP Based Video Surveillance System specification No. RDSO/SPN/TC/ 65/206 Revision 4.0 or   |      |     |   |      |                                  |
| platform./station of Railway Station to achieve the functionalities as defined above.  8. Bidders may quote for 64/32/16 Channel system keeping different categories of stations in mind to optimize the cost.  1. Clause 4.210 of IP Based Video Surveillance System specification No. RDSO/SPN/TC/ 65/206 Revision 4.0 or  |      |     |   |      |                                  |
| functionalities as defined above.  8. Bidders may quote for 64/32/16 Channel system keeping different categories of stations in mind to optimize the cost.  clause 4.210 of IP Based Video Surveillance System specification No. RDSO/SPN/TC/ 65/206 Revision 4.0 or   |      |     |   |      |                                  |
| 8. Bidders may quote for 64/32/16 Channel system keeping different categories of stations in mind to optimize the cost. clause 4.210 of IP Based Video Surveillance System specification No. RDSO/SPN/TC/ 65/206 Revision 4.0 or   |      |     | l l i   |      |                                  |
| 6. Technical Requirements: As per RDSO Specification different categories of stations in mind to optimize the cost.  clause 4.210 of IP Based Video Surveillance System specification No. RDSO/SPN/TC/ 65/206 Revision 4.0 or  |      |     |   |      |                                  |
| clause 4.210 of IP Based Video Surveillance System specification No. RDSO/SPN/TC/ 65/206 Revision 4.0 or   |      |     | different entergrises of stations in mind to entimize the cost  |      |                                  |
| specification No. RDSO/SPN/TC/ 65/206 Revision 4.0 or  |      |     | o. Technical Requirements. As per RDSO Specification  |      |                                  |
|  |      |     |   |      |                                  |
| latest with all amendments.  |      |     |   |      |                                  |
|  |      |     | latest with all amendments.   |      |                                  |
|  |      |     |   |      |                                  |

| 1046 | 209 8.3.1        | 12 le                     | Server and Storage System sizing   | Sarvar and Storage System sizing  | TEMA |  |
|------|------------------|---------------------------|--|---|------|--|
| 1046 | 209 8.3.1        | A B N S A B T N E S O F C | Server and Storage System sizing Approximate number of cameras considered across 6124 Railway Stations are 89844 units. Refer Chapter 7 Annexure-1 for station category, Region wise camera breakup. //ideo feed from cameras of group of stations (cluster) shall be stored in external storage for 30 days on H.265 at RPF/GRP-Thana/Post. Bidder to also propose a redundant server per RPF/GRP Thana/Post location to ensure uninterrupted services as mentioned in above para in case of failure of main server. Bidder to submit the calculation done to reach the quoted servers numbers, duly vetted and supported with pertification issued by OEM(S). TRS system at RPF/GRP Thana/Post and RailTel Data sentres. It shall sync new alert and new face enrolled with connectivity is established. | Approximate number of cameras considered across 6124 Railway Stations are 89844 units. Refer Chapter 7 Annexure-1 for station category, Region wise camera breakup. Video feed from cameras of group of stations (cluster) shall be stored in internal / external storage or combination of both for 30 days on H.265 /H.264. At each such cluster i.e. RPF/GRP Thana/Post location, bidder to size storage, server requirement and propose server (s) considering recording of FHD cameras, analytics, FRS with local matching capability with the watch list database on up to 8 cameras stream at each RPF/GRP Thana/Post locations without any impact on the performance of the system and overall solution requirement. In case, it is unable to do so on a single server, extra server(s) required for the RailTel Corporation of India Limited. Same shall be provided by the bidder without any cost to the purchaser. Bidder to also propose a redundant CRPU per RPF/ GRP Thana/ post location to ensure uninterrupted services as mentioned in above Para in case of failure of main CRPU at any of the stations co-allocated under it. Bidder to submit the calculation done to reach the quoted FRS/VA servers numbers, duly vetted and supported with certification issued by OEMs.  FRS system at RPF /GRP Thana/Post shall be work independently even if there is no connectivity between the RPF/GRP Thana/Post and RailTel Data centres. It shall sync new alert and new face enrolled when connectivity is | TEMA | Clause as per tender/corrigendum prevails. |
| 1047 | 101 4.A.1<br>(2) | s<br>c<br>C<br>H          | crores of OEMs supplying camera. INFR 100 crores for DEMs of switches and INR 225 crores for OEMs of IT  | should have a minimum cumulative turnover of INR 360 Crores of OEMs supplying camera. INFR 100 crores for OEMs of switches and INR 225 crores for OEMs of IT Hardware (server and storage) each in leach of the last 3  | TEMA | Clause as per tender/corrigendum prevails. |
| 1048 | 01 4.A.1         |                           | rom the User Organisations is required to be submitted.  | PO copies along with satisfactory report/completion certificates from the User Organisations is required to be submitted.   | TEMA | Clause as per tender/corrigendum prevails. |
| 1049 | 01 4.A.1         | s<br>F<br>A<br>c          | Rapid Transport system e.g. Metro, Railways, Mono Rail, Airport etc. in India or abroad in last 3 financial years (i.e. current year and three previous financial years) from the late of opening of tender. The same should have been working satisfactorily for the at least six (6) months.   | The OEM for proposed IP cameras and VMS Software should have supplied for at least one project under MHA, MOD, Mass Rapid Transport system e.g. Metro, Railways, Mono Rail, Airport, MOD, MHA etc. in India or abroad in last 3 financial years (i.e. current year and three previous financial years) from the date of opening of tender. The same should have been working satisfactorily for the at least six (6) months.  | TEMA | Clause as per tender/corrigendum prevails. |

| 1050 | 242 | 8.26        | Recording Parameters 8.3.2.3.1 For Surveillance network at Station: For Recording following parameters/guidelines must be followed by the bidder and size their servrs and storage requirements: 8.3.2.3.1.1  (A) On station collocated with RPF/GRP Thana/Post: i) One Full HD stream (@1080P and @25 FPS) FROM fULL HD Cambera on H.265 and ii) One UHD stream at resolution 3830x2160 and @15 FPS from 4K UHD Camera on H.265 should be recorded for 30 days in external storage at RPF/GRP Thana/Post.  (B) On other stations: i) One Full HD stream (@1080P and @25 FPS) from full HD camera on H.265 and ii) One UHD stream at resolution 3840x2160 and @15FPS from 4K UHD Camera on H.265 should be recorded for 7 days in Video Recording & Processing Unit.  iii) One HD streamn (@720P and @25FPS) from Full HD Camera on H.265 and iv) One FHD stream (@1080P and @15FPS from 4K UHD Camera on H.265 should be recorded for 30 days in external storage at RPF/GRP Thana/Post. 8.3.2.3.12 In case of MPLS/IP network connectivity failure, video stream and alarms would be stored locally at the Video Recording & Processing Unit for that duration and would transfer these data automatically to RPF/GRP Thana/Post when the network recovers without any impact on the system opeations.  8.3.2.3.1.3 The FRS will get the UHD feed from Recording Server at RPF/GRP Thana/Post for running Face Recognition algorithm and send alarms to designated clients at RPF/Div. HQ (Control Room)/others. | Recording Parameters 8.3.2.3.1 For Surveillance network at Station: For Recording following parameters/guidelines must be followed by the bidder and size their servers and storage requirements: 8.3.2.3.1.1  (A) On station collocated with RPF/GRP Thana/Post: i) One Full HD stream (@1080P and @25 FPS) FROM fULL HD Cambera on H.265/H.264 at 2MBps ii) One UHD stream at resolution 3840x2160 @25 FPS from 4K UHD Camera on H.265/H.264 at 8MBps should be recorded for 30 days in internal/external storage at Stations.  (B) On other stations: i) One Full HD stream (@1080P and @25 FPS) from full HD Camera on H.265/H.264 at 2Mbps ii) One UHD stream at resolution 3840x2160 @25FPS from 4K UHD Camera on H.265/H.264 at 8Mbps should be recorded for 30 days in internal/external storage at stations, should be recorded for 30 days in Video Recording & Processing Unit. Thana/Post. 8.3.2.3.1.2 In case of MPLS/IP network connectivity failure, video stream and alarms would be stored locally at the Video Recording & Processing Unit for that duration and would automatically make this data available for view to RPF/GRP Thana/Post when the network recovers without any impact on the system operations. 8.3.2.3.1.3 The FRS will get the UHD feed from cameras/VRPU at stations for running Face Recognition algorithm at 3840x2160 and @10 FPS from 4K UHD Camea on H.265/H.264 at 8 MBps and send alarms to designated VRPU or clients at RPF/Div. HQ (Control Room)/others. | TEMA | Clause as per tender/corrigendum prevails. |
|------|-----|-------------|--|--|------|--|
| 1051 | 211 | 8.4         | The Storage capacity shall be as per storage requirement of Full HD and 4K UHD camera as defined in tender clause 8.3 and other scalabilities requirements as mentioned in the tender document. The storage capacity should be calculated considering RAID6 configuration.   | The Storage capacity shall be as per storage requirement of Full HD and 4K UHD camera as defined in tender clause 8.3 and other scalabilities requirements as mentioned in the tender document. The storage capacity should be calculated considering RAID5/6 configuration.   | TEMA | Clause as per tender/corrigendum prevails. |
| 1052 | 211 | 8.3.2.3.1.2 | The FRS will get the UHD feed from Recording Server at RPF/GRP Thana/Post for running Face Recognition algorithm and send alarms to designated clients at RPF./Div.HQ (Control Room)/others.   | The FRS will get the UHD feed from CPRU/Cameras at stations for running Face Recognition algorithm and send alarms to designated CPRU or its clients as per offered solution at RPF./Div. HQ (Control Room)/others.  | TEMA | Clause as per tender/corrigendum prevails. |
| 1053 | 243 | 8.26        | The operator at the command centre shall have following access to the video feeds: Viewing rights to all the live camera feeds, Viewing rights to the stored feeds, Access to Alerts/Exceptions/ Triggers raised. Personalized Dashboard Accessbility to analytics on the recorded footages  | The operator at the command centre shall have following access to the video feeds: Viewing rights to all the live camera feeds. Viewing rights to the stored feeds, Access to Alerts/Exceptions/ Triggers raised Personalized Dashboard Accessbility to analytics on the recorded footages   | TEMA | Clause as per tender/corrigendum prevails. |

|      |     | 1      | Additional Comments:  |   |       | 1  |
|------|-----|--------|---|---|-------|--|
| 1055 | 244 | 8.26.1 | Video wall - Display Wall screen size - 70"   | Video Wall - Display Wall screen size - 55"   | I EMA | Clause as per tender/corrigendum prevails. |
| 1055 | 244 | 8 26 1 | (iv) Should also allow to view video feeds flagged or tagged for the purpose of investigation as a proof and store in an external Hard drive/CD etc. (v) Mobile application should allow MAC/IMEI No. binding, role based user access over secured VPN Client on users mobile/smart phone.  | Video Wall - Display Wall screen size - 55"   | TEMA  | Clause as per tendor/corrigondum           |
|      |     |        | (i) Dashboard: showing various performance/statics reports of the system (ii) Menu based selection to select and view video feeds on demand/need based (iii) Should work on pull based mechanism which will allow user to access the video feeds  | (i) Menu based selection to select and view video feeds on demand/need based (iii) Should work on pull based mechanism which will allow user to access the video feeds (iv) Should allow two factor authentication.   |       |  |
| 1054 | 247 | 8.26.2 | Mobile App for VSS System Bidder is also responsible for developing a mobile for Android as well as Apple iOS based smartphone to allow secure access of VMS Servers' live and recorded video streams using smartphone or a tablet from almost anywhere. This should be easy to use application allowing simultaneous multiple camera monitoring. Mobile app developed by the bidder should have minimum functionalities: | Mobile App for VSS System Bidder is also responsible for developing a mobile for Android as well as Apple iOS based smartphone to allow secure access of VMS Servers' live and recorded video streams using smartphone or a tablet from almost anywhere. This should be easy to use application allowing simultaneous multiple camera monitoring. Mobile app developed by the bidder should have minimum functionalities: | TEMA  | Clause as per tender/corrigendum prevails. |
|      |     |        | Adequate Electrical Work  UPS (adequate capacity to cover all above IT  Components with minimum 1 hour Backup)  | (5 Nos.)  Adequate IT/LAN Components  Chairs and Computer Tables (5 Nos.)  Adequate Electrical Work  UPS (adequate capacity to cover all above IT Components with minimum 1 hour Backup)  |       |  |
|      |     |        | Video Wall ( As per clasue 8.26 of chapter 8) PC Workstation as defined in clause 8.6 of chapter 8 (5 Nos.) Adequate IT/LAN Components Chairs and Computer Tables 5 Nos.)   | Broad Level Bill of Material required at Central Command Center is as follows:  Video Wall ( As per clasue 8.26 of chapter 8)  PC Workstation as defined in clause 8.6 of chapter 8   |       |  |
|      |     |        | search should be possible based on various filters like alarm, event, area, camera etc.  Broad Level Bill of Material required at Central Command Center is as follows:   | Provide search of recorded video, Advanced search should be possible based on various filters like alarm, event, area, camera etc.  GIS Maps, which should support the location and movement of various train movement across India with Geo Tagging of the train.  |       |  |
|      |     |        | Provide search of recorded video, Advanced  | Provide search of recorded video, Advanced search   |       |  |

| 1056 | The Camera sensor size may be left open as there new technologies have arrived that are cheaper.  | Recommended:  Maintained the minimum sensor size to 1/3" of  better | TEMA | Clause as per tender/corrigendum prevails. |
|------|---|---|------|--|
| 1057 | Datasheets which are signed and attested by the OEM may be accepted as final by RailTel and RailTel may ask for any queries directly from OEM for the same. |   | TEMA | Clause as per tender/corrigendum prevails. |