Information to Bidder for the "Procurement of Wi Fi Access Points of Wi-Fi setup for VSS work"

Ref: GeM Bid No. GEM/2020/B/628591 Dtd 26.04.2020

1. The item/items in this bid should be quoted as per the technical specifications. *The details of the specifications along with consignee/site details are also available on website www.railtelindia.com*

GEM/2020/B/628591 Dtd 26.04.2020

1.Wi-Fi Access Point at Stations and Wireless Controller at Datacenter with 3 year warranty (For SOR,SN-1)

WiFi Outdoor Access Points

Reference	Parameters	Technical specification
CT2HW1	Hardware	Access Points proposed must include radios for both 2.4 GHz and 5 GHz.
CT2HW2	Hardware	Must have a robust design for durability, without visible vents
CT2HW3	Hardware	Must include dual band antennas to support both the 2.4GHz and 5GHz operations simultaneously.
CT2HW4	Hardware	Proposed access point shall support MDO(Mobile Data offload)
CT2HW5	Hardware	Mounting kit should be standard which shall be used for mounting access point
CT2HW5	Hardware	Must support operating humidity of 10 to 90% (noncondensing)
CT2WS1	wireless Standard	Must support 2X2 multiple-input multiple-output (MIMO) with TWO spatial streams
CT2WS2	wireless Standard	Must support simultaneous 802.11n on both the 2.4 GHz and 5 GHz radios. And must support 802.11ac Wave 2 on 5 GHz .
CT2WS3	wireless Standard	Must support data rates unto 800 Mbps on 5Ghz radio and 140mbps on 2.4Ghz radio.
CT2WS4	wireless Standard	Must support 40 MHz and 80 MHz wide channels in 5 GHz.
CT2WS5	wireless Standard	Antenna Gain of Access Points must be +2dBm or better. Must support following minimum transmit power for both 2.4Ghz and 5Ghz radios.
		(i) 2.4-Ghz band : +21dBm
		(ii) 5.0-Ghz band: +24dBm

CT2WS6	wireless Standard	AP should support VLAN trunking (802.1q) and VLAN based SSID for user traffic.
CT2RF1	RF	The Wireless AP should have the technology to improve downlink performance.
CT2RF2	RF	The AP shall be able to load-balance between 2.4Ghz and 5Ghz band.
CT2RF3	RF	Must have -90dB to -100dB or better Receiver Sensitivity.
CT2RF4	RF	Must incorporate radio resource management for power, channel, coverage hole detection and performance optimization
CT2RF6	RF	Should support configurable carrier sense threshold
CT2M1	Mesh	The Wireless Backhaul shall operate in 5Ghz
CT2M2	Mesh	Support Encrypted and authenticated connectivity between all backhaul components
CT2M3	Mesh	Access point shall have wired uplink interfaces i.e. 1X10/100/1000BASE-T Ethernet
CT2R1	Roaming	Must support Proactive Key Caching and/or other methods for Fast Secure Roaming.
CT2S1	Security	Must support Management Frame Protection.
CT2S2	Security	Should support locally-significant certificates on the APs using a Public Key Infrastructure (PKI) or preinstalled certs on AP for authentication
CT2S3	Security	Provision of Wireless IPS to filter malicious traffic
CT2E1	Encryption	Access Points must support a distributed encryption/decryption model.
CT2E2	Encryption	Access Points must support hardware or software based encryption
CT2M1	Monitoring	Must support the ability to serve clients or monitor the RF environment.
CT2M2	Monitoring	AP model proposed must be able to be both a client-serving AP and Parallely monitor- Intrusion Prevention services.
CT2F1	Flexibility:	Should support mesh capabilities for temporary connectivity in areas with no Ethernet cabling.
CT2F2	Flexibility:	Should support QoS for voice over wireless.
CT2F3	Flexibility:	Must support Controller-based and standalone(autonomous) deployments
CT2F4	Flexibility:	Must support 16 WLANs per AP for SSID deployment flexibility.
CT2O1	Operational:	Must support telnet or SSH or console login to APs directly for troubleshooting flexibility.
CT2O2	Operational:	Must support automatic detection of dropped connection to controller,
CT2O3	Operational:	Must support automatic failover to secondary controller, upon detecting lost connection to controller

CT2O4	Operational:	Must support DHCP Option 82, defined in RFC 3046, including support for Sub-option 01 (Circuit-Id) and Sub-option 02 (Remote Id) fields.
CT2O5	Operational:	With Controller APs (from a data-plane plane perspective) must support:
		- Ethernet over GRE IPv6 tunnel
		- Automatic detection of failed tunnel termination, with configurable connection retry and timeout.
		- Automatic failover to secondary tunnel termination address.
CT2O6	Operational:	Support for basic AP monitoring statistics for each radio: Bytes Sent, Bytes Received, Packets Sent, Packets Received,
		Radio Channel Utilization, Noise.
CT2O7	Operational:	Must support data-plane split tunneling in which ACLs may be configured to enable a range of destination net blocks and/or IPs to bypass the data-plane tunnel and be bridged on the wired interface.
CT2O8	Operational:	AP should have capability to split tunnel for both IPv4 and IPv6 tunnel to segregate the management and data traffic.
CT2O9	Operational:	AP should have capability to split tunnel for specific destination IP/Subnet (For implementing policy based Caching solutions) using local NAT and forward user traffic.
CT2O10	Operational:	The AP shall support 200 concurrent Clients per AP
CT2O11	Operational:	APs shall support SNMP v1 Or higher (V2/V3)
CT2P1	Power:	Must support Power over Ethernet/PoE+/UPoE/Power Injector/AC/DC .
CT2Q1	Quality of Service:	shall have the support of 802.11e and WMM
CT2Q2	Quality of Service:	Should be Wi-Fi Alliance certified and WPC Approved and ETA Certified
CT2Q3	Quality of Service:	Must support QoS to prioritize video ,voice and Data traffic
CT2EES1	Environmental and Electrical Specifications	Must support QoS and Video Call Admission Control capabilities.
CT2EES2	Environmental and Electrical Specifications	Access point shall support powering from POE/PoE+/UPoE /Power Injector/AC/DC.
CT2EES3	Environmental and Electrical Specifications	Access point shall support pole, wall, and roof mounting options.
CT2EES4	Environmental and Electrical Specifications	Geographic orientation flexibility – tilt angle for pole, wall, and roof mounting units
CT2EES5	Environmental and Electrical Specifications	The equipment shall support up to 100 MPH sustained winds & 140 MPH wind gusts.

CT2EES6	Environmental and Electrical Specifications	The Access point shall be IP67 certified.
CT2EES7	Environmental and Electrical Specifications	The Access point shall be rated for operation over an ambient temperature range of 0C to +55 C
CT2EES8	Environmental and Electrical Specifications	Should Support Surge Protection on Ethernet Ports to meet the requirement at High Voltage Transmission Line running across the Railway Platform. If any OEM/Bidder can't provide inbuilt surge protection in AP, external surge protection must be proposed. Surge protection of ± 2 kV on copper Ethernet ports.

Specification of Cloud/Appliance based Wireless Controller

The below mentioned parameters are minimum specifications of the controller. Bidders has to propose Cloud/Appliance based Wireless Controller to meet the requirement as per the tender.

Reference	Parameters	Technical specification
WCHW1	Hardware and Standards	Must be compliant with IEEE CAPWAP or equivalent for controller-based WLANs.
WCHW2	Hardware and Standards	Controller should support 2U form factor and multiple stackable controllers must be proposed from Day One from single chassis of minimum 2000 Access Points. Proposed controller should support 1+1 or N+1 redundancy from the day one. The solution should be scalable to support 20,000 or more APs.
		Note: - Access Point Licensees on wireless controllers should be given as per SOR/PO/LOA(Access point total Qty) + 20% extra.
WCHW3	Hardware and Standards	Controller must have at least 4 x 10Gbps of uplink interfaces.
WCHW4	Hardware and Standards	Controller shall support 10,000 concurrent sessions from a single chassis
WCHW5	Hardware and Standards	WLAN controller shall support Mobile data offload as a feature or as a solution.
WCC1	Compatibility	Deleted
WCHA1	High Availability	Must support 1+1 or N+1 redundancy models.
WCHA2	High Availability	Must have feature for stateful recovery without re-authentication of the client in the event of LAN and WLAN infrastructure disruption to deliver a non-stop client session
WCHA3	High Availability	Must support internal 230 VAC redundant power supplies.
WCRF1	RF Management	Must support an ability to dynamically adjust channel and power settings based on the RF environment.

WCRF2	RF Management	Radio coverage algorithm must allow adjacent APs to operate on different channels, in order to maximize available bandwidth and avoid interference
WCRF3	RF Management	Must have Automatic 802.11 interference detection, identification, , and mitigation.
WCRF4	RF Management	Must support coverage whole detection and correction
WCRF5	RF Management	Must support RF Management with 20/40/80 MHz channels with 802.11a/b/g/n/ac
WCIP1	IPv6 features	WLC should support L2 and L3 roaming of IPv6 clients.
WCIP2	IPv6 features	WLC should support Guest-access functionality for IPv6 clients
WCP1	Performance:	Controller performance must remain the same if encryption is on or off for wireless SSIDs except the throughput processing of the controller.
WCS1	Security:	Should adhere to the strictest level of security standards, including 802.11i Wi-Fi Protected Access 2 (WPA2), WPA, 802.1X with multiple Extensible Authentication Protocol (EAP) types, including Protected EAP (PEAP), EAP with Transport Layer Security (EAP-TLS), EAP with Tunnelled TLS (EAP-TTLS)
WCS2	Security:	Should support Management frame protection for the authentication of 802.11 management frames by the wireless network infrastructure.
WCS3	Security:	Deleted
WCS4	Security:	Controller should have rogue AP detection and automatic containment feature
WCS5	Security:	Controller should be able to detect attacks like Broadcast deauthentication, NULL probe, from day one for all access points
WCS6	Security:	Controller should have profiling of devices based on protocols like HTTP/DNS, DHCP and more to identify the end devices on the network
WCG1	Guest Wireless	Must support internal and external web authentication.
WCF1	Functionality	Must be able to set a maximum per-user bandwidth limit on a per-SSID basis.
WCF2	Functionality	Must support user load balancing across Access Points.
WCF3	Functionality	Controller must provide Mesh capability for Mesh supported AP.
WCM1	Monitoring	Deleted
WCR1	Roaming:	Deleted
WCR2	Roaming:	Solution proposed must support clients roaming across at least 500 APs.

WCO1	Operational:	Solution Must support AP over-the-air packet capture for export to a tool such as Wire shark.
WCO2	Operational:	Should be able to classify and identify different types of interference
WCO3	Operational:	Should provide a snapshot of air quality in terms of the performance and impact of interference on the wireless network identifying the problem areas.
WCO4	Operational:	Should provide real-time charts showing interferers per access point, on a per-radio, per-channel basis.
WCO5	Operational:	Should support encrypted mechanism to securely upload/download software images to and from wireless controllers
WCO6	Operational:	Must support Ethernet over GRE IPv4 tunnel to northbound gateway
WCO7	Operational:	Must support Ethernet over GRE IPv6 tunnel to northbound gateway.
WCO8	Operational:	Must support automatic detection of failed tunnel termination, with configurable connection retry and timeout
WCO9	Operational:	Must support automatic failover to secondary tunnel termination address.
WCO10	Operational:	Must support controller-based configuration of Ethernet over GRE tunnel termination
WCO11	Operational:	must be wifipasspoint 2 complaint
WCO12	Operational:	System shall support various modes of operations like Tunnel Mode and local Breakout on the Same AP
WCO13	Operational:	Must support configuration of data-plane split tunneling by enabling specific destination IP addresses and net blocks to bypass the data-plane tunnel and be bridged on the wired interface
WCO14	Operational:	Deleted
WCO15	Operational:	shall support API's for NB and SNMP Integration with CNMS
WCO16	Operational:	System shall support Reporting functionality with or without external server
WCO17	Operational:	should support following Information through SNMP
		i) Interface utilization.
		ii) Interface errors and discards.
		iii) Connected APs (count) , Connected Clients (count),Access Point Failed Assoc. Count
		iv) Connected Stations (count), Admin Status (on/off) ,Broadcast SSID (on/off).
		v) CPU and Memory statistics.
		vi) AP name , AP IP address ,AP Model , AP uptime , AP admin status , operational status ,POE Status ,Ethernet speed , number of clients and AP mode .
		vii) Should also support snmp traps on failure conditions.
WCO18	Operational:	Reports type like number of clients, system resource utilization, Transmit and Receive bytes on AP/radio or set of AP or a particular site should be generated.
WCO19	Operational:	The controller should have a troubleshooting tool to detect user experience issues.

WCO20	Operational:	It should display health and traffic data for each AP to evaluate site performance.
WCQ1	QOS:	Must support 802.11e and WMM
WCQ2	QOS:	Shall able to prioritize all traffic such as (Data ,voice and video)
WCQ3	QOS:	Controller shall integrate with existing firewall
WCQ4	QOS:	Should have rate limiting per user and per SSID basis for encrypted tunnel mode
WCQ5	QOS:	To deliver optimal bandwidth usage, reliable multicast must use single session between AP and Wireless Controller.

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2. In the specification wherever support for a feature has been asked for, it will mean that the feature should be available without RailTel requiring any other hardware/software/licenses. Thus, all hardware/software/licenses required for enabling the support/feature shall be included in the offer.

3. OEM or Authorized distributor/Partner of OEM should have a registered office in India to provide sales and 24x7 support in India. The certificate to this effect should be submitted. The bidder should be either OEM or his authorized dealer/distributor.

   In case of the authorized distributor/partner certificate from the OEM to this effect should be submitted. If OEM is quoting then OEM should submit the certificate.

4. Equipment offered shall have complete data sheets and detailed description on OEM web sites.

5. Bidder shall submit the detailed BOM of the equipment offered duly verified and certified by the respective OEM.

6. GSTIN ID of vendor should be provided from where goods will be supplied.

7. **Tender Cost & Earnest Money Deposit (EMD)/ Bid Security:**

7.1 Tender Cost: Estimated cost of the Tender is **Rs 9,45,18,092/-.**

7.2 Earnest Money Deposit (EMD)/ Bid Security: Rs 1956465/- in the form of Pay Order/Demand Draft/BG drawn in favor of RailTel Corporation of India Ltd. payable at New Delhi. The Bid received without EMD will be summarily rejected.

8. Delivery period: **30 days** from the date of PO.

9. Eligibility Criteria for OEM:

a. The Equipment offered by the OEM or equipment of the same series/family from the same OEM should have been satisfactorily working in Government/PSUs/Telecom Service Providers network for at least 12 months as on opening of bid, in India or Abroad. The certificates from the actual users will have to be submitted online.

b. The OEM should have supplied at least 35% of the tendered quantity of the equipment offered or equipment of the same series/family during last preceding 3 financial years (i.e. current year and three previous financial years)as on opening of bid to Government/PSUs/Telecom Service Providers. OEM should submit self-certificate with proper contact detail of clients along with quantities supplied (Firm Name, Contact person, Designation, Telephone Number, Fax, Official mail id etc.). The same should be issued by authorized signatory.

c. The OEM should have proven facilities for Engineering, manufacture, assembly, integration and testing of **Wireless Access Points** and basic facilities with respect to space, Engineering, Personnel, Test equipment, Manufacture, Training, Repair, Service Center Supports for at least past three years in the country from where the proposed equipment are planned to be supplied. In case OEM is located outside India, it should have training repair and service center facilities in India also. The certificates/Undertaking for the same will have to be submitted offline.

(The bidder will have to submit the proof of establishment for the facility)

10. Eligibility Criteria for Bidder:

a. The tenderer should have executed order of supply/ provision of Telecom equipment like **Wireless Access Points** during last preceding 3 financial years (i.e. current year and three previous financial years) as on opening of bid, as per following:

(A) Single order of atleast 35% of tendered value.

OR

(B) Two orders of atleast 20% each of tendered value.

OR

(C) Three orders of atleast 15% each of tendered value.

Satisfactory Performance certificate issued by customer/s for the Purchase Orders/ Work Orders should be enclosed.

b. Bidder should have authorization specific to this tender from respective OEM as per Annex-II.

11. SLA:

After having been notified of the defects / service requirement during warrantee period, Seller has to complete the required Service / Rectification within time limit of max. 3 days. If the Seller fails to complete service / rectification with in defined time limit, a penalty of 0.5% of Unit Price of the product shall be charged as penalty for each week of delay from the seller & upto max. of 100% of Unit Price of the product.

Seller can deposit the penalty with the Buyer directly else the Buyer shall have a right to recover all such penalty amount from the Performance Security (PBG) or from the running bills.

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12. Long Term Maintenance Support:

Tenderer (OEM) shall provide maintenance support after successful completion of the warranty obligations for a minimum period of **5 years**. The long term maintenance support shall be comprehensive and include all hardware and software of equipment supplied against this contract. RailTel should be extended the benefits of periodical software patches/updates made by OEM on the system from time to time for equipment security/performance without any additional cost to RailTel.

Buyer reserves the right to enter into AMC @ 3.5% of ordered value of equipment before 30 days of expiry of warranty period. In case bidder refuses to enter into AMC, PBG will be forfeited.

Separate agreement for AMC (Long term Maintenance Support) before expiry of warranty period shall be entered into with OEM/the authorized partner of OEM by RailTel. A fresh Bank Guarantee valid for Five years and four months for 10% of the Long Term Maintenance Support cost of five years, shall be required to be submitted by bidder for due fulfillment of long term maintenance support obligation.

Quarterly payment for AMC Charges would be made by RailTel after successful completion of AMC Services of that quarter and on the certificate furnished by concerned RailTel representative.

Note: The acceptance of the above clause is mandatory and specific acceptance from OEM is required to be enclosed as per Annexure-I. Any deviation / non acceptance will lead to rejection of the bid.

13. Payment Conditions :-

i. 100% payment against full Supply, Installation & Commissioning ..

ii. 80% payment against part Supply , Installation & Commissioning of the completed part as the case may be. In case bidder completes the supply order or order for supply , installation and commissioning as the case may be, for one Region , he can claim part payment of 80% against each Region's completed supply / completed installation & Commissioning of the said Region. Balance payment shall be made after full supply or full installation & commissioning. The following documents are to be submitted for payment:

a. Original Invoice
b. Delivery Challan
c. Original Consignee receipt with GRN No.
d. Original Inspection Certificate
e. Insurance Certificate.
f. Warranty Certificate of OEM
g. Copy of BG
h. Certificate of receipt of Goods & installation thereof from RailTel.

14. On line Submissions:

The bidder is required to upload and submit the following documents on line before due date & time of bid. The due date & time for closing of the bid **is 15:00 Hrs of 11.05.2020** and the bid will be opened at **15:30 Hrs of 11.05.2020**

i. EMD
ii. BOQ of offered equipment.
iii. Clause wise compliance along with all mentioned documents/annexures for all clauses of GeM Bid and ATC documents.
iv. Data Sheet of offered equipment.
v. Financial (Certified copies of audited balance sheets/annual reports of last three preceding financial years) and Technical Eligibility Criteria documents.
vi. Technical Compliance of all Specification of items as per GeM Bid and ATC documents.
vii. Certificate from the End user against the Eligibility criteria for OEM para 9.
viii. Proof of document required against Eligibility criteria of OEM and Bidder vide para 9 & 10 respectively.
ix. Acceptance from OEM as per Annexure-I against long term maintenance support para 12.
x. MAF/OEM Authorization as per Annexure-II.

Note: 1) Non submission of any document online within the prescribed time will make the bid to be summarily rejected

2) The bidder has to submit the hardcopy of the EMD document submitted on line with in three working days from the date and time of opening of the bid to the RailTel Corporate Office, 6th floor, Tower II, NBCC Building,East Kidwai Nagar, Kidwai Nagar, New Delhi-110023.

3)The bidder is required to give acceptance of all the clauses mentioned in the **"Information to the Bidders"** document is mandatory. Any deviation / non-acceptance may lead to rejection of the bid.

4) Information to Bidder viz. corrigendum /addendum/ amendments etc. for this bid shall be posted on www.railtelindia.com only.

5) The Consignee details/tentative list of stations where equipment's/items has to Supply, Installed, test and Commissioned are as per Annexure-III.

6) This bid is governed by the Specific Additional Terms & Conditions and General Terms & Conditions laid down by the GeM against **GeM Bid No: GEM/2020/B/628591 Dtd 26.04.2020**

Annexure-A, SOR

The details of the specifications are available on website www.railtelindia.com

SOR for Procurement of Wi Fi Access Points of Wi-Fi setup for VSS work			
SN	**Item description**	**Unit**	**Qty**
1	Supply, Installation, Testing and Commissioning of Wireless Access Point with AP management license and all accessories required for their installation	No.	3005

Note: (i) RailTel is having Wireless controller (WLC) of Cisco. Ruckus and Aruba make as per detail given below. Bidders who are quoting for these OEMs need not supply Wireless controller (WLC) hardware. Only 3005 licenses are to be supplied along with APs as per schedule.

SN	Wireless Controller	Model	Software Version	Device
1	Cisco	AIR-CT8540-K9	8.6.101.0	Hardware Based
		AIR-CT8540-K9	8.8.130.0	Hardware Based
2	Ruckus	Vsz-High Scale	5.1.1.0.598	Software based (23 * Intel(R) Xeon(R) Silver 4110 CPU @ 2.10GHz , RAM:48 GB)
		Vsz-High Scale	5.1.1.0.598	Cloud based
3	Aruba	Aruba-7240XM	6.5.4.8	Hardware Based

(ii) Bidders who are quoting other than Cisco/Ruckus/Aruba, should supply Wireless controller (WLC) , along with 3005 licenses, compatible with APs quoted by them as per schedule without any cost to RailTel.

Annexure-I

PROFORMA FOR THE LONG-TERM MAINTENANCE SUPPORT
(To be signed by the O.E.M.)

To
The Executive Director/Operations,
RailTel Corporation of India Limited

I / We ……. hereby confirm and accept that against RailTel Tender No. …….. , there is a requirement of Long Term Maintenance Support as per Clause 12. We confirm that Long Term Maintenance Support shall be met by us directly or through Authorized partner, as the case may be based on contracts. I / We have gone through the requirement mentioned in the Tender document and shall provide services for the offered supply items.

(Signature of Firm's Authorized Officer)
Seal

Signature of witness:

1. ……

2. …….

Annexure-II

Executive Director, **Dated: …….**
RailTel Corporation of India Ltd.
……
……....
……....

Subject: Manufacturer Authorisation form (MAF) to M/s …… for ……
Ref: GeM Bid No…….……..dated…….

Dear Sir,
We, M/s……, are established and reputed manufacturer and service provider of …….(Product details), having our registered office at ……..
We hereby authorise M/s …….. (bidder name), Office ……. to participate in bid and subsequently upon award of the bid to execute the supply and Installation & Commissioning of our range of products against your above said bid.
We further extend our warranty for …… years for our range of products offered by M/s ……. against the above-said bid.

Thanking you,
Best regards,

Authorised Signatory

Consignee Details

The tentative list of stations where equipment's/items has to Supply, Installed, test and Commissioned

SN.	Station name	Region	State	Wireless Access Point (Nos)
1	Adoni	SR	Andhra Pradesh	19
2	ADRA JN	ER	West Bengal	19
3	Ahmednagar	WR	Maharashtra	40
4	AmbalaCantt.Jn.	NR	Haryana	50
5	Amethi	NR	Uttar Pradesh	19
6	Angul	ER	Odisha	19
7	ANUPPUR JN	WR	Madhya Pradesh	19
8	BAGAHA	ER	Bihar	19
9	Balugaon	ER	Odisha	19
10	Banda	NR	UttarPradesh	40
11	BandraTerminus	WR	Maharashtra	51
12	Bankura	ER	West Bengal	19
13	BapudhamMotihari	ER	Bihar	40
14	Bareilly City	NR	Uttar Pradesh	19
15	Barharwa	ER	Jharkhand	19
16	BARKA KANA	ER	Jharkhand	19
17	BARSOI JN	ER	Bihar	19
18	BEGAMPET	SR	Telangana	19
19	BEGU SARAI	ER	Bihar	19
20	Betiah	ER	Bihar	40
21	BHABUA ROAD	ER	Bihar	19
22	Bhatapara	ER	Chhattisgarh	19
23	BathindaJn.	NR	Punjab	40
24	BHAWANI MANDI	WR	Rajasthan	19
25	Bolpur	ER	West Bengal	19
26	Burhanpur	WR	Madhya Pradesh	40
27	Chakia	ER	Bihar	19
28	CHAKRADHARPUR	ER	Jharkhand	19
29	Chandarpura	ER	Jharkhand	19
30	Changanacheri	SR	Kerala	19

31	CHATRAPUR	ER	Odisha	19
32	CHITRAKUTDHAM K	NR	Uttar Pradesh	40
33	CHITTARANJAN	ER	Jharkhand	19
34	Dahod	WR	Gujarat	19
35	Dalsinghsarai	ER	Bihar	19
36	Daltonganj	ER	Jharkhand	40
37	Dausa	NR	Rajasthan	19
38	Devlali	WR	Maharashtra	19
39	Dewas	WR	Madhya Pradesh	19
40	Dhamangaon	WR	Maharashtra	19
41	Dharmavaram	SR	Andhra Pradesh	19
42	Dholpur	NR	Rajasthan	19
43	Dhenkanal	ER	Odisha	19
44	Dhone	SR	Andhra Pradesh	19
45	Dibrugarh Town	ER	Assam	40
46	DIPHU	ER	Assam	19
47	Dongargarh	WR	Chhattisgarh	19
48	Dumraon	ER	Bihar	19
49	Duvvada	SR	Andhra Pradesh	19
50	Dwarka	WR	Gujarat	19
51	Faizabad	NR	UttarPradesh	40
52	Faridkot	NR	Punjab	19
53	Farrukhabad	NR	Uttar Pradesh	19
54	GADARWARA	WR	Madhya Pradesh	19
55	JaipurGandhinagar	NR	Rajasthan	40
56	GANGAPUR CITY	WR	Rajasthan	19
57	GANJBASODA	WR	Madhya Pradesh	19
58	Garwa Road	ER	Jharkhand	19
59	Godhara	WR	Gujarat	19
60	Gooty Jn.	SR	Andhra Pradesh	19
61	GudurJn.	SR	Andhra Pradesh	40
62	GuntakalJn.	SR	Andhra Pradesh	40
63	Habibganj	WR	Madhya Pradesh	40
64	Haldwani	NR	Uttarakhand	19
65	Hapa	WR	Gujarat	19
66	Harda	WR	Madhya Pradesh	19
67	HAN	WR	Rajasthan	19
68	Hindupur	SR	Andhra Pradesh	19
69	HOJAI	ER	Assam	19
70	Ichchhapuram	ER	Andhra Pradesh	19
71	IGATPURI	WR	Maharashtra	19
72	JALPAIGURI	ER	West Bengal	19

73	Jaunpur City	NR	Uttar Pradesh	19
74	Jhajha	ER	Bihar	19
75	JUNAGADH JN	WR	Gujarat	19
76	KANPUR ANWRGANJ	NR	Uttar Pradesh	19
77	Kasganj Jn.	NR	Uttar Pradesh	19
78	Kathua	NR	Jammu & Kashmir	19
79	Khajuraho	NR	Madhya Pradesh	19
80	Kishangarh	NR	Rajasthan	19
81	Kochuveli	SR	Kerala	19
82	Koderma	ER	Jharkhand	40
83	Kurduwadi	WR	Maharashtra	40
84	Kurukshetra	NR	Haryana	19
85	LAKSAR JN	NR	Uttar Pradesh	19
86	Lalkuan	NR	Uttarakhand	19
87	Lingampalli	SR	Andhra Pradesh	19
88	Malkapur	WR	Maharashtra	19
89	MankapurJn.	NR	UttarPradesh	19
90	Mantralayam Road	SR	Andhra Pradesh	19
91	MOKAMEH JN	ER	Bihar	40
92	MURTAJAPUR	WR	Maharashtra	19
93	Nazibabad	NR	Uttar Pradesh	19
94	Nalgonda	SR	Andhra Pradesh	19
95	NarkatiaganjJn.	ER	Bihar	40
96	Nursinghpur	WR	Madhya Pradesh	19
97	NAUGACHIA	ER	Bihar	19
98	NewBongaigaon	ER	Assam	19
99	NewCoochbehar	ER	West Bengal	40
100	Nihal Garh	NR	Uttar Pradesh	19
101	GomohJn.	ER	Jharkhand	40
102	Okha	WR	Gujarat	19
103	PAKUR	ER	Jharkhand	19
104	Pratapgarh	NR	UttarPradesh	40
105	PENDRA ROAD	ER	Chhattisgarh	19
106	Phillaur Jn.	NR	Punjab	19
107	RaniGanj	ER	West Bengal	19
108	SagauliJn.	ER	Bihar	40
109	SaharsaJn.	ER	Bihar	40
110	SAHIBGANJ JN	ER	Jharkhand	19
111	SSPNilayam	SR	Andhra Pradesh	40
112	Sakari Jn.	ER	Bihar	19
113	Sattur	SR	Tamil Nadu	19
114	SHAHDOL	WR	Madhya Pradesh	19

115	Shalimar	ER	West Bengal	40
116	Shegaon	WR	Maharashtra	40
117	Sompeta	ER	Andhra Pradesh	19
118	Sultanganj	ER	Bihar	19
119	Tandur	SR	Andhra Pradesh	19
120	Vikarabad Jn.	SR	Andhra Pradesh	19
121	Vindhyachal	NR	Uttar Pradesh	19
122	Vizianagaram	ER	Andhra Pradesh	40
123	Wadi	WR	Karnataka	19
124	Wankaner	WR	Gujarat	19
125	Yelahanka	SR	Karnataka	19
			Total	**3005**

(Jagdeep Singh)
Executive Director/Project
For & on behalf of RailTel Corporation of India Ltd.