

QUALITY ASSURANCE (S&T) DIRECTORATE

(October, 2017)

1.0 ORGANISATION:

The Quality Assurance (S&T) Directorate was formed in 2002 and is presently headed by Executive Director, who is assisted by Six Directors. The Directors are posted at Lucknow, Kolkata, Bangalore, New Delhi, Mumbai and Jaipur to look after the Quality Assurance, Vendor Development & Inspection activities in their respective zones.

2.0 MAJOR ACTIVITIES:

The major activities of QA (S&T) Directorate are:

- Inspection of Signalling and Telecom items.
- Vendor development (Fresh Registration/ Multi sourcing)
- Periodical Quality Audits of Firms.
- Monitoring Performance of Approved Vendors
- Officer level Test Checks on material inspection on selected items.
- Surprise Inspection.
- Issue of Vendor Directory including monthly amendments.

2.1 VENDOR DEVELOPMENT / APPROVAL FOR CRITICAL S&T ITEMS:

The number of items dealt by QA/S&T directorate are as under:

S.No.	Item pertaining to	No. of Items dealt by Design Dte. (Vendor development)		No. of Items for Purchase inspection
		Design Dte.	QA/S&T Dte.	
1.	Signalling	24	69	93
2.	Telecommunication	14	26	40
	Total	38	95	133

- 2.2 In addition to material as per RDSO Specification's several telecom item as per TEC/BSNL specification are also inspected by this Directorate.

2.3 THE ACTIVITY WISE DETAILS:

S. No.	Activity	No. of Cases finalized			
		14-15	15-16	16-17	17-18 (till October)
1.	Fresh vendor Registration	13	13	06	19
2.	Quality Audit	15	7	57	99
3.	Up-gradation from Part II to Part I	05	23	09	02
4.	Down-gradation of vendors	01	00	00	00
5.	Delisting/ Temporary de-listing of Firms	03	02	29	25
6	Value of Inspected Material (in crore)	1710	2175	2399	1146

3.0 INSPECTION OF CRITICAL S&T ITEMS:

Quality Assurance (S&T) Directorate is undertaking the inspection of Signalling and Telecommunication items at the premises of manufacturers. There are approximately more than **223 firms** in total including S&T workshops. Several firms are approved for more than one item and the total no. of item approvals as on 30/09/2017 is **637**. In addition to Railways, QA (S&T) Directorate is also undertaking purchase inspection for PSUs and other organizations i.e. IRCON, RITES, KRCL, RAILTEL, MRVC, RVNL/DFCCIL etc.

3.1 Following critical items are inspected by this directorate irrespective of their value as per Railway Board letter no 74/RS(G)/379/2Pt. dated 4/3/91 and 18/6/91.

- i. All types of signalling relays.
- ii. Block instruments.
- iii. Axle counter equipments.
- iv. Signal machines.
- v. Point machines.
- vi. Colour light signal transformers.
- vii. Electrical signal lamps.
- viii. Voltage stabilizers and other power supply equipment.
- ix. Electric signal reversers.
- x. Signal roundels and lenses.

- xi. Electric lever lock and circuit controller.
- xii. Circuit controller.
- xiii. Electric key transmitter.
- xiv. Fuses, Fuse Block & Terminal blocks (PBT Type).
- xv. Electric Point and lock detector.

3.2 S&T items other than those mentioned above are normally inspected by RDSO if the order value is more than Rs. Five Lakh Fifty Thousand.

4.0 TEST-CHECKS AND SURPRISE INSPECTIONS BY OFFICERS:

In order to ensure that quality product reaches to the consignee, Officers of QA (S&T) directorate are also conducting Technical Quality audits, super-checks of material inspected by Inspecting Officials and are also conducting Surprise Inspections at the premises of approved vendors.

5.0 Zone wise detail of Firms

CENTRAL ZONE, LUCKNOW	17 Firms
EAST ZONE, KOLKATA	51 Firms
WEST ZONE, MUMBAI	33 Firms
NORTH ZONE, NEW DELHI	34 Firms
NORTH WEST ZONE, JAIPUR	27 Firms
SOUTH ZONE, BANGLORE	55 Firms

6.0 Major item inspected during 2017-18:

Item	Quantity (till Oct, 2017)
Signalling Cables	18,490Km
SSADC	1,934 No.
Quad Cables	4,098 Km
Relays	1.30 Lakhs
EI	5,095 No.
LED Signals	50,450 No.
MSDAC	284 No.
Indoor cables	-
IPIS	-
IPS	606 No.
Point Machines	3,914 No.
OFC Cable	
Other items	-
Total	

7.0 QUALITY MEASURES TAKEN BY QA(S&T) DIRECTORATE:

- On line placement of inspection calls by approved vendors
- On line nomination of inspection officials by Director for taking up inspections.
- Adoption of Computerized Random Sampling for cables.
- Test Checks at Officer (AIE/Dy. Dir) levels for selected items.
- Quality Audits, Test Checks & Surprise checks at Director Levels.
- Rotation of Inspecting Officials every four years.

Introduction of Hologram for Product Identification



To facilitate identification of inspected product, a system has been introduced by affixing of a small (15mm X 15mm) size Golden glare Hologram on the inspected product.

The Hologram has unique numbering system, security code at two locations, a Government of India emblem and RDSO letters on it and facilitates users to identify all the individual items inspected by QA(S&T) Dte. Holograms also prevent any mixing up of material at vendors' premises. The holograms

facilitate traceability of the details of inspected materials, as all the holograms are individually numbered.

8.0 Transparency in Vendor Development Process

To improve transparency in the vendor development process and to expedite the process, following steps have been taken:

- Online Vendor registration for enabling the vendors for online submission of their applications and related documents. The system also facilitates communication of deficiencies and actions by RDSO to vendor through e-mail & SMS. Vendor can also know the approval status online.
- Online purchase of all specifications, drawings & STRs.
- Online Inspection Monitoring System for enabling the approved vendors for online submission of their inspection calls. The Director/Inspections can allot the Inspecting Officials online. The system also facilitates generation of customized reports and Inspection Certificates.
