

# QUALITY ASSURANCE CIVIL DIRECTORATE

## 1.0 Functions & Organization Structure:

- RDSO, an ISO 9001 certified organization, is sole R&D organization of Indian Railways. It also functions as the technical adviser to Railway Board, Production unit and Zonal Railways. RDSO is involved in development of new and improved designs, absorption of new technology for use on Indian Railways, Development of sources for supply of products as per RDSO design and Specifications etc.
- As per policy directive of Railway Board, separate Quality Assurance Directorate was to be created for Mechanical, Civil, S&T and Electrical Departments headed by Executive Directors. Accordingly, Quality Assurance Civil Directorate started functioning since January 2003.
- The purchase inspection of five safety critical P-way items (GRSP, GFN, Dowels, CMS crossings & AT welding portions), which was earlier being done by I&L directorate of RDSO were transferred to this directorate in Sep'2004.

## 2.0 Main Activities of Directorate:

2.1 The main Activities of Directorate are as under:

- Multi sourcing and Vendor development for Specified Items (22 Items at present Listed in Para 2.2)
  - Fresh approval of Vendors
  - Re-assessment and Re-Certification of approved Vendors
  - Up gradation/ Down gradation of Vendors
  - Publication of Master list of approved Vendors & Its updation.
  - Assessment of Production capacity of vendors.
- Concrete Sleeper Plants
  - Development of New Concrete Sleeper Plants
  - Development of existing Concrete Sleeper Plants for manufacture of Special Sleepers
  - Oversight Inspection of concrete Sleeper Plants
- Quality checks on Materials supplied at Consignee end for ERC, GRSP, GFN and metal liners.
- Purchase Inspection of Five Safety critical P-Way Items Viz. CMS Crossings, Grooved Rubber sole Plates, Glass filled Nylon Liners, HDPE Dowels and AT Welding Portions.
- Up gradation of Schedule of Technical Requirements (STRs) & Quality Assurance Plans (QAPs)
- Training of Zonal Railway Officers for inspection of P-way components as required.

## 2.2 Items Dealt by Directorate:

At present, the Directorate is dealing with following items :

S.N.	Item	S.N.	Item
1.	SGCI Inserts	2.	ERC Mk-III
3.	ERC-J	4.	GFN-66 Liners
5.	Polyethylene Dowels	6.	Grooved Rubber Sole Plate 6 mm
7.	Grooved Rubber Sole Plate 10 mm	8.	Nylon Cord Rein. Elastomeric Pads
9.	Metal Liners	10.	Glued Insulated Rail Joints
11.	Fiber Glass Cloth	12.	HTS Hex Bolts & Nuts
13.	Glue	14.	Fabricated Curved Switches
15.	Fabricated Crossings	16.	IRS Design Switch Expansion Joints
17.	Single Coil Spring Washers	18.	Fish Plates
19.	Fish Plate Bars	20.	ALumino Thermic Welding
21.	Spring Setting device for OR Switches	22.	CMS Crossings ( 1 in 8.5 & 1 in 12)

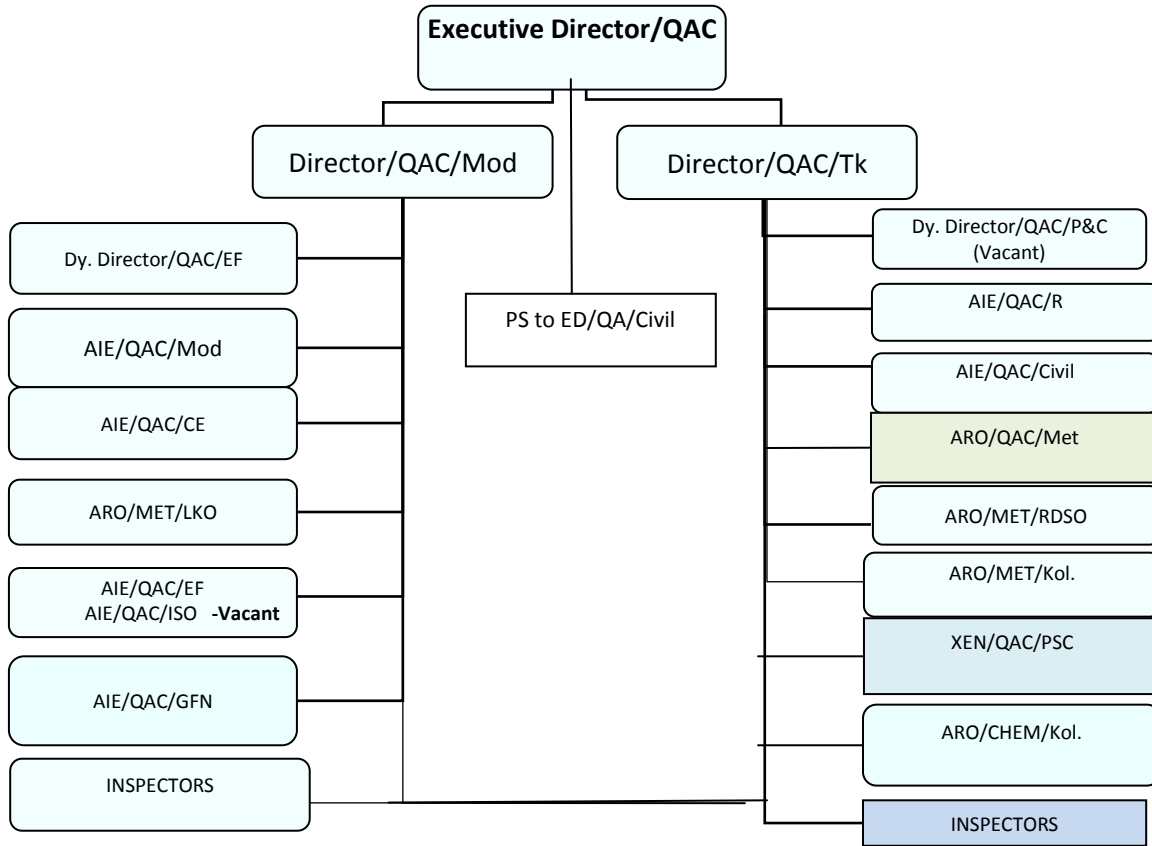
## 2.3 Master List of Approved Vendors:

The Directorate maintains the master list of approved vendors of important safety critical items controlled by civil engineering directorates ( Track Design, B& S and QA/Civil Directorates) of RDSO. Approximately 400 vendors are listed for various components, who have been developed in last more than one decade, as and when new components were designed and developed by RDSO. The list is updated twice every year i.ee on the 1st of January and 1st of July.

Monthly correction slips are being issued for items controlled by Qa/Civil directorate to add or delete or update/modify the vendor's status and names.

### 3.0 Organization:

The directorate is headed by Executive director, who is assisted by two Directors. The Organization chart is as under:



### 4.0 Powers and duties of Its officers and employees:

- **Executive Director/QAC:**

Head of Quality Assurance Civil Directorate

- **Director/QAC/Track:**

Coordinating director and dealing with subject matter related to P-way fittings namely Rubber Pads (GRSP) & Elastomeric Pads, CMS Crossings, Fabricated Crossings, Fabricated Curved Switches, Switch Expansion Joints, SGCI inserts, Spring setting device and Concrete sleeper plants. He is also responsible for issue and maintenance of Master list of approved vendors.

- **Director/QAC/Modernization:**

Director dealing with subject matter related to ERC Mk-III & ERC-J, Metal Liners, Fish Plates & Fish plate bars, GFN-66 Liners, HDPE Dowels, Alunino Thermic Welding, Single coil spring washers, Glued Joints and components viz Glue, Fibre Glass Cloth, HTS bolts etc. He is also responsible for ISO work , stores management, Compilation of annual requirement of railways, Consignee end cases, Training etc.

- **Assisting officers to Director/QAC/Track**

- Deputy Director/QAC/P&C

He is Nodal officer & Nodal officer for Inspection for Fabricated Curved Switches, Fabricated Crossings, CMS crossings, Spring Setting Device. He is also responsible for all work connected with creation/sanction of posts, estimate provisions from Railways, acceptance of debits and RDSO provision by Zonal Railways, Budget, Earnings of Directorate, PCDO and Progress reports of directorate.

- Executive Engineer/QAC/PSC

He is nodal officer for PSC sleepers. Responsible for all works related to PSC sleepers Viz Carrying out Oversight Inspections, Development of New PSC sleeper Plants & Development of Existing PSC sleeper plants for Manufacture of Special sleepers.

- Assistant Inspecting Engineer/QAC/Rubber

He is Nodal officer & Nodal officer for Inspection for Rubber Pads (GRSP) Elastomeric Pads.

He is also responsible for all activity connected with issue and updation of master list of approved vendors, Operation and maintenance of Cash Imprest etc.

- Assistant Inspecting Engineer/QAC/Civil

He is Nodal officer & Nodal officer for Inspection for SGCI inserts and Switch Expansion Joints. He assists DD in works related to vendor directory.

- Assistant Research Officer/M&C:

They are responsible for M& C inspection of products and assisting nodal officers on M&C issue of P-way component QAP & STR etc.

- **Assisting Officers to Director/QAC/Mod:**

- Deputy Director/QAC/EF

He is Nodal officer & Nodal officer for inspection of Metal liners, Fish Plates & Fish Plate Bars. He is also responsible for Training, all works related to Stores management of directorate and updating of General Guidelines for vendors, Consignee end policy and other documents.

- Assistant Inspecting Engineer /QAC/EF

He is Nodal officer & Nodal officer for inspection of ERC Mk-III & ERC-J. He is also responsible for organizing Training of zonal Railway officers for Inspection of ERC.

- Assistant Inspecting Engineer /QAC/Mod/

He is Nodal officer & Nodal officer for Inspection for Glued Insulated Rail Joints, Glue, HTS Nuts & Bolts, Fibre Glass Cloth. He assists DD in store related matters.

- Assistant Inspecting Engineer/QAC/GFN

He is Nodal officer & Nodal officer for Inspection for GFN-66 Liners, HDPE Dowels, Single Coil Spring Washer.

- Assistant Inspecting Engineer/QAC/CE

He is responsible for dealing Consignee end cases and all ISO works of directorate. He is also responsible for initial Processing of On Line Vendor registration cases and dealing with assigned fresh approval cases.

- Assistant Research Officer/M&C/Welding:

He is Nodal officer & Nodal officer for Inspection for AT welding portions. He is also responsible for M& C inspection of products and assisting nodal officers on M&C issue of P-way component QAP & STR etc.

- **Inspectors:**

They are responsible for carrying out product inspection as assigned and assisting nodal officers in Re-assessment & other works as assigned.

#### **5.0 Procedure followed in decision making Process including channels of supervision and accountability:**

The nodal Officers (Deputy Director/ Asst. Inspecting engineers) of directorate will process and put up the case files related to subject matter under their jurisdiction to concerned Director. The case is finalized after taking approval of competent authority (Executive Director).

Every official dealing the matter under their jurisdiction will be accountable for expeditious disposal of the case. The channel of supervision and accountability is as per the duties assigned.

#### **6.0 Norms set by it for the discharge of its functions:**

The Directorate Operating Procedure (QA-DM-4.2.2.1) lays down the Norms for discharge of its functions by directorate. The norms of vendor development process are well stipulated in the ISO document no. QC-G-7.1.1.

All activities related to vendors are guided ISO documents, IRS specifications, Drawings, Item specific guidelines, STRs, Manuals, Railway Board instructions and Quality objectives of QA Civil Directorate as well as RDSO.

Other processes of directorate are well documented in ISO documents in form of Work Instructions.

**7.0 Rules, Regulations, Instructions, Manual and Records held by it , for under its control or used by its employees for discharging its functions:**

The Rules/ Regulations have been documented in ISO documents. All ISO documents are controlled by Dir/QAC/Mod and AIE/QAC/CE and copies have been marked as per distribution list.

Though the specifications, Drawings, manuals etc are controlled by Track Design Directorate, the same are arranged by respective DDs/AIEs for P-way components under their respective Jurisdictions.

**8.0 Statement of the Categories of Documents that are held by it or under its control:**

Case files are centrally kept under the control of Office assistant, who shall arrange files to concerned official on demand. The Critical case files are kept under control of respective officials also.

ISO Documents	AIE/QAC/CE
Item Specific Guidelines, RDSO Drawings, IRS Specifications	Though controlled by Track Design Directorate, but shall be arranged by respective DD/AIE for P-way component under their jurisdiction
Case Files	Office assistant/QAC

**9. Details in respect of the Information available to or held by it reduced in an electronic form:**

.1 “General Guidelines for Vendor Approval” , “ Item Specific Guidelines” for P-way Components controlled by Directorate are held in Electronic form and posted at RDSO website for benefit of concerned public.

.2 “Master List of Approved Vendors” is held in electronic form and posted at RDSO Website. Monthly Correction slips to Master list of approved vendors are also posted at RDSO website.

.3 The status of Vendor registration, Vendor Renewal and Vendor up gradation is held in electronic form and is posted at RDSO Website every month.

.4 All ISO documents are kept in Electronic Form.