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| ISO9001:2015 | Document No: QO-D-8.1-1 | Version No: 2.3 | Date Effective: 23.07.2025 |
| Document Title: Creation of new specification / Indian Railway Standard (IRS) for items | | | |



RESEARCH DESIGNS & STANDARDS ORGANIZATION

Manaknagar, Lucknow– 226011

QO-D-8.1-1

Creation of the New RDSO Standard

1.0 Amendment History:

| S. No. | Amendment Date | Version | Reasons for Amendment |
|--------|----------------|---------|---|
| 1. | 12.09.2018 | 1.0 | First issue under ISO 9001:2015. Approved by DG/RDSO on NP-1 to NP-3 of MR/ISO9001/App/QMS/Doc/2018 on date 07.09.2018. No change in content from previous document no. QO-D-7.1-1 Ver 7.0 of 9001:2008 QMS. |
| 2. | 01.05.2019 | 1.1 | Changes in Note of Para (Clause) 2.0 ("that describe items or" deleted) based on recommendation of "Standing Committee on Vendor Development and Approval Issues" at NP-20 to NP-21 of Computer Wing's file No. Comp/1.55.07.01 (Pt-I) Vol-III, which is approved by DG/RDSO on date 12.02.2019. Copy is placed at SN-18 of ISO Cell File no. "MR/ISO 9001/App/Vendor Interface Vol-III" The same is again amended/corrected (Deletion of " describe items or " in Note of Para (Clause) 2.0 as per Minutes of Meeting of "Standing Committee on Vendor Development and Approval Issues" at NP-22 to NP-25 of Computer Wing's file No. Comp/1.55.07.01 (Pt-I) Vol-III, which is approved by DG/RDSO on date 28.03.2019. Copy is placed at SN-19 of ISO Cell File no. "MR/ISO 9001/App/Vendor Interface Vol-III" |
| 3. | 19.06.2020 | 1.2 | Special DG/ VD (Vender Development) has joined RDSO and looking after vendor development work. All proposal for ISO procedure related to vendor development, where it was earlier required to get the approval of DG/RDSO, now to be put up to Spl.DG / VD who is now designated as final authority in vendor development matters. DG's note no. DG/Misc. dated 15. Jun.2020 and 16 June 2020 to ED /VDG RDSO/LKO |

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| 4. | 14.06.2021 | 2.0 | This document has been reviewed and amended to align with the 'Code of Good Practices' for preparation, adoption and application of standards issued by World Trade Organization -Technical Barriers to Trade (WTO - TBT), followed globally by all Standards Making or Standards Developing Organizations (SDO). These Directives are circulated by BIS, the National Standards Body of the country for their SDOs. This final document has been Recommended by Standing committee at Note# 27 and approved by DG/RDSO on Note#29 in E-Office file no. RDSO-RES0LKO(MISC)/16/2020-O/o ED/Res/RDSO (recommendations are placed at SN 106 to SN 126 in above E-Office file) |
| 5. | 28.07.2022 | 2.1 | Replaced word 'Directorate Head, or Head of Directorate' with 'ED controlling the item (when final decision is taken at ED level)/ PED of Vertical (where final decision is taken at PED level)' and Responsible authority for 'Requirement of deviation from directive' under the sub head 'Responsibility and Authority' in existing ISO documents with "PED of the concerned Vertical". These changes are based on recommendation of Standing Committee and duly approved by Spl. DG/VD on date 19.07.2022 at Note#14 in e-office file no. RDSO-MR0ISO(VD-C)/1/2020-O/o ED/Res/RDSO-Part(2) (Comp. No 123324). Recommendations of Standing Committee is placed at Note#11 in the above e-office file. |
| 6. | 15.09.2023 | 2.2 | Modified the para 4.2.1, as per recommendation of Standing Committee duly approved by Spl. DG/VD on 15.09.2023 at Note#9 on deliberating the matters of Vigilance Directorate of file No. RDSO-MR0ISO(VRQ)/1/2020-O/o MR/ISO/RDSO-Part(5) (Computer no. 167753) & File no. RDSO-MR0ISO(VRQ)/1/2020-O/o MR/ISO/RDSO-Part(3) (Computer no. 69971). Recommendations of Standing Committee are placed at Note# 5 in file No. RDSO-MR0ISO(VRQ)/1/2020-O/o MR/ISO/RDSO-Part(5) (Computer no. 167753) |

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| 7. | 23.07.2025 | 2.3 | “ED controlling the item (when final decision is taken at ED level)/ PED of Vertical (where final decision is taken at PED level)” has been modified into “Vendor Approving Authority” in whole document and modification in para 9.0 “Requirement of deviation from directive.” approval is placed at Note#14 and Note#9 respectively in ED Stores e-office file No. 303042. Recommendations and approval are placed at SN 1-38 & 61-66 in this e-file no. 306914 for QO-D-8.1-1. |

1.1 Preamble

This document has been reviewed and amended to align with the ‘Code of Good Practices’ for preparation, adoption and application of standards issued by World Trade Organization - Technical Barriers to Trade (WTO - TBT), followed globally by all Standards Making or Standards Developing Organizations (SDO).

The procedure for establishment of a RDSO Standards shall follow the basic principles of WTO-TBT ‘Code of Good Practice for the Preparation, Adoption and Application of Standards’. The six principles of standardization to be followed are given below:

- a) Transparency
- b) Openness
- c) Impartiality and Consensus
- d) Effectiveness and Relevance
- e) Coherence
- f) Development Dimension

2.0 Purpose, Definitions

2.1 Purpose

This document contains directives for creation of new RDSO Standards. This document will be applicable for all the new RDSO Standards, for which the initiation process will start after publication of this document.

2.2 Definitions:

Standard: A standard is a document established by consensus amongst various stakeholders and provides for common and repeated use, rules, guidelines or characteristics for specific products or services and is aimed at achieving optimum degree of order in a given context. These could be specifications, procedures and guidelines to ensure that products, services and systems are safe, consistent and reliable. The term standard is used throughout the document and shall be understood to mean Specifications, RDSO Standards, the Schedule of Technical Requirements (STR) and other related technical documents such as Indian Railway Standard (IRS).

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3.0 Scope of Application

The directives contained in these documents are applicable to all the units covered by the quality management system of RDSO without any exception.

4.0 Details

The following sequence of steps shall be followed by all concerned for the creation of new Standards. The proposal for creation of Standards shall be put up to Vendor Approving Authority for approval and subsequently should be included in the "Program of New Standards" by the directorate. The updated program of standards, including both the ongoing Standard and the proposed Standard should be hosted /displayed in public domain (RDSO website) for information of all the stakeholders. The Vendor Approving Authority (Chairperson) shall constitute a "Standards Committee" for his Directorate and nominate its members as per guidelines given in para 4.1 below. Guidelines for creation of new Standards may be referred at para 4.2 for review of the initial draft of the proposed Standard. The committee will be formed so as to have a balanced representation from all the stakeholders.

4.1 Composition of Committee: Committee shall be constituted with a gathering of related experts or stakeholders to formulate the Standard. There shall be balanced representation of all stakeholders in the committee. Vendor Approving Authority will decide the composition of committee as per following indicative guidelines.

| <u>S. No.</u> | <u>Designation</u> | <u>Organisation</u> | <u>Member Selection</u> |
|---------------|--|---|---|
| 1. | Chairperson Ex officio) | Vendor Approving Authority of concerned Directorate | Vendor Approving Authority (Ex-officio) |
| 2. | Member Secretary | Joint Director/Director/Executive Director of the concerned Directorate | By Chairperson |
| 3. | Member (Regulator) | Concerned authority if applicable | By Chairperson |
| 4. | Members (Consumers) | Representatives from Zonal Railways/PUs/ PSU/Other Railway units etc. | By Chairperson |
| 5. | Member (Industry) | Representative nominated by CII, FICCI/ ASSOCHAM / MSME | By CII, FICCI etc. |
| 6. | Member (R&D Institutions) / Technologists. | CSIR/DRDO/ISRO/ CRR /IITs/NITs/Railways CTIs etc. | By Chairperson |
| 7. | Member (Testing Labs) | RDSO Labs / Government Labs | By Chairperson |
| 8. | Member Inspection | RITES/QA of RDSO or any other third-Party inspection agency as per requirement etc. | By Chairperson |

4.1.1 Chairperson will nominate another member in case nominated member is not available, for longer duration due to any reason for more than a month.

4.1.2 Tenure of Committee will be from preparation of initial draft Standard to final publishing of the Standard.

4.1.3 There will be no Honorarium or Fee for committee members.

4.1.4 Decision of Chairperson will be final in case of any dispute regarding composition and size of the Standards Committee or regarding the procedures to be followed by the committee.

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4.2 Creation of a Draft RDSO Standard

4.2.1 The concerned officer at the level of member secretary, dealing with the particular item/equipment /process shall put up proposal for the new standard to Vendor Approving Authority for approval to initiate the creation. For creating initial Draft Standard, design development process as described in (ref-1) is to be followed. When putting up the file to the Vendor Approving Authority, the member secretary shall prepare a self-contained note addressing the following:

- Need for creation of new Standard.
- Existing Vendor base and the action plan to develop new vendors
- Pricing of the item (Some indicative estimation of pricing of the item shall be indicated in note for information).
- Intended role / function / specific use / rating of M&P/T&P listed in STRs / Specifications to be self-explanatory.
- STRs / Specifications are not too restrictive with regard to outsourcing for non-critical activities / testing facilities and is in alignment with industry practices. Selective reasoned outsourcings to be deliberated and adopted.
- Alternative solutions offered by industry to be deliberated / considered after duly adjudging them vis-à-vis requirements in STRs/Specifications and duly factoring in the life cycle cost of different designs / solutions.

4.2.2 Member Secretary will process the proposal and draft of proposed Standard to take approval of Chairperson for creation of new Standard. Minimum 15 days shall be provided for each stage of the process, for circulation and taking comments of the committee members. The decision taken by the committee will be circulated within next seven days through minutes of meeting. The decision of committee at every stage shall be based upon majority consensus.

Documents containing draft Standard shall be watermarked DRAFT on every page, to prevent the same from being used inadvertently or intentionally.

Note: Indicative Flow process for Standard formulation is given below (Detailed Flow Chart is available as annexure-1):

NEW ITEM/Standard draft by member secretary ---->Approval of Chairperson and constitution of standards committee ----> Circulation to All the Committee Members ---->Members Comments---> Provisional Draft ----> Circulation to all Members---> Wide circulation to all stakeholders (minimum 1 months) ----> Comments / suggestions of all stakeholders ----> Preparation of reasoned document ---->Put up to committee members - ---->Final Draft Standard Draft ---> Wide Circulation to all stakeholders (minimum 15 days) ---> Comments --->Meeting---> Final Draft Standard -----> Publishing of Standard

4.3 Display of Provisional Draft RDSO Standard on RDSO Public Website for the comments & suggestions

The provisional draft Standard shall be displayed, for at least 30 days, on the RDSO Public website as per prevalent norms and comments/suggestions shall be invited from all the stakeholders. The concerned directorate shall ensure that contact details of concerned RDSO officials are clearly available to all the stakeholders on the RDSO Public Website, for sending their Comments/Suggestions.

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The provisional draft Standard shall also be circulated to all the Zonal Railways and all the production units/ Concerned Railway PSUs and to the all committee members for their comments/suggestions.

4.4 Creation of Reasoned Documents for the comments

The Member Secretary of the committee shall then prepare a document containing all suggestions and comments, received for preparation of reasoned document. This document shall be circulated to all the committee members. The committee members may give their suggestions / recommendations on document in next 15 days. Member secretary will hold a meeting with the permission of Chairman for arriving at majority consensus. Based upon the outcome of meeting, minutes will be drawn. Based on the accepted changes, reasoned document and final draft Standard will be prepared. Such Standard shall be watermarked FINAL DRAFT on every page to prevent the same from being used inadvertently.

4.5 Display of Final Draft copy on the RDSO Public Website

The copy of the Final Draft Standard and the Reasoned Document shall be put up on the website for at least 15 days. After the expiry of the time period, these documents may be removed from the website.

4.6 Creation of finalized copy of the Standard

4.6.1 The final draft copy of the Standard shall now be prepared including the suggestions if any, from stakeholders. The final draft Standard with documents containing comments received from stakeholders shall be put up to committee members for majority consensus. Member secretary will hold a meeting with the permission of chairman committee for arriving at consensus. Based upon outcome of the meeting, minutes will be drawn. **Based on the accepted changes and the prepared reasoned document to be kept in the record, final Standard will be prepared and issued with the approval of** Vendor Approving Authority. The Standard shall now be published for use by BIS, Railways and its Vendors, giving its unique identification number as IS/RDSO-ABC/XXXX: YYYY. ABC is the code/short form of the concerned directorate, XXXX is four digit unique numbers, given to the standard and YYYY is the Year of publication.

4.6.2 Standard can be reviewed as per the requirement of Railways as and when the need arises. The process of Review/Authentication of the Standard shall be ensured in every five years cycle.

4.7 Record of the RDSO Standard

Concerned Directorate will retain all the records for at least 10 years from the date of publication of Standard or for two review cycles whichever is earlier.

4.8 Version for download on internet RDSO Public Website

The directorate which has created a new Standard shall ensure that a copy of new document is uploaded on the **RDSO Public Website** for downloads by other stake holders. The person authorized to upload the document on the **RDSO Public Website** shall certify that the document has been uploaded. The responsibility of the getting the certificate of uploading shall be with the **Member Secretary** of the directorate controlling the specification.

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4.9 Complaint redressal mechanism

- i) Each Directorate shall have a formal process to accept and respond to public enquiries regarding the technical content of a published Standard related to their scope. This may include interpretations and ruling on the meaning or applicability of the standards.
- ii) The Directorate shall have a defined procedure for handling complaints and appeals arising out of the Standard development process.
- iii) The Directorate shall keep the Record of each complaint or appeal and the outcome of the same.
- iv) The procedure for handling of complaints and appeals shall be reviewed regularly by each directorate and if required, it should be updated to ensure effectiveness.

5.0 Summarized Report

In the first week of every month, Vendor Approving Authority shall submit a summarized position of all the Standard created in the following format for information of Spl. DG/VD.

| S. No | Item | Standard Number | Date of issue of Standard | Date from which new Standard shall be enforced. |
|-------|------|-----------------|---------------------------|---|
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Note: This report may be merged with the report summarizing Standard revised amended as described in ref-2.

6.0 Referenced Documents

| Ref. SN | Document Number | Document Name |
|---------|-----------------|---------------------|
| 1. | QO-D-8.1-15 | Product development |

7.0 **Referenced Documents of External Origin:** None

8.0 **Associated Records:** As required by directorate procedures / work instructions.

9.0 Responsibility and Authority

| Activity | Responsible | Approver | Supporting | Consulted | Informed |
|--|---|----------------------------|--------------------|-------------------|---|
| Creation, maintenance of this document | MR/ISO Cell | Spl. DG/VD | Staff of ISO Cell | | All directorates through intranet |
| Compliance of directives contained in this document. | ED/Director In-charge Member secretary) | Vendor Approving Authority | Directorate Staff | | |
| Requirement of deviation from directive. | Executive Director of concerned directorate | Vendor Approving Authority | Director In-charge | MR/ISO Cell | Spl. DG/VD & MR/ISO for discussion during MRM in agenda point-4 |
| Creation of New Standard | ED/Director In-charge Member secretary) | Vendor Approving Authority | Directorate Staff | Committee Members | To all concerned through RDSO Public Website |

The Vertical Head shall approve deviations, if necessary, based on a fair and transparent procedure to be defined by the Directorates in their Directorate level documents/ procedures. Record of deviations permitted by the verticals shall be maintained by them.

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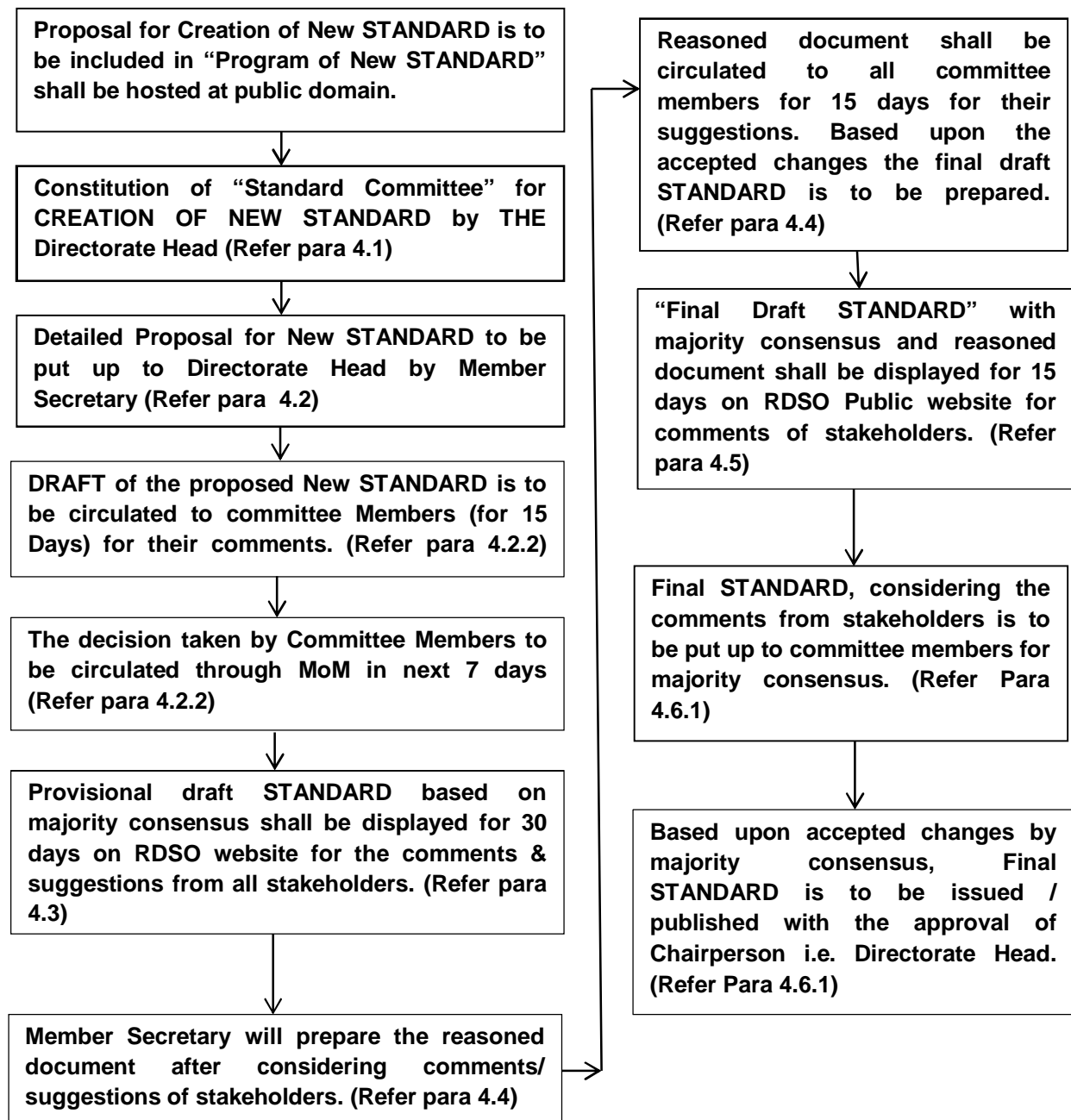
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10.0 Abbreviation:, ED: Executive Director, Spl. DG/VD: Special Director General (Vendor Development), MR/ISO: Management Representative (International Organization for standardization) , RDSO: Research Design & Standard Organization

Annexure:1

FLOW CHART FOR CREATION OF NEW RDSO STANDARD TO ALIGN WITH WTO-TBT

“CODE OF GOOD PRACTICE” (Ref: ISO Document No. QO-D-8.1-1 Ver. 2.0)



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