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प्राइमरी डिजिटल मल्टीप्लेक्सिंग इक्विपमेंट Primary Digital Multiplexing Equipment				



Schedule of Technical Requirements (STR)
for
Primary Digital Multiplexing Equipment
प्राइमरी डिजिटल मल्टीप्लेक्सिंग इक्विपमेंट

स्पेसिफिकेशन संख्या आई.आर.एस./ टीसी /68/2012

Specification No. IRS/TC/68/2012

दूरसंचार निदेशालय
अनुसंधान अभिकल्प और मानक संगठन
रेलमंत्रालय मानक नगर, लखनऊ - 226011

TELECOM DIRECTORATE
RESEARCH DESIGNS AND STANDARDS ORGANISATION
MINISTRY OF RAILWAYS MANAK NAGAR, LUCKNOW - 226011

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DOCUMENT CONTROL SHEET

NAME	ORGANIZATION	FUNCTION	LEVEL
DIRECTOR/ TELECOM-I	RDSO	MEMBER	PREPARE
EXECUTIVE DIRECTOR/ TELECOM	RDSO	-	APPROVE

REVISIONS

VERSION	CHAPTER/ ANNEXURE	REVISION	EFFECTIVE MONTH/YEAR
STR FOR PRIMARY DIGITAL MULTIPLEXING EQUIPMENT	FIRST ISSUE	-	09.05.2006
STR FOR PRIMARY DIGITAL MULTIPLEXING EQUIPMENT	-	REVISION	01.01.2021

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I. SCOPE:

The Schedule of Technical Requirement covers machinery & plant, testing & measuring equipments and quality assurance plan required for manufacturing of following items as per RDSO specifications

S. N.	Description of Item	Specification
1	Primary Digital Multiplexing Equipment	IRS/TC/68/ 2012

Vendor shall also comply norms issued by RDSO time to time in this connection and other relevant laws of country.

The STR shall be applicable to all vendors applying for registration.

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12.	In-circuit Tester /In System Programming									
13.	Test Jigs	1 Nos.								
14.	Data Analyser	1 Nos.								
15.	Variac	1 Nos.								
16.	Ultrasonic cleaning station / Alcohol vaporizer clean up machine.	1 Nos.								
17.	Environmental Chamber	1 Nos.								
18.	Vibration Table	1 Nos.								
19.	Surge and Transient Test Equipment	1 Nos.								

N

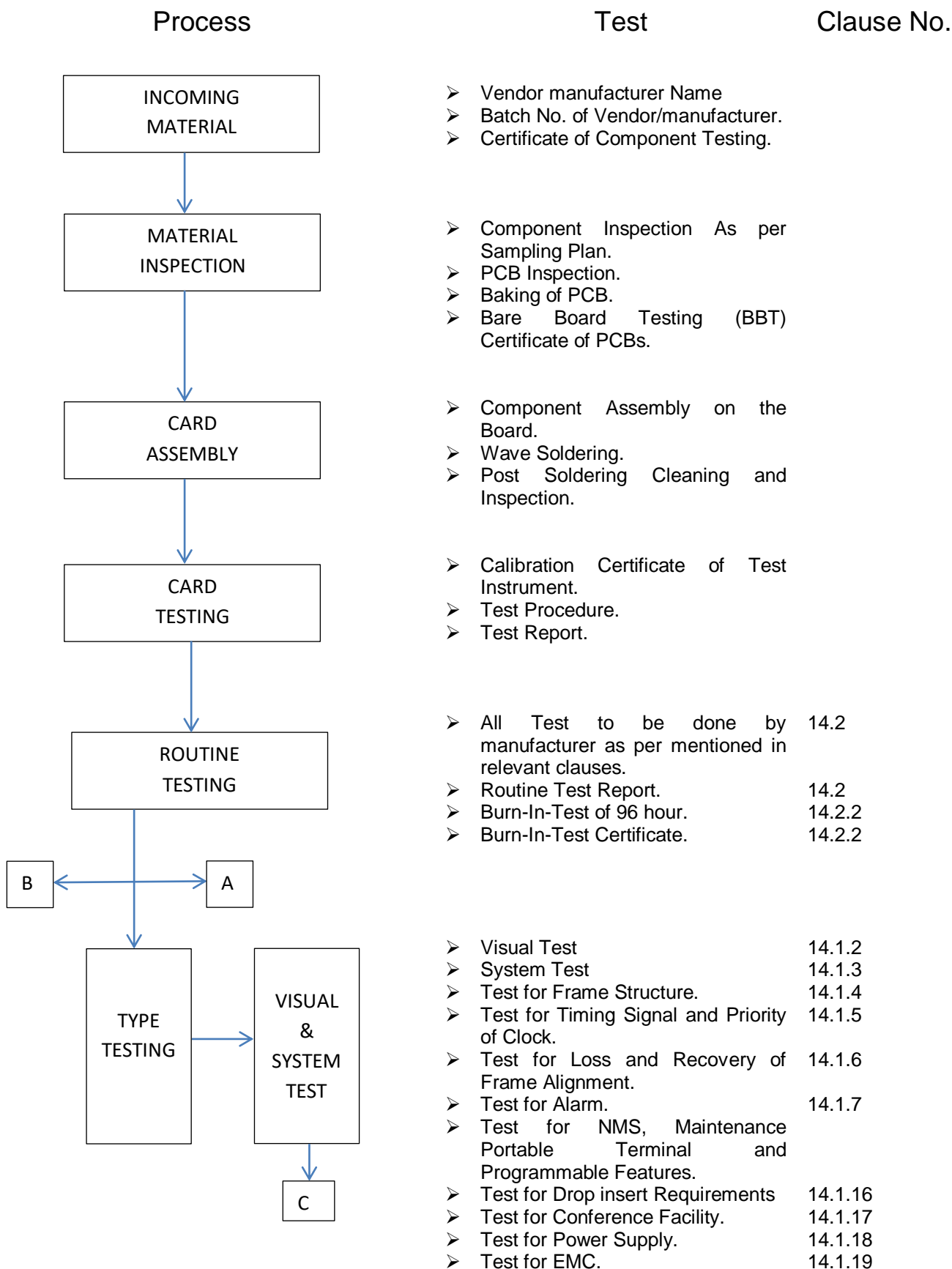
- Note:
1. Plant and machinery shall be of adequate capacity.
 2. Item No. 17 to 19 is Optional Equipment.

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15.	Frequency Counter	1 No.							
16.	Variac / Auto Transformer	1 No.							
17.	Attenuator	1 No.							
18.	Decadic Telephone	1 No.							
19.	24 AWG/0.5mm Cable drum (more than 4 Kms.)	1 No.							
20.	Burn-In-Chamber	1 No.							

Note: All the measuring and testing equipment shall have valid calibration report from NABL accredited calibration laboratory/testing house.

IV. Process Flow chart to be followed for manufacturing:



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PROCESS	TEST	CLAUSE NO.
C		
↓		
TEST FOR INTERFACE	<ul style="list-style-type: none"> ➤ Test for Voice Interface. 14.1.9 ➤ Test for Low Speed Data Interface. 14.1.10 ➤ Test for 64Kbps Data Interface. 14.1.11 ➤ Test for Nx64 Kbps Interface. 14.1.12 ➤ Test for E1 Branching Interface. 14.1.13 ➤ Test for IDSL. 14.1.14 ➤ Test for NTU. 14.1.15 	
↓		
ENVIROMENTAL TEST	<ul style="list-style-type: none"> ➤ Environmental as per QM333 of DOT Specification category B2. 14.1.1 ➤ System Test. 14.1.1.1 ➤ Test for Data Interface. 14.1.1.2 ➤ Test for Voice Interface. 14.1.1.3 	
↓		
FIELD TRIAL	<ul style="list-style-type: none"> ➤ Two or Three Equipment for field trial (4week). 14.1.20 ➤ Pre Field Trial Test. 14.1.20.1 ➤ Stability Test. 14.1.20.2 ➤ Traffic Loading 14.1.20.3 ➤ Post Field Trial Test. 14.1.20.4 	
A		
↓		
ACCEPTANCE TESTING	<ul style="list-style-type: none"> ➤ System Tests. 14.3.2(a) ➤ Voice Interface Test. 14.3.2(b) ➤ Data Interface Test. 14.3.2(c) ➤ Drop/Insert Requirement. 14.3.2(d) ➤ Requirement for Conference Facility. 14.3.2(e) ➤ Power Supply Test 14.3.2(f) 	
↓		
INFORMATION BY PURCHASER		
BY SUPPLIER	<ul style="list-style-type: none"> ➤ Information given by Purchaser. 15.0 ➤ Information given by Supplier. 16.0 	
B		
↓		
Documents	<ul style="list-style-type: none"> ➤ Manuals. 5.17 	

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Note:

1. After every process necessary quality record shall be prepared and maintained.
2. After processes involving inspection/ testing etc., in case of any non-conformance, suitable corrective action shall be taken.
3. This process flow chart is only indicative and firms shall follow detailed process flow chart to ensure quality, showing corrective action in case of non-conformance at each stage.
4. Some of the processes can be outsourced.

UNDERTAKING OF THE FIRM

“I hereby give an undertaking that at any time after approval is accorded, some machinery is found deficient without intimation to RDSO, and then it will be presumed that machinery was not there since beginning and firm will be withdrawn immediately.”

Date:

Signature

Name in capitals & Designation

Place:

Stamp of the firm

Note:

1. Details of Machinery & Plants and Testing Equipments should be furnished by the vendor in complete as per format of STR. Vendor should also furnish the details of the ownership.
2. It should be mandatory to inform the RDSO through Fax (followed by confirmation copy through courier /speed post) as soon as any machinery is removed from the firm's premises (even for repair etc.) RDSO should be informed again, when is brought back and made operational.
