

अनिवार्य आवश्यकताएँ

संख्या : TEC40042111

Essential Requirements

ER No. : TEC40042111

BSC RNC

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Essential Requirements for:

BSC RNC

Certification Scheme: **GCS**

Product Fee Group: **C**

This document lays down the Essential Requirements under MTCTE notified by GoI vide Gazette Notification No. G.S.R. 113 (E) dated 05-09-2017 for Base Station (BSC)/ Radio Network Controller (RNC) to be used in Indian Telecom

Note: Annexures referred to in this ER are Annexures as mentioned in "Annexures to ERs" No. TEC/SD/DD/TCP-222/02/June19 as updated from time to time and available on MTCTE portal.

This product has the following variants:

1. RNC for WCDMA
2. BSC for GSM

1. Variant 1 : RNC for WCDMA

1.1 Parameters Linked with Product Variant

S.No.	Parameter Name	Standard Name
1.1.1	Conducted And Radiated Emission - Class A	TEC EMI EMC Standard CISPR 22/32 EN55022/32. Annex-B
1.1.2	Immunity to AC Voltage Dips and Short Interruptions	TEC EMI EMC Standard EN/IEC:61000-4-11. Annex-B
1.1.3	Immunity to Electrostatic Discharge	TEC EMI EMC Standard EN/IEC:61000-4-2. Annex-B
1.1.4	Immunity to Fast Transients (Burst)	TEC EMI EMC Standard EN/IEC:61000-4-4. Annex-B
1.1.5	Immunity to Radiated RF	TEC EMI EMC Standard EN/IEC:61000-4-3. Annex-B
1.1.6	Immunity to RF Field Induced Conducted Disturbance	TEC EMI EMC Standard EN/IEC:61000-4-6. Annex-B

1.1.7	Immunity to Surges	TEC EMI EMC Standard EN/IEC:61000-4-5. Annex-B
1.1.8	IT Equipment Safety	IS 13252-1 or IEC:60950-1 or IEC 62368-1. Annex-A1
1.1.9	Numbering Addressing and identification	3GPP TS 23.003

1.2 Interface 1 : IuBc

S.No.	Parameter Name	Standard Name
1.2.1	Cell broadcast procedures(IuBc)	3GPP TS 48.049
1.2.2	Interface management procedures(IuBc)	3GPP TS 48.049

1.3 Interface 2 : IuCS

S.No.	Parameter Name	Standard Name
1.3.1	Call Control Management Procedures(IuCS interface)	3GPP TS 25.413 24.008 24.010
1.3.2	IuCS interface management procedures(IuCS interface)	3GPP TS 25.413 24.008 24.010
1.3.3	Mobility Management Procedures(IuCS interface)	3GPP TS 25.413 24.008 24.010
1.3.4	Supplementary Services Related Procedures(IuCS interface)	3GPP TS 25.413 24.008 24.010

1.4 Interface 3 : IuPC

S.No.	Parameter Name	Standard Name
1.4.1	Interface Management Procedures (IuPC)	3GPP TS 25.453 3GPP TS 25.450 3GPP TS 25.305
1.4.2	Location Services Procedures(IuPC)	3GPP TS 25.453 3GPP TS 25.450 3GPP TS 25.305

1.5 Interface 4 : IuPS Interface towards RNC

S.No.	Parameter Name	Standard Name
1.5.1	IuPS interface management procedures	RANAP - 3GPP TS 25.413. Layer-3 Specifications - 3GPP TS 24.008
1.5.2	Mobility Management Procedures (IuPS	RANAP - 3GPP TS 25.413. Layer-3

	Interface towards RNC)	Specifications - 3GPP TS 24.008
1.5.3	Session Management Procedures (IuPS Interface towards RNC)	RANAP - 3GPP TS 25.413. Layer-3 Specifications - 3GPP TS 24.008

2. Variant 2 : BSC for GSM

2.1 Parameters Linked with Product Variant

S.No.	Parameter Name	Standard Name
2.1.1	Conducted And Radiated Emission - Class A	TEC EMI EMC Standard CISPR 22/32 EN55022/32. Annex-B
2.1.2	Immunity to AC Voltage Dips and Short Interruptions	TEC EMI EMC Standard EN/IEC:61000-4-11. Annex-B
2.1.3	Immunity to Electrostatic Discharge	TEC EMI EMC Standard EN/IEC:61000-4-2. Annex-B
2.1.4	Immunity to Fast Transients (Burst)	TEC EMI EMC Standard EN/IEC:61000-4-4. Annex-B
2.1.5	Immunity to Radiated RF	TEC EMI EMC Standard EN/IEC:61000-4-3. Annex-B
2.1.6	Immunity to RF Field Induced Conducted Disturbance	TEC EMI EMC Standard EN/IEC:61000-4-6. Annex-B
2.1.7	Immunity to Surges	TEC EMI EMC Standard EN/IEC:61000-4-5. Annex-B
2.1.8	IT Equipment Safety	IS 13252-1 or IEC:60950-1 or IEC 62368-1. Annex-A1
2.1.9	Numbering Addressing and identification	3GPP TS 23.003

2.2 Interface 1 : A

S.No.	Parameter Name	Standard Name
2.2.1	A interface management procedures	3GPP TS 48.008 24.008 23.040 24.010
2.2.2	Call Control Management Procedures(A interface)	3GPP TS 48.008 24.008 23.040 24.010
2.2.3	Mobility Management Procedures(A interface)	3GPP TS 48.008 24.008 23.040 24.010
2.2.4	SMS Related Procedure(A interface)	3GPP TS 48.008 24.008 23.040 24.010

2.2.5	Supplementary Services Related Procedures(A interface)	3GPP TS 48.008 24.008 23.040 24.010
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2.3 Interface 2 : CBC-BSC

S.No.	Parameter Name	Standard Name
2.3.1	Cell broadcast procedures(CBC-BSC)	3GPP TS 48.049 or 3GPP TS 23.041
2.3.2	Cell broadcast procedures(CBC-BSC)	3GPP TS 48.049 or 3GPP TS 23.041
2.3.3	Interface management procedures(CBC-BSC)	3GPP TS 48.049 or 3GPP TS 23.041
2.3.4	Interface management procedures(CBC-BSC)	3GPP TS 48.049 or 3GPP TS 23.041

2.4 Interface 3 : Gb Interface Towards BSC

S.No.	Parameter Name	Standard Name
2.4.1	Gb interface management procedures	3GPP TS 48.016. BSSGP - 3GPP TS 48.018. LLC - 3GPP TS 44.064
2.4.2	Mobility Management Procedures (Gb Interface Towards BSC)	3GPP TS 48.016. BSSGP - 3GPP TS 48.018. LLC - 3GPP TS 44.064
2.4.3	Session Management Procedures (Gb Interface Towards BSC)	3GPP TS 48.016. BSSGP - 3GPP TS 48.018. LLC - 3GPP TS 44.064

2.5 Interface 4 : Lb

S.No.	Parameter Name	Standard Name
2.5.1	Interface Management Procedures (Lb)	3GPP TS 49.031 3GPP TS 48.071
2.5.2	Location Services Procedures (Lb)	3GPP TS 49.031 3GPP TS 48.071