

**अनिवार्य आवश्यकताएँ**

**संख्या : TEC40062111**

**Essential Requirements**

**ER No. : TEC40062111**

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**GMLC**

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MTCTE के तहत जारी:

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**Telecommunication Engineering Centre**

**Government of India**

**Khurshid Lal Bhawan, Janpath, New Delhi-110001, INDIA**

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## Essential Requirements for:

# GMLC

Certification Scheme: **GCS**

Product Fee Group: **C**

This document lays down the Essential Requirements under the MTCTE in accordance with GoI Gazette Notification No. G.S.R. 1131(E), dated 05-09-2017, for GMLC to be used in Indian Telecom Network.

*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. GMLC for GSM or WCDMA
2. GMLC for LTE or LTE-A

### 1. Variant 1 : GMLC for GSM or 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 : Lc

S.No.	Parameter Name	Standard Name
1.2.1	Interface Management Procedures(Lc interface)	3GPP TS 23.271 3GPP TS 29.002
1.2.2	Location Services Procedures(Lc interface)	3GPP TS 23.271 3GPP TS 29.002

### 1.3 Interface 2 : Le

S.No.	Parameter Name	Standard Name
1.3.1	Interface Management Procedures(Le interface)	3GPP TS 23.271
1.3.2	Location Services Procedures(Le interface)	3GPP TS 23.271

### 1.4 Interface 3 : Lg (GMLC-MSC)

S.No.	Parameter Name	Standard Name
1.4.1	Interface Management Procedures(Lg (GMLC-MSC) interface)	3GPP 23.271 3GPP TS 29.002
1.4.2	Location Services Procedures(Lg (GMLC-MSC) interface)	3GPP 23.271 3GPP TS 29.002

### 1.5 Interface 4 : Lg (GMLC-SGSN) DIAMETER

S.No.	Parameter Name	Standard Name
1.5.1	Interface Management Procedures(Lg (GMLC-SGSN) DIAMETER interface)	3GPP TS 23.271 Diameter: IETF RFC 3588
1.5.2	Interface Management Procedures(Lg (GMLC-SGSN) MAP interface)	3GPP TS 23.2713GPP TS 29.002
1.5.3	Location Services Procedures(Lg (GMLC-SGSN) DIAMETER interface)	3GPP TS 23.271 Diameter: IETF RFC 3588
1.5.4	Location Services Procedures(Lg (GMLC-	3GPP TS 23.2713GPP TS 29.002

	SGSN) MAP interface)	
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### 1.6 Interface 5 : Lg (GMLC-SGSN) MAP

S.No.	Parameter Name	Standard Name
1.6.1	Interface Management Procedures(Lg (GMLC-SGSN) MAP interface)	3GPP TS 23.271 3GPP TS 29.002
1.6.2	Location Services Procedures(Lg (GMLC-SGSN) MAP interface)	3GPP TS 23.271 3GPP TS 29.002

### 1.7 Interface 6 : Lh

S.No.	Parameter Name	Standard Name
1.7.1	Interface Management Procedures(Lh interface)	3GPP 23.271 3GPP TS 29.002
1.7.2	Location Services Procedures(Lh interface)	3GPP TS 23.271 3GPP TS 29.002

## 2. Variant 2 : GMLC for LTE or LTE-A

### 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 : Le

S.No.	Parameter Name	Standard Name
2.2.1	Interface Management Procedures(Le interface)	3GPP TS 23.271
2.2.2	Location Services Procedures(Le interface)	3GPP TS 23.271

## 2.3 Interface 2 : SLg

S.No.	Parameter Name	Standard Name
2.3.1	Interface Management Procedures(SLg interface)	3GPP TS 23.271 3GPP TS 29.172
2.3.2	Location Services Procedures(SLg interface)	3GPP TS 23.271 3GPP TS 29.172

## 2.4 Interface 3 : SLh

S.No.	Parameter Name	Standard Name
2.4.1	Interface Management Procedures(SLh interface)	3GPP TS 23.271 3GPP TS 29.173 IETF RFC 3588
2.4.2	Location Services Procedures(SLh interface)	3GPP TS 23.271 3GPP TS 29.173 IETF RFC 3588