

E4-E5 (CM)

Regulatory Guidelines for Mobile Network

WELCOME

- This is a presentation for the E5-E6 Telecom Module for the Topic: Regulatory Guidelines for Mobile Networks.
- Eligibility: Those who have got the Up-gradation to from E4 to E5 and are eligible for E5-E6.
- This presentation is last updated on 15-04-2011.
- You can also visit the Digital library of BSNL to see this topic.

AGENDA

- Regulatory Guidelines for QoS.
- Regulatory Guidelines for MNP.

Regulatory Guidelines for QoS

Regulatory Guidelines Related to QoS are categorized as:

- A. Network Service Quality Parameters.
 - B. Customer Service Quality Parameters.
 - C. Quality of Service parameter in respect of which compliance is to be monitored by the service provider.
 - D. Quality of Service parameters to be reflected in customer perception of service.
- Compliance Report to be submitted to TRAI

Regulatory Guidelines for QoS

S. N.	Name of Parameter	Benchmark	Average over a Period
A	Network Service Quality Parameters		
(i)	Network Availability		
	(a) BTSs Accumulated downtime (not available for service)	$\leq 2\%$	One Month
	(b) Worst affected BTSs due to downtime	$\leq 2\%$	One Month
(ii)	Connection Establishment (Accessibility)		
	(a) Call Set-up Success Rate (within licensee's own network)	$\geq 95\%$	One Month
	(b) SDCCH/ Paging Channel Congestion	$\leq 1\%$	One Month
	(c) TCH Congestion	$\leq 2\%$	One Month
(iii)	Connection Maintenance (Retainability)		
	(a) Call Drop Rate	$\leq 2\%$	One Month
	(b) Worst affected cells having more than 3% TCH drop (call drop) rate	$\leq 5\%$ up-to 31.03.2011 $\leq 3\%$ From 01.04.2011	One Month
	(c) connections with good voice quality	$\geq 95\%$	One Month
(iv)	Point of Interconnection (POI) Congestion (on individual POI)	$\leq 0.5\%$	One Month

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Regulatory Guidelines for QoS

Measurement

BTSS accumulated downtime (not available for service)

= Sum of downtime of BTSS in a month in hours * 100

24 * (No. of days in the month) *(No. of BTSS in the network in the licensed service area)

Worst affected BTSS due to downtime

= No. of BTSS having accumulated downtime of >24 hours in a month * 100

Total No. of BTSS in the licensed service area

Regulatory Guidelines for QoS

S. N.	Name of Parameter	Benchmark	Average over a Period
B	Customer Service Quality Parameters:		
(v)	Metering and billing credibility – post paid	Not more than 0.1% of bills issued should be disputed over a billing cycle	One Billing Cycle
(vi)	Metering and billing credibility – pre paid	Not more than 1 complaint per 1000 customers i.e. 0.1% complaints for metering, charging, credit, and validity	One Quarter
(vii)	(a) Resolution of billing/ charging complaints	100% within 4 weeks	One Quarter
	(b) Period of applying credit/ waiver/ adjustment to customer's account from the date of resolution of complaints	within 1 week of resolution of complaint	One Quarter
(viii)	Response Time to the customer for assistance		
	(a) Accessibility of call centre/ customer care	≥ 95%	One Quarter
	(b) Percentage of calls answered by the operators (voice to voice) within 60 seconds	≥ 90%	One Quarter
(ix)	Termination/ closure of service	≤ 7 days	One Quarter
(x)	Time taken for refund of deposits after closures	100% within 60 days	One Quarter

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Regulatory Guidelines for QoS

- C. QoS parameters for which compliance is to be monitored by the service provider.

S. N.	Name of Parameter	Benchmark
1.	Service Coverage	For In-door coverage the signal strength at street level shall be ≥ -75 dBm and In-vehicle shall be ≥ -85 dBm.

- The compliance of the Quality of Service benchmarks of the above parameter for CMTS need not be reported to TRAI.

Regulatory Guidelines for QoS

- D. QoS parameters to be reflected in customer perception of service.

S. N.	Name of Parameter	Benchmark
1.	customers satisfied with the provision of service	≥ 90 %
2.	customers satisfied with the billing performance	≥ 95 %
3.	customers satisfied with network performance, reliability and availability	≥ 95 %
4.	customers satisfied with maintainability	≥ 95 %
5.	customers satisfied with supplementary and value added services	≥ 90 %
6.	customers satisfied with help services including customer grievance redressal	≥ 90 %
7.	customers satisfied with overall service quality	≥ 90 %

Regulatory Guidelines for MNP



- Limits of MNP—
 1. MNP shall be limited to within a given licensed service area.
 2. MNP will be applicable only to cellular mobile telephone numbers.
- Access Providers to facilitate MNP in its entire network, to all subscribers, both pre-paid and post-paid and to provide the same, on request, on a non discriminatory basis.

Regulatory Guidelines for MNP



- **Rights and obligations of Donor Operator (DO)—**
- DO to continue to provide all subscribed services to the subscriber who has sought porting of his mobile number till the disconnection.
- Upon disconnection of a mobile number, the DO to refund to the subscriber, all amounts due to such subscriber on account of refundable payments or deposits.
- DO to maintain records of mobile numbers ported out by it and mobile numbers for which porting requests have been rejected for a minimum of 12 months.
- In case of non payment of any outstanding bill issued to the subscriber after the porting request, the DO shall give a notice of not less than 07 days to the subscriber, notifying him that in case of non payment within the said notice period, the DO shall request the RO to disconnect the ported number.

Regulatory Guidelines for MNP

- **Rights and obligations of Recipient Operator (RO)—**
- RO shall pay to the MNP Service provider, the Per Port Transaction charge at the rate as specified by TRAI from time to time, within 15 days of receipt of the bill from the MNP Service provider or within such other time limit as may be mutually agreed upon.
- RO to maintain records in respect of all mobile numbers for which porting requests have been rejected, for a minimum of 12 months.
- Where a request is made by DO for disconnecting the ported number, RO shall issue a notice to the concerned subscriber, the period of which shall be not less than 07 days and not more than 15 days, about the request received from DO and calling upon such subscriber to produce evidence of having settled such outstanding dues with DO within such notice period and in case the subscriber produces such evidence of having settled such dues, the Recipient Operator shall not take any further action in pursuance of the notice and shall inform the Donor Operator accordingly through Mobile Number Portability Service provider.

Regulatory Guidelines for MNP



- Rights and obligations of Recipient Operator (RO)—
- In case, before expiry of the specified period, the subscriber fails to provide evidence of having settled such outstanding dues with the DO, RO shall disconnect the mobile number of such subscriber and inform the MNP Service provider forthwith about the disconnection of such mobile number and request for reversal of such mobile Number to the Number Range Holder after expiry of 90 days.
- In case, after porting of a mobile number to the RO's network, there is disconnection of the mobile number, the RO shall, after 90 days of such disconnection, inform the MNP Service provider about such disconnection with a request for reversal of such mobile number to the Number Range Holder.

