

E4-E5 (CM)

Interconnect

WELCOME

- This is a presentation for the E4-E5 CFA Module for the Topic: **Interconnect**
- Eligibility: Those who have got the upgradation from E4 to E5.
- This presentation is last updated on 21-3-2011.
- You can also visit the digital library of BSNL to see this topic.

AGENDA

- Concept Of Interconnect
- Regulatory Principles For Interconnection
- Characteristics of interconnection
- Provisioning of POIs
- Augmentation of POIs
- Main Reasons for Delay in POIs Provisioning

Interconnect

Interconnection **means** the commercial and technical arrangements under which service providers connect their equipment, networks and services to enable their customers to have access to their customers, services and networks of their service providers.

Interconnect

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- ❑ Regulatory Authority of a given country may adopt one or a mixture of the following approaches to different interconnection issues.
 - ❑ Commercial negotiation between parties. If parties fail to agree, they may appeal to general competition and anti trust law.
 - ❑ Commercial negotiation subject to regulatory intervention if the parties fail to agree.
 - ❑ The Regulatory Authority prescribes specific issues from the outset, and parties negotiate over the remaining issues.
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Regulatory Principles For Interconnection



- Transparency
- Non-discrimination
- Cost based tariff
- Without regulatory intervention and direction, interconnection negotiations do not usually proceed successfully
- Delays and failures during negotiations
- The regulators can intervene by applying benchmarks or best practices from other countries

Characteristics of interconnection

- Interconnection is mandatory;
- It should be non discriminatory;
- It should be made available in a timely manner;
- Interconnection charges shall be cost based, unless as may be specified otherwise;

Provisioning of POIs

- ✓ The Circle office as a nodal point should handle the applications submitted by various operators for POI and issue of demand note/ advice note.
- ✓ The SSA Heads may be advised to speed up the process of feasibility report. This can be done if there is proper co-ordination between Circle office and SSA.
- ✓ The nodal officer for POI should review the pending feasibility reports from SSAs regularly to ensure that response to the interconnection seeker in the form of demand note for full or part of the requirement as per feasibility report is issued in timely manner.

Provisioning of POIscontd

- ✓ Once the interconnection seeker has made the payment as per the demand note for E1s and space/power (Infrastructure) requirements, the advice note should be issued immediately.
- ✓ In order to avoid the delay in commissioning of POI, the infrastructure and necessary power requirements should be made available to interconnection seeker promptly once the advice note has been issued.
- ✓ Efforts should be made to observe a time limit of 3-5 days for completing both the above works unless some additional works are to be carried out.

Provisioning of POIscontd



- ✓ Circle office should also maintain database of spare capacity of E1 ports capacity available in the switches designated for POI. This will help in sanctioning POIs without asking for feasibility out of the spare E1 capacity earmarked, if any, for interconnection purposes after taking case of expected requirement for expansion/ augmentation of BSNL own services.
- ✓ Designate tandem exchange in each SDCC well in advance for providing connectivity to NLDOs/ BSOs.

Provisioning of POIscontd



- ✓ This will not only reduce the time taken in issuing demand note for interconnection to BSOs/ NLDOs, but also help the BSO/NLDO to plan and ensure that their transmission link is available near the SDCC tandem exchange timely.
- ✓ The testing team for each SSA consisting of representative from SSA and Inspection(T&D) Circle, should be nominated well in advance so that some time saving is achieved.

Provisioning of POIscontd

- ✓ CGM Inspection(T&D) Circle, may work out necessary arrangements in this regard. Wherever required, separate representatives for transmission A/T and switching A/T should be nominated.
- ✓ The SSA representative should be well conversant with the framework of the interconnect agreement specially relating to the traffic routing and charging at the POI for each type of service.
- ✓ Inspection(T&D) Circle may make their representative available as per schedule. Efforts should be made to complete both, transmission and switching A/T within 7 days from the date of start of testing.

Provisioning of POIscontd



- ✓ In order to save time and effectively utilize the technical manpower, POI configuration by the SSA may be carried out just before start of switching A/T so that same person may become part of the switching A/T team.
- ✓ Acceptance testing time schedules should be prepared in advance for transmission as well as switching on Quarterly basis taking into account the POIs likely to come up for acceptance testing in near future.
- ✓ If there are no pending points in A/T report, prompt clearance for commercial traffic may be given by Circle Office to the concerned SSA Head along with POI clearance certificate.

Provisioning of POIscontd



- ✓ In case of any pending points, the same should be communicated to the interconnection seeker without delay.
- ✓ Minor pending points not affecting the quality of service, measurements and integrity of the network, should not delay the flow of commercial traffic subject to the undertaking from the seeker that the pending points will be cleared within 15 days time failing which BSNL will have right to discontinue the service.

Provisioning of POIscontd



- ✓ All efforts should be made to commission the POI within 30 days from the date when the interconnection seeker submits the application, excluding the time taken by the interconnection seeker for completing the concerned activities marked in the line diagram.
- ✓ The periods mentioned in the interconnection agreement are upper limit. However, efforts should be made to reduce the time taken for commissioning of POI.

Augmentation of POIs

- ❖ For augmentation of junctions at POI, traffic measurements shall be taken by BSNL and private operator during agreed route busy hour for seven days on quarterly basis.
- ❖ Based on the route busy hour traffic printouts, the number of junctions may be calculated as per Erlang Table for the Grade of Service (0.005) as per interconnection agreement including 25% additional junctions for future traffic requirements.

Augmentation of POIscontd

- ❖ However, the provision of E1s shall be subject to the terms and provisions of interconnection agreement and guidelines given above.
- ❖ The POI capacity on the basis of traffic should be reviewed regularly and the number of E1s may be reduced if not justified as per traffic requirement, as per the provisions of interconnection agreement if BSNL/ other operator requirements are pending.

Augmentation of POIscontd

- ❖ TRAI (Telecom Regulatory Authority of India) vide its notification number 409-5/2003-FN dated 29.10.2003 had issued Regulation, which has been, implemented w.e.f. 01.02.2004.
- ❖ Due to non-availability of CDR based billing platform, IUC applicable for the calls handed-over to BSNL at the POI (Point of Interconnect) have been converted into different pulse rates as per Appendix B. The pulse rates have been calculated at a per MCU (Metered Call Unit) rate of Rs 0.10 for all calls except outgoing ISD calls which shall be measured at a rate of Rs 1.20 per MCU.

Main Reasons for Delay in POIs Provisioning

BSOs, NLDOs and ILDOs normally complain about general delay in commissioning of POIs. Following are main reasons for delay intimated by them:

- Delay in issue of demand note due to non-receipt of feasibility report from SSAs.
- Delay in nomination/ declaration of a local exchange (in case of non-availability of separate SDCC tandem) as SDCC tandem for providing connectivity to NLDOs/ BSOs.

Main Reasons for Delay in POIs Provisioning

- Delay in provision of infrastructure and power after payment of demand note.
- Delay in constitution of testing team or nomination of representative on behalf of BSNL for acceptance testing.
- Non-availability of interconnection agreements and test schedules in concerned SSAs.
- Non-availability of A/T wing representative in time due to pre-occupation in other acceptance testing works.
- Approval of A/T report by circle office.

