Consultation Paper No. 7/2004

TELECOM REGULATORY AUTHORITY OF INDIA

CONSULTATION PAPER
On

INTERCONNECT EXCHANGE
cum
INTER-CARRIER BILLING CLEARING HOUSE
For
Multi-Operator Multi-Service Scenario

Consultation Paper No. 2004/ dated 13th April 2004

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PREFACE

One of the objectives of NTP99 is to create a modern and efficient telecommunications infrastructure which takes into account the convergence of data, media, telephony, and consumer electronics to propel India into becoming an IT superpower. TRAI has taken several initial steps in the area of telephony, which have led to growth and wider availability of telecommunications services, reduction in tariffs from the competition among telephony service providers, and introduction of better technologies. Interconnection is one of the most serious problems that is emerging with the increase in number of operators with open market conditions. With the increase of number of operators in different services, the number of interconnection circuit groups between operators will increase in multiples and will be very soon unmanageable. The concept of INTERCONNECT EXCHANGE cum INTER-CARRIER BILLING CLEARING HOUSE is a further step towards creation of a modern and efficient telecommunications infrastructure.

This Consultation Paper on “INTERCONNECT EXCHANGE cum INTER-CARRIER BILLING CLEARING HOUSE for Multi-Operator Multi-Service Scenario” addresses key issues related to Interconnection Architecture. The paper suggests a totally new approach which possibly may provide a solution to facilitate further competition and could be a catalyst as well as launching pad for the tele-density growth in the multi-operator multi-service scenario. It could also provide a solution to a number of issues that are coming in the way of getting best results from the investments being made in the telecom sector. It could further lead to many new value additions for the consumers at competitive tariffs.

2. This Consultation paper provides a background framework for TRAI's public consultation process with the stakeholders on the above issues in order to obtain feedback and suggestions to be considered by TRAI.

3. The Consultation Paper is supported by a number of related documents. The inputs of the Consultation Paper also incorporates the ITU-D Report on Interconnection, which has been completed by Mr. Rakesh Kumar Bhatnagar, Advisor

(FN), TRAI in his capacity as the Chairman of the Project Group on Interconnection (ITU-D Study Group 1 Question 6-1/1).

4. The Authority invites written responses from all stakeholders on this consultation paper latest by closing hours of 15/05/2004. It would be appreciated if the response is accompanied with an electronic version of the text through Email.

5. For further clarifications please contact, Shri Rakesh Kumar Bhatnagar, Advisor (FN) - Tel. No. 011-26166930, Email address trai06@bol.net.in. The FAX No. of TRAI is 26103294.

New Delhi (Pradip Baijal)

Dated: 13th April 2004

CHAPTER 1

1. Background

1.1. The telecommunication networks in the present Multi-Operator Multi-Service Scenario are becoming very complex. Operators are growing very fast and expanding into all types of telephony – fixed, mobile, Long Distance (National & International) and also into convergent networks. The Geographical spread is also increasing at a fast pace. Operators worldwide are realizing the need for fixed-mobile, voice-data and carrier-enterprise convergence. Only by doing so can they enable users to combine their services in the most flexible way possible. No longer can an operator prosper simply by offering basic telephone services. End users are looking at the added value being offered by the operator.

1.2 The opening of telecom scenario has brought a lot of value to the customers. The quality of service is improving, prices are coming down and competitive operators are offering many new services and value additions to their respective existing services. Behind this bright scene, a complexity is also developing, which if not tackled with long term perspective at the very beginning, could lead to a complex situation resulting in an increase in the cost of interconnecting network for multi-operator multi-service scenario. In a rapidly growing telecommunication networks, the incumbent and other operators may not be able to organize Interconnection facilities at very fast speed to match the demand. This results in delayed provisioning of interconnection which in turn leads to :

- Higher cost of service
- Inefficient handling of call
- Sub-optimal utilisation of network
- Serious increase of CAPEX and OPEX making operation unavailable

1.3 Considering low affordability of general population, it should be the most important endeavour to-day to keep the CAPEX & OPEX of the network as low as possible, so that the communication facility may be provided at most affordable prices.

2. Requirements and associated problems of Interconnection

2.1 Requirements:

2.1.1 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 customers, services and networks of other service providers.

2.1.2 Interconnection is one of the most serious problems that is emerging with the increase in number of operators with open market conditions and Interconnection licensing requirements which possibly call for mandatory interconnections between each of Cellular, Basic and National/ International Long Distance Operator in any particular licensed service area. Some types of Interconnections in Multi-Operator Multi Service environment are as follows:

- Basic to Basic
- Basic to Cellular
- Basic to National Long Distance
- Basic to International Long Distance (Direct or through National Long Distance Operator)
- Mobile to Mobile
- Mobile to National Long Distance
- Mobile to International Long Distance (Direct or through National Long Distance Operator)
- Basic to others including Paging, GMPCS, ISPs etc.

With the increase of number of operators in different services, the number of interconnection circuit groups between operators will increase in multiples and will be very soon unmanageable.

2.1.3 In India, the interconnection has been mandated between Access Providers and National Long Distance Operators as suggested by the Licensing /Regulatory Regime is at each Long Distance Charging Area and there are 322 Long Distance Charging Areas in the country. Interconnection between Basic and Cellular Service Providers also take place at this level. NLDOs can also pick up the traffic at Local Area level. Basic Service Operators are expected to establish their POIs in each Local Area. Over the whole country there are 2647 Local Areas i.e. SDCAs. International Long Distance traffic should be routed through NLDOs, to the ILDOs gateways for onward transmission to international networks. International Long Distance Operators can also pick up traffic directly from Local Area level in situations where ILD Gateway Switches, and that of Access Provider's GMSC/ Transit Switch are located at the same station, i.e. as at Level I TAX stations.

2.1.4 At present the country is having 4 functioning International Long Distance Operators, 4 National Long Distance Operators, 4 Cellular Operators in most of the Licensing Areas and two to four Basic Service Operators at Licensing Area level.

2.1.5 Example:

2.1.5.1 In a typical Long Distance Charging Area, the interconnection scenario will be dependent upon the number of multiple operators providing different type of services as per details below:

• Number of Basic Service Operators	4
• Number of Cellular Mobile Operators	4
• Number of National Long Distance Operators	4
• Number of International Long Distance Operators	4
Total	16

2.1.5.2 To connect these 16 operators with each other, 16 x 15, i.e. 240 interconnection circuit groups are required, and where each operator will have to have 15 interconnection circuit groups.

2.1.5.3 To handle so many interconnections will be too difficult to be provided and also be operationally difficult to manage. If we consider similar or more

complicated situation in half or even one third Long Distance Local Areas, the gravity of the problem could well be understood.

2.1.5.4 To minimize the operational difficulties, it is essential to have a managed node for automatic switching or cross connect rather than a mesh like structure currently being followed. This is illustrated in Figure I and II.

2.1.5.5 The node can have two possible capabilities. It could either be a plain cross-connecting device which manipulates the transmission capacity available between various operators, or alternately, it could be a full fledged switch with many more functions besides cross connectivity.

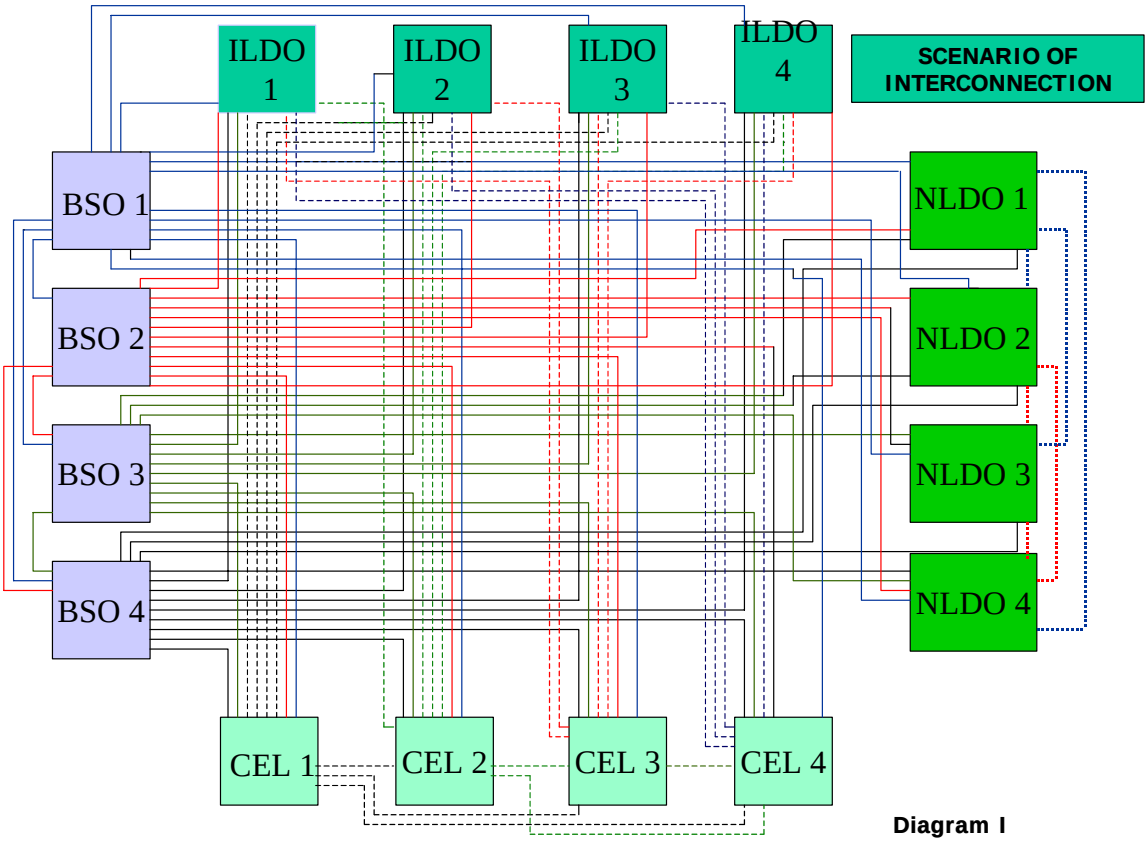
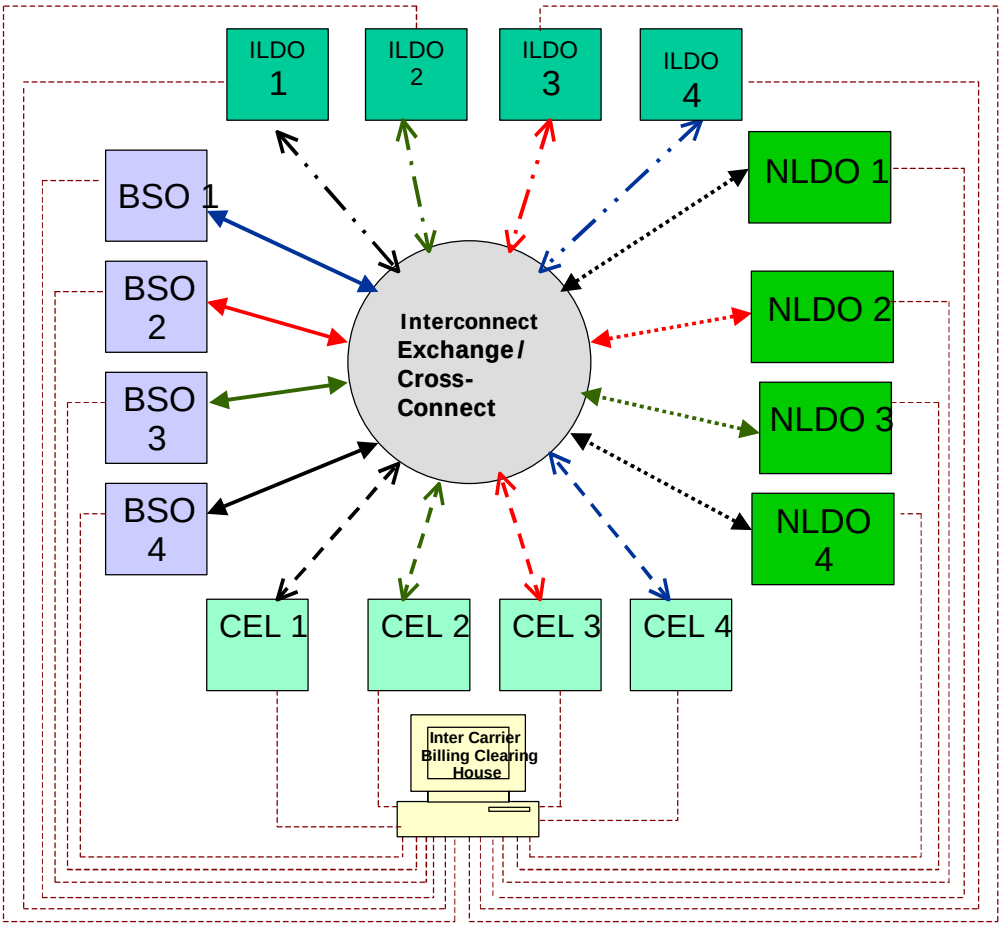

ILDO 1
ILDO 2
ILDO 3
ILDO 4
SCENARIO OF INTERCONNECTION
BSO 1
BSO 2
BSO 3
BSO 4
NLDO 1
NLDO 2
NLDO 3
NLDO 4
CEL 1
CEL 2
CEL 3
CEL 4

Diagram I

Figure II: New Scenario of Interconnection (With Interconnect Exchange/ Cross Connect cum Inter-carrier Billing Clearing House)

In the scenario with 16 operators in a typical POI Area, with the introduction of an Interconnect Exchange the number of Interconnect links could be reduced to as little as 16 from staggering number of 240 Circuit Groups needed based on the conventional interconnection architecture.



2.2 Problems currently being experienced by various Service Providers in the absence of an Interconnect Exchange :-

2.2.1 In the existing multi-operator multi-service environment, the following problems are being faced by the service providers:

- Timely availability of Interconnection
- Inter carrier billing
- Complexity in settlement of interconnect usage charges
- Sharing of Intelligent Network Platform
- Implementation of Number Portability.
- Implementation of carrier selection.
- Higher range of interconnection cost and Port Charges.
- Longer waiting period for provision of interconnection capacities.
- Higher cost of service
- Inefficient handling of call
- Sub-optimal utilisation of network
- Serious increase of CAPEX and OPEX making operation unavailable

2.2.2 While a Digital Cross-connect associated with an Inter-Carrier billing and settlement platform, could meet the core requirements of providing timely interconnectivity and inter-operator billing and settlement issues, an Interconnect Exchange associated with an Inter-Carrier billing and settlement platform will be able to provide answers to most of the problems.

3. Role of Interconnect Exchange in resolving the above problems:

We discuss below, how the problems listed in para 2.2.1 can be addressed.

3.1 **Inter-Carrier Billing:** Presently Inter-Carrier Billing is a major issue of dispute between various Service Providers and is likely to escalate unless corrective steps are in place at this stage itself. If Interconnect Exchange is having the Role of Inter-Carrier Billing Clearing House as well, a solution of a major problem area could be available. **Annex I** provides certain inputs on Clearing House being established in Indonesia. It may be noted that Interconnect Exchange is not there in Indonesia.

3.2 **Intelligent Network Services:** How Intelligent Network Services in a multi-operator multi-service scenario could be provided through the combination of Interconnect Exchange cum Inter-Carrier Billing Clearing House, is discussed in **Annex II**. It could be debated whether the implementation of IN services could be considered in the initial stage itself of could be considered at a later stage.

3.3. **Number Portability:** How Number Portability issue could be addressed for a multi-operator multi-service scenario through the centralised Database available with Interconnect Exchange cum Inter-Carrier Billing Clearing House, is discussed in **Annex III**. It could be debated whether the implementation of Number Portability could be considered in the initial stage itself or could be considered at a later stage. The issues regarding Number Portability at this stage are not discussed in detail as a separate consultation paper on the same is being issued shortly.

3.4 **Carrier Selection:** It has been established that costs running into a few thousand of Crores will be involved if Dial by Dial Carrier Selection and Carrier Pre-selection is to be implemented in all the exchanges across the country. That cost would be borne by the NLDOs/ ILDOs. With higher CAPEX, IUC charges also may need an upward revision and tariffs even may go up. At present, the NLDOs get a carriage charge ranging from Rs 0.20 to Rs.1.10. At best they may be in a position to offer discounts ranging from Rs. 0.02 to Rs. 0.10. In the present scenario, Carrier-Selection choice could be left with the Access Provider. Interconnect Exchange in any

case would provide the sufficient supporting infrastructure as an alternate options through NLD/ILD Calling Cards etc.

3.5 **Simplification in Network Architecture, Reduction in POIs, Simplification in settlement of Interconnect Usage Charges, Abolition/ Steep reduction of Port Charges, Reduction in waiting period for Interconnection capacities :**

Each POI calls for a Interface between two operators. With number of Switching technologies and number of Software releases even within a given technology, calls for Mediation devices, Signalling and Billing complexities at each POI. By using Interconnect Exchange the Network Architecture could get simplified and investments for Interconnection could see a drastic cost reduction. As is discussed later on, Interconnect capacities would see around 40 to 50% reduction and the same will be higher in respect of Circuit Kms. Number of POIs would see a massive reduction and as a result the number of mediation.

3.6 Carriage Charges

This could lead to a simplified IUC Regime. Depending on the option finally selected, either there will be no annual Port Charges or even if they continue, could see a steep fall. The Interconnect exchange would cut down the waiting period of 3 to 12 months. Direct infrastructure support for further increases in the subscriber base of all service providers with minimum constraints would also be feasible.

As each operator is responsible for the transmission media right upto the Interconnect exchange and also is responsible for sharing of the Interconnect Exchange and supporting Computers and other infrastructure for Inter-Carrier Billing System, no Carriage Charge of 20 P to 110 P would be applicable for the Inter-Network Intra-Circle calls. This charge will apply only to Inter-Circle calls.

Distance based Carriage Charge would be applicable for Inter-Circle Inter-Network calls and the location of Interconnect exchange would be the reference point for such distance calculations. Effectively, NLDOs and ILDOs would pick up the traffic from

locations where such Interconnect Exchanges are located i.e. generally Level I stations and one in each Circle.

Uniform termination charges could be made applicable.

3.7 Roll Out Requirements

Interconnect Exchange at Circle level will simplify the Roll Out of NLDOs/ ILDOs as their POPs would not be required at Level II TAX stations. In fact already most of the new NLDOs are having transmission POIs at Level II TAX stations and their switches are confined to generally one in each Licensing Service Area.

3.8 Intra-Circle Inter-Network calls between Fixed Lines

Inter-Network Intra-Circle Calls between Fixed Lines can continue to be handled at SDCA level also.

4. Features of Interconnect Exchange

4.1 Interconnect Exchange could be connected to each operator at POIs preferably through two independent transmission systems.

4.2 As all the operators would be connected to only one interconnect operator, uniform terms of interconnect could be applicable

4.3 Interconnect Exchange could be versatile enough to accommodate all type of interconnection circuit groups as per licensing/ regulatory requirements

4.4 Interconnect Exchange operator could work as a mediator and the Clearing House for the bills between service providers. In the first instance, incumbent operator could offer these services. In case he declines, one of the new operators could provide such interconnect exchange for all type of interconnections at designated POIs

5. Advantages of Interconnect Exchange

5.1 Network Simplicity: Interconnect Exchange will immediately simplify the network interconnection architecture.

5.2 Optimisation of number of Interconnect circuit groups: Interconnect Exchange will drastically reduce the number of interconnection circuit groups. Present requirement of interconnection circuit groups in any POI Area is N x (N-1), where N is the number of operators to be interconnected. After introduction of Interconnect Exchange, N circuit groups only will be required i.e. equal to number of operators.

5.3 Simplicity in Digit analysis/ Route selection: The Interconnect Exchange will take over the load of digit analysis for all Inter operator calls and Inter circle calls from the exchanges connected to it.

5.4 Simplicity of Operation: The Exchanges of service operators will be responsible for analysing and routing calls within their network only. This will dramatically simplify their operational and coordination problems.

5.5 Simplification of Carrier selection function: the Interconnect Exchange, making all type of carrier selection possible even in the present network scenario, making National Long Distance Operation more users friendly, may handle Carrier selection responsibility for LDCA.

5.6 Simple, Cost effective and reliable POIs

As any operator will need to maintain only one POIs in any POI Area, it will cost effective for each operator to go for most reliable and upgradeable media like SDH Rings for POIs in each Local Area, which will provide much more dependable service to the end users. The Interconnect Exchange operator will be in a position to collate the requirements of all operators and plan out augmentation of POI capacities in a time bound and cost effective manner.

5.7 Efficient handling of New and Traditional Interconnects

As in near future, a part of the national network will be IP based, it will be very expensive for every incoming IP operators to have different type of protocol conversion hardware and software installed at their end to handle interconnections with different traditional operators. If the same is handled in the Interconnect Exchange, it will be much more cost effective, efficient and uniform.

5.8 Better utilisation of Interconnection capacities

As the peak traffic period of different services is not identical, an Interconnect Exchange can help in more efficient usage of the Point of Interconnects.

5.9 Equality in Terms of Interconnect

A standard interconnect agreement format may be created in consultation with Regulator and to be followed by all operators. It will bring uniformity in terms of interconnect and all operators will receive same treatment.

6. Disadvantages

6.1 For Intra-Circle Inter-Circle calls one more stage of switching would be involved

6.2 As compared to private operators, the incumbent's gains will be on the lower side and moreover with the advantages accruing to new operators, they will be able to offer stiff competition to the incumbent.

6.3 There would be a need for certain changes in the present licensing conditions covering POIs and roll out requirements.

7. Interconnect Exchanges Responsibility

7.1 As the Interconnect Exchanges will handle all inter operator calls, it is in a unique position to work for

- Inter Operator bill settlement (Clearing House function)
- Reconciliation and MIS generation.
- Tariff based/ Time based route selection.
- Route related announcements.
- Carrier selection.
- Promotion handling in coordination with operators etc.

7.2 Centralised data base control for nation wide uniformity of service

- All Interconnect Exchanges at Local Area level then could be connected through a nation wide network, to Regional/ Centralised data base, so that the operational data of all Interconnect Exchanges will be uniform, to support uniform service quality through out the country.

8. Source of Revenue for Interconnect Exchange

8.1 Being a common facility, each operator could pay a small part of the outgoing inter-operator call revenue to the Interconnect operator.

8.2 For Clearing House operation, it could get a separate charge from each operator.

8.3 Reconciliation service and MIS could also be a charged service.

8.4 Announcement handling on behalf of different operators and promotion handling could also be a source of revenue.

8.5 Carrier selection feature charge if controlled by Interconnect Exchange could be another source of revenue.

9. Cost of Interconnection with Interconnect Exchange

9.1 The cost of bringing an interconnect circuit group to an Interconnect Exchange could be the responsibility of Interconnect seeking operator. Terminal equipments at both ends and media could be commissioned and maintained by Interconnect seekers at their cost. Interconnect Exchange could provide space, power etc. for entry and installation of terminal equipments.

9.2 The specification and type of terminal equipment should be guided by the applicable National standards. The minimum capacity of Interconnect for a particular service operator may be mutually decided on local basis.

9.3 The rental to be levied by Interconnect Exchange operator to an interconnect seeker for Space, Power, Air Conditioned environment and for Hardware & Software to support the interconnection requirements could be determined and proclaimed by Regulator on time to time through cost base analysis.

10. Issue regarding assigning the responsibility for operating the Interconnect Exchange cum Clearing House:

10.1 A question arises as to who should be given the responsibility for operating the Interconnect exchanges cum Clearing House and what are the issues involved with the suggested option.

The options available are:

- Operated by regulator
- Operated by carrier

- Operated by consortium

- Operated by neutral third party contractor

10.2 In case it is operated by regulator, the following issues are involved:

- Potential conflict between policy
  (traditional regulatory role)
- Suitability for IT
- Concern for motivation for service efficiency and effectiveness

10.3 In case it is operated by carrier (incumbent) the following issues are involved :

- Conflict of interest vs competitors
- Concern for motivation for service efficiency and effectiveness
- Ability to gain competitive advantage
- Access to proprietary information of competitors

10.4 In case it is operated by Consortium the following issues are involved:

- Potential for obstructionist operator to render consortium ineffectual
- Who donates staff and technical expertise?
- Who is accountable for the accuracy and operations of the database?
- Who owns the assets?
- Are all carriers fairly represented?
- How are budgets/ ongoing operation funding handled?
- Is the service most cost-effective

10.5 In case it is operated by neutral third party contractor the following issues are involved:

- Provides streamlined approach and system of checks and balances:
- Policy/ standards formation; regulators and industry advisory group
- Policy enactment: industry numbering committee
- Implementation: Industry consortium as contracting entity
- Service delivery : Neutral third-party (NTP) NPAC

11. **International Experience**

The approach suggested is quite unique and the implementation covering simultaneous solution for various Interconnection problems has found a place in the ITU-D documents very recently.

However common Interconnection facilities find applications in Greece, USA, and Japan.

As an illustration One Wilshire in Los Angeles, USA provides unparalleled opportunity for communication companies to interconnect and gain direct access to major carriers and service providers. One Wilshire tenant have the option to bringing their own fibre into the building and/or connecting to their fiber services of other tenants. It provides connectivity options through Digital Cross-Connects to all parts of the world. AT&T, Cable & Wireless, China Telecom, Global Crossing, MCI Worldcom, MFS, PacBell, Sprint, Qwest Communications, Time arner (AOL), Verizon (GTE) and XO Communication are among 120 telecom entities that make use of the One Wilshire Interconnections.

Inter-Carrier Billing through shared or third party Clearing Houses find applications in many countries including India for GSM operations. An example from Indonesia is covered in this Paper.

Number Portability through Clearing House is implemented in many countries including USA.

12. Brief on various supporting Annexes:

12.1 Annex IV brings out an ITU GREX Case Study on Interconnection for country "Erehwon" as a sample illustration. Study shows as to how POIs could be reduced from 8250 to just 325. Section 5 of this Annex gives the summary of saving in E1s and percentage reduction in E1s as a result of Interconnect Exchange for each type of Service Provider based on the Licensing Regime prescribed for the Case Study under consideration. The same is reproduced below for ready reference.

Service Provider	Interconnect Capacity as % of DELs	Saving in E1s through Interconnect Exchange	% Reduction in E1s as a result of Interconnect Exchange
Fixed Incumbent	3.90	1205	38.169
Fixed Private 1	4.82	1323	80.476
Fixed Private 2	4.82	1323	80.476
Cellular Incumbent	5.79	251	20.641
Cellular Private 1	4.63	254	17.989
Cellular Private 2	4.63	254	17.989
NLDO Incumbent		734	55.354
NLDO Private 1		773	65.453
NLDO Private 2		773	65.453
ILDO Incumbent		127	44.718
ILDO Private 1		148	54.613
ILDO Private 2		147	53.650
ILDO Private 3		147	52.500
Total		7459	48.810

12.2 The study establishes that Interconnection capacities can be reduced by a factor of 48.81% for the Case study under consideration through one of the possible implementation option with Incumbent providing the Interconnect Exchange. In the transmission media, number of Circuit-KMs would see a further steeper reduction.

Options like Consortium of operators or third party Interconnect exchange cum Inter-Carrier settlement through Interconnect Clearing House are also possible.

For some of the operators with distributed architecture like BSNL, the reduction in number of Interconnection Requirements (2 Mb/s streams) at the Interconnect Exchange level needs to be seen in the background of more transmission requirements between Level II and Level I stations (Interconnect exchange stations). To overcome this problem, this Intra-SCDA Inter-Network calls to follow the existing methodology of SDCC level interconnection is suggested to continue.

12.3 **Annex V** gives POI calculations as applicable to Indian scenario. Conventional approach has been compared with that of Interconnect Exchange. Based on the existing Licensing Regime while considering the full roll out by the Service Providers (all those with licenses as of 27th February 2004), 51557 POIs would be required to be established spread over 2648 SDCAs including 322 LDCAs. The same could be reduced to just 405 with the Service Providers and same number in the Interconnect Exchange.

12.4 Annex VI tries to calculate the Number of Interconnect Exchanges. It is seen that if a Mega switch similar to Alcatel 1000 E10 supporting 15000 E1s, is deployed only one Switch in each Level I/ Gateway Switch Area could be adequate. At the same number based on rough assessment of Interconnect Exchange, supporting Infrastructure and Inter-Carrier Billing functions etc. would one time investment of around Rs. 600 Crores with all Service Providers contributing in the ratio of their E1 requirements.

12.5 Interconnect Exchange would carry only Inter-Network traffic. There could be a uniform Intra-Circle termination charge. Inter-Circle traffic for Carriage calculations could be based on the distance between Interconnect Exchanges in two Circles. Origination charges are already under forbearance category. ADC regime could be based on the % of Revenue or any new formula.

12.6 Interconnect Exchange

Within the country CDOT in Bangalore has developed an Inter-Carrier Billing System with an investment of about Rs. 10 Crores or so. The system with little efforts could meet all the function requirements for the Inter-Carrier Billing in multi-operator multi-service scenario. The same is already being used on trial basis for BSNL's Inter-Network CDRs covering Karnataka Circle. It could meet the Inter-Carrier Billing requirements of all the operators at least for Karnataka Circle.

As the issue on the Interconnect Exchange is being debated, the consortium of operators say in Karnataka Circle could pool their resources and set up a Mega Transit Switch with capabilities similar to Alcatel 1000 E10 over a period of say three to four months time. CDOT's efforts already made could also be effectively utilised for CDR based Inter-Carrier Billing. All Inter-Network Intra-Circle calls could be made mandatory for routing through Interconnect exchange with the exception of Intra-SDCA local calls between fixed subscribers. Based on the success of the new concept, it could be extended to cover all Licensing Areas. However the option of simultaneous implementation is also kept open.

CHAPTER 2
QUESTIONS FOR CONSULTATION

1. Considering the International experience, problems currently being faced in Interconnection within the country and discussions given in this paper, should we consider the implementation of Interconnect Exchange or Cross-connects for India?

2. Should an Inter-Carrier Billing Clearing House concept be initiated as a first step or we should opt for an integrated arrangement with Interconnect Exchange or Cross-connects along with the Clearing House.?

3. In case it is decided to go for an Integrated Interconnect Exchange and Inter-Carrier Billing Clearing House, should it be attempted at one go throughout the country or in one or more service areas to begin with?

4. What are the various concerns in using Interconnect Exchange cum Inter-Carrier Billing Clearing House in Indian scenario?

5. Who should establish and operate the Interconnect exchanges, what are the issues involved with the suggested option. Clearly bring out the basis for suggestion.

6. What should be the suggested steps needs to be taken by
    a) Government/ DOT
    b) Regulator
    c) Service Providers

7. Whether Interconnect exchanges should be established at the Level I TAX stations or Designated Gateway stations i.e. one each in each Licensing Area, in case the same is technically feasible with Mega Capacity Transit Switches. Comments may be offered on appropriate location of Interconnect Exchanges.

8. What could be the likely expenditure involved in establishing these Exchanges.

9. What should be the criteria for deciding the fees and charges.
    a) Whether there is requirement of one time joining fee if yes than what should be the appropriate one time joining fee.
    b) Whether these charges and fees should be same for all circle/Metros or different for different category of circles.

10. Should the Regulator leave the issue to mutual agreement amongst the Operators or should all service providers be mandated to route all the Inter Network traffic through Interconnect Exchange only.

ANNEX I
Indonesian Interconnect Clearing House

The RFP for the Clearing House was issued by the Regulator. Bids were only accepted from Indonesian companies. A substantial Bid Bond had to be posted to discourage small companies from responding. The Bid Bond is returnable after the FRP process.

The Minister for Transport and Telecommunications and the Regulator are evaluating a number of responses to the FRP and will select the winning consortium.

The successful consortium will be granted a license to run the Clearing House for a period of 10 years. Having won the selection process, the winning consortium will have to negotiate with each operator since each operator will have different capabilities and requirements. For example, some operators will need a mediation capability to collect interconnect CDRs.

Operators will pay a fee for every CDR processed, so there will be at least two CDRs per call, one outgoing and one incoming. A transit call will typically generate four CDRs.

Differential rates per CDR are likely to be agreed depending on each operator's requirements and the service they require. The basic settlement service will be common but some operators may want additional reports, data extracts, interfaces etc.

The Clearing House will collect all CDRs, maintain reference data (e.g. rates, number plans, network information etc.), rate the CDRs and summarise them by hour, day and billing period. The Clearing House will carry out the reconciliation process, produce reconciled interconnect statements and provide supporting evidence for dispute resolution.

The Clearing House will also provide a range of standard reports for each operator and an executive dashboard containing daily, weekly and monthly key performance indicators on the operator's interconnect business. The Clearing House will provide a range of reports e.g. on interconnect market share and growth and an executive dashboard for the Regulator.

The Clearing House will be administered by a Steering Committee whose members will be drawn from the Ministry, the Regulator, the operators and the Clearing House organisation. The performance of the Clearing House will be monitored against Service Level Agreements with the operators and the Regulator. Independent audits will carried out to ensure that the Clearing House is meeting its prime requirements for security, accuracy, impartiality and service.

ANNEX II

Interconnect Exchange and IN Services

The telecommunication networks of today are becoming very complex. Operators are growing very fast and expanding into all types of telephony – fixed, mobile, Long Distance (National & International) and also into convergent networks. The Geographical spread is also increasing at a fast pace. Operators worldwide are realizing the need for fixed-mobile, voice-data and carrier-enterprise convergence. Only by doing so can they enable users to combine their services in the most flexible way possible. No longer can an operator prosper simply by offering basic telephone services. End users are looking at the added value being offered by the operator.

On account of this the major challenges that operators face are :

- how to achieve this demanding objective rapidly and cost-effectively, and
- how to differentiate themselves from their competitors.

Intelligent Network (IN) services add value to voice and data bearer service through number translation, alternate billing and private numbering plan features. These features are provided with the help of network databases (also known as Service Control Points – SCPs) endowed with query-response protocols using which the underlying bearer network entities such as PSTN/ ISDN switches, mobile switching centers and media gateways communicate with it. The bearer network entities designated to communicate with the SCPs are known as the Service Switching Points (SSPs). With respect to the physical architecture, the SCPs and the SSPs can be within the same node, co-located or remotely located over the SS7 signalling network. The rest of the bearer network entities are independent of the IN nodes. This independence lets the network providers to utilize the same IN infrastructure for a variety of networks viz. fixed, WLL-F, WLL-M, cellular mobile, VoIP and IP. Intelligent networks provide twin advantages of new revenue streams and investment protection.

From a regulator's perspective, IN services pose a challenge due to non-availability of B number, i.e. called party number, at the originating network interfaces, alternate billing options, i.e. calling party pays in full or part, called party pays in full or part or a third party pays, and, distributed location of functional entities. These characteristics neither permit transparent application of the existing interconnect regime nor present any straightforward opportunity for installing an interconnect regime that is equitable and mutually beneficial to the interconnecting operators.

Theoretically many hypothetical reference networks could be suggested by Service Providers like BSOs/CMSOs – NLDOs/ILDOs – ILDOs with inter-networking depending upon the network location of the SCP and the SSP. While the SSP could be located in the access provider's network, the SCP can be shared among the service providers. In such an arrangement, the B number will always be available at the PoIs and the existing interconnect can be applied straightaway. Only issues that would need to be tackled are the determination of origination charge, "port" charge for SS7 signalling links between SSP and SCP and database hosting charges at the

SCP. Of these, forbearance can continue for origination charge and the database hosting charge can be mutually agreed between the cooperating operators.

IN Services and Interconnect Issues

From the interconnection perspective, the following issues are important with respect to the network architecture.

Identification of the actual called party number at the POI

IN services are access based services where the calling party uses the fixed or mobile access to place local and long distance calls. The only difference with the non-IN call handling is the centralised location of the subscriber data. The network architecture should therefore be such that it enables the access provider to route the call to the appropriate POI as is being done currently. The revenue sharing can be done as before.

The unavailability of the B number with the access provider could lead to bypassing of NLD and ILD operators, routing of intra-circle traffic to NLD and could complicate the revenue sharing arrangement.

Efficient utilization of SSP, SCP/ SCEP and Intelligent Peripheral (IP) resources

It is in the interest of the operators that the IN infrastructure is optimally utilized and new investments can be made gradually commensurate with the traffic growth. The three main nodes that participate in IN call handling and whose dimensioning depends upon the traffic and connectivity are SSP, SCP and IP.

The SSP is the aggregation point for all IN traffic in the access provider's network and exists both in the bearer network and the signalling network. Generally, SSP is a PSTN switch, media gateway or mobile switching center. The access interface of the local switches to the SSP is SS7 (ISUP). The subscriber dials the IN service access code, comprising the service code (e.g. 1600 for freephone) and the SCP ID (e.g. 33 for BSNL Kolkata). The local exchange routes the call to the SSP and a bearer path gets established between the LE and the SSP. An SSP can therefore serve a number of exchanges and depending upon the traffic in the access network, a number of SSPs can be employed. Level I TAX switches or Gateway MSCs can provide SSP functionality support.

The SSP detects request for an IN service from the access code. It hold the call and then queries the SCP via the signalling network by using INAP (for fixed network), CAMEL (for mobile network) and SIP (for VoIP network) protocols and gets routing instructions. The SSP then sets up the downstream call through the bearer network in the usual way. In this way, the SCP can serve a number of SSPs and is the aggregation point for IN services related data and feature handling intelligence and depending upon the traffic, a number of SCPs can be employed or one SCP shared among operators. An additional advantage here is the sharing of Service Creation Environment Point (SCEP) platform costs that can be quite substantial.

From the above description, it is evident that the IN nodes lend themselves well to sharing among multiple operators. The best way to handle the evolving network environment and end user requirements profitably is to deploy Intelligent Network (IN) solutions that support multi-vendor, multi-network, multi-switch, multi-service and multi-transport environment, are rich in features, future safe and ready to move toward the Next Generation Networks.

Interconnect Exchange can be a platform that supports a multi-network, multi-switch, multi-operate and multi-service. Interconnect Exchange can support all the types of networks like Fixed, Mobile and NLD and ILD and there is no need to have a separate IN Platforms for different types of networks.

Interconnect Exchange can not only allow interfacing to different networks for providing services, but management can also be extended to fields related to customer care, such as billing systems, customer databases, fraud and complaint handling, service provisioning and integration with the service providers support system. Interconnect Exchange can even propose generic or even tailor made solutions responding to the service provider's particular requirements.

Interconnect Exchange could be interfaced to any type of SSP operation in the service provider's network. Interconnect Exchange can get further expanded to IP based networks and results in fixed-mobile-data convergence services. With the help of Interconnect Exchange a vast bouquet of IN services could also be available. Interconnect Exchange can enable operators to generate additional revenue streams by providing new value added services to their customers.

The interconnect usage charge can therefore be applied as mandated by TRAI's IUC Regulations. The origination charge payable to the access provider should be forborne. The charges for SCP hosting can be mutually worked out by the cooperating operators. Inter-Carrier Billing Clearing House could facilitate the Charging, billing and settlement functions.

ANNEX III

Number Portability – Interconnect Clearing House Solutions

Number portability changes a phone number into a virtual address or a name:

- Uses a routing database to map the dialed (virtual) number into a routing address
- Bifurcates the existing number plan into two identical plans : subscriber numbers and routing numbers.
- Retains existing routing plans and switch identifiers (e.g. MSC)

Some of the Number Portability types

Service Provider Portability:

- Subscriber changing serving carrier/ network operator
- Facilitates open competition between carriers by eliminating subscriber disincentive.

Location Portability :

- Subscriber changing service location
- Subscriber convenience

Service Portability :

- Subscriber changing type of service (e.g. fixed – Mobile, or mobile – VoIP

TYPE OF DATABASE USED for NUMBER PORTABILITY

Country	Introduction date	Database
Belgium	10/2000	Centralized
Czech Republic	1/2003	Centralized
Denmark	7/2001	Centralised
Finland	8/2001	Centralized
Germany	10/2002	Centralized
Greece	1/2004	Centralized
Hong Kong	3/1999	Distributed
Hungary	5/2004	Centralized
Ireland	7/2003	Centralized
Italy	6/2002	Distributed, move to Centralized DB
Netherlands	4/1999	Hybrid, move to Centralized DB
Norway	11/2001	Centralized
Portugal		Centralized
Sweden	9/2001	Centralized
U.S.	11/2003	Centralized

Clearing House can provide Centralised Data Base. It may be seen that most of the countries are either are already having a centralized database for Number Portability of various types or are migrating towards that direction.

There are a number of activities in the communication industry that can be linked to the concept of Clearing House. It include

- Number Portability Administration (Master call and signaling routing database (NPAC) for North America)

- Numbering Plan Administration (Administration of telephone numbering resources for North America & Europe)

- Internet Registry (Global provider of Internet domain names for biz, .us(US), .cn (China) and .tw (Taiwan))

- OSS Clearinghouse (Clearinghouse in US for exchange of service orders and transactions between carrier's back-office support systems (OSS))

- Digital Identity Services (Authentication and identity information exchange clearinghouse services)

ANNEX IV

ITU: G-REX CASE STUDY
on
INTERCONNECTION
for
Country ‘Erehwon’

by

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AS AN ILLUSTRATUION FOR POI CALCULATION

SECTION 1

CASE STUDY INPUTS

SECTION 1
CASE STUDY INPUTS

G-REX CASE STUDY on INTERCONNECTION

Country	:	Erehwon
Population	:	25 Million with 150,000 villages, 1 capital city, 24 other major cities

Level of Competition:

Cellular Licenses	:	3 National Licensees
Local Fixed Service Licenses	:	3 Licensees including State-owned service provider for local service
National Long Distance Services	:	2 Licensees (Can carry only Long Distance traffic); state owned service provider has one (2+1)
International Long Distance Services	:	3 Licensees (state-owned service provider has one) (3+1)

Classification of Areas

Local Areas : 250

- Each Local Area provides coverage to about 1200 Sq. Km. Area
- Within each Local Area, calls are considered as Local Calls and charged at 120 second pulse

Long Distance Areas 25

- Each Long Distance Area provides a coverage of about 12,000 Sq. Km. Area
- Inter-Local Area and Intra-Long Distance calls are charged at 60 second pulse

- Inter-Long Distance Area calls are charged at 30 second pulse

Subscriber BASE

Fixed (State-owned service provider)	:	1.5 Million
Fixed (2 new entrants)	:	0.4 million
Cellular Mobile (2 private operators)	:	1.5 million
Cellular Mobile (State-owned service provider)	:	0.5 million

Type and number of switches

Fixed Network of State-owned service provider

High Capacity Digital Switches : 30 of 40,000 lines each and installed in the main city of the Long Distance Area.

- Switches do not have any limitations on interconnection and can provide CCSS7 (Common Channel Signalling System Number 7) support.

- With additional marginal investments, Inter-Carrier CDR (Call/ Charge Data Records) based Billing support and Carrier Selection support can be provided

Digital switches : 225 of 1000 lines each installed in the main town of the local area.

- Each switch is capable of providing interconnection facilities restricted to 4 E1s (Four number of 2 Mb/s streams or 120 circuits for interconnection).

- However CCSS7 support and carrier selection are not supported,

- Each Digital Switch is parented to a High Capacity Digital Switch located at Long Distance Area city.

- Standalone transit capacities can also be installed

Rural Switches : 3000 of 250 lines with each switch having a maximum of 2 E1s (Two number of 2 Mb/s streams or 60 circuits for interconnection) installed by the state owned incumbent only.

- Each Rural Switch is parented to the Digital switch at the Local Area town or directly to High Capacity Digital Switch.

- These switches do not support CCSS7 signalling. They also do not support CDR (Call /Charge Data Records) based billing and Carrier Selection.

New Fixed Line Operators

Large Capacity Digital Switches deployed with following details:

Traffic Handling Capacity = 10000 Erlangs (Erl, which is a measure of traffic. Traffic is said to be 1 Erlang when one circuit is fully in use for a one hour duration.)

Traffic in Minutes/ day = 24 minutes
Traffic during Busy Hour (BH) = 4 minutes
= 0.067 Erlangs
Average Subscribers that can be served by the exchange with traffic of 0.067 Erlangs / Busy Hour and 70% average loading will be = 0.70* (10000)/ 0.067
= About 0.1 million

- Number of Switches by each Fixed operator at present is restricted to only three i.e., in three major cities including the capital city. As of date each new fixed operator provides services in 25 cities located in 25 Long Distance Areas.

- These switches have capability of two stage Remote Units that can be installed at Long Distance Area cities (other 22) and at Local Area towns (250).

- Licensing requirements call for Roll out in all 250 Local and 25 Long Distance areas by year 2006.

- Licensing requirements at present call for direct interconnection between all Fixed Service Providers in Local Areas.

- Principles of near end or far end handovers are presently allowed.

- Currently, new service providers can have their Points of Interconnection through their switching and/ or transmission infrastructure.

- All the switches from new entrants have CCSS7 signalling support.

- The switches are capable for Carrier Selection.

- CDR (Call/ Charge Data Records) based billing support is available.

Private Cellular Mobile Operators

In case of Cellular Mobile Licensees, MSCs (Mobile Switching Centres) are located in the Capital Region. These switches also are capable of supporting 50,000 to 0.1 million subscribers.

Point of Interconnections as per existing Licensing Conditions were framed with new entrants expected to deploy their networks as mirror image of incumbent's network.

Between Fixed Line Operators :At Local Area Level

Between Fixed and Mobile :At Long Distance Area Level

Between Fixed and National Long Distance Operators:
At Long Distance Area Level with arrangements to pick up traffic from Local Areas

Between Fixed and International Long Distance Operators:
At Long Distance Area Level

Between Mobile and National Long Distance Operators:
At MSCs (Mobile Switching Centres)

Between Mobile and International Long Distance Operators:

	At MSCs directly or through National Long Distance Operators
Between Mobile Operators	At MSCs (Mobile Switching Centres)

Interconnection Facts

- New entrants do not have any major plans to enter rural areas.
- Most of the interconnection requirements are not likely to be technically feasible in the incumbent's network at Local Area Level. State owned operator could be required to set up additional transit capacities for interconnection requirements.
- Cost based interconnection usage charge regime has been planned
- Carrier Selection has also been planned in a phased manner
- Inter-Carrier Billing based on CDRs is planned

Annual Subscriber Growth Rate

Annual Subscriber growth rate in the Fixed Line Network is 5% and that in the Cellular Mobile is 30% for the last three years. Similar trends are likely for the next 5 years. Fixed Line Operators from this year have been permitted to provide CDMA based Local services also.

Responses are Requested on:

a) Calculate the number of Points Of Interconnection (POIs) for the above scenario in line with licensing requirements.

b) In the above scenario, kindly comment on whether there is a need to change the rules for provision of POIs? If yes, please provide the reasons.

SECTION 2

POI Calculations :

Case Study Solution

SECTION 2

POI Calculations : GREX Case Study

1. GREX Case Study was posted on the GREX about 3 months back. I am posting on GREX my POI calculations. It may be noted that I have made some minor amendments in the Case Study Inputs also based on assumption of successful completion of Roll Out requirements by all the new Service Providers. Revised Word Files as amended in English, Spanish and French are also enclosed. These replace the earlier Files.

2. SWITCH ARHITECURE Details

Section 3.1 provides detailed calculations on the deployment of the Switches by the Fixed Incumbent, two fixed operators (Fixed Private 1 and Fixed Private 2) for fixed services in Local and Intra-Long distance Area services. Incumbent is providing services in Rural Areas also. Details of the subscriber base are also given. Similar details are provided for the Cellular incumbent and two private Cellular Operators (Cellular Private 1 and Cellular Private 2).

3. Points of Interconnection (POI) Calculations

POI Calculations have to be based on the strict implementation of the Routing Principles established in the existing Licensing regime. Some of the POIs will involve Transmission POIs only also. Incumbent would like new entrants to abide by the existing architecture only even if it is inefficient based on the new architecture of the new entrants. The existing regime provides for POIs as per following details:

i) Between Fixed Line Operators :At Local Area Level

ii) Between Fixed and Mobile :At Long Distance Area Level

iii) Between Fixed and National Long Distance Operators:

a) At Long Distance Area Level while NLDO required to pay the carriage from LD Area to Local Area

b) At Local Area

iv) Between Fixed and International Long Distance Operators:
At Long Distance Area Level

v) Between Mobile and National Long Distance Operators:
At MSCs (Mobile Switching Centres) [i.e. Long Distance Area]

vi) Between Mobile and International Long Distance Operators:

		At MSCs directly or through National Long Distance Operators
vii)	Between Mobile Operators	At MSCs (Mobile Switching Centres) [i.e. Long Distance Area]

It will be seen that in 3 (iii) there are two options a) and b). If option a) is exercised, the relevant calculations are available in Section 3.4 and 3.5 i.e. NLD POI in Long Distance Area. If option b) is functional, relevant calculations are available in section 3.2 and 3.3 i.e. NLD POIs in Local Area.

3. POI Calculations with NLD POIs in Local Area

Detailed POI Calculations with NLD POIs in Local Area as per existing arrangement are available in Section 3.2.

a) Long Distance Area POIs

It will be seen in Figure I that in each of the 25 Long Distance Area, Fixed Incumbent has 12 Interconnection POIs with

- Fixed Private 1
- Fixed Private 2
- Cellular Incumbent
- Cellular Private 1
- Cellular Private 2
- NLD (National Long Distance) Incumbent
- NLD Private 1
- NLD Private 2
- ILD (International Long Distance) Incumbent
- ILD Private 1
- ILD Private 2
- ILD Private 3

Similar will be the situation for Fixed Private 1 and Fixed Private 2, Cellular Incumbent, Cellular Private1 and Cellular Private 2 operators. Each Interconnection involves two network operators i.e. one operator routing his outgoing inter-operator traffic to other operator. For the routing of the Inter-Operator traffic, ports are required to be provided in their switches by both operators. In certain cases traffic may not be delivered at the switch level but any other physical or notional point between the telecommunications networks of the two network operators as per the agreed arrangements (Transmission POIs). Each POI for the calculations made is associated with the outgoing traffic. As such between any two operators there would be two POIs corresponding to the outgoing traffic of each operator.

As far as NLDOs are concerned they need at least 6 POIs at Long Distance Area level with :

- Fixed Incumbent
- Fixed Private 1
- Fixed Private 2
- Cellular Incumbent
- Cellular Private 1
- Cellular Private 2

NLDO to NLDO Interconnections are not defined in the License conditions.

b) Local Area POIs

Within each Long Distance Area, there are 9 Local Areas. Fixed Incumbent will then have 5 POIs in the Local Area (Figure II) with

- Fixed Private 1
- Fixed Private 2
- NLDO Incumbent
- NLDO Private 1
- NLDO Private 2

Fixed Incumbent will have 300 POIs in Long Distance Area city and another 1125 POIs covering Local Areas. Similar will be the situation for Fixed Private 1 and Fixed Private 2 operators.

Since Cellular Networks presently do not have POIs at Local Area level, POIs are restricted to 300 POIs at Long Distance Area level.

NLDOs are having 150 POIs at Long Distance Area level and 675 at Local Area. In case of ILDOs only 150 POIs are listed at Long Distance Area level.

A total of 8250 POIs are calculated.

In the capital city of the country, NLDOS and ILDOs also would have 7*6 = 42 POIs in case NLDOs are doing the transit functions for Access Providers with respect to International traffic.

3.2 POI Calculation with NLD POIs in Long Distance Area

The detailed calculations regarding POI with NLD POI in Long Distance Area are given in section 3.4. The calculations are self explanatory as description in Para 3.1 above would apply. In this case the only difference is that POIs at Local Area would involve only the Fixed Service Providers and not NLDOs.

A total of 4200 POIs are calculated.

5. **Do we need a change in the existing Interconnection Regime?**

For the answer to the Question, I would like to draw the attention towards the "Report on Interconnection" based on the output of the Project Group on Interconnection for ITU-D's Question 6-1/1 which has now been approved by TDAG on 23rd January 2004. Web site details are as below:

http://www.itu.int/ITU-D/pdf/B406011-1_057REV1-en.doc

http://www.itu.int/ITU-D/pdf/B406011-1_057ADD1REV1-1-en.doc

Annex VI of the Addendum document needs to be seen.

POI calculations are also available by using Interconnect Exchange. Section 3.3 provides the detailed POI calculation with NLD POIs in Local Area using Interconnect Exchange and Section 3.5 provides the detailed POI calculation with NLD POIs in Long Distance Area using one Interconnect Exchange in each Long Distance Area. It shows that for Inter-Operator traffic, Interconnect exchange will need interconnection capacities through 325 POIs only. Figure III may be seen. In this case 325 circuit administration points would be required in the Networks of the Licensed Service Providers for Inter-Network traffic routing. Equal number of 325 circuit administration points would be required in the interconnect exchange also. Based on Erlang Formula with high traffic involved in each circuit group, traffic of 0.9 Erlangs per circuit should be feasible. However with mesh type of interconnection, circuit groups are far too many and Erlang formula calculations may lead to traffic of 0.4 to 0.5 Erlangs per circuit.

It is established through this study as to how POIs could be reduced from 8250 to just 325, if Interconnect Exchange is used. Section 5 gives the summary of the reduction in number of E1s/ PCMs (2 Mb/s streams) for each type of Service Provider based on the Licensing Regime prescribed for the Case Study. The study establishes that Interconnection capacities can be reduced by a factor of almost 50% (48.81%) for the Case study under consideration through one of the possible implementation option with Incumbent providing the Interconnect Exchange. In the transmission media, number of Circuit-KMs would see a further steeper reduction.

Options like Consortium of operators or third party Interconnect exchange cum Inter-Carrier settlement through Interconnect Clearing House are also possible.

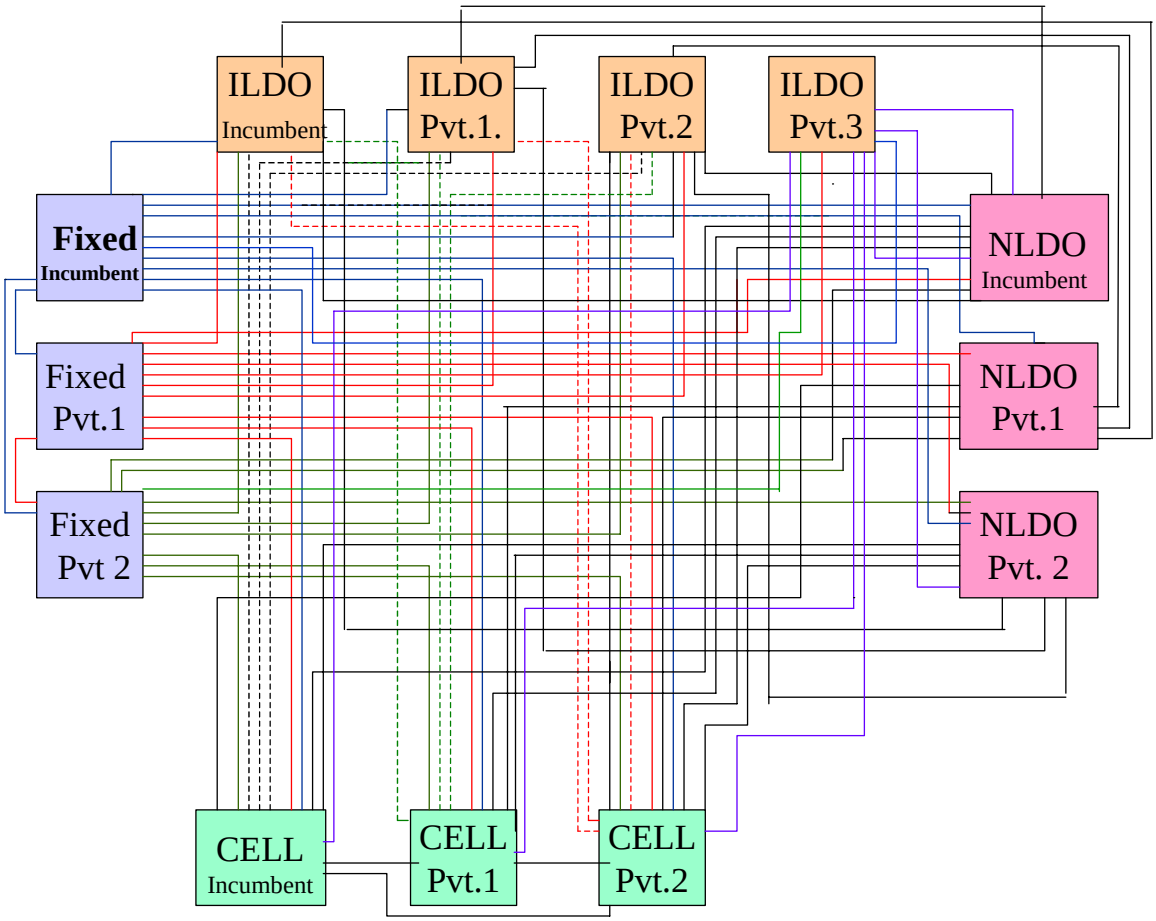
In addition to normal Interconnection requirements, Interconnect Exchanges with in-built Inter-Carrier Clearing House could further facilitate various other issues like

- **Inter-Carrier Billing**
- **Number Portability,**
- **Carrier Selection,**
- **IN Services in multi-operator multi-service scenario,**

- **Simplified Inter-Carrier Usage Charge regime etc.**
- **Reduction in Port Charges**
- **Reduction in Interconnection costs**
- **Reduction in Waiting Period for Interconnection capacities.**
- **Funds saved would be able to service capital requirements for more e**quipment and resultant increase in tele-density.

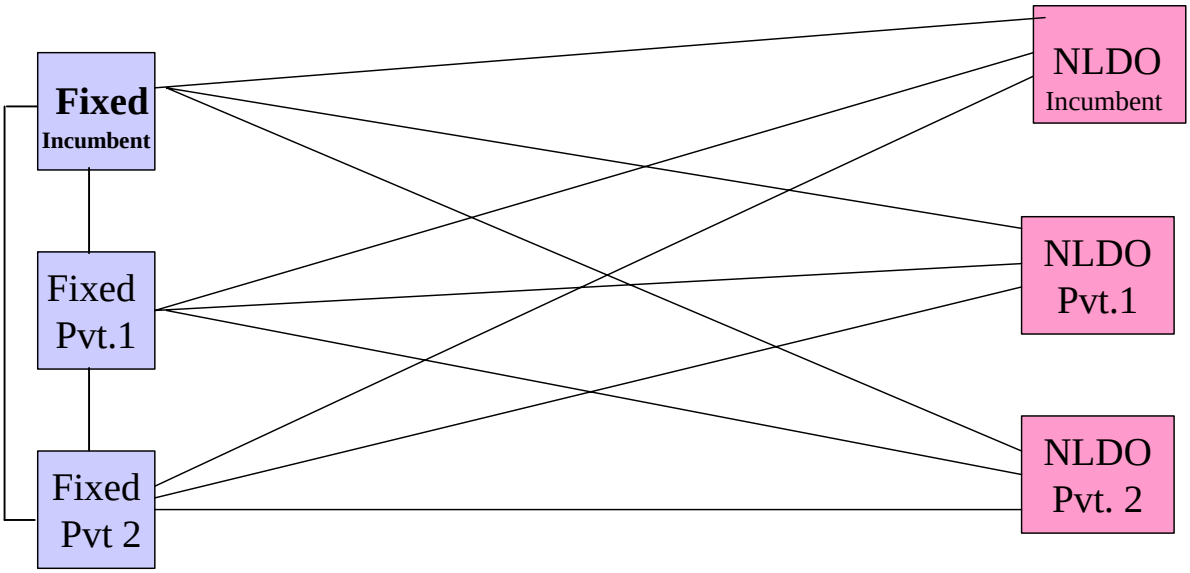
The solution of course is dependent on the level of competition that is prevalent or likely in any country and also the level of expansion. In certain countries where annual growth in the subscriber base is likely to be nominal or wherein adequate interconnection capacities are already available, there may not be gains with the proposed option.

Figure I : Interconnection as per License in each Long Distance Area



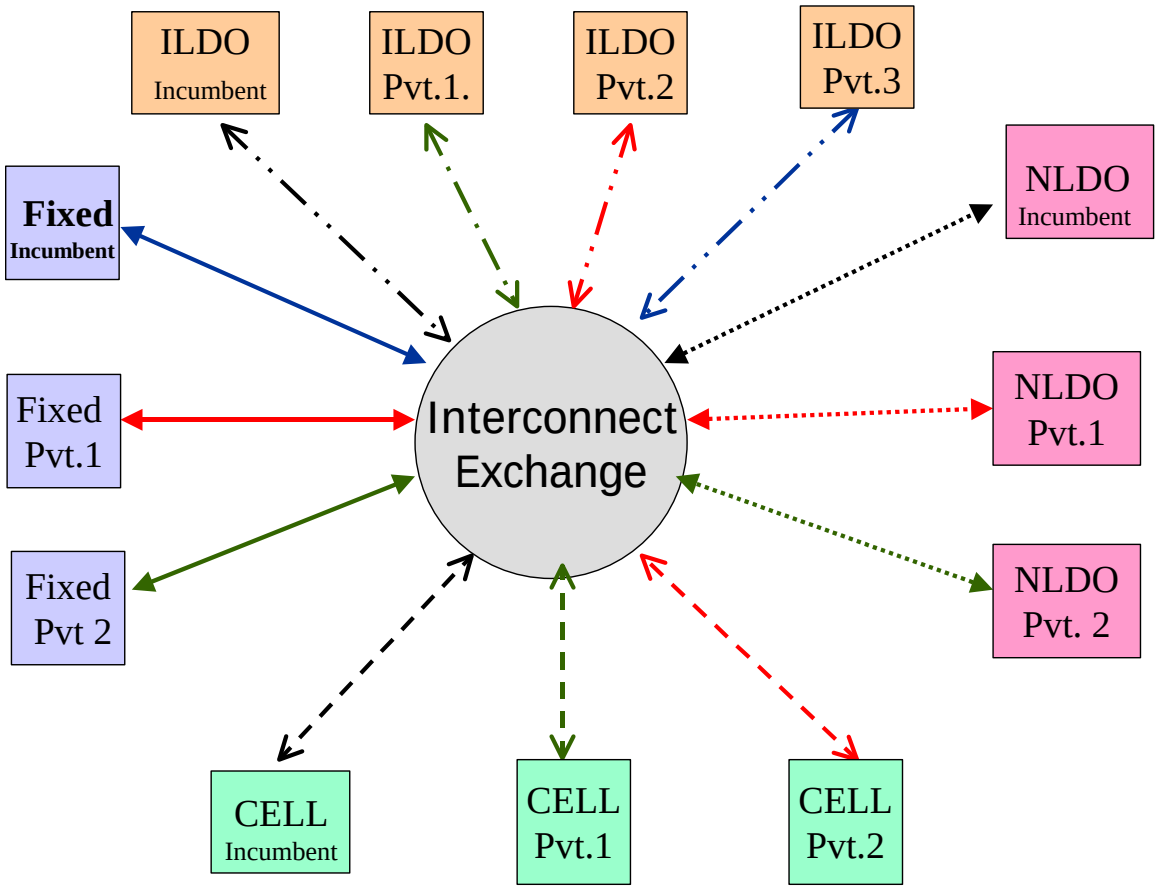
Note: Each line in the figure represents two Circuit Groups i.e. Outgoing traffic for each operator

Figure II: Interconnection in each Local Area



Note: Each line in the figure represents two Circuit Groups i.e. Outgoing traffic for each operator

Figure III: Proposed Interconnection scenario using Interconnect Exchange



SECTION 3

Calculations Showing Details Regarding The Solution

Section 3.1

Switch Architecture Details

SERVICE PROVIDER	Name of the Service Area	LONG DISTANCE AREA MAIN CITY				LOCAL AREAS in each LONG DISTANCE AREA				RURAL AREA under each Long Distance/ Local Area					Total Switch Capacity in each LD Area
		Switch Capacity at Long Distance Area Centre city	No. of Switch in the Long Distance Area Centre city	Switch Capacity at Long Distance Area Centre city	Subscribers in Long Distance Area Central city	Capacity of Switch at Local Area	No of Local Area	Switch Capacity at Local Area	Subscribers in each local area	Capacity of Switch in Rural Area	No of Rural Exchanges in each Local Area	No of Rural Switch in each Long Distance Area	Switch Capacity in Rural Area	Subscribers : Rural	
Fixed Incumbent	Long Distance Area 1	40000	4	160000	100000	1000	9	9000	8700	250	13	117	29250	20000	198250
	Long Distance Area 2	40000	2	80000	66000	1000	9	9000	8700	250	14	126	31500	20000	120500
	Long Distance Area 3	40000	2	80000	66500	1000	9	9000	8700	250	13	117	29250	20000	118250
	Long Distance Area 4	40000	1	40000	25000	1000	9	9000	8700	250	13	117	29250	20000	78250
	Long Distance Area 5	40000	1	40000	25000	1000	9	9000	8700	250	13	117	29250	20000	78250
	Long Distance Area 6	40000	1	40000	25000	1000	9	9000	8700	250	13	117	29250	20000	78250
	Long Distance Area 7	40000	1	40000	25000	1000	9	9000	8700	250	13	117	29250	20000	78250
	Long Distance Area 8	40000	1	40000	25000	1000	9	9000	8700	250	13	117	29250	20000	78250
	Long Distance Area 9	40000	1	40000	25000	1000	9	9000	8700	250	13	117	29250	20000	78250
	Long Distance Area 10	40000	1	40000	25000	1000	9	9000	8700	250	13	117	29250	20000	78250
	Long Distance Area 11	40000	1	40000	25000	1000	9	9000	8700	250	13	117	29250	20000	78250
	Long Distance Area 12	40000	1	40000	25000	1000	9	9000	8700	250	13	117	29250	20000	78250
	Long Distance Area 13	40000	1	40000	25000	1000	9	9000	8700	250	13	117	29250	20000	78250
	Long Distance Area 14	40000	1	40000	25000	1000	9	9000	8700	250	13	117	29250	20000	78250
	Long Distance Area 15	40000	1	40000	25000	1000	9	9000	8700	250	13	117	29250	20000	78250
	Long Distance Area 16	40000	1	40000	25000	1000	9	9000	8700	250	13	117	29250	20000	78250
	Long Distance Area 17	40000	1	40000	25000	1000	9	9000	8700	250	13	117	29250	20000	78250
	Long Distance Area 18	40000	1	40000	25000	1000	9	9000	8700	250	13	120	30000	20000	79000
	Long Distance Area 19	40000	1	40000	25000	1000	9	9000	8700	250	14	126	31500	20000	80500
	Long Distance Area 20	40000	1	40000	25000	1000	9	9000	8700	250	14	126	31500	20000	80500
	Long Distance Area 21	40000	1	40000	25000	1000	9	9000	8700	250	14	126	31500	20000	80500
	Long Distance Area 22	40000	1	40000	25000	1000	9	9000	8700	250	14	126	31500	20000	80500
	Long Distance Area 23	40000	1	40000	25000	1000	9	9000	8700	250	14	126	31500	20000	80500
	Long Distance Area 24	40000	1	40000	25000	1000	9	9000	8700	250	14	126	31500	20000	80500
	Long Distance Area 25	40000	1	40000	25000	1000	9	9000	8700	250	14	126	31500	20000	80500
		1000000	30	1200000	782500		225	225000	217500			3000	750000	500000	2175000

SERVICE PROVIDER	Name of the Service Area	LONG DISTANCE AREA MAIN CITY				LOCAL AREAS in each LONG DISTANCE AREA				RURAL AREA under each Local Area					Total Switch Capacity in each LD Area
		Switch Capacity at Long Distance Area Centre city	No. of Switch in the Long Distance Area Centre city	Switch Capacity at Long Distance Area Centre city incuding RSUs	Subscribers in Long Distance Area Central city	Capacity of Switch (second stage RSU) at Local Area	No of Local Area	Switch Capacity at Local Area including second stage remote unit	Subscribers in each local area	Capacity of Switch in Rural Area		No of Switch in Rural Area	Switch Capacity in Rural Area	Subscribers : Rural	
Fixed Private 1	Long Distance Area 1	100000	1	100000	78600	500	9	4500	1800						104500
	Long Distance Area 2	100000	1	45000	14000	500	9	4500	1800						49500
	Long Distance Area 3	100000	1	45000	14000	500	9	4500	1800						49500
	Long Distance Area 4			5000	2200	500	9	4500	1800						9500
	Long Distance Area 5			5000	2200	500	9	4500	1800						9500
	Long Distance Area 6			5000	2200	500	9	4500	1800						9500
	Long Distance Area 7			5000	2200	500	9	4500	1800						9500
	Long Distance Area 8			5000	2200	500	9	4500	1800						9500
	Long Distance Area 9			5000	2200	500	9	4500	1800						9500
	Long Distance Area 10			5000	2200	500	9	4500	1800						9500
	Long Distance Area 11			5000	2200	500	9	4500	1800						9500
	Long Distance Area 12			5000	2200	500	9	4500	1800						9500
	Long Distance Area 13			5000	2200	500	9	4500	1800						9500
	Long Distance Area 14			5000	2200	500	9	4500	1800						9500
	Long Distance Area 15			5000	2200	500	9	4500	1800						9500
	Long Distance Area 16			5000	2200	500	9	4500	1800						9500
	Long Distance Area 17			5000	2200	500	9	4500	1800						9500
	Long Distance Area 18			5000	2200	500	9	4500	1800						9500
	Long Distance Area 19			5000	2200	500	9	4500	1800						9500
	Long Distance Area 20			5000	2200	500	9	4500	1800						9500
	Long Distance Area 21			5000	2200	500	9	4500	1800						9500
	Long Distance Area 22			5000	2200	500	9	4500	1800						9500
	Long Distance Area 23			5000	2200	500	9	4500	1800						9500
	Long Distance Area 24			5000	2200	500	9	4500	1800						9500
	Long Distance Area 25			5000	2200	500	9	4500	1800						9500
		300000	3	300000	155000	12500	225	112500	45000				0	0	412500

SERVICE PROVIDER	Name of the Service Area	LONG DISTANCE AREA MAIN CITY				LOCAL AREAS in each LONG DISTANCE AREA				RURAL AREA under each Long Distance/ Local Area					Total Switch Capacity in each LD Area
		Switch Capacity at Long Distance Area Centre city	No. of Switch in the Long Distance Area Centre city	Switch Capacity at Long Distance Area Centre city	Subscribers in Long Distance Area Central city	Capacity of Switch at Local Area	No of Local Area	Switch Capacity at Local Area	Subscribers in each local area	Capacity of Switch in Rural Area	No of Rural Exchanges in each Local Area	No of Rural Switch in each Long Distance Area	Switch Capacity in Rural Area	Subscribers : Rural	
Fixed Private 2	Long Distance Area 1	100000	1	100000	78600	500	9	4500	1800						104500
	Long Distance Area 2	100000	1	45000	14000	500	9	4500	1800						49500
	Long Distance Area 3	100000	1	45000	14000	500	9	4500	1800						49500
	Long Distance Area 4			5000	2200	500	9	4500	1800						9500
	Long Distance Area 5			5000	2200	500	9	4500	1800						9500
	Long Distance Area 6			5000	2200	500	9	4500	1800						9500
	Long Distance Area 7			5000	2200	500	9	4500	1800						9500
	Long Distance Area 8			5000	2200	500	9	4500	1800						9500
	Long Distance Area 9			5000	2200	500	9	4500	1800						9500
	Long Distance Area 10			5000	2200	500	9	4500	1800						9500
	Long Distance Area 11			5000	2200	500	9	4500	1800						9500
	Long Distance Area 12			5000	2200	500	9	4500	1800						9500
	Long Distance Area 13			5000	2200	500	9	4500	1800						9500
	Long Distance Area 14			5000	2200	500	9	4500	1800						9500
	Long Distance Area 15			5000	2200	500	9	4500	1800						9500
	Long Distance Area 16			5000	2200	500	9	4500	1800						9500
	Long Distance Area 17			5000	2200	500	9	4500	1800						9500
	Long Distance Area 18			5000	2200	500	9	4500	1800						9500
	Long Distance Area 19			5000	2200	500	9	4500	1800						9500
	Long Distance Area 20			5000	2200	500	9	4500	1800						9500
	Long Distance Area 21			5000	2200	500	9	4500	1800						9500
	Long Distance Area 22			5000	2200	500	9	4500	1800						9500
	Long Distance Area 23			5000	2200	500	9	4500	1800						9500
	Long Distance Area 24			5000	2200	500	9	4500	1800						9500
	Long Distance Area 25			5000	2200	500	9	4500	1800						9500
		300000	3	300000	155000	12500	225	112500	45000				0	0	412500

SERVICE PROVIDER	Name of the Service Area	LONG DISTANCE AREA MAIN CITY				LOCAL AREAS in each LONG DISTANCE AREA				RURAL AREA under each Long Distance/ Local Area					Total Switch Capacity in each LD Area
		Switch Capacity at Long Distance Area Centre city	No. of Switch in the Long Distance Area Centre city	Switch Capacity at Long Distance Area Centre city	Subscribers in Long Distance Area Central city	Capacity of Switch at Local Area	No of Local Area	Switch Capacity at Local Area	Subscribers in each local area	Capacity of Switch in Rural Area	No of Rural Exchanges in each Local Area	No of Rural Switch in each Long Distance Area	Switch Capacity in Rural Area	Subscribers : Rural	
Cellular Incumbent	Long Distance Area 1	50000	1	100000	90000										100000
	Long Distance Area 2	50000	1	50000	40000										50000
	Long Distance Area 3	50000	1	50000	40000										50000
	Long Distance Area 4	50000	1	50000	15000										50000
	Long Distance Area 5	50000	1	50000	15000										50000
	Long Distance Area 6	50000	1	50000	15000										50000
	Long Distance Area 7	50000	1	50000	15000										50000
	Long Distance Area 8	50000	1	50000	15000										50000
	Long Distance Area 9	50000	1	50000	15000										50000
	Long Distance Area 10	50000	1	50000	15000										50000
	Long Distance Area 11	50000	1	50000	15000										50000
	Long Distance Area 12	50000	1	50000	15000										50000
	Long Distance Area 13	50000	1	50000	15000										50000
	Long Distance Area 14	50000	1	50000	15000										50000
	Long Distance Area 15	50000	1	50000	15000										50000
	Long Distance Area 16	50000	1	50000	15000										50000
	Long Distance Area 17	50000	1	50000	15000										50000
	Long Distance Area 18	50000	1	50000	15000										50000
	Long Distance Area 19	50000	1	50000	15000										50000
	Long Distance Area 20	50000	1	50000	15000										50000
	Long Distance Area 21	50000	1	50000	15000										50000
	Long Distance Area 22	50000	1	50000	15000										50000
	Long Distance Area 23	50000	1	50000	15000										50000
	Long Distance Area 24	50000	1	50000	15000										50000
	Long Distance Area 25	50000	1	50000	15000										50000
		1250000	25	1300000	500000			0	0				0	0	1300000

SERVICE PROVIDER	Name of the Service Area	LONG DISTANCE AREA MAIN CITY				LOCAL AREAS in each LONG DISTANCE AREA				RURAL AREA under each Long Distance/ Local Area					Total Switch Capacity in each LD Area
		Switch Capacity at Long Distance Area Centre city	No. of Switch in the Long Distance Area Centre city	Switch Capacity at Long Distance Area Centre city	Subscribers in Long Distance Area Central city	Capacity of Switch at Local Area	No of Local Area	Switch Capacity at Local Area	Subscribers in each local area	Capacity of Switch in Rural Area	No of Rural Exchanges in each Local Area	No of Rural Switch in each Long Distance Area	Switch Capacity in Rural Area	Subscribers : Rural	
Cellular Private 1	Long Distance Area 1	100000	1	100000	90000										100000
	Long Distance Area 2	50000	1	50000	55000										50000
	Long Distance Area 3	50000	1	50000	55000										50000
	Long Distance Area 4	50000	1	50000	25000										50000
	Long Distance Area 5	50000	1	50000	25000										50000
	Long Distance Area 6	50000	1	50000	25000										50000
	Long Distance Area 7	50000	1	50000	25000										50000
	Long Distance Area 8	50000	1	50000	25000										50000
	Long Distance Area 9	50000	1	50000	25000										50000
	Long Distance Area 10	50000	1	50000	25000										50000
	Long Distance Area 11	50000	1	50000	25000										50000
	Long Distance Area 12	50000	1	50000	25000										50000
	Long Distance Area 13	50000	1	50000	25000										50000
	Long Distance Area 14	50000	1	50000	25000										50000
	Long Distance Area 15	50000	1	50000	25000										50000
	Long Distance Area 16	50000	1	50000	25000										50000
	Long Distance Area 17	50000	1	50000	25000										50000
	Long Distance Area 18	50000	1	50000	25000										50000
	Long Distance Area 19	50000	1	50000	25000										50000
	Long Distance Area 20	50000	1	50000	25000										50000
	Long Distance Area 21	50000	1	50000	25000										50000
	Long Distance Area 22	50000	1	50000	25000										50000
	Long Distance Area 23	50000	1	50000	25000										50000
	Long Distance Area 24	50000	1	50000	25000										50000
	Long Distance Area 25	50000	1	50000	25000										50000
		1300000	25	1300000	750000			0	0				0	0	1300000

SERVICE PROVIDER	Name of the Service Area	LONG DISTANCE AREA MAIN CITY				LOCAL AREAS in each LONG DISTANCE AREA				RURAL AREA under each Long Distance/ Local Area					Total Switch Capacity in each LD Area
		Switch Capacity at Long Distance Area Centre city	No. of Switch in the Long Distance Area Centre city	Switch Capacity at Long Distance Area Centre city	Subscribers in Long Distance Area Central city	Capacity of Switch at Local Area	No of Local Area	Switch Capacity at Local Area	Subscribers in each local area	Capacity of Switch in Rural Area	No of Rural Exchanges in each Local Area	No of Rural Switch in each Long Distance Area	Switch Capacity in Rural Area	Subscribers : Rural	
Cellular Private 2	Long Distance Area 1	100000	1	100000	90000										100000
	Long Distance Area 2	50000	1	50000	55000										50000
	Long Distance Area 3	50000	1	50000	55000										50000
	Long Distance Area 4	50000	1	50000	25000										50000
	Long Distance Area 5	50000	1	50000	25000										50000
	Long Distance Area 6	50000	1	50000	25000										50000
	Long Distance Area 7	50000	1	50000	25000										50000
	Long Distance Area 8	50000	1	50000	25000										50000
	Long Distance Area 9	50000	1	50000	25000										50000
	Long Distance Area 10	50000	1	50000	25000										50000
	Long Distance Area 11	50000	1	50000	25000										50000
	Long Distance Area 12	50000	1	50000	25000										50000
	Long Distance Area 13	50000	1	50000	25000										50000
	Long Distance Area 14	50000	1	50000	25000										50000
	Long Distance Area 15	50000	1	50000	25000										50000
	Long Distance Area 16	50000	1	50000	25000										50000
	Long Distance Area 17	50000	1	50000	25000										50000
	Long Distance Area 18	50000	1	50000	25000										50000
	Long Distance Area 19	50000	1	50000	25000										50000
	Long Distance Area 20	50000	1	50000	25000										50000
	Long Distance Area 21	50000	1	50000	25000										50000
	Long Distance Area 22	50000	1	50000	25000										50000
	Long Distance Area 23	50000	1	50000	25000										50000
	Long Distance Area 24	50000	1	50000	25000										50000
	Long Distance Area 25	50000	1	50000	25000										50000
		1300000	25	1300000	750000			0	0				0	0	1300000
Summary : Fixed Services		1600000	36		1092500			450000	307500				750000	500000	3000000
Summary : Cellular Services		3850000	75		2000000			0	0				0	0	3900000
Summary : Fixed + Cellular		5450000	111		3092500			450000	307500				750000	500000	6900000

Section 3.2

POI Calculations with

NLD POIs in Local Area :

Existing Arrangement

SERVICE PROVIDER	Name of the Service Area	INTER-OPERATOR POIs					
		No. of POIs (4 for ILDOs, 3 for NLDOs, 3 for Cellular and 2 for Fixed) in Long Distance Area Centre city	No of POIs in each Local Area (3 for NLDOs and 2 for Fixed)	Number of Local Areas in each Long Distance Area	No of POIs in each Long Distance Area for each Local Area	Inter-Operator POIs	
Fixed Incumbent	Long Distance Area 1	12	5	9	45	57	
	Long Distance Area 2	12	5	9	45	57	
	Long Distance Area 3	12	5	9	45	57	
	Long Distance Area 4	12	5	9	45	57	
	Long Distance Area 5	12	5	9	45	57	
	Long Distance Area 6	12	5	9	45	57	
	Long Distance Area 7	12	5	9	45	57	
	Long Distance Area 8	12	5	9	45	57	
	Long Distance Area 9	12	5	9	45	57	
	Long Distance Area 10	12	5	9	45	57	
	Long Distance Area 11	12	5	9	45	57	
	Long Distance Area 12	12	5	9	45	57	
	Long Distance Area 13	12	5	9	45	57	
	Long Distance Area 14	12	5	9	45	57	
	Long Distance Area 15	12	5	9	45	57	
	Long Distance Area 16	12	5	9	45	57	
	Long Distance Area 17	12	5	9	45	57	
	Long Distance Area 18	12	5	9	45	57	
	Long Distance Area 19	12	5	9	45	57	
	Long Distance Area 20	12	5	9	45	57	
	Long Distance Area 21	12	5	9	45	57	
	Long Distance Area 22	12	5	9	45	57	
	Long Distance Area 23	12	5	9	45	57	
	Long Distance Area 24	12	5	9	45	57	
	Long Distance Area 25	12	5	9	45	57	
		300			1125	1425	1425

SERVICE PROVIDER	Name of the Service Area	INTER-OPERATOR POIs					
		No. of POIs (4 for ILDOs, 3 for NLDOs, 3 for Cellular and 2 for Fixed) in Long Distance Area Centre city	No of POIs in each Local Area (3 for NLDOs and 2 for Fixed)	Number of Local Areas in each Long Distance Area	No of POIs in each Long Distance Area for each Local Area	Inter-Operator POIs	
Fixed Private 1	Long Distance Area 1	12	5	9	45	57	
	Long Distance Area 2	12	5	9	45	57	
	Long Distance Area 3	12	5	9	45	57	
	Long Distance Area 4	12	5	9	45	57	
	Long Distance Area 5	12	5	9	45	57	
	Long Distance Area 6	12	5	9	45	57	
	Long Distance Area 7	12	5	9	45	57	
	Long Distance Area 8	12	5	9	45	57	
	Long Distance Area 9	12	5	9	45	57	
	Long Distance Area 10	12	5	9	45	57	
	Long Distance Area 11	12	5	9	45	57	
	Long Distance Area 12	12	5	9	45	57	
	Long Distance Area 13	12	5	9	45	57	
	Long Distance Area 14	12	5	9	45	57	
	Long Distance Area 15	12	5	9	45	57	
	Long Distance Area 16	12	5	9	45	57	
	Long Distance Area 17	12	5	9	45	57	
	Long Distance Area 18	12	5	9	45	57	
	Long Distance Area 19	12	5	9	45	57	
	Long Distance Area 20	12	5	9	45	57	
	Long Distance Area 21	12	5	9	45	57	
	Long Distance Area 22	12	5	9	45	57	
	Long Distance Area 23	12	5	9	45	57	
	Long Distance Area 24	12	5	9	45	57	
	Long Distance Area 25	12	5	9	45	57	
						1425	1425

SERVICE PROVIDER	Name of the Service Area	INTER-OPERATOR POIs					
		No. of POIs (4 for ILDOs, 3 for NLDOs, 3 for Cellular and 2 for Fixed) in Long Distance Area Centre city	No of POIs in each Local Area (3 for NLDOs and 2 for Fixed)	Number of Local Areas in each Long Distance Area	No of POIs in each Long Distance Area for each Local Area	Inter-Operator POIs	
Fixed Private 2	Long Distance Area 1	12	5	9	45	57	
	Long Distance Area 2	12	5	9	45	57	
	Long Distance Area 3	12	5	9	45	57	
	Long Distance Area 4	12	5	9	45	57	
	Long Distance Area 5	12	5	9	45	57	
	Long Distance Area 6	12	5	9	45	57	
	Long Distance Area 7	12	5	9	45	57	
	Long Distance Area 8	12	5	9	45	57	
	Long Distance Area 9	12	5	9	45	57	
	Long Distance Area 10	12	5	9	45	57	
	Long Distance Area 11	12	5	9	45	57	
	Long Distance Area 12	12	5	9	45	57	
	Long Distance Area 13	12	5	9	45	57	
	Long Distance Area 14	12	5	9	45	57	
	Long Distance Area 15	12	5	9	45	57	
	Long Distance Area 16	12	5	9	45	57	
	Long Distance Area 17	12	5	9	45	57	
	Long Distance Area 18	12	5	9	45	57	
	Long Distance Area 19	12	5	9	45	57	
	Long Distance Area 20	12	5	9	45	57	
	Long Distance Area 21	12	5	9	45	57	
	Long Distance Area 22	12	5	9	45	57	
	Long Distance Area 23	12	5	9	45	57	
	Long Distance Area 24	12	5	9	45	57	
	Long Distance Area 25	12	5	9	45	57	
		300			1125	1425	1425

SERVICE PROVIDER	Name of the Service Area	INTER-OPERATOR POIs					
		No. of POIs (4 for ILDOs, 3 for NLDO, 2 for Cellular and 3 for Fixed) in Long Distance Area Centre city	No of POIs in each Local Area	Number of Local Areas in each Long Distance Area	No of POIs in each Long Distance Area for each Local Area	Inter-Operator POIs	
Cellular Incumbent	Long Distance Area 1	12	0	9	0	12	
	Long Distance Area 2	12	0	9	0	12	
	Long Distance Area 3	12	0	9	0	12	
	Long Distance Area 4	12	0	9	0	12	
	Long Distance Area 5	12	0	9	0	12	
	Long Distance Area 6	12	0	9	0	12	
	Long Distance Area 7	12	0	9	0	12	
	Long Distance Area 8	12	0	9	0	12	
	Long Distance Area 9	12	0	9	0	12	
	Long Distance Area 10	12	0	9	0	12	
	Long Distance Area 11	12	0	9	0	12	
	Long Distance Area 12	12	0	9	0	12	
	Long Distance Area 13	12	0	9	0	12	
	Long Distance Area 14	12	0	9	0	12	
	Long Distance Area 15	12	0	9	0	12	
	Long Distance Area 16	12	0	9	0	12	
	Long Distance Area 17	12	0	9	0	12	
	Long Distance Area 18	12	0	9	0	12	
	Long Distance Area 19	12	0	9	0	12	
	Long Distance Area 20	12	0	9	0	12	
	Long Distance Area 21	12	0	9	0	12	
	Long Distance Area 22	12	0	9	0	12	
	Long Distance Area 23	12	0	9	0	12	
	Long Distance Area 24	12	0	9	0	12	
	Long Distance Area 25	12	0	9	0	12	
		300			0	300	300

SERVICE PROVIDER	Name of the Service Area	INTER-OPERATOR POIs					
		No. of POIs (4 for ILDOs, 3 for NLDOs, 2 for Cellular and 3 for Fixed) in Long Distance Area Centre city	No of POIs in each Local Area	Number of Local Areas in each Long Distance Area	No of POIs in each Long Distance Area for each Local Area	Inter-Operator POIs	
Cellular Private 1	Long Distance Area 1	12	0	9	0	12	
	Long Distance Area 2	12	0	9	0	12	
	Long Distance Area 3	12	0	9	0	12	
	Long Distance Area 4	12	0	9	0	12	
	Long Distance Area 5	12	0	9	0	12	
	Long Distance Area 6	12	0	9	0	12	
	Long Distance Area 7	12	0	9	0	12	
	Long Distance Area 8	12	0	9	0	12	
	Long Distance Area 9	12	0	9	0	12	
	Long Distance Area 10	12	0	9	0	12	
	Long Distance Area 11	12	0	9	0	12	
	Long Distance Area 12	12	0	9	0	12	
	Long Distance Area 13	12	0	9	0	12	
	Long Distance Area 14	12	0	9	0	12	
	Long Distance Area 15	12	0	9	0	12	
	Long Distance Area 16	12	0	9	0	12	
	Long Distance Area 17	12	0	9	0	12	
	Long Distance Area 18	12	0	9	0	12	
	Long Distance Area 19	12	0	9	0	12	
	Long Distance Area 20	12	0	9	0	12	
	Long Distance Area 21	12	0	9	0	12	
	Long Distance Area 22	12	0	9	0	12	
	Long Distance Area 23	12	0	9	0	12	
	Long Distance Area 24	12	0	9	0	12	
	Long Distance Area 25	12	0	9	0	12	
		300			0	300	300

SERVICE PROVIDER	Name of the Service Area	INTER-OPERATOR POIs					
		No. of POIs (4 for ILDOs, 3 for NLDOs, 2 for Cellular and 3 for Fixed) in Long Distance Area Centre city	No of POIs in each Local Area	Number of Local Areas in each Long Distance Area	No of POIs in each Long Distance Area for each Local Area	Inter-Operator POIs	
Cellular Private 2	Long Distance Area 1	12	0	9	0	12	
	Long Distance Area 2	12	0	9	0	12	
	Long Distance Area 3	12	0	9	0	12	
	Long Distance Area 4	12	0	9	0	12	
	Long Distance Area 5	12	0	9	0	12	
	Long Distance Area 6	12	0	9	0	12	
	Long Distance Area 7	12	0	9	0	12	
	Long Distance Area 8	12	0	9	0	12	
	Long Distance Area 9	12	0	9	0	12	
	Long Distance Area 10	12	0	9	0	12	
	Long Distance Area 11	12	0	9	0	12	
	Long Distance Area 12	12	0	9	0	12	
	Long Distance Area 13	12	0	9	0	12	
	Long Distance Area 14	12	0	9	0	12	
	Long Distance Area 15	12	0	9	0	12	
	Long Distance Area 16	12	0	9	0	12	
	Long Distance Area 17	12	0	9	0	12	
	Long Distance Area 18	12	0	9	0	12	
	Long Distance Area 19	12	0	9	0	12	
	Long Distance Area 20	12	0	9	0	12	
	Long Distance Area 21	12	0	9	0	12	
	Long Distance Area 22	12	0	9	0	12	
	Long Distance Area 23	12	0	9	0	12	
	Long Distance Area 24	12	0	9	0	12	
	Long Distance Area 25	12	0	9	0	12	
		300	0		0	300	300

SERVICE PROVIDER	Name of the Service Area	INTER-OPERATOR POIs					
		No. of POIs (3 for Cellular and 3 for Fixed) in Long Distance Area Centre city	No of POIs in each Local Area (3 for Fixed)	Number of Local Areas in each Long Distance Area	No of POIs in each Long Distance Area for each Local Area	Inter-Operator POIs	
NLDO Incumbent	Long Distance Area 1	6	3	9	27	33	
	Long Distance Area 2	6	3	9	27	33	
	Long Distance Area 3	6	3	9	27	33	
	Long Distance Area 4	6	3	9	27	33	
	Long Distance Area 5	6	3	9	27	33	
	Long Distance Area 6	6	3	9	27	33	
	Long Distance Area 7	6	3	9	27	33	
	Long Distance Area 8	6	3	9	27	33	
	Long Distance Area 9	6	3	9	27	33	
	Long Distance Area 10	6	3	9	27	33	
	Long Distance Area 11	6	3	9	27	33	
	Long Distance Area 12	6	3	9	27	33	
	Long Distance Area 13	6	3	9	27	33	
	Long Distance Area 14	6	3	9	27	33	
	Long Distance Area 15	6	3	9	27	33	
	Long Distance Area 16	6	3	9	27	33	
	Long Distance Area 17	6	3	9	27	33	
	Long Distance Area 18	6	3	9	27	33	
	Long Distance Area 19	6	3	9	27	33	
	Long Distance Area 20	6	3	9	27	33	
	Long Distance Area 21	6	3	9	27	33	
	Long Distance Area 22	6	3	9	27	33	
	Long Distance Area 23	6	3	9	27	33	
	Long Distance Area 24	6	3	9	27	33	
	Long Distance Area 25	6	3	9	27	33	
		150			675	825	825

SERVICE PROVIDER	Name of the Service Area	INTER-OPERATOR POIs					
		No. of POIs (3 for Cellular and 3 for Fixed) in Long Distance Area Centre city	No of POIs in each Local Area (3 for Fixed)	Number of Local Areas in each Long Distance Area	No of POIs in each Long Distance Area for each Local Area	Inter-Operator POIs	
NLDO Private 1	Long Distance Area 1	6	3	9	27	33	
	Long Distance Area 2	6	3	9	27	33	
	Long Distance Area 3	6	3	9	27	33	
	Long Distance Area 4	6	3	9	27	33	
	Long Distance Area 5	6	3	9	27	33	
	Long Distance Area 6	6	3	9	27	33	
	Long Distance Area 7	6	3	9	27	33	
	Long Distance Area 8	6	3	9	27	33	
	Long Distance Area 9	6	3	9	27	33	
	Long Distance Area 10	6	3	9	27	33	
	Long Distance Area 11	6	3	9	27	33	
	Long Distance Area 12	6	3	9	27	33	
	Long Distance Area 13	6	3	9	27	33	
	Long Distance Area 14	6	3	9	27	33	
	Long Distance Area 15	6	3	9	27	33	
	Long Distance Area 16	6	3	9	27	33	
	Long Distance Area 17	6	3	9	27	33	
	Long Distance Area 18	6	3	9	27	33	
	Long Distance Area 19	6	3	9	27	33	
	Long Distance Area 20	6	3	9	27	33	
	Long Distance Area 21	6	3	9	27	33	
	Long Distance Area 22	6	3	9	27	33	
	Long Distance Area 23	6	3	9	27	33	
	Long Distance Area 24	6	3	9	27	33	
	Long Distance Area 25	6	3	9	27	33	
		150			675	825	825

SERVICE PROVIDER	Name of the Service Area	INTER-OPERATOR POIs					
		No. of POIs (3 for Cellular and 3 for Fixed) in Long Distance Area Centre city	No of POIs in each Local Area (3 for Fixed)	Number of Local Areas in each Long Distance Area	No of POIs in each Long Distance Area for each Local Area	Inter-Operator POIs	
NLDO Private 2	Long Distance Area 1	6	3	9	27	33	
	Long Distance Area 2	6	3	9	27	33	
	Long Distance Area 3	6	3	9	27	33	
	Long Distance Area 4	6	3	9	27	33	
	Long Distance Area 5	6	3	9	27	33	
	Long Distance Area 6	6	3	9	27	33	
	Long Distance Area 7	6	3	9	27	33	
	Long Distance Area 8	6	3	9	27	33	
	Long Distance Area 9	6	3	9	27	33	
	Long Distance Area 10	6	3	9	27	33	
	Long Distance Area 11	6	3	9	27	33	
	Long Distance Area 12	6	3	9	27	33	
	Long Distance Area 13	6	3	9	27	33	
	Long Distance Area 14	6	3	9	27	33	
	Long Distance Area 15	6	3	9	27	33	
	Long Distance Area 16	6	3	9	27	33	
	Long Distance Area 17	6	3	9	27	33	
	Long Distance Area 18	6	3	9	27	33	
	Long Distance Area 19	6	3	9	27	33	
	Long Distance Area 20	6	3	9	27	33	
	Long Distance Area 21	6	3	9	27	33	
	Long Distance Area 22	6	3	9	27	33	
	Long Distance Area 23	6	3	9	27	33	
	Long Distance Area 24	6	3	9	27	33	
	Long Distance Area 25	6	3	9	27	33	
		150			675	825	825

SERVICE PROVIDER	Name of the Service Area	INTER-OPERATOR POIs					
		No. of POIs (3 for Cellular and 3 for Fixed) in Long Distance Area Centre city	No of POIs in each Local Area	Number of Local Areas in each Long Distance Area	No of POIs in each Long Distance Area for each Local Area	Inter-Operator POIs	
ILDO Incumbent	Long Distance Area 1	6	0	9	0	6	
	Long Distance Area 2	6	0	9	0	6	
	Long Distance Area 3	6	0	9	0	6	
	Long Distance Area 4	6	0	9	0	6	
	Long Distance Area 5	6	0	9	0	6	
	Long Distance Area 6	6	0	9	0	6	
	Long Distance Area 7	6	0	9	0	6	
	Long Distance Area 8	6	0	9	0	6	
	Long Distance Area 9	6	0	9	0	6	
	Long Distance Area 10	6	0	9	0	6	
	Long Distance Area 11	6	0	9	0	6	
	Long Distance Area 12	6	0	9	0	6	
	Long Distance Area 13	6	0	9	0	6	
	Long Distance Area 14	6	0	9	0	6	
	Long Distance Area 15	6	0	9	0	6	
	Long Distance Area 16	6	0	9	0	6	
	Long Distance Area 17	6	0	9	0	6	
	Long Distance Area 18	6	0	9	0	6	
	Long Distance Area 19	6	0	9	0	6	
	Long Distance Area 20	6	0	9	0	6	
	Long Distance Area 21	6	0	9	0	6	
	Long Distance Area 22	6	0	9	0	6	
	Long Distance Area 23	6	0	9	0	6	
	Long Distance Area 24	6	0	9	0	6	
	Long Distance Area 25	6	0	9	0	6	
		150			0	150	150

SERVICE PROVIDER	Name of the Service Area	INTER-OPERATOR POIs					
		No. of POIs (3 for Cellular and 3 for Fixed) in Long Distance Area Centre city	No of POIs in each Local Area	Number of Local Areas in each Long Distance Area	No of POIs in each Long Distance Area for each Local Area	Inter-Operator POIs	
ILDO Private 1	Long Distance Area 1	6	0	9	0	6	
	Long Distance Area 2	6	0	9	0	6	
	Long Distance Area 3	6	0	9	0	6	
	Long Distance Area 4	6	0	9	0	6	
	Long Distance Area 5	6	0	9	0	6	
	Long Distance Area 6	6	0	9	0	6	
	Long Distance Area 7	6	0	9	0	6	
	Long Distance Area 8	6	0	9	0	6	
	Long Distance Area 9	6	0	9	0	6	
	Long Distance Area 10	6	0	9	0	6	
	Long Distance Area 11	6	0	9	0	6	
	Long Distance Area 12	6	0	9	0	6	
	Long Distance Area 13	6	0	9	0	6	
	Long Distance Area 14	6	0	9	0	6	
	Long Distance Area 15	6	0	9	0	6	
	Long Distance Area 16	6	0	9	0	6	
	Long Distance Area 17	6	0	9	0	6	
	Long Distance Area 18	6	0	9	0	6	
	Long Distance Area 19	6	0	9	0	6	
	Long Distance Area 20	6	0	9	0	6	
	Long Distance Area 21	6	0	9	0	6	
	Long Distance Area 22	6	0	9	0	6	
	Long Distance Area 23	6	0	9	0	6	
	Long Distance Area 24	6	0	9	0	6	
	Long Distance Area 25	6	0	9	0	6	
		150			0	150	150

SERVICE PROVIDER	Name of the Service Area	INTER-OPERATOR POIs					
		No. of POIs (3 for Cellular and 3 for Fixed) in Long Distance Area Centre city	No of POIs in each Local Area	Number of Local Areas in each Long Distance Area	No of POIs in each Long Distance Area for each Local Area	Inter-Operator POIs	
ILDO Private 2	Long Distance Area 1	6	0	9	0	6	
	Long Distance Area 2	6	0	9	0	6	
	Long Distance Area 3	6	0	9	0	6	
	Long Distance Area 4	6	0	9	0	6	
	Long Distance Area 5	6	0	9	0	6	
	Long Distance Area 6	6	0	9	0	6	
	Long Distance Area 7	6	0	9	0	6	
	Long Distance Area 8	6	0	9	0	6	
	Long Distance Area 9	6	0	9	0	6	
	Long Distance Area 10	6	0	9	0	6	
	Long Distance Area 11	6	0	9	0	6	
	Long Distance Area 12	6	0	9	0	6	
	Long Distance Area 13	6	0	9	0	6	
	Long Distance Area 14	6	0	9	0	6	
	Long Distance Area 15	6	0	9	0	6	
	Long Distance Area 16	6	0	9	0	6	
	Long Distance Area 17	6	0	9	0	6	
	Long Distance Area 18	6	0	9	0	6	
	Long Distance Area 19	6	0	9	0	6	
	Long Distance Area 20	6	0	9	0	6	
	Long Distance Area 21	6	0	9	0	6	
	Long Distance Area 22	6	0	9	0	6	
	Long Distance Area 23	6	0	9	0	6	
	Long Distance Area 24	6	0	9	0	6	
	Long Distance Area 25	6	0	9	0	6	
		150			0	150	150

SERVICE PROVIDER	Name of the Service Area	INTER-OPERATOR POIs					
		No. of POIs (3 for Cellular and 3 for Fixed) in Long Distance Area Centre city	No of POIs in each Local Area	Number of Local Areas in each Long Distance Area	No of POIs in each Long Distance Area for each Local Area	Inter-Operator POIs	
ILDO Private 3	Long Distance Area 1	6	0	9	0	6	
	Long Distance Area 2	6	0	9	0	6	
	Long Distance Area 3	6	0	9	0	6	
	Long Distance Area 4	6	0	9	0	6	
	Long Distance Area 5	6	0	9	0	6	
	Long Distance Area 6	6	0	9	0	6	
	Long Distance Area 7	6	0	9	0	6	
	Long Distance Area 8	6	0	9	0	6	
	Long Distance Area 9	6	0	9	0	6	
	Long Distance Area 10	6	0	9	0	6	
	Long Distance Area 11	6	0	9	0	6	
	Long Distance Area 12	6	0	9	0	6	
	Long Distance Area 13	6	0	9	0	6	
	Long Distance Area 14	6	0	9	0	6	
	Long Distance Area 15	6	0	9	0	6	
	Long Distance Area 16	6	0	9	0	6	
	Long Distance Area 17	6	0	9	0	6	
	Long Distance Area 18	6	0	9	0	6	
	Long Distance Area 19	6	0	9	0	6	
	Long Distance Area 20	6	0	9	0	6	
	Long Distance Area 21	6	0	9	0	6	
	Long Distance Area 22	6	0	9	0	6	
	Long Distance Area 23	6	0	9	0	6	
	Long Distance Area 24	6	0	9	0	6	
	Long Distance Area 25	6	0	9	0	6	
		150			0	150	150
							8250
							4125

SECTION 3.3

POI Calculations with
NLD POIs in Local Area :
If Interconnect Gateway Exchange
used at
Long Distance Area City

IF INTERCONNECT GATEWAY EXCHANGE USED AT LONG DISTANCE AREA CITY

SERVICE PROVIDER	Name of the Service Area	INTER-OPERATOR POIs					
		No. of POIs (3 for Cellular and 3 for Fixed) in Long Distance Area Centre city	No of POIs in each Local Area	Number of Local Areas in each Long Distance Area	No of POIs in each Long Distance Area for each Local Area	Inter-Operator POIs	
GATEWAY EXCHANGE	Long Distance Area 1	13	0	0	0	13	
	Long Distance Area 2	13	0	0	0	13	
	Long Distance Area 3	13	0	0	0	13	
	Long Distance Area 4	13	0	0	0	13	
	Long Distance Area 5	13	0	0	0	13	
	Long Distance Area 6	13	0	0	0	13	
	Long Distance Area 7	13	0	0	0	13	
	Long Distance Area 8	13	0	0	0	13	
	Long Distance Area 9	13	0	0	0	13	
	Long Distance Area 10	13	0	0	0	13	
	Long Distance Area 11	13	0	0	0	13	
	Long Distance Area 12	13	0	0	0	13	
	Long Distance Area 13	13	0	0	0	13	
	Long Distance Area 14	13	0	0	0	13	
	Long Distance Area 15	13	0	0	0	13	
	Long Distance Area 16	13	0	0	0	13	
	Long Distance Area 17	13	0	0	0	13	
	Long Distance Area 18	13	0	0	0	13	
	Long Distance Area 19	13	0	0	0	13	
	Long Distance Area 20	13	0	0	0	13	
	Long Distance Area 21	13	0	0	0	13	
	Long Distance Area 22	13	0	0	0	13	
	Long Distance Area 23	13	0	0	0	13	
	Long Distance Area 24	13	0	0	0	13	
	Long Distance Area 25	13	0	0	0	13	
		325			0	325	325

SECTION 3.4

POI Calculations with

NLD POIs

in Long Distance Area

SERVICE PROVIDER	Name of the Service Area	INTER-OPERATOR POIs					
		No. of POIs (4 for ILDOs, 3 for NLDOs, 3 for Cellular and 2 for Fixed) in Long Distance Area Centre city	No of POIs in each Local Area (2 for Fixed)	Number of Local Areas in each Long Distance Area	No of POIs in each Long Distance Area for each Local Area	Inter-Operator POIs	
Fixed Incumbent	Long Distance Area 1	12	2	9	18	30	
	Long Distance Area 2	12	2	9	18	30	
	Long Distance Area 3	12	2	9	18	30	
	Long Distance Area 4	12	2	9	18	30	
	Long Distance Area 5	12	2	9	18	30	
	Long Distance Area 6	12	2	9	18	30	
	Long Distance Area 7	12	2	9	18	30	
	Long Distance Area 8	12	2	9	18	30	
	Long Distance Area 9	12	2	9	18	30	
	Long Distance Area 10	12	2	9	18	30	
	Long Distance Area 11	12	2	9	18	30	
	Long Distance Area 12	12	2	9	18	30	
	Long Distance Area 13	12	2	9	18	30	
	Long Distance Area 14	12	2	9	18	30	
	Long Distance Area 15	12	2	9	18	30	
	Long Distance Area 16	12	2	9	18	30	
	Long Distance Area 17	12	2	9	18	30	
	Long Distance Area 18	12	2	9	18	30	
	Long Distance Area 19	12	2	9	18	30	
	Long Distance Area 20	12	2	9	18	30	
	Long Distance Area 21	12	2	9	18	30	
	Long Distance Area 22	12	2	9	18	30	
	Long Distance Area 23	12	2	9	18	30	
	Long Distance Area 24	12	2	9	18	30	
	Long Distance Area 25	12	2	9	18	30	
		300			450	750	750

SERVICE PROVIDER	Name of the Service Area	INTER-OPERATOR POIs					
		No. of POIs (4 for ILDOs, 3 for NLDOs, 3 for Cellular and 2 for Fixed) in Long Distance Area Centre city	No of POIs in each Local Area (2 for Fixed)	Number of Local Areas in each Long Distance Area	No of POIs in each Long Distance Area for each Local Area	Inter-Operator POIs	
Fixed Private 1	Long Distance Area 1	12	2	9	18	30	
	Long Distance Area 2	12	2	9	18	30	
	Long Distance Area 3	12	2	9	18	30	
	Long Distance Area 4	12	2	9	18	30	
	Long Distance Area 5	12	2	9	18	30	
	Long Distance Area 6	12	2	9	18	30	
	Long Distance Area 7	12	2	9	18	30	
	Long Distance Area 8	12	2	9	18	30	
	Long Distance Area 9	12	2	9	18	30	
	Long Distance Area 10	12	2	9	18	30	
	Long Distance Area 11	12	2	9	18	30	
	Long Distance Area 12	12	2	9	18	30	
	Long Distance Area 13	12	2	9	18	30	
	Long Distance Area 14	12	2	9	18	30	
	Long Distance Area 15	12	2	9	18	30	
	Long Distance Area 16	12	2	9	18	30	
	Long Distance Area 17	12	2	9	18	30	
	Long Distance Area 18	12	2	9	18	30	
	Long Distance Area 19	12	2	9	18	30	
	Long Distance Area 20	12	2	9	18	30	
	Long Distance Area 21	12	2	9	18	30	
	Long Distance Area 22	12	2	9	18	30	
	Long Distance Area 23	12	2	9	18	30	
	Long Distance Area 24	12	2	9	18	30	
	Long Distance Area 25	12	2	9	18	30	
					450	750	750

SERVICE PROVIDER	Name of the Service Area	INTER-OPERATOR POIs					
		No. of POIs (4 for ILDOs, 3 for NLDOs, 3 for Cellular and 2 for Fixed) in Long Distance Area Centre city	No of POIs in each Local Area (2 for Fixed)	Number of Local Areas in each Long Distance Area	No of POIs in each Long Distance Area for each Local Area	Inter-Operator POIs	
Fixed Private 2	Long Distance Area 1	12	2	9	18	30	
	Long Distance Area 2	12	2	9	18	30	
	Long Distance Area 3	12	2	9	18	30	
	Long Distance Area 4	12	2	9	18	30	
	Long Distance Area 5	12	2	9	18	30	
	Long Distance Area 6	12	2	9	18	30	
	Long Distance Area 7	12	2	9	18	30	
	Long Distance Area 8	12	2	9	18	30	
	Long Distance Area 9	12	2	9	18	30	
	Long Distance Area 10	12	2	9	18	30	
	Long Distance Area 11	12	2	9	18	30	
	Long Distance Area 12	12	2	9	18	30	
	Long Distance Area 13	12	2	9	18	30	
	Long Distance Area 14	12	2	9	18	30	
	Long Distance Area 15	12	2	9	18	30	
	Long Distance Area 16	12	2	9	18	30	
	Long Distance Area 17	12	2	9	18	30	
	Long Distance Area 18	12	2	9	18	30	
	Long Distance Area 19	12	2	9	18	30	
	Long Distance Area 20	12	2	9	18	30	
	Long Distance Area 21	12	2	9	18	30	
	Long Distance Area 22	12	2	9	18	30	
	Long Distance Area 23	12	2	9	18	30	
	Long Distance Area 24	12	2	9	18	30	
	Long Distance Area 25	12	2	9	18	30	
		300			450	750	750

SERVICE PROVIDER	Name of the Service Area	INTER-OPERATOR POIs					
		No. of POIs (4 for ILDOs, 3 for NLDOs, 3 for Cellular and 2 for Fixed) in Long Distance Area Centre city	No of POIs in each Local Area	Number of Local Areas in each Long Distance Area	No of POIs in each Long Distance Area for each Local Area	Inter-Operator POIs	
Cellular Incumbent	Long Distance Area 1	12	0	9	0	12	
	Long Distance Area 2	12	0	9	0	12	
	Long Distance Area 3	12	0	9	0	12	
	Long Distance Area 4	12	0	9	0	12	
	Long Distance Area 5	12	0	9	0	12	
	Long Distance Area 6	12	0	9	0	12	
	Long Distance Area 7	12	0	9	0	12	
	Long Distance Area 8	12	0	9	0	12	
	Long Distance Area 9	12	0	9	0	12	
	Long Distance Area 10	12	0	9	0	12	
	Long Distance Area 11	12	0	9	0	12	
	Long Distance Area 12	12	0	9	0	12	
	Long Distance Area 13	12	0	9	0	12	
	Long Distance Area 14	12	0	9	0	12	
	Long Distance Area 15	12	0	9	0	12	
	Long Distance Area 16	12	0	9	0	12	
	Long Distance Area 17	12	0	9	0	12	
	Long Distance Area 18	12	0	9	0	12	
	Long Distance Area 19	12	0	9	0	12	
	Long Distance Area 20	12	0	9	0	12	
	Long Distance Area 21	12	0	9	0	12	
	Long Distance Area 22	12	0	9	0	12	
	Long Distance Area 23	12	0	9	0	12	
	Long Distance Area 24	12	0	9	0	12	
	Long Distance Area 25	12	0	9	0	12	
		300			0	300	300

SERVICE PROVIDER	Name of the Service Area	INTER-OPERATOR POIs					
		No. of POIs (4 for ILDOs, 3 for NLDOs, 3 for Cellular and 2 for Fixed) in Long Distance Area Centre city	No of POIs in each Local Area	Number of Local Areas in each Long Distance Area	No of POIs in each Long Distance Area for each Local Area	Inter-Operator POIs	
Cellular Private 1	Long Distance Area 1	12	0	9	0	12	
	Long Distance Area 2	12	0	9	0	12	
	Long Distance Area 3	12	0	9	0	12	
	Long Distance Area 4	12	0	9	0	12	
	Long Distance Area 5	12	0	9	0	12	
	Long Distance Area 6	12	0	9	0	12	
	Long Distance Area 7	12	0	9	0	12	
	Long Distance Area 8	12	0	9	0	12	
	Long Distance Area 9	12	0	9	0	12	
	Long Distance Area 10	12	0	9	0	12	
	Long Distance Area 11	12	0	9	0	12	
	Long Distance Area 12	12	0	9	0	12	
	Long Distance Area 13	12	0	9	0	12	
	Long Distance Area 14	12	0	9	0	12	
	Long Distance Area 15	12	0	9	0	12	
	Long Distance Area 16	12	0	9	0	12	
	Long Distance Area 17	12	0	9	0	12	
	Long Distance Area 18	12	0	9	0	12	
	Long Distance Area 19	12	0	9	0	12	
	Long Distance Area 20	12	0	9	0	12	
	Long Distance Area 21	12	0	9	0	12	
	Long Distance Area 22	12	0	9	0	12	
	Long Distance Area 23	12	0	9	0	12	
	Long Distance Area 24	12	0	9	0	12	
	Long Distance Area 25	12	0	9	0	12	
		300			0	300	300

SERVICE PROVIDER	Name of the Service Area	INTER-OPERATOR POIs					
		No. of POIs (4 for ILDOs, 3 for NLDOs, 3 for Cellular and 2 for Fixed) in Long Distance Area Centre city	No of POIs in each Local Area	Number of Local Areas in each Long Distance Area	No of POIs in each Long Distance Area for each Local Area	Inter-Operator POIs	
Cellular Private 2	Long Distance Area 1	12	0	9	0	12	
	Long Distance Area 2	12	0	9	0	12	
	Long Distance Area 3	12	0	9	0	12	
	Long Distance Area 4	12	0	9	0	12	
	Long Distance Area 5	12	0	9	0	12	
	Long Distance Area 6	12	0	9	0	12	
	Long Distance Area 7	12	0	9	0	12	
	Long Distance Area 8	12	0	9	0	12	
	Long Distance Area 9	12	0	9	0	12	
	Long Distance Area 10	12	0	9	0	12	
	Long Distance Area 11	12	0	9	0	12	
	Long Distance Area 12	12	0	9	0	12	
	Long Distance Area 13	12	0	9	0	12	
	Long Distance Area 14	12	0	9	0	12	
	Long Distance Area 15	12	0	9	0	12	
	Long Distance Area 16	12	0	9	0	12	
	Long Distance Area 17	12	0	9	0	12	
	Long Distance Area 18	12	0	9	0	12	
	Long Distance Area 19	12	0	9	0	12	
	Long Distance Area 20	12	0	9	0	12	
	Long Distance Area 21	12	0	9	0	12	
	Long Distance Area 22	12	0	9	0	12	
	Long Distance Area 23	12	0	9	0	12	
	Long Distance Area 24	12	0	9	0	12	
	Long Distance Area 25	12	0	9	0	12	
		300	0		0	300	300

SERVICE PROVIDER	Name of the Service Area	INTER-OPERATOR POIs					
		No. of POIs (3 for Cellular and 3 for Fixed) in Long Distance Area Centre city	No of POIs in each Local Area (NIL for Fixed)	Number of Local Areas in each Long Distance Area	No of POIs in each Long Distance Area for each Local Area	Inter-Operator POIs	
NLDO Incumbent	Long Distance Area 1	6	0	9	0	6	
	Long Distance Area 2	6	0	9	0	6	
	Long Distance Area 3	6	0	9	0	6	
	Long Distance Area 4	6	0	9	0	6	
	Long Distance Area 5	6	0	9	0	6	
	Long Distance Area 6	6	0	9	0	6	
	Long Distance Area 7	6	0	9	0	6	
	Long Distance Area 8	6	0	9	0	6	
	Long Distance Area 9	6	0	9	0	6	
	Long Distance Area 10	6	0	9	0	6	
	Long Distance Area 11	6	0	9	0	6	
	Long Distance Area 12	6	0	9	0	6	
	Long Distance Area 13	6	0	9	0	6	
	Long Distance Area 14	6	0	9	0	6	
	Long Distance Area 15	6	0	9	0	6	
	Long Distance Area 16	6	0	9	0	6	
	Long Distance Area 17	6	0	9	0	6	
	Long Distance Area 18	6	0	9	0	6	
	Long Distance Area 19	6	0	9	0	6	
	Long Distance Area 20	6	0	9	0	6	
	Long Distance Area 21	6	0	9	0	6	
	Long Distance Area 22	6	0	9	0	6	
	Long Distance Area 23	6	0	9	0	6	
	Long Distance Area 24	6	0	9	0	6	
	Long Distance Area 25	6	0	9	0	6	
		150			0	150	150

SERVICE PROVIDER	Name of the Service Area	INTER-OPERATOR POIs					
		No. of POIs (3 for Cellular and 3 for Fixed) in Long Distance Area Centre city	No of POIs in each Local Area (NIL for Fixed)	Number of Local Areas in each Long Distance Area	No of POIs in each Long Distance Area for each Local Area	Inter-Operator POIs	
NLDO Private 1	Long Distance Area 1	6	0	9	0	6	
	Long Distance Area 2	6	0	9	0	6	
	Long Distance Area 3	6	0	9	0	6	
	Long Distance Area 4	6	0	9	0	6	
	Long Distance Area 5	6	0	9	0	6	
	Long Distance Area 6	6	0	9	0	6	
	Long Distance Area 7	6	0	9	0	6	
	Long Distance Area 8	6	0	9	0	6	
	Long Distance Area 9	6	0	9	0	6	
	Long Distance Area 10	6	0	9	0	6	
	Long Distance Area 11	6	0	9	0	6	
	Long Distance Area 12	6	0	9	0	6	
	Long Distance Area 13	6	0	9	0	6	
	Long Distance Area 14	6	0	9	0	6	
	Long Distance Area 15	6	0	9	0	6	
	Long Distance Area 16	6	0	9	0	6	
	Long Distance Area 17	6	0	9	0	6	
	Long Distance Area 18	6	0	9	0	6	
	Long Distance Area 19	6	0	9	0	6	
	Long Distance Area 20	6	0	9	0	6	
	Long Distance Area 21	6	0	9	0	6	
	Long Distance Area 22	6	0	9	0	6	
	Long Distance Area 23	6	0	9	0	6	
	Long Distance Area 24	6	0	9	0	6	
	Long Distance Area 25	6	0	9	0	6	
		150			0	150	150

SERVICE PROVIDER	Name of the Service Area	INTER-OPERATOR POIs					
		No. of POIs (3 for Cellular and 3 for Fixed) in Long Distance Area Centre city	No of POIs in each Local Area (NIL for Fixed)	Number of Local Areas in each Long Distance Area	No of POIs in each Long Distance Area for each Local Area	Inter-Operator POIs	
NLDO Private 2	Long Distance Area 1	6	0	9	0	6	
	Long Distance Area 2	6	0	9	0	6	
	Long Distance Area 3	6	0	9	0	6	
	Long Distance Area 4	6	0	9	0	6	
	Long Distance Area 5	6	0	9	0	6	
	Long Distance Area 6	6	0	9	0	6	
	Long Distance Area 7	6	0	9	0	6	
	Long Distance Area 8	6	0	9	0	6	
	Long Distance Area 9	6	0	9	0	6	
	Long Distance Area 10	6	0	9	0	6	
	Long Distance Area 11	6	0	9	0	6	
	Long Distance Area 12	6	0	9	0	6	
	Long Distance Area 13	6	0	9	0	6	
	Long Distance Area 14	6	0	9	0	6	
	Long Distance Area 15	6	0	9	0	6	
	Long Distance Area 16	6	0	9	0	6	
	Long Distance Area 17	6	0	9	0	6	
	Long Distance Area 18	6	0	9	0	6	
	Long Distance Area 19	6	0	9	0	6	
	Long Distance Area 20	6	0	9	0	6	
	Long Distance Area 21	6	0	9	0	6	
	Long Distance Area 22	6	0	9	0	6	
	Long Distance Area 23	6	0	9	0	6	
	Long Distance Area 24	6	0	9	0	6	
	Long Distance Area 25	6	0	9	0	6	
		150			0	150	150

SERVICE PROVIDER	Name of the Service Area	INTER-OPERATOR POIs					
		No. of POIs (3 for Cellular and 3 for Fixed) in Long Distance Area Centre city	No of POIs in each Local Area (NIL for Fixed)	Number of Local Areas in each Long Distance Area	No of POIs in each Long Distance Area for each Local Area	Inter-Operator POIs	
ILDO Incumbent	Long Distance Area 1	6	0	9	0	6	
	Long Distance Area 2	6	0	9	0	6	
	Long Distance Area 3	6	0	9	0	6	
	Long Distance Area 4	6	0	9	0	6	
	Long Distance Area 5	6	0	9	0	6	
	Long Distance Area 6	6	0	9	0	6	
	Long Distance Area 7	6	0	9	0	6	
	Long Distance Area 8	6	0	9	0	6	
	Long Distance Area 9	6	0	9	0	6	
	Long Distance Area 10	6	0	9	0	6	
	Long Distance Area 11	6	0	9	0	6	
	Long Distance Area 12	6	0	9	0	6	
	Long Distance Area 13	6	0	9	0	6	
	Long Distance Area 14	6	0	9	0	6	
	Long Distance Area 15	6	0	9	0	6	
	Long Distance Area 16	6	0	9	0	6	
	Long Distance Area 17	6	0	9	0	6	
	Long Distance Area 18	6	0	9	0	6	
	Long Distance Area 19	6	0	9	0	6	
	Long Distance Area 20	6	0	9	0	6	
	Long Distance Area 21	6	0	9	0	6	
	Long Distance Area 22	6	0	9	0	6	
	Long Distance Area 23	6	0	9	0	6	
	Long Distance Area 24	6	0	9	0	6	
	Long Distance Area 25	6	0	9	0	6	
		150			0	150	150

SERVICE PROVIDER	Name of the Service Area	INTER-OPERATOR POIs					
		No. of POIs (3 for Cellular and 3 for Fixed) in Long Distance Area Centre city	No of POIs in each Local Area (NIL for Fixed)	Number of Local Areas in each Long Distance Area	No of POIs in each Long Distance Area for each Local Area	Inter-Operator POIs	
ILDO Private 1	Long Distance Area 1	6	0	9	0	6	
	Long Distance Area 2	6	0	9	0	6	
	Long Distance Area 3	6	0	9	0	6	
	Long Distance Area 4	6	0	9	0	6	
	Long Distance Area 5	6	0	9	0	6	
	Long Distance Area 6	6	0	9	0	6	
	Long Distance Area 7	6	0	9	0	6	
	Long Distance Area 8	6	0	9	0	6	
	Long Distance Area 9	6	0	9	0	6	
	Long Distance Area 10	6	0	9	0	6	
	Long Distance Area 11	6	0	9	0	6	
	Long Distance Area 12	6	0	9	0	6	
	Long Distance Area 13	6	0	9	0	6	
	Long Distance Area 14	6	0	9	0	6	
	Long Distance Area 15	6	0	9	0	6	
	Long Distance Area 16	6	0	9	0	6	
	Long Distance Area 17	6	0	9	0	6	
	Long Distance Area 18	6	0	9	0	6	
	Long Distance Area 19	6	0	9	0	6	
	Long Distance Area 20	6	0	9	0	6	
	Long Distance Area 21	6	0	9	0	6	
	Long Distance Area 22	6	0	9	0	6	
	Long Distance Area 23	6	0	9	0	6	
	Long Distance Area 24	6	0	9	0	6	
	Long Distance Area 25	6	0	9	0	6	
		150			0	150	150

SERVICE PROVIDER	Name of the Service Area	INTER-OPERATOR POIs					
		No. of POIs (3 for Cellular and 3 for Fixed) in Long Distance Area Centre city	No of POIs in each Local Area (NIL for Fixed)	Number of Local Areas in each Long Distance Area	No of POIs in each Long Distance Area for each Local Area	Inter-Operator POIs	
ILDO Private 2	Long Distance Area 1	6	0	9	0	6	
	Long Distance Area 2	6	0	9	0	6	
	Long Distance Area 3	6	0	9	0	6	
	Long Distance Area 4	6	0	9	0	6	
	Long Distance Area 5	6	0	9	0	6	
	Long Distance Area 6	6	0	9	0	6	
	Long Distance Area 7	6	0	9	0	6	
	Long Distance Area 8	6	0	9	0	6	
	Long Distance Area 9	6	0	9	0	6	
	Long Distance Area 10	6	0	9	0	6	
	Long Distance Area 11	6	0	9	0	6	
	Long Distance Area 12	6	0	9	0	6	
	Long Distance Area 13	6	0	9	0	6	
	Long Distance Area 14	6	0	9	0	6	
	Long Distance Area 15	6	0	9	0	6	
	Long Distance Area 16	6	0	9	0	6	
	Long Distance Area 17	6	0	9	0	6	
	Long Distance Area 18	6	0	9	0	6	
	Long Distance Area 19	6	0	9	0	6	
	Long Distance Area 20	6	0	9	0	6	
	Long Distance Area 21	6	0	9	0	6	
	Long Distance Area 22	6	0	9	0	6	
	Long Distance Area 23	6	0	9	0	6	
	Long Distance Area 24	6	0	9	0	6	
	Long Distance Area 25	6	0	9	0	6	
		150			0	150	150

SERVICE PROVIDER	Name of the Service Area	INTER-OPERATOR POIs					
		No. of POIs (3 for Cellular and 3 for Fixed) in Long Distance Area Centre city	No of POIs in each Local Area (NIL for Fixed)	Number of Local Areas in each Long Distance Area	No of POIs in each Long Distance Area for each Local Area	Inter-Operator POIs	
ILDO Private 3	Long Distance Area 1	6	0	9	0	6	
	Long Distance Area 2	6	0	9	0	6	
	Long Distance Area 3	6	0	9	0	6	
	Long Distance Area 4	6	0	9	0	6	
	Long Distance Area 5	6	0	9	0	6	
	Long Distance Area 6	6	0	9	0	6	
	Long Distance Area 7	6	0	9	0	6	
	Long Distance Area 8	6	0	9	0	6	
	Long Distance Area 9	6	0	9	0	6	
	Long Distance Area 10	6	0	9	0	6	
	Long Distance Area 11	6	0	9	0	6	
	Long Distance Area 12	6	0	9	0	6	
	Long Distance Area 13	6	0	9	0	6	
	Long Distance Area 14	6	0	9	0	6	
	Long Distance Area 15	6	0	9	0	6	
	Long Distance Area 16	6	0	9	0	6	
	Long Distance Area 17	6	0	9	0	6	
	Long Distance Area 18	6	0	9	0	6	
	Long Distance Area 19	6	0	9	0	6	
	Long Distance Area 20	6	0	9	0	6	
	Long Distance Area 21	6	0	9	0	6	
	Long Distance Area 22	6	0	9	0	6	
	Long Distance Area 23	6	0	9	0	6	
	Long Distance Area 24	6	0	9	0	6	
	Long Distance Area 25	6	0	9	0	6	
		150			0	150	150
							4200

SECTION 3.5

POI Calculations
with NLD POIs in Long Distance Area
If Interconnect Gateway Exchange
used at
Long Distance Area City

IF INTERCONNECT GATEWAY EXCHANGE USED AT LONG DISTANCE AREA CITY							
SERVICE PROVIDER	Name of the Service Area	INTER-OPERATOR POIs					
		No. of POIs (4 for ILDOs, 3 for NLDOs, 3 for Cellular and 2 for Fixed) in Long Distance Area Centre city	No of POIs in each Local Area (3 for NLDOs and 2 for Fixed)	Number of Local Areas in each Long Distance Area	No of POIs in each Long Distance Area for each Local Area	Inter-Operator POIs	
GATEWAY EXCHANGE	Long Distance Area 1	13	0	0	0	13	
	Long Distance Area 2	13	0	0	0	13	
	Long Distance Area 3	13	0	0	0	13	
	Long Distance Area 4	13	0	0	0	13	
	Long Distance Area 5	13	0	0	0	13	
	Long Distance Area 6	13	0	0	0	13	
	Long Distance Area 7	13	0	0	0	13	
	Long Distance Area 8	13	0	0	0	13	
	Long Distance Area 9	13	0	0	0	13	
	Long Distance Area 10	13	0	0	0	13	
	Long Distance Area 11	13	0	0	0	13	
	Long Distance Area 12	13	0	0	0	13	
	Long Distance Area 13	13	0	0	0	13	
	Long Distance Area 14	13	0	0	0	13	
	Long Distance Area 15	13	0	0	0	13	
	Long Distance Area 16	13	0	0	0	13	
	Long Distance Area 17	13	0	0	0	13	
	Long Distance Area 18	13	0	0	0	13	
	Long Distance Area 19	13	0	0	0	13	
	Long Distance Area 20	13	0	0	0	13	
	Long Distance Area 21	13	0	0	0	13	
	Long Distance Area 22	13	0	0	0	13	
	Long Distance Area 23	13	0	0	0	13	
	Long Distance Area 24	13	0	0	0	13	
	Long Distance Area 25	13	0	0	0	13	
		325			0	325	325

SECTON-4

INTER OPERATOR TRAFFIC
AND
2Mbps STREAMS BASED ON GOS OF 0.0005

SECTON-4.1

LONG DISTANCE AREA CITY:
INTER OPERATOR TRAFFIC

SERVICE PROVIDER	Name of the Service Area	LONG DISTANCE AREA CITY : INTER_OPERATOR TRAFFIC													
		Subscribers in Long Distance Area Central city	Inter-Operator Traffic in Erlangs at Long Distance Area City	Inter-Operator Traffic from Long Distance Area City	Intra_Network Traffic of Fixed Incumbent not counted	Traffic at Fixed Private 1 POI (Erlangs)	Traffic at Fixed Private 2 POI (Erlangs)	Traffic at Cellular Incumbent POI (Erlangs)	Traffic at Cellular Private 1 POI (Erlangs)	Traffic at Cellular Private 2 POI (Erlangs)	Traffic at NLDO Incumbent POI (Erlangs)	Traffic at NLDO Private 1 POI (Erlangs)	Traffic at NLDO Private 2 POI (Erlangs)	Traffic at ILDO Incumbent POI (Erlangs)	Traffic at ILDO Private 1 POI (Erlangs)
			0.067			1	2	3	4	5	6	7	8	9	10
Fixed Incumbent	Long Distance Area 1	160000	12060	6000		1000	1000	600	640	640	650	470	470	170	120
	Long Distance Area 2	80000	6700	2557		270	270	350	350	350	300	200	200	100	60
	Long Distance Area 3	80000	6700	2557		270	270	350	350	350	300	200	200	100	60
	Long Distance Area 4	40000	4020	1670		65	65	225	250	250	275	160	160	70	50
	Long Distance Area 5	40000	4020	1670		65	65	225	250	250	275	160	160	70	50
	Long Distance Area 6	40000	4020	1670		65	65	225	250	250	275	160	160	70	50
	Long Distance Area 7	40000	4020	1670		65	65	225	250	250	275	160	160	70	50
	Long Distance Area 8	40000	4020	1670		65	65	225	250	250	275	160	160	70	50
	Long Distance Area 9	40000	4020	1670		65	65	225	250	250	275	160	160	70	50
	Long Distance Area 10	40000	4020	1670		65	65	225	250	250	275	160	160	70	50
	Long Distance Area 11	40000	4020	1670		65	65	225	250	250	275	160	160	70	50
	Long Distance Area 12	40000	4020	1670		65	65	225	250	250	275	160	160	70	50
	Long Distance Area 13	40000	4020	1670		65	65	225	250	250	275	160	160	70	50
	Long Distance Area 14	40000	4020	1670		65	65	225	250	250	275	160	160	70	50
	Long Distance Area 15	40000	4020	1670		65	65	225	250	250	275	160	160	70	50
	Long Distance Area 16	40000	4020	1670		65	65	225	250	250	275	160	160	70	50
	Long Distance Area 17	40000	4020	1670		65	65	225	250	250	275	160	160	70	50
	Long Distance Area 18	40000	4020	1670		65	65	225	250	250	275	160	160	70	50
	Long Distance Area 19	40000	4020	1670		65	65	225	250	250	275	160	160	70	50
	Long Distance Area 20	40000	4020	1670		65	65	225	250	250	275	160	160	70	50
	Long Distance Area 21	40000	4020	1670		65	65	225	250	250	275	160	160	70	50
	Long Distance Area 22	40000	4020	1670		65	65	225	250	250	275	160	160	70	50
	Long Distance Area 23	40000	4020	1670		65	65	225	250	250	275	160	160	70	50
	Long Distance Area 24	40000	4020	1670		65	65	225	250	250	275	160	160	70	50
	Long Distance Area 25	40000	4020	1670		65	65	225	250	250	275	160	160	70	50
		1200000	113900	47853	0	2970	2970	6250	6840	6840	7300	4390	4390	1910	1340

SERVICE PROVIDER	Name of the Service Area	LONG DISTANCE AREA CITY : INTER_OPERATOR TRAFFIC													
		Subscribers in Long Distance Area Central city	Traffic in Erlangs for Long Distance Area City	Inter-Operator Traffic from Long Distance Area City	Traffic at Fixed Incumbent POI (Erlangs)	Intra_Network Traffic of Fixed private 1 not included	Traffic at Fixed Private 2 POI (Erlangs)	Traffic at Cellular Incumbent POI (Erlangs)	Traffic at Cellular Private 1 POI (Erlangs)	Traffic at Cellular Private 2 POI (Erlangs)	Traffic at NLDO Incumbent POI (Erlangs)	Traffic at NLDO Private 1 POI (Erlangs)	Traffic at NLDO Private 2 POI (Erlangs)	Traffic at ILDO Incumbent POI (Erlangs)	Traffic at ILDO Private 1 POI (Erlangs)
					1		2	3	4	5	6	7	8	9	10
Fixed Private 1	Long Distance Area 1	78600	5266	3488	1000		460	300	300	300	376	200	200	88	88
	Long Distance Area 2	14000	938	735	270		80	56	56	56	72	40	40	16	16
	Long Distance Area 3	14000	938	735	270		80	56	56	56	72	40	40	16	16
	Long Distance Area 4	2200	147	121	65		8	6	6	6	8	5	5	3	3
	Long Distance Area 5	2200	147	121	65		8	6	6	6	8	5	5	3	3
	Long Distance Area 6	2200	147	121	65		8	6	6	6	8	5	5	3	3
	Long Distance Area 7	2200	147	121	65		8	6	6	6	8	5	5	3	3
	Long Distance Area 8	2200	147	121	65		8	6	6	6	8	5	5	3	3
	Long Distance Area 9	2200	147	121	65		8	6	6	6	8	5	5	3	3
	Long Distance Area 10	2200	147	121	65		8	6	6	6	8	5	5	3	3
	Long Distance Area 11	2200	147	121	65		8	6	6	6	8	5	5	3	3
	Long Distance Area 12	2200	147	121	65		8	6	6	6	8	5	5	3	3
	Long Distance Area 13	2200	147	121	65		8	6	6	6	8	5	5	3	3
	Long Distance Area 14	2200	147	121	65		8	6	6	6	8	5	5	3	3
	Long Distance Area 15	2200	147	121	65		8	6	6	6	8	5	5	3	3
	Long Distance Area 16	2200	147	121	65		8	6	6	6	8	5	5	3	3
	Long Distance Area 17	2200	147	121	65		8	6	6	6	8	5	5	3	3
	Long Distance Area 18	2200	147	121	65		8	6	6	6	8	5	5	3	3
	Long Distance Area 19	2200	147	121	65		8	6	6	6	8	5	5	3	3
	Long Distance Area 20	2200	147	121	65		8	6	6	6	8	5	5	3	3
	Long Distance Area 21	2200	147	121	65		8	6	6	6	8	5	5	3	3
	Long Distance Area 22	2200	147	121	65		8	6	6	6	8	5	5	3	3
	Long Distance Area 23	2200	147	121	65		8	6	6	6	8	5	5	3	3
	Long Distance Area 24	2200	147	121	65		8	6	6	6	8	5	5	3	3
	Long Distance Area 25	2200	147	121	65		8	6	6	6	8	5	5	3	3
		155000	10385	7621	2970	0	796	544	544	544	696	390	390	186	186

SERVICE PROVIDER	Name of the Service Area	LONG DISTANCE AREA CITY : INTER_OPERATOR TRAFFIC													
		Subscribers in Long Distance Area Central city	Inter-Operator Traffic in Erlangs at Long Distance Area City	Inter-Operator Traffic from Long Distance Area City	Traffic at Fixed Incumbent POI (Erlangs)	Traffic at Fixed Private 1 POI (Erlangs)	Intra_Network Traffic of Fixed private 2 not included	Traffic at Cellular Incumbent POI (Erlangs)	Traffic at Cellular Private 1 POI (Erlangs)	Traffic at Cellular Private 2 POI (Erlangs)	Traffic at NLDO Incumbent POI (Erlangs)	Traffic at NLDO Private 1 POI (Erlangs)	Traffic at NLDO Private 2 POI (Erlangs)	Traffic at ILDO Incumbent POI (Erlangs)	Traffic at ILDO Private 1 POI (Erlangs)
					1	2		3	4	5	6	7	8	9	10
Fixed Private 2	Long Distance Area 1	78600	5266	3488	1000	460		300	300	300	376	200	200	88	88
	Long Distance Area 2	14000	938	735	270	80		56	56	56	72	40	40	16	16
	Long Distance Area 3	14000	938	735	270	80		56	56	56	72	40	40	16	16
	Long Distance Area 4	2200	147	121	65	8		6	6	6	8	5	5	3	3
	Long Distance Area 5	2200	147	121	65	8		6	6	6	8	5	5	3	3
	Long Distance Area 6	2200	147	121	65	8		6	6	6	8	5	5	3	3
	Long Distance Area 7	2200	147	121	65	8		6	6	6	8	5	5	3	3
	Long Distance Area 8	2200	147	121	65	8		6	6	6	8	5	5	3	3
	Long Distance Area 9	2200	147	121	65	8		6	6	6	8	5	5	3	3
	Long Distance Area 10	2200	147	121	65	8		6	6	6	8	5	5	3	3
	Long Distance Area 11	2200	147	121	65	8		6	6	6	8	5	5	3	3
	Long Distance Area 12	2200	147	121	65	8		6	6	6	8	5	5	3	3
	Long Distance Area 13	2200	147	121	65	8		6	6	6	8	5	5	3	3
	Long Distance Area 14	2200	147	121	65	8		6	6	6	8	5	5	3	3
	Long Distance Area 15	2200	147	121	65	8		6	6	6	8	5	5	3	3
	Long Distance Area 16	2200	147	121	65	8		6	6	6	8	5	5	3	3
	Long Distance Area 17	2200	147	121	65	8		6	6	6	8	5	5	3	3
	Long Distance Area 18	2200	147	121	65	8		6	6	6	8	5	5	3	3
	Long Distance Area 19	2200	147	121	65	8		6	6	6	8	5	5	3	3
	Long Distance Area 20	2200	147	121	65	8		6	6	6	8	5	5	3	3
	Long Distance Area 21	2200	147	121	65	8		6	6	6	8	5	5	3	3
	Long Distance Area 22	2200	147	121	65	8		6	6	6	8	5	5	3	3
	Long Distance Area 23	2200	147	121	65	8		6	6	6	8	5	5	3	3
	Long Distance Area 24	2200	147	121	65	8		6	6	6	8	5	5	3	3
	Long Distance Area 25	2200	147	121	65	8		6	6	6	8	5	5	3	3
		155000	10385	7621	2970	796	0	544	544	544	696	390	390	186	186

SERVICE PROVIDER	Name of the Service Area	LONG DISTANCE AREA CITY : INTER_OPERATOR TRAFFIC														
		Subscribers in Long Distance Area Central city	Inter-Operator Traffic in Erlangs at Long Distance Area City	Inter-Operator Traffic from Long Distance Area City	Traffic at Fixed Incumbent POI (Erlangs)	Traffic at Fixed Private 1 POI (Erlangs)	Traffic at Fixed Private 2 POI (Erlangs)	Intra_Network Traffic of Cellular Incumbent not counted	Traffic at Cellular Private 1 POI (Erlangs)	Traffic at Cellular Private 2 POI (Erlangs)	Traffic at NLDO Incumbent POI (Erlangs)	Traffic at NLDO Private 1 POI (Erlangs)	Traffic at NLDO Private 2 POI (Erlangs)	Traffic at ILDO Incumbent POI (Erlangs)	Traffic at ILDO Private 1 POI (Erlangs)
			0.067		1	2	3		4	5	6	7	8	9	10
Cellular Incumbent	Long Distance Area 1	90000	6030	4519	600	300	300		900	900	450	300	300	113	75
	Long Distance Area 2	40000	2680	2182	350	56	56		600	600	120	120	120	40	40
	Long Distance Area 3	40000	2680	2182	350	56	56		600	600	120	120	120	40	40
	Long Distance Area 4	15000	1005	802	225	6	6		225	225	25	25	25	10	10
	Long Distance Area 5	15000	1005	802	225	6	6		225	225	25	25	25	10	10
	Long Distance Area 6	15000	1005	802	225	6	6		225	225	25	25	25	10	10
	Long Distance Area 7	15000	1005	802	225	6	6		225	225	25	25	25	10	10
	Long Distance Area 8	15000	1005	802	225	6	6		225	225	25	25	25	10	10
	Long Distance Area 9	15000	1005	802	225	6	6		225	225	25	25	25	10	10
	Long Distance Area 10	15000	1005	802	225	6	6		225	225	25	25	25	10	10
	Long Distance Area 11	15000	1005	802	225	6	6		225	225	25	25	25	10	10
	Long Distance Area 12	15000	1005	802	225	6	6		225	225	25	25	25	10	10
	Long Distance Area 13	15000	1005	802	225	6	6		225	225	25	25	25	10	10
	Long Distance Area 14	15000	1005	802	225	6	6		225	225	25	25	25	10	10
	Long Distance Area 15	15000	1005	802	225	6	6		225	225	25	25	25	10	10
	Long Distance Area 16	15000	1005	802	225	6	6		225	225	25	25	25	10	10
	Long Distance Area 17	15000	1005	802	225	6	6		225	225	25	25	25	10	10
	Long Distance Area 18	15000	1005	802	225	6	6		225	225	25	25	25	10	10
	Long Distance Area 19	15000	1005	802	225	6	6		225	225	25	25	25	10	10
	Long Distance Area 20	15000	1005	802	225	6	6		225	225	25	25	25	10	10
	Long Distance Area 21	15000	1005	802	225	6	6		225	225	25	25	25	10	10
	Long Distance Area 22	15000	1005	802	225	6	6		225	225	25	25	25	10	10
	Long Distance Area 23	15000	1005	802	225	6	6		225	225	25	25	25	10	10
	Long Distance Area 24	15000	1005	802	225	6	6		225	225	25	25	25	10	10
	Long Distance Area 25	15000	1005	802	225	6	6		225	225	25	25	25	10	10
		500000	33500	26527	6250	544	544	0	7050	7050	1240	1090	1090	413	375

SERVICE PROVIDER	Name of the Service Area	LONG DISTANCE AREA CITY : INTER_OPERATOR TRAFFIC													
		Subscribers in Long Distance Area Central city	Inter-Operator Traffic in Erlangs at Long Distance Area City	Inter-Operator Traffic from Long Distance Area City	Traffic at Fixed Incumbent POI (Erlangs)	Traffic at Fixed Private 1 POI (Erlangs)	Traffic at Fixed Private 2 POI (Erlangs)	Traffic at Cellular Incumbent POI (Erlangs)	Intra_Network traffic of Celliular Private 1 not counted	Traffic at Cellular Private 2 POI (Erlangs)	Traffic at NLDO Incumbent POI (Erlangs)	Traffic at NLDO Private 1 POI (Erlangs)	Traffic at NLDO Private 2 POI (Erlangs)	Traffic at ILDO Incumbent POI (Erlangs)	Traffic at ILDO Private 1 POI (Erlangs)
			0.067		1	2	3	4		5	6	7	8	9	10
Cellular Private 1	Long Distance Area 1	90000	6030	4559	640	300	300	900		900	450	300	300	113	75
	Long Distance Area 2	55000	3685	2377	350	56	56	600		600	165	165	165	55	55
	Long Distance Area 3	55000	3685	2377	350	56	56	600		600	165	165	165	55	55
	Long Distance Area 4	25000	1675	1022	250	6	6	225		225	70	70	70	25	25
	Long Distance Area 5	25000	1675	1022	250	6	6	225		225	70	70	70	25	25
	Long Distance Area 6	25000	1675	1022	250	6	6	225		225	70	70	70	25	25
	Long Distance Area 7	25000	1675	1022	250	6	6	225		225	70	70	70	25	25
	Long Distance Area 8	25000	1675	1022	250	6	6	225		225	70	70	70	25	25
	Long Distance Area 9	25000	1675	1022	250	6	6	225		225	70	70	70	25	25
	Long Distance Area 10	25000	1675	1022	250	6	6	225		225	70	70	70	25	25
	Long Distance Area 11	25000	1675	1022	250	6	6	225		225	70	70	70	25	25
	Long Distance Area 12	25000	1675	1022	250	6	6	225		225	70	70	70	25	25
	Long Distance Area 13	25000	1675	1022	250	6	6	225		225	70	70	70	25	25
	Long Distance Area 14	25000	1675	1022	250	6	6	225		225	70	70	70	25	25
	Long Distance Area 15	25000	1675	1022	250	6	6	225		225	70	70	70	25	25
	Long Distance Area 16	25000	1675	1022	250	6	6	225		225	70	70	70	25	25
	Long Distance Area 17	25000	1675	1022	250	6	6	225		225	70	70	70	25	25
	Long Distance Area 18	25000	1675	1022	250	6	6	225		225	70	70	70	25	25
	Long Distance Area 19	25000	1675	1022	250	6	6	225		225	70	70	70	25	25
	Long Distance Area 20	25000	1675	1022	250	6	6	225		225	70	70	70	25	25
	Long Distance Area 21	25000	1675	1022	250	6	6	225		225	70	70	70	25	25
	Long Distance Area 22	25000	1675	1022	250	6	6	225		225	70	70	70	25	25
	Long Distance Area 23	25000	1675	1022	250	6	6	225		225	70	70	70	25	25
	Long Distance Area 24	25000	1675	1022	250	6	6	225		225	70	70	70	25	25
	Long Distance Area 25	25000	1675	1022	250	6	6	225		225	70	70	70	25	25
		750000	50250	31797	6840	544	544	7050	0	7050	2320	2170	2170	773	735

SERVICE PROVIDER	Name of the Service Area	LONG DISTANCE AREA CITY : INTER_OPERATOR TRAFFIC													
		Subscribers in Long Distance Area Central city	Inter-Operator Traffic in Erlangs at Long Distance Area City	Inter-Operator Traffic from Long Distance Area City	Traffic at Fixed Incumbent POI (Erlangs)	Traffic at Fixed Private 1 POI (Erlangs)	Traffic at Fixed Private 2 POI (Erlangs)	Traffic at Cellular Incumbent POI (Erlangs)	Traffic at Cellular Private 1 POI (Erlangs)	Intra_Network Traffic of Cellular Private 2 not counted	Traffic at NLDO Incumbent POI (Erlangs)	Traffic at NLDO Private 1 POI (Erlangs)	Traffic at NLDO Private 2 POI (Erlangs)	Traffic at ILDO Incumbent POI (Erlangs)	Traffic at ILDO Private 1 POI (Erlangs)
			0.067		1	2	3	4	5		6	7	8	9	10
Cellular Private 2	Long Distance Area 1	90000	6030	4559	640	300	300	900	900		450	300	300	113	75
	Long Distance Area 2	55000	3685	2377	350	56	56	600	600		165	165	165	55	55
	Long Distance Area 3	55000	3685	2377	350	56	56	600	600		165	165	165	55	55
	Long Distance Area 4	25000	1675	1022	250	6	6	225	225		70	70	70	25	25
	Long Distance Area 5	25000	1675	1022	250	6	6	225	225		70	70	70	25	25
	Long Distance Area 6	25000	1675	1022	250	6	6	225	225		70	70	70	25	25
	Long Distance Area 7	25000	1675	1022	250	6	6	225	225		70	70	70	25	25
	Long Distance Area 8	25000	1675	1022	250	6	6	225	225		70	70	70	25	25
	Long Distance Area 9	25000	1675	1022	250	6	6	225	225		70	70	70	25	25
	Long Distance Area 10	25000	1675	1022	250	6	6	225	225		70	70	70	25	25
	Long Distance Area 11	25000	1675	1022	250	6	6	225	225		70	70	70	25	25
	Long Distance Area 12	25000	1675	1022	250	6	6	225	225		70	70	70	25	25
	Long Distance Area 13	25000	1675	1022	250	6	6	225	225		70	70	70	25	25
	Long Distance Area 14	25000	1675	1022	250	6	6	225	225		70	70	70	25	25
	Long Distance Area 15	25000	1675	1022	250	6	6	225	225		70	70	70	25	25
	Long Distance Area 16	25000	1675	1022	250	6	6	225	225		70	70	70	25	25
	Long Distance Area 17	25000	1675	1022	250	6	6	225	225		70	70	70	25	25
	Long Distance Area 18	25000	1675	1022	250	6	6	225	225		70	70	70	25	25
	Long Distance Area 19	25000	1675	1022	250	6	6	225	225		70	70	70	25	25
	Long Distance Area 20	25000	1675	1022	250	6	6	225	225		70	70	70	25	25
	Long Distance Area 21	25000	1675	1022	250	6	6	225	225		70	70	70	25	25
	Long Distance Area 22	25000	1675	1022	250	6	6	225	225		70	70	70	25	25
	Long Distance Area 23	25000	1675	1022	250	6	6	225	225		70	70	70	25	25
	Long Distance Area 24	25000	1675	1022	250	6	6	225	225		70	70	70	25	25
	Long Distance Area 25	25000	1675	1022	250	6	6	225	225		70	70	70	25	25
		750000	50250	31797	6840	544	544	7050	7050	0	2320	2170	2170	773	735

SERVICE PROVIDER	Name of the Service Area	LONG DISTANCE AREA CITY : INTER_OPERATOR TRAFFIC								
					Traffic at Fixed Incumbent POI (Erlangs)	Traffic at Fixed Private 1 POI (Erlangs)	Traffic at Fixed Private 2 POI (Erlangs)	Traffic at Cellular Incumbent POI (Erlangs)	Traffic at Cellular Private 1 POI (Erlangs)	Traffic at Cellular Private 2 POI (Erlangs)
					1	2	3	4	5	6
NLDO Incumbent	Long Distance Area 1				650	376	376	450	450	450
	Long Distance Area 2				300	72	72	120	165	165
	Long Distance Area 3				300	72	72	120	165	165
	Long Distance Area 4				275	8	8	25	70	70
	Long Distance Area 5				275	8	8	25	70	70
	Long Distance Area 6				275	8	8	25	70	70
	Long Distance Area 7				275	8	8	25	70	70
	Long Distance Area 8				275	8	8	25	70	70
	Long Distance Area 9				275	8	8	25	70	70
	Long Distance Area 10				275	8	8	25	70	70
	Long Distance Area 11				275	8	8	25	70	70
	Long Distance Area 12				275	8	8	25	70	70
	Long Distance Area 13				275	8	8	25	70	70
	Long Distance Area 14				275	8	8	25	70	70
	Long Distance Area 15				275	8	8	25	70	70
	Long Distance Area 16				275	8	8	25	70	70
	Long Distance Area 17				275	8	8	25	70	70
	Long Distance Area 18				275	8	8	25	70	70
	Long Distance Area 19				275	8	8	25	70	70
	Long Distance Area 20				275	8	8	25	70	70
	Long Distance Area 21				275	8	8	25	70	70
	Long Distance Area 22				275	8	8	25	70	70
	Long Distance Area 23				275	8	8	25	70	70
	Long Distance Area 24				275	8	8	25	70	70
	Long Distance Area 25				275	8	8	25	70	70
		0	0	0	7300	696	696	1240	2320	2320

SERVICE PROVIDER	Name of the Service Area	LONG DISTANCE AREA CITY : INTER_OPERATOR TRAFFIC								
					Traffic at Fixed Incumbent POI (Erlangs)	Traffic at Fixed Private 1 POI (Erlangs)	Traffic at Fixed Private 2 POI (Erlangs)	Traffic at Cellular Incumbent POI (Erlangs)	Traffic at Cellular Private 1 POI (Erlangs)	Traffic at Cellular Private 2 POI (Erlangs)
					1	2	3	4	5	6
NLDO Private 1	Long Distance Area 1				470	200	200	300	300	300
	Long Distance Area 2				200	40	40	120	165	165
	Long Distance Area 3				200	40	40	120	165	165
	Long Distance Area 4				160	5	5	25	70	70
	Long Distance Area 5				160	5	5	25	70	70
	Long Distance Area 6				160	5	5	25	70	70
	Long Distance Area 7				160	5	5	25	70	70
	Long Distance Area 8				160	5	5	25	70	70
	Long Distance Area 9				160	5	5	25	70	70
	Long Distance Area 10				160	5	5	25	70	70
	Long Distance Area 11				160	5	5	25	70	70
	Long Distance Area 12				160	5	5	25	70	70
	Long Distance Area 13				160	5	5	25	70	70
	Long Distance Area 14				160	5	5	25	70	70
	Long Distance Area 15				160	5	5	25	70	70
	Long Distance Area 16				160	5	5	25	70	70
	Long Distance Area 17				160	5	5	25	70	70
	Long Distance Area 18				160	5	5	25	70	70
	Long Distance Area 19				160	5	5	25	70	70
	Long Distance Area 20				160	5	5	25	70	70
	Long Distance Area 21				160	5	5	25	70	70
	Long Distance Area 22				160	5	5	25	70	70
	Long Distance Area 23				160	5	5	25	70	70
	Long Distance Area 24				160	5	5	25	70	70
	Long Distance Area 25				160	5	5	25	70	70
		0	0	0	4390	390	390	1090	2170	2170

SERVICE PROVIDER	Name of the Service Area	LONG DISTANCE AREA CITY : INTER_OPERATOR TRAFFIC								
					Traffic at Fixed Incumbent POI (Erlangs)	Traffic at Fixed Private 1 POI (Erlangs)	Traffic at Fixed Private 2 POI (Erlangs)	Traffic at Cellular Incumbent POI (Erlangs)	Traffic at Cellular Private 1 POI (Erlangs)	Traffic at Cellular Private 2 POI (Erlangs)
					1	2	3	4	5	6
NLDO Private 2	Long Distance Area 1				470	200	200	300	300	300
	Long Distance Area 2				200	40	40	120	165	165
	Long Distance Area 3				200	40	40	120	165	165
	Long Distance Area 4				160	5	5	25	70	70
	Long Distance Area 5				160	5	5	25	70	70
	Long Distance Area 6				160	5	5	25	70	70
	Long Distance Area 7				160	5	5	25	70	70
	Long Distance Area 8				160	5	5	25	70	70
	Long Distance Area 9				160	5	5	25	70	70
	Long Distance Area 10				160	5	5	25	70	70
	Long Distance Area 11				160	5	5	25	70	70
	Long Distance Area 12				160	5	5	25	70	70
	Long Distance Area 13				160	5	5	25	70	70
	Long Distance Area 14				160	5	5	25	70	70
	Long Distance Area 15				160	5	5	25	70	70
	Long Distance Area 16				160	5	5	25	70	70
	Long Distance Area 17				160	5	5	25	70	70
	Long Distance Area 18				160	5	5	25	70	70
	Long Distance Area 19				160	5	5	25	70	70
	Long Distance Area 20				160	5	5	25	70	70
	Long Distance Area 21				160	5	5	25	70	70
	Long Distance Area 22				160	5	5	25	70	70
	Long Distance Area 23				160	5	5	25	70	70
	Long Distance Area 24				160	5	5	25	70	70
	Long Distance Area 25				160	5	5	25	70	70
		0	0	0	4390	390	390	1090	2170	2170

SERVICE PROVIDER	Name of the Service Area	LONG DISTANCE AREA CITY : INTER_OPERATOR TRAFFIC								
					Traffic at Fixed Incumbent POI (Erlangs)	Traffic at Fixed Private 1 POI (Erlangs)	Traffic at Fixed Private 2 POI (Erlangs)	Traffic at Cellular Incumbent POI (Erlangs)	Traffic at Cellular Private 1 POI (Erlangs)	Traffic at Cellular Private 2 POI (Erlangs)
					1	2	3	4	5	6
ILDO Incumbent	Long Distance Area 1				170	88	16	113	113	113
	Long Distance Area 2				100	16	16	40	55	55
	Long Distance Area 3				100	16	3	40	55	55
	Long Distance Area 4				70	3	3	10	25	25
	Long Distance Area 5				70	3	3	10	25	25
	Long Distance Area 6				70	3	3	10	25	25
	Long Distance Area 7				70	3	3	10	25	25
	Long Distance Area 8				70	3	3	10	25	25
	Long Distance Area 9				70	3	3	10	25	25
	Long Distance Area 10				70	3	3	10	25	25
	Long Distance Area 11				70	3	3	10	25	25
	Long Distance Area 12				70	3	3	10	25	25
	Long Distance Area 13				70	3	3	10	25	25
	Long Distance Area 14				70	3	3	10	25	25
	Long Distance Area 15				70	3	3	10	25	25
	Long Distance Area 16				70	3	3	10	25	25
	Long Distance Area 17				70	3	3	10	25	25
	Long Distance Area 18				70	3	3	10	25	25
	Long Distance Area 19				70	3	3	10	25	25
	Long Distance Area 20				70	3	3	10	25	25
	Long Distance Area 21				70	3	3	10	25	25
	Long Distance Area 22				70	3	3	10	25	25
	Long Distance Area 23				70	3	3	10	25	25
	Long Distance Area 24				70	3	3	10	25	25
	Long Distance Area 25				70	3	186	10	25	25
		0	0	0	1910	186	284	413	773	773

SERVICE PROVIDER	Name of the Service Area	LONG DISTANCE AREA CITY : INTER_OPERATOR TRAFFIC								
					Traffic at Fixed Incumbent POI (Erlangs)	Traffic at Fixed Private 1 POI (Erlangs)	Traffic at Fixed Private 2 POI (Erlangs)	Traffic at Cellular Incumbent POI (Erlangs)	Traffic at Cellular Private 1 POI (Erlangs)	Traffic at Cellular Private 2 POI (Erlangs)
					1	2	3	4	5	6
ILDO Private 1	Long Distance Area 1				120	88	88	75	75	75
	Long Distance Area 2				60	16	16	40	55	55
	Long Distance Area 3				60	16	16	40	55	55
	Long Distance Area 4				50	3	3	10	25	25
	Long Distance Area 5				50	3	3	10	25	25
	Long Distance Area 6				50	3	3	10	25	25
	Long Distance Area 7				50	3	3	10	25	25
	Long Distance Area 8				50	3	3	10	25	25
	Long Distance Area 9				50	3	3	10	25	25
	Long Distance Area 10				50	3	3	10	25	25
	Long Distance Area 11				50	3	3	10	25	25
	Long Distance Area 12				50	3	3	10	25	25
	Long Distance Area 13				50	3	3	10	25	25
	Long Distance Area 14				50	3	3	10	25	25
	Long Distance Area 15				50	3	3	10	25	25
	Long Distance Area 16				50	3	3	10	25	25
	Long Distance Area 17				50	3	3	10	25	25
	Long Distance Area 18				50	3	3	10	25	25
	Long Distance Area 19				50	3	3	10	25	25
	Long Distance Area 20				50	3	3	10	25	25
	Long Distance Area 21				50	3	3	10	25	25
	Long Distance Area 22				50	3	3	10	25	25
	Long Distance Area 23				50	3	3	10	25	25
	Long Distance Area 24				50	3	3	10	25	25
	Long Distance Area 25				50	3	3	10	25	25
		0	0	0	1340	186	186	375	735	735

SERVICE PROVIDER	Name of the Service Area	LONG DISTANCE AREA CITY : INTER_OPERATOR TRAFFIC								
					Traffic at Fixed Incumbent POI (Erlangs)	Traffic at Fixed Private 1 POI (Erlangs)	Traffic at Fixed Private 2 POI (Erlangs)	Traffic at Cellular Incumbent POI (Erlangs)	Traffic at Cellular Private 1 POI (Erlangs)	Traffic at Cellular Private 2 POI (Erlangs)
					1	2	3	4	5	6
ILDO Private 2	Long Distance Area 1				120	88	88	113	113	113
	Long Distance Area 2				60	16	16	40	55	55
	Long Distance Area 3				60	16	16	40	55	55
	Long Distance Area 4				50	3	3	10	25	25
	Long Distance Area 5				50	3	3	10	25	25
	Long Distance Area 6				50	3	3	10	25	25
	Long Distance Area 7				50	3	3	10	25	25
	Long Distance Area 8				50	3	3	10	25	25
	Long Distance Area 9				50	3	3	10	25	25
	Long Distance Area 10				50	3	3	10	25	25
	Long Distance Area 11				50	3	3	10	25	25
	Long Distance Area 12				50	3	3	10	25	25
	Long Distance Area 13				50	3	3	10	25	25
	Long Distance Area 14				50	3	3	10	25	25
	Long Distance Area 15				50	3	3	10	25	25
	Long Distance Area 16				50	3	3	10	25	25
	Long Distance Area 17				50	3	3	10	25	25
	Long Distance Area 18				50	3	3	10	25	25
	Long Distance Area 19				50	3	3	10	25	25
	Long Distance Area 20				50	3	3	10	25	25
	Long Distance Area 21				50	3	3	10	25	25
	Long Distance Area 22				50	3	3	10	25	25
	Long Distance Area 23				50	3	3	10	25	25
	Long Distance Area 24				50	3	3	10	25	25
	Long Distance Area 25				50	3	3	10	25	25
		0	0	0	1340	186	186	413	773	773

SERVICE PROVIDER	Name of the Service Area	LONG DISTANCE AREA CITY : INTER_OPERATOR TRAFFIC								
					Traffic at Fixed Incumbent POI (Erlangs)	Traffic at Fixed Private 1 POI (Erlangs)	Traffic at Fixed Private 2 POI (Erlangs)	Traffic at Cellular Incumbent POI (Erlangs)	Traffic at Cellular Private 1 POI (Erlangs)	Traffic at Cellular Private 2 POI (Erlangs)
					1	2	3	4	5	6
ILDO Private 3	Long Distance Area 1				120	88	88	169	169	169
	Long Distance Area 2				47	16	16	40	55	55
	Long Distance Area 3				47	16	16	40	55	55
	Long Distance Area 4				50	3	3	10	25	25
	Long Distance Area 5				50	3	3	10	25	25
	Long Distance Area 6				50	3	3	10	25	25
	Long Distance Area 7				50	3	3	10	25	25
	Long Distance Area 8				50	3	3	10	25	25
	Long Distance Area 9				50	3	3	10	25	25
	Long Distance Area 10				50	3	3	10	25	25
	Long Distance Area 11				50	3	3	10	25	25
	Long Distance Area 12				50	3	3	10	25	25
	Long Distance Area 13				50	3	3	10	25	25
	Long Distance Area 14				50	3	3	10	25	25
	Long Distance Area 15				50	3	3	10	25	25
	Long Distance Area 16				50	3	3	10	25	25
	Long Distance Area 17				50	3	3	10	25	25
	Long Distance Area 18				50	3	3	10	25	25
	Long Distance Area 19				50	3	3	10	25	25
	Long Distance Area 20				50	3	3	10	25	25
	Long Distance Area 21				50	3	3	10	25	25
	Long Distance Area 22				50	3	3	10	25	25
	Long Distance Area 23				50	3	3	10	25	25
	Long Distance Area 24				50	3	3	10	25	25
	Long Distance Area 25				50	3	3	10	25	25
		0	0	0	1313	186	186	469	829	829

SECTION-4.2

NUMBER OF 2 Mbps STREAMS
AT
LONG DISTANCE AREA

SERVICE PROVIDER	Name of the Service Area		Number of 2 Mb/s streams based on GOS = 0.0005											
		Intra_Network 2 Mb/s of Fixed Incumbent not counted	Number of E1s (2 MB/s streams at POI = Fixed Private 1	Number of E1s (2 MB/s streams at POI = Fixed Private 2	Number of E1s (2 MB/s streams at POI = Cellular Incumbent	Number of E1s (2 MB/s streams at POI = Cellular Private 1	Number of E1s (2 MB/s streams at POI = Cellular Private 2	Number of E1s (2 MB/s streams at POI = NLDO Incumbent	Number of E1s (2 MB/s streams at POI = NLDO Private 1	Number of E1s (2 MB/s streams at POI = NLDO Private 2	Number of E1s (2 MB/s streams at POI = ILDO Incumbent	Number of E1s (2 MB/s streams at POI = ILDO Private 1	Number of E1s (2 MB/s streams at POI = ILDO Private 2	Number of E1s (2 MB/s streams at POI = ILDO Private 3
			1	2	3	4	5	6	7	8	9	10	11	12
Fixed Incumbent	Long Distance Area 1		38	38	23	25	25	25	18	18	7	5	5	5
	Long Distance Area 2		11	11	14	14	14	12	8	8	7	3	3	3
	Long Distance Area 3		11	11	14	14	14	12	8	8	7	3	3	3
	Long Distance Area 4		3	3	9	10	10	11	7	7	3	3	3	3
	Long Distance Area 5		3	3	9	10	10	11	7	7	3	3	3	3
	Long Distance Area 6		3	3	9	10	10	11	7	7	3	3	3	3
	Long Distance Area 7		3	3	9	10	10	11	7	7	3	3	3	3
	Long Distance Area 8		3	3	9	10	10	11	7	7	3	3	3	3
	Long Distance Area 9		3	3	9	10	10	11	7	7	3	3	3	3
	Long Distance Area 10		3	3	9	10	10	11	7	7	3	3	3	3
	Long Distance Area 11		3	3	9	10	10	11	7	7	3	3	3	3
	Long Distance Area 12		3	3	9	10	10	11	7	7	3	3	3	3
	Long Distance Area 13		3	3	9	10	10	11	7	7	3	3	3	3
	Long Distance Area 14		3	3	9	10	10	11	7	7	3	3	3	3
	Long Distance Area 15		3	3	9	10	10	11	7	7	3	3	3	3
	Long Distance Area 16		3	3	9	10	10	11	7	7	3	3	3	3
	Long Distance Area 17		3	3	9	10	10	11	7	7	3	3	3	3
	Long Distance Area 18		3	3	9	10	10	11	7	7	3	3	3	3
	Long Distance Area 19		3	3	9	10	10	11	7	7	3	3	3	3
	Long Distance Area 20		3	3	9	10	10	11	7	7	3	3	3	3
	Long Distance Area 21		3	3	9	10	10	11	7	7	3	3	3	3
	Long Distance Area 22		3	3	9	10	10	11	7	7	3	3	3	3
	Long Distance Area 23		3	3	9	10	10	11	7	7	3	3	3	3
	Long Distance Area 24		3	3	9	10	10	11	7	7	3	3	3	3
	Long Distance Area 25		3	3	9	10	10	11	7	7	3	3	3	3
		0	126	126	249	273	273	291	188	188	87	77	77	77

SERVICE PROVIDER	Name of the Service Area		Number of 2 Mb/s streams based on GOS = 0.0005											
		Number of E1s (2 MB/s streams at POI = Fixed Incumbent	Intra_Network 2 Mb/s of Fixed Private 1 not counted	Number of E1s (2 MB/s streams at POI = Fixed Private 2	Number of E1s (2 MB/s streams at POI = Cellular Incumbent	Number of E1s (2 MB/s streams at POI = Cellular Private 1	Number of E1s (2 MB/s streams at POI = Cellular Private 2	Number of E1s (2 MB/s streams at POI = NLDO Incumbent	Number of E1s (2 MB/s streams at POI = NLDO Private 1	Number of E1s (2 MB/s streams at POI = NLDO Private 2	Number of E1s (2 MB/s streams at POI = ILDO Incumbent	Number of E1s (2 MB/s streams at POI = ILDO Private 1	Number of E1s (2 MB/s streams at POI = ILDO Private 2	Number of E1s (2 MB/s streams at POI = ILDO Private 3
		1		2	3	4	5	6	7	8	9	10	11	12
Fixed Private 1	Long Distance Area 1	38		18	12	12	12	15	8	8	4	4	4	4
	Long Distance Area 2	11		4	3	3	3	4	2	2	1	1	1	1
	Long Distance Area 3	11		4	3	3	3	4	2	2	1	1	1	1
	Long Distance Area 4	3		1	1	1	1	1	1	1	1	1	1	1
	Long Distance Area 5	3		1	1	1	1	1	1	1	1	1	1	1
	Long Distance Area 6	3		1	1	1	1	1	1	1	1	1	1	1
	Long Distance Area 7	3		1	1	1	1	1	1	1	1	1	1	1
	Long Distance Area 8	3		1	1	1	1	1	1	1	1	1	1	1
	Long Distance Area 9	3		1	1	1	1	1	1	1	1	1	1	1
	Long Distance Area 10	3		1	1	1	1	1	1	1	1	1	1	1
	Long Distance Area 11	3		1	1	1	1	1	1	1	1	1	1	1
	Long Distance Area 12	3		1	1	1	1	1	1	1	1	1	1	1
	Long Distance Area 13	3		1	1	1	1	1	1	1	1	1	1	1
	Long Distance Area 14	3		1	1	1	1	1	1	1	1	1	1	1
	Long Distance Area 15	3		1	1	1	1	1	1	1	1	1	1	1
	Long Distance Area 16	3		1	1	1	1	1	1	1	1	1	1	1
	Long Distance Area 17	3		1	1	1	1	1	1	1	1	1	1	1
	Long Distance Area 18	3		1	1	1	1	1	1	1	1	1	1	1
	Long Distance Area 19	3		1	1	1	1	1	1	1	1	1	1	1
	Long Distance Area 20	3		1	1	1	1	1	1	1	1	1	1	1
	Long Distance Area 21	3		1	1	1	1	1	1	1	1	1	1	1
	Long Distance Area 22	3		1	1	1	1	1	1	1	1	1	1	1
	Long Distance Area 23	3		1	1	1	1	1	1	1	1	1	1	1
	Long Distance Area 24	3		1	1	1	1	1	1	1	1	1	1	1
	Long Distance Area 25	3		1	1	1	1	1	1	1	1	1	1	1
		126	0	48	40	40	40	45	34	34	28	28	28	28

SERVICE PROVIDER	Name of the Service Area		Number of 2 Mb/s streams based on GOS = 0.0005											
		Number of E1s (2 MB/s streams at POI = Fixed Incumbent	Number of E1s (2 MB/s streams at POI = Fixed Private 1	Intra_Network 2 Mb/s of Fixed Private 2 not counted	Number of E1s (2 MB/s streams at POI = Cellular Incumbent	Number of E1s (2 MB/s streams at POI = Cellular Private 1	Number of E1s (2 MB/s streams at POI = Cellular Private 2	Number of E1s (2 MB/s streams at POI = NLDO Incumbent	Number of E1s (2 MB/s streams at POI = NLDO Private 1	Number of E1s (2 MB/s streams at POI = NLDO Private 2	Number of E1s (2 MB/s streams at POI = ILDO Incumbent	Number of E1s (2 MB/s streams at POI = ILDO Private 1	Number of E1s (2 MB/s streams at POI = ILDO Private 2	Number of E1s (2 MB/s streams at POI = ILDO Private 3
		1	2		3	4	5	6	7	8	9	10	11	12
Fixed Private 2	Long Distance Area 1	38	18		12	12	12	15	8	8	4	4	4	4
	Long Distance Area 2	11	4		3	3	3	4	2	2	1	1	1	1
	Long Distance Area 3	11	4		3	3	3	4	2	2	1	1	1	1
	Long Distance Area 4	3	1		1	1	1	1	1	1	1	1	1	1
	Long Distance Area 5	3	1		1	1	1	1	1	1	1	1	1	1
	Long Distance Area 6	3	1		1	1	1	1	1	1	1	1	1	1
	Long Distance Area 7	3	1		1	1	1	1	1	1	1	1	1	1
	Long Distance Area 8	3	1		1	1	1	1	1	1	1	1	1	1
	Long Distance Area 9	3	1		1	1	1	1	1	1	1	1	1	1
	Long Distance Area 10	3	1		1	1	1	1	1	1	1	1	1	1
	Long Distance Area 11	3	1		1	1	1	1	1	1	1	1	1	1
	Long Distance Area 12	3	1		1	1	1	1	1	1	1	1	1	1
	Long Distance Area 13	3	1		1	1	1	1	1	1	1	1	1	1
	Long Distance Area 14	3	1		1	1	1	1	1	1	1	1	1	1
	Long Distance Area 15	3	1		1	1	1	1	1	1	1	1	1	1
	Long Distance Area 16	3	1		1	1	1	1	1	1	1	1	1	1
	Long Distance Area 17	3	1		1	1	1	1	1	1	1	1	1	1
	Long Distance Area 18	3	1		1	1	1	1	1	1	1	1	1	1
	Long Distance Area 19	3	1		1	1	1	1	1	1	1	1	1	1
	Long Distance Area 20	3	1		1	1	1	1	1	1	1	1	1	1
	Long Distance Area 21	3	1		1	1	1	1	1	1	1	1	1	1
	Long Distance Area 22	3	1		1	1	1	1	1	1	1	1	1	1
	Long Distance Area 23	3	1		1	1	1	1	1	1	1	1	1	1
	Long Distance Area 24	3	1		1	1	1	1	1	1	1	1	1	1
	Long Distance Area 25	3	1		1	1	1	1	1	1	1	1	1	1
		126	48	0	40	40	40	45	34	34	28	28	28	28

SERVICE PROVIDER	Name of the Service Area		Number of 2 Mb/s streams based on GOS = 0.0005											
		Number of E1s (2 MB/s streams at POI = Fixed Incumbent	Number of E1s (2 MB/s streams at POI = Fixed Private 1	Number of E1s (2 MB/s streams at POI = Fixed Private 2	Intra_Network 2 Mb/s of Cellular Incumbent not counted	Number of E1s (2 MB/s streams at POI = Cellular Private 1	Number of E1s (2 MB/s streams at POI = Cellular Private 2	Number of E1s (2 MB/s streams at POI = NLDO Incumbent	Number of E1s (2 MB/s streams at POI = NLDO Private 1	Number of E1s (2 MB/s streams at POI = NLDO Private 2	Number of E1s (2 MB/s streams at POI = ILDO Incumbent	Number of E1s (2 MB/s streams at POI = ILDO Private 1	Number of E1s (2 MB/s streams at POI = ILDO Private 2	Number of E1s (2 MB/s streams at POI = ILDO Private 3
		1	2	3		4	5	6	7	8	9	10	11	12
Cellular Incumbent	Long Distance Area 1	23	12	12		34	34	18	12	12	5	4	5	7
	Long Distance Area 2	14	3	3		23	23	6	5	5	2	2	2	2
	Long Distance Area 3	14	3	3		23	23	6	5	5	2	2	2	2
	Long Distance Area 4	9	1	1		9	9	2	2	2	1	1	1	1
	Long Distance Area 5	9	1	1		9	9	2	2	2	1	1	1	1
	Long Distance Area 6	9	1	1		9	9	2	2	2	1	1	1	1
	Long Distance Area 7	9	1	1		9	9	2	2	2	1	1	1	1
	Long Distance Area 8	9	1	1		9	9	2	2	2	1	1	1	1
	Long Distance Area 9	9	1	1		9	9	2	2	2	1	1	1	1
	Long Distance Area 10	9	1	1		9	9	2	2	2	1	1	1	1
	Long Distance Area 11	9	1	1		9	9	2	2	2	1	1	1	1
	Long Distance Area 12	9	1	1		9	9	2	2	2	1	1	1	1
	Long Distance Area 13	9	1	1		9	9	2	2	2	1	1	1	1
	Long Distance Area 14	9	1	1		9	9	2	2	2	1	1	1	1
	Long Distance Area 15	9	1	1		9	9	2	2	2	1	1	1	1
	Long Distance Area 16	9	1	1		9	9	2	2	2	1	1	1	1
	Long Distance Area 17	9	1	1		9	9	2	2	2	1	1	1	1
	Long Distance Area 18	9	1	1		9	9	2	2	2	1	1	1	1
	Long Distance Area 19	9	1	1		9	9	2	2	2	1	1	1	1
	Long Distance Area 20	9	1	1		9	9	2	2	2	1	1	1	1
	Long Distance Area 21	9	1	1		9	9	2	2	2	1	1	1	1
	Long Distance Area 22	9	1	1		9	9	2	2	2	1	1	1	1
	Long Distance Area 23	9	1	1		9	9	2	2	2	1	1	1	1
	Long Distance Area 24	9	1	1		9	9	2	2	2	1	1	1	1
	Long Distance Area 25	9	1	1		9	9	2	2	2	1	1	1	1
		249	40	40	0	278	278	74	66	66	31	30	31	33

SERVICE PROVIDER	Name of the Service Area		Number of 2 Mb/s streams based on GOS = 0.0005											
		Number of E1s (2 MB/s streams at POI = Fixed Incumbent	Number of E1s (2 MB/s streams at POI = Fixed Private 1	Number of E1s (2 MB/s streams at POI = Fixed Private 2	Number of E1s (2 MB/s streams at POI = Cellular Incumbent	Intra_Network 2 Mb/s of Cellular Private 1 not counted	Number of E1s (2 MB/s streams at POI = Cellular Private 2	Number of E1s (2 MB/s streams at POI = NLDO Incumbent	Number of E1s (2 MB/s streams at POI = NLDO Private 1	Number of E1s (2 MB/s streams at POI = NLDO Private 2	Number of E1s (2 MB/s streams at POI = ILDO Incumbent	Number of E1s (2 MB/s streams at POI = ILDO Private 1	Number of E1s (2 MB/s streams at POI = ILDO Private 2	Number of E1s (2 MB/s streams at POI = ILDO Private 3
		1	2	3	4		5	6	7	8	9	10	11	12
Cellular Private 1	Long Distance Area 1	25	12	12	34		34	18	12	12	5	4	5	7
	Long Distance Area 2	14	3	3	23		23	7	7	7	3	3	3	3
	Long Distance Area 3	14	3	3	23		23	7	7	7	3	3	3	3
	Long Distance Area 4	10	1	1	9		9	3	3	3	2	2	2	2
	Long Distance Area 5	10	1	1	9		9	3	3	3	2	2	2	2
	Long Distance Area 6	10	1	1	9		9	3	3	3	2	2	2	2
	Long Distance Area 7	10	1	1	9		9	3	3	3	2	2	2	2
	Long Distance Area 8	10	1	1	9		9	3	3	3	2	2	2	2
	Long Distance Area 9	10	1	1	9		9	3	3	3	2	2	2	2
	Long Distance Area 10	10	1	1	9		9	3	3	3	2	2	2	2
	Long Distance Area 11	10	1	1	9		9	3	3	3	2	2	2	2
	Long Distance Area 12	10	1	1	9		9	3	3	3	2	2	2	2
	Long Distance Area 13	10	1	1	9		9	3	3	3	2	2	2	2
	Long Distance Area 14	10	1	1	9		9	3	3	3	2	2	2	2
	Long Distance Area 15	10	1	1	9		9	3	3	3	2	2	2	2
	Long Distance Area 16	10	1	1	9		9	3	3	3	2	2	2	2
	Long Distance Area 17	10	1	1	9		9	3	3	3	2	2	2	2
	Long Distance Area 18	10	1	1	9		9	3	3	3	2	2	2	2
	Long Distance Area 19	10	1	1	9		9	3	3	3	2	2	2	2
	Long Distance Area 20	10	1	1	9		9	3	3	3	2	2	2	2
	Long Distance Area 21	10	1	1	9		9	3	3	3	2	2	2	2
	Long Distance Area 22	10	1	1	9		9	3	3	3	2	2	2	2
	Long Distance Area 23	10	1	1	9		9	3	3	3	2	2	2	2
	Long Distance Area 24	10	1	1	9		9	3	3	3	2	2	2	2
	Long Distance Area 25	10	1	1	9		9	3	3	3	2	2	2	2
		273	40	40	278	0	278	98	92	92	55	54	55	57

SERVICE PROVIDER	Name of the Service Area		Number of 2 Mb/s streams based on GOS = 0.0005											
		Number of E1s (2 MB/s streams at POI = Fixed Incumbent	Number of E1s (2 MB/s streams at POI = Fixed Private 1	Number of E1s (2 MB/s streams at POI = Fixed Private 2	Number of E1s (2 MB/s streams at POI = Cellular Incumbent	Number of E1s (2 MB/s streams at POI = Cellular Private 1	Intra_Network 2 Mb/s of Cellular Private 2 not counted	Number of E1s (2 MB/s streams at POI = NLDO Incumbent	Number of E1s (2 MB/s streams at POI = NLDO Private 1	Number of E1s (2 MB/s streams at POI = NLDO Private 2	Number of E1s (2 MB/s streams at POI = ILDO Incumbent	Number of E1s (2 MB/s streams at POI = ILDO Private 1	Number of E1s (2 MB/s streams at POI = ILDO Private 2	Number of E1s (2 MB/s streams at POI = ILDO Private 3
		1	2	3	4	5		6	7	8	9	10	11	12
Cellular Private 2	Long Distance Area 1	25	12	12	34	34		18	12	12	5	4	5	7
	Long Distance Area 2	14	3	3	23	23		7	7	7	3	3	3	3
	Long Distance Area 3	14	3	3	23	23		7	7	7	3	3	3	3
	Long Distance Area 4	10	1	1	9	9		3	3	3	2	2	2	2
	Long Distance Area 5	10	1	1	9	9		3	3	3	2	2	2	2
	Long Distance Area 6	10	1	1	9	9		3	3	3	2	2	2	2
	Long Distance Area 7	10	1	1	9	9		3	3	3	2	2	2	2
	Long Distance Area 8	10	1	1	9	9		3	3	3	2	2	2	2
	Long Distance Area 9	10	1	1	9	9		3	3	3	2	2	2	2
	Long Distance Area 10	10	1	1	9	9		3	3	3	2	2	2	2
	Long Distance Area 11	10	1	1	9	9		3	3	3	2	2	2	2
	Long Distance Area 12	10	1	1	9	9		3	3	3	2	2	2	2
	Long Distance Area 13	10	1	1	9	9		3	3	3	2	2	2	2
	Long Distance Area 14	10	1	1	9	9		3	3	3	2	2	2	2
	Long Distance Area 15	10	1	1	9	9		3	3	3	2	2	2	2
	Long Distance Area 16	10	1	1	9	9		3	3	3	2	2	2	2
	Long Distance Area 17	10	1	1	9	9		3	3	3	2	2	2	2
	Long Distance Area 18	10	1	1	9	9		3	3	3	2	2	2	2
	Long Distance Area 19	10	1	1	9	9		3	3	3	2	2	2	2
	Long Distance Area 20	10	1	1	9	9		3	3	3	2	2	2	2
	Long Distance Area 21	10	1	1	9	9		3	3	3	2	2	2	2
	Long Distance Area 22	10	1	1	9	9		3	3	3	2	2	2	2
	Long Distance Area 23	10	1	1	9	9		3	3	3	2	2	2	2
	Long Distance Area 24	10	1	1	9	9		3	3	3	2	2	2	2
	Long Distance Area 25	10	1	1	9	9		3	3	3	2	2	2	2
		273	40	40	278	278	0	98	92	92	55	54	55	57

SERVICE PROVIDER	Name of the Service Area	Number of 2 Mb/s streams based on GOS = 0.0005					
		Number of E1s (2 MB/s streams at POI = Fixed Incumbent	Number of E1s (2 MB/s streams at POI = Fixed Private 1	Number of E1s (2 MB/s streams at POI = Fixed Private 2	Number of E1s (2 MB/s streams at POI = Cellular Incumbent	Number of E1s (2 MB/s streams at POI = Cellular Private 1	Number of E1s (2 MB/s streams at POI = Cellular Private 2
		1	2	3	4	5	6
NLDO Incumbent	Long Distance Area 1	25	15	15	18	18	18
	Long Distance Area 2	12	4	4	6	7	7
	Long Distance Area 3	12	4	4	6	7	7
	Long Distance Area 4	11	1	1	2	3	3
	Long Distance Area 5	11	1	1	2	3	3
	Long Distance Area 6	11	1	1	2	3	3
	Long Distance Area 7	11	1	1	2	3	3
	Long Distance Area 8	11	1	1	2	3	3
	Long Distance Area 9	11	1	1	2	3	3
	Long Distance Area 10	11	1	1	2	3	3
	Long Distance Area 11	11	1	1	2	3	3
	Long Distance Area 12	11	1	1	2	3	3
	Long Distance Area 13	11	1	1	2	3	3
	Long Distance Area 14	11	1	1	2	3	3
	Long Distance Area 15	11	1	1	2	3	3
	Long Distance Area 16	11	1	1	2	3	3
	Long Distance Area 17	11	1	1	2	3	3
	Long Distance Area 18	11	1	1	2	3	3
	Long Distance Area 19	11	1	1	2	3	3
	Long Distance Area 20	11	1	1	2	3	3
	Long Distance Area 21	11	1	1	2	3	3
	Long Distance Area 22	11	1	1	2	3	3
	Long Distance Area 23	11	1	1	2	3	3
	Long Distance Area 24	11	1	1	2	3	3
	Long Distance Area 25	11	1	1	2	3	3
		291	45	45	74	98	98

SERVICE PROVIDER	Name of the Service Area	Number of 2 Mb/s streams based on GOS = 0.0005					
		Number of E1s (2 MB/s streams at POI = Fixed Incumbent	Number of E1s (2 MB/s streams at POI = Fixed Private 1	Number of E1s (2 MB/s streams at POI = Fixed Private 2	Number of E1s (2 MB/s streams at POI = Cellular Incumbent	Number of E1s (2 MB/s streams at POI = Cellular Private 1	Number of E1s (2 MB/s streams at POI = Cellular Private 2
		1	2	3	4	5	6
NLDO Private 1	Long Distance Area 1	18	8	8	12	12	12
	Long Distance Area 2	8	2	2	5	7	7
	Long Distance Area 3	8	2	2	5	7	7
	Long Distance Area 4	7	1	1	2	3	3
	Long Distance Area 5	7	1	1	2	3	3
	Long Distance Area 6	7	1	1	2	3	3
	Long Distance Area 7	7	1	1	2	3	3
	Long Distance Area 8	7	1	1	2	3	3
	Long Distance Area 9	7	1	1	2	3	3
	Long Distance Area 10	7	1	1	2	3	3
	Long Distance Area 11	7	1	1	2	3	3
	Long Distance Area 12	7	1	1	2	3	3
	Long Distance Area 13	7	1	1	2	3	3
	Long Distance Area 14	7	1	1	2	3	3
	Long Distance Area 15	7	1	1	2	3	3
	Long Distance Area 16	7	1	1	2	3	3
	Long Distance Area 17	7	1	1	2	3	3
	Long Distance Area 18	7	1	1	2	3	3
	Long Distance Area 19	7	1	1	2	3	3
	Long Distance Area 20	7	1	1	2	3	3
	Long Distance Area 21	7	1	1	2	3	3
	Long Distance Area 22	7	1	1	2	3	3
	Long Distance Area 23	7	1	1	2	3	3
	Long Distance Area 24	7	1	1	2	3	3
	Long Distance Area 25	7	1	1	2	3	3
		188	34	34	66	92	92

SERVICE PROVIDER	Name of the Service Area	Number of 2 Mb/s streams based on GOS = 0.0005					
		Number of E1s (2 MB/s streams at POI = Fixed Incumbent	Number of E1s (2 MB/s streams at POI = Fixed Private 1	Number of E1s (2 MB/s streams at POI = Fixed Private 2	Number of E1s (2 MB/s streams at POI = Cellular Incumbent	Number of E1s (2 MB/s streams at POI = Cellular Private 1	Number of E1s (2 MB/s streams at POI = Cellular Private 2
		1	2	3	4	5	6
NLDO Private 2	Long Distance Area 1	18	8	8	12	12	12
	Long Distance Area 2	8	2	2	5	7	7
	Long Distance Area 3	8	2	2	5	7	7
	Long Distance Area 4	7	1	1	2	3	3
	Long Distance Area 5	7	1	1	2	3	3
	Long Distance Area 6	7	1	1	2	3	3
	Long Distance Area 7	7	1	1	2	3	3
	Long Distance Area 8	7	1	1	2	3	3
	Long Distance Area 9	7	1	1	2	3	3
	Long Distance Area 10	7	1	1	2	3	3
	Long Distance Area 11	7	1	1	2	3	3
	Long Distance Area 12	7	1	1	2	3	3
	Long Distance Area 13	7	1	1	2	3	3
	Long Distance Area 14	7	1	1	2	3	3
	Long Distance Area 15	7	1	1	2	3	3
	Long Distance Area 16	7	1	1	2	3	3
	Long Distance Area 17	7	1	1	2	3	3
	Long Distance Area 18	7	1	1	2	3	3
	Long Distance Area 19	7	1	1	2	3	3
	Long Distance Area 20	7	1	1	2	3	3
	Long Distance Area 21	7	1	1	2	3	3
	Long Distance Area 22	7	1	1	2	3	3
	Long Distance Area 23	7	1	1	2	3	3
	Long Distance Area 24	7	1	1	2	3	3
	Long Distance Area 25	7	1	1	2	3	3
		188	34	34	66	92	92

SERVICE PROVIDER	Name of the Service Area	Number of 2 Mb/s streams based on GOS = 0.0005					
		Number of E1s (2 MB/s streams at POI = Fixed Incumbent	Number of E1s (2 MB/s streams at POI = Fixed Private 1	Number of E1s (2 MB/s streams at POI = Fixed Private 2	Number of E1s (2 MB/s streams at POI = Cellular Incumbent	Number of E1s (2 MB/s streams at POI = Cellular Private 1	Number of E1s (2 MB/s streams at POI = Cellular Private 2
		1	2	3	4	5	6
ILDO Incumbent	Long Distance Area 1	7	4	4	5	5	5
	Long Distance Area 2	7	1	1	2	3	3
	Long Distance Area 3	7	1	1	2	3	3
	Long Distance Area 4	3	1	1	1	2	2
	Long Distance Area 5	3	1	1	1	2	2
	Long Distance Area 6	3	1	1	1	2	2
	Long Distance Area 7	3	1	1	1	2	2
	Long Distance Area 8	3	1	1	1	2	2
	Long Distance Area 9	3	1	1	1	2	2
	Long Distance Area 10	3	1	1	1	2	2
	Long Distance Area 11	3	1	1	1	2	2
	Long Distance Area 12	3	1	1	1	2	2
	Long Distance Area 13	3	1	1	1	2	2
	Long Distance Area 14	3	1	1	1	2	2
	Long Distance Area 15	3	1	1	1	2	2
	Long Distance Area 16	3	1	1	1	2	2
	Long Distance Area 17	3	1	1	1	2	2
	Long Distance Area 18	3	1	1	1	2	2
	Long Distance Area 19	3	1	1	1	2	2
	Long Distance Area 20	3	1	1	1	2	2
	Long Distance Area 21	3	1	1	1	2	2
	Long Distance Area 22	3	1	1	1	2	2
	Long Distance Area 23	3	1	1	1	2	2
	Long Distance Area 24	3	1	1	1	2	2
	Long Distance Area 25	3	1	1	1	2	2
		87	28	28	31	55	55

SERVICE PROVIDER	Name of the Service Area	Number of 2 Mb/s streams based on GOS = 0.0005					
		Number of E1s (2 MB/s streams at POI = Fixed Incumbent	Number of E1s (2 MB/s streams at POI = Fixed Private 1	Number of E1s (2 MB/s streams at POI = Fixed Private 2	Number of E1s (2 MB/s streams at POI = Cellular Incumbent	Number of E1s (2 MB/s streams at POI = Cellular Private 1	Number of E1s (2 MB/s streams at POI = Cellular Private 2
		1	2	3	4	5	6
ILDO Private 1	Long Distance Area 1	5	4	4	4	4	4
	Long Distance Area 2	3	1	1	2	3	3
	Long Distance Area 3	3	1	1	2	3	3
	Long Distance Area 4	3	1	1	1	2	2
	Long Distance Area 5	3	1	1	1	2	2
	Long Distance Area 6	3	1	1	1	2	2
	Long Distance Area 7	3	1	1	1	2	2
	Long Distance Area 8	3	1	1	1	2	2
	Long Distance Area 9	3	1	1	1	2	2
	Long Distance Area 10	3	1	1	1	2	2
	Long Distance Area 11	3	1	1	1	2	2
	Long Distance Area 12	3	1	1	1	2	2
	Long Distance Area 13	3	1	1	1	2	2
	Long Distance Area 14	3	1	1	1	2	2
	Long Distance Area 15	3	1	1	1	2	2
	Long Distance Area 16	3	1	1	1	2	2
	Long Distance Area 17	3	1	1	1	2	2
	Long Distance Area 18	3	1	1	1	2	2
	Long Distance Area 19	3	1	1	1	2	2
	Long Distance Area 20	3	1	1	1	2	2
	Long Distance Area 21	3	1	1	1	2	2
	Long Distance Area 22	3	1	1	1	2	2
	Long Distance Area 23	3	1	1	1	2	2
	Long Distance Area 24	3	1	1	1	2	2
	Long Distance Area 25	3	1	1	1	2	2
		77	28	28	30	54	54

SERVICE PROVIDER	Name of the Service Area	Number of 2 Mb/s streams based on GOS = 0.0005					
		Number of E1s (2 MB/s streams at POI = Fixed Incumbent	Number of E1s (2 MB/s streams at POI = Fixed Private 1	Number of E1s (2 MB/s streams at POI = Fixed Private 2	Number of E1s (2 MB/s streams at POI = Cellular Incumbent	Number of E1s (2 MB/s streams at POI = Cellular Private 1	Number of E1s (2 MB/s streams at POI = Cellular Private 2
		1	2	3	4	5	6
ILDO Private 2	Long Distance Area 1	5	4	4	5	5	5
	Long Distance Area 2	3	1	1	2	3	3
	Long Distance Area 3	3	1	1	2	3	3
	Long Distance Area 4	3	1	1	1	2	2
	Long Distance Area 5	3	1	1	1	2	2
	Long Distance Area 6	3	1	1	1	2	2
	Long Distance Area 7	3	1	1	1	2	2
	Long Distance Area 8	3	1	1	1	2	2
	Long Distance Area 9	3	1	1	1	2	2
	Long Distance Area 10	3	1	1	1	2	2
	Long Distance Area 11	3	1	1	1	2	2
	Long Distance Area 12	3	1	1	1	2	2
	Long Distance Area 13	3	1	1	1	2	2
	Long Distance Area 14	3	1	1	1	2	2
	Long Distance Area 15	3	1	1	1	2	2
	Long Distance Area 16	3	1	1	1	2	2
	Long Distance Area 17	3	1	1	1	2	2
	Long Distance Area 18	3	1	1	1	2	2
	Long Distance Area 19	3	1	1	1	2	2
	Long Distance Area 20	3	1	1	1	2	2
	Long Distance Area 21	3	1	1	1	2	2
	Long Distance Area 22	3	1	1	1	2	2
	Long Distance Area 23	3	1	1	1	2	2
	Long Distance Area 24	3	1	1	1	2	2
	Long Distance Area 25	3	1	1	1	2	2
		77	28	28	31	55	55

SERVICE PROVIDER	Name of the Service Area	Number of 2 Mb/s streams based on GOS = 0.0005					
		Number of E1s (2 MB/s streams at POI = Fixed Incumbent	Number of E1s (2 MB/s streams at POI = Fixed Private 1	Number of E1s (2 MB/s streams at POI = Fixed Private 2	Number of E1s (2 MB/s streams at POI = Cellular Incumbent	Number of E1s (2 MB/s streams at POI = Cellular Private 1	Number of E1s (2 MB/s streams at POI = Cellular Private 2
		1	2	3	4	5	6
ILDO Private 3	Long Distance Area 1	5	4	4	7	7	7
	Long Distance Area 2	3	1	1	2	3	3
	Long Distance Area 3	3	1	1	2	3	3
	Long Distance Area 4	3	1	1	1	2	2
	Long Distance Area 5	3	1	1	1	2	2
	Long Distance Area 6	3	1	1	1	2	2
	Long Distance Area 7	3	1	1	1	2	2
	Long Distance Area 8	3	1	1	1	2	2
	Long Distance Area 9	3	1	1	1	2	2
	Long Distance Area 10	3	1	1	1	2	2
	Long Distance Area 11	3	1	1	1	2	2
	Long Distance Area 12	3	1	1	1	2	2
	Long Distance Area 13	3	1	1	1	2	2
	Long Distance Area 14	3	1	1	1	2	2
	Long Distance Area 15	3	1	1	1	2	2
	Long Distance Area 16	3	1	1	1	2	2
	Long Distance Area 17	3	1	1	1	2	2
	Long Distance Area 18	3	1	1	1	2	2
	Long Distance Area 19	3	1	1	1	2	2
	Long Distance Area 20	3	1	1	1	2	2
	Long Distance Area 21	3	1	1	1	2	2
	Long Distance Area 22	3	1	1	1	2	2
	Long Distance Area 23	3	1	1	1	2	2
	Long Distance Area 24	3	1	1	1	2	2
	Long Distance Area 25	3	1	1	1	2	2
		77	28	28	33	57	57

SECTION-4.3

LOCAL AREA TRAFFIC
AND
2 Mbps STREAMS

SERVICE PROVIDER	Name of the Service Area	Local Area Traffic and 2 Mb/s streams														Rural T
		Subscribers in each local area	Traffic in Erlangs including Rural subs traffic in each local Area	Inter-Operator Traffic in each local Area	Traffic with Fixed Private 1 in each Local Area	Traffic with Fixed Private 2 in each Local Area	Traffic with Private NLDO1 from Local Area	Traffic with Private NLDO2 from Local Area	Traffic with Incumbent NLDO from Local Area	Traffic to Cellular/ ILDOs (included in respective stream at Long Distance Area)	Inter Operator E1s (2 Mb/s streams) with Fixed Private 1 in Local Area : Transmission POIs	Inter Operator E1s (2 Mb/s streams) with Fixed Private 2 in Local Area : Transmission POIs	Inter Operator E1s (2 Mb/s streams) with NLDO Incumbent in Local Area	Inter Operator E1s (2 Mb/s streams) with NLDO Private 1 in Local Area	Inter Operator E1s (2 Mb/s streams) with NLDO Private 2 in Local Area	Rural subscribers in each Local/ Long Distance Area
					1	2	3	4	5		1	2	3	4	5	
Fixed Incumbent	Long Distance Area 1	870	207	60	3	3	8	5	5	36	1	1	1	1	1	20000
	Long Distance Area 2	870	207	60	3	3	8	5	5	36	1	1	1	1	1	20000
	Long Distance Area 3	870	207	60	3	3	8	5	5	36	1	1	1	1	1	20000
	Long Distance Area 4	870	207	60	3	3	8	5	5	36	1	1	1	1	1	20000
	Long Distance Area 5	870	207	60	3	3	8	5	5	36	1	1	1	1	1	20000
	Long Distance Area 6	870	207	60	3	3	8	5	5	36	1	1	1	1	1	20000
	Long Distance Area 7	870	207	60	3	3	8	5	5	36	1	1	1	1	1	20000
	Long Distance Area 8	870	207	60	3	3	8	5	5	36	1	1	1	1	1	20000
	Long Distance Area 9	870	207	60	3	3	8	5	5	36	1	1	1	1	1	20000
	Long Distance Area 10	870	207	60	3	3	8	5	5	36	1	1	1	1	1	20000
	Long Distance Area 11	870	207	60	3	3	8	5	5	36	1	1	1	1	1	20000
	Long Distance Area 12	870	207	60	3	3	8	5	5	36	1	1	1	1	1	20000
	Long Distance Area 13	870	207	60	3	3	8	5	5	36	1	1	1	1	1	20000
	Long Distance Area 14	870	207	60	3	3	8	5	5	36	1	1	1	1	1	20000
	Long Distance Area 15	870	207	60	3	3	8	5	5	36	1	1	1	1	1	20000
	Long Distance Area 16	870	207	60	3	3	8	5	5	36	1	1	1	1	1	20000
	Long Distance Area 17	870	207	60	3	3	8	5	5	36	1	1	1	1	1	20000
	Long Distance Area 18	870	207	60	3	3	8	5	5	36	1	1	1	1	1	20000
	Long Distance Area 19	870	207	60	3	3	8	5	5	36	1	1	1	1	1	20000
	Long Distance Area 20	870	207	60	3	3	8	5	5	36	1	1	1	1	1	20000
	Long Distance Area 21	870	207	60	3	3	8	5	5	36	1	1	1	1	1	20000
	Long Distance Area 22	870	207	60	3	3	8	5	5	36	1	1	1	1	1	20000
	Long Distance Area 23	870	207	60	3	3	8	5	5	36	1	1	1	1	1	20000
	Long Distance Area 24	870	207	60	3	3	8	5	5	36	1	1	1	1	1	20000
	Long Distance Area 25	870	207	60	3	3	8	5	5	36	1	1	1	1	1	20000
		21750	5179	1500	75	75	200	125	125	900	25	25	25	25	25	500000

SERVICE PROVIDER	Name of the Service Area	Local Area Traffic and 2 Mb/s streams														Rural T
		Subscribers in each local area	Traffic in Erlangs including Rural subs traffic in each local Area	Inter-Operator Traffic in each local Area	Traffic with Fixed Incumbent in each Local Area	Traffic with Fixed Private 2 in each Local Area	Traffic with Private NLDO1 from Local Area	Traffic with Private NLDO2 from Local Area	Traffic with Incumbent NLDO from Local Area	Traffic to Cellular/ ILDOs (included in respective stream at Long Distance Area)	Inter Operator E1s (2 Mb/s streams) with Fixed Incumbent in Local Area : Transmission POIs	Inter Operator E1s (2 Mb/s streams) with Fixed Private 2 in Local Area : Transmission POIs	Inter Operator E1s (2 Mb/s streams) with NLDO Incumbent in Local Area	Inter Operator E1s (2 Mb/s streams) with NLDO Private 1 in Local Area	Inter Operator E1s (2 Mb/s streams) with NLDO Private 2 in Local Area	Rural subscribers in each Local/ Long Distance Area
					1	2	3	4	5		1	2	3	4	5	
Fixed Private 1	Long Distance Area 1	200	13	10	3	1	1	1	1	3	1	1	1	1	1	
	Long Distance Area 2	200	13	10	3	1	1	1	1	3	1	1	1	1	1	
	Long Distance Area 3	200	13	10	3	1	1	1	1	3	1	1	1	1	1	
	Long Distance Area 4	200	13	10	3	1	1	1	1	3	1	1	1	1	1	
	Long Distance Area 5	200	13	10	3	1	1	1	1	3	1	1	1	1	1	
	Long Distance Area 6	200	13	10	3	1	1	1	1	3	1	1	1	1	1	
	Long Distance Area 7	200	13	10	3	1	1	1	1	3	1	1	1	1	1	
	Long Distance Area 8	200	13	10	3	1	1	1	1	3	1	1	1	1	1	
	Long Distance Area 9	200	13	10	3	1	1	1	1	3	1	1	1	1	1	
	Long Distance Area 10	200	13	10	3	1	1	1	1	3	1	1	1	1	1	
	Long Distance Area 11	200	13	10	3	1	1	1	1	3	1	1	1	1	1	
	Long Distance Area 12	200	13	10	3	1	1	1	1	3	1	1	1	1	1	
	Long Distance Area 13	200	13	10	3	1	1	1	1	3	1	1	1	1	1	
	Long Distance Area 14	200	13	10	3	1	1	1	1	3	1	1	1	1	1	
	Long Distance Area 15	200	13	10	3	1	1	1	1	3	1	1	1	1	1	
	Long Distance Area 16	200	13	10	3	1	1	1	1	3	1	1	1	1	1	
	Long Distance Area 17	200	13	10	3	1	1	1	1	3	1	1	1	1	1	
	Long Distance Area 18	200	13	10	3	1	1	1	1	3	1	1	1	1	1	
	Long Distance Area 19	200	13	10	3	1	1	1	1	3	1	1	1	1	1	
	Long Distance Area 20	200	13	10	3	1	1	1	1	3	1	1	1	1	1	
	Long Distance Area 21	200	13	10	3	1	1	1	1	3	1	1	1	1	1	
	Long Distance Area 22	200	13	10	3	1	1	1	1	3	1	1	1	1	1	
	Long Distance Area 23	200	13	10	3	1	1	1	1	3	1	1	1	1	1	
	Long Distance Area 24	200	13	10	3	1	1	1	1	3	1	1	1	1	1	
	Long Distance Area 25	200	13	10	3	1	1	1	1	3	1	1	1	1	1	
		5000	335	250	75	25	25	25	25	75	25	25	25	25	25	0

SERVICE PROVIDER	Name of the Service Area	Local Area Traffic and 2 Mb/s streams														Rural T
		Subscribers	Traffic in Erlangs includes Rural subs traffic	Inter-Operator Traffic	Traffic with Fixed Incumbent in each Local Area	Traffic with Fixed Private 1 in each Local Area	Traffic with Private NLDO1 from Local Area	Traffic with Private NLDO2 from Local Area	Traffic with Incumbent NLDO from Local Area	Traffic to Cellular/ ILDOs (included in respective stream at Long Distance Area)	Inter Operator E1s (2 Mb/s streams) with Fixed Incumbent in Local Area : Transmission POIs	Inter Operator E1s (2 Mb/s streams) with Fixed Private 2 in Local Area : Transmission POIs	Inter Operator E1s (2 Mb/s streams) with NLDO Incumbent in Local Area	Inter Operator E1s (2 Mb/s streams) with NLDO Private 1 in Local Area	Inter Operator E1s (2 Mb/s streams) with NLDO Private 2 in Local Area	Rural subscribers in each Local/ Long Distance Area
					1	2	3	4	5		1	2	3	4	5	
Fixed Private 2	Long Distance Area 1	200	13	10	3	1	1	1	1	3	1	1	1	1	1	
	Long Distance Area 2	200	13	10	3	1	1	1	1	3	1	1	1	1	1	
	Long Distance Area 3	200	13	10	3	1	1	1	1	3	1	1	1	1	1	
	Long Distance Area 4	200	13	10	3	1	1	1	1	3	1	1	1	1	1	
	Long Distance Area 5	200	13	10	3	1	1	1	1	3	1	1	1	1	1	
	Long Distance Area 6	200	13	10	3	1	1	1	1	3	1	1	1	1	1	
	Long Distance Area 7	200	13	10	3	1	1	1	1	3	1	1	1	1	1	
	Long Distance Area 8	200	13	10	3	1	1	1	1	3	1	1	1	1	1	
	Long Distance Area 9	200	13	10	3	1	1	1	1	3	1	1	1	1	1	
	Long Distance Area 10	200	13	10	3	1	1	1	1	3	1	1	1	1	1	
	Long Distance Area 11	200	13	10	3	1	1	1	1	3	1	1	1	1	1	
	Long Distance Area 12	200	13	10	3	1	1	1	1	3	1	1	1	1	1	
	Long Distance Area 13	200	13	10	3	1	1	1	1	3	1	1	1	1	1	
	Long Distance Area 14	200	13	10	3	1	1	1	1	3	1	1	1	1	1	
	Long Distance Area 15	200	13	10	3	1	1	1	1	3	1	1	1	1	1	
	Long Distance Area 16	200	13	10	3	1	1	1	1	3	1	1	1	1	1	
	Long Distance Area 17	200	13	10	3	1	1	1	1	3	1	1	1	1	1	
	Long Distance Area 18	200	13	10	3	1	1	1	1	3	1	1	1	1	1	
	Long Distance Area 19	200	13	10	3	1	1	1	1	3	1	1	1	1	1	
	Long Distance Area 20	200	13	10	3	1	1	1	1	3	1	1	1	1	1	
	Long Distance Area 21	200	13	10	3	1	1	1	1	3	1	1	1	1	1	
	Long Distance Area 22	200	13	10	3	1	1	1	1	3	1	1	1	1	1	
	Long Distance Area 23	200	13	10	3	1	1	1	1	3	1	1	1	1	1	
	Long Distance Area 24	200	13	10	3	1	1	1	1	3	1	1	1	1	1	
	Long Distance Area 25	200	13	10	3	1	1	1	1	3	1	1	1	1	1	
		5000	335	250	75	25	25	25	25	75	25	25	25	25	25	0

SERVICE PROVIDER	Name of the Service Area	Local Area Traffic and 2 Mb/s streams														Rural T
		Subscribers in each local area	Traffic in Erlangs including Rural subs traffic in each local Area	Inter-Operator Traffic in each local Area	Traffic with Fixed Private 1 in each Local Area	Traffic with Fixed Private 1 in each Local Area	Traffic with Private NLDO1 from Local Area	Traffic with Private NLDO2 from Local Area	Traffic with Incumbent NLDO from Local Area	Traffic to Cellular/ ILDOs (included in respective stream at Long Distance Area)	Inter Operator E1s (2 Mb/s streams) with Fixed Private 1 in Local Area : Transmission POIs	Inter Operator E1s (2 Mb/s streams) with Fixed Private 2 in Local Area : Transmission POIs	Inter Operator E1s (2 Mb/s streams) with NLDO Incumbent in Local Area	Inter Operator E1s (2 Mb/s streams) with NLDO Private 1 in Local Area	Inter Operator E1s (2 Mb/s streams) with NLDO Private 2 in Local Area	Rural subscribers in each Local/ Long Distance Area
Cellular Incumbent	Long Distance Area 1															
	Long Distance Area 2															
	Long Distance Area 3															
	Long Distance Area 4															
	Long Distance Area 5															
	Long Distance Area 6															
	Long Distance Area 7															
	Long Distance Area 8															
	Long Distance Area 9															
	Long Distance Area 10															
	Long Distance Area 11															
	Long Distance Area 12															
	Long Distance Area 13															
	Long Distance Area 14															
	Long Distance Area 15															
	Long Distance Area 16															
	Long Distance Area 17															
	Long Distance Area 18															
	Long Distance Area 19															
	Long Distance Area 20															
	Long Distance Area 21															
	Long Distance Area 22															
	Long Distance Area 23															
	Long Distance Area 24															
	Long Distance Area 25															
																0

SERVICE PROVIDER	Name of the Service Area	Local Area Traffic and 2 Mb/s streams														Rural T
		Subscribers in each local area	Traffic in Erlangs including Rural subs traffic in each local Area	Inter-Operator Traffic in each local Area	Traffic with Fixed Private 1 in each Local Area	Traffic with Fixed Private 1 in each Local Area	Traffic with Private NLDO1 from Local Area	Traffic with Private NLDO2 from Local Area	Traffic with Incumbent NLDO from Local Area	Traffic to Cellular/ ILDOs (included in respective stream at Long Distance Area)	Inter Operator E1s (2 Mb/s streams) with Fixed Private 1 in Local Area : Transmission POIs	Inter Operator E1s (2 Mb/s streams) with Fixed Private 2 in Local Area : Transmission POIs	Inter Operator E1s (2 Mb/s streams) with NLDO Incumbent in Local Area	Inter Operator E1s (2 Mb/s streams) with NLDO Private 1 in Local Area	Inter Operator E1s (2 Mb/s streams) with NLDO Private 2 in Local Area	Rural subscribers in each Local/ Long Distance Area
Cellular Private 1	Long Distance Area 1															
	Long Distance Area 2															
	Long Distance Area 3															
	Long Distance Area 4															
	Long Distance Area 5															
	Long Distance Area 6															
	Long Distance Area 7															
	Long Distance Area 8															
	Long Distance Area 9															
	Long Distance Area 10															
	Long Distance Area 11															
	Long Distance Area 12															
	Long Distance Area 13															
	Long Distance Area 14															
	Long Distance Area 15															
	Long Distance Area 16															
	Long Distance Area 17															
	Long Distance Area 18															
	Long Distance Area 19															
	Long Distance Area 20															
	Long Distance Area 21															
	Long Distance Area 22															
	Long Distance Area 23															
	Long Distance Area 24															
	Long Distance Area 25															
																0

SERVICE PROVIDER	Name of the Service Area	Local Area Traffic and 2 Mb/s streams														Rural T
		Subscribers in each local area	Traffic in Erlangs including Rural subs traffic in each local Area	Inter-Operator Traffic in each local Area	Traffic with Fixed Private 1 in each Local Area	Traffic with Fixed Private 1 in each Local Area	Traffic with Private NLDO1 from Local Area	Traffic with Private NLDO2 from Local Area	Traffic with Incumbent NLDO from Local Area	Traffic to Cellular/ ILDOs (included in respective stream at Long Distance Area)	Inter Operator E1s (2 Mb/s streams) with Fixed Private 1 in Local Area : Transmission POIs	Inter Operator E1s (2 Mb/s streams) with Fixed Private 2 in Local Area : Transmission POIs	Inter Operator E1s (2 Mb/s streams) with NLDO Incumbent in Local Area	Inter Operator E1s (2 Mb/s streams) with NLDO Private 1 in Local Area	Inter Operator E1s (2 Mb/s streams) with NLDO Private 2 in Local Area	Rural subscribers in each Local/ Long Distance Area
Cellular Private 2	Long Distance Area 1															
	Long Distance Area 2															
	Long Distance Area 3															
	Long Distance Area 4															
	Long Distance Area 5															
	Long Distance Area 6															
	Long Distance Area 7															
	Long Distance Area 8															
	Long Distance Area 9															
	Long Distance Area 10															
	Long Distance Area 11															
	Long Distance Area 12															
	Long Distance Area 13															
	Long Distance Area 14															
	Long Distance Area 15															
	Long Distance Area 16															
	Long Distance Area 17															
	Long Distance Area 18															
	Long Distance Area 19															
	Long Distance Area 20															
	Long Distance Area 21															
	Long Distance Area 22															
	Long Distance Area 23															
	Long Distance Area 24															
	Long Distance Area 25															
																0

SERVICE PROVIDER	Name of the Service Area	Local Area Traffic and 2 Mb/s streams															
				Traffic with Fixed Incumbent in each Local Area	Traffic with Fixed Private 1 in each Local Area	Traffic with Fixed Private 2 in each Local Area				Inter Operator E1s (2 Mb/s streams) with Fixed Incumbent 1 in Local Area POIs	Inter Operator E1s (2 Mb/s streams) with Fixed Private 1 in Local Area POIs	Inter Operator E1s (2 Mb/s streams) with Fixed Private 2 in Local Area POIs				
				1	2	3				1	2	3				
NLDO Incumbent	Long Distance Area 1			8	1	1				1	1	1				
	Long Distance Area 2			8	1	1				1	1	1				
	Long Distance Area 3			8	1	1				1	1	1				
	Long Distance Area 4			8	1	1				1	1	1				
	Long Distance Area 5			8	1	1				1	1	1				
	Long Distance Area 6			8	1	1				1	1	1				
	Long Distance Area 7			8	1	1				1	1	1				
	Long Distance Area 8			8	1	1				1	1	1				
	Long Distance Area 9			8	1	1				1	1	1				
	Long Distance Area 10			8	1	1				1	1	1				
	Long Distance Area 11			8	1	1				1	1	1				
	Long Distance Area 12			8	1	1				1	1	1				
	Long Distance Area 13			8	1	1				1	1	1				
	Long Distance Area 14			8	1	1				1	1	1				
	Long Distance Area 15			8	1	1				1	1	1				
	Long Distance Area 16			8	1	1				1	1	1				
	Long Distance Area 17			8	1	1				1	1	1				
	Long Distance Area 18			8	1	1				1	1	1				
	Long Distance Area 19			8	1	1				1	1	1				
	Long Distance Area 20			8	1	1				1	1	1				
	Long Distance Area 21			8	1	1				1	1	1				
	Long Distance Area 22			8	1	1				1	1	1				
	Long Distance Area 23			8	1	1				1	1	1				
	Long Distance Area 24			8	1	1				1	1	1				
	Long Distance Area 25			8	1	1				1	1	1				
				200	25	25				25	25	25				

SERVICE PROVIDER	Name of the Service Area	Local Area Traffic and 2 Mb/s streams															Rural T
				Traffic with Fixed Incumbent in each Local Area	Traffic with Fixed Private 1 in each Local Area	Traffic with Fixed Private 2 in each Local Area				Inter Operator E1s (2 Mb/s streams) with Fixed Incumbent 1 in Local Area POIs	Inter Operator E1s (2 Mb/s streams) with Fixed Private 1 in Local Area POIs	Inter Operator E1s (2 Mb/s streams) with Fixed Private 2 in Local Area POIs				
				1	2	3				1	2	3				
NLDO Private 1	Long Distance Area 1			5	1	1				1	1	1				
	Long Distance Area 2			5	1	1				1	1	1				
	Long Distance Area 3			5	1	1				1	1	1				
	Long Distance Area 4			5	1	1				1	1	1				
	Long Distance Area 5			5	1	1				1	1	1				
	Long Distance Area 6			5	1	1				1	1	1				
	Long Distance Area 7			5	1	1				1	1	1				
	Long Distance Area 8			5	1	1				1	1	1				
	Long Distance Area 9			5	1	1				1	1	1				
	Long Distance Area 10			5	1	1				1	1	1				
	Long Distance Area 11			5	1	1				1	1	1				
	Long Distance Area 12			5	1	1				1	1	1				
	Long Distance Area 13			5	1	1				1	1	1				
	Long Distance Area 14			5	1	1				1	1	1				
	Long Distance Area 15			5	1	1				1	1	1				
	Long Distance Area 16			5	1	1				1	1	1				
	Long Distance Area 17			5	1	1				1	1	1				
	Long Distance Area 18			5	1	1				1	1	1				
	Long Distance Area 19			5	1	1				1	1	1				
	Long Distance Area 20			5	1	1				1	1	1				
	Long Distance Area 21			5	1	1				1	1	1				
	Long Distance Area 22			5	1	1				1	1	1				
	Long Distance Area 23			5	1	1				1	1	1				
	Long Distance Area 24			5	1	1				1	1	1				
	Long Distance Area 25			5	1	1				1	1	1				
				125	25	25				25	25	25				0

SERVICE PROVIDER	Name of the Service Area	Local Area Traffic and 2 Mb/s streams															Rural T
				Traffic with Fixed Incumbent in each Local Area	Traffic with Fixed Private 1 in each Local Area	Traffic with Fixed Private 2 in each Local Area				Inter Operator E1s (2 Mb/s streams) with Fixed Incumbent 1 in Local Area POIs	Inter Operator E1s (2 Mb/s streams) with Fixed Private 1 in Local Area POIs	Inter Operator E1s (2 Mb/s streams) with Fixed Private 2 in Local Area POIs				
				1	2	3				1	2	3				
NLDO Private 2	Long Distance Area 1			5	1	1				1	1	1				
	Long Distance Area 2			5	1	1				1	1	1				
	Long Distance Area 3			5	1	1				1	1	1				
	Long Distance Area 4			5	1	1				1	1	1				
	Long Distance Area 5			5	1	1				1	1	1				
	Long Distance Area 6			5	1	1				1	1	1				
	Long Distance Area 7			5	1	1				1	1	1				
	Long Distance Area 8			5	1	1				1	1	1				
	Long Distance Area 9			5	1	1				1	1	1				
	Long Distance Area 10			5	1	1				1	1	1				
	Long Distance Area 11			5	1	1				1	1	1				
	Long Distance Area 12			5	1	1				1	1	1				
	Long Distance Area 13			5	1	1				1	1	1				
	Long Distance Area 14			5	1	1				1	1	1				
	Long Distance Area 15			5	1	1				1	1	1				
	Long Distance Area 16			5	1	1				1	1	1				
	Long Distance Area 17			5	1	1				1	1	1				
	Long Distance Area 18			5	1	1				1	1	1				
	Long Distance Area 19			5	1	1				1	1	1				
	Long Distance Area 20			5	1	1				1	1	1				
	Long Distance Area 21			5	1	1				1	1	1				
	Long Distance Area 22			5	1	1				1	1	1				
	Long Distance Area 23			5	1	1				1	1	1				
	Long Distance Area 24			5	1	1				1	1	1				
	Long Distance Area 25			5	1	1				1	1	1				
				125	25	25				25	25	25				0

SERVICE PROVIDER	Name of the Service Area	Local Area Traffic and 2 Mb/s streams														Rural T
ILDO Incumbent	Long Distance Area 1															
	Long Distance Area 2															
	Long Distance Area 3															
	Long Distance Area 4															
	Long Distance Area 5															
	Long Distance Area 6															
	Long Distance Area 7															
	Long Distance Area 8															
	Long Distance Area 9															
	Long Distance Area 10															
	Long Distance Area 11															
	Long Distance Area 12															
	Long Distance Area 13															
	Long Distance Area 14															
	Long Distance Area 15															
	Long Distance Area 16															
	Long Distance Area 17															
	Long Distance Area 18															
	Long Distance Area 19															
	Long Distance Area 20															
	Long Distance Area 21															
	Long Distance Area 22															
	Long Distance Area 23															
	Long Distance Area 24															
	Long Distance Area 25															
																0

SERVICE PROVIDER	Name of the Service Area	Local Area Traffic and 2 Mb/s streams														Rural T
ILDO Private 1	Long Distance Area 1															
	Long Distance Area 2															
	Long Distance Area 3															
	Long Distance Area 4															
	Long Distance Area 5															
	Long Distance Area 6															
	Long Distance Area 7															
	Long Distance Area 8															
	Long Distance Area 9															
	Long Distance Area 10															
	Long Distance Area 11															
	Long Distance Area 12															
	Long Distance Area 13															
	Long Distance Area 14															
	Long Distance Area 15															
	Long Distance Area 16															
	Long Distance Area 17															
	Long Distance Area 18															
	Long Distance Area 19															
	Long Distance Area 20															
	Long Distance Area 21															
	Long Distance Area 22															
	Long Distance Area 23															
	Long Distance Area 24															
	Long Distance Area 25															
																0

SERVICE PROVIDER	Name of the Service Area	Local Area Traffic and 2 Mb/s streams														Rural T
ILDO Private 2	Long Distance Area 1															
	Long Distance Area 2															
	Long Distance Area 3															
	Long Distance Area 4															
	Long Distance Area 5															
	Long Distance Area 6															
	Long Distance Area 7															
	Long Distance Area 8															
	Long Distance Area 9															
	Long Distance Area 10															
	Long Distance Area 11															
	Long Distance Area 12															
	Long Distance Area 13															
	Long Distance Area 14															
	Long Distance Area 15															
	Long Distance Area 16															
	Long Distance Area 17															
	Long Distance Area 18															
	Long Distance Area 19															
	Long Distance Area 20															
	Long Distance Area 21															
	Long Distance Area 22															
	Long Distance Area 23															
	Long Distance Area 24															
	Long Distance Area 25															
																0

SERVICE PROVIDER	Name of the Service Area	Local Area Traffic and 2 Mb/s streams														Rural T
ILDO Private 3	Long Distance Area 1															
	Long Distance Area 2															
	Long Distance Area 3															
	Long Distance Area 4															
	Long Distance Area 5															
	Long Distance Area 6															
	Long Distance Area 7															
	Long Distance Area 8															
	Long Distance Area 9															
	Long Distance Area 10															
	Long Distance Area 11															
	Long Distance Area 12															
	Long Distance Area 13															
	Long Distance Area 14															
	Long Distance Area 15															
	Long Distance Area 16															
	Long Distance Area 17															
	Long Distance Area 18															
	Long Distance Area 19															
	Long Distance Area 20															
	Long Distance Area 21															
	Long Distance Area 22															
	Long Distance Area 23															
	Long Distance Area 24															
	Long Distance Area 25															
																0

SECTION – 4.4

TOTAL INTER OPERATOR TRAFFIC

AT

LONG DISTANCE CITY

INCLUDING

INTER-OPERATOR TRAFFIC FROM LOCAL AREA (EARLIER THIS TRAFFIC WAS ROUTED DIRECTLY FROM LOCAL AREA)

SERVICE PROVIDER	Name of the Service Area	Inter-Operator Traffic in Erlangs at Long Distance Area City	Inter-Operator Traffic from Local Area which was routed directly earlier from Local Area	Total Inter-Operator Traffic at Long Distance City	Number of 2 Mb/s streams to Interconnect Exchange	Inter-Operator 2Mb/s streams at Interconnect Capacity (E1s)
Fixed Incumbent	Long Distance Area 1	6000	216	6216	230	230
	Long Distance Area 2	2557	216	2773	102	102
	Long Distance Area 3	2557	216	2773	102	102
	Long Distance Area 4	1670	216	1886	69	69
	Long Distance Area 5	1670	216	1886	69	69
	Long Distance Area 6	1670	216	1886	69	69
	Long Distance Area 7	1670	216	1886	69	69
	Long Distance Area 8	1670	216	1886	69	69
	Long Distance Area 9	1670	216	1886	69	69
	Long Distance Area 10	1670	216	1886	69	69
	Long Distance Area 11	1670	216	1886	69	69
	Long Distance Area 12	1670	216	1886	69	69
	Long Distance Area 13	1670	216	1886	69	69
	Long Distance Area 14	1670	216	1886	69	69
	Long Distance Area 15	1670	216	1886	69	69
	Long Distance Area 16	1670	216	1886	69	69
	Long Distance Area 17	1670	216	1886	69	69
	Long Distance Area 18	1670	216	1886	69	69
	Long Distance Area 19	1670	216	1886	69	69
	Long Distance Area 20	1670	216	1886	69	69
	Long Distance Area 21	1670	216	1886	69	69
	Long Distance Area 22	1670	216	1886	69	69
	Long Distance Area 23	1670	216	1886	69	69
	Long Distance Area 24	1670	216	1886	69	69
	Long Distance Area 25	1670	216	1886	69	69
					1952	1952

SERVICE PROVIDER	Name of the Service Area	Inter-Operator Traffic in Erlangs at Long Distance Area City	Inter-Operator Traffic from Local Area which was routed directly earlier from Local Area	Total Inter-Operator Traffic at Long Distance City	Number of 2 Mb/s streams to Interconnect Exchange	Inter-Operator 2Mb/s streams at Interconnect Capacity (E1s)
Fixed Private 1	Long Distance Area 1	3488	63	3551	131	131
	Long Distance Area 2	735	63	798	29	29
	Long Distance Area 3	735	63	798	29	29
	Long Distance Area 4	121	63	184	6	6
	Long Distance Area 5	121	63	184	6	6
	Long Distance Area 6	121	63	184	6	6
	Long Distance Area 7	121	63	184	6	6
	Long Distance Area 8	121	63	184	6	6
	Long Distance Area 9	121	63	184	6	6
	Long Distance Area 10	121	63	184	6	6
	Long Distance Area 11	121	63	184	6	6
	Long Distance Area 12	121	63	184	6	6
	Long Distance Area 13	121	63	184	6	6
	Long Distance Area 14	121	63	184	6	6
	Long Distance Area 15	121	63	184	6	6
	Long Distance Area 16	121	63	184	6	6
	Long Distance Area 17	121	63	184	6	6
	Long Distance Area 18	121	63	184	6	6
	Long Distance Area 19	121	63	184	6	6
	Long Distance Area 20	121	63	184	6	6
	Long Distance Area 21	121	63	184	6	6
	Long Distance Area 22	121	63	184	6	6
	Long Distance Area 23	121	63	184	6	6
	Long Distance Area 24	121	63	184	6	6
	Long Distance Area 25	121	63	184	6	6
					321	321

SERVICE PROVIDER	Name of the Service Area	Inter-Operator Traffic in Erlangs at Long Distance Area City	Inter-Operator Traffic from Local Area which was routed directly earlier from Local Area	Total Inter-Operator Traffic at Long Distance City	Number of 2 Mb/s streams to Interconnect Exchange	Inter-Operator 2Mb/s streams at Interconnect Capacity (E1s)
Fixed Private 2	Long Distance Area 1	3488	63	3551	131	131
	Long Distance Area 2	735	63	798	29	29
	Long Distance Area 3	735	63	798	29	29
	Long Distance Area 4	121	63	184	6	6
	Long Distance Area 5	121	63	184	6	6
	Long Distance Area 6	121	63	184	6	6
	Long Distance Area 7	121	63	184	6	6
	Long Distance Area 8	121	63	184	6	6
	Long Distance Area 9	121	63	184	6	6
	Long Distance Area 10	121	63	184	6	6
	Long Distance Area 11	121	63	184	6	6
	Long Distance Area 12	121	63	184	6	6
	Long Distance Area 13	121	63	184	6	6
	Long Distance Area 14	121	63	184	6	6
	Long Distance Area 15	121	63	184	6	6
	Long Distance Area 16	121	63	184	6	6
	Long Distance Area 17	121	63	184	6	6
	Long Distance Area 18	121	63	184	6	6
	Long Distance Area 19	121	63	184	6	6
	Long Distance Area 20	121	63	184	6	6
	Long Distance Area 21	121	63	184	6	6
	Long Distance Area 22	121	63	184	6	6
	Long Distance Area 23	121	63	184	6	6
	Long Distance Area 24	121	63	184	6	6
	Long Distance Area 25	121	63	184	6	6
					321	321

SERVICE PROVIDER	Name of the Service Area	Inter-Operator Traffic in Erlangs at Long Distance Area City	Inter-Operator Traffic from Local Area which was routed directly earlier from Local Area	Total Inter-Operator Traffic at Long Distance City	Number of 2 Mb/s streams to Interconnect Exchange	Inter-Operator 2Mb/s streams at Interconnect Capacity (E1s)
Cellular Incumbent	Long Distance Area 1	4519	0	4519	167	167
	Long Distance Area 2	2182	0	2182	80	80
	Long Distance Area 3	2182	0	2182	80	80
	Long Distance Area 4	802	0	802	29	29
	Long Distance Area 5	802	0	802	29	29
	Long Distance Area 6	802	0	802	29	29
	Long Distance Area 7	802	0	802	29	29
	Long Distance Area 8	802	0	802	29	29
	Long Distance Area 9	802	0	802	29	29
	Long Distance Area 10	802	0	802	29	29
	Long Distance Area 11	802	0	802	29	29
	Long Distance Area 12	802	0	802	29	29
	Long Distance Area 13	802	0	802	29	29
	Long Distance Area 14	802	0	802	29	29
	Long Distance Area 15	802	0	802	29	29
	Long Distance Area 16	802	0	802	29	29
	Long Distance Area 17	802	0	802	29	29
	Long Distance Area 18	802	0	802	29	29
	Long Distance Area 19	802	0	802	29	29
	Long Distance Area 20	802	0	802	29	29
	Long Distance Area 21	802	0	802	29	29
	Long Distance Area 22	802	0	802	29	29
	Long Distance Area 23	802	0	802	29	29
	Long Distance Area 24	802	0	802	29	29
	Long Distance Area 25	802	0	802	29	29
					965	965

SERVICE PROVIDER	Name of the Service Area	Inter-Operator Traffic in Erlangs at Long Distance Area City	Inter-Operator Traffic from Local Area which was routed directly earlier from Local Area	Total Inter-Operator Traffic at Long Distance City	Number of 2 Mb/s streams to Interconnect Exchange	Inter-Operator 2Mb/s streams at Interconnect Capacity (E1s)
Cellular Private 1	Long Distance Area 1	4559	0	4559	168	168
	Long Distance Area 2	2377	0	2377	88	88
	Long Distance Area 3	2377	0	2377	88	88
	Long Distance Area 4	1022	0	1022	37	37
	Long Distance Area 5	1022	0	1022	37	37
	Long Distance Area 6	1022	0	1022	37	37
	Long Distance Area 7	1022	0	1022	37	37
	Long Distance Area 8	1022	0	1022	37	37
	Long Distance Area 9	1022	0	1022	37	37
	Long Distance Area 10	1022	0	1022	37	37
	Long Distance Area 11	1022	0	1022	37	37
	Long Distance Area 12	1022	0	1022	37	37
	Long Distance Area 13	1022	0	1022	37	37
	Long Distance Area 14	1022	0	1022	37	37
	Long Distance Area 15	1022	0	1022	37	37
	Long Distance Area 16	1022	0	1022	37	37
	Long Distance Area 17	1022	0	1022	37	37
	Long Distance Area 18	1022	0	1022	37	37
	Long Distance Area 19	1022	0	1022	37	37
	Long Distance Area 20	1022	0	1022	37	37
	Long Distance Area 21	1022	0	1022	37	37
	Long Distance Area 22	1022	0	1022	37	37
	Long Distance Area 23	1022	0	1022	37	37
	Long Distance Area 24	1022	0	1022	37	37
	Long Distance Area 25	1022	0	1022	37	37
					1158	1158

SERVICE PROVIDER	Name of the Service Area	Inter-Operator Traffic in Erlangs at Long Distance Area City	Inter-Operator Traffic from Local Area which was routed directly earlier from Local Area	Total Inter-Operator Traffic at Long Distance City	Number of 2 Mb/s streams to Interconnect Exchange	Inter-Operator 2Mb/s streams at Interconnect Capacity (E1s)
Cellular Private 2	Long Distance Area 1	4559	0	4559	168	168
	Long Distance Area 2	2377	0	2377	88	88
	Long Distance Area 3	2377	0	2377	88	88
	Long Distance Area 4	1022	0	1022	37	37
	Long Distance Area 5	1022	0	1022	37	37
	Long Distance Area 6	1022	0	1022	37	37
	Long Distance Area 7	1022	0	1022	37	37
	Long Distance Area 8	1022	0	1022	37	37
	Long Distance Area 9	1022	0	1022	37	37
	Long Distance Area 10	1022	0	1022	37	37
	Long Distance Area 11	1022	0	1022	37	37
	Long Distance Area 12	1022	0	1022	37	37
	Long Distance Area 13	1022	0	1022	37	37
	Long Distance Area 14	1022	0	1022	37	37
	Long Distance Area 15	1022	0	1022	37	37
	Long Distance Area 16	1022	0	1022	37	37
	Long Distance Area 17	1022	0	1022	37	37
	Long Distance Area 18	1022	0	1022	37	37
	Long Distance Area 19	1022	0	1022	37	37
	Long Distance Area 20	1022	0	1022	37	37
	Long Distance Area 21	1022	0	1022	37	37
	Long Distance Area 22	1022	0	1022	37	37
	Long Distance Area 23	1022	0	1022	37	37
	Long Distance Area 24	1022	0	1022	37	37
	Long Distance Area 25	1022	0	1022	37	37
					1158	1158

SERVICE PROVIDER	Name of the Service Area	Inter-Operator Traffic in Erlangs at Long Distance Area City	Inter-Operator Traffic from Local Area which was routed directly earlier from Local Area	Total Inter-Operator Traffic at Long Distance City	Number of 2 Mb/s streams to Interconnect Exchange	Inter-Operator 2Mb/s streams at Interconnect Capacity (E1s)
NLDO Incumbent	Long Distance Area 1	2752	63	2815	104	104
	Long Distance Area 2	894	63	957	35	35
	Long Distance Area 3	894	63	957	35	35
	Long Distance Area 4	456	63	519	19	19
	Long Distance Area 5	456	63	519	19	19
	Long Distance Area 6	456	63	519	19	19
	Long Distance Area 7	456	63	519	19	19
	Long Distance Area 8	456	63	519	19	19
	Long Distance Area 9	456	63	519	19	19
	Long Distance Area 10	456	63	519	19	19
	Long Distance Area 11	456	63	519	19	19
	Long Distance Area 12	456	63	519	19	19
	Long Distance Area 13	456	63	519	19	19
	Long Distance Area 14	456	63	519	19	19
	Long Distance Area 15	456	63	519	19	19
	Long Distance Area 16	456	63	519	19	19
	Long Distance Area 17	456	63	519	19	19
	Long Distance Area 18	456	63	519	19	19
	Long Distance Area 19	456	63	519	19	19
	Long Distance Area 20	456	63	519	19	19
	Long Distance Area 21	456	63	519	19	19
	Long Distance Area 22	456	63	519	19	19
	Long Distance Area 23	456	63	519	19	19
	Long Distance Area 24	456	63	519	19	19
	Long Distance Area 25	456	63	519	19	19
					592	592

SERVICE PROVIDER	Name of the Service Area	Inter-Operator Traffic in Erlangs at Long Distance Area City	Inter-Operator Traffic from Local Area which was routed directly earlier from Local Area	Total Inter-Operator Traffic at Long Distance City	Number of 2 Mb/s streams to Interconnect Exchange	Inter-Operator 2Mb/s streams at Interconnect Capacity (E1s)
NLDO Private 1	Long Distance Area 1	1770	36	1806	66	66
	Long Distance Area 2	730	36	766	28	28
	Long Distance Area 3	730	36	766	28	28
	Long Distance Area 4	335	36	371	13	13
	Long Distance Area 5	335	36	371	13	13
	Long Distance Area 6	335	36	371	13	13
	Long Distance Area 7	335	36	371	13	13
	Long Distance Area 8	335	36	371	13	13
	Long Distance Area 9	335	36	371	13	13
	Long Distance Area 10	335	36	371	13	13
	Long Distance Area 11	335	36	371	13	13
	Long Distance Area 12	335	36	371	13	13
	Long Distance Area 13	335	36	371	13	13
	Long Distance Area 14	335	36	371	13	13
	Long Distance Area 15	335	36	371	13	13
	Long Distance Area 16	335	36	371	13	13
	Long Distance Area 17	335	36	371	13	13
	Long Distance Area 18	335	36	371	13	13
	Long Distance Area 19	335	36	371	13	13
	Long Distance Area 20	335	36	371	13	13
	Long Distance Area 21	335	36	371	13	13
	Long Distance Area 22	335	36	371	13	13
	Long Distance Area 23	335	36	371	13	13
	Long Distance Area 24	335	36	371	13	13
	Long Distance Area 25	335	36	371	13	13
					408	408

SERVICE PROVIDER	Name of the Service Area	Inter-Operator Traffic in Erlangs at Long Distance Area City	Inter-Operator Traffic from Local Area which was routed directly earlier from Local Area	Total Inter-Operator Traffic at Long Distance City	Number of 2 Mb/s streams to Interconnect Exchange	Inter-Operator 2Mb/s streams at Interconnect Capacity (E1s)
NLDO Private 2	Long Distance Area 1	1770	36	1806	66	66
	Long Distance Area 2	730	36	766	28	28
	Long Distance Area 3	730	36	766	28	28
	Long Distance Area 4	335	36	371	13	13
	Long Distance Area 5	335	36	371	13	13
	Long Distance Area 6	335	36	371	13	13
	Long Distance Area 7	335	36	371	13	13
	Long Distance Area 8	335	36	371	13	13
	Long Distance Area 9	335	36	371	13	13
	Long Distance Area 10	335	36	371	13	13
	Long Distance Area 11	335	36	371	13	13
	Long Distance Area 12	335	36	371	13	13
	Long Distance Area 13	335	36	371	13	13
	Long Distance Area 14	335	36	371	13	13
	Long Distance Area 15	335	36	371	13	13
	Long Distance Area 16	335	36	371	13	13
	Long Distance Area 17	335	36	371	13	13
	Long Distance Area 18	335	36	371	13	13
	Long Distance Area 19	335	36	371	13	13
	Long Distance Area 20	335	36	371	13	13
	Long Distance Area 21	335	36	371	13	13
	Long Distance Area 22	335	36	371	13	13
	Long Distance Area 23	335	36	371	13	13
	Long Distance Area 24	335	36	371	13	13
	Long Distance Area 25	335	36	371	13	13
					408	408

SERVICE PROVIDER	Name of the Service Area	Inter-Operator Traffic in Erlangs at Long Distance Area City	Inter-Operator Traffic from Local Area which was routed directly earlier from Local Area	Total Inter-Operator Traffic at Long Distance City	Number of 2 Mb/s streams to Interconnect Exchange	Inter-Operator 2Mb/s streams at Interconnect Capacity (E1s)
ILDO Incumbent	Long Distance Area 1	612	0	612	22	22
	Long Distance Area 2	282	0	282	10	10
	Long Distance Area 3	269	0	269	9	9
	Long Distance Area 4	136	0	136	5	5
	Long Distance Area 5	136	0	136	5	5
	Long Distance Area 6	136	0	136	5	5
	Long Distance Area 7	136	0	136	5	5
	Long Distance Area 8	136	0	136	5	5
	Long Distance Area 9	136	0	136	5	5
	Long Distance Area 10	136	0	136	5	5
	Long Distance Area 11	136	0	136	5	5
	Long Distance Area 12	136	0	136	5	5
	Long Distance Area 13	136	0	136	5	5
	Long Distance Area 14	136	0	136	5	5
	Long Distance Area 15	136	0	136	5	5
	Long Distance Area 16	136	0	136	5	5
	Long Distance Area 17	136	0	136	5	5
	Long Distance Area 18	136	0	136	5	5
	Long Distance Area 19	136	0	136	5	5
	Long Distance Area 20	136	0	136	5	5
	Long Distance Area 21	136	0	136	5	5
	Long Distance Area 22	136	0	136	5	5
	Long Distance Area 23	136	0	136	5	5
	Long Distance Area 24	136	0	136	5	5
	Long Distance Area 25	319	0	319	11	11
					157	157

SERVICE PROVIDER	Name of the Service Area	Inter-Operator Traffic in Erlangs at Long Distance Area City	Inter-Operator Traffic from Local Area which was routed directly earlier from Local Area	Total Inter-Operator Traffic at Long Distance City	Number of 2 Mb/s streams to Interconnect Exchange	Inter-Operator 2Mb/s streams at Interconnect Capacity (E1s)
ILDO Private 1	Long Distance Area 1	521	0	521	19	19
	Long Distance Area 2	242	0	242	8	8
	Long Distance Area 3	242	0	242	8	8
	Long Distance Area 4	116	0	116	4	4
	Long Distance Area 5	116	0	116	4	4
	Long Distance Area 6	116	0	116	4	4
	Long Distance Area 7	116	0	116	4	4
	Long Distance Area 8	116	0	116	4	4
	Long Distance Area 9	116	0	116	4	4
	Long Distance Area 10	116	0	116	4	4
	Long Distance Area 11	116	0	116	4	4
	Long Distance Area 12	116	0	116	4	4
	Long Distance Area 13	116	0	116	4	4
	Long Distance Area 14	116	0	116	4	4
	Long Distance Area 15	116	0	116	4	4
	Long Distance Area 16	116	0	116	4	4
	Long Distance Area 17	116	0	116	4	4
	Long Distance Area 18	116	0	116	4	4
	Long Distance Area 19	116	0	116	4	4
	Long Distance Area 20	116	0	116	4	4
	Long Distance Area 21	116	0	116	4	4
	Long Distance Area 22	116	0	116	4	4
	Long Distance Area 23	116	0	116	4	4
	Long Distance Area 24	116	0	116	4	4
	Long Distance Area 25	116	0	116	4	4
					123	123

SERVICE PROVIDER	Name of the Service Area	Inter-Operator Traffic in Erlangs at Long Distance Area City	Inter-Operator Traffic from Local Area which was routed directly earlier from Local Area	Total Inter-Operator Traffic at Long Distance City	Number of 2 Mb/s streams to Interconnect Exchange	Inter-Operator 2Mb/s streams at Interconnect Capacity (E1s)
ILDO Private 2	Long Distance Area 1	634	0	634	23	23
	Long Distance Area 2	242	0	242	8	8
	Long Distance Area 3	242	0	242	8	8
	Long Distance Area 4	116	0	116	4	4
	Long Distance Area 5	116	0	116	4	4
	Long Distance Area 6	116	0	116	4	4
	Long Distance Area 7	116	0	116	4	4
	Long Distance Area 8	116	0	116	4	4
	Long Distance Area 9	116	0	116	4	4
	Long Distance Area 10	116	0	116	4	4
	Long Distance Area 11	116	0	116	4	4
	Long Distance Area 12	116	0	116	4	4
	Long Distance Area 13	116	0	116	4	4
	Long Distance Area 14	116	0	116	4	4
	Long Distance Area 15	116	0	116	4	4
	Long Distance Area 16	116	0	116	4	4
	Long Distance Area 17	116	0	116	4	4
	Long Distance Area 18	116	0	116	4	4
	Long Distance Area 19	116	0	116	4	4
	Long Distance Area 20	116	0	116	4	4
	Long Distance Area 21	116	0	116	4	4
	Long Distance Area 22	116	0	116	4	4
	Long Distance Area 23	116	0	116	4	4
	Long Distance Area 24	116	0	116	4	4
	Long Distance Area 25	116	0	116	4	4
					127	127

SERVICE PROVIDER	Name of the Service Area	Inter-Operator Traffic in Erlangs at Long Distance Area City	Inter-Operator Traffic from Local Area which was routed directly earlier from Local Area	Total Inter-Operator Traffic at Long Distance City	Number of 2 Mb/s streams to Interconnect Exchange	Inter-Operator 2Mb/s streams at Interconnect Capacity (E1s)
ILDO Private 3	Long Distance Area 1	802	0	802	29	29
	Long Distance Area 2	229	0	229	8	8
	Long Distance Area 3	229	0	229	8	8
	Long Distance Area 4	116	0	116	4	4
	Long Distance Area 5	116	0	116	4	4
	Long Distance Area 6	116	0	116	4	4
	Long Distance Area 7	116	0	116	4	4
	Long Distance Area 8	116	0	116	4	4
	Long Distance Area 9	116	0	116	4	4
	Long Distance Area 10	116	0	116	4	4
	Long Distance Area 11	116	0	116	4	4
	Long Distance Area 12	116	0	116	4	4
	Long Distance Area 13	116	0	116	4	4
	Long Distance Area 14	116	0	116	4	4
	Long Distance Area 15	116	0	116	4	4
	Long Distance Area 16	116	0	116	4	4
	Long Distance Area 17	116	0	116	4	4
	Long Distance Area 18	116	0	116	4	4
	Long Distance Area 19	116	0	116	4	4
	Long Distance Area 20	116	0	116	4	4
	Long Distance Area 21	116	0	116	4	4
	Long Distance Area 22	116	0	116	4	4
	Long Distance Area 23	116	0	116	4	4
	Long Distance Area 24	116	0	116	4	4
	Long Distance Area 25	116	0	116	4	4
					133	133

SECTION-5

SAVING IN E1s

AND

PERCENTAGE REDUCTION IN E1s

AS A RESULT
OF
INTERCONNECT EXCHANGE

Service Provider	Interconnect Capacity as % of DELs	Saving in E1s through Interconnect Exchange	% Reduction in E1s as a result of Interconnect Exchange
Fixed Incumbent	3.90	1205	38.169
Fixed Private 1	4.82	1323	80.476
Fixed Private 2	4.82	1323	80.476
Cellular Incumbent	5.79	251	20.641
Cellular Private 1	4.63	254	17.989
Cellular Private 2	4.63	254	17.989
NLDO Incumbent		734	55.354
NLDO Private 1		773	65.453
NLDO Private 2		773	65.453
ILDO Incumbent		127	44.718
ILDO Private 1		148	54.613
ILDO Private 2		147	53.650
ILDO Private 3		147	52.500
Total		7459	48.810

ANNEX V

POI CALCULATIONS AS APPLICABLE TO INDIAN SCENARIO

(Comparison of Conventional Approach Vs approach through an Interconnect Exchange)

SECTION I

We can reduce the Number of POIs by a Factor of 1:50. Following set of the Tables illustrate how the same can be achieved provided existing Licensing Regime/ existing Interconnection architecture is modified and TRAI mandates that all Inter-Network Traffic shall be routed through 24 Interconnect Exchanges cum Inter-Carrier Billing Clearing House facilities could be established at designated Gateway / Level I Stations.

TABLE 1: Distribution of LDCAs/ SDCAs at Circle Level

TABLE 2: Interconnections and POIs at designated Gateways/ Level I stations

TABLE 3: POIs required at each Level II TAX stations

TABLE 4: Total POIs at Level II TAX stations other than Gateway/ Level I

TABLE 5: POIs required in each SDCA (NLDO POIs at LDCA level assumed)

TABLE 6: Total POIs at SDCA level

TABLE 7: Total POIs in each Circle covering all LDCAs and SDCAs (51557)

TABLE 8: Total POIs that would be required if 24 Interconnect Exchanges are established at designated Gateway / Level I Stations (405 + 405: With Interconnect Exchange cum Inter-Carrier Billing Clearing House)

TABLE 1					
DISTRIBUTION of LDCAs/ SDCAs at Circle Level					
S. No.	Circle (Unified License)	LDCA	SDCA	SDCA is LDCA also	SDCA is other than LDCA
1	AN	1	2	1	1
2	AP	21	243	21	222
3	AS	7	46	7	39
4	BR	18	181	18	163
5	BY	1	2	1	1
5A	MH	30	308	30	278
7	GJ	17	161	17	144
8	HA	8	53	8	45
9	HP	6	33	6	27
10	JK	5	34	5	29
11	KL	11	58	11	47
12	KT	19	180	19	161
13	MP	40	361	40	321
14	ND	1	1	1	0
15	NE	7	83	7	76
16	OR	12	120	12	108
17	PB	11	55	11	44
18	RJ	24	246	24	222
19	TN	17	129	17	112
19A	CH	1	1	1	0
21	UPE	31	166	31	135
22	UPW	20	103	20	83
1	WB	13	70	13	57
1A	WB_KOL	1	12	1	11
		322	2648	322	2326

TABLE 2: INTERCONNECTION AT Designated Gateway or Level I TAX with Full Roll Out assumed and based on License conditions															
			FIXED					CELLULAR							
			Number of POIs in Level I / Designated Gateway LDCA					Number of POIs in Level I / Designated Gateway LDCA							
S. No.	Circle (Unified License)	LDCA	BSNL	RELIANCE	TATA	BHARTI	OTHER	BSNL	RELIANCE	TATA	BHARTI	IDEA	HUTCH	Others	Others
1	AN	1	15	15	15			15	15	15	15				
2	AP	1	17	17	17			17	17	17	17	17	17		
3	AS	1	11					11	11						
4	BR	1	15	15	15			15	15	15	15				
5	BY	1	17	17	17			17	17	17	17		17	17	
5A	MH	1	17	17	17			17	17	17	17	17		17	
7	GJ	1	17	17	17			17	17	17	17	17		17	
8	HA	1	18	18	18	18		18	18	18	18			18	18
9	HP	1	15	15	15			15	15	15	15				
10	JK	1	11					11			11				
11	KL	1	17	17	17			17	17	17	17			17	17
12	KT	1	18	18	18	18		18	18	18	18			18	18
13	MP	1	17	17	17			17	17	17	17	17			
14	ND	1	18	18	18	18		18	18	18	18	18	18		
15	NE	1	11					11	11						
16	OR	1	15	15	15			15	15	15	15				
17	PB	1	17	17	17		17	17	17	17	17			17	
18	RJ	1	17	17	17		17	17	17	17				17	17
19	TN	1	18	18	18	18		18	18	18	18			18	18
19A	CH	1	18	18	18	18		18	18	18	18			18	18
21	UPE	1	16	16	16			16	16	16	16			16	
22	UPW	1	16	16	16			16	16	16	16			16	
1	WB	1	15	15	15			15	15	15	15				
1A	WB_KOL	1	16	16	16			16	16	16	16		16		
		24													

TABLE 2(Continued): INTERCONNECTION AT Designated Gateway or Level I TAX with Full Roll Out assumed and based on License conditions												
NLDOs				ILDOs							S. No.	Circle (Unified License)
Number of POIs in Level I / Designated Gateway LDCA				Number of POIs in Level I / Designated Gateway LDCA								
BSNL	RELIANCE	TATA	BHARTI	RELIANCE	TATA	BHARTI	BSNL	DATA ACCESS	TOTAL POIs			
12	12	12	12	12	12	12	12	12	213		1	AN
14	14	14	14	14	14	14	14	14	279		2	AP
8	8	8	8	8	8	8	8	8	105		3	AS
12	12	12	12	12	12	12	12	12	213		4	BR
14	14	14	14	14	14	14	14	14	279		5	BY
14	14	14	14	14	14	14	14	14	279		5A	MH
14	14	14	14	14	14	14	14	14	279		7	GJ
15	15	15	15	15	15	15	15	15	315		8	HA
12	12	12	12	12	12	12	12	12	213		9	HP
8	8	8	8	8	8	8	8	8	105		10	JK
14	14	14	14	14	14	14	14	14	279		11	KL
15	15	15	15	15	15	15	15	15	315		12	KT
14	14	14	14	14	14	14	14	14	262		13	MP
15	15	15	15	15	15	15	15	15	315		14	ND
8	8	8	8	8	8	8	8	8	105		15	NE
12	12	12	12	12	12	12	12	12	213		16	OR
14	14	14	14	14	14	14	14	14	279		17	PB
14	14	14	14	14	14	14	14	14	279		18	RJ
15	15	15	15	15	15	15	15	15	315		19	TN
15	15	15	15	15	15	15	15	15	315		19A	CH
13	13	13	13	13	13	13	13	13	245		21	UPE
13	13	13	13	13	13	13	13	13	245		22	UPW
12	12	12	12	12	12	12	12	12	213		1	WB
13	13	13	13	13	13	13	13	13	245		1A	WB_KOL
									5905			

TABLE 3: INTERCONNECTION AT LDCA LEVEL with Full Roll Out and based on License conditions

			FIXED					CELLULAR							
			Number of POIs in each LDCA					Number of POIs in each LDCA (Cellular Operator would be Interconnecting at Gateway Level)							
S. No.	Circle (Unified License)	LDCA	BSNL	RELIANCE	TATA	BHARTI	OTHER	BSNL	RELIANCE	TATA	BHARTI	IDEA	HUTCH	Others	Others
1	AN	0	15	15	15			3	3	3	3				
2	AP	20	17	17	17			3	3	3	3	3	3		
3	AS	6	11					1	1						
4	BR	17	15	15	15			3	3	3	3				
5	BY	0	17	17	17			3	3	3	3		3	3	
5A	MH	29	17	17	17			3	3	3	3	3		3	
7	GJ	16	17	17	17			3	3	3	3	3		3	
8	HA	7	18	18	18	18		4	4	4	4			4	4
9	HP	5	15	15	15			3	3	3	3				
10	JK	4	11					1			1				
11	KL	10	17	17	17			3	3	3	3			3	3
12	KT	18	18	18	18	18		4	4	4	4			4	4
13	MP	39	17	17	17			3	3	3	3	3			
14	ND	0	18	18	18	18		4	4	4	4	4	4		
15	NE	6	11					1	1						
16	OR	11	15	15	15			3	3	3	3				
17	PB	10	17	17	17		17	3	3	3	3			3	
18	RJ	23	17	17	17		17	3	3	3				3	3
19	TN	16	18	18	18	18		4	4	4	4			4	4
19A	CH	0	18	18	18	18		4	4	4	4			4	4
21	UPE	30	16	16	16			3	3	3	3			3	
22	UPW	19	16	16	16			3	3	3	3			3	
1	WB	12	15	15	15			3	3	3	3				
1A	WB_KOL	0	16	16	16			3	3	3	3		3		
		298													

TABLE 3 (Continued): INTERCONNECTION AT LDCA LEVEL with Full Roll Out and based on License conditions

NLDOs				ILDOs						
Number of POIs in each LDCA				Number of POIs in each LDCA					S. No.	Circle (Unified License)
BSNL	RELIANCE	TATA	BHARTI	RELIANCE	TATA	BHARTI	BSNL	DATA ACCESS		
3	3	3	3	3	3	3	3	3	1	AN
3	3	3	3	3	3	3	3	3	2	AP
1	1	1	1	1	1	1	1	1	3	AS
3	3	3	3	3	3	3	3	3	4	BR
3	3	3	3	3	3	3	3	3	5	BY
3	3	3	3	3	3	3	3	3	5A	MH
3	3	3	3	3	3	3	3	3	7	GJ
4	4	4	4	4	4	4	4	4	8	HA
3	3	3	3	3	3	3	3	3	9	HP
1	1	1	1	1	1	1	1	1	10	JK
3	3	3	3	3	3	3	3	3	11	KL
4	4	4	4	4	4	4	4	4	12	KT
3	3	3	3	3	3	3	3	3	13	MP
4	4	4	4	4	4	4	4	4	14	ND
1	1	1	1	1	1	1	1	1	15	NE
3	3	3	3	3	3	3	3	3	16	OR
3	3	3	3	3	3	3	3	3	17	PB
3	3	3	3	3	3	3	3	3	18	RJ
4	4	4	4	4	4	4	4	4	19	TN
4	4	4	4	4	4	4	4	4	19A	CH
3	3	3	3	3	3	3	3	3	21	UPE
3	3	3	3	3	3	3	3	3	22	UPW
3	3	3	3	3	3	3	3	3	1	WB
3	3	3	3	3	3	3	3	3	1A	WB_KOL

TABLE 4 : INTERCONNECTION AT LDCA LEVEL with Full Roll Out and based on License conditions

			FIXED					CELLULAR							
			Number of POIs covering all LDCAs other than Gateway LDCA					Number of POIs at LDCA (Cellular Operators would be Interconnecting at Gateway Level)							
S. No.	Circle (Unified License)	LDCA	BSNL	RELIANCE	TATA	BHARTI	OTHER	BSNL	RELIANCE	TATA	BHARTI	IDEA	HUTCH	Others	Others
1	AN	0	0	0	0			0	0	0	0				
2	AP	20	340	340	340			60	60	60	60	60	60		
3	AS	6	66					6	6						
4	BR	17	255	255	255			51	51	51	51				
5	BY	0	0	0	0			0	0	0	0		0	0	
5A	MH	29	493	493	493			87	87	87	87	87		87	
7	GJ	16	272	272	272			48	48	48	48	48		48	
8	HA	7	126	126	126	126		28	28	28	28			28	28
9	HP	5	75	75	75			15	15	15	15				
10	JK	4	44					4			4				
11	KL	10	170	170	170			30	30	30	30			30	30
12	KT	18	324	324	324	324		72	72	72	72			72	72
13	MP	39	663	663	663			117	117	117	117	117			
14	ND	0	0	0	0	0		0	0	0	0	0	0		
15	NE	6	66					6	6						
16	OR	11	165	165	165			33	33	33	33				
17	PB	10	170	170	170		170	30	30	30	30			30	
18	RJ	23	391	391	391		391	69	69	69				69	69
19	TN	16	288	288	288	288		64	64	64	64			64	64
19A	CH	0	0	0	0	0		0	0	0	0			0	0
21	UPE	30	480	480	480			90	90	90	90			90	
22	UPW	19	304	304	304			57	57	57	57			57	
1	WB	12	180	180	180			36	36	36	36				
1A	WB_KOL	0	0	0	0			0	0	0	0		0		
		298	4872	4696	4696	738	561	903	899	887	822	312	60	575	263

TABLE 4 (Continued) : INTERCONNECTION AT LDCA LEVEL with Full Roll Out and based on License conditions

NLDOs				ILDOs							
Number of POIs covering all LDCAs other than Gateway LDCA				Number of POIs covering all LDCAs other than Gateway LDCA							
BSNL	RELIANCE	TATA	BHARTI	RELIANCE	TATA	BHARTI	BSNL	DATA ACCESS	TOTAL POIs	S. No.	Circle (Unified License)
0	0	0	0	0	0	0	0	0	0	1	AN
60	60	60	60	60	60	60	60	60	1920	2	AP
6	6	6	6	6	6	6	6	6	132	3	AS
51	51	51	51	51	51	51	51	51	1428	4	BR
0	0	0	0	0	0	0	0	0	0	5	BY
87	87	87	87	87	87	87	87	87	2784	5A	MH
48	48	48	48	48	48	48	48	48	1536	7	GJ
28	28	28	28	28	28	28	28	28	924	8	HA
15	15	15	15	15	15	15	15	15	420	9	HP
4	4	4	4	4	4	4	4	4	88	10	JK
30	30	30	30	30	30	30	30	30	960	11	KL
72	72	72	72	72	72	72	72	72	2376	12	KT
117	117	117	117	117	117	117	117	117	3627	13	MP
0	0	0	0	0	0	0	0	0	0	14	ND
6	6	6	6	6	6	6	6	6	132	15	NE
33	33	33	33	33	33	33	33	33	924	16	OR
30	30	30	30	30	30	30	30	30	1100	17	PB
69	69	69	69	69	69	69	69	69	2530	18	RJ
64	64	64	64	64	64	64	64	64	2112	19	TN
0	0	0	0	0	0	0	0	0	0	19A	CH
90	90	90	90	90	90	90	90	90	2700	21	UPE
57	57	57	57	57	57	57	57	57	1710	22	UPW
36	36	36	36	36	36	36	36	36	1008	1	WB
0	0	0	0	0	0	0	0	0	0	1A	WB_KOL
903	903	903	903	903	903	903	903	903	28411		

TABLE 5 : POIs in each SDCA							
S. No.	Circle (Unified License)	SDCA is other than LDCA	Number of POIs in each SDCA				
			BSNL	RELIANCE	TATA	BHARTI	OTHER
1	AN	1	2	2	2		
2	AP	222	2	2	2		
3	AS	39	0				
4	BR	163	2	2	2		
5	BY	1	2	2	2		
5A	MH	278	2	2	2		
7	GJ	144	2	2	2		
8	HA	45	3	3	3	3	
9	HP	27	2	2	2		
10	JK	29	0				
11	KL	47	2	2	2		
12	KT	161	3	3	3	3	
13	MP	321	2	2	2		
14	ND	0	3	3	3	3	
15	NE	76	0				
16	OR	108	2	2	2		
17	PB	44	3	3	3		3
18	RJ	222	3	3	3		3
19	TN	112	3	3	3	3	
19A	CH	0	0	0	0	0	
21	UPE	135	2	2	2		
22	UPW	83	2	2	2		
1	WB	57	2	2	2		
1A	WB_KOL	11	2	2	2		
		2326					

TABLE 6 : POIs at SDCA Level (only for Fixed Services)								
S. No.	Circle (Unified License)	SDCA is other than LDCA	Number of POIs in SDCAs other than LDCAs					TOTAL POIs
			BSNL	RELIANCE	TATA	BHARTI	OTHER	
1	AN	1	2	2	2			6
2	AP	222	444	444	444			1332
3	AS	39	0					0
4	BR	163	326	326	326			978
5	BY	1	2	2	2			6
5A	MH	278	556	556	556			1668
7	GJ	144	288	288	288			864
8	HA	45	135	135	135	135		540
9	HP	27	54	54	54			162
10	JK	29	0					0
11	KL	47	94	94	94			282
12	KT	161	483	483	483	483		1932
13	MP	321	642	642	642			1926
14	ND	0	0	0	0	0		0
15	NE	76	0					0
16	OR	108	216	216	216			648
17	PB	44	132	132	132		132	528
18	RJ	222	666	666	666		666	2664
19	TN	112	336	336	336	336		1344
19A	CH	0	0	0	0	0		0
21	UPE	135	270	270	270			810
22	UPW	83	166	166	166			498
1	WB	57	114	114	114			342
1A	WB_KOL	11	22	22	22			66
		2326	4948	4948	4948	954	798	16596

TABLE 7 : Total POI Requirements with Full Roll Out and based on License conditions														
S. No.	Circle (Unified License)	FIXED					CELLULAR							
		BSNL	RELIANCE	TATA	BHARTI	OTHER	BSNL	RELIANCE	TATA	BHARTI	IDEA	HUTCH	Others	Others
1	AN	17	17	17			15	15	15	15				
2	AP	801	801	801			77	77	77	77	77	77		
3	AS	77					17	17						
4	BR	596	596	596			66	66	66	66				
5	BY	19	19	19			17	17	17	17		17	17	
5A	MH	1066	1066	1066			104	104	104	104	104		104	
7	GJ	577	577	577			65	65	65	65	65		65	
8	HA	279	279	279	279		46	46	46	46			46	46
9	HP	144	144	144			30	30	30	30				
10	JK	55					15			15				
11	KL	281	281	281			47	47	47	47			47	47
12	KT	825	825	825	825		90	90	90	90			90	90
13	MP	1322	1322	1322			134	134	134	134	134			
14	ND	18	18	18	18		18	18	18	18	18	18		
15	NE	77					17	17						
16	OR	396	396	396			48	48	48	48				
17	PB	319	319	319		319	47	47	47	47			47	
18	RJ	1074	1074	1074		1074	86	86	86				86	86
19	TN	642	642	642	642		82	82	82	82			82	82
19A	CH	18	18	18	18		18	18	18	18			18	18
21	UPE	766	766	766			106	106	106	106			106	
22	UPW	486	486	486			73	73	73	73			73	
1	WB	309	309	309			51	51	51	51				
1A	WB_KOL	38	38	38			16	16	16	16		16		
		10202	9993	9993	1782	1393	903	899	887	822	398	128	781	369

TABLE 7 (Continued) : Total POI Requirements with Full Roll Out and based on License conditions											
NLDOs				ILDOs							
BSNL	RELIANCE	TATA	BHARTI	RELIANCE	TATA	BHARTI	BSNL	DATA ACCESS	TOTAL POIs	S. No.	Circle (Unified License)
12	15	15	15	15	15	15	15	15	243	1	AN
77	77	77	77	77	77	77	77	77	3558	2	AP
17	17	17	17	17	17	17	17	17	264	3	AS
66	66	66	66	66	66	66	66	66	2646	4	BR
17	17	17	17	17	17	17	17	17	312	5	BY
104	104	104	104	104	104	104	104	104	4758	5A	MH
65	65	65	65	65	65	65	65	65	2706	7	GJ
46	46	46	46	46	46	46	46	46	1806	8	HA
30	30	30	30	30	30	30	30	30	822	9	HP
15	15	15	15	15	15	15	15	15	220	10	JK
47	47	47	47	47	47	47	47	47	1548	11	KL
90	90	90	90	90	90	90	90	90	4650	12	KT
134	134	134	134	134	134	134	134	134	5842	13	MP
18	18	18	18	18	18	18	18	18	342	14	ND
17	17	17	17	17	17	17	17	17	264	15	NE
48	48	48	48	48	48	48	48	48	1812	16	OR
47	47	47	47	47	47	47	47	47	1934	17	PB
86	86	86	86	86	86	86	86	86	5500	18	RJ
82	82	82	82	82	82	82	82	82	3798	19	TN
18	18	18	18	18	18	18	18	18	342	19A	CH
106	106	106	106	106	106	106	106	106	3782	21	UPE
73	73	73	73	73	73	73	73	73	2480	22	UPW
51	51	51	51	51	51	51	51	51	1590	1	WB
16	16	16	16	16	16	16	16	16	338	1A	WB_KOL
1282	1285	1285	1285	1285	1285	1285	1285	1285	51557		

TABLE 8 : Total POI Requirements with Interconnect Exchange															
		FIXED					CELLULAR								
S. No.	Circle (Unified License)	BSNL	RELIANCE	TATA	BHARTI	OTHER	BSNL	RELIANCE	TATA	BHARTI	IDEA	HUTCH	Others	Others
1	AN	1	1	1			1	1	1	1				
2	AP	1	1	1			1	1	1	1	1	1		
3	AS	1					1	1						
4	BR	1	1	1			1	1	1	1				
5	BY	1	1	1			1	1	1	1		1	1	
5A	MH	1	1	1			1	1	1	1	1		1	
7	GJ	1	1	1			1	1	1	1	1		1	
8	HA	1	1	1	1		1	1	1	1			1	1
9	HP	1	1	1			1	1	1	1				
10	JK	1					1			1				
11	KL	1	1	1			1	1	1	1			1	1
12	KT	1	1	1	1		1	1	1	1			1	1
13	MP	1	1	1			1	1	1	1	1			
14	ND	1	1	1	1		1	1	1	1	1	1		
15	NE	1					1	1						
16	OR	1	1	1			1	1	1	1				
17	PB	1	1	1		1	1	1	1	1			1	
18	RJ	1	1	1		1	1	1	1				1	1
19	TN	1	1	1	1		1	1	1	1			1	1
19A	CH	1	1	1	1		1	1	1	1			1	1
21	UPE	1	1	1			1	1	1	1			1	
22	UPW	1	1	1			1	1	1	1			1	
1	WB	1	1	1			1	1	1	1				
1A	WB_KOL	1	1	1			1	1	1	1		1		
		24	21	21	5	2	24	23	21	21	5	4	12	6

TABLE 8 (Continued) : Total POI Requirements with Interconnect Exchange											
NLDOs				ILDOs							
BSNL	RELIANCE	TATA	BHARTI	RELIANCE	TATA	BHARTI	BSNL	DATA ACCESS	TOTAL POIs	POIs in Interconnect Exchange	Circle (Unified License)
1	1	1	1	1	1	1	1	1	16	16	AN
1	1	1	1	1	1	1	1	1	18	18	AP
1	1	1	1	1	1	1	1	1	12	12	AS
1	1	1	1	1	1	1	1	1	16	16	BR
1	1	1	1	1	1	1	1	1	18	18	BY
1	1	1	1	1	1	1	1	1	18	18	MH
1	1	1	1	1	1	1	1	1	18	18	GJ
1	1	1	1	1	1	1	1	1	19	19	HA
1	1	1	1	1	1	1	1	1	16	16	HP
1	1	1	1	1	1	1	1	1	12	12	JK
1	1	1	1	1	1	1	1	1	18	18	KL
1	1	1	1	1	1	1	1	1	19	19	KT
1	1	1	1	1	1	1	1	1	17	17	MP
1	1	1	1	1	1	1	1	1	19	19	ND
1	1	1	1	1	1	1	1	1	12	12	NE
1	1	1	1	1	1	1	1	1	16	16	OR
1	1	1	1	1	1	1	1	1	18	18	PB
1	1	1	1	1	1	1	1	1	18	18	RJ
1	1	1	1	1	1	1	1	1	19	19	TN
1	1	1	1	1	1	1	1	1	19	19	CH
1	1	1	1	1	1	1	1	1	17	17	UPE
1	1	1	1	1	1	1	1	1	17	17	UPW
1	1	1	1	1	1	1	1	1	16	16	WB
1	1	1	1	1	1	1	1	1	17	17	WB_KOL
24	24	24	24	24	24	24	24	24	405	405	

ANNEX VI

Calculations for number of Interconnect Switches and likely costs

SECTION I

CALCULATION OF INTERCONNECT SWITCHES REQUIRED FOR ALL INTER-NETWORK TRAFFIC

22 Spread Sheet outputs are enclosed and they cover the Circles/ Service Areas of Andaman & Nicobar, Andhra Pradesh, Assam + NE, Bihar, Delhi, Gujarat, Haryana, Himachal Pradesh, Jammu & Kashmir, Karnataka, Kerala, Maharashtra, Mumbai, Madhya Pradesh, Orissa, Punjab, Rajasthan, Cennai, Tamilnadu, UP(East), UP(West), West Bengal including Kolkatta.

Columns in each Spread sheet include:

- **Service Provider**
- **Circle/ Service Area**
- **DELs as on 31.12.2003**
- **Traffic per DEL in Busy Hour assumed (0.06 Erlangs/ subscriber for BSNL/MTNL Fixed, 0.05 Erlangs/ subscriber for TATA, RELIANCE, HFCL, SHYAM and BHARTI for Fixed/ WLL(M) subscriber base, 0.04 Erlangs/ subscriber for BSNL/MTNL Mobile traffic and 0.03 Erlangs/ subscriber for all other Cellular Operators.**
- **Busy Hour Traffic calculated**
- **Intra-Operator Traffic percentage assumed**
- **Inter-Operator Intra Circle traffic % assumed**
- **Inter-Operator Inter Circle NLD traffic % assumed**
- **Inter-Operator ILD traffic % assumed**
- **Inter-Operator Inter Circle NLD traffic calculated**
- **Inter-Operator ILD traffic calculated**
- **Total Inter-Operator traffic**
- **Circuits calculated based on average of 0.5 Erlangs/ Circuit**
- **Number of PCMs calculated**
- **Interconnect Exchange Switch capacity**
- **Interconnect Exchange Cost based on assumption of $25 per line (Alcatel1000 E10 that can support 15000 E1s) taken with 100%**

addition for other Infrastructure support including Inter-Carrier Billing Clearing House functions

- **Number of Interconnect Switches similar to Alcatel 1000 E10 (ONE SWITCH PER GATEWAY/ LEVEL I Area only is required)**

INTERCONNECT SWITCH AND INTER-CARRIER BILLING															
Service Provider	Name of the Circle/ Service Area	DELs (31.12.03)	Traffic/ DEL in BH	BH Traffic Dec 03	Intra-Operator Traffic %	Inter-Operator Intra-Circle Traffic %	Inter-Operator NLD Traffic %	Inter-Operator ILD Traffic %	Inter-Operator NLD Traffic	Inter-Operator ILD Traffic	Inter-Operator Total Traffic	Circuits with Avg BH Loading 0.8/ Cct	No of PCMs calculated	Interconnect Exchange Capacity in PCMs as calculated	Cost of Interconnect Switch + Infrastructure + Inter-Connect Billing in Rs. Crores
BSNL	A&N	37443	0.06	2247	73.0	21.0	5.0	1.0	112.3	22.5	607	758	26		
NLDO_BSNL	A&N								71.9		71.9	90	3		
NLDO_BHARTI	A&N								13.5		13.5	17	1		
NLDO_RELIANCE	A&N								13.5		13.5	17	1		
NLDO_VSNL	A&N								13.5		13.5	17	1		
ILDO_VSNL	A&N									14.4	14.4	18	1		
ILDO_BHARTI	A&N									2.7	2.7	3	1		
ILDO_RELIANCE	A&N									2.7	2.7	3	1		
ILDO_DATA ACCESS	A&N									2.7	2.7	3	1	36	0.2

Service Provider	Name of the Circle/ Service Area	DELs (31.12.03)	Traffic/ DEL in BH	BH Traffic Dec 03	Intra-Operator Traffic %	Inter-Operator Intra-Circle Traffic %	Inter-Operator NLD Traffic %	Inter-Operator ILD Traffic %	Inter-Operator NLD Traffic	Inter-Operator ILD Traffic	Inter-Operator Total Traffic	Circuits with Avg BH Loading 0.8/ Cct	No of PCMs calculated	Interconnect Capacity on 31.12.2003 (No of PCMs calculated)	Cost of Interconnect Switch + Infrastructure + Inter-Connect Billing in Rs. Crores
BSNL	Assam	501879	0.06	30113	50.0	45.0	4.0	1.0	1204.5	301.1	15056	18820	628		
Reliance	Assam	42160	0.03	1265	18.5	73.0	8.0	0.5	101.2	6.3	1031	1289	43		
BSNL	NE	645549	0.06	38733	50.0	45.0	4.0	1.0	1549.3	387.3	19366	24208	807		
BSNL	NE	386	0.04	15	50.0	45.0	4.0	1.0	0.6	0.2	8	10	1		
Reliance	NE	10220	0.03	307	18.5	73.0	8.0	0.5	24.5	1.5	250	312	11		
NLDO_BSNL	Assam+NE								1843.3		1843.3	2304	77		
NLDO_BHARTI	Assam+NE								345.6		345.6	432	15		
NLDO_RELIANCE	Assam+NE								345.6		345.6	432	15		
NLDO_VSNL	Assam+NE								345.6		345.6	432	15		
ILDO_VSNL	Assam+NE									445.7	446	557	19		
ILDO_BHARTI	Assam+NE									83.6	84	104	4		
ILDO_RELIANCE	Assam+NE									83.6	84	104	4		
ILDO_DATA ACCESS	Assam+NE									83.6	84	104	4	1643	10.7

Service Provider	Name of the Circle/ Service Area	DELs (31.12.03)	Traffic/ DEL in BH	BH Traffic Dec 03	Intra-Operator Traffic %	Inter-Operator Intra-Circle Traffic %	Inter-Operator NLD Traffic %	Inter-Operator ILD Traffic %	Inter-Operator NLD Traffic	Inter-Operator ILD Traffic	Inter-Operator Total Traffic	Circuits with Avg BH Loading 0.8/ Cct	No of PCMs calculated	Interconnect Capacity on 31.12.2003 (No of PCMs calculated)	Cost of Interconnect Switch + Infrastructure + Inter-Connect Billing in Rs. Crores
BSNL	Bihar including Jharkhand	217145	0.04	8686	50.0	45.0	4.0	1.0	347.4	86.9	4343	5429	181		
BSNL	Bihar including Jharkhand	1392625	0.06	83558	50.0	45.0	4.0	1.0	3342.3	835.6	41779	52223	1741		
Reliance	Bihar including Jharkhand	232531	0.03	6976	18.5	73.0	8.0	0.5	558.1	34.9	5685	7107	237		
RTPL	Bihar including Jharkhand	90358	0.05	4518	18.5	73.0	8.0	0.5	361.4	22.6	3682	4603	154		
NLDO_BSNL	Bihar including Jharkhand								2949.9		2949.9	3687	123		
NLDO_BHARTI	Bihar including Jharkhand								553.1		553.1	691	24		
NLDO_RELIANCE	Bihar including Jharkhand								553.1		553.1	691	24		
NLDO_VSNL	Bihar including Jharkhand								553.1		553.1	691	24		
ILDO_VSNL	Bihar including Jharkhand									627.1	627	784	27		
ILDO_BHARTI	Bihar including Jharkhand									117.6	118	147	5		
ILDO_RELIANCE	Bihar including Jharkhand									117.6	118	147	5		
ILDO_DATA ACCESS	Bihar including Jharkhand									117.6	118	147	5	2550	16.7

Service Provider	Name of the Circle/ Service Area	DELs (31.12.03)	Traffic/ DEL in BH	BH Traffic Dec 03	Intra-Operator Traffic %	Inter-Operator Intra-Circle Traffic %	Inter-Operator NLD Traffic %	Inter-Operator ILD Traffic %	Inter-Operator NLD Traffic	Inter-Operator ILD Traffic	Inter-Operator Total Traffic	Circuits with Avg BH Loading 0.8/ Cct	No of PCMs calculated	Interconnect Capacity on 31.12.2003 (No of PCMs calculated)	Cost of Interconnect Switch + Infrastructure + Inter-Connect Billing in Rs. Crores
Bharti	Delhi	76768	0.05	3838	18.5	73.0	8.0	0.5	307.1	19.2	3128	3910	131		
Bharti	Delhi	1331003	0.03	39930	18.5	73.0	8.0	0.5	3194.4	199.7	32543	40679	1356		
Hutchison	Delhi	1026077	0.03	30782	15.0	70.0	13.0	2.0	4001.7	615.6	26165	32706	1091		
IDEA	Delhi	420828	0.03	12625	15.0	70.0	13.0	2.0	1641.2	252.5	10731	13414	448		
MTNL	Delhi	2339574	0.06	140374	73.0	12.0	13.0	2.0	18248.7	2807.5	37901	47376	1580		
MTNL	Delhi	156501	0.04	6260	73.0	13.0	13.0	1.0	813.8	62.6	1690	2113	71		
RTPL	Delhi	730607	0.05	36530	18.5	73.0	8.0	0.5	2922.4	182.7	29772	37215	1241		
TTL	Delhi	539510	0.05	26976	18.5	73.0	8.0	0.5	2158.0	134.9	21985	27481	917		
NLDO_BSNL	Delhi								21303.9		21303.9	26630	888		
NLDO_BHARTI	Delhi								3994.5		3994.5	4993	167		
NLDO_RELIANCE	Delhi								3994.5		3994.5	4993	167		
NLDO_VSNL	Delhi								3994.5		3994.5	4993	167		
ILDO_VSNL	Delhi									2735.7	2736	3420	114		
ILDO_BHARTI	Delhi									513.0	513	641	22		
ILDO_RELIANCE	Delhi									513.0	513	641	22		
ILDO_DATA ACCESS	Delhi									513.0	513	641	22	8404	55.0

Service Provider	Name of the Circle/ Service Area	DELs (31.12.03)	Traffic/ DEL in BH	BH Traffic Dec 03	Intra-Operator Traffic %	Inter-Operator Intra-Circle Traffic %	Inter-Operator NLD Traffic %	Inter-Operator ILD Traffic %	Inter-Operator NLD Traffic	Inter-Operator ILD Traffic	Inter-Operator Total Traffic	Circuits with Avg BH Loading 0.8/ Cct	No of PCMs calculated	Interconnect Capacity on 31.12.2003 (No of PCMs calculated)	Cost of Interconnect Switch + Infrastructure + Inter-Connect Billing in Rs. Crores
Bharti	Gujarat	156539	0.03	4696	18.5	73.0	8.0	0.5	375.7	23.5	3827	4784	160		
BSNL	Gujarat	2811521	0.06	168691	50.0	45.0	4.0	1.0	6747.7	1686.9	84346	105432	3515		
BSNL	Gujarat	480395	0.04	19216	50.0	45.0	4.0	1.0	768.6	192.2	9608	12010	401		
Fascel	Gujarat	817778	0.03	24533	15.0	70.0	13.0	2.0	3189.3	490.7	20853	26067	869		
IDEA	Gujarat	350185	0.03	10506	15.0	70.0	13.0	2.0	1365.7	210.1	8930	11162	373		
RTPL	Gujarat	432401	0.05	21620	21.5	70.0	8.0	0.5	1729.6	108.1	16972	21215	708		
TTL	Gujarat	39794	0.05	1990	21.5	70.0	8.0	0.5	159.2	9.9	1562	1952	66		
NLDO_BSNL	Gujarat								9174.9		9174.9	11469	383		
NLDO_BHARTI	Gujarat								1720.3		1720.3	2150	72		
NLDO_RELIANCE	Gujarat								1720.3		1720.3	2150	72		
NLDO_VSNL	Gujarat								1720.3		1720.3	2150	72		
ILDO_VSNL	Gujarat									1741.7	1742	2177	73		
ILDO_BHARTI	Gujarat									326.6	327	408	14		
ILDO_RELIANCE	Gujarat									326.6	327	408	14		
ILDO_DATA ACCESS	Gujarat									326.6	327	408	14	6806	44.5

Service Provider	Name of the Circle/ Service Area	DELs (31.12.03)	Traffic/ DEL in BH	BH Traffic Dec 03	Intra-Operator Traffic %	Inter-Operator Intra-Circle Traffic %	Inter-Operator NLD Traffic %	Inter-Operator ILD Traffic %	Inter-Operator NLD Traffic	Inter-Operator ILD Traffic	Inter-Operator Total Traffic	Circuits with Avg BH Loading 0.8/ Cct	No of PCMs calculated	Interconnect Capacity on 31.12.2003 (No of PCMs calculated)	Cost of Interconnect Switch + Infrastructure + Inter-Connect Billing in Rs. Crores
Aircel Digilink	Haryana	26218	0.03	787	10.0	73.0	16.0	1.0	125.8	7.9	708	885	30		
Bharti	Haryana	71582	0.05	3579	18.5	73.0	8.0	0.5	286.3	17.9	2917	3646	122		
Bharti	Haryana	115860	0.03	3476	18.5	73.0	8.0	0.5	278.1	17.4	2833	3541	118		
BSNL	Haryana	1099050	0.06	65943	50.0	45.0	4.0	1.0	2637.7	659.4	32972	41214	1374		
BSNL	Haryana	150024	0.04	6001	50.0	45.0	4.0	1.0	240.0	60.0	3000	3751	125		
Escotel	Haryana	122410	0.03	3672	15.0	70.0	13.0	2.0	477.4	73.4	3121	3902	131		
RTPL	Haryana	108120	0.05	5406	21.5	70.0	8.0	0.5	432.5	27.0	4244	5305	177		
NLDO_BSNL	Haryana								2865.8		2865.8	3582	120		
NLDO_BHARTI	Haryana								537.3		537.3	672	23		
NLDO_RELIANCE	Haryana								537.3		537.3	672	23		
NLDO_VSNL	Haryana								537.3		537.3	672	23		
ILDO_VSNL	Haryana									552.4	552	690	23		
ILDO_BHARTI	Haryana									103.6	104	129	5		
ILDO_RELIANCE	Haryana									103.6	104	129	5		
ILDO_DATA ACCESS	Haryana									103.6	104	129	5	2304	15.1

Service Provider	Name of the Circle/ Service Area	DELs (31.12.03)	Traffic/ DEL in BH	BH Traffic Dec 03	Intra-Operator Traffic %	Inter-Operator Intra-Circle Traffic %	Inter-Operator NLD Traffic %	Inter-Operator ILD Traffic %	Inter-Operator NLD Traffic	Inter-Operator ILD Traffic	Inter-Operator Total Traffic	Circuits with Avg BH Loading 0.8/ Cct	No of PCMs calculated	Interconnect Capacity on 31.12.2003 (No of PCMs calculated)	Cost of Interconnect Switch + Infrastructure + Inter-Connect Billing in Rs. Crores
Bharti	HP	65386	0.03	1962	21.5	70.0	8.0	0.5	156.9	9.8	1540	1925	65		
BSNL	HP	469879	0.06	28193	50.0	45.0	4.0	1.0	1127.7	281.9	14096	17620	588		
BSNL	HP	59999	0.04	2400	50.0	45.0	4.0	1.0	96.0	24.0	1200	1500	50		
Reliance	HP	11589	0.03	348	18.5	73.0	8.0	0.5	27.8	1.7	283	354	12		
RTPL	HP	1680	0.05	84	18.5	73.0	8.0	0.5	6.7	0.4	68	86	3		
NLDO_BSNL	HP								905.7		905.7	1132	38		
NLDO_BHARTI	HP								169.8		169.8	212	8		
NLDO_RELIANCE	HP								169.8		169.8	212	8		
NLDO_VSNL	HP								169.8		169.8	212	8		
ILDO_VSNL	HP									203.5	203	254	9		
ILDO_BHARTI	HP									38.1	38	48	2		
ILDO_RELIANCE	HP									38.1	38	48	2		
ILDO_DATA ACCESS	HP									38.1	38	48	2	795	5.2

Service Provider	Name of the Circle/ Service Area	DELs (31.12.03)	Traffic/ DEL in BH	BH Traffic Dec 03	Intra-Operator Traffic %	Inter-Operator Intra-Circle Traffic %	Inter-Operator NLD Traffic %	Inter-Operator ILD Traffic %	Inter-Operator NLD Traffic	Inter-Operator ILD Traffic	Inter-Operator Total Traffic	Circuits with Avg BH Loading 0.8/ Cct	No of PCMs calculated	Interconnect Capacity on 31.12.2003 (No of PCMs calculated)	Cost of Interconnect Switch + Infrastructure + Inter-Connect Billing in Rs. Crores
BSNL	J&K	279617	0.06	16777	50.0	45.0	4.0	1.0	671.1	167.8	8389	10486	350		
BSNL	J&K	28741	0.04	1150	50.0	45.0	4.0	1.0	46.0	11.5	575	719	24		
NLDO_BSNL	J&K								458.9		458.9	574	20		
NLDO_BHARTI	J&K								86.0		86.0	108	4		
NLDO_RELIANCE	J&K								86.0		86.0	108	4		
NLDO_VSNL	J&K								86.0		86.0	108	4		
ILDO_VSNL	J&K									114.7	115	143	5		
ILDO_BHARTI	J&K									21.5	22	27	1		
ILDO_RELIANCE	J&K									21.5	22	27	1		
ILDO_DATA ACCESS	J&K									21.5	22	27	1	414	2.7

Service Provider	Name of the Circle/ Service Area	DELs (31.12.03)	Traffic/ DEL in BH	BH Traffic Dec 03	Intra-Operator Traffic %	Inter-Operator Intra-Circle Traffic %	Inter-Operator NLD Traffic %	Inter-Operator ILD Traffic %	Inter-Operator NLD Traffic	Inter-Operator ILD Traffic	Inter-Operator Total Traffic	Circuits with Avg BH Loading 0.8/ Cct	No of PCMs calculated	Interconnect Capacity on 31.12.2003 (No of PCMs calculated)	Cost of Interconnect Switch + Infrastructure + Inter-Connect Billing in Rs. Crores
Bharti	Karnataka	68925	0.05	3446	18.5	73.0	8.0	0.5	275.7	17.2	2809	3511	117		
Bharti	Karnataka	681508	0.03	20445	18.5	73.0	8.0	0.5	1635.6	102.2	16663	20829	695		
BSNL	Karnataka	2727313	0.06	163639	50.0	45.0	4.0	1.0	6545.6	1636.4	81819	102274	3410		
BSNL	Karnataka	320617	0.04	12825	50.0	45.0	4.0	1.0	513.0	128.2	6412	8015	268		
Hutchison	Karnataka	230105	0.03	6903	15.0	70.0	13.0	2.0	897.4	138.1	5868	7335	245		
RTPL	Karnataka	431700	0.05	21585	21.5	70.0	8.0	0.5	1726.8	107.9	16944	21180	706		
Spice	Karnataka	260889	0.03	7827	15.0	70.0	13.0	2.0	1017.5	156.5	6653	8316	278		
TTL	Karnataka	141885	0.05	7094	21.5	70.0	8.0	0.5	567.5	35.5	5569	6961	233		
NLDO_BSNL	Karnataka								8434.6		8434.6	10543	352		
NLDO_BHARTI	Karnataka								1581.5		1581.5	1977	66		
NLDO_RELIANCE	Karnataka								1581.5		1581.5	1977	66		
NLDO_VSNL	Karnataka								1581.5		1581.5	1977	66		
ILDO_VSNL	Karnataka									1486.1	1486	1858	62		
ILDO_BHARTI	Karnataka									278.7	279	348	12		
ILDO_RELIANCE	Karnataka									278.7	279	348	12		
ILDO_DATA ACCESS	Karnataka									278.7	279	348	12	6600	43.2

Service Provider	Name of the Circle/ Service Area	DELs (31.12.03)	Traffic/ DEL in BH	BH Traffic Dec 03	Intra-Operator Traffic %	Inter-Operator Intra-Circle Traffic %	Inter-Operator NLD Traffic %	Inter-Operator ILD Traffic %	Inter-Operator NLD Traffic	Inter-Operator ILD Traffic	Inter-Operator Total Traffic	Circuits with Avg BH Loading 0.8/ Cct	No of PCMs calculated	Interconnect Capacity on 31.12.2003 (No of PCMs calculated)	Cost of Interconnect Switch + Infrastructure + Inter-Connect Billing in Rs. Crores
Bharti	Kerala	131462	0.03	3944	21.5	70.0	8.0	0.5	315.5	19.7	3096	3870	129		
BPL	Kerala	202796	0.03	6084	15.0	70.0	13.0	2.0	790.9	121.7	5171	6464	216		
BSNL	Kerala	3158208	0.06	189492	50.0	45.0	4.0	1.0	7579.7	1894.9	94746	118433	3948		
BSNL	Kerala	350131	0.04	14005	50.0	45.0	4.0	1.0	560.2	140.1	7003	8753	292		
Escotel	Kerala	338707	0.03	10161	15.0	70.0	13.0	2.0	1321.0	203.2	8637	10796	360		
RTPL	Kerala	298233	0.05	14912	21.5	70.0	8.0	0.5	1192.9	74.6	11706	14632	488		
NLDO_BSNL	Kerala								7526.5		7526.5	9408	314		
NLDO_BHARTI	Kerala								1411.2		1411.2	1764	59		
NLDO_RELIANCE	Kerala								1411.2		1411.2	1764	59		
NLDO_VSNL	Kerala								1411.2		1411.2	1764	59		
ILDO_VSNL	Kerala									1570.7	1571	1963	66		
ILDO_BHARTI	Kerala									294.5	294	368	13		
ILDO_RELIANCE	Kerala									294.5	294	368	13		
ILDO_DATA ACCESS	Kerala									294.5	294	368	13	6029	39.4

Service Provider	Name of the Circle/ Service Area	DELs (31.12.03)	Traffic/ DEL in BH	BH Traffic Dec 03	Intra-Operator Traffic %	Inter-Operator Intra-Circle Traffic %	Inter-Operator NLD Traffic %	Inter-Operator ILD Traffic %	Inter-Operator NLD Traffic	Inter-Operator ILD Traffic	Inter-Operator Total Traffic	Circuits with Avg BH Loading 0.8/ Cct	No of PCMs calculated	Interconnect Capacity on 31.12.2003 (No of PCMs calculated)	Cost of Interconnect Switch + Infrastructure + Inter-Connect Billing in Rs. Crores
Bharti	Maharashtra (excluding Mumbai)	267526	0.03	8026	21.5	70.0	8.0	0.5	642.1	40.1	6300	7875	263		
BPL	Maharashtra (excluding Mumbai)	268191	0.03	8046	15.0	70.0	13.0	2.0	1045.9	160.9	6839	8549	285		
BSNL	Maharashtra (excluding Mumbai)	590333	0.04	23613	50.0	45.0	4.0	1.0	944.5	236.1	11807	14758	492		
BSNL	Maharashtra (excluding Mumbai)	3890389	0.06	233423	50.0	45.0	4.0	1.0	9336.9	2334.2	116712	145890	4863		
IDEA	Maharashtra (excluding Mumbai)	841666	0.03	25250	15.0	70.0	13.0	2.0	3282.5	505.0	21462	26828	895		
RTPL	Maharashtra (excluding Mumbai)	439270	0.05	21964	21.5	70.0	8.0	0.5	1757.1	109.8	17241	21552	719		
NLDO_BSNL	Maharashtra (excluding Mumbai)								10885.8		10885.8	13607	454		
NLDO_BHARTI	Maharashtra (excluding Mumbai)								2041.1		2041.1	2551	86		
NLDO_RELIANCE	Maharashtra (excluding Mumbai)								2041.1		2041.1	2551	86		
NLDO_VSNL	Maharashtra (excluding Mumbai)								2041.1		2041.1	2551	86		
ILDO_VSNL	Maharashtra (excluding Mumbai)									2167.2	2167	2709	91		
ILDO_BHARTI	Maharashtra (excluding Mumbai)									406.3	406	508	17		
ILDO_RELIANCE	Maharashtra (excluding Mumbai)									406.3	406	508	17		
ILDO_DATA ACCESS	Maharashtra (excluding Mumbai)									406.3	406	508	17	8371	54.7

Service Provider	Name of the Circle/ Service Area	DELs (31.12.03)	Traffic/ DEL in BH	BH Traffic Dec 03	Intra-Operator Traffic %	Inter-Operator Intra-Circle Traffic %	Inter-Operator NLD Traffic %	Inter-Operator ILD Traffic %	Inter-Operator NLD Traffic	Inter-Operator ILD Traffic	Inter-Operator Total Traffic	Circuits with Avg BH Loading 0.8/ Cct	No of PCMs calculated	Interconnect Capacity on 31.12.2003 (No of PCMs calculated)	Cost of Interconnect Switch + Infrastructure + Inter-Connect Billing in Rs. Crores
Bharti	Maharashtra (Mumbai)	478251	0.03	14348	21.5	70.0	8.0	0.5	1147.8	71.7	11263	14079	470		
BPL	Maharashtra (Mumbai)	854823	0.03	25645	15.0	70.0	13.0	2.0	3333.8	512.9	21798	27247	909		
Hutchison	Maharashtra (Mumbai)	1005723	0.03	30172	15.0	70.0	13.0	2.0	3922.3	603.4	25646	32057	1069		
MTNL	Maharashtra (Mumbai)	2154076	0.06	129245	73.0	12.0	13.0	2.0	16801.8	2584.9	34896	43620	1454		
MTNL	Maharashtra (Mumbai)	168432	0.06	10106	73.0	12.0	13.0	2.0	1313.8	202.1	2729	3411	114		
RTPL	Maharashtra (Mumbai)	585162	0.05	29258	18.5	73.0	8.0	0.5	2340.6	146.3	23845	29807	994		
TTL	Maharashtra including Mumbai	458852	0.05	22943	18.5	73.0	8.0	0.5	1835.4	114.7	18698	23373	780		
NLDO_BSNL	Maharashtra (Mumbai)								19645.2		19645.2	24556	819		
NLDO_BHARTI	Maharashtra (Mumbai)								3683.5		3683.5	4604	154		
NLDO_RELIANCE	Maharashtra (Mumbai)								3683.5		3683.5	4604	154		
NLDO_VSNL	Maharashtra (Mumbai)								3683.5		3683.5	4604	154		
ILDO_VSNL	Maharashtra (Mumbai)									2711.1	2711	3389	113		
ILDO_BHARTI	Maharashtra (Mumbai)									508.3	508	635	22		
ILDO_RELIANCE	Maharashtra (Mumbai)									508.3	508	635	22		
ILDO_DATA ACCESS	Maharashtra (Mumbai)									508.3	508	635	22	7250	47.4

Service Provider	Name of the Circle/ Service Area	DELs (31.12.03)	Traffic/ DEL in BH	BH Traffic Dec 03	Intra-Operator Traffic %	Inter-Operator Intra-Circle Traffic %	Inter-Operator NLD Traffic %	Inter-Operator ILD Traffic %	Inter-Operator NLD Traffic	Inter-Operator ILD Traffic	Inter-Operator Total Traffic	Circuits with Avg BH Loading 0.8/ Cct	No of PCMs calculated	Interconnect Capacity on 31.12.2003 (No of PCMs calculated)	Cost of Interconnect Switch + Infrastructure + Inter-Connect Billing in Rs. Crores
Bharti	MP including Chattisgarh	237723	0.05	11886	18.5	73.0	8.0	0.5	950.9	59.4	9687	12109	404		
Bharti	MP including Chattisgarh	89346	0.03	2680	18.5	10.0	8.0	0.5	214.4	13.4	496	620	21		
BSNL	MP including Chattisgarh	1607919	0.06	96475	50.0	45.0	4.0	1.0	3859.0	964.8	48238	60297	2010		
BSNL	MP including Chattisgarh	151516	0.04	6061	50.0	45.0	4.0	1.0	242.4	60.6	3030	3788	127		
IDEA	MP including Chattisgarh	251510	0.03	7545	15.0	70.0	13.0	2.0	980.9	150.9	6414	8017	268		
Reliance	MP including Chattisgarh	200290	0.03	6009	21.5	70.0	8.0	0.5	480.7	30.0	4717	5896	197		
RTPL	MP including Chattisgarh	175189	0.05	8759	21.5	70.0	8.0	0.5	700.8	43.8	6876	8595	287		
NLDO_BSNL	MP including Chattisgarh								4754.6		4754.6	5943	199		
NLDO_BHARTI	MP including Chattisgarh								891.5		891.5	1114	38		
NLDO_RELIANCE	MP including Chattisgarh								891.5		891.5	1114	38		
NLDO_VSNL	MP including Chattisgarh								891.5		891.5	1114	38		
ILDO_VSNL	MP including Chattisgarh									846.7	847	1058	36		
ILDO_BHARTI	MP including Chattisgarh									158.8	159	198	7		
ILDO_RELIANCE	MP including Chattisgarh									158.8	159	198	7		
ILDO_DATA ACCESS	MP including Chattisgarh									158.8	159	198	7	3684	24.1

Service Provider	Name of the Circle/ Service Area	DELs (31.12.03)	Traffic/ DEL in BH	BH Traffic Dec 03	Intra-Operator Traffic %	Inter-Operator Intra-Circle Traffic %	Inter-Operator NLD Traffic %	Inter-Operator ILD Traffic %	Inter-Operator NLD Traffic	Inter-Operator ILD Traffic	Inter-Operator Total Traffic	Circuits with Avg BH Loading 0.8/ Cct	No of PCMs calculated	Interconnect Capacity on 31.12.2003 (No of PCMs calculated)	Cost of Interconnect Switch + Infrastructure + Inter-Connect Billing in Rs. Crores
BSNL	Orissa	766680	0.06	46001	50.0	45.0	4.0	1.0	1840.0	460.0	23000	28751	959		
BSNL	Orissa	142061	0.04	5682	50.0	45.0	4.0	1.0	227.3	56.8	2841	3552	119		
Reliance	Orissa	86846	0.03	2605	18.5	73.0	8.0	0.5	208.4	13.0	2123	2654	89		
RTPL	Orissa	69259	0.05	3463	18.5	73.0	8.0	0.5	277.0	17.3	2822	3528	118		
NLDO_BSNL	Orissa								1633.8		1633.8	2042	69		
NLDO_BHARTI	Orissa								306.3		306.3	383	13		
NLDO_RELIANCE	Orissa								306.3		306.3	383	13		
NLDO_VSNL	Orissa								306.3		306.3	383	13		
ILDO_VSNL	Orissa									350.2	350	438	15		
ILDO_BHARTI	Orissa									65.7	66	82	3		
ILDO_RELIANCE	Orissa									65.7	66	82	3		
ILDO_DATA ACCESS	Orissa									65.7	66	82	3	1417	9.3

Service Provider	Name of the Circle/ Service Area	DELs (31.12.03)	Traffic/ DEL in BH	BH Traffic Dec 03	Intra-Operator Traffic %	Inter-Operator Intra-Circle Traffic %	Inter-Operator NLD Traffic %	Inter-Operator ILD Traffic %	Inter-Operator NLD Traffic	Inter-Operator ILD Traffic	Inter-Operator Total Traffic	Circuits with Avg BH Loading 0.8/ Cct	No of PCMs calculated	Interconnect Capacity on 31.12.2003 (No of PCMs calculated)	Cost of Interconnect Switch + Infrastructure + Inter-Connect Billing in Rs. Crores
Bharti	Punjab	711271	0.03	21338	18.5	73.0	8.0	0.5	1707.1	106.7	17391	21738	725		
BSNL	Punjab	2029236	0.06	121754	50.0	45.0	4.0	1.0	4870.2	1217.5	60877	76096	2537		
BSNL	Punjab	276746	0.04	11070	50.0	45.0	4.0	1.0	442.8	110.7	5535	6919	231		
HFCL	Punjab	133735	0.05	6687	15.0	70.0	13.0	2.0	869.3	133.7	5684	7105	237		
RTPL	Punjab	299044	0.05	14952	21.5	70.0	8.0	0.5	1196.2	74.8	11737	14672	490		
Spice	Punjab	791819	0.03	23755	15.0	70.0	13.0	2.0	3088.1	475.1	20191	25239	842		
NLDO_BSNL	Punjab								7791.1		7791.1	9739	325		
NLDO_BHARTI	Punjab								1460.8		1460.8	1826	61		
NLDO_RELIANCE	Punjab								1460.8		1460.8	1826	61		
NLDO_VSNL	Punjab								1460.8		1460.8	1826	61		
ILDO_VSNL	Punjab									1355.9	1356	1695	57		
ILDO_BHARTI	Punjab									254.2	254	318	11		
ILDO_RELIANCE	Punjab									254.2	254	318	11		
ILDO_DATA ACCESS	Punjab									254.2	254	318	11	5660	37.0

Service Provider	Name of the Circle/ Service Area	DELs (31.12.03)	Traffic/ DEL in BH	BH Traffic Dec 03	Intra-Operator Traffic %	Inter-Operator Intra-Circle Traffic %	Inter-Operator NLD Traffic %	Inter-Operator ILD Traffic %	Inter-Operator NLD Traffic	Inter-Operator ILD Traffic	Inter-Operator Total Traffic	Circuits with Avg BH Loading 0.8/ Cct	No of PCMs calculated	Interconnect Capacity on 31.12.2003 (No of PCMs calculated)	Cost of Interconnect Switch + Infrastructure + Inter-Connect Billing in Rs. Crores
Aircel Digilink	Rajasthan	47371	0.03	1421	10.0	75.0	13.0	2.0	184.7	28.4	1279	1599	54		
BSNL	Rajasthan	1765244	0.06	105915	50.0	45.0	4.0	1.0	4236.6	1059.1	52957	66197	2207		
BSNL	Rajasthan	186828	0.04	7473	50.0	45.0	4.0	1.0	298.9	74.7	3737	4671	156		
Hexacom	Rajasthan	203377	0.03	6101	15.0	70.0	13.0	2.0	793.2	122.0	5186	6483	217		
RTPL	Rajasthan	164198	0.05	8210	21.5	70.0	8.0	0.5	656.8	41.0	6445	8056	269		
STL	Rajasthan	116969	0.05	5848	15.0	70.0	13.0	2.0	760.3	117.0	4971	6214	208		
NLDO_BSNL	Rajasthan								4435.5		4435.5	5544	185		
NLDO_BHARTI	Rajasthan								831.7		831.7	1040	35		
NLDO_RELIANCE	Rajasthan								831.7		831.7	1040	35		
NLDO_VSNL	Rajasthan								831.7		831.7	1040	35		
ILDO_VSNL	Rajasthan									923.1	923	1154	39		
ILDO_BHARTI	Rajasthan									173.1	173	216	8		
ILDO_RELIANCE	Rajasthan									173.1	173	216	8		
ILDO_DATA ACCESS	Rajasthan									173.1	173	216	8	3464	22.7

Service Provider	Name of the Circle/ Service Area	DELs (31.12.03)	Traffic/ DEL in BH	BH Traffic Dec 03	Intra-Operator Traffic %	Inter-Operator Intra-Circle Traffic %	Inter-Operator NLD Traffic %	Inter-Operator ILD Traffic %	Inter-Operator NLD Traffic	Inter-Operator ILD Traffic	Inter-Operator Total Traffic	Circuits with Avg BH Loading 0.8/ Cct	No of PCMs calculated	Interconnect Capacity on 31.12.2003 (No of PCMs calculated)	Cost of Interconnect Switch + Infrastructure + Inter-Connect Billing in Rs. Crores
Bharti	Tamilnadu (Chennai)	305106	0.03	9153	21.5	70.0	8.0	0.5	732.3	45.8	7185	8982	300		
BSNL	Tamilnadu (Chennai)	1044429	0.06	62666	50.0	45.0	4.0	1.0	2506.6	626.7	31333	39166	1306		
BSNL	Tamilnadu (Chennai)	106413	0.04	4257	50.0	45.0	4.0	1.0	170.3	42.6	2128	2660	89		
Hutchison	Tamilnadu (Chennai)	122188	0.03	3666	15.0	70.0	13.0	2.0	476.5	73.3	3116	3895	130		
RPG	Tamilnadu (Chennai)	226082	0.03	6782	15.0	70.0	13.0	2.0	881.7	135.6	5765	7206	241		
Bharti	Tamilnadu (Chennai)	114198	0.05	5710	21.5	70.0	8.0	0.5	456.8	28.5	4482	5603	187		
RTPL	Tamilnadu (Chennai)	370641	0.05	18532	21.5	70.0	8.0	0.5	1482.6	92.7	14548	18185	607		
TTL	Tamilnadu (Chennai)	184014	0.05	9201	21.5	70.0	8.0	0.5	736.1	46.0	7223	9028	301		
NLDO_BSNL	Tamilnadu (Chennai)								4763.4		4763.4	5954	199		
NLDO_BHARTI	Tamilnadu (Chennai)								893.1		893.1	1116	38		
NLDO_RELIANCE	Tamilnadu (Chennai)								893.1		893.1	1116	38		
NLDO_VSNL	Tamilnadu (Chennai)								893.1		893.1	1116	38		
ILDO_VSNL	Tamilnadu (Chennai)									698.3	698	873	30		
ILDO_BHARTI	Tamilnadu (Chennai)									130.9	131	164	6		
ILDO_RELIANCE	Tamilnadu (Chennai)									130.9	131	164	6		
ILDO_DATA ACCESS	Tamilnadu (Chennai)									130.9	131	164	6	3522	23.0

Service Provider	Name of the Circle/ Service Area	DELs (31.12.03)	Traffic/ DEL in BH	BH Traffic Dec 03	Intra-Operator Traffic %	Inter-Operator Intra-Circle Traffic %	Inter-Operator NLD Traffic %	Inter-Operator ILD Traffic %	Inter-Operator NLD Traffic	Inter-Operator ILD Traffic	Inter-Operator Total Traffic	Circuits with Avg BH Loading 0.8/ Cct	No of PCMs calculated	Interconnect Capacity on 31.12.2003 (No of PCMs calculated)	Cost of Interconnect Switch + Infrastructure + Inter-Connect Billing in Rs. Crores
Aircel	Tamilnadu excluding Chennai	519981	0.03	15599	10.0	75.0	13.0	2.0	2027.9	312.0	14039	17549	585		
Bharti	Tamilnadu excluding Chennai	165785	0.03	4974	16.5	75.0	8.0	0.5	397.9	24.9	4153	5191	174		
Bharti	Tamilnadu including Chennai	114198	0.05	5710	16.5	75.0	8.0	0.5	456.8	28.5	4768	5960	199		
BPL	Tamilnadu excluding Chennai	215654	0.03	6470	15.0	70.0	13.0	2.0	841.1	129.4	5499	6874	230		
BSNL	Tamilnadu excluding Chennai	335000	0.04	13400	50.0	45.0	4.0	1.0	536.0	134.0	6700	8375	280		
BSNL	Tamilnadu excluding Chennai	2858368	0.06	171502	50.0	45.0	4.0	1.0	6860.1	1715.0	85751	107189	3573		
Bharti	Tamilnadu excluding Chennai	114198	0.06	6852	18.5	73.0	8.0	0.5	548.2	34.3	5584	6980	233		
RTPL	Tamilnadu excluding Chennai	365416	0.05	18271	18.5	73.0	8.0	0.5	1461.7	91.4	14891	18613	621		
TTL	Tamilnadu excluding Chennai	184014	0.05	9201	18.5	73.0	8.0	0.5	736.1	46.0	7499	9373	313		
NLDO_BSNL	Tamilnadu excluding Chennai								8874.0		8874.0	11092	370		
NLDO_BHARTI	Tamilnadu excluding Chennai								1663.9		1663.9	2080	70		
NLDO_RELIANCE	Tamilnadu excluding Chennai								1663.9		1663.9	2080	70		
NLDO_VSNL	Tamilnadu excluding Chennai								1663.9		1663.9	2080	70		
ILDO_VSNL	Tamilnadu excluding Chennai									1609.9	1610	2012	68		
ILDO_BHARTI	Tamilnadu excluding Chennai									301.9	302	377	13		
ILDO_RELIANCE	Tamilnadu excluding Chennai									301.9	302	377	13		
ILDO_DATA ACCESS	Tamilnadu excluding Chennai									301.9	302	377	13	6895	45.1

Service Provider	Name of the Circle/ Service Area	DELs (31.12.03)	Traffic/ DEL in BH	BH Traffic Dec 03	Intra-Operator Traffic %	Inter-Operator Intra-Circle Traffic %	Inter-Operator NLD Traffic %	Inter-Operator ILD Traffic %	Inter-Operator NLD Traffic	Inter-Operator ILD Traffic	Inter-Operator Total Traffic	Circuits with Avg BH Loading 0.8/ Cct	No of PCMs calculated	Interconnect Capacity on 31.12.2003 (No of PCMs calculated)	Cost of Interconnect Switch + Infrastructure + Inter-Connect Billing in Rs. Crores
Aircel Digilink	UP(E)	272086	0.03	8163	15.0	70.0	13.0	2.0	1061.1	163.3	6938	8673	290		
BSNL	UP(E)	1682497	0.06	100950	50.0	45.0	4.0	1.0	4038.0	1009.5	50475	63094	2104		
BSNL	UP(E)	330164	0.04	13207	50.0	45.0	4.0	1.0	528.3	132.1	6603	8254	276		
RTPL	UP(E)	250338	0.05	12517	18.5	73.0	8.0	0.5	1001.4	62.6	10201	12752	426		
NLDO_BSNL	UP(E)								4242.4		4242.4	5303	177		
NLDO_BHARTI	UP(E)								795.4		795.4	994	34		
NLDO_RELIANCE	UP(E)								795.4		795.4	994	34		
NLDO_VSNL	UP(E)								795.4		795.4	994	34		
ILDO_VSNL	UP(E)									875.1	875	1094	37		
ILDO_BHARTI	UP(E)									164.1	164	205	7		
ILDO_RELIANCE	UP(E)									164.1	164	205	7		
ILDO_DATA ACCESS	UP(E)									164.1	164	205	7	3433	22.4

Service Provider	Name of the Circle/ Service Area	DELs (31.12.03)	Traffic/ DEL in BH	BH Traffic Dec 03	Intra-Operator Traffic %	Inter-Operator Intra-Circle Traffic %	Inter-Operator NLD Traffic %	Inter-Operator ILD Traffic %	Inter-Operator NLD Traffic	Inter-Operator ILD Traffic	Inter-Operator Total Traffic	Circuits with Avg BH Loading 0.8/ Cct	No of PCMs calculated	Interconnect Capacity on 31.12.2003 (No of PCMs calculated)	Cost of Interconnect Switch + Infrastructure + Inter-Connect Billing in Rs. Crores
Bharti	UP(W)	164888	0.03	4947	18.5	73.0	8.0	0.5	395.7	24.7	4032	5039	168		
BSNL	UP(W)	1608336	0.06	96500	50.0	45.0	4.0	1.0	3860.0	965.0	48250	60313	2011		
BSNL	UP(W)	330061	0.04	13202	50.0	45.0	4.0	1.0	528.1	132.0	6601	8252	276		
Escotel	UP(W)	364728	0.03	10942	15.0	70.0	13.0	2.0	1422.4	218.8	9301	11626	388		
RTPL	UP(W)	160280	0.05	8014	21.5	70.0	8.0	0.5	641.1	40.1	6291	7864	263		
NLDO_BSNL	UP(W)								4382.3		4382.3	5478	183		
NLDO_BHARTI	UP(W)								821.7		821.7	1027	35		
NLDO_RELIANCE	UP(W)								821.7		821.7	1027	35		
NLDO_VSNL	UP(W)								821.7		821.7	1027	35		
ILDO_VSNL	UP(W)									883.6	884	1105	37		
ILDO_BHARTI	UP(W)									165.7	166	207	7		
ILDO_RELIANCE	UP(W)									165.7	166	207	7		
ILDO_DATA ACCESS	UP(W)									165.7	166	207	7	3452	22.6

Service Provider	Name of the Circle/ Service Area	DELs (31.12.03)	Traffic/ DEL in BH	BH Traffic Dec 03	Intra-Operator Traffic %	Inter-Operator Intra-Circle Traffic %	Inter-Operator NLD Traffic %	Inter-Operator ILD Traffic %	Inter-Operator NLD Traffic	Inter-Operator ILD Traffic	Inter-Operator Total Traffic	Circuits with Avg BH Loading 0.8/ Cct	No of PCMs calculated	Interconnect Capacity on 31.12.2003 (No of PCMs calculated)	Cost of Interconnect Switch + Infrastructure + Inter-Connect Billing in Rs. Crores
BSNL	West Bengal (excluding Kolkatta)	152031	0.04	6081	50.0	45.0	4.0	1.0	243.2	60.8	3041	3801	127		
Reliance	West Bengal (excluding Kolkatta)	91052	0.03	2732	18.5	73.0	8.0	0.5	218.5	13.7	2226	2783	93		
Bharti	West Bengal (Kolkatta)	329113	0.03	9873	18.5	73.0	8.0	0.5	789.9	49.4	8047	10059	336		
BSNL	West Bengal (Kolkatta)	1358375	0.06	81503	50.0	45.0	4.0	1.0	3260.1	815.0	40751	50939	1698		
BSNL	West Bengal (Kolkatta)	24745	0.04	990	50.0	45.0	4.0	1.0	39.6	9.9	495	619	21		
Hutchison	West Bengal (Kolkatta)	439042	0.03	13171	15.0	70.0	13.0	2.0	1712.3	263.4	11196	13994	467		
BSNL	West Bengal including Kolkatta	2546049	0.06	152763	50.0	45.0	4.0	1.0	6110.5	1527.6	76381	95477	3183		
RTPL	West Bengal including Kolkatta	340747	0.05	17037	18.5	73.0	8.0	0.5	1363.0	85.2	13885	17357	579		
NLDO_BSNL	West Bengal including Kolkatta								8791.7		8791.7	10990	367		
NLDO_BHARTI	West Bengal including Kolkatta								1648.5		1648.5	2061	69		
NLDO_RELIANCE	West Bengal including Kolkatta								1648.5		1648.5	2061	69		
NLDO_VSNL	West Bengal including Kolkatta								1648.5		1648.5	2061	69		
ILDO_VSNL	West Bengal including Kolkatta									1808.0	1808	2260	76		
ILDO_BHARTI	West Bengal including Kolkatta									339.0	339	424	15		
ILDO_RELIANCE	West Bengal including Kolkatta									339.0	339	424	15		
ILDO_DATA ACCESS	West Bengal including Kolkatta									339.0	339	424	15	7199	47.1
		72774045.5		3673698					454916	79582	2340495	2925619	97668	97668	638.7