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Government of India
Ministry of Communications and IT
Department of Telecommunications
(AS-II Cell)
Sanchar Bhavan, 20, Ashok Road, New Delhi-110117

No. 842-1042/2009-AS-IV/13

Dated: 15th April, 2009

To

1. Bharat Sanchar Nigam Ltd.
2. Mahanagar Telephone Nigam Ltd.

Subject: Amendment of the Basic Service Licence.

With reference to the licence for operation of Basic Service, in exercise of the powers vested in the Licensor to modify at any time the terms and conditions of the LICENCE, in public interest, security of the nation or proper conduct of the SERVICE, the Licensor hereby inserts, with immediate effect the following clause after the last clause of the licences for operation of Basic Service in respective Service Areas:

" It shall be mandatory for the LICENSEE to provide interconnection to all eligible Telecom Service Providers as well as NLD Operators whereby the subscribers could have a free choice to make inter-circle/ international long distance calls through NLD/ ILD Operator. For international long distance call, the LICENSEE shall normally access International Long Distance Operator's network through National Long Distance Operator's network subject to fulfillment of any Guidelines/ Orders/ Directions/ Regulation issued from time to time by Licensor/ TRAI. The LICENSEE shall not refuse to interconnect with the International Long Distance Service Licensee directly in situations where ILD Gateway Switches/ Point of Presence (POP), and that of Access Provider's (GMSC/ Transit Switch/Media Gateway Controller (MGC)/Media Gateway (MG)) are located at the same station of Level -I TAX ."

"The designated person of the Central/ State Government as conveyed to the Licensor from time to time in addition to the Licensor or its nominee shall have the right to monitor the telecommunication traffic in every MSC/ Exchange/MGC/MG or any other technically feasible point in the network set up by the LICENSEE. The LICENSEE should make arrangement for monitoring

simultaneous calls by Government security agencies. The hardware at LICENSEE's end and software required for monitoring of calls shall be engineered, provided/installed and

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maintained by the LICENSEE at LICENSEE's cost. However, the respective Government instrumentality shall bear the cost of user end hardware and leased line circuits from the MSC/ Exchange/MGC/MG to the monitoring centres to be located as per their choice in their premises or in the premises of the LICENSEE. In case the security agencies intend to locate the equipment at LICENSEE's premises for facilitating monitoring, the LICENSEE should extend all support in this regard including Space and Entry of the authorized security personnel. The Interface requirements as well as features and facilities as defined by the Licensor

should be implemented by the LICENSEE for both data and speech. Presently, the LICENSEE should ensure suitable redundancy in the complete chain of Monitoring equipment for trouble free operations of monitoring of at least 210 simultaneous calls for seven security agencies."

Along with the monitored call following records should be made available:

- (i) Called/calling party mobile/ PSTN numbers.
- (ii) Time/date and duration of interception.
- (iii) Location of target subscribers. For the present, Cell ID should be provided for location of the target subscriber. However, Licensor may issue directions from time to time on the precision of location, based on technological developments and integration of Global Positioning System (GPS) which shall be binding on the LICENSEE.
- (iv) Telephone numbers if any call-forwarding feature has been invoked by target subscriber.
- (v) Data records for even failed call attempts.
- (vi) CDR (Call Data Record) of Roaming Subscriber.

The LICENSEE shall be required to provide the call data records of all the specified calls handled by the system at specified periodicity, as and when required by the security agencies."

"LOCAL CALLS mean calls originating and terminating with in the same local area, which are charged at local call rates and Remote Subscribers' Unit (RSU)/ Remote Line Unit (RLU) , Concentrators/Media Gateway having switching functions are to be treated as an exchange for the purposes of this definition."

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“MOBILE SWITCHING CENTRE, ALSO KNOWN AS MSC” means the switching equipment installed as a part of the network which performs all switching functions of calls for providing various services under the scope of this Licence. For IP based Next Generation Network Media Gateway Controller (MGC) can be deployed within or outside of the License service area controlling the Media Gateways deployed in each license service area. The Media Gateways so installed in each service area shall perform the function of switching subscriber traffic under the control of MGC for call control. These two are interconnected through signalling link and can be located in different locations as per the network architecture of the service provider.”

“MEDIA GATEWAY CONTROLLER (MGC) ALSO KNOWN AS SOFTSWITCH, CALL SERVER (CS), CALL AGENT, CALL CONTROLLER :

The Media Gateway Controller is located in the service provider’s network and handles call control and signaling functions, typically maintaining call state for every call in the network. A MGC interacts with Application Servers to provide services that are not directly hosted on MGC in Packet Based networks .It handles the registration and management of resources at the media gateway. A media gateway controller exchanges messages with central office switches via a signaling gateway. It processes the signaling for all types of packet protocols. It controls connection services for a media gateway and/or native IP endpoints, selects processes that can be applied to a call, provides routing for a call within the network based on signalling and customer database information, transfers control of the call to another network element, and interfaces to and support management functions such as provisioning, fault, billing, etc.”

“MEDIA GATEWAY (MG): A protocol converter that interfaces a traditional public switched telephone network (PSTN), or device running PSTN protocols, with a device running the Internet protocol (IP) suite. As the Media Gateway connects different types of networks, one of its main functions is to convert between the different transmission and coding techniques. Media streaming functions such as echo cancellation, DTMF, and tone sender are also located in the Media Gateways.”

“Trunk Media gateway (TMG): The TMG supports a trunk side interface to the PSTN and/or IP routed flows in the packet network. It supports functions such as packetisation, echo control etc.”

“Access gateway (AG): The AG is located in the service provider’s network. It supports the line side interface to the core IP network for use by phones, devices, and PBXs. This element provides functions such as media conversion (circuit to Packet, Packet to circuit) and echo control.”

“Signaling gateway (SG): The SG provides the signaling interface between the VoIP network and the PSTN signaling network. It terminates SS7 links and provides Message

Transport Part (MTP) Level 1 and Level 2 functionality. Each SG communicates with its associated CS to support the end-to-end signaling for calls.”

“Next Generation Network (NGN): As per ITU-T recommendation Y.2001, A Next Generation Network (NGN) is a packet-based network able to provide services including Telecommunication Services and able to make use of multiple broadband, QoS-enabled transport technologies and in which service-related functions are independent from underlying transport-related technologies. It offers unrestricted access by users to different service providers. It supports generalized mobility which will allow consistent and ubiquitous provision of services to users.”

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(B.L. Panwar)
ADG(VAS-II)

Copy to:

1. Secretary, TRAI, New Delhi
2. Wireless Advisor, WPC Wing, New Delhi
3. Sr.DDG(WPF), DoT, New Delhi
4. DDG(Security), DoT, New Delhi
5. DDG(AS-I), DoT, New Delhi
6. DDG(LF), DoT, New Delhi
- ✓ 7. DDG(C&A), DoT for posting on the DoT website

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