

September 8th, 2008

Facility for MPLS Leased Circuit based connectivity

MPLS is one of the most sophisticated and latest VPN technologies available as on date. MPLS provides secure, most cost effective, high performance, scalable, redundancy and managed end-to-end network connectivity. It allows label switching, due to this it offers fastest mode of data transfer, making it most suitable for real time trading application like ours. Due to the additional features like 'Bandwidth on Demand' and 'Committed Bandwidth' it has overcome all shortfalls of conventional point-to-point leased line network. BSNL MPLS network nodes are mesh connected on STM 1 (155 mbps) links. This ensures congestion free data transfer on the network. The network has multiple ring redundancy, ensuring high uptime to the end users and presence in most of the cities in the country. Interested members are required to obtain a local leased circuit to the nearest MPLS node of the service provider. The data finally reaches to MCX-SX trading system through BSNL node located at Mumbai.

A. New MPLS Leased Circuit based connectivity -

1. Application procedure

Exchange is providing BSNL MPLS 64kbps (Gold scheme) and 256kbps (silver scheme) leased circuit based connectivity to connect to trading systems. Interested members may submit an application in the specified format, enclosed as Annexure-1 for 64 kbps/256 kbps leased circuit connectivity.

Any Member with existing leased line terminating at Exchange Square may apply for new 256 kbps MPLS leased circuit and use the same also for connecting to MCX-SX trading systems. Members, with existing leased line, need to submit application as per the specified format in Annexure 2.

Member is requested to submit an undertaking on the letter head of the company in the enclosed format as given in Annexure-4. On receipt of the application along with the undertaking (Annexure-4) and payment, the application will be forwarded to BSNL, for further processing. It may take around 3 – 4 weeks to complete the process of providing leased circuit based connectivity to the Member.

2. Commercials –

Availability	Charges Applicable	
	BSNL Circle (All over India except Delhi, Mumbai and Navi Mumbai region)	MTNL Circle (Delhi, Mumbai and Navi Mumbai region)
MPLS port capacity		
64 kbps (Gold Scheme)	Rs. 59724	Rs. 63095
256 kbps (Silver Scheme)	Rs. 140835	Rs. 144206

#the aforesaid amount represents respective port charges, local loop charges, one time modem installation charges & service tax.

These charges are payable on an annual basis. The payment shall be made in advance and by way of demand draft favoring "AO (F & A) BSNL Mumbai". Member may send the demand draft along with the application form to MCX Stock Exchange Ltd., Membership department in advance to start the Leased Line application process. The prices are uniform across the country except Mumbai and Navi Mumbai. In case of non-availability of BSNL network in a particular city, the payment would be refunded to the member. In case of shifting of the Leased circuit to some other location, the member has to pay the necessary charges as decided by BSNL.

3. Equipment requirement -

Members should procure a ROUTER directly, which has to be installed at their office. The specifications of the ROUTER are given in the Annexure-3. The ROUTER will be dedicated for MCX-SX trading system only. Members are requested to co-ordinate with MCX-SX Systems and Network Department for the necessary ROUTER configuration once the leased line is commissioned.

BSNL will provide leased line modems for Managed Leased Line Network (MLLN). In case of non availability of MLLN, the members have to procure leased line modems as per the details given in the Annexure-3.

4. Number of terminals -

Exchange will allow connectivity upto 5 terminals (Trader Work Station) for 64kbps MPLS Leased circuit and upto 7 terminals for 256 kbps MPLS leased circuit and a Member Administrator Terminal on a single Leased Circuit based connectivity. In case a member wants to install more terminals, they may request for required number of additional Leased Circuit based connectivity. For ensuring additional security, the User IDs will be mapped with respective Leased Circuit IP addresses. In case of failure of Leased Circuit connectivity Member can map such IDs with alternate approved mode of connectivity.

Disclaimer: MCX-SX has received in-principle approval from SEBI. Final approval is expected from SEBI & RBI shortly. This advance – letter / circular is issued to the members to save time & to enable those members who complete their compliances with the Exchange & SEBI so that they are able to trade whenever the Exchange goes live which is expected shortly.

**MCX Stock Exchange Limited, Exchange Square, Suren Road, Chakala, Andheri (East),
 Mumbai – 400 093 Tele - +91 22 67319000 Fax - +91 22 67269575**

5. Back-up link -

Member has to procure ISDN line for dial-in facility, which acts as an automatic back-up for the proposed leased circuit and ensures highest uptime for the network to our members. In case the leased line goes down, member can dial to MCX-SX central site.

Members opting for 256 kbps MPLS port have been recommended that they should opt for point to point leased circuit connectivity of 256 kbps from any other service provider or VSAT facility from Exchange, which acts as a back-up for the proposed leased circuit and ensures highest uptime for the network to the members. In case the leased line goes down, member needs to switch over to such backup mode. To opt for backup point to point leased circuit connectivity from private service provider, Members are requested to apply directly to the service provider. In such cases members need to obtain no objection certificate from exchange.

6. Crisis management -

The complete MPLS network is monitored 24x7 from a centralized Network Operating Centre (NOC) of BSNL. This NOC is managed by highly skilled engineers who can give all assistance to our members. The NOC can be accessed on toll free number - 18004251957.

B. Usage of Existing MPLS Leased circuit based connectivity –

Members having existing 64 kbps BSNL MPLS Leased Circuit connectivity terminating at Exchange Square may use the same MPLS Leased circuit connectivity to connect to the MCX-SX trading system by upgrading to 256 kbps MPLS (Silver Scheme).

1. Application procedure

For the Upgradation Members need to submit an application in the specified format, enclosed as Annexure-5. Members are requested to submit an undertaking on the letter head of the company in the enclosed format as given in Annexure-4.

On receipt of the application along with the undertaking, the application will be forwarded to BSNL for further processing. It may take around 3 - 4 weeks to complete the process of up gradation of existing leased circuits.

2. Commercials –

The applicable charges along with relevant taxes for up gradation (64kbps MPLS port to 256kbps MPLS port based connectivity) will be reflected in annual bill of subsequent billing cycle of BSNL on pro rata basis.

3. Equipment requirement -

Member may use the existing router to connect the upgraded 256 kbps MPLS leased circuit.

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4. Number of terminal, Back up link provision and Crisis management are same as stated in **point A**.

Customer care department can be contacted at 022 – 67319000 Extn.: 9227 and 8901 for any clarification

For and on behalf of
MCX STOCK Exchange Ltd.

Uday Nadkarni
Chief Technology Officer

Encl: As above

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Mumbai – 400 093 Tele - +91 22 67319000 Fax - +91 22 67269575**

APPLICATION FOR BSNL MPLS LEASED CIRCUIT CONNECTIVITY

(On the letter head of the Member)

Date: _____

MCX Stock Exchange Limited.
102-A, Landmark,
Suren Road, Chakala,
Andheri (East),
Mumbai – 400 093

Dear Sir,

Sub: Application for BSNL MPLS (64kbps Gold / 256kbps Silver) leased circuit based connectivity.

I/We (name of the Member) would like to apply for the leased line connectivity for MCX-SX trading.

I/We (name of the Member) are furnishing hereunder the details of the locations, contact persons and site telephone numbers etc. where the leased circuits have to be terminated:

Name of the Member:

Membership ID:

Address of the member where
the circuit will be terminated:

City and Pin code:

Contact Person at site
(Mobile No.):

Site phone No. (MTNL/BSNL
only) with STD code:

Fax No.:

BSNL MPLS port Capacity 64 kbps (Gold) / 256 kbps (Silver)

Thanking you.

Yours faithfully
For _____

(Name and signature of the authorized signatory)
(Affix rubber stamp)

**APPLICATION FOR BSNL MPLS 256 kbps (Silver scheme) LEASED CIRCUIT
CONNECTIVITY**

(On the letter head of the Member)

Date: _____

MCX Stock Exchange Limited.
102-A, Landmark,
Suren Road, Chakala,
Andheri (East),
Mumbai – 400 093

Dear Sir,

Sub: Application for BSNL MPLS 256 kbps (Silver scheme) leased circuit based connectivity.

I/We (name of the Member) would like to apply for the leased line connectivity for MCX-SX trading.

I/We (name of the Member) are furnishing hereunder the details of the locations, contact persons and site telephone numbers etc. where the leased circuits have to be terminated:

Membership Name:

MCX-SX
Membership ID:

MCX-SX
Address of the member where
the circuit will be terminated:

City and Pin code:

Contact Person at site
(Mobile No.):

Site phone No. (MTNL/BSNL)
with STD code:

Fax No.:

Thanking you.

Yours faithfully
For _____

(Name and signature of the authorized signatory)
(Affix rubber stamp)

The required Router configuration -

Make & model: CISCO 1800 modular router, 2 WAN slots 32 MB flash Memory & 128 MB DRAM.

Interfaces: 1-port serial WAN interface card, 1 port ISDN BRI card

Cables: V.35 cable, DTE Male to smart serial – 10 feet

IOS version: CISCO 1800 IOS IP Version 12.3 or above

LAN infrastructure -

(a) Switch/Hub: 8/12 port switch from leading manufacturers like Cisco, Nortel or 3Com.

(b) LAN cabling: CAT 5 (structured cabling)

Modems (optional) -

For MLDN & MLLN type of links (only select telephone exchanges have this facility), the Modem is provided by MTNL/BSNL, which is billed in the demand note. Other wise member has to procure the following leased line modems,

Make: RAD

Model number: ASM 20 or ASM 31 (depend on Telephone Exchange requirement)

Interfaces: V.35

UNDERTAKING FOR BSNL MPLS LEASED LINE
(On Member's Letter head)

I/We, _____ (Name of the Trading-cum-Clearing Member) do hereby undertake the following:

1. I/We agree that the circuit will be used purely for MCX-SX trading purpose and only for such other purpose as may be approved by the Management of MCX-SX.
2. I/We agree that this circuit will not be interconnected to any of the Leased Line/Data Circuit/ Network/ PSTN/EPABX etc of any other service providers, which is not permitted by the rules of Telegraph authority/ BSNL. I/We further agree to extend facility to the Telegraph authority/ BSNL in order to enable monitoring of the purpose, performance and operation of the circuit, as and when required.
3. I/we hereby agree to abide by the provisions of Indian Telegraph Rules in force and as modified from time to time and such other terms and conditions prescribed by the Telegraph Authority / BSNL.
4. I/We agree that necessary charges for registration/installation/Advance annual rental/Arrears, if any will be paid to the controlling/billing authority of BSNL and MCX-SX, as and when we receive demand note/advice from BSNL /MCX-SX and when such charges become due.
5. I/We agree that I/We shall pay the cancellation charges and other expenses incurred to establish the circuit as requested by me/us that may become payable, in the event of cancellation of the application/closure of the circuit at a later date.
6. I/We do hereby agree to indemnify the Government of India / DOT / BSNL and keep them indemnified against any loss, damage claim, cost, charges, expenditure incurred by or made against them in respect of loss of rent/ call charges, violation of C.U.G. norms due to misuse of the circuit or otherwise whatsoever in the matter.
7. In case BSNL provides us MLLN modems, it will be our responsibility to maintain the same safely. In case of any physical damage or theft, we will bear the charges specified by BSNL.

Signature

Signature

(Affix Rubber Stamp)

* strike out whichever is not applicable

APPLICATION FOR UPGRADATION OF EXISTING LEASED LINE CONNECTIVITY

(On the letter head of the Member)

Date: _____

To,
The Membership Department,
MCX Stock Exchange Limited,
102-A, Landmark,
Suren Road, Chakala,
Andheri (East),
Mumbai – 400 093

Dear Sir,

Sub: Upgradation of existing BSNL MPLS 64 kbps (Gold) leased circuit based connectivity to BSNL MPLS 256 kbps (silver) leased circuit based connectivity to connect MCX and MCX-SX trading systems.

I/We (name of the Member) would like to upgrade the existing 64 kbps MPLS port to 256 kbps MPLS port for the leased line connectivity to connect the two exchanges.

I/We (name of the Member) are furnishing hereunder the details of the locations, contact persons and site telephone numbers etc. where the leased circuits have to be terminated:

Membership Name:

MCX-SX
Membership ID:
MCX-SX (To be filled by MCX-SX)
MCX MEMBERSHIP NAME &
CODE
Address of the location where
the circuit is terminated:

City and Pin code:

Contact Person at site
(Mobile No.):

Site phone No. (MTNL/BSNL)
with STD code:

Fax No.:

Advice note number of the
existing BSNL MPLS leased
circuit:

Thanking you.

Yours faithfully

For _____

(Name and signature of the authorized signatory)
(Affix rubber stamp)