MscLight - Russia

Update for GLIF - 2009
Technical & Control Plane Working Group Meeting
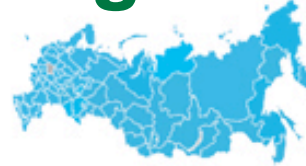
Natalia Bulashova
RIPN
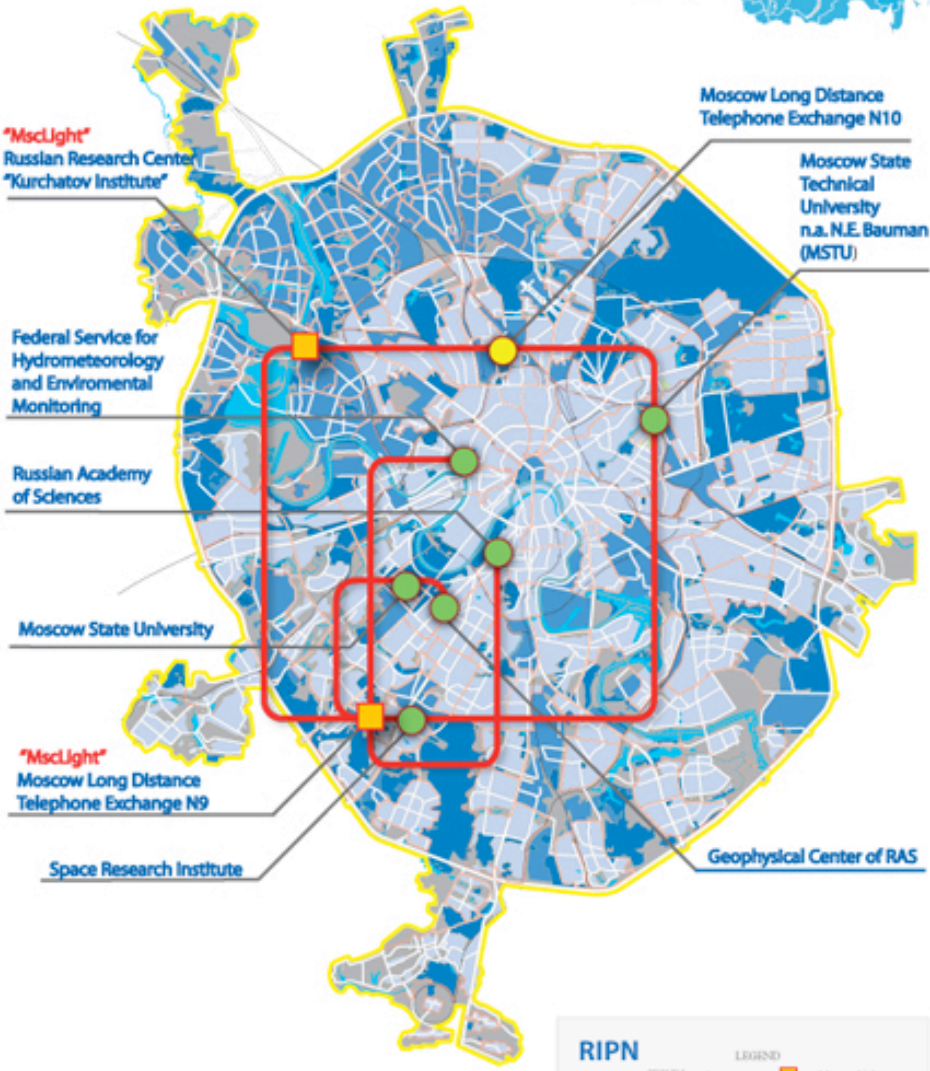*nbulashova@mac.com*

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Daejeon, Korea, 2009

MscLight

MOSCOW
METROPOLITAN OPTICAL NETWORK FOR ADVANCED RESEARCH AND EDUCATION

1
MscLight

"MscLight"
Russian Research Center "Kurchatov Institute"

GEANT-PoP

2
MscLight

Moscow Long Distance Telephone Exchange N10

Moscow State Technical University n.a. N.E. Bauman (MSTU)

Federal Service for Hydrometeorology and Enviromental Monitoring

Russian Academy of Sciences

Moscow State University

"MscLight"
Moscow Long Distance Telephone Exchange N9

Space Research Institute

Geophysical Center of RAS

RIPN LEGEND

SDH Ethernet lines — MoscowLight Domestic GOLE
IP-lines
Science Research Organization — Long Distance Telephone Exchange

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Locations

1
ROSNIIROS,
1, Kurchatov square
Moscow, Russia,123182

2
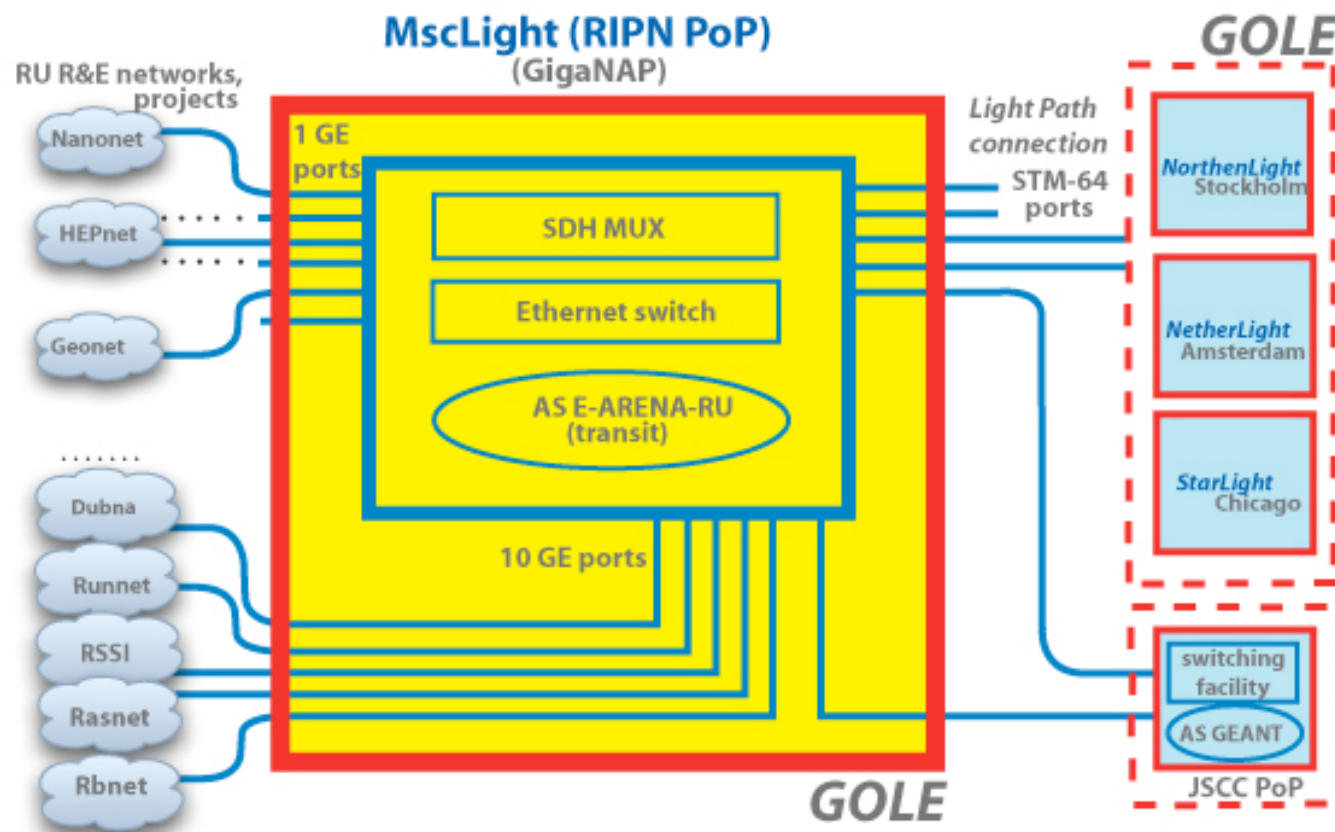M9 Telephone Exchange, 7, Butlerov Street,
Moscow, Russia

Sponsoring Organization

Russian Institute for Public Networks (RIPN) has been founded in 1992 by the Science and Higher School State Committee of Russia, Russian Research Centre "Kurchatov Institute"

РОСНИИРОС
RIPN

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Equipment

123182, Russia,
Moscow, Kurchatov
square, 1
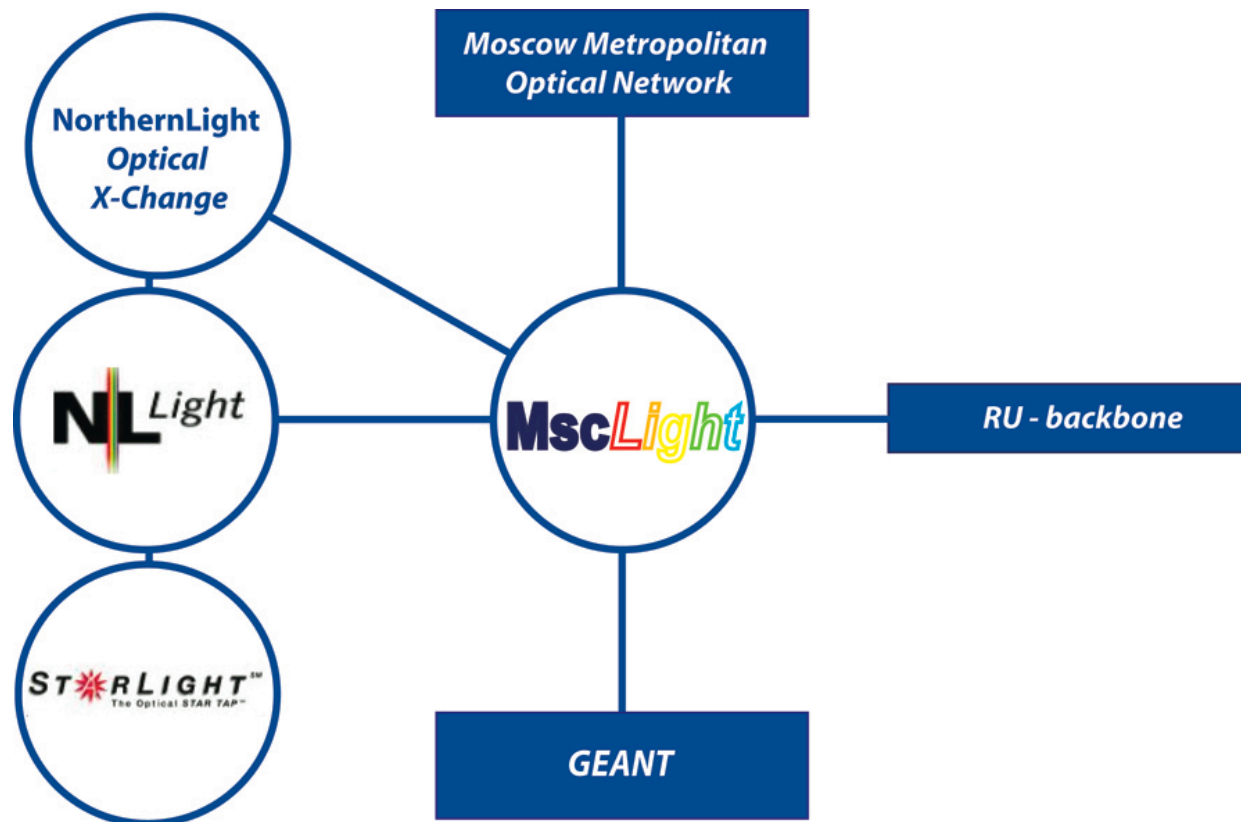(ROSNIIROS)

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Summary

Location	1.ROSNIIROS, Kurchatov square, 1, Moscow, Russia, 123182, 2.M9 Telephone Exchange, 7, Butlerov Street, Moscow, Russia
Sponsoring Organization(s)	RIPN (ROSNIROS)
Website	http://www.ripn.net:8080/about/en/
Service Contact	Administrative contact: admin@ripn.net Network Operations Center: noc@rbnet.ru
Interfaces	Cisco, Nortel 1000 Base-T 1000 Base-SX 1000 Base-LX 10GBASE-SX 10GBASE-LX STM-64 (Packet over SONET)
Connectivity	1 x 10 Gbps to NorthernLight (and NetherLigh, STARLight) provided and operated by RIPN Moscow, Russia 1 x 10 Gbps to NORDUnet IP provided and operated by RUNnet Moscow, Russia) Runnet-nordunet
Charging Policy	Free of Charge

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and connection to GLIF GOLEs

123182, Russia,
Moscow, Kurchatov
square, 1 (ROSNIIROS)

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International Connection

➢**RBnet's connections**

NORDUnet - NorthenLight - NetherLight - StarLight

➢**RBnet's chnnels:**

Moscow – Petersburg - Stockholm - Amsterdam - Chicago

STM-64

➢**RUNnet's connection:**

NORDUnet

➢**RUNnet's chanels:**

Moscow – Petersburg - Stockholm STM-64

Domestic connection

• **Constructed on R&E Russian networks - joint efforts of the RBNET/RUNNet/RASnet (e-arena)**

• **RBnet/Runnet have constructed own DWDM-infrastructure S.Petersburg - Helsinki (32 channels, NORTEL equipment)**

• **S.Petersburg - Moscow; lease optical channels**

• **Today: 2-level structure, 7 main PoPs at Russia**

• **Cover over 50 regions of Russian Federation**

• **Based on Russian optical infrastructure of the providers such as Rostelecom/TransTeleCom/Eurotel**

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RIPN
РОСНИИРОС

RUSSIAN R&E IP-BACKBONE NETWORK
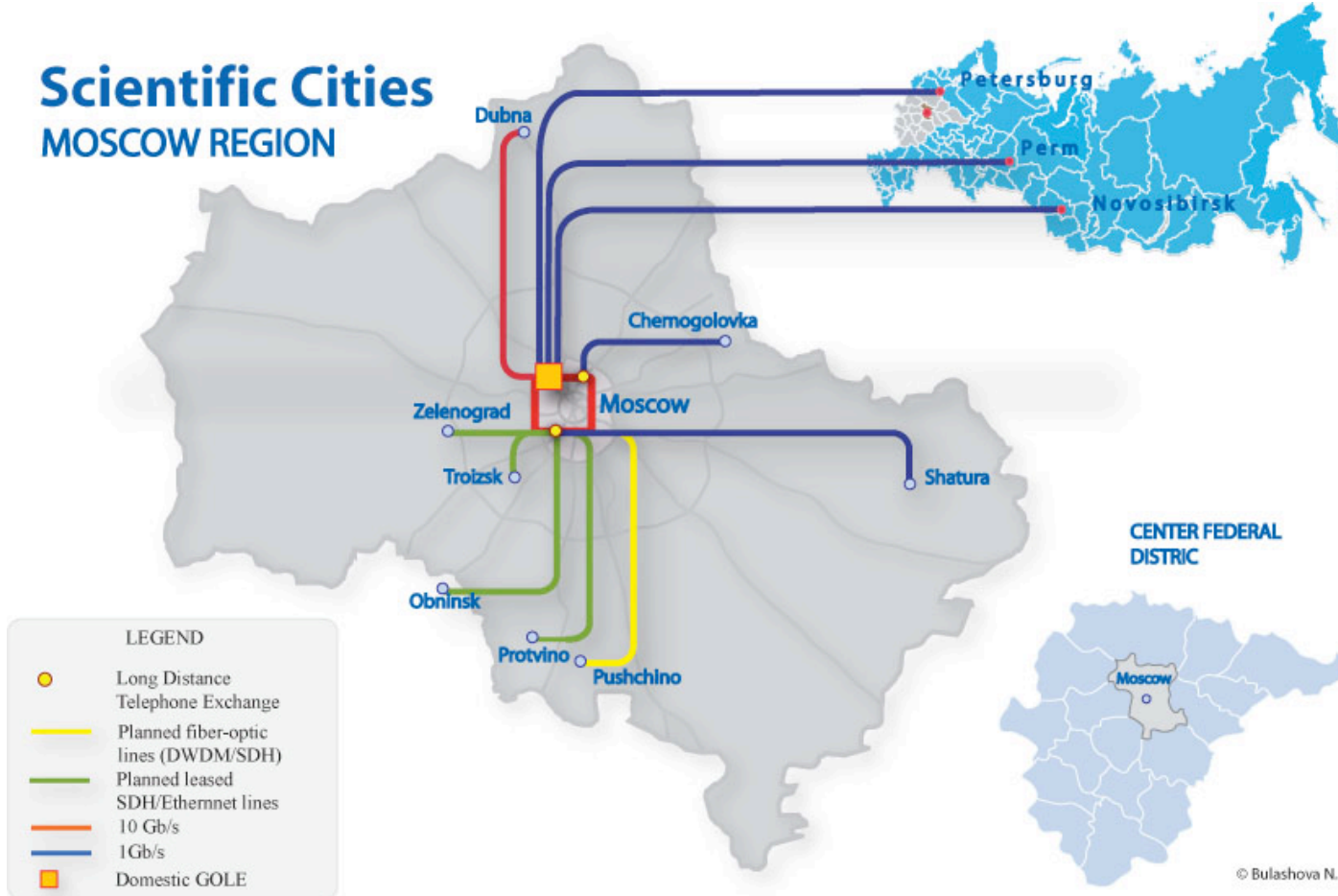
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2008 - RIPN in partnership with Regions. Moscow Region. *High Energy Physics*

Advanced Networking infrastructure for the National Large scale science application.

Scientific Cities
MOSCOW REGION

Dubna
Petersburg
Perm
Novosibirsk
Chemogolovka
Moscow
Zelenograd
Shatura
Troizsk
Obninsk
Protvino
Pushchino

CENTER FEDERAL DISTRIC

Moscow

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LEGEND
- Long Distance Telephone Exchange
- Planned fiber-optic lines (DWDM/SDH)
- Planned leased SDH/Ethernnet lines
- 10 Gb/s
- 1Gb/s
- Domestic GOLE

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Russia in World-wide LHC Computing Grid

Location	Institution
Moscow (1-10Gps)	**ITEP, RRC KI, SINP MSU, ...LPI, MEPhI**
Protvino (plans 1Gbps)	**IHEP**
Dubna (10Gbps)	**JINR**
Novosibirsk (1Gps)	**BINP**
Troisk (100Mbps now, 1Gbps)	**INR RAS**
Gatchina (Plans 1 Gbps)	**PNPI**
S-Peterburg 1Gbps now	**SPbSU**

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감사합니다

Thank you for your attention

Natalia A.Bulashova
nbulashova@mac.com

РОСНИИРОС
RIPN

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