

GÉANT Global Connectivity

June 2012

GÉANT Global Connectivity: Index

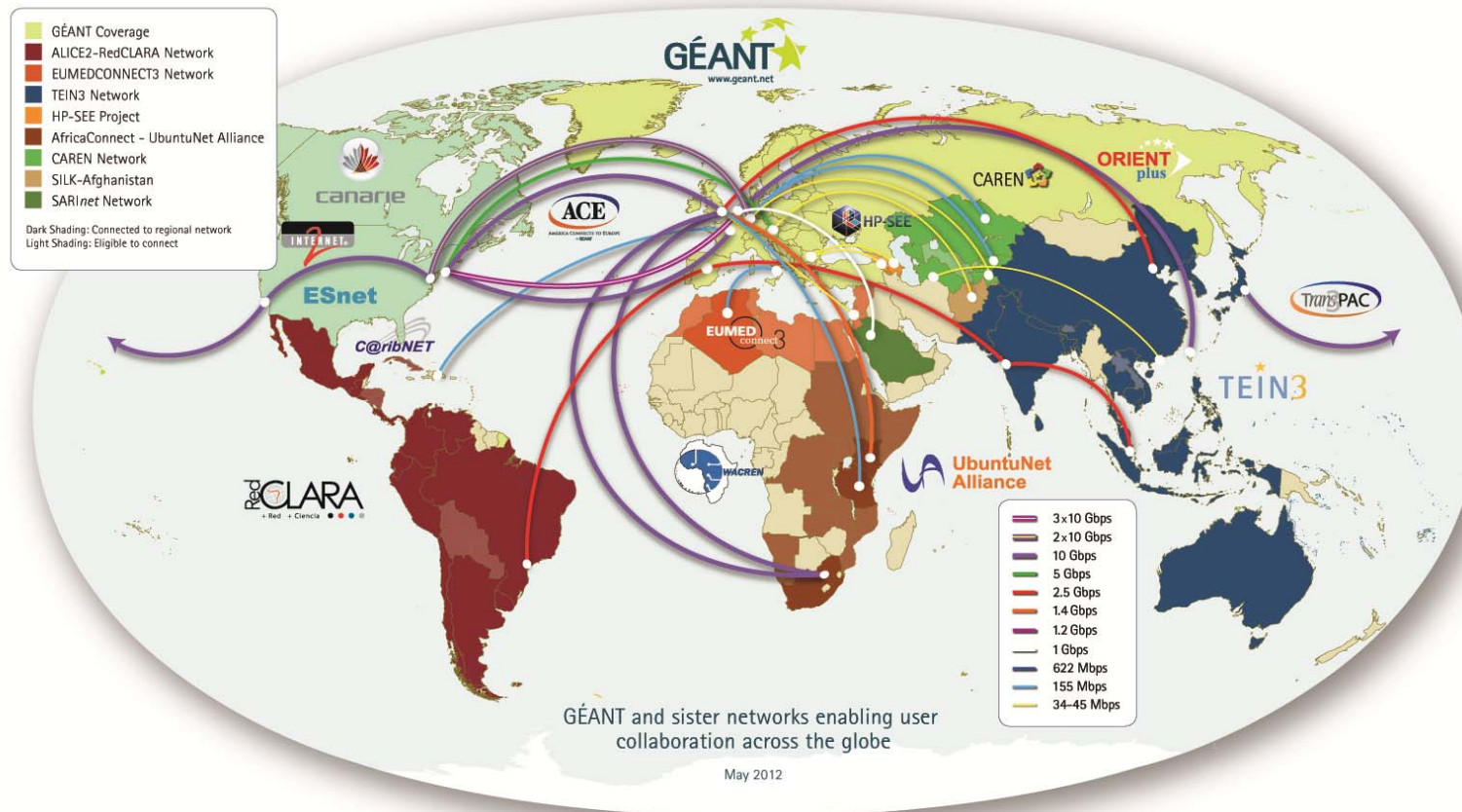


Slide No.	Content
Slide 3	Global Connectivity Map
Slide 4	North America
Slide 5	Latin America
Slide 6	The Caribbean
Slide 7	North Africa & the Middle East
Slide 8	Sub-Saharan Africa
Slide 9	South Caucasus & Central Asia
Slide 10	Asia-Pacific
Slide 11	Full list of NRENs outside Europe reached by GÉANT

GÉANT: At the heart of the Global R&E Village



GÉANT At the Heart of Global Research Networking





Global Links: North America



End A	End B	Capacity	Type	Connects to
Amsterdam	New York	3 x 10 Gbps	IP	CANARIE; ESnet; Internet2; NLR; SINET; TWAREN
Frankfurt	Washington DC	2 x 10 Gbps	IP	ESnet; Internet2; NISN
Vienna	New York	5 Gbps	IP	ESnet
Paris	New York	10 Gbps	Point-to-point	CANARIE; ESnet; Internet2
London	New York	10 Gbps	Point-to-point	CANARIE; ESnet; Internet2
Amsterdam	Chicago	10 Gbps	Point-to-point	ESnet; Internet2



Global Links: Latin America



End A	End B	Capacity	Type	Connects to
Madrid	Sao Paulo, Brazil	2.5 Gbps	IP	RedCLARA

- Latin American NRENs connected to RedCLARA are:

NREN	Country
INNOVA Red	Argentina
RNP	Brazil
REUNA	Chile
RENATA	Colombia
Red CONARE	Costa Rica
CEDIA	Ecuador
RAICES	El Salvador

NREN	Country
RAGIE	Guatemala
CUDI	Mexico
RedCyT	Panama
RAAP	Peru
RAU	Uruguay
REACCIUN	Venezuela



Global Links: Caribbean



End A	End B	Capacity	Type	Connects to
Paris	Santo Domingo, Dominican Republic	155 Mbps	IP	C@ribNET

Caribbean Countries Connected to C@ribNET	
Anguilla	Jamaica
Antigua	Montserrat
Barbados	St. Kitts
British Virgin Island	St. Lucia
Dominica	St. Vincent
Dominican Republic	Trinidad
Grenada	



Global Links: North Africa & the Middle East



EUMEDCONNECT3:

End A	End B	Capacity	Type	Connects to
Catania	Algiers, Algeria	622 Mbps	IP	ARN
London	Ramallah, Palestine	45 Mbps	IP	PaINREN
Amsterdam	Egypt	622 Mbps	IP	ENTSTINET

Saudi Arabia:

End A	End B	Capacity	Type	Connects to
Amsterdam	Saudi Arabia	1 Gbps	IP	SARInet

- GÉANT has indirect links to:
 - ANKABUT, United Arab Emirates
 - Qatar Foundation, Qatar



Global Links: Sub-Saharan Africa



End A	End B	Capacity	Type	Connects to
London	UbuntuNet Alliance router	10 Gbps	IP	UbuntuNet Alliance
London	UbuntuNet Alliance router	10 Gbps	Point-to-point	UbuntuNet Alliance

- Sub-Saharan NRENs connected to UbuntuNet are:

NREN	Country
KENET	Kenya
MoRENNet	Mozambique
SUIN	Sudan
TENET	South Africa
TERNET	Tanzania
ZAMREN	Zambia



Global Links: Southern Caucasus & Central Asia



Southern Caucasus – HP-SEE:

End A	End B	Capacity	Type	Connects to
Sofia	Azerbaijan	45 Mbps	IP	AzRENA
Sofia	Armenia	45 Mbps	IP	NAS RA

Central Asia – CAREN:

End A	End B	Capacity	Type	Connects to
Frankfurt	Kazakhstan	155 Mbps	IP	KazRENA
Frankfurt	Kyrgyzstan	155 Mbps	IP	KRENA-AKNET
Frankfurt	Tajikistan	34 Mbps	IP	TARENA
TEIN3 Hong Kong PoP	Turkmenistan	34 Mbps	IP	TuRENA

Afghanistan – SILK-Afghanistan:

End A	End B	Capacity	Type	Connects to
Vienna	Afghanistan	43 Mbps	IP	AfRENA



Global Links: Asia-Pacific



End A	End B	Capacity	Type	Connects to
Madrid	Mumbai, Singapore, H. Kong	2.5 Gbps	IP	TEIN3
London	Beijing (ORIENTplus link)	10 Gbps	IP	TEIN3, CERNET, CSTNET
Amsterdam	Taiwan	10 Gbps	IP	ASGC

- Asia-Pacific NRENs connected to TEIN3 are:

NREN	Country	NREN	Country	NREN	Country
AARNet	Australia	JGN-X	Japan	PERN2	Pakistan
BdREN	Bangladesh	MAFFIN	Japan	PREGINET	Philippines
CamREN	Cambodia	SINET3	Japan	SingAREN	Singapore
CERNET	China	KOREN	Korea	LEARN	Sri Lanka
HARNET	Hong Kong	MYREN	Malaysia	ThaiREN	Thailand
NKN	India	NREN	Nepal	VINAREN	Vietnam
INHERENT	Indonesia				

GÉANT: The Best-connected R&E Network



65 countries outside Europe connected to GÉANT

Americas & the Caribbean

- CANARIE Canada
- C@ribNET Anguilla, Antigua, Barbados, BVI, Dominica, Dominican Rep., Grenada, Jamaica, Montserrat, St. Kitts, St. Lucia, St. Vincent, Trinidad
- CEDIA Ecuador
- CUDI Mexico
- ESNet USA
- INNOVA|RED Argentina
- Internet2 USA
- NISN (NASA) USA
- NLR USA
- RAAP Peru
- RAGIE Guatemala
- RAICES El Salvador
- RAU2 Uruguay
- REACCIUN2 Venezuela
- Red CoNARE Costa Rica
- RedCyT Panama
- RENATA Colombia
- REUNA Chile
- RNP Brazil
- USLHCNet USA

Middle East & Africa

- ANKABUT United Arab Emirates
- ARN Algeria
- ENTSTINET Egypt
- KENET Kenya
- MoRENet Mozambique
- PaINREN Palestinian Territories
- Qatar Foundation Qatar
- SARInet Saudi Arabia
- SUIN Sudan
- TENET South Africa
- TERNET Tanzania
- ZAMREN Zambia

Asia & Oceania

- AARNet Australia
- AfRENA Afghanistan
- NAS RA Armenia
- ASGC Taiwan
- AzRENA Azerbaijan
- BdREN Bangladesh
- CamREN Cambodia
- CERNET China
- CSTNET China
- INHERENT/ITB Indonesia

Asia & Oceania (cont.)

- JGN-X Japan
- HARNET Hong Kong
- KazRENA Kazakhstan
- KOREN/NIA Korea
- KRENA-AKNET Kyrgyzstan
- LEARN Sri Lanka
- MAFFIN Japan
- MYREN Malaysia
- NKN India
- NREN Nepal
- PERN2 Pakistan
- PREGINET Philippines
- SINET3/NII Japan
- SingAREN Singapore
- TARENA Tajikistan
- ThaiREN/ThaiSARN Thailand
- ThaiREN/UniNet Thailand
- TuRENA Turkmenistan
- TWAREN Taiwan
- VINAREN Vietnam

<http://global.geant.net/>

connect • communicate • collaborate