## 4th SIG-NGN Meeting

# Wednesday 15th & Thursday 16th January 2020, Geneva, Switzerland

SIG-NGN is the Special Interest Group on Next Generation Networks.

This meeting is the fourth meeting of the SIG and hosted by  $\ensuremath{\textbf{CERN}}$  in Geneva.



Photo by Daniela Turcanu on Unsplash

#### **Next Generation Networking for Science**

The 4th SIG-NGN meeting take place at CERN on the 15th and 16th January 2020, and is co-located with a two-day workshop on networking for LHC and High-Energy Physics. This SIG-NGN meeting is an opportunity for two groups focused on advanced, high-performance networking to work together, and therefore the theme for this SIG-NGN is Next Generation Networking for Science.

The SIG-NGN Steering Committee would like to invite contributions to the agenda on themes such as:

- · Advanced networking for instruments
- Big Science, big networks
- Data Tranport Services
- · Specialised needs, e.g. supporting time & frequency

SIG-NGN will see presentations and discussion on how advances in networking allow close integration of instrument, wide-area, and datacentre networks. How networks are tackling the extreme data transport needs of Big Science and its instruments, services that allow large data sets to be made available to their global science communities, and new services being offered to serve the special needs of science, such as high-precision timing.

Please send your suggestions to ngn-sc@lists.geant.org.

## **Remote Participation**

Vidyo room: SIG-NGN Auto-join URL: https://vidyoportal.cern.ch/join/rX9DYsYktY Extension: 10854543 Phone numbers: howto-join-vidyo-meeting-by-phone

## Directions

Address: CERN, Route de Meyrin 385, 1217 Meyrin, Switzerland

CERN visitor pass: fill this form to request the CERN visitor pass

Meeting rooms:

#### Registration

Registration is Open!

## Agenda (all times are in CET)

#### Monday, 13th January 2020

Time	What's happening
13:00-17: 30	LHCOPN/LHCONE workshop

#### Tuesday, 14th January 2020

Time	What's happening
09:00-17: 30	LHCOPN/LHCONE workshop

#### Wednesday, 15th January 2020 - SIG-NGN

Time	What's happening	
09: 30- 10: 30	Coffee and Croissants	
10: 30- 11: 00	Welcome, introduction to CERN and forward look on LHC's networking requirements - <i>Edoardo Martelli, CERN</i>	
11:	Time and frequency discussions	
00- 13: 00	Nicolas Quintin - OTFN Optical Time and Frequency Network	
	Per Olof Hedekvist -National and International timing	
	Jani Myyry - Nordic T&F activities	
	Josef Vojtech - Where is right spectral gap for accommodation of emerged photonic services of time and frequency or QKD?	
	Paolo Bolletta - Approach in Italy to T/F distribution	
13: 00- 14: 00	Lunch at own expense in CERN canteen	
14: 00- 14: 50	SCION: New directions for high-throughput and high- security academic research communication - <i>Adrian Perrig,</i> <i>ETH Zürich</i>	

- On Wednesday the meeting will be in CERN's Computer Centre building on the CERN Meyrin site: 513/1-024 (on Google Maps)
- On Thursday the meeting will be in the Amphitheatre of the IT building on the CERN Meyrin site: 31/3-004 (on Google Maps)

Directions to CERN are available. Please go to the reception of CERN (building 33) first when you arrive to print your visitor's pass or directly to the meeting venue if you have printed it already.

Geneva public transport: http://www.tpg.ch/en/web/site-international Lines passing by CERN: Tram 18. Stop name: CERN.

There will be an optional organised dinner on the evening of Wednesday 15th January, but this will be at your own expense.

## WI-FI

eduROAM and CERN Guest network is available. The mail2print service can also be used.

## Hotels

Hotels close to CERN include:

- CERN Housing (you can use Edoardo Martelli as contact person)
- Holiday Inn Express Geneva Airport.
- Mövenpick Hotel & Casino Geneva.
- Other nearby hotels

### **Quick Links**

All Presentations

Checkout the discussion on NREN.slack.com (sign up here)

Subscribe to the NGN mailing list or View the Archive

Contact the NGN Steering Committee

Attendee List

15: 00-	Tour of CERN (limited places available).		
17: 00	15:00-15:45 Synchrocyclotron		
	16:00-17:00 Antimatter Factory		
17: 00	End of Day 1		
19: 30	Social dinner at own expense at Mr Pickwick		

## Thursday, 16th January 2020 - SIG-NGN + HEPiX IPv6 WG

Time	What's happening	
09: 00- 09: 30	DCI for datalakes - Paolo Bolletta, GARR	
09: 30- 10: 00	Integrating Openstack with Tungsten – Hamza Zafar and Ricardo Rocha, CERN	
10: 00- 10: 30	Kubernetes Networking – Marian Babik and Spyridon Trigazis, CERN	
10: 30- 11: 00	Tea and coffee	
11: 00- 11: 30	EISCAT-3D – Lars Fischer, NORDUnet	
11: 30- 12: 00	LHCb Data Acquisition Network – Niko Neufeld and Tommaso Colombo, CERN	
12: 00- 12: 30	GradientGraph – <i>Jordi Ros-Giralt, Reservoir Lab</i>	
12: 30- 13: 00	ESnet6 High Touch Services: Real-Time Precision Telemetry and ML-based TCP Classification – <i>Richard</i> <i>Cziva &amp; Chin Guok, ESnet</i>	
13: 00- 14: 00	Wrap up and Lunch	
14: 00- 17: 30	HEPiX IPv6 Working Group (meeting agenda and registration)	

Friday, 17th January 2020

Time	What's happening	
09:00-12: 30	HEPiX IPv6 Working Group (meeting agenda and registration)	

File	Modified
JPEG File photo-geneva-1566116954707-99fa19f957d4.jpg	Oct 03, 2019 by Brook Schofie
PDF File 00-SIG-NGN-Logistics.pdf	Jan 15, 2020 by Edoardo Marte
PDF File 01-CERN-and-LHC-challenges.pdf	Jan 15, 2020 by Edoardo Marte
PDF File GARR_metrology_SIG-NGN_CERN_2020_01_15.pdf	Jan 15, 2020 by Paolo Bolletta
PDF File Funet-GEANT-SIG-NGN-20200115-final.pdf	Jan 15, 2020 by Jani Myyry
PDF File CESNET-SIG-NGNJan20-Vojtech-short.pdf	Jan 15, 2020 by Josef Vojtch
PDF File ESnet HighTouch Network Precision Telemetry - SIG-NGN Geneva-2.pdf	Jan 15, 2020 by Richard Cziva
Microsoft Powerpoint Presentation National timing.pptx	Jan 15, 2020 by Edoardo Marte
PDF File SCION-SIG-NGI-CERN-2020.pdf	Jan 15, 2020 by Edoardo Marte
PDF File GARR_evo_DCI_SIG-NGN_CERN_2020_01_16.pdf	Jan 15, 2020 by Paolo Bolletta
PDF File LHCb_Eventbuilder_SIG_NGN_workshop_2020.pdf	Jan 15, 2020 by Niko Neufeld
PDF File GEANT_Integrating_Openstack_with_Tungsten_Fabric.pdf	Jan 16, 2020 by Hamza Zafar
PDF File GEANT_Kubernetes_Networking.pdf	Jan 16, 2020 by Marian Babik
Microsoft Powerpoint Presentation OTFN - SIG-NGN meeting 15-01-2020.pptx	Jan 16, 2020 by Nicolas QUIN
PDF File EISCAT-3D instriument network, SIG NGN, January 2020.pdf	Jan 16, 2020 by Lars Fischer
PDF File 2020-CERN-SIG-NGN-RL-GradientGraph.pdf	Jan 16, 2020 by Rob Evans