

# 2nd SIG-NGN Meeting

4th & 5th April 2019, Stockholm, Sweden

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

This meeting was the second meeting of the SIG and hosted by **SUNET** in Stockholm.



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## Theme

"whiteboxing" & "optical"

## Remote Participation

Meeting ID: 338 012 664

Join Zoom Meeting: <https://geant.zoom.us/j/338012664>

Find your local number: <https://zoom.us/u/acBzohYblm>

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Join by H.323 [109.105.112.236](tel:109.105.112.236) or [109.105.112.235](tel:109.105.112.235)

## Directions

Meeting location: SUNET, Tulegatan 11, Stockholm, Sweden.

Direction provided on the [SUNET website](#).

## Quick Links

[All Presentations](#)

Checkout the discussion on [NREN.slack.com](https://nren.slack.com) ([sign up here](#))

[Subscribe to the NGN mailing list](#) or [View the Archive](#)

Contact the [NGN Steering Committee](#)

## Registration

[Attendee List](#)

## Agenda (all times are in CET)

### Thursday, 4th April 2019 - "White boxing"

| Time        | What's happening  |
|-------------|---|
| 09:00-12:00 | <b>GÉANT GN4-3 WP6 White boxing workshop</b><br><b>This is open to all SIG-NGN attendees</b><br>Coordinators:<br><i>Xavier Jeannin (Renater), Ivana Golub (PSNC), Tim Chown (Jisc)</i><br><br>In this session we present the work ongoing in the new GÉANT GN4-3 project in the area of white boxing and P4, to solicit input and feedback from the SIG-NGN community on uses cases and services. |
| 09:00-09:10 | <a href="#">Welcome and introductions</a> - <i>Ivana Golub, PSNC, GN4-3 WP6 co-leader</i>   |
| 09:10-09:40 | <a href="#">White boxing for NRENs, where we are today, lessons learnt, uptake strategy</a> - <i>Xavier Jeannin, Renater</i>  |
| 09:40-10:20 | <a href="#">Work planned and use cases (including new services) within the GÉANT project</a> - <i>Xavier Jeannin, Renater and Christos Argyropoulos, GRNet</i>  |
| 10:20-10:40 | <b>Coffee break</b>   |
| 10:40-10:50 | <a href="#">Data plane programming, status, uptake strategy</a> - <i>Xavier Jeannin, Renater</i>  |
| 10:50-11:10 | <a href="#">Designing a routing platform for the R&amp;E academic community</a> - <i>Frédéric Loui, Renater</i>   |
| 11:10-11:30 | <a href="#">Network monitoring and security (DDoS mitigation) with P4</a> - <i>Marco Savi, FBK</i>  |
| 11:30-12:30 | <b>Lunch</b>  |

|                         |  |
|-------------------------|--|
| 12:<br>30-<br>13:<br>00 | Discussion around white box adoption (Updated) <ul style="list-style-type: none"> <li>• Use cases, services, innovation, new features, concerns, ...</li> <li>• Uptake - quick-wins and challenges</li> <li>• How should we build a strong community around white boxing and data plane programming (inc. P4) ?</li> </ul> |
|                         | <b>SIG-NGN</b>   |
| 13:<br>00-<br>13:<br>15 | <a href="#">Welcome &amp; Introduction</a> - <i>Rob Evans, Jisc, Rudolf Vohnout, CESNET, Edoardo Martelli, CERN, Lars Fischer, NORDUnet, Jac Kloots, SURFnet</i>   |
| 13:<br>15-<br>14:<br>00 | "Whiteboxing at LINX" - <i>Flemming Heino (LINX)</i>   |
| 14:<br>00-<br>14:<br>45 | "A Plethora of P4 Particulars" - <i>Aaron A. Glenn</i>   |
| 14:<br>45-<br>15:<br>30 | "P4-to-VHDL: How We Built the Compiler for FPGA Devices" - <i>Pavel Benacek &amp; Jan Korenek (CESnet). (Video P4-INT   I Pv7 Demo )</i>   |
| 15:<br>30-<br>16:<br>00 | <b><i>Tea and coffee break</i></b>   |
| 16:<br>00-<br>16:<br>45 | "FPGA and NPU technologies into our next generation production network" - <i>Yatish Kumar (Lawrence Berkeley National Laboratory)</i>  |
| 16:<br>45-<br>17:<br>30 | "ESnet6 High-Touch Services: Telemetry and Rate Monitoring." - <i>Richard Cziva (ESnet)</i>  |
| 17:<br>30-<br>19:<br>30 | <b><i>Pause (or provide feedback at <a href="https://www.menti.com">Menti.com 67 00 73</a>)</i></b>  |
| 19:<br>30-<br>20:<br>30 | Meet for drinks on the roof top bar Urban Deli (pay for yourself).   |
| 20:<br>30               | <b>Dinner at <a href="#">Urban Deli</a> on <a href="#">Sveavägen 44</a> (Hosted by <a href="#">SUNET</a>)</b>  |

## Friday, 5th April 2019 - "Optical"

| Time                    | What's happening                                 |
|-------------------------|--|
| 09:<br>00-<br>09:<br>30 | <b><i>SIG-NGN Steering Committee Catchup</i></b> |

|                         |   |
|-------------------------|---|
| 09:<br>30-<br>09:<br>40 | Variable T/F Infrastructure and Testbed - <i>Josef Vojtech (presented by Rudolf Vohnout), CESnet</i>  |
| 09:<br>40-<br>09:<br>55 | "How to measure and analyze non-data applications in fibres?" - <i>Jan Radil &amp; Rudolf Vohnout (CESnet)</i>  |
| 09:<br>55-<br>10:<br>45 | "Disaggregated optical systems" - <i>Kent Lidström (Smartoptics)</i>  |
| 10:<br>45-<br>11:<br>15 | <b><i>Tea and coffee</i></b>  |
| 11:<br>15-<br>11:<br>45 | "GEANT lab automation and network evolution." - <i>Guy Roberts (GÉANT)</i>  |
| 11:<br>45-<br>12:<br>00 | "Optical time frequency: its a relative thing" - <i>Guy Roberts (GÉANT)</i>   |
| 12:<br>00-<br>12:<br>45 | "OpenROADM Multi Service Agreements" - <i>Rob Smets (SURFnet)</i>   |
| 12:<br>45-<br>13:<br>00 | Wrap up, Summary and Next Steps - <i>Rob Evans, Jisc, Rudolf Vohnout, CESNET, Edoardo Martelli, CERN, Lars Fischer, NORDUnet, Jac Kloots, SURFnet</i><br><br>...and provide feedback at <a href="https://menti.com/670073">Menti.com 67 00 73</a> |
| 13:<br>00               | <b><i>Finish</i></b>  |