Title: “Off the beaten track: Sparks of innovation out of the NREN universe”

Presenter names and affiliations:

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Session Abstract:

The session will take a look at the changing NREN landscape worldwide, namely changes which take place in view of Globalisation, the Organisation of NRENs and the Structure in R&E, and the resulting challenges to NRENs worldwide.

Newly created innovative NRENS of regions outside the centre of Europe, which do not follow the beaten path of the long-time well-established NRENs, are invited to present their approaches on how to overcome these challenges.

Challenges to be discussed might include how to succeed in competition with commercial providers, how to successfully develop new products and bring them to the market, and in which way to effectively attract new customers.

The objective of the session is to promote new and innovative ideas from the “Start-up” NRENS, which might spark innovation also in long-time-on-the-market NRENs.

Session format:

Introduction (10 min)

The session will start with a brief introduction into the theme by Steve Cotter.

Presentations (4 x 15min)

The introduction will be followed by a joint session in which the presenters provide their point of view and will showcase examples of the regions they represent.

Panel Discussion (20 min)

The session will close with a panel discussion in which the presenters participate as panelists. The panel questions will not only be directed to the panelists but also invite the audience to voice their opinion.
**Speaker's biographies:**

**Steve Cotter** is the CEO of GÉANT, Europe's leading collaboration on e-infrastructure and services for research and education. Prior to coming to GÉANT in 2015, Steve was CEO of REANNZ, New Zealand’s NREN (National Research and Education Network). Formerly Department Head of ESnet, and having also worked for technology companies in Europe and the US including Google, Internet2 and Cisco, Steve brings a track record of working with government funders and research and academic users.

**Prof. Askar KUTANOV** is the Regional Coordinator for EC Central Asian Research and Education Network (CAREN) Project, and he actively promotes regional and international collaboration for Central Asian NRENs. He is Academician of the National Academy of Sciences, Kyrgyz Republic. He has background in physics, and got Doctor of technical sciences degree in the field of Optical Information Processing in 1992. Askar Kutanov worked at Osaka University, Japan as research fellow and invited professor from 1993 to 1996. He was a Chairman of Kyrgyz Research and Education Network Association (KRENA) after its establishment in 2002. He received the State Award of the Kyrgyz Republic in the field of science and technology for research & education networking development in 2004. At present, he is Regional Coordinator of the CAREN network which will bring many opportunities to Central Asian NRENs for growth and applications development.

**Dr Hrachya Astsatryan** holds the position of the head of the centre of “Scientific Computing” in the Institute for Informatics and Automation Problems of the National Academy of Sciences of Armenia. He was involved and organized various aspects of e-infrastructures in the region, and their sustainability and seamless integration in pan-European eScience infrastructures. Previously, within the framework of Marie Curie Fellowship, Hrachya worked in the KFKI Research Institute for Particle and Nuclear Physics (Budapest, Hungary), as a Researcher and hold PostDoc position in Institute de Recherche en Informatique de Toulouse (Toulouse, France). Participated in realisation of projects in association with EU FP, SNF, CNRS, ISTC, INTAS, etc.

**Chris Rohrer** is Special Projects Coordinator for UbuntuNet and based at the Alliance’s secretariat in Lilongwe, Malawi. At UbuntuNet Alliance, Chris provides technical expertise in the execution of work packages in the three Horizon 2020 projects (Sci-GaIA, TANDEM and MAGIC), at which the UbuntuNet Alliance is partner. Chris joined the Alliance at the beginning of December 2015 from SWITCH, the Swiss National Research and Education network, where he has been working as a Software Engineer for eight years. He holds a Master of Science in Neurobiology from the University of Berne as well as a Master of Advanced Studies in Human Computer Interaction Design from the University of Basel.

**Seema Khanna** is Director Operations at NKN and Technical Director at NIC, India. Seema was one of the main responsible persons in establishing the 10Gbps NKN interconnection with GÉANT which will further support R&E collaborations between India and Europe, in particular within the HEP community.