

### **WELCOME TO NGINO**

The <u>Next Generation Internet (NGI)</u> initiative, launched by the European Commission a few years ago, aims to shape the future internet as an interoperable platform ecosystem. The desire is to create an internet that embodies the values that Europe feels important: openness, inclusivity, transparency, privacy, cooperation, and protection of data.

**The NGINO network** is supporting the development of a Norwegian strategic research and innovation agenda and fosters the stakeholders to explore European funding opportunities in the scope of the NGI. The NGINO project is co-funded by the RCN and is composed from these partners: NTNU (coordinator), UiO, SINTEF, NRK and Telenor.

#### IMPLEMENTED ENGAGEMENT ACTIVITIES

On 22<sup>nd</sup> September 2020 NGINO partners held an annual online meeting to exchange views and ideas about the project achievements and next steps. DG CONNECT, the European Commission representative <u>Dr.Loretta Anania</u> actively participated in the meeting and gave a short presentation. Mr.Pål Sigurd Malm from the Research Council of Norway also joined the event. The presentations made during the meeting will be made available here: <a href="https://www.ntnu.edu/digital/ngino">https://www.ntnu.edu/digital/ngino</a>

NGI Policy Summit - the flagship policy conference of the European Commission's Next Generation Internet (NGI) initiative was held on 28-29 September 2020. The conference presented a vision for the future internet and strengthened the ecosystem of the NGI initiative. The NGINO activities are very much aligned with the vision paper, for example, prof. Josef NoII from the University of Oslo actively contributes to removing the physical barriers to internet access in Africa. A vision paper for the future internet soon will be made available here: https://www.ntnu.edu/digital/ngino.

On 1<sup>st</sup> October 2020 <u>Dr.Vilija Balionyte-Merle</u> (NTNU) supported the Research Council of Norway at the <u>Future Internet Forum</u> and informed the EU Member States about NGINO activities and its key outcomes.

Assoc. Prof. David Palma served as an independent expert in evaluating the proposals submitted for the cascading calls launched by the NGIAltantic project funded under H2020. The process included remotely evaluating several innovative experimental platforms, conducted by intercontinental teams (EU-US). The proposals focused on new discovery and identification technologies, privacy and trust enhancing technologies and mechanisms for decentralised data governance. In total 6 projects were selected for funding in the first call.

NTNU has submitted a proposal for MSCA COFUND-2020 call on 29 September 2020. If successful, the PERSEUS Doctoral Programme will foster the training of highly skilled doctoral researchers in thematic areas of Big Data, Artificial Intelligence, Digital Twins, Internet of Things, Extended Reality and Information and Cyber Security linked to sectors of the national importance to Norway, namely energy, healthcare, manufacturing, mobility





and ocean-based technologies. Telenor is a partner in PERSEUS among other 11 top-level universities in Europe and 8 industry representatives in Norway.

#### PROJECT ACHIEVEMENTS

NGINO has facilitated the preparation and submission of proposals for H2020 Framework Programme and EEA Programme and those efforts have resulted in several granted projects:

ICT-55-2020 Interactive Technologies: the AdMiRe project coordinated by Brainstorm Multimedia SL (Spain) with participation of NRK and NTNU has started on 1 September 2020. The main goal of AdMiRe is to develop, validate and demonstrate innovation solutions, based on Mixed Reality (MR) technology, which will allow for TV audiences a step change in interactivity, and bring for content creators a radical improvement in talent immersion and interaction with computer generated elements. Key innovations produced with the project will allow to capture the viewer, stream the video to the TV studio over 4G or 5G, extract the viewer's silhouette from the background and insert the viewer into the studio footage as a Mixed Reality object.

ICT-41-2020 5G-PPP: 5G innovations for verticals with third party services. The 5GMediaHUB project is coordinated by CTTC (Spain) and involves **Telenor and NTNU**. The start of the project is planned on 1st January 2021. 5GMediaHUB aims to help EU to achieve the goal of becoming a world leader in 5G, by accelerating the testing and validation of innovative 5G-empowered media applications and NetApps from 3rd party experimenters and NetApps developers, through an open, integrated and fully featured.

ICT-52-2020 5G PPP: Smart connectivity beyond 5G. Secured autonomic traffic management for a Tera of SDN flows, or TeraFlow, is a new 5GPPP Phase 3 project. The TeraFlow project is coordinated by CTTC (Spain) and involves **Telenor and NTNU**. The start of the project is planned on 1<sup>st</sup> January 2021. TeraFlow will create a new type of secure cloud-native SDN controller that will radically advance the state-of-the-art in beyond 5G networks and will integrate a new generation of smart traffic and flow handling with the current NFV and edge computing frameworks. TeraFlow will provide revolutionary features for flow management while incorporating security using Machine Learning (ML) and forensic evidence for multi tenancy based on Distributed Ledgers.

The NGINO network also addressed the <u>EEA Programme</u> between Norway and Czech Republic. The NordTrans project included a participation of **NTNU**, namely <u>Prof. Torbjørn Svendsen</u>. The main goal of the NordTrans project is to improve the state-of-the-art quality and usability of the automatic speech recognition (ASR) technology for Swedish and Norwegian. The developed technology will operate with high accuracy in various applications including online broadcast monitoring, such as TV, internet podcasts, etc., transcription of speeches in parliaments and similar public institutions, as well as spoken archive mining. The project is a collaboration between NTNU and the Czech partners Newton Technologies and TU Liberec.





## PLANNED ENGAGEMENT ACTIVITIES

Naturally the planned activities will be influenced by the consequences of the corona outbreak. At the time of writing, these are the planned activities:



3rd Nordic Conference on ICT 5G for Industry and Society will be hosted online by NTNU, SINTEF, Telenor Research and 5G-VINNI on 5-6 November 2020.

<u>ICT 2020</u> event has been postponed until March 2021. Further notice about the event should be made available in October 2020.

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