

Nordic IoT News

No. 4-2020

Navigating in the COVID-19 pandemic

In the last Hub telco, the partners shared experiences on how the various universities are navigating with respect to the COVID-19 pandemic. It seems as most of the same restrictions apply to the five universities involved in the Hub, i.e.

- The re-opening after the vacation seems only partial
- The universities can be visited, but with several restrictions (no larger meetings)
- The staff should avoid business travels or must be completed with certain risk assessment procedures, and in some cases also quarantine apply, i.e. 14 days isolation (both in and out)
- Increased cleaning throughout the day with extended focus on hygiene
- Lectures are mainly a combination of physical presence and virtual attendance
- Labs can only be performed with certain distance requirements
- Staff are encouraged to work part time from home

Following the above restrictions it was agreed that the Hub should gather experiences from the partners on what works and what doesn't work when it comes to on-line training (experiences from using various tools, best practice from on-line training, how to ensure dialogue with the students, virtual labs, etc.).



Hub Yearly meeting – cancelled

Due to the COVID-19 pandemic we unfortunately must cancel our planned Yearly meeting in Gothenburg. The Hub students are encouraged to look up other Hub events in the on-line calendar: <http://www.nordic-iot.org/events-page/>

5G roll out in the Nordic countries

Last month, Analysys Mason, a global telecom research analyst issued a report on the current status of the 5G roll-out in the Nordic countries where the governments have developed strategies, agendas and plans for digitalization towards a future often referred to as the Gigabit Society. Progress in these areas is shown by several studies that indicate that the Nordic countries have the most advanced digital economies in Europe.

Jukka Leinonen, head of Telenor Nordics says that they are launching 5G in all our four Nordic markets, supporting the political ambition set by the Nordic Prime Ministers to “lead the world in developing and rolling out 5G”

In the coming years, 5G roll-outs and IoT developments will contribute to the next phase of this digital transformation process. Nordic countries are well prepared for an ever more digitalized future, but it is important to maintain frameworks that ensure digitally driven innovations are developed, disseminated, and used.

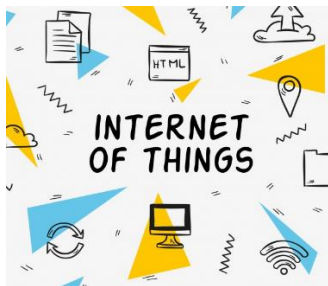
The report ranks 60 Nordic municipalities based on their facilitation of mobile network deployment, municipalities' digital service offerings and planning, organizing, facilitating, and developing smart municipality ecosystems and services. Please find the report here: <https://www.telenor.com/wp-content/uploads/2020/09/Nordic-Digital-Municipality-Index-2020.pdf>

The Hub's IIoT Roadmap

The work on the Hub's IIoT Roadmap has, despite the COVID-19 pandemic, progressed well during the last months. Currently we have received more than 30 contributions from our active Hub partners.

The aim of making a Nordic IIoT Roadmap is to give it a specific Nordic flavor. So far, the common Nordic denominator is the word "sustainability". To a large extent the Nordic countries have been successful in combining high environmental ambitions, high-income, economic growth, a stable macro economy and social well-being. Therefore, the whole Region works together towards sustainable development, with several impressive achievements already:

- Common to all four countries is a high share of renewables (hydro, bio, wind, etc.), ranging from 32% to 73% in 2016, relative to the EU28 share of 17%
- Exceptionally low level of carbon intensity of Nordic electricity <60 gCO₂/kWh (EU 447 gCO₂/kWh)
- The Nordic Region has highly developed solutions in areas such as water supply, waste disposal, green town planning, transport, and energy.
- High level utilization of electric vehicles (2020 market share in e.g. Norway >50%)
- High Nordic education level: 34% graduates with a tertiary degree (EU19 average: 25%)
- In the 2016 EC Innovation Scoreboard, the Nordic Region was the most innovative in Europe, not least in terms of clean technologies



IoT technologies will further fuel this transition towards a sustainable Nordic region. IoT has the capability to affect smart cities by improving the infrastructure, controlling buildings, facilitating energy and water supply, as well as transportation and traffic. However, also smart factories can benefit from IoT by e.g. smart production, energy management, predictive maintenance, etc.

To put focus on this angle we have for the roadmap got testimonials from a number of leading innovative Nordic companies.

Swedish ELLIIT environment

ELLIIT is a strategic research environment funded by the Swedish government, as part of its initiative to support strong research in information technology and mobile communications. ELLIIT has four partners: Linköping University, Lund University, Halmstad University and Blekinge Institute of Technology. ELLIIT constitutes a platform for both fundamental and applied research, and for cross-fertilization between disciplines and between academic researchers and industry experts.

Recently ELLIIT published the 2030 Technology Foresight with focus on New directions for strategic research in IT and mobile communications. Several of the report's focus themes are also within the scope of the Hub activities:

<https://old.liu.se/elliit/startpage/1.764031/elliit-190706a-webb.pdf>



Currently, ELLIIT is planning the annual workshop, and our Hub students are welcome to attend to this event on 21-22 October in Lund:

<https://old.liu.se/elliit/workshop?!=en>



Aalto University, FI
Lund University, SE
Norwegian University of Science and Technology, NO
Royal Institute of Technology, SE
Technical University of Denmark, DK

