Josef Noll – Internet of Things / Security

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United Nations
Sustainable Development Goals

1 NO POVERTY
2 ZERO HUNGER
3 GOOD HEALTH AND WELL-BEING
4 QUALITY EDUCATION
5 GENDER EQUALITY
6 CLEAN WATER AND SANITATION
7 AFFORDABLE AND CLEAN ENERGY
8 DECENT WORK AND ECONOMIC GROWTH
9 INDUSTRY, INNOVATION AND INFRASTRUCTURE
10 REDUCED INEQUALITIES
11 SUSTAINABLE CITIES AND COMMUNITIES
12 RESPONSIBLE CONSUMPTION AND PRODUCTION
13 CLIMATE ACTION
14 LIFE BELOW WATER
15 LIFE ON LAND
16 PEACE AND JUSTICE STRONG INSTITUTIONS
17 PARTNERSHIPS FOR THE GOALS
THE GLOBAL GOALS For Sustainable Development

"Internet had the ability to dismantle the divide. Internet failed miserably, the divide is bigger than ever."
Kate Gilmore, Human Rights, UNO

Source: Akers Avis Groruddalen, 2013

Affordable Energy & Internet Lite for All
the catalysts for the goals

Showcase
"Non discriminating access" project
- funded by RCN and Mfa/Norad (14.9 MNOK for 2017-2020)
- Tanzania: digital health
- Mali: energy

3 GOOD HEALTH AND WELL-BEING
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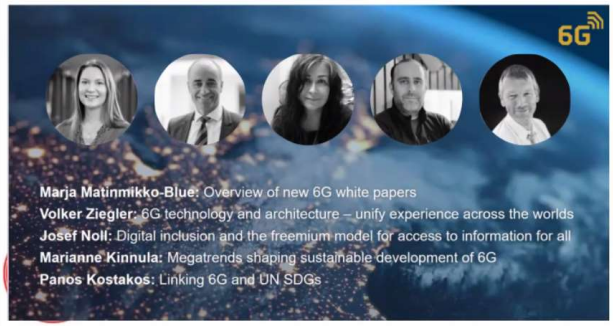
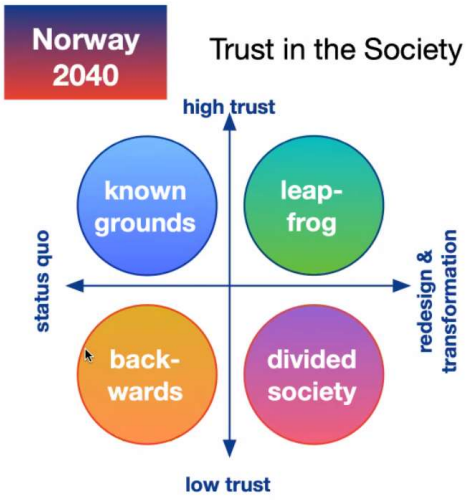
17 PARTNERSHIPS FOR THE GOALS

Energy & Internet Lite for All
Target 7.1&7.2 Target 9.C Target 16.10

Topic areas for Master Thesis

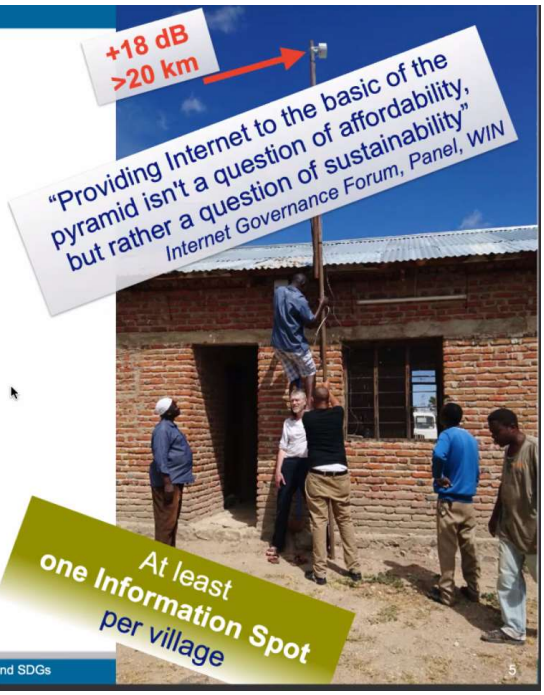
- Societal Security
- Trust in Society



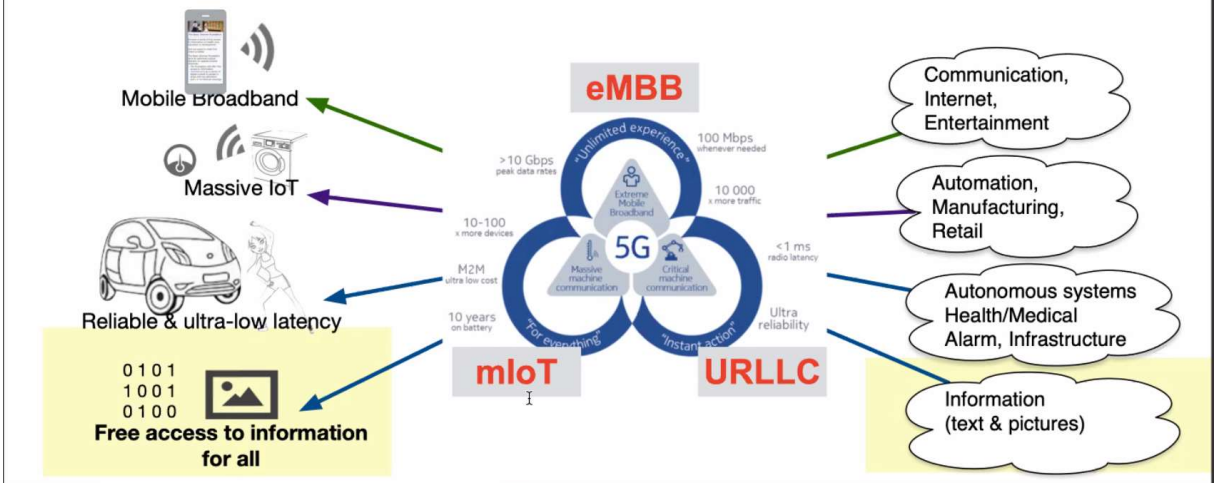


Providing 6GforAll

- **Free access** to **Information** (Internet Lite)
  - 1) Access - one **Information Spot** per village
  - 2) Skills - Health, Education, Agriculture
  - 3) Regulations - Freemium model
  - 4) Inclusion - Free access for all #LeaveNoOneBehind
- Internet Lite & **Freemium** model for access
  - **free access to National Knowledge Portal** for all
  - **premium** access to **broadband**
  - sustainable solution

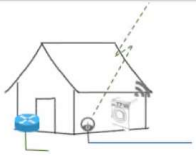


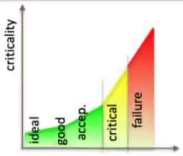
5G network slicing for Free Access to Information for All

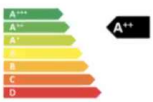
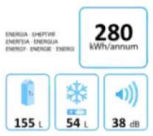


Conclusions

- Things (IoT) are driving the digital societies
- Two main areas for a Master Thesis
  - Security and Privacy in IoT
    - IoTSec.no, Privacy Label
  - Smart Energy transition
    - trust in the society
  - Digitisation of the Society
    - 4 Billion without Internet
- Sustainability and Digital Inclusion
  - UNO Sustainable Development Goals (SDG 2030)
    - Free access to basic information: Internet Lite







SPD level	SPD vs SPD$_{Goal}$
(67,61,47)	
(67,61,47)	
(31,33,63)