Nordic WAY2

Data privacy and GDPR in the NordicWay2 national pilots – **The Finnish pilot**

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Picture: Wikimedia Common, S. Solberg J.

Background of the Finnish C-ITS-deployment pilot

- The C-ITS-deployment pilot continues the architecture developed in NordicWay with sharing of C-ITS-messages through a central cloud

- The aim of the pilot is to share information that **enhance traffic safety and fluency** and to **create a new way to share C-ITS-messages between traffic information suppliers** so that the end user gets more information of better quality

- Traficom has contracts with 3 suppliers
  - Each supplier sets up an interchange node
  - Each supplier is obliged to exchange their ecosystem's C-ITS messages with other suppliers via the interchange nodes
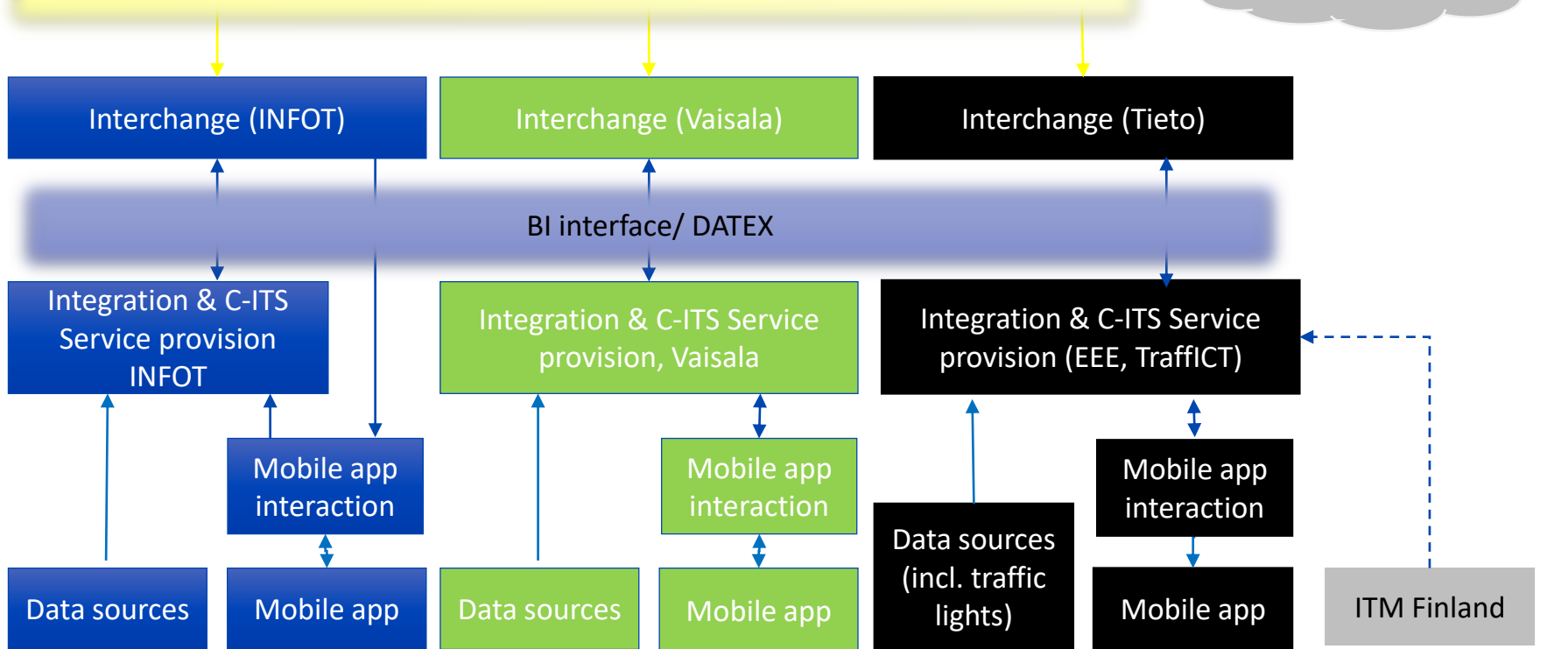
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Finnish C-ITS-deployment pilot partners
- estimated amount of pilot users ~7000

infoTripla

E3 DRIVE SMARTER.

posti

RoadCloud
WAY AHEAD

DRIVECO

TRAFF
ICT

VAISALA

FICONIC

SITOWISE

Metsäteho

tieto

ILMATIETEEN LAITOS
METEOROLOGISKA INSTITUTET
FINNISH METEOROLOGICAL INSTITUTE

DRIVE
looper

AHOLA
TRANSPORT

arctic machine
ROAD INTELLIGENCE

The Finnish C-ITS-deployment pilot, architecture

Nordic **WAY 2**

Other Interchange Nodes

BI & II interface

Interchange (INFOT)

Interchange (Vaisala)

Interchange (Tieto)

BI interface/ DATEX

Integration & C-ITS Service provision INFOT

Integration & C-ITS Service provision, Vaisala

Integration & C-ITS Service provision (EEE, TraffICT)

Mobile app interaction

Mobile app interaction

Mobile app interaction

Data sources

Mobile app

Data sources

Mobile app

Data sources (incl. traffic lights)

Mobile app

ITM Finland

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Finnish deployment pilot: Protocols

- Exchange between interchange servers:
  - NordicWay protocol,
    - Based on AMQP v1.0 publish-subscribe protocol
    - Migration to C-ROADS BI protocol
  - Federation protocol for automated discovery is being tested
    - Avoids to have to connect to each interchange server separately

- Payload:
  - DATEX II v3.0 used for publication of events
  - Migration to standard C-ITS messages in NordicWay3

Roles in the Finnish C-ITS-deployment pilot

- The Finnish Transport and Communication Agency Traficom is funding the pilot
- 3 suppliers, with 15 subcontractors (service providers) in total: different roles, many companies have several roles:
  - Data collectors
  - Integrators
  - Data analyzers
  - Visualizers
  - Interchange Server providers
- A large variety in how the suppliers and service providers are gathering the data
  - Mobile apps
    - Professional drivers and private persons
  - In car devices (dash board devices, in-vehicle sensors, machine vision)
  - Static devices (in-road sensors, traffic signals, VMS…)

Process to establish good data privacy in the pilot

- Traficom wants to have a good picture of **how the involved companies are handling their personal data** and wants to make sure that they are acting accordingly to the GDPR

- **The companies are filling out a form**, with information about the piloted C-ITS-services and how personal data is handled in the different services:
  - What kind of information/data is gathered for the C-ITS-service and what is the purpose of it
  - What kind of personal data is gathered by the company for this particular service
  - Lawfulness of processing the personal data
  - The rights of the data subject
  - Anonymization and pseudonymization of the collected personal data
  - Other factors considered in the processing of personal data

Lessons learned

- Public-private collaboration
  - The private companies are the controllers/processors and therefore obliged to follow the GDPR, but as public interest (and money) is involved in the development, it is also a public interest to solve these issues.

- Important to have right kind of expertise solving issues and raising the questions
  - Collaboration between technical – legal – user understanding – communication

- Collaboration on EU-level?

What next / open questions

- How to build new on old structures?
  - The pilot involves services that already have users (~7000) from before – important to secure that these users understand what they are involved in
    - New consent from the users?
- C-ITS feature
  - Messages can and will be distributed widely and they will be aggregated and analysed on the way – if the user wants to know where his/hers personal data is being used, it can be hard to track
    - When does personal data stop being personal data?
- Employees as data subjects
  - How can a consent be freely given when the controller is your employer?

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Thank you!
Questions?