Nordic WAY 2

Lessons learned from NordicWay2 C-ITS deployment pilots:
The service provision ecosystem companies' perspective

C-ROADS

Ecosystem evaluation results

Petri Mononen VTT

VTT TRAFICON

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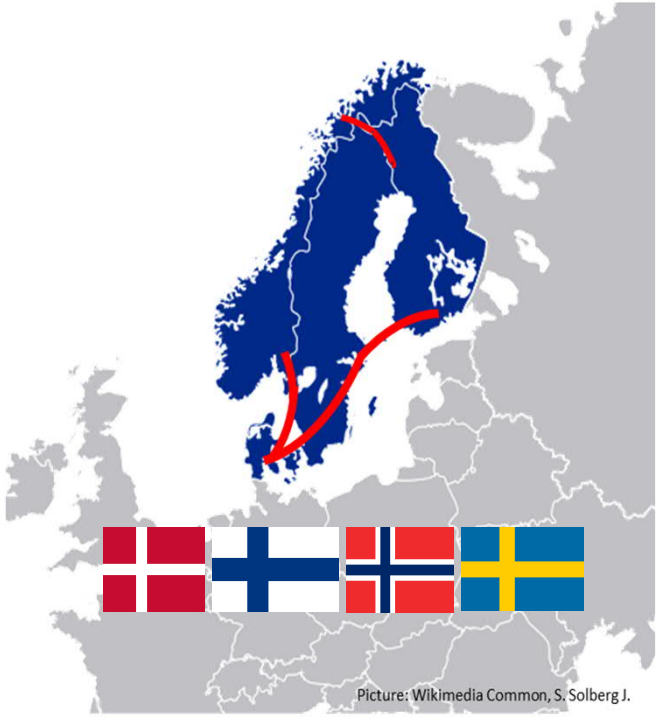

The backdrop

C-ITS deployed fast but technology-push and public involvement are dominant - limited attention to the business viability.

Often aggravated by complex mobility scenarios involving many stakeholders with their own needs and interests, e.g.

- the commercial parties (e.g. revenues, customer satisfaction), and
- authorities (fast, safe and green traffic).

Some overlap, but different on other aspects → a challenge to find business models that are attractive for all.

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The backdrop

NordicWay2 (C-ROADS) C-ITS deployments

- 20 Day 1 and Day 1.5 C-ITS services deployed in FI, SE, NO
- Delivered by 10+ business ecosystems with dozens of actors
- Investigated in detail in 2019-2020, to find out the companies' perspectives, hopes, worries and lessons learned
- Foci on start-up phase challenges and visions of scale-up
- Data collected mainly in workshops + some written input
- Evaluation team Petri Mononen (VTT), Risto Kulmala (Traficon), Magnus Simons (VTT)

RWW
SSVW
EVA
HLN
SI
IVS
IVI
PVD
TJW
GLOSA
etc.
etc.

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Research questions

What should be taken into account in forming a service ecosystem? What defines an ”ideal” ecosystem?

What problems and challenges have been encountered? (challenges encountered thus far and foreseeable challenges)

What is the business potential of the service? (perceived, anticipated, modelled or observed potential - the actor perspective)

What are the most important things to be taken into account and solved in the service development and provision phases, in short term and in medium term?

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Methods & tools

Value network modelling (current state & scaled-up state)

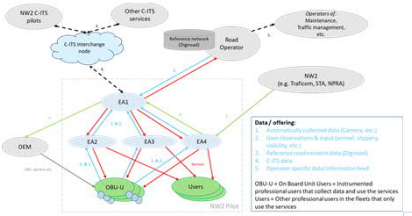
Motivational charts of pains, gains and commitment

End-to-end content provision and service provision matrices (roles, data, actions, hand-overs)

Business projection charting

Scale-up strategy workshop

Etc.



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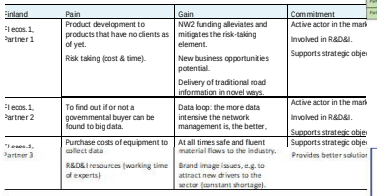

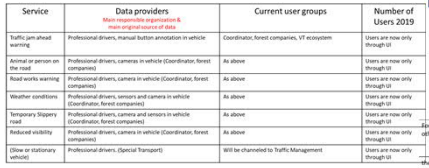

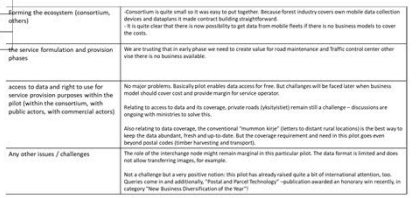

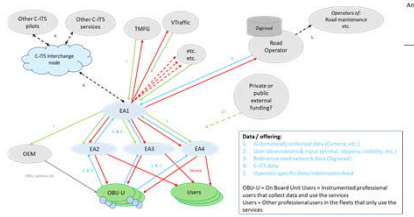

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Findings: Ramp up challenges

Some highlights:

Contracting can be very challenging and time consuming - especially GDPR, but also service contracts

Data quality issues

Service coverage issues (temporal & geographical)

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Findings: Pains, gains, commitment

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Pains

- Integrator pain
- Attracting users in the harshly competitive climate
- Revenue streams from individual private users may be thin
- Product development investment, data costs, etc.
- Lack of skilled work force (capabilities, knowledge, experience)

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Findings: Pains, gains, commitment

Gains

New business opportunities

Access to new data

Revenue growth and service portfolio expansion

New national and international contacts and networking coming from the cooperation in the ecosystem in itself

Operational gains

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Findings: Pains, gains, commitment

Commitment

Aspiration to be an active actor in this market while creating new business.

The will to be involved in the forefront of the latest R&D&I activities.

Being involved in these kinds of endeavors strongly support the company strategic choices and objectives.

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Findings: Business models

Feasibility, scalability, long term sustainability, profit):

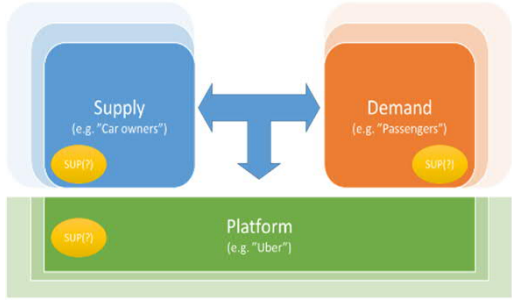
"If there is public data, there needs to be public co-funding."
(Direct revenue collection pipeline stops at publication of data)

"Revenue streams from individual private users may be thin."
("Grouping synergy": insurers, employers, etc. as primary clients?)

Scaling up ideas are now there and brewing - but not too concrete yet across the board.

The most prominent scaling up strategy: the "single-side strategy", also "follow that rabbit", "big-bang", "piggyback".

The most prominent and promising Scale Up Partner candidates: navigation device manufacturers and large fleet owners.



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Findings: Data exchange platform

Generally the C-ITS platform (federation model, interchange node) was perceived as an opportunity and a benefit - but opposing views, challenges and worries were brought up as well

"All data structured through one source very helpful."

"Common platform helps to increase the product range."

"All interchange of data is good for us."

"Enables cross-border exchange and services" etc.

"The role of the interchange node might remain marginal. The data format is limited e.g. does not allow transferring images."

"The interchange model does not scale."

"Some actors not open to sharing information."

"A bottleneck for innovation?"

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Findings: Public actors' role

Public sector and public funding have been integral to the development by e.g.

- Helping to populate the network and providing valuable real-time data
- Increasing the value of the network for all by helping to have more organizations and people to join and share data
- Creating a network effect that will be a benefit to the ecosystems; and
- Being demanding customers (describing the needs and specs, input into business models, regulation needs and contractual obligations incl. GDPR)

The public sector probably will remain an important, if not the most important facilitator, client and market driver in large scale C-ITS

Relying only on markets might have European competitiveness implications

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To conclude

In order to maintain momentum

- the added positive impacts for end-users and for the society need to be in place, but also
- the business benefits need to be there for commercial actors in an ecosystem.

Now is a critical time in terms of facilitating viable business models to keep the deployment ratio up.

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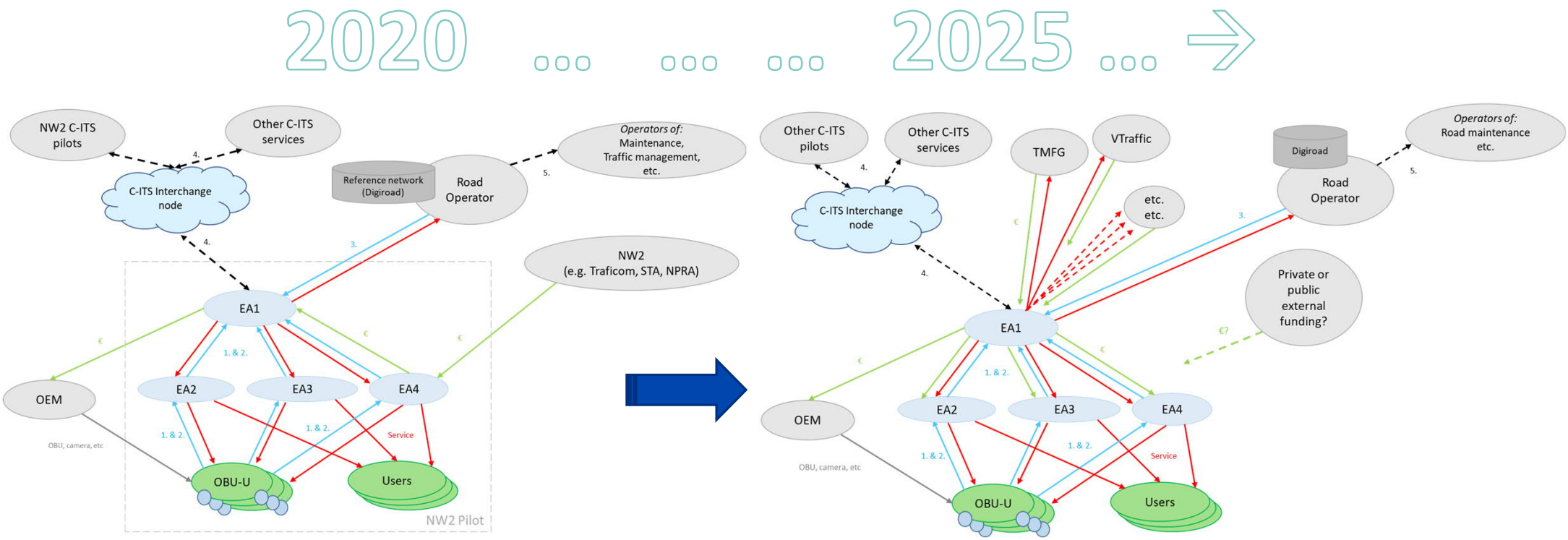
Results to be published in NordicWay 2 deliverable «Evaluation Report».



Thank you!

Contact:

Dr. Petri Mononen
Principal Scientist
+358 40 5155 808

petri.mononen@vtt.fi

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