

Nordic Way 2 Ecosystem evaluation

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The presentation material from the Virtual ITS European Congress November 9th 2020

Special Session PS1187 “Business cases for traffic management and autonomous vehicle applications”

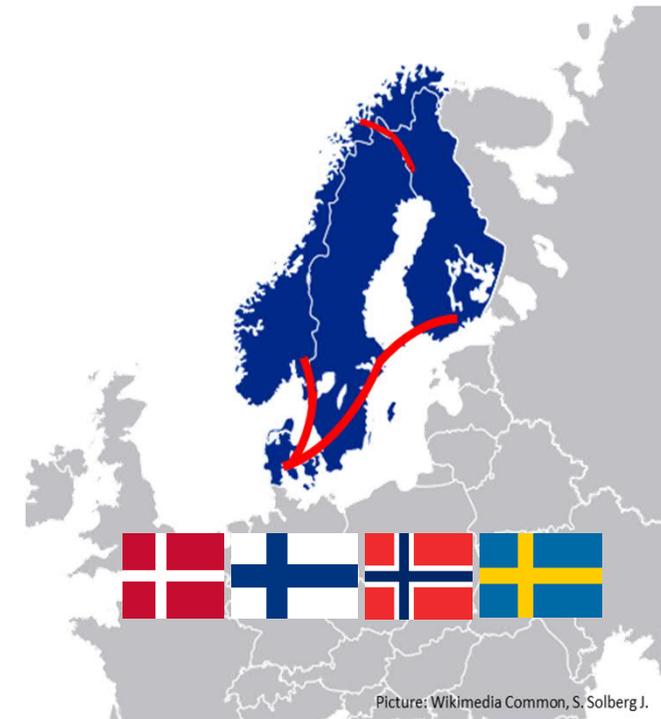
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Nordic
WAY 2 

 C-ROADS



Picture: Wikimedia Common, S. Solberg J.

The presentation material from the Virtual ITS European Congress November 9th and 10th 2020.

The beef for the businesses in C-ITS.

Service provision ecosystem companies' perspectives and lessons learned from NordicWay2 C-ITS deployment pilots.

Dr. Petri Mononen, Principal Scientist, VTT Ltd. Finland

PS1187



Whats, whys and hows.

Economically robust, resilient and viable deployment of C-ITS services cater for a multitude of positive impacts (to green agendas and wider societal goals, for cities, regions and nations)

For UN SDGs 2030, C-ITS is relevant at least for goals SDG3, SDG9, SDG 11, SDG 12 and SDG13

In European Green Deal, automated and connected mobility & smart traffic management systems will help make transport greener.



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Whats, whys and hows.

C-ITS deployed fast but technology-push is dominant - limited attention to the value and for 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.



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

other groups looked at user acceptance, technical aspects, socio-economic impacts and application in the logistics domain

Foci on start-up phase challenges and visions of scale-up

Data collected mainly in workshops + some written input



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

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.



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?



Findings – ramp up challenges.

Just some highlights:

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

Data quality issues

Service coverage issues (temporal & geographical)



Findings – pains, gains, commitment.

Integrator pain

Attracting users in the harshly competitive climate

Pains

Revenue streams from individual private users may be thin

Product development investment, data costs, etc.

Lack of skilled work force (capabilities, knowledge, experience)



Findings – pains, gains, commitment.

New business opportunities

Access to new data

Gains

Revenue growth and service portfolio expansion

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

Operational gains



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.



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)

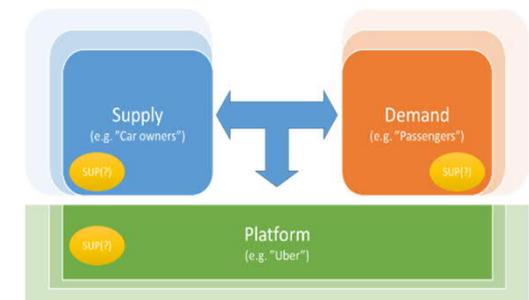
“Revenue streams from individual private users may be thin.”
(“Grouping synergy”: insurers, employers, etc. as primary clients?)

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.

| | | | |
|--|---|---|---|
| <p>“Follow that rabbit”</p> <p>Use a non-platform demonstration project to model success</p> | <p>“The piggyback strategy”</p> <p>Connect with an existing user base from a different platform and stage the creation of value units to recruit those users.</p> | <p>“The seeding strategy”</p> <p>Platform company acts as first producer, borrows value units or simulates platform activities creating value units that will be relevant to at least one set of potential users. Others will follow.</p> | <p>“The marquee strategy”</p> <p>Provide incentives to attract members of a key user set onto your platform. This is a single group of users who are so important that their participation can make or brake the success of the platform.</p> |
| <p>“The single-side strategy”</p> <p>Create a business around product or services that benefit a single set of users, later attract a second set of users who want to engage in interaction with the first set</p> | <p>“The producer evangelism strategy”</p> <p>Design your platform to attract producers, who can induce their customers to become users of the platform.</p> | <p>“The big-bang adoption strategy”</p> <p>Use one or more traditional push marketing strategies to attract a high volume of interest and attention to your platform.</p> | <p>“The micromarket strategy”</p> <p>Start by targeting a tiny market of members already engaging in interactions, in order to provide matchmaking characteristics of a large market</p> |



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?”



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



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.

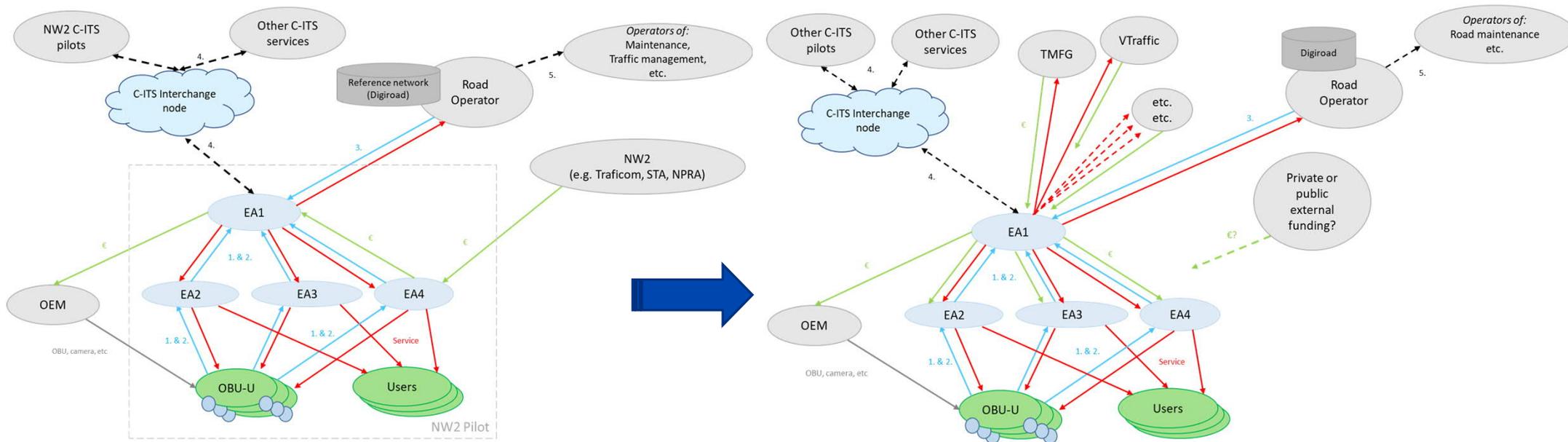


Final results to be published later this year.



NordicWay 2 deliverable «Evaluation Report», including also the other evaluation perspectives.

2020 2025 ... ➔



Thank you!

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