

NordicWay 2 Cellular C-ITS Corridor

User acceptance of C-ITS



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Objectives

Research questions

Indicators

Which C-ITS services/messages are relevant in Nordic conditions?	Relevancy
Which C-ITS services/messages are feasible to deploy in Nordic conditions?	Feasibility & barriers
What is the acceptance of the systems?	Acceptance
What is the willingness to use?	Willingness to use



Method

- Harmonised on-line survey (FI, SE, NO, DK)
- Data collection mainly 04/2020
- Over 4000 responses
 - Overall a representative sample of drivers
- Analysis driver groups
 - Mileage, age, gender, technology adoption



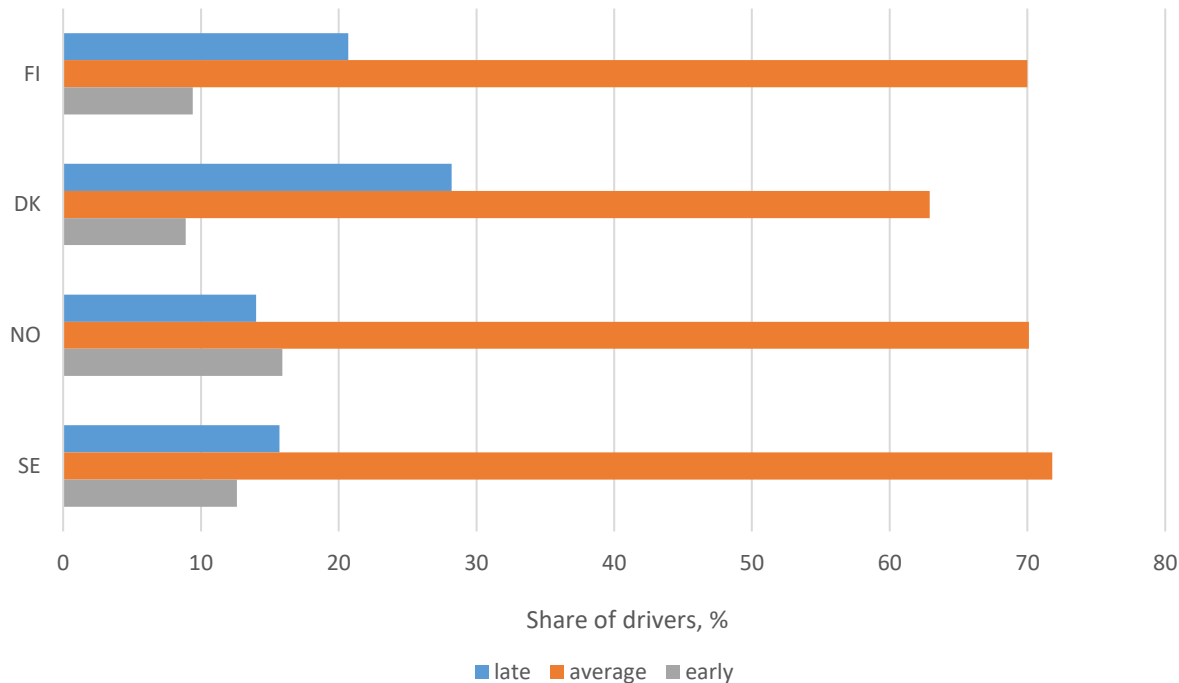
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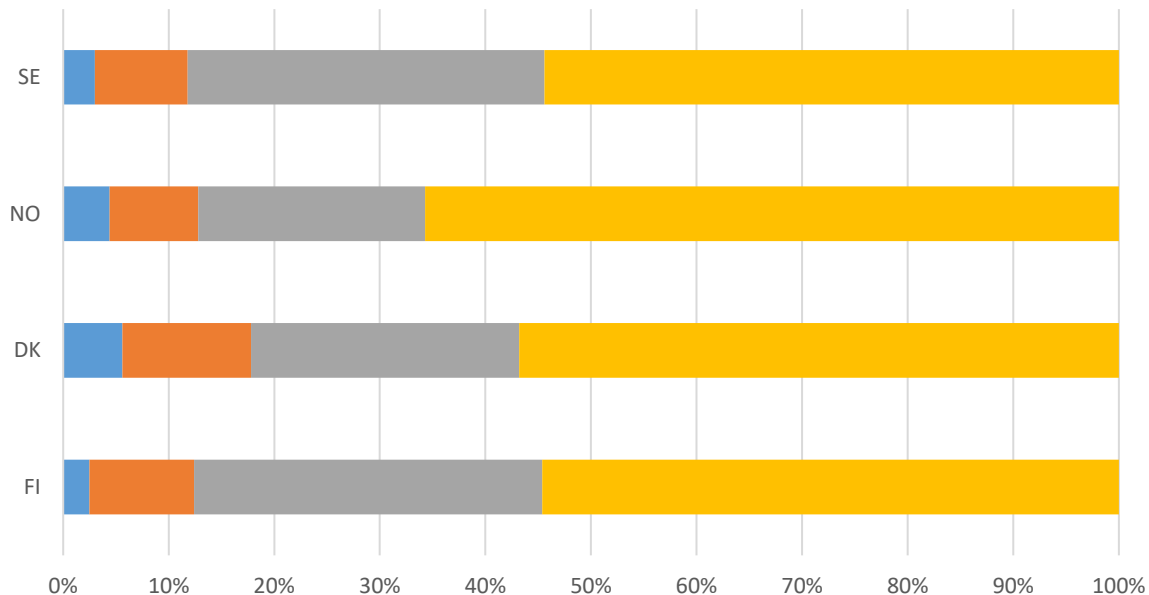
Technology adoption







Technology adoption



Awareness of C-ITS services



-  I know these services well and have used them myself
-  I am familiar with these services but I have not used them by myself
-  I am familiar with these services to some extent
-  I have not heard about these services before



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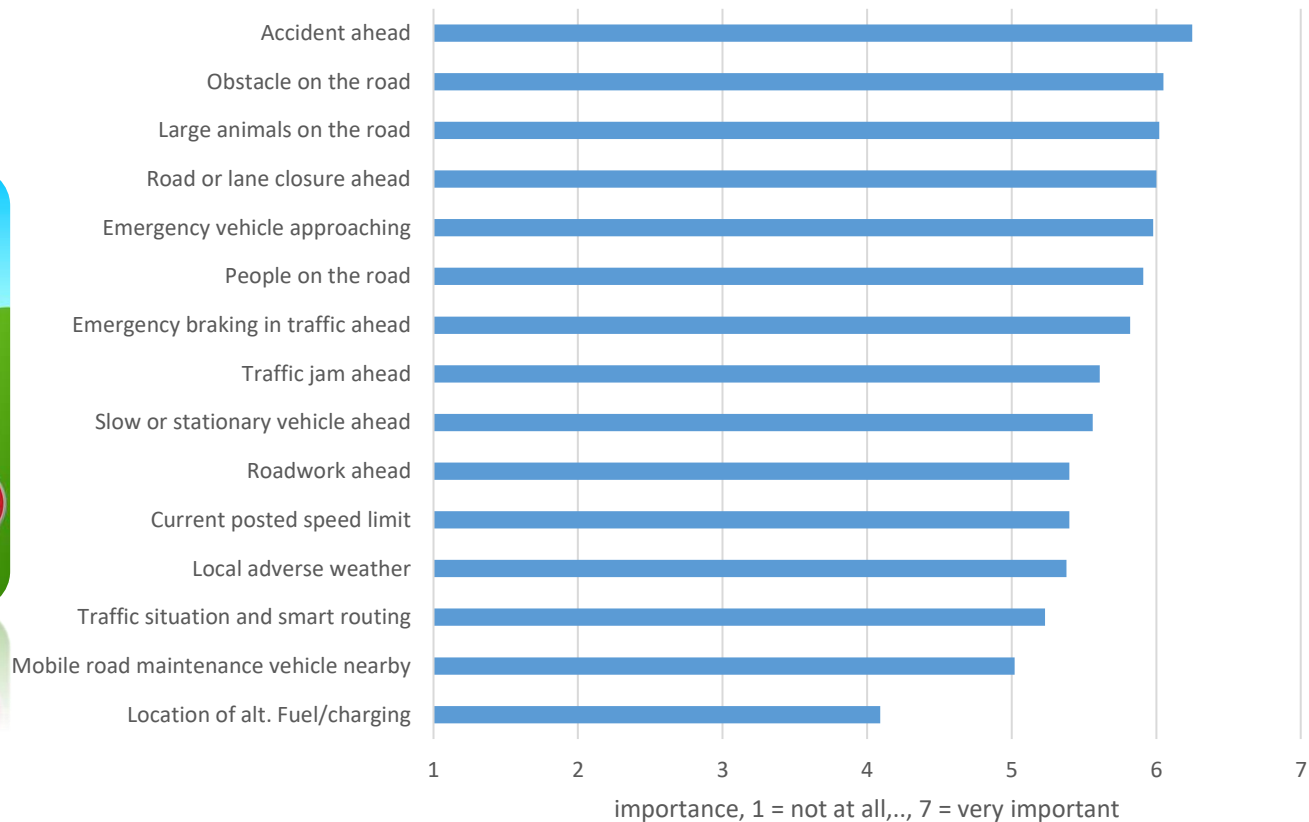
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Awareness per driver groups

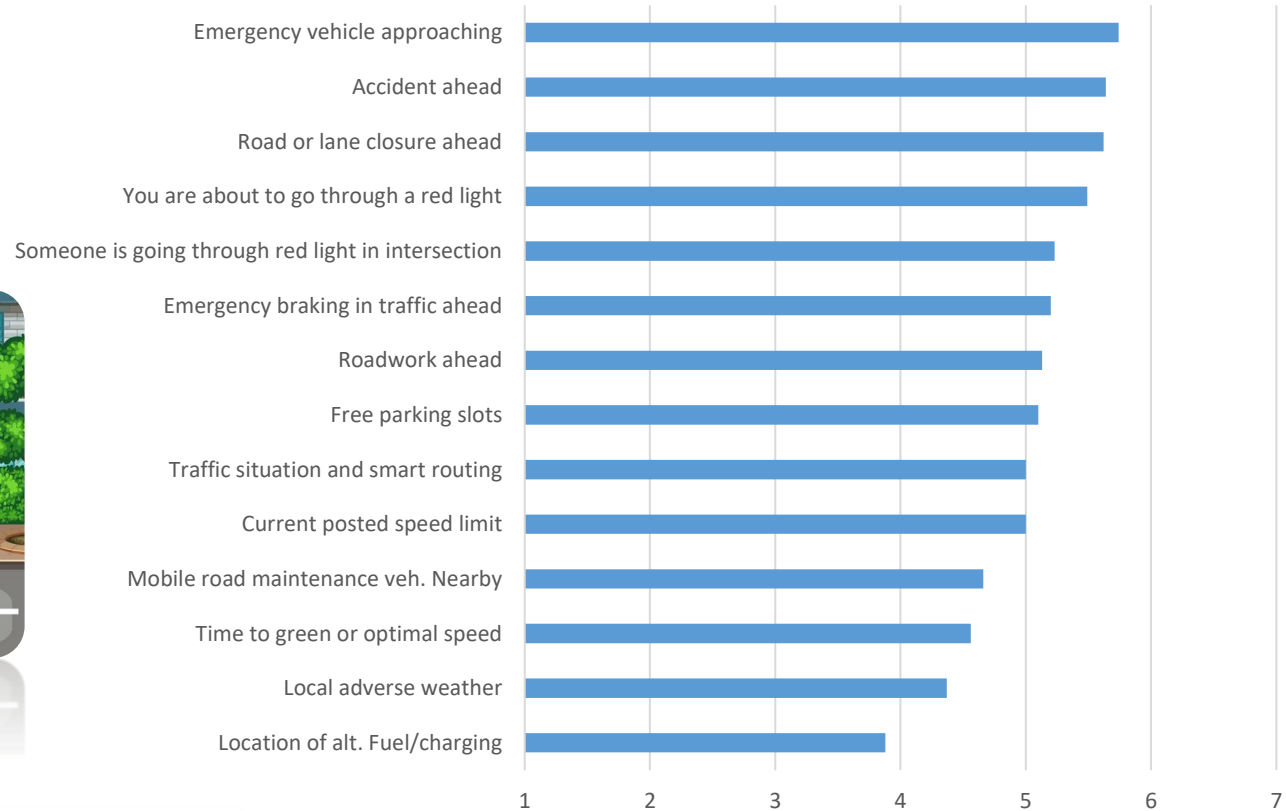
- Gender:
 - Male drivers more aware than female
- Age:
 - Awareness declined with age
- Mileage:
 - Awareness increased with mileage
- Technology adoption:
 - Early adopters more aware than other groups



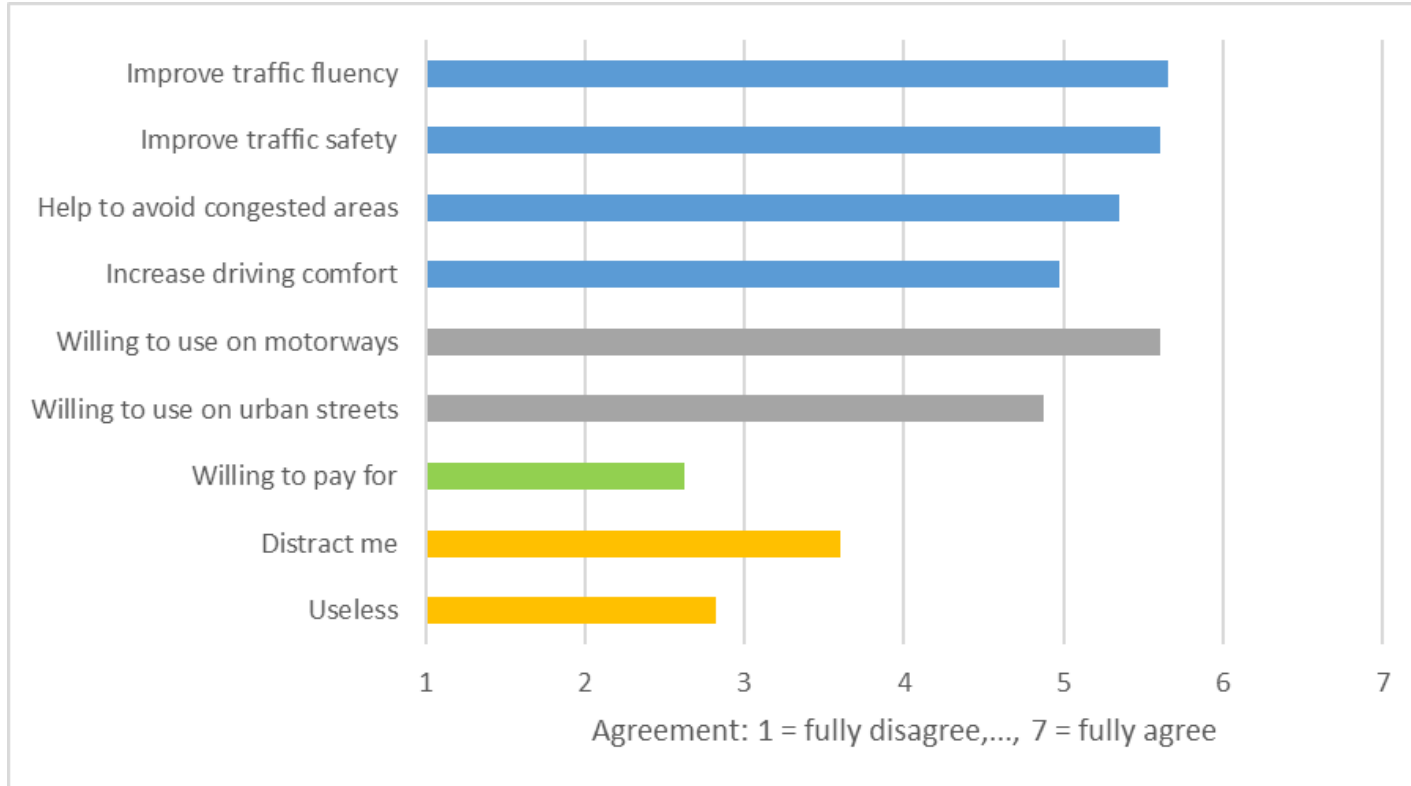
Importance of information, main road and motorways



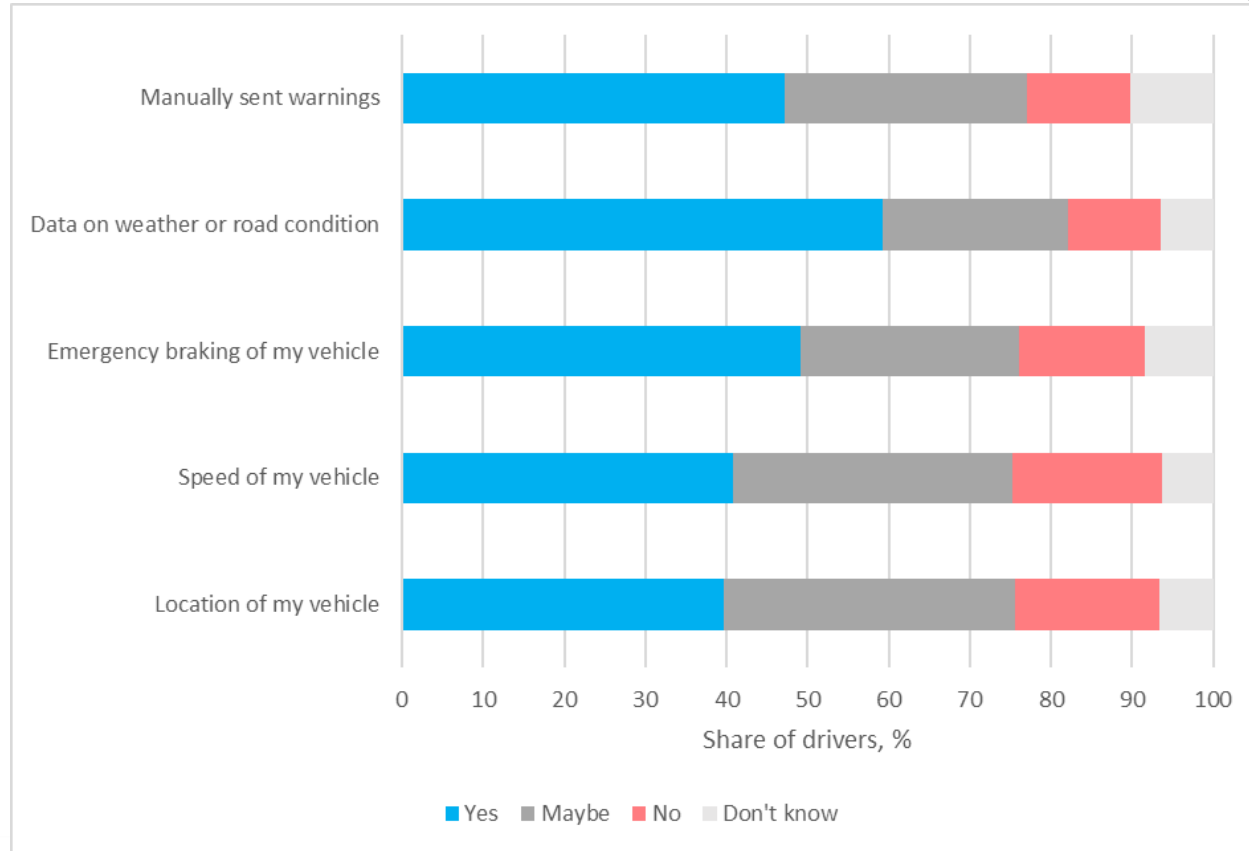
Importance of information – urban streets



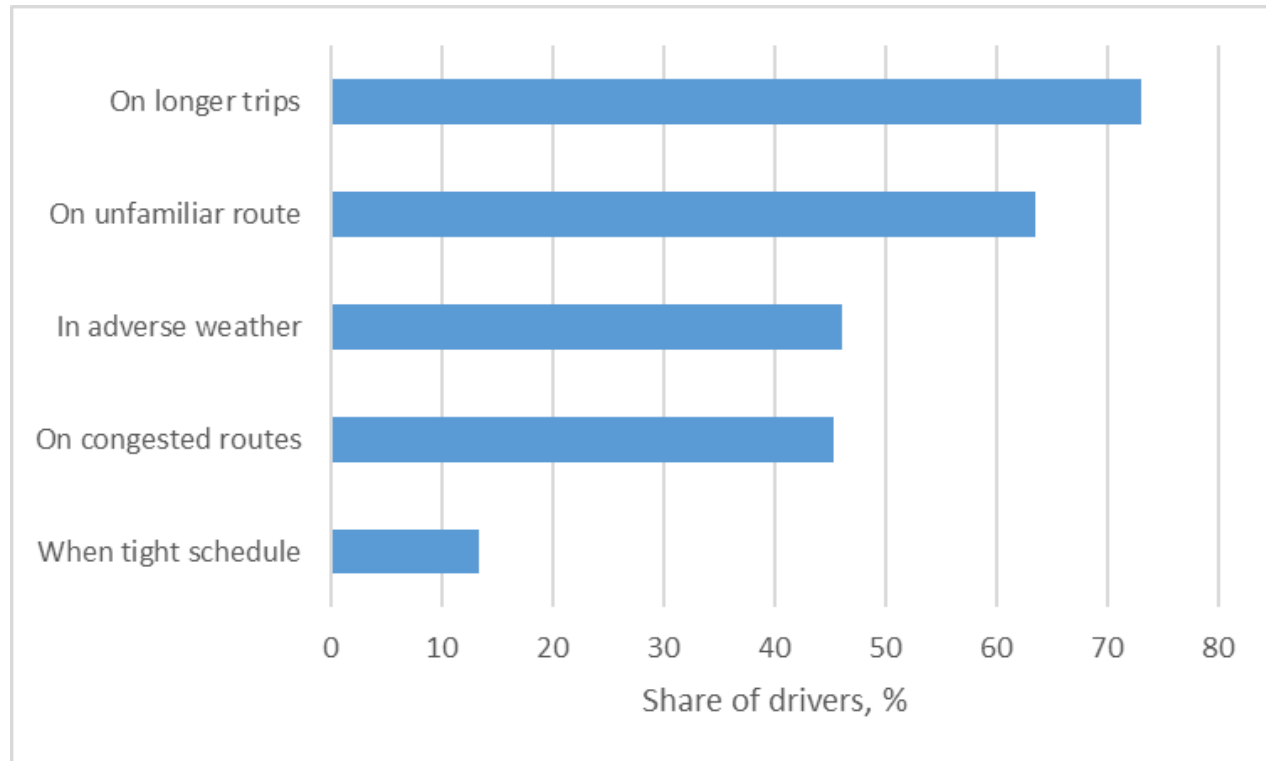
Opinions of C-ITS services



Willingness to share information for C-ITS services



When would drivers use the C-ITS?



Cross-border issues

- On average 45% of Nordic drivers drive abroad.
 - This varies from 28% of Finnish drivers to 60% of Norwegian drivers.
 - The average score for the importance of having the C-ITS service available also abroad was 5.4 on a scale of 1–7 for drivers who indicated driving abroad.
- The countries where this use abroad would be relevant included the other Nordic countries (73–95% depending on the country) and
- Central Europe (45–64%) for all countries. Also, Southern Europe was considered important by relatively many (34–44%).
- However, the Baltic countries and Russia were considered more important by Finnish drivers (58% and 16% respectively) than by drivers of other countries (1–5%).



Conclusions

- C-ITS services were considered relevant and the acceptance was high.
 - It must be bared in mind though that most of the drivers (54–66%) had never heard of C-ITS services and only 3–6% had used these services by themselves.
 - Thus, even if there is acceptance for those who know or are informed about these services, the overall awareness is still rather low.
- In addition to lack of awareness, also the lack of willingness to pay may become a barrier for deployment of the services.
- It is also important to note, that since so few drivers had own experience of the services, the results should be considered indicative, and later when services become more widely known and used, issues, such as HMI, may become relevant for the acceptance and willingness to use.

