



NAPCORE & C-Roads

Data sharing & C-ITS

Sylvain Belloche, on behalf of Marie-Christine Esposito

9 November 2023

08:45-10:00



Co-funded by
the European Union

NAPCORE / C-Roads Cooperation Agreement

- Signed at the ITS Congress in Lisbon – May 2023



NAPCORE / C-Roads

Objectives of the Cooperation Agreement

- Discuss the role of C-ITS and NAPs to support mobility services and future developments in the mobility domain
- Jointly work on processes and procedures to ensure outmost benefits by linking NAPs and C-ITS
- Join forces to align and increase data quality, usability and standardisation to guarantee a functioning exchange of information
- Identify actions needed to achieve these objectives, also going beyond the scope of undergoing work of both platforms

The C-Roads Platform and NAPCORE agree to jointly:

- Bring clarity on how the C-ITS ecosystem and the NAP ecosystem are linked to each other and how they could complement each other
- Facilitate knowledge sharing and create a common understanding about
 - data quality and criteria as well as bringing such quality frameworks into practice
 - the role of data in traffic management processes (e.g. using the same data for several services, processing of data for traffic management purposes, etc..)
- Analyse the groups of standards in NAPCORE and C-Roads and identify the best use for supporting various mobility networks and their services (including data)

The C-Roads Platform and NAPCORE agree to jointly:

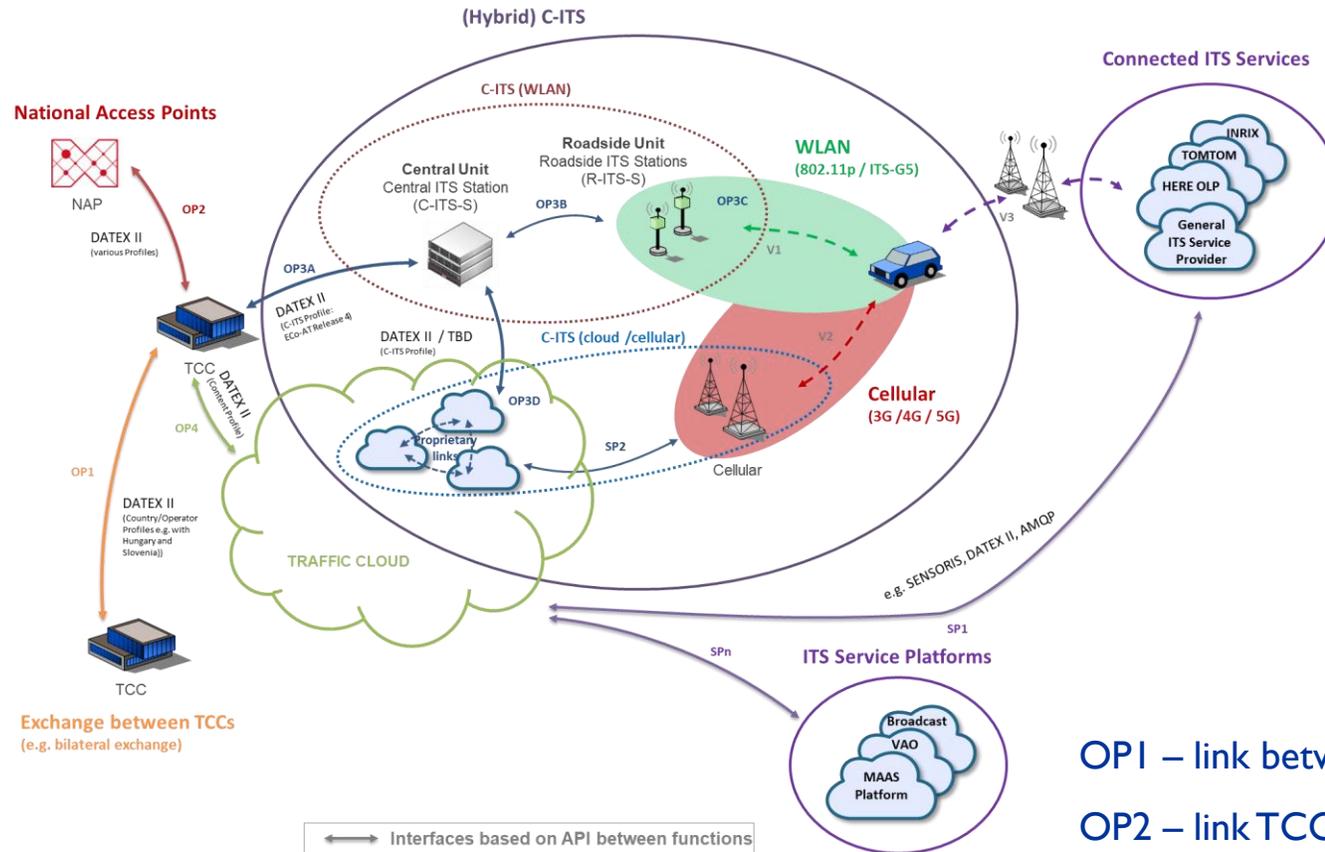
- **Bring clarity on how the C-ITS ecosystem and the NAP ecosystem are linked to each other and how they could complement each other**
- **Facilitate knowledge sharing and create a common understanding about**
 - data quality and criteria as well as bringing such quality frameworks into practice
 - the role of data in traffic management processes (e.g. using the same data for several services, processing of data for traffic management purposes, etc..)
- **Analyse the groups of standards in NAPCORE and C-Roads and identify the best use for supporting various mobility networks and their services (including data)**

Linked Ecosystems

A: NAP – is linked to hybrid C-ITS elements e.g. lists brokers in a member state as link

B: NAP - is linked and provides services for C-ITS e.g. sample data sets – DENM, SPAT

C: NAP – is linked to C-ITS Network and supports it fully e.g. security of transmissions with common Root CA certificates for all brokers



OP1 – link between TCC’s
 OP2 – link TCC to NAP
 OP4 – Link to Traffic cloud
 OPx – many other links to service providers, platforms etc..

The C-Roads Platform and NAPCORE agree to jointly:

- Bring clarity on how the C-ITS ecosystem and the NAP ecosystem are linked to each other and how they could complement each other
- **Facilitate knowledge sharing and create a common understanding about**
 - data quality and criteria as well as bringing such quality frameworks into practice
 - the role of data in traffic management processes (e.g. using the same data for several services, processing of data for traffic management purposes, etc..)
- Analyse the groups of standards in NAPCORE and C-Roads and identify the best use for supporting various mobility networks and their services (including data)

Data quality

- Quality of Data is a really important for C-ITS services
 - Having good data quality ensure relevant displaying, relevant reaction from drivers
 - The position shall be precise till the lane for some services (Glosa...)
 - Position must be accurate for Autonomous Vehicle
 - Events shall be real
 - Dynamic updated maps element are needed, especially for autonomous Vehicle
- Data quality is addressed whenever it is needed
 - In standards (data quality elements embedded)
 - In all appropriate part of C-ROADS specifications (requirements)
- Quality of data has several layers (position accuracy, time accuracy, probability of occurrence of the event, ...)
- Guaranteed the quality of data through the chain - Having same data from the first sender since the final user.

Need for collaboration

- Actual operations and deployment in Europe of C-ITS :
 - We have data enough “good” to deploy
 - Knowing the limit of our system is important
- We didn't tackle all the aspects of quality : works to be continued with NAPCORE
 - Examples :Validity of long messages
 - Validity of event in the future
 - Precision on the road
 - ...

The C-Roads Platform and NAPCORE agree to jointly:

- Bring clarity on how the C-ITS ecosystem and the NAP ecosystem are linked to each other and how they could complement each other
- Facilitate knowledge sharing and create a common understanding about
 - data quality and criteria as well as bringing such quality frameworks into practice
 - the role of data in traffic management processes (e.g. using the same data for several services, processing of data for traffic management purposes, etc..)
- **Analyse the groups of standards in NAPCORE and C-Roads and identify the best use for supporting various mobility networks and their services (including data)**