

Pedaling towards Cycling Data Standardisation

Cycling data, why, how and for who?

*Introductory workshop online
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I. WHAT IS THE GOAL

(Cristina BURAGA, Cerema FRANCE)

Our goal

- Giving advice or recommendation to NAPCORE on the necessity of **standards** with specific requirements for the **cycling data** by:
 - Launch workshop on this topic to determine cycling data types
 - Finding participants in the community of cycling data in Europe
 - Sharing use cases on cycling data to define the need
 - Working together to determine the requirements

European context

Global transportation **objectives**:

- Reduce the transportation impact on the environment and promote multimodal mobility
- Provide open and accessible mobility data, including active modes as cycling

=> *Cycling needs a **similar status** as a mode of transport like any other*

Diversity of **use cases** and actual resources for cycling:

- Different travel types: utility trips (home-work, deliveries), leisure (relaxation, sport, tourism)
- Various infrastructures: segregated cycle routes, on-road/on-path shared with vehicles/pedestrians

=> *Speak the **same language**, without erasing the specificities of each region*

And this is where NAPCORE can intervene!

2. WHAT IS NAPCORE AND HOW IT CAN HELP

(Cristina BURAGA, Cerema FRANCE)

NAPCORE project

NAPCORE (National Access Point Coordination Organisation in Europe):

- **Coordination** of NAPs (for more than 30 mobility data platforms across Europe)
- **Harmonization** of data standards (for interoperable C-ITS services)

*=> Focus on new relevant topics, as **cycling data** (Ambassadors)*

Ambassadors for cycling data in NAPCORE and associated **taskforce**:

- Communicate about cycling data progress and exchange internal/external information
- Act as a contact point for stakeholders and give more visibility to cycling

*=> Identify main topics on **cycling data** for: counting, infrastructure, parking, real-time*

Challenges for measuring active mobility

Define basic and complementary **indicators** to improve:

- Calculation of **modal shares** compared to motorized traffic (alternative transport)
- Classification of **user categories** for soft transport modes (GDPR compliance)

*=> Better consideration and quality of **cycling data** (static/dynamic) in NAPs*

Cycling data in traffic management:

- Recent, complex and heterogenous (fixed/mobile sources, variety of users and behaviors)
- Diversity of usages (real-time/delayed) for counting, routing, information, infrastructure, services...

*=> Need for data **standards** and importance of **harmonization** work in Europe*

But it is not so simple!

3. WHY WE DO NEED DATA

(Mirelle PETERS, NTM Netherlands)

Cycling as part of the ‘bigger picture’

- SUMP (Sustainable urban mobility plans)
- Reduce the transportation impact on the environment and promote multimodal mobility
- EU Declaration on cycling (signed 3th of April 2024)



“Sustainable urban mobility plans (SUMP) are the **cornerstone of European urban mobility policy**. The European Commission strongly recommends that European towns and cities of all sizes embrace the concept of **SUMPs**. These can improve the **overall quality of life for residents** by addressing major challenges related to for example congestion, air/noise pollution, climate change, road safety, and parking. SUMP also provide a framework for **innovation** and the integration of **new mobility services**.”

Challenges we experience today

- Health
- Economics
- Accessibility
- Environment
- Safety
- Social equity



Source: Goudappel, calculation made by Milieu Centraal based on number from CE Delft, NS en Ecotest

Why do we need the data?

- Connect modalities: first and last mile
- Traffic models
- Policy making
- Monitoring (policy)
- Increase bicycle use
- Development new routes
- Bike parking space Safety
- Measures (increase safety)
- Capacity bike lanes
- Prioritize projects
- ...

Information needed from bicycles

- Flow
- Routes
- Speed
- Origin – destination
- Modal split (normal bike, E-bike, speed pedelec, cargo bike), delays
- Location (parking),
- Time / duration (parking),
- Target groups (parking/ bike rental)
- Delay/waiting cross sections
- ...

4. Food for thought: initiatives on cycling data

Recap and Roadmap

POLIS and Cycling Ambassadors

Cycling data standardisation

Need harmonize standards for cycling data (static/dynamic) => **WHY**

- standards exist for certain domains, but not the same for all countries
- adapt standards to use cases, if specific need or open innovation

=> *(EU) ITS Directives (MMTIS, RTTI), Declaration on cycling*

Cycling community (technical and strategical stakeholders) => **WHO**

- analyze requirements with respect to cycling data and cycling infrastructure data
- collect relevant use cases, where standardisation would be an added value

=> *Cities, regions cooperation (experimentation, feedback, good practices)*

Actions internal/external (analysis, working groups) => **HOW**

=> *Workshops and conferences (NAPCORE, POLIS, associates)*

Cycling community

Standardisation from multiple perspectives:

- **Who collects and spread the data** (like Road managers (cities, regions))
- **Who use data for navigation, tools, insights** (like providers, industry)
- **Who need the data for the information** (for policy making, prioritizing projects, increase cycling, etc.)

All sorts of members are necessary in this process!



Roadmap

- **Setting up Taskforce:**
 - Cycling Ambassadors: Cristina Buraga (Cerema), Mirelle Peters (NTM)
 - Samuel Pierce (Cycling Industries Europe)
 - Jørgen Wanscher (Hermes Traffic Intelligence)
 - Remo Brouwer (NDW, working group WG4)
 - Tu-Tho Thai (ITxPT)
 - Stephen T'Siobbel (Ertico)
 - Ties de Groot (European Parking Association)
- **Finding use cases for 4 datatypes:**
 - Cycling counting data
 - Bicycle parking data
 - Bicycle infrastructure data
 - Realtime data for cyclist (road works, disruptions, etc.)
- **Setting up working groups for those 4 datatypes**

Next time in May

- Goal is to collect **use cases** on the 4 data types to determine:
 - What can you use the data for?
 - Added value when standardized
- Please contact us when you want to contribute



Thank you for your attention!



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