

## **EU EIP – European ITS Platform**

### **Reference Handbook for Harmonised ITS Core Service Deployment in Europe**

**Concluding DATEX II PSA webinar, 09.06.2021**

# The European ITS Platform (EU EIP)

## Who we are

Road authorities and operators from all over Europe cooperating on ITS corridors and EU ITS Platform (EU EIP)



## What we do

Harmonise and deploy European core ITS services in TEN-T network

Support implementation of the ITS Directive and subsequent Delegated Regulations

Collaborate on improving corridor performance

Develop & maintain harmonisation tools and processes

Stimulate dialogue with core actors in ITS domain

Plan and prepare for future ITS needs

## What we achieve

Reference Handbook for harmonised core ITS service deployment

Cross Corridor Cooperation Results

KPIs of ITS deployment/benefits

ITS Toolkit – Evaluation Library

NAP community building

Innovation Timelines and Deployment Roadmaps

Inform. services quality frameworks

Physical and digital infrastructure attributes for automated driving

How to automate road operators' own ITS

Integrating C-ITS into road operators day-to-day business

ITS Forum

# The Reference Handbook for Harmonised ITS Core Service Deployment in Europe



- An essential basis for a harmonised and cross-border implementation of ITS services.
- Comprises a series of guidance and advice for use by road authorities and operators.
- Assists Member States in taking a broadly similar approach.
- Written by ITS practitioners and experts.
- Content originally drafted and adopted by Member States in 2012, partial update in 2015.
- Major revision to reflect changing requirements.


# Drafting process




Expert Groups of Activity 2  
„Monitoring and  
Dissemination“




**Contributors**




- EU EIP Activity 2: Best Practice Collection and Cross Corridor Cooperation tasks



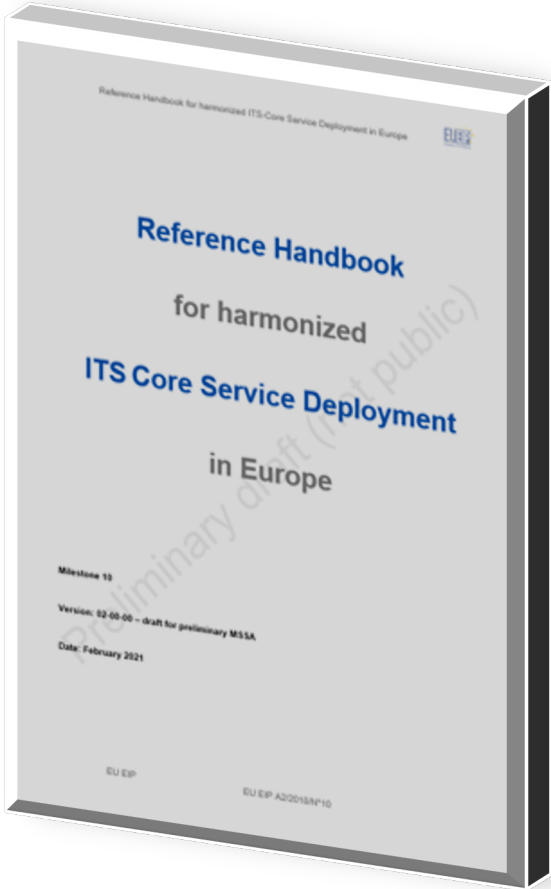
- Further EU EIP activities  
(Evaluation, interfaces for data exchange, ...)



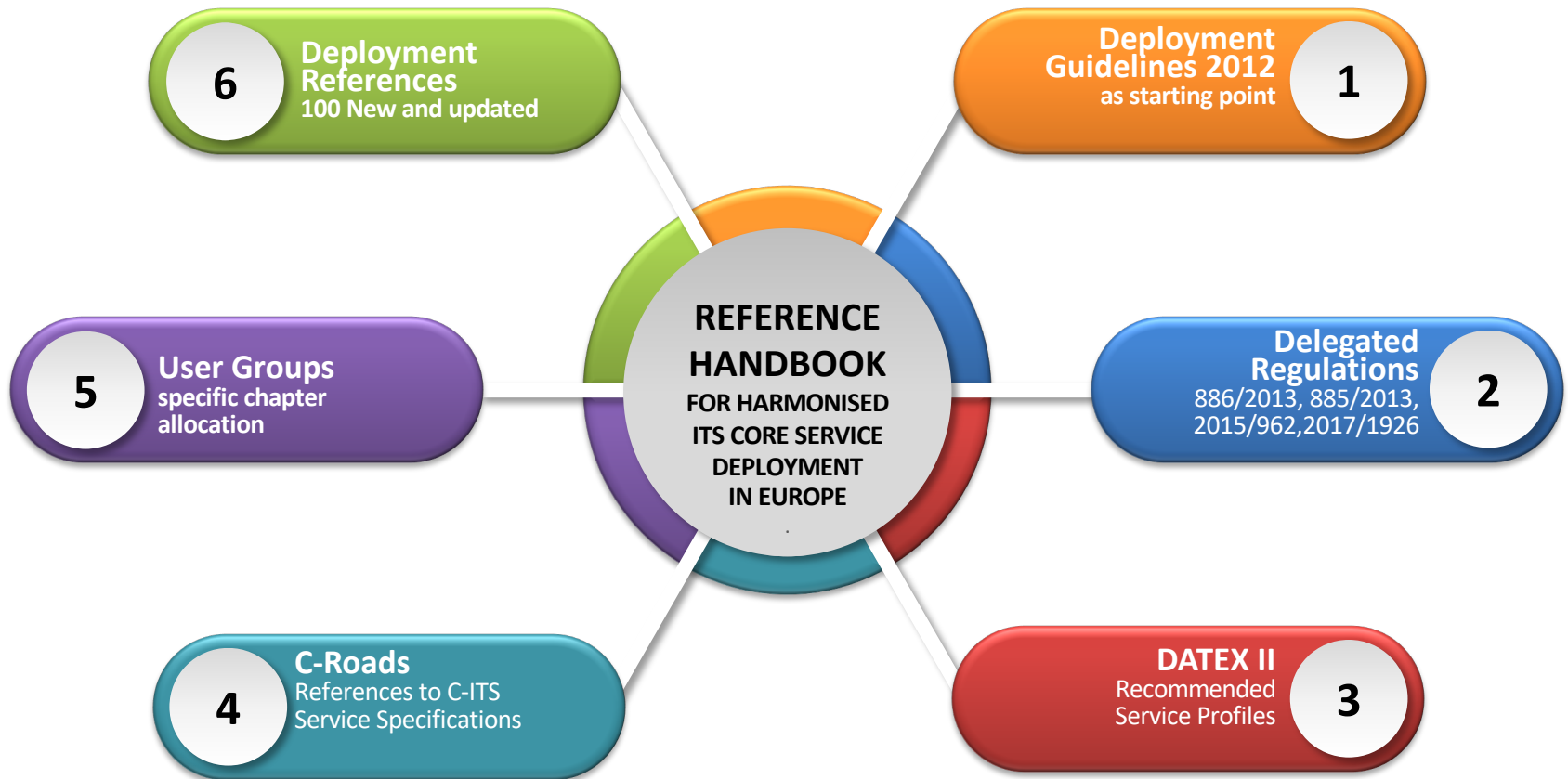
- C-ROADS: References to C-ITS service spec.



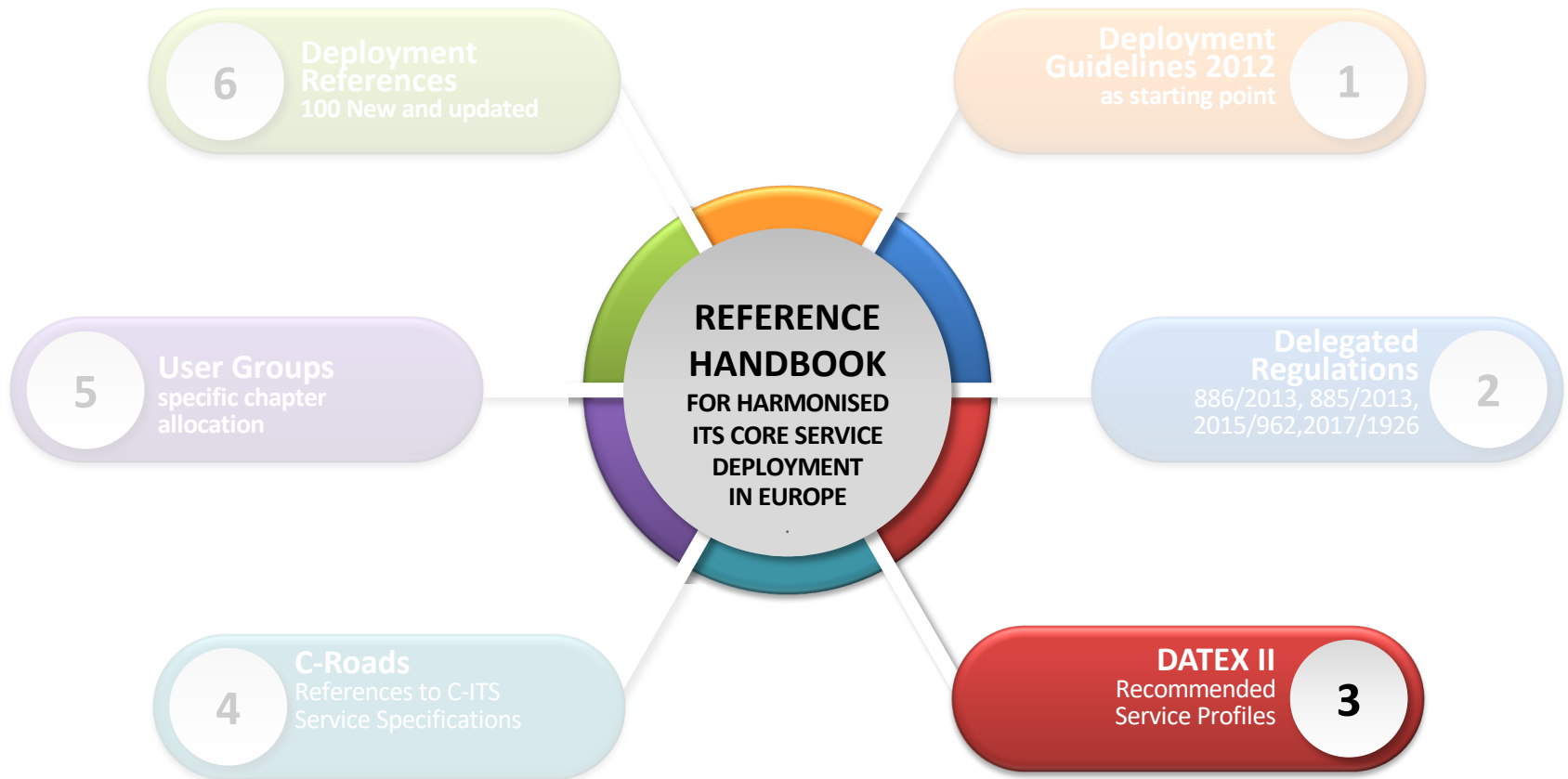
- DATEX II: Development of Recommended Service Profiles for all ITS core services.



# Reference Handbook: New features



# Reference Handbook: New features



In cooperation with DATEX II PSA:

- Recommended Service Profiles for every ITS Service developed
- Freely available on the DATEX II Webpage: <https://webtool.datex2.eu/wizard>
- Linkage via Interface Requirement and Information provision standards

e.g. for the Variable Speed Limit service:

**Interface Requirement**

**IFR1:** Variable Speed Limit service **must** provide at interface 1 [...]information on the current speed limit including the following elements [...]:

- Sign ID
- Active Speed Limit (display value, shown on the variable sign)
- Location of the Speed Limit sign (coordinate information for mapping)
- Timestamp
- Location reference where speed limit begins (e.g. road address, direction)
- Where necessary, the type of vehicle concerned by the Speed Limit
- Validity (advanced)

**Information Provision Standard**

**IPS1:** If a Variable Speed Limit service is implemented at interface 1 (see IFR1), it must be profiled based on CEN/EN 16157-3 using the DATEX II Recommended Reference Profile for Speed Limits or any international machine-readable format fully compatible and interoperable with DATEX II.

<https://webtool.datex2.eu/wizard>

# DATEX II

1. Source    2. Selection file    3. Profile Selection

## Choose optional Recommended Reference Profiles

Select RRP profiles

Select RSP profiles

## Choose optional Recommended Service Profiles

- Forecast and Realtime Event Information
- Traffic Condition and Travel Time Information
- Speed Limit Information
- Road Weather Information
- Multi-Modal Traveller Information
- Intelligent and Secure Truck parking
- Dynamic Lane Management
- Variable Speed Limits
- Ramp Metering
- Hard Shoulder Running
- Incident Warning and Management
- HGV Overtaking Ban
- Traffic Management for Corridors and Networks



← → ↻ 🏠 🔒 https://docs.datex2.eu/profiles/rsp/roadweatherinformation/index.html 📄 ⋮ ☆ 🗑️ 📄 ☰

**DATEX II** 🔍 SEARCH CONTENTMODEL ▾ EXCHANGE ▾ DEVELOPERS ▾ MODELLERS ▾ DATEX II ARCHIVE ▾ DOWNLOADS ▾

🕒 Version 3.1 ▾

**User support**

- Level 0
- Level 1
- Level 2
- Level 3

**Profiles**

- Introduction
- Recommended Reference Profiles
- Recommended Service Profiles

**Downloads**

- DATEX II Version 3.1
- D2Light
- ParkingLight

**Exchange 2020**

- Specification Rationale
- User Guide
- Platform Independent Model
- Platform Specific Model
- Information Delivery

## DATEX II packages addressed by the Road Weather Information RSP

This RSP tailors the following DATEX II model packages:

- *Common* – commonly used DATEX II data elements used by the tailored packages below (CEN/EN 16157-7:2018)
- *LocationReferencing* – the location references, tailored for road weather information (CEN/EN 161578-2: 2019)
- *Situation* – the DATEX II general traffic event packages tailored for road weather information (CEN/EN 16157-3:2018)
- *RoadTrafficData* – the DATEX II package for sensor data publications (currently balloted to be published as CEN/EN 16157-5:2020)

The *Situation* package is used for publishing event-type information for weather related road conditions as a *SituationPublication*. Instances of *WeatherRelatedRoadConditions* may contain *RoadSurfaceConditionMeasurements*, see Figure 1.

```

classDiagram
    class WeatherRelatedRoadConditions {
        +<<class>> WeatherRelatedRoadConditions
        +<<data type>> weatherRelatedRoadConditionType
        +<<data type>> weatherRelatedRoadConditionTypeNum [1..*]
    }
    class RoadSurfaceConditionMeasurements {
        +<<class>> RoadSurfaceConditionMeasurements
    }
    class Conditions {
        +<<class>> Conditions
        +<<data type>> drivingConditionType
        +<<data type>> drivingConditionTypeNum [3..4]
    }
    WeatherRelatedRoadConditions <|-- RoadSurfaceConditionMeasurements
    WeatherRelatedRoadConditions <|-- Conditions
    
```

## Summary and next steps

### ▪ DATEX II Contribution:

- Recommended Service Profiles
- Documentation
- Available at [www.datex2.eu](http://www.datex2.eu)

### ▪ Reference Handbook status and next steps:

- Finalisation of printable/PDF version
- Development of web-based version
- Simultaneous release in Autumn
- Dissemination

THANK YOU FOR  
YOUR COLLABORATION!

DATEX II &



Image source: [www.cembi.org](http://www.cembi.org)