

Promoting Intelligent Transport Systems (ITS) in Europe through Cross-Border Cooperation

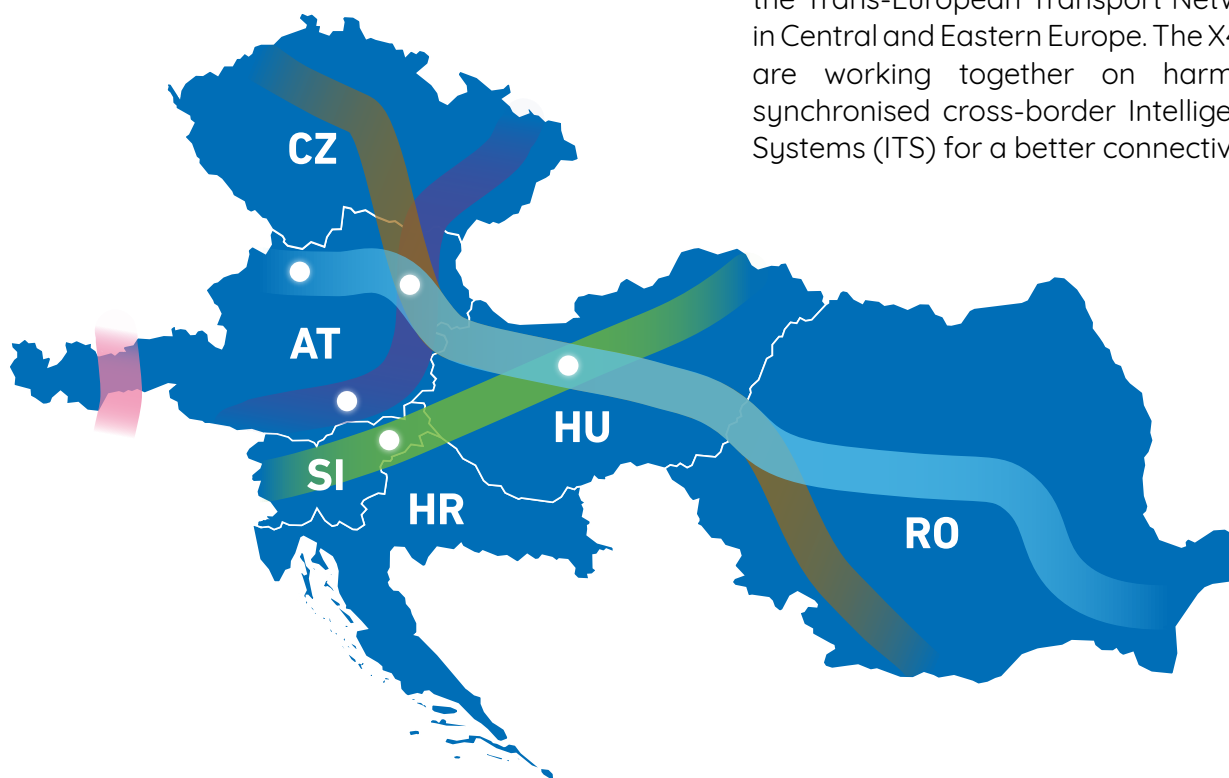
About X4ITS

- **28 partners**
- **6 Member States** Austria, Croatia, Czech Republic, Hungary, Romania, Slovenia
- **Runtime** 2023 - 2027
- **Focus** cross-border traffic, harmonised (C)-ITS, data exchange
- **Budget** € 64,786,741.00
- **EU contribution** 50 %

Background and embedding of X4ITS

The European ITS landscape is characterised by different national approaches to the implementation of the ITS Directive and different speeds in the implementation of ITS services and C-ITS applications. In Central and Eastern Europe, the fragmented development is also characterised by geographical peculiarities - such as the coexistence of smaller countries with different languages.

Cross for ITS (X4ITS) strengthens the corridors of the Trans-European Transport Network (TEN-T) in Central and Eastern Europe. The X4ITS partners are working together on harmonised and synchronised cross-border Intelligent Transport Systems (ITS) for a better connectivity in Europe.



TEN-T corridors in Central and Eastern Europe

X4ITS Member States and partners are committed to make data available, fostering cross-border collaboration which should ultimately lead to high-quality end-user information services. X4ITS is one of the projects under the umbrella of the Connecting Europe Facility (CEF). As an implementation project, X4ITS focuses on the standardisation of digital applications along five TEN-T corridors that run through Austria, the

Czech Republic, Hungary, Croatia, Romania and Slovenia but is in close contact with other European implementation and coordination projects. Part of X4ITS is an extended cooperation with NAPCORE and a harmonised integrated C-ITS implementation based on the C-Roads specifications. Increased cooperation was initiated with implementation projects in neighbouring corridors such as MERIDIAN and MATIS.

C-ITS implementations for a safe and efficient traffic management

Objectives of the X4ITS project

With the help of the implementation of innovative (C)-ITS applications in the course of the project, cross-border mobility is to be improved, the availability of data increased and the exchange of data optimised. In contrast to the predecessor project CROCODILE, not only the high-level road network is being considered, but also C-ITS use cases in an urban and multimodal context. Several cities (Vienna, Linz, Salzburg, Klagenfurt, Budapest, Ljubljana) are also involved.

C-ITS deployment in cities

The X4ITS project involves the implementation of C-ITS applications in several cities, with a focus on use cases that accelerate public transport and increase road safety. Each city will have ITS applications tailored to its needs, e.g. in Klagenfurt, usecases for the prioritisation of public transport will be realised. In Vienna, intersections will be equipped with roadside units. Linz will equip approximately 25 junctions and road sections with C-ITS use cases. Ljubljana plans to install at least 100 roadside units at the two main road entrances. Budapest will implement C-ITS services in the city area.

Technical workshops

In X4ITS, several technical workshops are planned, continuing the exchange of knowledge and experiences among corridor participants and external stakeholders, which already started in the previous CROCODILE projects. The first technical workshop took place in close cooperation with the C-Roads platform in May 2024, regarding the topic **C-ITS and Urban Use Cases**. C-Roads supports cities with implementing harmonised and interoperable deployments in accordance to the C-Roads C-ITS specifications. Input is also collected and shared with other working groups within C-Roads. Urban C-ITS use cases were presented from the cities of Kassel, Graz, Vienna, Győr and Zalaegerszeg. Moreover, planned implementations of X4ITS were introduced and how these cities can benefit from more experienced cities.

Key findings of the first workshop

- ✓ avoid focusing on too many use cases at the beginning
- ✓ have a strong commitment of politicians in the city with outlining the positive impact of the technology
- ✓ share experience and knowledge among others

Key figures

108
roadside-units
planned

50
on-board-units
planned

200
variable message
signs implemented
or replaced

724
closed-circuit television
cameras planned

1138
planned kilometres
of TEN-T roads
with roadside
data collection

643
planned kilometres
of secondary roads
with roadside data
collection

5
planned urban
hubs with digital
infrastructure

50
planned kilometres
of secondary road
network with digital
infrastructure