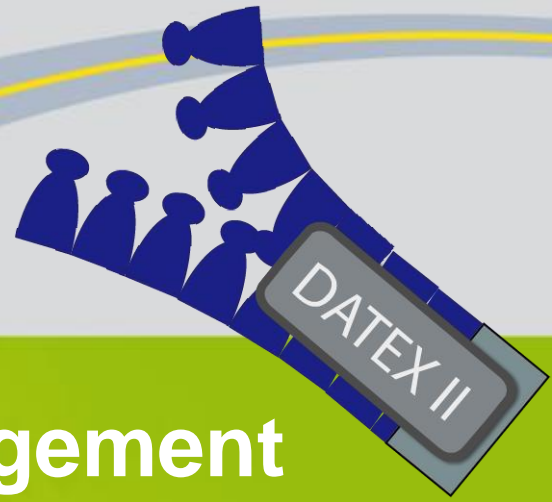




EasyWay



# **PROMET – PRO**ject for the **M**anagement of **E**uropean **T**raffic – DATEX II in Slovenia

Technical Session 2

**Ulrich Zorin, M.Sc.**

**DARS, d.d., Motorway Comapny in the Republic of Slovenia**

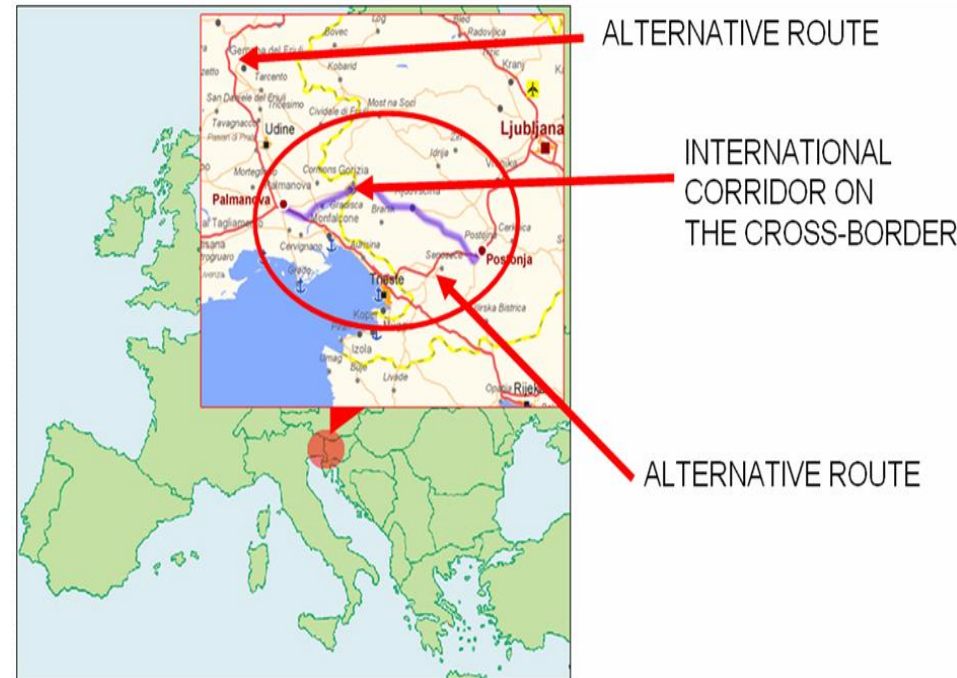
**DATEX II Forum Berlin**

**March 16/17 2010**

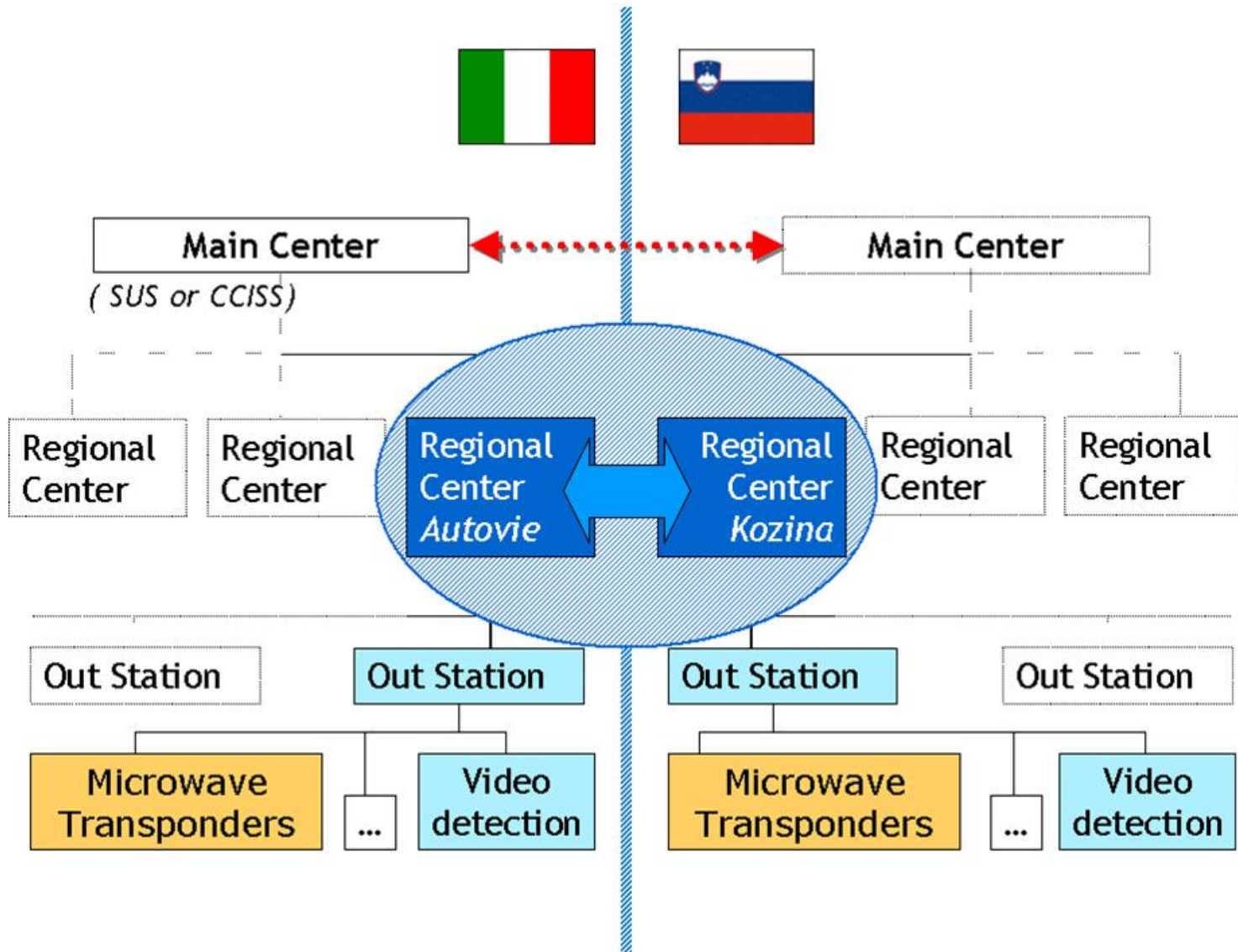
# Background of the project PROMET



- PROMET is a project of common interest as a part of Trans-European infrastructure networks (TEN-T)
- The project improves traffic flow and safety in the cross-border link between Italy and Slovenia
- PROMET promotes coordinated procedures for traffic management, traffic monitoring and information services to drivers
- The cross-border motorway is a crucial link on EU Corridor V, characterized by high traffic flows (freight and passengers) and seasonal peaks
- The two existing Traffic Control Centres in Palmanova (Italy) and Kozina (Slovenia) are the basic nodes for the planned interventions



# Project area



- reduced congestion time
- increased information on traffic events and foreseen travel times
- higher cooperation between the cross-border Traffic Management Centers and authorities to manage the crisis situations
- accord on the system/service developments at local level between the two different countries with the aim to make them really interoperable and compatible both from the technical and users point of view

- Area 3 of PROMET: develop and validate a Data Exchange System between the Traffic Control Centers of Kozina in Slovenia and Palmanova in Italy
- connection between a DATEX I (Italy) node and a DATEX II node (Slovenia)

trafficdesign PROMET Co-financed by the Trans European Transport Network

Zemljevid Satelit Hibridni pogled

Podatki Legenda

Dodatno

Osveži mapo Zbriši vse dogodke

Potovalni čas

Prikaži Odstrani

Relacija
NANOS - VRTOJBA
VRTOJBA - NANOS
allacciamento A4 - Udine Sud
Udine Sud - allacciamento A4
Udine Sud - C.C. A23 Tronco 9-Autovie venete
Villesse - Palmanova
Villesse - Redipuglia
Trieste Lisert - Redipuglia

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This project also addresses the logical architecture of the system, considering how the Data Exchange could support new and integrated Traffic Management operations, in particular the recovery interventions in case of major traffic breakdowns.

This part follows the standard methodologies defined by the European ITS Framework Architecture, and also developed in the frame of the Italian ARTIST architecture.





The PROMET **Data Exchange system** is built upon two nodes, i.e. the Palmanova TCC in Italy, managed by Autovie Venete, and the Kozina TCC in Slovenia, managed by DARS.

Each of these sub-systems can act in the two directions as a client or as a server.

The following **interfaces** are considered for each node:

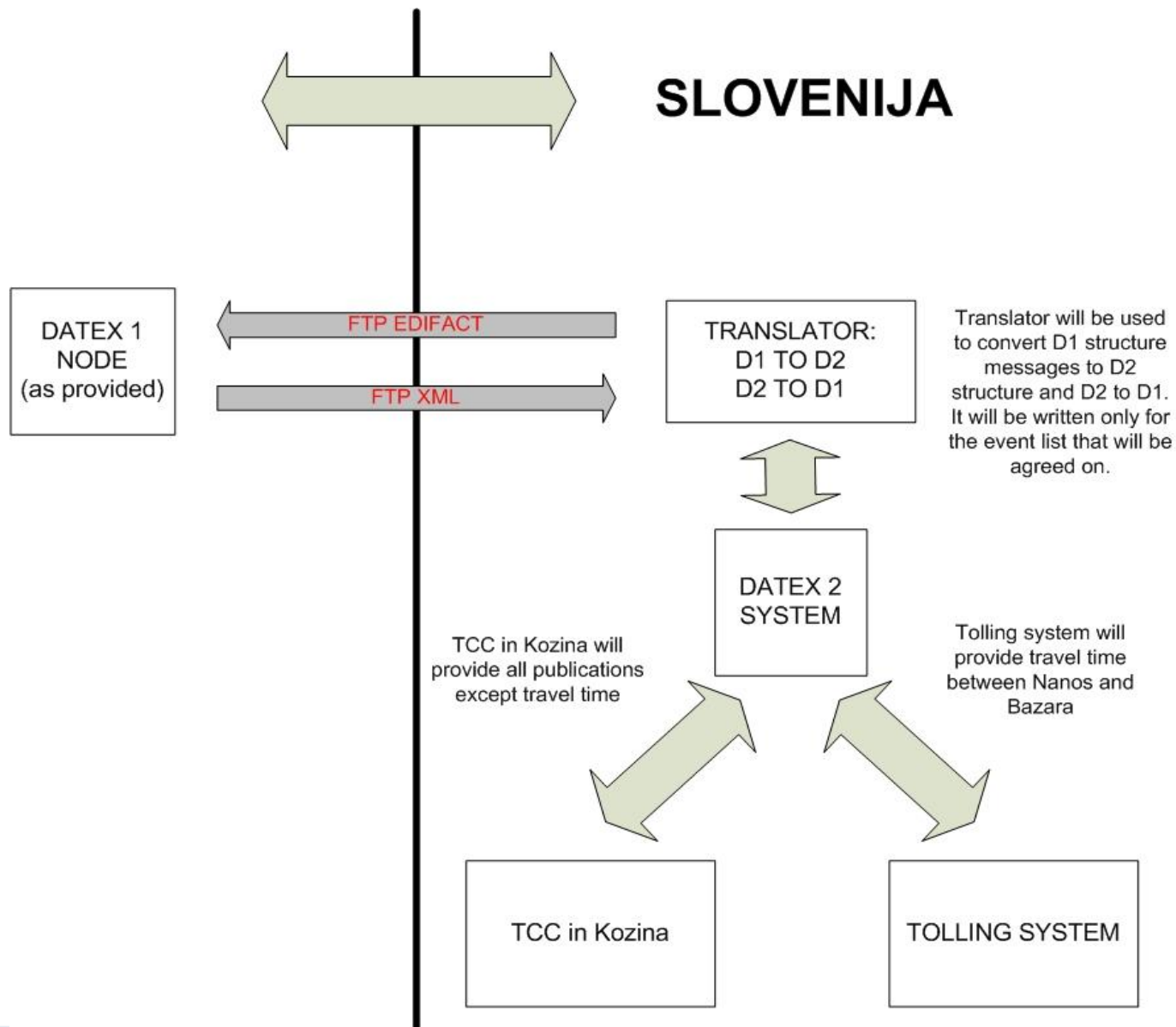
- Application interface
- Operator interface
- Communication interface
- Database interface

Therefore a translator for the specific PROMET events is included in the Data Exchange system.

The system accepted data from Italy in term of **XML files via ftp**, including traffic events. These XML files do not follow a standard format, but they consist of standard data according to the DATEX I model. The translator will be used to convert these XML files into data following the DATEX II model.

In the opposite direction, the system will provide data to Italy in term of **EDIFACT formatted data via ftp files**. Data as mentioned will be generated in two major systems and concentrated in the DATEX II node. The translator will convert all the data into **EDIFACT messages**.







## Updating of situation data

It is agreed that, when **one of the events changes, a new snapshot will be sent**. 'Non-active' events will not be sent; however when an operator decides to close an event, a message will be delivered automatically.

## Location reference system

It is agreed that the **ALERT-C method will be used** to specify the location of an event.

## Formats for data exchange

Traffic-design (DARS) will send Edifact messages for the events following the DATEX I data model. **The dedicated translator** (from DATEX I to DATEX II and viceversa) will be inserted by TD in Kozina, specifically for the events to be used in the project. Traffic-design (DARS) will accept XML files and convert them into DATEX II model.

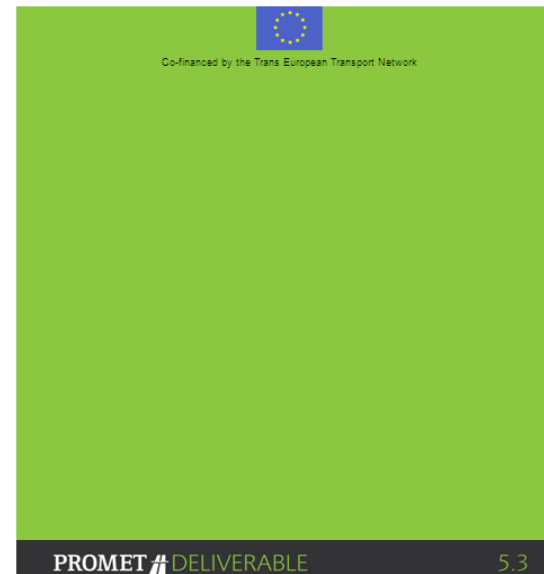
## Telecommunication

The communication over FTP. The link use a public IP address.

# Conclusions



- the integration of Traffic Management tactical operations across the border between Italy and Slovenia, between the operators Autovie Venete and DARS
- Data Exchange link connecting in a new way a DATEX I node and a DATEX II node
- the partners have agreed on the relevant scenarios, the event list to be exchanged, the communication formats and the logical architecture.
- a functional scheme has been defined, following the approach given by the European ITS architecture
- PROMET guidelines



**PROMET guidelines**

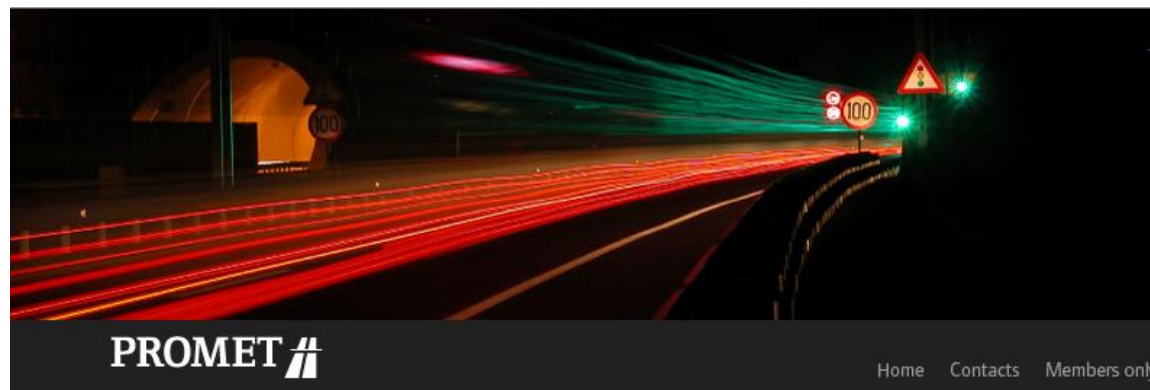
Version 0.1

15.12.2008



Thank you for your attention.

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Further information:

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