Geographical location

The CROCODILE corridor comprises road network elements of 13 Central and Eastern European countries with different network characteristics and crosses bi-national borders at more than 15 locations. Thus it ensures a coordinated approach towards traffic management and control as well as high quality traveller information services on the most important east-west road corridor in an enlarged Europe. The basis for the CROCODILE corridor is the existing TEN-T core network which was presented and published 2013. CROCODILE consists of three main TEN-T core network corridors and one additional corridor (Mediterranean) to fill the gaps:

- Baltic – Adriatic (Poland – Czech Republic – Slovakia – Austria – Slovenia - Italy)
- Rhine – Danube (Germany – Czech Republic – Austria – Slovakia – Hungary – Romania – Bulgaria)
- Orient/East-Med (Germany – Czech Republic – Austria – Slovakia – Hungary – Romania – Bulgaria – Greece - Cyprus)

Partners from Austria, Bulgaria, Croatia, Cyprus, Czech Republic, Germany, Greece, Hungary, Italy, Poland, Romania, Slovakia and Slovenia are working together to improve cross-border traffic and transport on the high road network in this area.

Contact

AustriaTech - Gesellschaft des Bundes für technologiepolitische Maßnahmen GmbH
Raimundgasse 1/6
1020 Vienna
Austria

Project coordination

Martin Böhm
martin.boehm@austriatech.at
P: +43 1 26 33 444-63

Wolfgang Kernstock
wolfgang.kernstock@austriatech.at
P: +43 1 26 33 444-29

DATEX II

David König
david.koenig@austriatech.at
P: +43 1 26 33 444-42

crocodile

European Commission

Austria *(coordinator)*

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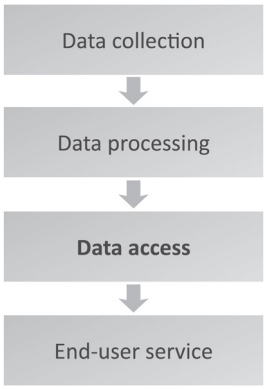
Overview

Within CROCODILE public authorities, road administrations and traffic information service providers of in total 13 European Member States are committed to set-up and operate data exchange infrastructure based on DATEX II. That infrastructure will be used to exchange data and information between all involved stakeholders, including private partners, with the goal to provide harmonised cross-border traveller information services along the whole corridor. A specific focus within CROCODILE will be on safety-related information services and truck parking information services.

Based on the EasyWay Deployment Guidelines (especially on DTX-DG01 - DATEX II) CROCODILE will mainly focus on the implementation of DATEX II notes for data availability and exchange as mentioned delegated regulations. To ensure data availability additional data collection infrastructure, relevant for road-safety and truck-parking information services, will be deployed on specific road sections along the CROCODILE corridor for collecting data needed to detect events or identify conditions. To ensure access to data CROCODILE Member States and partners will setup access points in accordance to mentioned delegated regulations. Finally exchanged data will be integrated in end-user services by CROCODILE partners as well as interested ITS Associations.

Objectives

Figure 1
The major activities of CROCODILE



By exchanging data via DATEX II between road operators and stakeholders of different countries including data necessary for the provision of safety critical road services and the information on available truck parking spaces CROCODILE partners are committed to the objectives of the ITS Directive and their resulting delegated acts. Here especially Priority Actions c (provision of road safety related minimum universal traffic information free of charge to users), and e (provision of information services for safe and secure parking places for trucks and commercial vehicles) will be covered by the final CROCODILE service.

In parallel, the deployment within the CROCODILE corridor also serves as preparation activity for implementations in accordance to Priority Action b (provision of EU-wide real-time traffic information services) and a (provision of EU-wide multimodal travel information services). In this respect the CROCODILE corridor deployments will support Member States and partners to carry out harmonised deployment while contributing to the policy objectives of the European Commission even after project finalisation. Additionally CROCODILE partners are committed to provide to the European ITS Platform Project (EIP) evaluation data necessary for analysing performance and contribution to the transport policy objectives concerned (i.e. safety, efficiency and environmental sustainability).

Member States involved

CROCODILE activities are carried out both at national and European level. Main focus is on activites with European dimension in order to ensure the maximum exchange of experiences and knowledge, the efficiency in resource allocation using synergies and the European dimension assuring implementations at national level in a consistent way among the project area. Several actors are involved in the project activities, most of them directly related to the road traffic and transport telematics application.

The Member States involved comprise Austria, Cyprus, Czech Republic, Germany, Greece, Hungary, Italy, Poland, Romania and Slovenia as regular partners as well as Bulgaria, Croatia and Slovakia in an observing role.

Result expected/achieved

The first CROCODILE workshop addressed the transposition of the EU ITS Directive with regard to the establishment of national bodies, national access points and the availability of traffic data in general. There was common sense visible that a national body has to be part of the public administration in order to ensure impartiality and shall be attached to an already existing organisation. Current initiatives for NAPs can be seen as a starting point. Their expandability must be be agreed upon early on national and cross-border level. The discussion about data availability once more revealed the necessity of bilateral agreements between Member States on traffic data. The workshop participants worked out a first proposal for a minimum set of traffic data to be exchanged between CROCODILE MS (on the TERN).

Figure 2

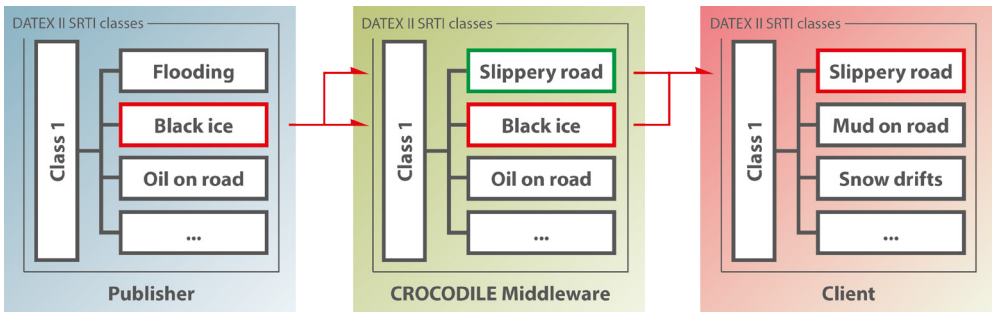
Traffic control centre of Palmanova

Within CROCODILE Austria, Croatia, Hungary, Italy and Slovenia have sigend a Memorandum of Understanding in which they agree upon elaborating and implementing procedures for the exchange of national traffic information. Mutually agreed traffic management plans will be elaborated and put into force in order to manage traffic and traffic incidents on the shared road transport corridors, also involving possibly affected third countries.

Out of cooperation and agreements between Croatia, Italy and Slovenia there are Traffic Management Plans operational for the main travelling times and in case of major events related to severe weather conditions. DATEX II will be the main tool to be adopted by the road operators in order to ensure smooth and seamless data exchange. Alternative routes have been identified by the main stakeholders, paying attention to the OE and the statistical data available.

The second CROCODILE workshop was focused on organisational and technical issues for data exchange related to the EU ITS Directive. Participants discussed their approaches together with representatives from the DATEX II Strategic Group. A questionnaire conducted after the first workshop has revealed that many static and dynamic traffic data are already available in the CROCODILE Member States. But due to the splintered responsibilities (e.g. different road operators) it is sometimes unclear which data are available from which side and in what level of quality.

Based on the data available, a so-called middleware specification was developed to support harmonised data exchange, covering a minimum set of required SRTI and truck parking messages. The middleware specification provides master data types which are used for rendering differently assigned DATEX II attributes into commonly understood ones. Thus there will be a simplification of data types by establishing master values within available DATEX II classes. The relevant document can be found at crocodile.easyway-its.eu.

Figure 3

With the CROCODILE DATEX II Middleware, SRTI messages (e.g. Black ice) from publisher side can be reinterpreted to the superordinate class (i.e. Slippery road) on client side