The CORVETTE Euro-Regional project area involves the German region of Bavaria in the North, the North-Italian region in the South, Switzerland in the West and Austria in the East. The geographical location within the central Alpine area, added to a very high cross border traffic, implies frequent situations where the road travellers need timely, precise and punctual information about congestion, accidents, adverse weather conditions.

Therefore many efforts were devoted by the Corvette partners in the different regions and significant results were achieved in trying to satisfy such needs within the Corvette activities during the MIP period 2001-2006, aiming also at the safety improvement and at the cross-border traffic problems solving.

The main aspects of commonality for the activities carried on by the Corvette partners on the information services are clear in the objectives: give timely and completely the drivers on and before their trip all the information necessary to travel in the quickest, safest and more comfortable way to their destination.

Such objectives include all the necessary actions to promote interoperability of system, homogeneization of procedures, standardization of equipment, data exchange between Traffic Centres, etc.

Various different information services and technologies studied and implemented could be described as important achievements in Corvette, from Variable Message Signs to Internet applications, from real-time journey time prediction to dynamic pre-trip/on-trip information, from radio systems to multimedia broadcasting systems, etc. But here we will present only some more relevant examples identified in each involved country.

In **Austria** a significant result was obtained by ASFiNAG, in cooperation with the BMVIT, with the **SWIS system**, related to the collection and distribution of weather information.

The data collected thanks a wide installation of road side sensors and weather measuring equipment, together with the road-based weather prognosis, allows to elaborate and provide accurate and timely information, through the SWIS system, to the motorways maintenance agencies for the winter services, to the Traffic Centres operators for the traffic management and control and to the drivers by means of the online traffic information service.

In the following schema the described process is summarised.

The installation of the SWIS system started in 2005, after a period of study and pilot tests, and the system is now in operation along a great part of the Austrian motorway network, allowing in addition to effectively cooperate also with the neighbour countries, particularly in the winter season.
In Bavaria an important example is given by the project FIMSAA (Freight Information and Management System for the Alpine Area), aimed at an effective management of dangerous and extra-heavy goods transport via Alps also through related efficient information services.

The FIMSAA project has a strong focus on international cross-border aspects, looking into the management of goods transports on the corridors through the Alpine region of Bavaria, Austria, Switzerland and Italy (Gotthard, Inntal triangle-Brenner-Verona, Tauern), including in particular those kinds, where safety is an issue, such as the transport of heavy or dangerous goods. The information offered enables improved traffic management in the whole Alpine area, including the recommendation to change modes, e.g. from road to rail in case the traffic situation allows nothing else. In this way, the use of the available infrastructure will be improved and the travel time needed, e.g. for a heavy or dangerous goods transport from Germany to Italy over the Brenner pass, will be reduced because road-related delays can be avoided and the number of road-bound cargo transports can be decreased due to the transfer of goods to the rail systems located parallel to the Brenner. The choice between different modes of transport (road, rail, air) will lead to a higher and more optimal exploitation of the available transport resources. With FIMSAA, it is possible to register, control and monitor special transports and to make their position available via online centre.

The project started in 2004, coordinated by LKZ and involving the major companies and associations linked to the transport problems, is now almost completed. The information related aspects are based on the “online centres”, collecting data and distributing information able to control and manage the Dangerous and heavy goods transport problems.

See below some pictures highlighting the system basic structure.
A further Bavarian interesting project, just mentioned here, was related to TPEG Rich-Info Mobility Services over Mobile Broadcast, managed by IRT according to the OBB directions. It was a study aimed at the harmonisation and integration of traffic and traveller information according to the TPEG standard (Traffic Protocol Expert Group, initiated by the European Broadcasting Union) for cross-country services with real-time traffic information and at the analysis of potential bearer technologies for the distribution of traffic information services with TPEG. A report on the results of the study with recommendations for the implementation is available and could be really useful at European level.

For Italy it is worth to report shortly the activities carried out and the results achieved with the Mare Nostrum initiative.

Such initiative started in 2003, in cooperation with the Euro-regional projects Serti and Arts, including today also Connect. All the Italian motorways partners of Corvette were and are active participants, but also the other Italian concessionaires are strongly involved.

In a first phase of the project the objective of VMS harmonization was addressed to the structure of the messages, including text and pictograms. In 2004 a common national Guideline for such structure was issued and used in experimental test with messages related to the points lost on the driving licence with irregular behaviour.

In the meantime several tests were conducted on drivers, in accordance with the other countries of Mare Nostrum, firstly using questionnaires and then by means of an interactive software on website prepared by the Neatherland.

Following the example of France, where further tests were performed with the “tachistoscope” method, at the end of 2006 a new test was set up at the Research Centre of Roma 3 University, using a driving simulator with a real car and a virtual motorway environment: the test took place at the beginning of 2007 with a restrict number of selected common drivers and will be repeated with a wider number of drivers at the end of 2007.

Furthermore the study works continued also about the harmonization of the procedures used by the various Traffic Control and Information Centres to manage the VMS: at the end of 2006 an agreement among the Italian Concessionaires was achieved on a common basic Operators Manual for the VMS.
The other countries of Corvette, even if not directly active, were constantly updated on the Mare Nostrum progress, which is going to become a wide Europe project starting from 2007.

A last example regards **Switzerland**, where the **Truckinfo** project was successfully implemented.

Within the scope of its activities in the field of heavy goods traffic management, the Swiss Federal Roads Authority has set up a Internet portal (www.truckinfo.ch) for HGVs. One of the main aims of this site is to enable transport companies to optimally plan their routes with the aid of up-to-date traffic information, weather forecast and intermodal offers, but it is also hoped that it will lead to more efficient utilisation of capacities in the area of transalpine freight transport. An intermodal route planner proposing alternative modes of transport has also been included on the truckinfo platform. The service is in operation since December 2004 and the number of visitors is constantly increasing.

On www.truckinfo.ch, reports concerning the traffic situation on the main routes through Switzerland are published and updated every 10 minutes, so that transport companies are able to keep up to date with all significant occurrences such as traffic jams, accidents and special measures involving HGVs (situation at feed stations and waiting zones, triggering of “Red Phase”, etc.). The main pages can be viewed in German, English, French and Italian. Important information about restrictions, such as “Red Phase” and the feed system at the Gotthard, are also provided in other languages e.g. Spanish, Czech, Dutch, Polish, Turkish and Russian.

Since August 2005, the truckinfo has included traffic bulletins concerning neighbouring countries (France, Germany, Austria and Italy).

The intermodal route planner incorporates significant cost and time factors for the transport industry such as the night-time curfew in Switzerland and waiting times at feed stations, and automatically it indicates also rail connections for combined transport (piggy-back rail service, rolling highway) that cover the same transit route. It encompasses Switzerland, France, Germany, Austria and Italy, i.e. practically the entire region of the Alps. The current booking status of the piggy-back rail service is also shown on the platform.

Truckinfo provides as well assistance for the declaration procedure using prepared route plans for some major destinations, with details about routing and costs.

The above examples give an idea of the various ways followed by the Corvette partners to provide useful information to the drivers in an interoperable manner, assured by the link with similar activities of the other Euro Regional Projects and by the active participation in the Expert Group on Traveller Information Services (TIS).

All the results of the work done in 2001-2006 in the Corvette area in the field of information services are available on proper maps, while the effectiveness of such results is testified and will be testified by the evaluation actions performed or planned in the different countries.