

9 March 2007

Screening report Croatia

Chapter 21 – Trans-European networks

Date of the screening meetings:

Explanatory meeting: 30 June 2006

Bilateral meeting: 22 September 2006

I. CHAPTER CONTENT

The European Union policy concerning Trans-European Networks for transport (TEN-T) and energy (TEN-E) is based on three cornerstones: the legal basis for TENs, Articles 154-156 of the EC Treaty, the regulation on TEN financial support (Reg. 2236/95) and the guidelines Decisions for TEN-T (1692/96) and for TEN-E (1364/2006). This framework sets out the objectives of Community policy for the trans-European network policy which encompasses the transport, energy and telecommunication networks and aims at adapting and developing networks and ensuring their interconnections and interoperability.

As far as **transport networks** are concerned, the trans-European network contributes to a sustainable and multimodal development of transport and to the elimination of bottlenecks. In this regard, transport networks play a significant role in ensuring a sustainable mobility, combining Europe's competitiveness with the welfare of its citizens while securing the transports of good and passengers in Europe.

Given the level of investments needed to complete and increase the trans-European networks and bearing in mind the estimated growth in traffic between Member States, expected to double by 2020, a list of priority trans-national projects has been defined at the European level.

Trans-European **energy networks** cover the transport and storage facilities of gas as well as the electricity transmission and make a significant contribution to the electricity and gas market. TEN-E respond to the growing importance for securing and diversifying the Community's energy supplies, incorporating the energy networks of the Member States and candidate countries, and ensuring the coordinated operation of the energy networks in the Community and in neighbouring countries. The security of energy supply and the functioning of the internal energy market are key policy goals. This is mirrored in the Trans-European Energy guidelines of 2006 aiming at the installation of an electricity and gas network. Axes for priority projects and projects of common interest have been identified in this regard.

Trans-European **telecommunication networks** mainly refer to the development of networks and deployment of related services in the framework of specific Community programme.

II. COUNTRY ALIGNMENT AND IMPLEMENTATION CAPACITY

This part summarises the information provided by Croatia and the discussion at the screening meeting.

Croatia indicated that it can accept the *acquis* regarding the trans-European networks of transport and energy and that it does not expect any difficulties in implementing the *acquis* by accession.

II.a. Transport networks

Croatia gave the main characteristics of the national transport network infrastructure with the following data detail:

- roads and motorways network with a total length of 29,016 km,
- railway network with a total length of 2,720 km,

- inland waterways network with a total length of 804 km, including four ports (Sisak, Slavonski Brod, Vukovar and Osijek),
- maritime transport infrastructure including six major seaports (Rijeka, Zadar, Šibenik, Split, Ploče and Dubrovnik)
- air transport system covering nine airports (7 international airports: (Zagreb, Dubrovnik, Split, Zadar, Pula, Rijeka and Osijek) and 2 air fields (Brač and Mali Lošinj).

Considering the geographic shape of Croatia and its position, main transport routes passing through the Republic of Croatia connect the area of Central Europe with the Mediterranean and South East Europe. In this regard, Croatia hosts the following segments of Pan-European corridors:

- Vb: Rijeka-Zagreb-Varaždin-Budapest,
- Vc: Ploče-Sarajevo-Osijek-Budapest,
- X: Salzburg-Villach-Ljubljana-Zagreb-Belgrade-Skopje-Thessaloniki,
- Xa: Graz-Maribor-Zagreb,
- VII: the river Danube (with the river Sava waterway)
- and the Adriatic-Ionian Area (PETRA) of Pan-European transport importance.

Croatia confirmed that its *legislation*¹ regarding transport networks is not yet aligned with Regulation 2236/95, laying down general rules for the granting of Community financial aid in the field of trans-European networks, and Decision 1692/96 on community guidelines for the development of the Trans-European Transport Network. Croatia indicated that, once aligned by accession, the implementation of this legislation will not raise any difficulties. Croatia mentioned that the legislative framework relevant for the development of its transport infrastructure encompasses the Physical Planning Strategy of the Republic of Croatia (1997) which defines the main transport routes and the Strategy of Transport Development (OG 139/99 of 1999). Croatia refers for each mode of transport to specific development plans or strategies: plan for the construction and maintenance of public roads (2005-2008), strategy for restructuring of the Croatian railways (2000), a forthcoming five-year development plan for inland waterways that should be released in 2007, a pre-accession strategy for maritime transport and development plans for the main airports. Croatia underlined that the existing legal framework for environmental protection, market competition and public procurement applies to all infrastructure projects across all modes of transport. This includes an obligation of the environmental impact assessment (EIA) procedure for every project, and a public debate on the basis of physical plans before approval of the projects. Croatia confirmed its participation in the existing *regional cooperation* in the field of transport as a good support to the improvement of the transport network of regional and European significance.

Regarding the ongoing project and administrative capacity as concerns the *road network*, Croatia indicated that the motorway to Split has been completed, whereas the sections towards the port of Ploče are under construction. The construction of the new motorway on the branch Corridor Vc from Bosnia and Herzegovina border to Hungarian border via Osijek has already started and the first section in the length of 23 km will be opened to traffic in October 2007 according to Croatia. The construction of the 33 km long section

¹ In particular the Public Roads Act (OG 180/04), Railway Act (OG 123/03, 194/03 and 30/04), Inland Ports Act (OG 142/98 and 65/02), Maritime Domain and Seaports Act (OG 158/03) and Airport Act (OG 19/98)

towards Osijek has also started⁸. The section from Zagreb to Macelj / Slovenian border on the Corridor Xa will be opened to traffic in the whole length in May 2007.

The Croatian Parliament is adopting the main development strategies, the Croatian Government validates the four-year programmes and the annual plans, and the Ministry of the Sea, Tourism, Transport and Development (MSTTD) provides expertise and supervision of motorway concessions. The practical implementation is done through the Croatian Roads Ltd (HCdoo), the Croatian Motorways Ltd (HACdoo), the concession companies and the county road offices. Croatia mentioned that the physical plans go through public presentation and debates before approval by the Ministry of Environment Protection and Physical Planning.

Concerning the **railway network**, Croatia mentioned the improvements on the railway Corridor X from Slovenian border to Serbian border and expressed its plan to construct a new railway line from Rijeka to Hungarian border on the branch Corridor Vb. Croatia stated that it intends to have a new railway connection between Graz and Zagreb via Maribor and Krapina (i.e. branch Corridor Xa as in Motorway). According to the data provided, close to 91% of the railway network is composed of single-track lines while only around 36% of the total network is electrified. Croatia underlined that the co-operation with neighbouring countries to develop the railway network and interoperability is ensured through its participation in international organisations such as COTIF / OTIF (Intergovernmental Organisation for International Carriage by Rail) and TER (Trans-European Railways).

The MSTTD is the competent authority, through the Railway Transport directorate which covers combined transport, railway infrastructure and safety issues. However, Croatia stated that this Directorate is not sufficiently staffed to cover all its duties.

Regarding the **inland waterway network**, the strategic framework is composed by the "transport development strategy" of 1999. However, Croatia underlined that five-year plans of inland waterways development and inland ports development are scheduled for early 2007. According to the Croatian data, almost 75% of the total network length is included in the network of European waterways of international importance while less than 50% of it complies with international navigation standards.

The responsibility of inland waterways development and maintenance is ensured by the Agency for Inland Waterways.

As regards **maritime transport**, Croatia stressed the growing demand for port facilities linked to the position of the ports in the Adriatic (the two main ports, Rijeka and Ploče are located respectively in corridors Vb and Vc and the development of cruising voyages. According to Croatia, the demand is facing limited capacities and equipment of ports for transport of goods and passengers. Croatia has developed a pre-accession maritime strategy and foresees investments in the ports of Rijeka, Ploče, Dubrovnik, Zadar, Šibenik and Split.

The MSTTD is the responsible authority, through the Maritime Policy directorate which includes in particular specialised department for maritime transport and shipping, seaports and international affairs. Croatia estimates that the directorate is adequately staffed.

Finally, regarding *air transport*, Croatia considers that the current capacities of its infrastructure on smaller airports such as Pula, Rijeka, Zadar and Osijek as well as handling services at airports, also connected with existing infrastructure, do not constitute an obstacle to air transport development and integration into international route. Croatia stated that due to a considerable and constant increase of traffic noted in the last years, works on further expansion, development and modernisation of those airports are still under way and that the three major airports (Zagreb, Split and Dubrovnik) have already been modernized while future phases of modernisation are foreseen. Croatia estimates that the implementation of the European Common Aviation Area agreement (ECAA) will lead to significant improvements in this regard.

The Civil Aviation Authority is the competent body in charge of the sector within the MSTTD and Croatia intends to set up an independent Civil Aviation Agency to improve the administrative capacity regarding the duties arising from the development of air transport and the alignment with the *acquis*.

II.b. Energy networks

As regards primary energy production, Croatia indicated that in 2004 the production split was 34% hydropower, 37% natural gas, 21% crude oil and 8% biomass. As for the main characteristics of the national energy network Croatia considers that the electricity transmission network is well connected to neighbouring networks for all high voltage levels (400, 220 and 110 kV). The total length of high voltage lines is 7,232 km while medium and low voltage lines represent 122,000 km. Regarding the gas transport system, Croatia indicated having 1657 km of high-pressure gas pipelines and a total capacity of 550 million m³ for underground gas storage.

Croatia confirmed that its *legislation*² regarding energy networks will only be aligned by accession with Regulation 2236/95, laying down general rules for the granting of Community financial aid in the field of trans-European Networks, with Decision 1229/2003 amended by Decision 1364/2006 on community guidelines for the development of the trans-European energy network and with Decision 96/391 laying down a series of measures aimed at creating a more favourable context for the development of trans-European networks in the energy sector. Croatia indicated that, once aligned by accession, the implementation of this legislation will not raise any difficulties. The basic legal framework is composed of the Energy Act, the Electricity Market Act and the Act on Regulation of Energy Related Activities accompanied with the Competition Act and State Inspectorate Act. Croatia considers that by ratifying the Treaty Establishing the Energy Community in 2006, it has committed itself to modernising the energy transit infrastructure, to improve the cooperation in ensuring interconnections of the energy networks with neighbouring countries and to provide free passage of energy products.

In 2002 Croatia produced an Energy Sector Development Strategy which defined the energy policy and development until 2011. The Strategy brought specific targets for each energy source and indicated further development of interconnections with neighbouring countries. In July 2005, Croatia established the Croatian Energy Regulatory Agency (HERA).

² In particular the Energy Act (OG 68/01 and 177/04), Act on electricity Market (OG 177/04), Act on Gas Market (OG 68/01 and 87/05) and Act on Regulation of Energy-Related Activities (OG 177/04)

As regards the *electricity* network Croatia long-term investment estimations (up to 2015) amount to € 136 million of new investments until 2010 and the same amount for the period 2011-2015. Croatia considers that with regard to the desired electricity interconnection capacity of at least 10% target (March 2002 – Barcelona European Council), existing interconnection capacities of Croatia with neighbouring countries are high. Croatia foresees primarily the strengthening of internal high voltage (400 kV) connections with plans for the extensions of existing high interconnections capacities with second 400 kV line to +hungary, submarine high voltage direct current (HVDC) cable to Italy and a 110 kV line to Montenegro.

The *gas* transport is operated by the state-owned company "PLINACRO d.o.o.", which has elaborated a "Plan for the development, construction and modernisation of the gas transport system from 2002 to 2011". Croatia stated that the first phase of this plan is on-going and includes the construction of 386 km of several trunk gas pipeline (75 bar), one of them from Pula to Karlovac ensure an interconnection with the Italian gas system (but not the Italian transmission network). This interconnection is the second one with gas systems of neighbouring countries since there is already an interconnection with the Slovenian gas system (supply route for Russian gas). The second Phase (2007-2011) foresees € 443 million mostly for interconnection and network extension and includes the interconnection with the Hungarian gas system through the construction of the gas pipeline Donji Miholjac – Dravaszerdahely. According to Croatia, the network extension will ensure transit capacities and open possibilities for the interconnections on South and East to Interconnection Greece-Italie (IGI), Trans Adriatic Pipeline (TAP) and the Nabucco project.

The energy networks and markets, for electricity and gas are under the responsibility of the Energy and Mining Directorate in the Ministry of the Economy, Labour and Entrepreneurship. The Croatian Energy Regulatory Agency acts as an independent body.

II.c. Telecommunication networks

As regards the development of Trans European telecommunication networks and the deployment of Trans European electronic services for all, Croatia has adopted its eCroatia programme which aims to develop most of the services included in the Commission's eTEN programme. Croatia did not take part in the eTEN programme which has ended in 2006 but Croatia plans to participate in the Commission's new Competitiveness and Innovation Programme (CIP) which notably builds on the aims of the eTEN and other programmes in line with the i2010 strategy.

III. ASSESSMENT OF THE DEGREE OF ALIGNMENT AND IMPLEMENTING CAPACITY

Overall, Croatia has reached a satisfactory level of preparedness regarding the strategic development of the transport and energy networks in accordance with the design and objectives of the TEN-T and TEN-E. The relevant legislation can only be implemented in practice by accession. Regarding transport, while each mode is covered by a particular strategic and investment plan, the country's Physical Planning Strategy dates back to 1997 and the Strategy of Transport is from 1999. These keys strategic Plans should be updated to fully integrate the latest development of the TEN-T policy and to adapt accordingly the investments foreseen. As regard the energy network, it is needed to update the Energy Sector Development Strategy released in 2002 which defines the Croatian energy policy regarding

the network system until 2011. Recent developments in the energy sector in Europe may indeed have an impact on the strategic development of the energy networks in Croatia such as the further implementation of some major international projects. However, the adaptation and extensions of the networks for transport and energy will require significant financial resources to ensure the implementation of the investments needed.

III.a. Transport networks

The *acquis* in the field of Trans-European Transport Networks of transport can only be applied by accession.

Globally, the foreseen development of the Croatian transport network, in particular within the South East Europe Core Regional Transport Network, should enable Croatia's future inclusion in the TEN-T without major difficulties. However significant investments are needed in the near future to implement a fully functioning network corresponding to the growing needs and facilitating the modal split and inter-modality for a sustainable growth. Soft measures aiming at simplifying the procedures at border crossings are also a key issue. Although Croatia stated that its legislation includes an obligation of Environmental Impact Assessment (EIA) for transport projects, it needs to be underlined that following the General Affairs Council conclusions of 24 September 1998, all new investments in candidate countries should comply with the EU *acquis*, in particular with environmental Directives, including the EIA Directive (85/337), the Strategic Environmental Assessment (SEA) Directive (2001/42) and the Habitats and Birds Directives (92/43 and 79/409).

As regards *regional cooperation*, the "Memorandum of Understanding for the development of the South East Europe Core Regional Transport Network" (MoU) has been a key initiative to identify the needed development of the transport infrastructure in Croatia in the clear framework of the eponym transport networks. Most of the nodes and network identified in Croatia are crucial to ensure a good continuation of the TEN-T in the future. In addition, under the framework of the MoU, initiatives have been undertaken to identify a list of projects of regional interest. The South East Europe Transport Observatory (SEETO) to which Croatia is part, has been the kingpin of the approval of a five year multi-annual plan (2007-2011) aiming at improving both operational measures and infrastructure on the Core Regional Transport network. All these elements constitute a sound basis to mobilise international financial support. However, Croatia needs to enhance its cooperation in the framework of the MoU notably by selecting adequate key priority projects to be considered as projects of regional interest in the context of the multi-annual plan drafted by SEETO. Croatia also needs to fulfil the obligation arising from the MoU notably by signing the SEETO agreement and by paying its contribution to the 2006 budget of SEETO.

Regarding the *road network*, positive developments can be recorded as Croatian authorities have established an investment and maintenance financial plan up to 2008 currently under implementation. However, the absence of budgetary perspectives for the period after 2008 may put at risk the pace of investment foreseen, notably considering that the international financial institutions need clear indications on the national financial commitments prior to mobilise their assistance on this sector.

As concerns the *railway network*, significant investments are needed since the prevalence of double-track lines and electrified lines is still very limited. The signalling and safety

devices are not always compatible with EU standards, preventing a satisfactory level of interconnection with neighbouring countries. The improvement of the railway network requires a strengthening of the railway transport directorate which is currently understaffed. It is therefore crucial to ensure that the administrative capacity regarding the railway sector is strengthened considering the increased duties arising from the alignment on the *acquis* and the need to ensure a satisfactory level of interoperability of the Croatian railway network within the TEN-T. The 2007-2013 investment plan for railways has to be adopted to serve as a reference base for considering the necessary infrastructure need in this sector.

The *inland waterways network* has suffered from a lack of investments for years. A need for interconnection concerning the Sava waterway remains. Improvements in this field are still expected and in this regard, the new development plan that should be released in 2007.

Regarding *maritime transport*, the main obstacle arises from the inadequacy of ports facilities to cope with the increased demand both as regards transport of passengers and transport of goods. However, Croatian seaports have already developed close links with EU countries such as Austria, Hungary, and Slovenia and with the Balkan countries.

The *air transport* sector has benefited from large investments to reconstruct the infrastructure but the increasing demand in this sector requires further investments to meet EU standards. It is therefore important that Croatia implements the European Common Aviation Area agreement (ECAA).

The administrative capacity to develop and manage the TEN-T is shared between the relevant modal directorates in the MSTTD. The services dealing with strategic developments, international issues and financing issues should be strengthened in order to enhance the coordination and the implementation of the priority projects in Croatia.

III.b. Energy networks

The *acquis* in the field of trans-European Energy Networks will be applied by accession.

The ratification by Croatia of the Treaty Establishing the Energy Community in 2006 provides a sound basis for opening of the energy market and promoting the interconnection of the Croatian networks with its neighbouring countries.

Croatia is a net importer of energy and should become even more dependant on energy imports in the near future. The development of the energy networks in Croatia can be seen as a significant step needed to ensure the transit of energy sources through Europe. Croatia also needs to develop alternative energy sources which could generate additional need in terms of connection to the network and transport of the energy produced by these means. As described so far, the planned projects in the field of energy are to a large extent contributing to the TEN-E as a whole and in particular to the projects of European common interest.

Croatia produced an Energy Development Strategy in 2002 which covers the energy sector as a whole and foresees the development and modernisation of the relevant transport infrastructure, in particular the interconnection needs for electricity and the development of the gas transport system. The transit of *electricity* through Croatia

remains a key element and in this regard, electricity interconnections with Hungary, Bosnia and Herzegovina and Italy need further strengthening while the actual cross-border exchange is hampered by an incomplete regulatory framework. Creation of interconnections and extensions of the *gas* network is expected in the near future. In this respect the axis between Greece and Slovenia, which will run through Croatia and which is of common interest under the TEN-E guidelines, should be included among Croatia's priorities. In addition, Croatia is part of the project for the creation of a Liquefied Natural Gas (LNG) terminal in the Adriatic Sea.

Regarding the administrative capacity, the main bodies and services needed are operational and do not face major weaknesses. However, further strengthening will be required to deal with future duties arising from the implementation of the *acquis*.

III.c. Telecommunication networks

It has to be noted that the deployment of electronic services in Croatia has been supported by numerous national initiatives. The future participation of Croatia in the Competitiveness and Innovation Programme (CIP) will notably allow including the Trans European element in the development of the networks and deployment of related services.