Hrvatske autoceste d.o.o.

Construction starts at the A5 Motorway Drava Bridge

The start of construction of the A5 Motorway bridge over the Drava River was marked on 11 July 2011. The bridge is the most important structure along the Beli Manastir - Osijek Section of the A5 Motorway (Beli Manastir - Osijek - Svilaj). The bridge will be a suspended composite steel structure at the very crossing of the Drava River, and a semi-precast concrete structure. The bridge is 2,507 m long, and the main 420 m long structure spanning the Drava is formed of a composite steel girder, reinforced concrete pylons, and staying cables. The load bearing steel girder will be made to act compositely with the reinforced-concrete deck slab.

The approach bridges over the left and right flood zones of the Drava River, 2,087 m in length, are conceived as two separate bridges each 35 m in span, except in abutment zones. The bridge project will also include the Drava regulation works 3 km in length, Vučica River regulation, and bridge over the Vučica River which flows under the designed bridge. These works include riverbed correction and construction of additional water engineering facilities.

This very demanding project has been designed taking into account the following elements: navigation conditions and navigation profile of the Drava River, Drava River flood zone width, Vučica river bed, flood protection dyke, and nature protection requirements as set for the Drava wetlands. The Drava River bridge will be built by joint venture formed of: Viadukt d.d., Zagreb - Lead Partner; Osijek-Koteks d.d., Osijek; Konstruktor-inženjering d.d., Split; Skladgradnja-Grup d.o.o., Imotski; and Hidroelektra niskogradnja d.d. Zagreb. The contract price amounts to EUR 128,295,414.55, not including VAT, and the work is to be completed in 30 months. The project will be financed through the KfW bank loan.

Works start at the Sredanci - BH Border section of the A5 Motorway

The start of work at the Sredanci - BH Border section of the A5 Motorway (Beli Manastir - Osijek - Svilaj) was ceremoniously marked on 4 September 2011.

The section from Sredanci to the Bosnia and Herzegovina border crossing is the final section of the A5 Motorway (Beli Manastir - Osijek - Svilaj), and it forms an integral part of the European transport corridor Vc (Budapest - Sarajevo - Ploče). This 3.2 km section comes after the already built Đakovo - Sredanci section.

The following structures will be built along the route:

• bridge (Popovača),
• 2 overpasses (Svilaj Interchange and Zoljani),
• frontal toll station “Svilaj”,
• Svilaj interchange linking the motorway with the county road Ž4210 and enabling link with the communities of Svilaj, Zoljani and Prnjavor,
• Svilaj border crossing.

The Sredanci - BH Border section is built by the joint venture formed of: Osijek-Koteks d.d. Osijek - Lead Partner, and Ingra d.d. Zagreb - Partner. The total cost of the Sredanci - BH Border section amounts to EUR 25,216,322.02 and works are to be completed within 2 years. The project is financed through loan secured by the European Bank for Reconstruction and Development (EBRD) and the European Investment Bank (EIB) where each bank participates with 50 %.

Current works include embankment construction along the route and Zoljani Overpass earthworks, while preparations are underway for rehabilitation of the Stružani-Zoljani overhead power line.
**HRVATSKA UDRUGA KONCESIONARA ZA AUTOCESTE S NAPLATOM CESTARINE / CROATIAN ASSOCIATION OF TOLL MOTORWAYS CONCESSIONAIRES**  
**NEWSLETTER 23, OCTOBER 2011**

**Hrvatske autoceste d.o.o.**

**Loan agreement signed for the “Corridor Vc Completion Project”**

On 15 September 2011 Hrvatske autoceste d.o.o. (HAC) signed the loan agreement for EUR 60,000,000.00 with the European Investment Bank (EIB). The proceeds of the loan will be used to finance 50% of the Corridor Vc Completion Project, in the scope of which Croatian part of motorway network, 12.5 km in length, will be built along the northern and southern border with Bosnia and Herzegovina, including the Metković border crossing.

The loan will be repaid in 25 years with a 5 year grace period, and a variable interest rate based on six-month EURIBOR, increased by EIB markup, will be applied. The remaining amount will be obtained through an EBRD loan and from funds to be secured by HAC.

---

**Autocesta Zagreb - Macelj d.o.o.**

**Strategic Noise Map**

An increase in the number of vehicles also generates higher levels of traffic noise. The Environmental Protection Act and the Noise Protection Act (both harmonized with EU legislation) were passed to improve this situation. They specify requirements for continuous monitoring of noise pollution levels, and define measures for noise suppression and lowering, with simultaneous improvement of environmental situation.

**Noise protection on motorways Current regulations:**
- Noise Protection Act (NN 30/09)
- Bylaw on the preparation and content of action plans, and on calculation of allowable noise indicators (NN 75/09)
- Bylaw on maximum allowable noise levels in places where people work and stay (NN 145/04)
- Physical Planning and Construction Act (NN 76/07, significant requirements for buildings)
- Environmental Protection Act (NN 110/07)

**Construction of individual sections of the motorway (59.3 km):**
- Jankomir - Zaprešić Section (7.4 km) - east pavement - 1980
- west pavement - 2006
- Zaprešić - Zabok Section (17 km) - 1991
- Zabok - Začretje Section (12.7 km) - 1996
- Začretje - Krapina Section (5 km) - 1996
- Krapina - Burmanec Section (9.4 km) - 2007
- Durmanec - Macelj Section (7.8 km) - 2007

The concession company “Autocesta Zagreb-Macelj d.o.o.” (AZM), formed in 2003, was required to build then inexistent motorway sections, namely: Jankomir – Zaprešić (west pavement), Krapina – Burmanec, and Đurmanec – Macelj. These sections were designed and built in the period from 2004 to 2007 in accordance with prevailing regulations, including the above mentioned legislation on noise protection.

As the first Noise Protection Act was passed in 2003, no noise protection measures were planned or implemented on previously built sections: Jankomir – Zaprešić, east pavement (1980), Zaprešić – Zabok (1991), Zabok – Začretje (1996), and Začretje – Krapina (1996).

In accordance with prevailing regulations, AZM issued in March 2011 a Strategic Noise Map (basic map for an integrated evaluation of exposure of population to noise from various sources) for the entire Zagreb-Macelj motorway route.

After preparation of the Strategic Noise Map, the company is now preparing the Action Plan (for management of environmental noise and its harmful effects, and definition of noise protection measures) which will be followed by implementation of noise protection measures and selection of noise protection systems. Many different noise protection solutions are currently available. However, due to on-site conditions (terrain configuration, physical conditions, roadside area width, traffic load, efficiency of protection, blending in with natural environment, etc.), the attention will primarily be paid to noise systems involving construction of noise barriers.

It is interesting to note that a new highly innovative and environment-sensitive Croatian product called RUCONBAR (Rubberised concrete Noise Barriers), with an absorbing layer made of recycled rubber, has recently appeared on market. It is expected to contribute to environmental and noise protection efforts, so as to improve the quality of living and working near the motorway, and to boost development and economic growth in areas along the motorway.

---

**Notes:**

- Začretje-Krapina Section of the Zagreb-Macelj Motorway with no noise protection facilities
- Začretje-Krapina Section of the Zagreb-Macelj Motorway after implementation of noise protection measures
Bina–Istra d.d.

30 years of Učka Tunnel

The Učka road tunnel was opened to traffic 30 years ago, on 27 September 1981. This has greatly facilitated traffic between Istra and the rest of Croatia as, before that, Istrians travelling to Rijeka and other parts of Croatia had to use a winding coastal road via Opalija, or an old road across Učka. The Učka Tunnel was also considered necessary because of poor sea and air connections, and lack of a railway tunnel. Thirty years later, on 27 September 2011, the tunnel’s thirtieth anniversary was marked. In addition to Bina–Istra representatives and members of coordination board for Učka tunnel construction, the event was also attended by representatives of the Istrian County and Primorje – Gorski Kotar County, by officials from various municipalities and districts, and by the State Secretary for Infrastructure, Tomislav Mihotić.

Start of construction

The idea to connect Istra with the rest of Croatia was first formulated more than one hundred years ago at an Istria’s Regional Parliament session held in 1864. Almost a century later, Croatian Parliament approved a document about Istrian transport problems which placed emphasis on the need to build modern roads through central Istra, and a road tunnel through Učka. Soon thereafter, in 1970, representatives of Istrian municipalities agreed on flotation of a bond issue, and a Coordinating Committee was formed to administer the Učka Tunnel construction and to manage the bond funding. In 1971, the bidding for tunnel construction was organized, and preliminary works commenced as soon as the electricity and water were brought to the site. In the first phase, the builders built three kilometres of approach roads, Vela draga viaduct and two shorter tunnels, and also laid 3.5 kilometres of water supply pipes and 30 kilometres of electric power lines. However, the biggest monthly progress was registered in March 1977 when 452 meters of tunnel were excavated. The tunnel excavation ended on 14 May 1978, less than two years after the start of the works. The Učka Tunnel and its approach roads were ceremoniously opened to traffic on 27 September 1981 and the event was attended by more than 15,000 visitors.

Construction of Istrian Y continues

The Učka Tunnel is a part of the motorway project 145 km in total length. The first phase of Istrian Y construction was completed in 2006. The second phase, i.e. widening to the full motorway profile, started in 2008, and the total of 80 km have so far been completed (Kanfanar–Pula, 2010, and Umag-Kanfanar, 2011). The Kanfanar–Rogovići section (18 km) is to be opened to traffic by the end of 2011.

Autocesta Rijeka - Zagreb d.d.

IFRIC 12 Service Concession Arrangements - Interpretations

A new financial reporting standard for concession issues - IFRIC 12 - is applied in Croatia as of 1 January 2010. As according to Accountancy Act the company Autocesta Rijeka - Zagreb d.d. (ARZ) has to prepare its reports in keeping with the International Financial Reporting Standards, we have implemented the IFRIC 12 as of 1 January 2010. This standard defines accounting procedure for presenting concession contracts in concessionaire’s books, which differs considerably from the former way of presenting such contracts in concessionaire’s books. Furthermore, this IFRIC interpretation requires retroactive application, which is why correction of initial situation was made as of 1 January 2010 in the company’s books, and all cumulative effects were acknowledged in the first year of application of this standard, which resulted in the change of form and content of financial reports. According to the former book-keeping method for concession contracts, tangible or intangible assets were recognized in the amount equal to the cost of construction in concessionaire’s books during construction of the infrastructure project, and then this cost was depreciated in the course of concession period.

New book-keeping method

The infrastructure project that is transferred to operator (concessionaire) through concession contract is not recognized as the operator’s real estate, plant and equipment, because the right to control the use of a public infrastructure project is not transferred by the said contract to the operator (concessionaire), but rather the operator (concessionaire) is granted access to the infrastructure project for the sole purpose of operating it to provide public services. The company ARZ was founded by including the right to operate concession into the company equity and, according to modified IFRIC, this right is no longer recognized in concessionaire’s books. As a result of the change in accounting rules for concession contracts, the book-keeping basis for recognizing the intangible asset included in form of right in the company equity on the occasion of establishment of the company, has ceased to exist. The property included as right in the company equity will be returned to its owner after the end of concession and hence, according to IFRIC 12, this right included in equity can no longer be presented as a property. According to these book-keeping changes, the company has started some activities relating to presentation of its equity. Until the issue of initial recognition of property included in the equity according to IFRIC 12 is resolved, this property will be expressed as a separate intangible asset independent from concession property, and the depreciation of this separate property will not be expressed through income statement, but directly as a charge on the equity. According to IFRIC 12, the property built by the company during concession period will be recognized based on construction costs as increased by markup.
Autocesta Rijeka - Zagreb d.d.

Summer traffic on Rijeka - Zagreb Motorway

The Rijeka - Zagreb Motorway is a part of Corridor V and the main axis of Croatia’s motorway network. Traffic load is the biggest in July and August when most tourists entering or leaving Croatia use road infrastructure that has been brought to an enviable level of quality thanks to constant investments and construction. The ASDT analysis shows that good results have been achieved this year on all sections operated by Autocesta Rijeka-Zagreb d.d. [ARZ] while it can be seen from analysis of historic data that this year’s summer traffic is the best traffic realized since ARZ establishment. The greatest growth index compared to 2010 has been registered on Bosiljevo II - Rijeka section. The analysis of summer traffic shows growth in all categories, except for category III, whereas a high 12 % increase can be noted for category IV when compared to 2010. As already mentioned, the summer traffic is greatly influenced by tourist movements, and so the category I participates in overall traffic by 86 %. In summer traffic, the peak hour with the greatest number of entering or leaving vehicle passages was registered on 30 July with as many as 99,281 vehicles. In July and August, motorway sections were closed to all traffic for 25 hours and 43 minutes, and this in most cases (16 hours and 28 minutes) due to traffic accidents. The traffic was most often closed due to traffic accidents at the most-trafficked Jastrebarsko - Lučko section. In other cases traffic was closed because of wind to double-decker buses, camp trailers and motorcycles and this on Krk bridge, which was closed for the total of 9 hours and 15 minutes. 

ARZ Reports on Socially Accountable and Sustainable Conduct of Activities

In addition to adoption of sustainable development policies and socially accountable practices, ARZ also tries to make a step further by systemic analysis of human and environmental aspects of business activity. Furthermore, attempts are continuously made to reconcile economic success with effects the business activity has on the society, community and environment. A long-term vision encompassing not only development parameters, but also sustainability of areas crossed by the motorway, has always been a part of the ARZ construction plan. This is why criteria of socially accountable operations are embedded in its business strategy, which results in greater resistance to crisis, easier access to capital, better long-term risk management, and hence in long-term sustainability. The ARZ development policy is based on a number of basic assumptions:

- traffic safety,
- accountable environmental management,
- social accountability,
- health care and occupational safety,
- greatest focus on users,
- development of human resources,
- toll collection as an instrument of sustainable development

In order to implement its sustainable development policy, the company has introduced the quality management system (ISO 9001), environmental management system (ISO 14001) and occupational health and safety management system (OHSAS 18001), while the confidential information management system is currently being prepared. In 2007, ARZ signed the UN strategic policy initiative Global Compact (GC) and it regularly submits, as the first one in this field of activity, and among the first ones in Croatia, its reports on sustainability and socially accountable business practices, and the 2010 report is their fourth annual report. Excellence in business can not be achieved without respect of human rights, work rights, and consumer or user rights, and without proper care about environment and its development. Socially accountable business practices, and achievement of business balance in the scope of sustainable development, are the only way to achieve progress and success.

ASDT by vehicle categories for VII-VIII 2011 and 2010

<table>
<thead>
<tr>
<th>Vehicle category</th>
<th>ASDT 2011</th>
<th>ASDT 2010</th>
<th>Index 2011/2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>27,484</td>
<td>26,823</td>
<td>102</td>
</tr>
<tr>
<td>IA</td>
<td>220</td>
<td>218</td>
<td>101</td>
</tr>
<tr>
<td>II</td>
<td>1,878</td>
<td>1,863</td>
<td>101</td>
</tr>
<tr>
<td>III</td>
<td>952</td>
<td>951</td>
<td>100</td>
</tr>
<tr>
<td>IV</td>
<td>1,159</td>
<td>1,032</td>
<td>112</td>
</tr>
<tr>
<td>IX</td>
<td>380</td>
<td>363</td>
<td>105</td>
</tr>
<tr>
<td>Total</td>
<td>32,073</td>
<td>31,249</td>
<td>103</td>
</tr>
</tbody>
</table>
environment protection, high level of service, and efficiency. All strategies, plans and goals are measured against these determinants. Toll collection revenues are the main source of company’s income. Cost reduction measures are aimed at gradual reduction of current expenditures.

**Environmental performance**

General, long-term and permanent environment management objectives include harmonization with all laws, regulations and standards; lowest possible use of resources; minimum generation of waste and reduction of air, water and soil pollution; safe and environmentally-friendly management of waste; education of employees about environment protection needs; and adoption of new technologies and materials enabling realization of these objectives.

**Social performance**

By investment in human resources, generation of educated, informed and motivated employees are formed, which ensures not only success in the company but in the society as a whole. The work climate and employee satisfaction is regularly measured, and results show that most employees consider that they work in a good company. Funds are regularly set aside for donations and sponsorships, and so various sporting activities, societies and professional associations are sponsored, and donations are given to finance various activities and humanitarian projects.

**Accountability for services**

Possibilities are explored for using toll collection as a tool for regulation of traffic together with other interested parties; tariff system that takes into account individual vehicle pollution levels is promoted; and trucks are encouraged to use motorways. All this is done to achieve high standards of safety, comfort and environmental protection. Improvements are introduced to increase the level of safety and travel comfort. The user forum and user charter have been created so that the user needs and wishes, and attitude towards users, can be evaluated. Appropriate procedures are used to respond to questions/objections formulated by users. User satisfaction level is permanently monitored.

---

**Monitoring Environmental and Biological Diversity in Rijeka - Zagreb Motorway Zone**

The Autocesta Rijeka - Zagreb d.d. (ARZ) manages the area of 6,359,500 square meters (174 km in length). The area traversed by the motorway is characterized by significant geographic features, such as an expressive relief and forest cover with many protected natural landmarks. It spreads through three Croatian macro-regions, abounding in a highly diverse flora and fauna life. A scientific and business cooperation was launched in 2009 between ARZ and experts from Faculty of Veterinary Medicine, Faculty of Forestry, Faculty of Civil Engineering and the State Institute for Nature Protection, while in 2011 an agreement was also signed with the Croatian Botanical Society. This has enabled cooperation in the field of nature protection and environment management, aimed at undertaking joint activities in the study and mitigation of impacts affecting nature and natural environment.

**Monitoring environmental and biological diversity**

In the scope of environment protection measures and programs, ARZ has been preparing since 2009 various environment monitoring and biological diversity studies. These studies focus on soil, water and atmosphere, and cover plant and animal life in the region.

The study of wildlife crossing structures along the Rijeka - Zagreb Motorway includes monitoring activities at the Dedin Green Bridge, and a regular analysis of motorway traffic accidents involving animals. The analysis of such accidents were made on sections from Zagreb to Bosiljevo II interchange (A1), and from Bosiljevo II Interchange to Orehovica (A6) in the period from 15/06/2002 to 13/09/2010, during which 275 animals lost their life in such accidents. Assumptions about a great number of animal species living in areas traversed by the motorway were confirmed, and 16 animal species were identified, from carnivores such as bear, wolf and lynx, to does and deer, and to various species of birds such as buzzard, owl, pheasant, swan, etc. Seasonal variations of animal accidents on motorways have also been noted. No black spots with significantly greater animal casualties have been noted. The above study shows that the number of animals perishing in traffic along the Rijeka - Zagreb Motorway is not of significance for individual species, and that it is primarily a traffic safety hazard. Furthermore, a relatively great number of wild animals live in areas along the motorway, and their numbers are constantly increasing. This is evidenced by a notable increase in the number of predatory birds and big carnivores (bear, wolf), as confirmed by monitoring undertaken by local hunting clubs. A floristic study of all roadside service facilities (RSF) on both sides of the Rijeka - Zagreb Motorway (Štipunik, “Orchid Islands”, Desinec I and II, Draganić I and II, Vukova Gorica, Ravna Gora, Lepenica, Tuhobić and Černik-Čavle) was undertaken in 2011 to determine plant species of significance for Croatian flora in the wider area of the Rijeka - Zagreb Motorway. 277 plant species were identified, out of which 48 species are protected by law or are strictly protected as autochthonous species. Eight species figure in the “Red Book of vascular flora of Croatia”. Ten species may be considered as weed species, i.e. as potentially invasive species. Plant species important for Croatian flora have subsequently been studied in the wider area of the Ravna Gora RSF. The Ravna Gora RSF is located in the area covered by the National Environmental Network of Gorski kotar, Primorje and Northern Lika (HR5000019). According to national classification of habitats, this huge area abounds in highly valuable grassland habitats, endangered on the European and national scale, and is characterized by an integral complex of mountain forests.

268 plant species were registered during floristic study of the Ravna Gora RSF area conducted in June, August and September 2011. These species were checked against relevant lists and data bases (primarily the data base of Croatian flora, Flora Croatica Databasel) in order to define species of significance for national flora which grow in the vicinity of Ravna Gora RSF. C

---

**Taraxacum officinale Lepenica**

**Orchis morio**
“Eurovignette” directive adopted (Directive 2011/76/EU)

On September 12th 2011 the Council approved the European Parliament’s amendments to a draft directive on road use charges for heavy goods vehicles (“Eurovignette”). A new directive (Directive 2011/76/EU) has been published in the EU’s Official Journal (L 269) on October 14th 2011 and member states will have two years to transpose it into their national legislation.

Modulation of tolls depending on external costs

New directive, which is a revision of the “Eurovignette” directive of 1999 (Directive 1999/62/EC), aims at reducing pollution from road freight transport and making traffic flow smoother by levying tolls that factor in the cost of air and noise pollution due to traffic (so-called external costs) and help avoid road congestion. To this end, member states may apply an “external cost charge” on lorries, complementing the already existing infrastructure charge designed to recover the costs of construction, operation, maintenance and development of road infrastructure. They may also modulate the infrastructure charge to take account of road congestion, with a maximum variation rate of 175% during peak periods limited to five hours per day.

Discounts for less polluting vehicles

Vehicles complying with the most stringent emission standards will be exempt from the air pollution charge for four years after those standards have become applicable; that means that vehicles of the EURO VI emission class will be exempted until 31 December 2017. In addition, EURO V vehicles will be exempted until the date of application of the EURO VI standards, that is, until 31 December 2013. Less polluting vehicles than EURO VI, namely hybrid and electrical heavy goods vehicles, are exempted. Moreover, member states may exempt vehicles under 12 tonnes from the tolls if they consider this necessary, for example if application of tolls would create significant adverse effects or excessive administrative costs. However, they must inform the Commission about the reasons for such a decision. While a mark-up may be added to the infrastructure charge in mountainous regions under certain conditions, the amount of this mark-up will be deducted from the external cost charge. This deduction, though, will not apply to the most polluting vehicles, that is, the EURO emission classes 0, I, II and from 2015 onwards also III.

Allocation of revenue

Member states should, but are not obliged to, earmark revenue generated by the infrastructure and external cost charges for projects in the transport sector, in particular in support of the trans-European transport network. There is, however, an earmarking obligation for revenue stemming from infrastructure charge mark-ups in mountainous regions or from the simultaneous application of such a mark-up and an external cost charge to the most polluting vehicles.

Toll collection in Austria and Germany with just one On-Board Unit

The new TOLL2GO transnational, cross-system toll service was launched on 1 September 2011. It is a joint service provided by Austrian toll operator ASFINAG and Germany’s Toll Collect GmbH. With TOLL2GO, the two companies are offering a toll collection service based on microwave technology and a satellite-supported toll system. In the future, TOLL2GO will make it possible for drivers of trucks with 12 tonnes or more gross vehicle weight to pay for road tolls in Germany and Austria via the Toll Collect OBU.

The Toll Collect OBU used in Germany will continue to operate using satellite-based technology, but will also support Austrian microwave system (Go-Box), which has been adapted for use with interoperable vehicle units. Although a single OBU is used, the customer still has a contract with each of the two toll operators. As in the past, toll invoicing by the two companies remains completely separate.

Applications for the TOLL2GO service can be submitted from 1 September 2011 via the fully electronic SelfCare portal directly to ASFINAG at www.go-maut.at. After successful registration and verification of requirements by ASFINAG, the service is activated automatically by the Toll Collect computer centre. Vehicles must have a Toll Collect OBU installed. When driving through a toll station on an Austrian motorway, the Toll Collect OBU triggers a toll transaction in exactly the same way as a Go-Box and transmits the billing data from the toll station to the ASFINAG computer centre. If the vehicle in question was previously equipped with an Austrian Go-Box, this unit will be deregistered when the Toll Collect OBU is activated. The Austrian GO-Box must then be turned over to a GO sales point.

Background information: In April 2004, Member States adopted the Directive on interoperability of electronic road toll systems aiming to harmonise the toll systems in Europe and to facilitate cross-border road transport. The Directive requires that all new electronic toll systems brought into service shall use one or more of the following technologies: satellite positioning (GNSS); mobile communications (GSM-GPRS); and microwave technology (DSRC).
HUKA pays visit to Italian concessionaire Autovie Venete

In the scope of preparations for the 5th Croatian Road Congress, held this year in Cavtat and organized by the Croatian roads society Via-Vita, HUKA has had established contacts with motorway companies that participated, in the scope of this congress, in the round table called “Cooperation of Road Societies in the Adriatic-Ionian Area”. As the Trieste and Venice are at the origin of this coastal transport area, the first contact was established with the company Autovie Venete (AVV). We visited them on 14 September in their office in Palmanova and invited them to the congress, which they accepted with pleasure. Our delegation was formed of Via-Vita President, Željko Vivoda, Honorary President Darko Mlinarić, President of Autocesta Rijeka - Zagreb (ARZ) Miro Škrgratić, and Management Board member Željko Denona.

The AVV General Manager Enrico Razzini and his colleagues Renzo Pavan, Technical Director in charge of construction, and Davide Sartelli, Director of Toll Collection, Management and Maintenance, presented their company which has concession over 237 km of motorways, namely the A4 Motorway (Venice - Trieste) and the A23 Motorway (Palmanova - Udine) where toll is collected, and the A28 Motorway (Portogruaro - Conegliano) and the A57 Motorway (Quarto d’Altino - Terraglio) where toll is not collected. The company has 648 employees and 16 toll stations. The concession is situated along the Corridor V (Kiev - Trieste - Ljubljana - Budapest - Barcelona). The A4 Motorway (Trieste - Venice) is the most trafficked motorway in the north-western Italy. It was built in 1968 and the traffic has been growing ever since. This route is mostly used by vehicles (trucks) in transit to and from Austria, and to and from Slovenia. If we add to this the summer passenger car traffic towards tourist destinations, the total AADT in 2008 amounted to 111,000 vehicles and reached 160,000 of vehicles in 2010.

AVV is currently building the third traffic lane on the Trieste - Venice Motorway. The total of 95 km will be built in several phases. The works will be carried out without interruption of traffic, which is why no more than 2.5 km will be built at a time.

The best indicator of the user structure on motorways operated by AVV is the Trieste toll station which is also interesting to us as many transit or tourist traffic is directed towards our motorways, especially towards the Rijeka - Zagreb Motorway. On normal days, the proportion of passenger cars at Trieste TS is 70 - 75 % while trucks account for 25 - 30 %. On peak days, the proportion of passenger cars reaches 90 - 91 %. This also influences toll collection methods and so in peak days the proportion of manual toll collection is 67 %. AVV has expressed its wish to cooperate with Croatia, particularly with ARZ, through exchange of traffic and other information, which will be mutually beneficial. During presentation of ARZ, its Management Board President Miro Škrgratić emphasized that AADT on the Zagreb-Karlovački Motorway, built in 1972, amounts to more than 30,000 vehicles, while the ASDT exceeds 50,000, which is why construction of a third traffic lane is also planned. After exchange of practical experience, it was concluded that there are many areas in which the two companies can cooperate. We also visited the Palmanova traffic control centre and one of the most representative toll stations, situated in Latisana, which is shaped as sea gull with spread wings. For ten months in a year it operates automatically without toll assistants, while in summer months only 4 lanes are used for automatic toll collection, while toll is collected manually on other lanes.

We also went through underground tunnels that are used by toll assistants to reach their booths, and through which the daily toll is carried to the central safe. Similar tunnels are used on most AVV toll stations (on 10 out of 16).

We wish to thank our colleagues from AVV for excellent organization and warm welcome, and are looking forward to future cooperation.

Austrian journalists on the tour of motorways in Croatia

On 7 and 8 September this year some ten Austrian journalists toured Croatian motorways in the scope of the three-day educational tour organized each year by the Austrian motorway concessionary AFSINAG for journalists working in daily and weekly publications. This is the continuation of a successful cooperation between HUKA and AFSINAG that has been going on for two years now, during which excellent contacts have been established between top officials of Austrian and Croatian concessionaires. The tour started on 6 September in Vienna by visit to the Bruck Tunnel Control Centre in Styria, and the Stass Traffic Control Centre. This was followed by meeting with the AFSINAG Management Board President Klaus Schierhackl. Next morning, the group visited Slovenian motorways and met with the DARS Management Board President Mateja Duhaovnik, and then toured the local Traffic Control Centre.

After driving along the Slovenian A1 motorway and crossing the border at Dragonja/ Kaštel, the Austrian delegation reached the newly opened west leg of the Istrian Y, the motorway A9 and Bina Istra, the first host in the scope of the planned tour of Croatian motorways. The initial point of contact was the Umag TS, after which the tour continued along Istrian Y until the Bina Istra maintenance and control centre at the Učka Tunnel. David Gabelica, General Manager, presented the history and structure of the company and the network it operates, and the Management Board Member Christian Santaleza showed them the control centre and presented the already 30 years old Učka Tunnel.

After Bina Istra the journey continued to Opatija where the role of host was assumed by ARZ d.d. The HUKA presentation, made on that very evening at Milenij Hotel by the HUKA President Aleksandar Čaklović, was attended by Tomislav Mihotić, State Secretary for Infrastructure, and Miro Škrgratić, ARZ Management Board President, who readily responded to additional questions. On the last day of the tour, journalists visited Rijeka Bypass and Krk Bridge where they made a brief technical tour by boat, after which the delegation returned to Zagreb and took the plane back to Vienna.

Finally, we wish to thank all HUKA members for their assistance and support in the organization of this tour, which has been crowned by fruitful contacts that are certain to open door to joint projects and similar gatherings in the future.
### Statistical data

#### Traffic number of vehicles on toll plazas

<table>
<thead>
<tr>
<th>Company</th>
<th>Light vehicles (IA, I i II)</th>
<th>Heavy vehicles (III i IV)</th>
<th>Total</th>
<th>Light vehicles (IA, I i II)</th>
<th>Heavy vehicles (III i IV)</th>
<th>Total</th>
<th>% (11/10)</th>
</tr>
</thead>
<tbody>
<tr>
<td>HAC</td>
<td>22,613,503</td>
<td>2,813,895</td>
<td>25,427,398</td>
<td>23,127,571</td>
<td>3,001,681</td>
<td>26,129,252</td>
<td>2.76</td>
</tr>
<tr>
<td>ARZ</td>
<td>13,402,212</td>
<td>1,270,894</td>
<td>14,673,106</td>
<td>14,010,356</td>
<td>1,365,487</td>
<td>15,355,843</td>
<td>4.65</td>
</tr>
<tr>
<td>BINA-ISTRA*</td>
<td>4,397,916</td>
<td>361,798</td>
<td>4,759,714</td>
<td>5,678,075</td>
<td>486,573</td>
<td>6,164,648</td>
<td>29.52</td>
</tr>
<tr>
<td>AZM</td>
<td>4,416,764</td>
<td>465,385</td>
<td>4,882,149</td>
<td>4,350,847</td>
<td>455,005</td>
<td>4,805,852</td>
<td>-1.56</td>
</tr>
<tr>
<td>TOTAL</td>
<td>44,830,395</td>
<td>4,911,972</td>
<td>49,742,367</td>
<td>47,166,849</td>
<td>5,288,746</td>
<td>52,455,595</td>
<td>5.45</td>
</tr>
</tbody>
</table>

#### Toll revenues (without VAT)

<table>
<thead>
<tr>
<th>Company</th>
<th>HRK</th>
<th>EUR</th>
<th>HRK</th>
<th>EUR</th>
<th>% (11/10)</th>
</tr>
</thead>
<tbody>
<tr>
<td>HAC</td>
<td>983,923,604.15</td>
<td>131,716,680.61</td>
<td>1,007,895,251.26</td>
<td>134,925,736.45</td>
<td>2.44</td>
</tr>
<tr>
<td>ARZ</td>
<td>361,012,758.00</td>
<td>48,328,347.79</td>
<td>379,353,249.00</td>
<td>50,783,567.47</td>
<td>5.08</td>
</tr>
<tr>
<td>BINA-ISTRA**</td>
<td>108,090,622.86</td>
<td>14,469,962.90</td>
<td>136,177,521.00</td>
<td>18,229,922.49</td>
<td>25.98</td>
</tr>
<tr>
<td>AZM</td>
<td>134,421,658.09</td>
<td>17,994,867.21</td>
<td>133,340,698.99</td>
<td>17,850,160.51</td>
<td>-0.80</td>
</tr>
<tr>
<td>TOTAL</td>
<td>1,587,448,643.10</td>
<td>212,509,858.51</td>
<td>1,656,766,720.25</td>
<td>221,789,386.91</td>
<td>4.37</td>
</tr>
</tbody>
</table>

1 EUR = 7.47 HRK

#### Traffic safety

<table>
<thead>
<tr>
<th>Number of traffic accidents:</th>
<th>Until the end of September 2011</th>
<th>Until the end of September 2010</th>
<th>CROATIA</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>HAC</td>
<td>ARZ</td>
<td>BINA-ISTRA</td>
</tr>
<tr>
<td>- with fatal casualties</td>
<td>14</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>- with injuries</td>
<td>209</td>
<td>55</td>
<td>6</td>
</tr>
<tr>
<td>- with material damage</td>
<td>1,068</td>
<td>278</td>
<td>77</td>
</tr>
<tr>
<td>TOTAL number of accidents</td>
<td>1,291</td>
<td>337</td>
<td>85</td>
</tr>
<tr>
<td>TOTAL number of fatalities</td>
<td>16</td>
<td>4</td>
<td>2</td>
</tr>
</tbody>
</table>

*Since June 14, 2011 traffic counting has been switched from open to closed toll system on the whole stretch Umag-Pula

**In 2011 the traffic and revenues are in significant increase in comparison to 2010 due to the opening to traffic of the sections Kanfanar - Pula in June 2010 and Umag – Kanfanar in June 2011.