DAGOB Newsletter
November 2007

DaGoB Leaders

Inese Vilane, Freeport of Riga Authority

Dear DaGoB-partners and friends,

Inese Vilane is the Head of the Project Management Unit at the Freeport of Riga Authority in Latvia since 2005. Prior to this, she worked for the Ministry of Education and for the World Bank Education System Improvement Project in Latvia.

Within DaGoB, Inese is the senior DaGoB partner representing the Freeport of Riga Authority. In this capacity she coordinates the work between DaGoB and other interested parties within Latvia.

The Riga Freeport Authority has been involved in several European Union Interreg projects, of which DaGoB is one of them. Other Freeport of Riga Authority participation includes the "PLAN THE CITY WITH THE PORT" and "PORT-NET" Interreg projects.

More on the Freeport of Riga Authority and Latvian DaGoB participation is provided in this issue of the DaGoB Newsletter under "The Freeport of Riga Authority and the DaGoB Project."

Yours Inese Vilane

DaGoB Final Conference and Partner Meeting in Tallinn

By Timothy Tinney, University College of Borås

The DaGoB Final Conference will be held in Tallinn, Estonia, 30 November 2007, at the Radisson SAS Hotel. This is an open seminar with invited speakers highlighting the DaGoB Key Findings and Contemporary Issues on Maritime, Road, and Rail Transport of Dangerous Goods. The registration form to this conference can be found from www.dagob.info.

DaGoB Final Partner Meeting on 29 November 2007 will be held at the Radisson SAS Hotel a day before the final conference, concentrating on DaGoB expectations and results. Also, a panel discussion around DaGoB findings will be organized. This meeting will also form a platform for discussions about further projects concerning the Transport of Dangerous Goods in the Baltic Sea Region. Please note that this event is only for DaGoB partners.

Historic centre of Tallinn
Picture: © r_aps/PIXELLO

The Freeport of Riga Authority and the DaGoB Project

By Inese Vilane, Freeport of Riga Authority

Latvia, as a new member state of the European Union, has just started the development of legislation concerning transportation of dangerous goods. Because of this, the participation in the DaGoB project by those Latvian institutions and personnel involved in the transport of dangerous goods has been of high importance.

The most valuable result of the project has been the exposure that the Freeport of Riga employees have experienced by way of several meetings and gatherings with many of the other DaGoB project partners. DaGoB provided an excellent opportunity for those Latvian personnel involved in the transport of dangerous goods to associate with other dangerous goods experts. This in turn has resulted in a cross-pollination of ideas and concepts that has significantly assisted Latvia in its quest for more effective and efficient dangerous goods legislation. The Freeport of Riga employees and other Latvian personnel involved in the transport of dangerous goods, have discovered that there are many others working to solve the same problems and consequently are traveling in the same direction.

As a result of the Freeport of Riga Authority's participation in DaGoB, a new information booklet on the transportation of dangerous goods will be published very soon. Also, information about the DaGoB project can be found in the Freeport's homepage (http://www.freeportofriga.lv/eng/projekti.asp).

More and more dangerous goods are transported in the Baltic Sea

By Leena Hulsi

Millions of tonnes of dangerous goods are transported in the Baltic Sea and on the roads of the Baltic Sea countries. In case of an accident, these substances may be a threat to people and the environment. In order to avoid dangerous situations and major accidents, the official supervision of the area is now being standardised.

The transport of dangerous goods in the Baltic Sea is increasing. Because of this, transport safety should be increased. The purpose is to standardise the practices related to the transport of dangerous goods and to increase the cooperation with the authorities and transport actors in the Baltic Sea Region.

Progresses towards the realisation of these goals are made, for example, by means of the DaGoB project coordinated by the Turku School of Economics.

One of the participants in the two-year project started last year is the Mobile Police Unit of Turku.

The legislation on the transport of dangerous goods is uniform in all EU countries. However, there are still some discrepancies in the interpretations and working methods. The DaGoB project puts together the best practices of the different countries and uniforms the working method on the basis of them, states Inspector Ilkka Myllymaa from the Traffic Police Unit of Turku.

The question is, above all, about the safety of the people and the environment. Common working methods and smooth cooperation beyond borders facilitate the supervision work of the authorities, whose goal is to avoid serious accidents, adds the Inspector.

The task of the Mobile Police is to control the road transport of hazardous substances. The so-called ADR control* is used to verify that the hazardous substances are classified, loaded and marked according to the law.

Transport is always associated with human risk factors that cannot be completely excluded. We try to minimise possible damages with common rules, states Myllymaa.

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Ilkka Myllymaa is getting acquainted with the operations of the Waterways Police Unit of Hamburg
Picture: Ilkka Myllymaa

More and more dangerous goods are transported in the Baltic Sea

By Leena Hulsi

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For example, everyone can imagine how important it is during an accident to know what was loaded onto the car. We must quickly find out whether the cargo contains explosive, corrosive, radioactive or flammable substances. The relevant notes immediately tell the authorities what the question is about.

Positive experiences from civil servant exchange

In the regularly held workshops of the DaGoB project, the transport of dangerous goods is approached from as many point of views as possible.

The theme has been, for example, the IT applications related to the transport of dangerous goods. The practical cooperative skills have been refined in common exercises organised in Sweden, Germany, Finland, and two weeks ago Latvia. The experiences obtained from the exercises were also documented, states Myllymaa.

The project also includes civil servant exchange. Two of us spent one week in Germany to get acquainted with the working methods of the German Police. Correspondingly, last May two German police officers visited Finland. We deal with the same problems, even if the traffic flows in Turku and Hamburg are quite different.

According to Myllymaa, the working methods of the authorities in Finland and Germany are already now quite similar, but there is still to learn.

The Germans were surprised by the smooth and close cooperation between Finnish Police, Customs and Border Guards. As for us, we paid attention to the driver's card reading devices of the digital plotter used by the Germans. The digital plotters save, for example, the exact driving distances and break durations. The driver's state of alertness significantly affects driving safety. Therefore, we would really need a reading device as well.

Overall, Myllymaa is satisfied with the results of the DaGoB project. The project has increased the cooperation between the Baltic Sea countries, which significantly facilitates the activities of the authorities. There is less bureaucracy, and networking has given a face to the partners in cooperation.

If needed, it is easier to ask for executive assistance from a colleague that has become familiar through cooperation. The practical issues are progressing more rapidly because people know each other. The formation of an individual network of contacts is definitely one of the best results of the project. This is a good point to continue from, thanks Myllymaa.

* European Agreement concerning the international carriage of Dangerous goods by Road

The driver´s card reading device of the digital plotter would improve traffic safety also in Finland
Picture: Ilkka Myllymaa

A seeing, hearing and sniffing car

By Marja Heikkilä

A quite ordinary-looking station wagon conceals a complete arsenal of top-level technology inside itself: computers, calculation programs, cameras, odour detectors and radiation gauges.

A flashing light atop the vehicle gives away the fact that this is no ordinary station wagon

However, what this concerns is not the Batmobile, but rather what is evidently the first mobile command centre on wheels, which is benefiting from the newest broadband mobile technology in the Port of Turku's safety surveillance system.

The Port of Turku has been amongst the first to incorporate IP-based, digital video surveillance in which the wireless WiMAX broadband service is utilized.

Previously, supervision has been based on stationary monitoring points. Now information can both be sent and received from a motor vehicle. In practice, Timo Laitinen, the Port of Turku's safety manager, can monitor all ten cameras in the port area, and even control them.

In addition to the cameras, the car comprehensively observes its environment otherwise. It is capable of identifying oxygen, carbon monoxide, toxic gases and 80 varieties of hydrocarbons. Moreover, radioactivity can also be exposed and measured by means of the vehicle.

"Various calculation programs make it possible for us to identify dangerous substances and assess their rate of distribution and area rather precisely through the aid of the wind and air flow data on the computer's map grid. This being the case, we can initiate evacuation measures instantly," Mr Laitinen explains.

Utilizing this vehicle, it is possible to describe the damage from a distance. A camera can also be taken from the car and carried along, in which case the camera image is wirelessly transmitted from the base station in the vehicle to the port's Wimax radio network and onwards to, for example, the rescue authorities. The versatile data systems also enable the exchange of information in real time between various officials.

"By means of the calculation programs and weather station, we succeed at making precise assessments about water level rises, which is particularly required here at the Port of Turku," Mr Laitinen knows from experience. On the whole, changes in the weather conditions are monitored quite stringently.

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A seeing, hearing and sniffing car

By Marja Heikkilä

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An excellent tool

Similar mobile command centres are not yet found elsewhere. This prototype has been constructed as part of the DaGoB project common to the Baltic ports and authorities, in which new methods, for instance, are being sought to supervise the transport of dangerous substances.

The car has been equipped by Taitotekniikka Taitotalo Oy as well as Suomi-Communication Oy. The project has been allocated a small amount of European Union funding.

”We are extremely satisfied with this solution. This new system increases the safety of both passenger and freight traffic in possible accidents and disasters, and functions as a tool in overseeing construction and environmental sites.“

First and foremost, the supervision and safety of the port is anticipation: there is an attempt to prevent dangerous situations such as the outbreak of fires and oil spills. However, it is not always possible to avert damage and losses entirely.

According to Mr Laitinen, it is of primary importance in accidents and disasters that there is an awareness of what has really happened and that it is thereby possible to act quickly and effectively. If, for example, an accident involving dangerous substances were to happen at the port and gas escaped into the air, its distribution rate, area and direction could be assessed through calculation programs.

By monitoring the vehicle’s data sources, there is knowledge at all times about what is happening. For example, the types of all incoming and outgoing deliveries are found on the safety manager’s computer.

This mobile command centre has also aroused wide interest beyond the borders of Finland.

”This would be highly useful outside of ports as well – at airports and even in processing industry applications. When we get more user experience from this and we have the chance to hone the system so that it works even better, this may be a safety tool in the future for many operators,” Laitinen reckons.

That’s despite the fact that this vehicle costs, according to conservative estimates, at least twice the price of the average car.

Dangerous substances can be identified by means of the vehicle’s equipment. By taking advantage of the computer’s map grid-based wind and air flow data, it is possible to assess its distribution speed, direction and area

Milestone 3 - A busy time in DaGoB

By Timothy Tinney, University College of Borås

As Stephen R. Covey once said, "We may be very busy, we may be very efficient, but we will also be truly effective only when we begin with the end in mind." DaGoB Milestone 3 (MS3) was planned with the end in mind and did in fact turnout to be quite effective. The following is a synopsis of DaGoB MS3 events:

Seminar on "Harmonization of Training of DG-Control Officers."

This seminar was held in Riga, Latvia on February 19-21, 2007 and was discussed in DaGoB Newsletter #4. Specific recommendations from this seminar can now be found in the DaGoB Intranet titled Recommondations for Harmonisation of Training of DG Control Personnel.

DaGoB Partner Meeting in Malmö, Sweden.

This meeting, April 25-27 at the Mayfair Hotel, began with the normal briefings from various DaGoB leaders, but it also included a short seminar on risk management and dangerous goods transport. Notable speakers included Arben Mullai, PhD student at Lund University; Kurt Petersen, Professor in Risk Management at Lund University; Max Mejia, Assistant Professor at the World Maritime University in Malmö; Roland Gildemeister, Hamburg Waterways Police; and Joanne Ellis a Project Manager and PhD student at SSPA in Gothenburg, Sweden. All in all, this seminar was productive and informative. Also on the program was an excellent brief and dinner at the Copenhagen Malmö Port with Lars Karlsson, the Managing Director.

Workshop on "Communication and Information Exchange in the Transport of Dangerous Goods in the Baltic Sea Region."

Held in Hamburg, Germany on May 15, 2007 at TuTech Innovation GmbH, in this workshop the current situation concerning information systems usage in ports was described by Johannes Raitio, an introduction to Safe Sea Net was provided by Mr Gund of Dakosy AG and the GEGIS (Gefahrgutinformationssystem) (spell out) system was presented by Roland Gildemeister. These systems clearly showed that a significant amount of information is collected on DG transport in the Baltic Sea Region. The next question was how could this information be exchanged? In the second part of the workshop, a moderated session, the participants discussed the information they would like to exchange. The result will be published in the DaGoB Toolkit at the end of the DaGoB project. In the end, the participants realised that the main problem in exchanging information was not necessarily a technical problem because many systems are already accessible via the Internet. The main problem was that national legislation often forbids the disclosure of certain types of information to foreign entities, even to entities outside an organisation. To change this situation, ways need to be found on how best to overcome these legal restrictions.

Malmoe Partner Meeting

Seminar on "Towards Safer and More Reliable Transport of Dangerous Goods in Europe."

This seminar was the culminated event for DaGoB MS3 being held on June 13, 2007 at the Hotel Silken Berlaymont in Brussels. Opening remarks were made by Seija Miettinen-Bellevergue from the Ministry of Transport and Communications in Finland, followed by Professor Lauri Ojala from the Turku School of Economics also in Finland. Then there was Jos Verlinden, the Director Transport and Logistics at CEFIC and Rose-Marie Pype, a Logistics Manager at ECTA. After the coffee break was Paavo Wihuri from the Finnish Maritime Administration, and Olivier Kervella, the Transport Division Chief at UNECE. Lastly, there was Andrea Pearson from DG TREN Security of Surface Transport & Transport of Dangerous Goods. Professor Lauri Ojala concluded this event by thanking all for their excellent work and participation in this informative, fruitful, and succinct seminar. All presentation slides can be found on the DaGoB homepage under the link www.tukkk.fi/dagob/news.asp.

Dangerous Goods Transportation Information

By Timothy Tinney

As discussed in DaGoB Newsletter #3, part of the DaGoB mission is to assist in the dissemination of dangerous goods transportation articles and information. The following reviews are on dangerous goods transportation papers found in Elsevier at http://www.elsevier.com/.

For those who are unfamiliar with Elsevier, they publish trusted, leading-edge Scientific, Technical and Medical (STM) information. Elsevier disseminates and preserves STM literature to meet the information needs of the world's present and future scientists and clinicians – linking thinkers with ideas.

The first paper to be discussed is Dangerous good transportation by road: from risk analysis to emergency planning, by B. Fabiano, F. Curró, A.P. Reverberi, and R. Pastorino. This paper focused on analyzing Italian dangerous goods transport safety and effectiveness issues associated with road transportation. Initially there was a theoretical discussion on transportation risk analysis followed by a discussion on emergency planning. Next, a case study was used to demonstrate how a site-oriented risk assessment is conducted, sensitive to route features and exposed population. The result showed that the risk associated with some hazardous materials transport, in some areas, was at a borderline acceptability. From there, the authors developed a theoretical approach to plan optimal emergency actions. Strategies for reducing risk included the distribution and limitation of ADR road traffic, highway section improvements, alternative routes, and appropriate emergency management. Overall a worthwhile paper, occasionally though it did present some difficult wording and sentence structures.

The second and last dangerous goods transportation paper to be reviewed is Comprehensive risk assessment for rail transportation of dangerous goods: a validated platform for decision support by Adrian V. Gheorghe, Jürg Birchmeier, Dan Vamanu, Ioannis Papazoglou, and Wolfgang Kröger. This paper addresses the result that there will be an increase in dangerous goods traffic volume by rail, especially in Switzerland. The authors examined current risk assessment techniques for transportation of dangerous goods by rail and then presented an enhanced solution, and a related software platform, which attempts to integrate loss of containment causes and consequences with a system's infrastructure and its environment. The risk-related results were integrated into a software platform, which was structured as a decision support system using intelligent maps and a variety of geographical information system data processing procedures. The approach and software were validated by a case study conducted for a particular traffic segment of the Swiss Federal Railway company. This paper was well organized and well written, and included several appendixes to further clarify and substantiate the results.

ABBREVATIONS

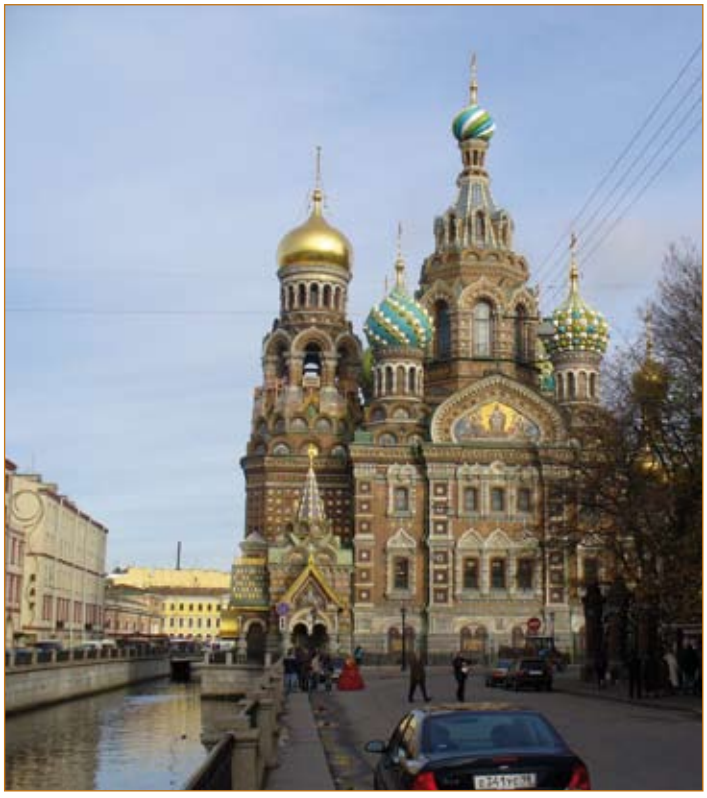
ADN	**Accord européen relativ au transport international des marchandises dange reuses par voie de navigation intérieure (European agreement on the international transport of dangerous goods by inland navigation)**
ADR	**Accord europeen relatif au transport international des marchandise dangereuses parroute (European Agreement on the international transport of dangerous goods by road)**
AG	**Aktiengesellschaft**
AGV	**Automatically Guided Vehicle**
BSR	**Baltic Sea Region**
CEFIC	**Conseil Européen de l'Industrie Chimique / European Chemical Industry Council.**
CTA	**Container Terminal Altenwerder**
DaGoB	**Safe and Reliable Transport Chains of Dangerous Goods in the Baltic Sea**
DG	**Dangerous Goods**
DG TREN	**Directorate General for Transport and Energy of the European Union**
EC	**European Community**
ECTA	**European Chemical Transport Association**
EU	**European Union**
EUROFER	**European Confederation of Iron and Steel Industries**
FHH	**Free and Hanseatic City of Hamburg**
GEGIS	**Gefahrgutinformationssystem (Dangerous goods information system)**
IMDG-Code	**International Maritime Dangerous Goods Code**
ISPS	**International Ship and Port Facility Security**
MRCC	**Maritime Rescue Coordination Centre**
PCB	**Police, Customs, Border Guard**
RID	**Règlement concernant le transport international ferroviare de marchandise Dangereuses (Regulations on the international transport of dangerous goods by rail)**
SRSA	**Swedish Rescue Services Agency**
TUHH	**Technische Universität Hamburg-Harburg (Hamburg University of Technology)**
UNECE	**United Nations Economic Commission for Europe**
STM	**Scientific, Technical and Medical Information**
WI-FI	**Wireless Fidelity**
WiMAX	**Worldwide Interoperability for Microwave Access**
WP	**Work package**

Other Related DG News

By Timothy Tinney, University of Borås

St. Petersburg Russian-Finnish Seminar

On 21 March 2007 there was a Russian-Finnish Seminar on "Safe and Reliable Transport of Dangerous Goods in the Baltic Sea Region" held at the Consulate General of Finland in St. Petersburg. There were many participants from both Russia and Finland to include representatives from DaGoB. The following is a short list of speakers and topics that were discussed during the seminar: DaGoB extension to Russia- DaGoRus project presented by Mr Jorma Rytkönen from VTT Technical Research Centre of Finland; Matti Andersson, VR Cargo, presented new plans concerning "Railway Transport Between East and West"; "General Guidelines for Lorry Traffic and Port Transactions" published within DaGoB was presented; as well as safety regulations pertaining to seaports were discussed.



Church St. Petersburg

At the Icelandic Maritime Rescue Coordination Centre (MRCC)

DaGoT–Workshop in Szentendre

On 31 May – 1 June 2007, Tomi Solakivi from Turku School of Economics took part in a thematic workshop involving stakeholders concerned with Dangerous Goods Transport in Szentendre near Budapest. The workshop was a part of another dangerous goods related project "European Reference on Dangerous Good Transport - DaGoT." and organised by The Regional Environmental Center for Central and Eastern Europe (HU). 13 different organisations and 20 people from Italy, Hungary, Slovenia and Finland took part in this event. The purpose of the participation was to present the DaGoB project to other participating workshop organisations and discuss possible co-operation between the two projects.

DaGoB visits Iceland

On 6 June 2007, DaGoB representatives visited the Icelandic Coast Guard in Reykjavik. Also at the meeting was a representative from the Icelandic Ministry of Transport. The meeting focused on similarities and differences with DG regulation enforcement and management. As part of this visit DaGoB representatives were shown where and how the Icelandic Coast Guard conducts their operations in monitoring sea traffic in their coastal waters. Candid and informative views and experiences where shared by all parties.

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