

## Newsletter





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TELEBALT workshop
"INFORMATION TECHNOLOGIES,
TOURISM AND SOCIAL INTEGRATION"
Riga, Latvia
4-5 April 2002

FROM e-EUROPE 2002 TO e-EUROPE 2005

THE 6 FRAMEWORK PROGRAMME

IST PROGRAMME AND OTHER TELEMATIC PROJECTS IN BALTIC

TELEBALT Conference
"TELEWORKING FOR BUSINESS,
EDUCATION AND ELECTRONIC
COMMERCE"
Vilnius, Lithuania
22-23 October 2002

BALTIC IT&T 2003 FORUM Riga, Latvia 2-5 April 2003



IST-2001-33041
Teleworking as Tool for
Information Society
Technologies Programme
Promotion to Baltic States

New Methods of Working for Information Society Technologies Programme Promotion to Commonwealth of Independent States TELEBALT project advertises and promotes Information Society Technologies (IST) Programme to three Baltic countries (Latvia, Lithuania and Estonia) by fast and efficient dissemination and awareness actions targeted on Baltic countries as states newly associated to European Union. These goals are fulfilled using new methods of team work,s uch as teleworking, vir tual laboratories, etc. EU and Baltic states interested parties are encouraged to work together for the benefits of joint Europe.

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#### **Editorial**

TELEBALT project, as IST Programme accompanying measure, aims to strengthen the links between European Union (EU) member countries and the three Baltic states in the field of Information Society technologies and new methods of team work. TELEBALT tackles the European dimension problem of integration of the three EU newly associated Baltic states (Latvia, Lithuania, Estonia) into European information society by implementation and adaptation of relevant teleworking tools. In addition to direct benefits for user communities in these EC newly associated states, the action will promote the wider goals of European integration by facilitating scientific, educational, environmental and

business cooperation, free flow of information and mutual knowledge and understanding. TELEBALT is directly related with IST Programme as a whole, and especially with its key action (ii) "New methods of work and electronic commerce". The project also contributes to other key actions. TELEBALT will significantly contribute to the extension of IST Programme to Latvia, Lithuania and Estonia.

It is foreseen that as a result of the project, information dissemination, gathering, training and implementation actions, as well as the market potential for IST telematics applications and products will progress significantly both in EU and the Baltic countries markets.

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## TELEBALT project: state of the art

#### Alexander Beriozko, Jean Bonnin

The second issue of TELEBALT Newsletter covers the period of April - October 2002. This was an active period in the lifetime of the project, which was completed by the main TELEBALT conference in Vilnius, Lithuania. In this period the four partners of the project and their collaborators in the three Baltic States have developed numerous important activities.

Liaison with IST projects, with the participating Baltic countries and collaboration with co-operating initiatives was managed in more and more efficient way. As a result, numerous IST projects took an active part in TELEBALT workshop "Information technology, Tourism and Social Integration" which was held in Riga, 4-5 April 2002. TELEBALT established an efficient working collaboration with FLEXWORK, TEAMWORK, E3WORK, WISTCIS, TELEBALT, THINK-EXT and other IST projects. Another result achieved is the successful deployment of the database of contacts concerning IST Programme activities in Latvia, Lithuania and Estonia, and EU member states. TELEBALT plans to make this database available to all IST project partners interested in the collaboration with the Baltic States in the field of telematics applications.

TELEBALT Newsletter Vol.1, published in hard copies in English (1000 copies) and electronically, was widely disseminated, in particular at TELEBALT Workshop "Information technology, Tourism and Social Integration" and Baltic IT&T 2002 Forum in Riga, Latvia, on April 3-6, 2002, as well as via TELEBALT Web-sites at EDNES, France (http://www.ednes.org/telebalt) and INFOBALT, Lithuania (http://www.infobalt.lt/telebalt). The newsletter has been widely disseminated to IST projects, at the IST meetings etc in hard copies and electronically.

TELEBALT Information Dissemination Centres (IDCs) were further developed at: INFOBALT (28/17-16, Vokieciu LT-2001 Vilnius Lithuania) entitled "Teleworking for Business and Partnership Promotion", "Open Latvia" (3, Zakusalas krastmala LV-1509 Riga Latvia) entitled "Telematics for Tourism and Social Integration", and at Inforing AS (Kohla-Yarva, Estonia) entitled "Telematics Challenge to Employment Opportunities". Deployment of Information Demonstration Centres (IDCs) in the reporting period was mostly focused on the web based actions. The system of the web sites entitled TELEBALT on the web has been deployed at EDNES, France (http://www.ednes.org/telebalt), Open Latvia (http://www.telebalt.lv), INFOBALT, Lithuania (http://www.infobalt.lt/telebalt) and Inforing, Estonia (http://www.telebalt.ee http://www.telebalt.infopress.ee). The web sites are interconnected with each other and with the web resources of their hosting organisations, which are the TELEBALT partners. Further in this volume the reader will find a detailed description of the TELEBALT on the web system.

The major forthcoming project event is the TELEBALT Conference "Teleworking for Business, Education, Research and e-Commerce", which will be held in Vilnius, Lithuania, October 21-23, 2002. It is now under an active

preparation and the organisation work is being done by INFOBALT. In addition to the presentation of IST projects to Lithuanian and other Baltic States' audience, the conference will focus on other important matters closely connected with teleworking. One of these focuses is the artificial intelligence algorithms' library accessible in teleworking mode (TAR). A reader can find an article about TAR in this issue. Telework terminology that should serve as a background for development of telework ontology is another focus. The information on telework, telecommuting, e-Work and other related Web links has been collected by the project and will be widely presented at the conference. It will also serve as the basis for telework TELEBALT information database (DB), which is planned by the project and which will be widely discussed at the conference. The specification of the prototype DB has been developed.

TELEBALT presentation "Will the digital work (telework) rescue Lithuanian regions?" was carried out during the joint seminar of Lithuanian Computer Society Artificial Intelligence and Education Divisions, held on April 27, 2002, in Vilnius, Lithuania. Another presentation "Telework - terms, history, current status, trends" was made during the Lithuanian Parliament (Seimas) Information Society Development Committee meeting on May 8, 2002, in Vilnius, Lithuania.

The central project event for the moment was TELE-BALT Workshop "Information technology, Tourism and Social Integration". It was successfully held in Riga, Latvia, on April 4-5, 2002. The workshop was organised in the frame of Baltic IT&T Forum 2002. Wide circles of Latvian businessmen, research scientists, teachers and university professors attended it. Many tourist companies attended the workshop, too. The Deputy Director General of the European Commission along with the ministers of government of Latvia and members of the parliament took an active part in the opening session of the workshop. The following IST projects participated at the workshop:

- Eastern Europe E-work (E3Work);
- Towards a European E-Commerce Ambient in the Craft Sector (EASYCRAFT);
- Estimation and Mapping of Employment Relocation in a Global Economy in the New Communications Environment (Emergence);
- Demonstrating and promoting the take-up of new ways of FLEXIBLE WORKING among outlying regions and SMEs (FlexWork);
  - Open Network for Tourism (ONTOUR);
- Personalised Access to Local Information and services for tourists (PALIO);
- Small and Medium Sized Enterprises Alliance through Research in Tourism (SmartUp);
- Technology Exploitation and Adaptable Methodologies (TEAM) offering new Organisational Models and Practices for e-Working Teams (TEAMwork);
- Towards Handicap Integration Negotiating Knowledge (THINK);
- New methods of working for Information Society Technologies Programme promotion to the Commonwealth of Independent States (WISTCIS).

The success of the workshop can be evaluated using the number of agreements signed between the participants from EU countries and Baltic States. More than 30 memorandum

of understanding have been established. It is the first step to further co-operation through the joint projects approaching the forthcoming Sixth Framework Programme (FP6) of the European Union or in bilateral EU-NAS co-operation.

Two days of the workshop attracted around 160 participants from different countries of Baltic's, Europe and Russia. Many EC representatives came to the workshop (Parajon COLLADA, Deputy General Director at the EC, Jacques BABOT, Head of sector at the EC, Brice LEPAPE, Head of Tourism sector at the EC). Sectors of different IT activities were widely represented. The workshop clearly proved the wide interest of different organisations and the necessity of similar events in the future. The presentation "TELEBALT project - Lithuanian Web-site" was made on Baltic IT&T Forum 2002 in Riga, Latvia, on April 3-5, 2002. The proceedings of TELEBALT Workshop "Information technology, Tourism and Social Integration", Riga, Latvia, April 3-6, 2002, have been prepared by "Open Latvia". They will be published electronically and in hard copies.

The preparation work of TELEBALT Conference "Teleworking for Business, Education, Research and e-Commerce", which will be held in Vilnius, Lithuania, on October 22-23, 2002, has started and has been highlighted by TELEBALT Web-site at INFOBALT, Lithuania (http://www.infobalt.lt/telebalt). The following projects of Information Society Technologies (IST) and Telematic Applications (TAP) Programmes have confirmed their interest regarding their participation in the workshop:

- EURO INNOVATION (IST);
- Eastern Europe E-work (E3Work, IST);
- European Knowledge Platform (EKP)
- Demonstrating and promoting the take-up of new ways of FLEXIBLE WORKING among outlying regions and SMEs (FlexWork, IST);
- Technology Exploitation and Adaptable Methodologies (TEAM) offering new Organisational Models and Practices for e-Working Teams (TEAMwork, IST);
- Telework solutions for promotion of EU co-operation in business and research with the Commonwealth of Independent States (TELESOL, IST);
- Towards Handicap Integration Negotiating Knowledge (THINK, IST);
- Virtual Presence System (VPS) (SHOPEAWARE and WISTCIS, IST);
  - New methods of working for Information Society

Technologies Programme promotion to the Commonwealth of Independent States (WISTCIS, IST).

Special detailed presentations of TEAMwork technology by representatives of IST project TEAMwork and Pl@za groupware by representatives of Teamware Group Oy, Finland, were given during the TELEBALT Workshop "Information technology, Tourism and Social Integration" held in Riga, Latvia, on April 4-5, 2002. These presentations were installed at TELEBALT Web-site at EDNES, France (http://www.ednes.org/telebalt).

Collaborative browsing toolkit (CoBrow) (CoBrow (RE 1003) and CoBrow/D (RE 4003) TAP projects) and Virtual Presence System (VPS) (SHOPEAWARE and WISTCIS IST projects) developed by consortium led by University of Ulm, Germany, IST project TEAMwork technology, European Knowledge Platform (EKP) developed by German Research Institute (GRI), and Pl@za groupware developed by Teamware Group Oy, Finland, have been studied as the pilot examples of telematics products for evaluation, adaptation, demonstration and implementation for EU-Baltic States' team-work. A preliminary evaluation has been made Open Source project "PHProject groupware" (http://www.phprojekt.com/demo/index.php). The draft of aggregated concept of Integrated Telework Management system has been developed. The prototypes of core modules are planned to be developed in the second half of 2002.

The training course on EU, Fifth Framework and Sixth Framework Programmes has been developed by telematic experts of EDNES headed by J-C.Marot, JCM Consultants, France. Four lectures of five were prepared entitled "European Union", "Enlarging the European Union", "Fifth and Sixth Framework Programmes" and "Participating in Sixth Framework Programme: opportunities for pre-accession states". A preliminary version of the course (three lectures) was presented at TELEBALT Workshop "Information Technology, Tourism and Social Integration" in Riga, Latvia, on April 4-5, 2002. The four lectures in its final form will be presented at the TELEBALT conference in Vilnius.

In this mid-point of the project seven project-deliverables have been prepared and delivered to the Commission. In addition to that a separate workshop (not originally envisaged by the project plan) especially devoted to the Sixth Framework Programme (6FP) opportunities for the Baltic States is under consideration to be organised by TELEBALT in Riga, Latvia, in April 2003.

## TELEBALT Workshop "Information Technologies, Tourism and Social Integration" in Riga 4-5 April 2002

#### Dinnija Mudure

The workshop "Information Technologies, Tourism and Social Integration" was organised by Open Latvia in co-operation with the Ministry of Environmental Protection and Regional Development, the Latvian Tourism Development

Agency and was supported by European Union (European Commission, IST Programme). It was held in Riga, Latvia from April 4 to 5, 2002. Two days of workshop attracted the attention of approximately 160 participants from different countries of Baltic, Europe and Russia.

This workshop was held in the frame of The International Forum "Baltic IT&T 2002:

Towards Effective Public-Private Partnership". The annual conference has proven itself as one of the most important IT&T forums in the Baltic Sea Region States and the topics discussed are important every year. The opening speech of the forum was performed by Andris Berzinš, the honorary chairman of the forum, Prime Minister of Latvia. Keynote speech was delivered by Vicente Parajon Collada, Deputy Director



General, Directorate for Information Society of European Commission. The plenary sessions "Global IT&T trends and consequences for governments and businesses" featured such top speakers as Glenn Edens, Vice President and Chief of Strategic Technology of Hewlett-Packard, Peter R. Walters, Director of Division of Product and Market Development at International Trade Center, UNCTAD/WTO, Werner Koepf, Executive Chairman of Compaq International, Steven Frantzen, Managing Director/Group Vice President of IDC CEMA, and Dr. Alexander D. Gelman, Vice President of IEEE Communications Society.

The opening session of the TELEBALT workshop started with the welcome speech of Vladimirs Makarovs, Minister of Environmental Protection and Regional Development of the Republic of Latvia and Andrew Rasbash, Ambassador of the European Union in Latvia. Key speeches in the plenary session were also delivered by Jacques BABOT, Head of sector at the European Commission in Brussels, Prof. Alexei GVISHIANI, Vice-president of EDNES, Nicole TURBE-SUETENS, Director of Distance expert Ltd, Dzintars ZARINŠ, Advisor of the Prime Minister of LATVIA, Brice LEPAPE, Head of Tourism sector at the European Commission in Brussels and Aira ANDRIKSONE, Head of the Tourism development division (MEPRD).

The speakers accentuated the important role of the workshop for promotion of Information Society Technologies Programme to the NAS telematic community and defined the goals and objectives of the event.

The workshop was held in two streams, tourism and ework: one stream was devoted to IST development, teleworking, distance education, and social integration by using IT and its applications.

The other stream was devoted to achievements and activities in IT tourism sector as well as IT solutions in tourism. Both streams were divided in four sessions:

#### Stream e-work:

- The Social and Labour Market Policy Context of e-Work: current European experience
- Presentation of e-Work related projects funded by EU
- E Work activities in Baltic's and CIS countries
- E Work, employment and social exclusion

#### **Stream Tourism:**

■ Globalisation of Tourism Information Systems

- Experience of tourism & IT in EU
- IT Solutions in Tourism
- Co-operation in Tourism Industry through IT

Participants of the workshop shared their experience in different sectors by presenting a number of projects (THINK, THINK NAS, E3Work, Baltport, WISTCIS, EASYCRAFT, Emergence, Team Work, Flex Work, SmartUp, WMART, ONTOUR, Renaissance, Tellmaris) funded by EC; IST and other local financial sources as well as sectors of different IT activities were widely represented.

During the workshop working groups were organised where participants had the possibility to establish contacts and discuss further collaboration.

At the final stage of the workshop the round table was organised with participation of high level representatives of IT community from all the Baltic States and EC (Marek TIITS (ESTONIA), Tarmo PIHL (ESTONIA), Karlis CERANS (LATVIA), Ramune PETUCHOVAITE (LITHUANIA), Juris BALODIS (LATVIA), Bernard SORDET (EU Delegation, Riga), Erik HABERS, (European Commission, Brussels). The subject of discussion was: Participation of Baltic's in the EU IST programme during the last 3 years as well as lessons learned and perspectives of the 6th Framework programme.

The number of agreements signed between the participants from different EU countries and Baltic countries determined the success of the workshop. Indeed, more than 30 memorandums of understanding have been established. The fact approves both the great success and the first step to further cooperation with the help of joint projects of the approaching 6th Framework programme of the European Union or bilateral EU and NAS co-operation.



The main aim of this workshop was to foster the co-operation between the Baltic and EU countries in the scientific and technological fields establishing new methods of work in tourism and social integration areas. The workshop clearly showed the huge interest of different organisations and the necessity of likewise events in the future.

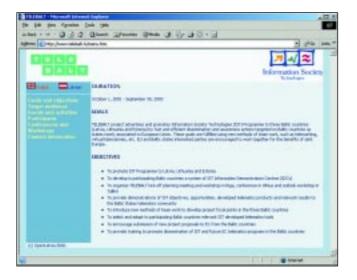
All information concerning this workshop is available on: http://www.telebalt.lv/workshop.php

#### **IDC** in Latvia

#### Dinnija Mudure, Alexander Beriozko

Information Dissemination Centre (IDC) at "Open Latvia" association (3, Zakusalas krastmala LV-1509 Riga Latvia).

The main objective of the IDC will be to dessiminate informations about opportunities to participate to the research and development programme of the European Union.



## Developing TELEBALT Project in Estonia

#### Konstantin Baranov

The beginning of 2002 was the incipience of the TELE-BALT project in Estonia. Prior to that, the project managers' meeting held in Vilnius at the end of December 2001, resulted in taking up a decision to involve Inforing Ltd (Estonia) as a project subcontractor. Inforing Ltd is a leading Estonian publishing house, with its own information portal in the Internet, which is known as "Infopress". The main purpose of the TELEBALT project is promoting the programme of Information Society Technologies (IST) in the Baltic countries, namely: Estonia, Latvia and Lithuania, based on activities to spread out information throughout these countries as future member-states of the European Union. The project also foresees presentations of new principles and methods for team-working such as teleworking, virtual teams, etc. viewed as further basis for preparing new education, scientific, medical and business projects.

As to the main guiding line for the project development in Estonia, it was approved that "Telematic methods of working and problems pertaining to provision of employment in the Baltic countries" would be prevailing. However, it was also stipulated that within the project framework other interesting leads could be developed, for instance, those which might be interconnected with implementing the teleworking, setting up virtual laboratories, and so forth. In accordance with the said purposes of the project, the staff of Inforing Ltd developed the plan of activities comprising the following tasks:

The main part of IDC will be the web site www.telebalt.lv/IDC where it will be possible to obtain an updated information on IT and EU matters, partnership, but also specific informations about employment opportunities for desable people in the field of turism.

The Information available will deepen the awareness regarding the upcoming 6th Framework Programme (FP6), by lesson learn from the participation of NAS for the IST Programme of 5th Framework Programme (FP5). The European and Baltic companies will learn about the ways of practical implementation of joint research activities in the framework of the European funding allocated by the European Commission (EC).

Information regarding new project possibilities will be distributed using the database collected during TELEBALT workshop in Riga. Electronic mailing following this list will be organised. On February 2003 a press conference will take place in Riga in order to inform about the IDC launched.

The IDC will possess its: local area network (LAN) with high capacity Internet connection; regularly updated library (books, IST project reports, electronic publications, Internet references, CD-ROMs); demonstration software library; services to provide telematics documentation and demonstration software; interactive goal oriented Web-site; facilities to organise TELEBALT demonstrations and gatherings.

The IDC will also provide some consulting activities to help Latvian companies to prepare proposals for EU funding in the IST domain.

- developing the major information data resource in the Internet, with basic data on purposes, management and participants of TELEBALT project
- developing the database in the Internet on labour law and procedures of labour employment in the Baltic countries and EU countries
- developing the database in the Internet on details pertaining to agencies and companies involved in providing labour employment in Estonia and other Baltic countries
- setting up the registration and search system in the Internet for parties and persons interested in finding either jobs or workers in the Baltic countries
- setting up the information centre for collecting trustworthy details on level of skills and experience of CVs as placed in the search system under the TELEBALT project
- advertising activities on the TELEBALT project through publications of Inforing Ltd.

Actually, the first part of the above works has been successfully completed. Currently, the information resource at www.telebalt.ee is operating in the Internet in three languages (in Estonian, English and Russian), with the basic details on the project. Nowadays, the collecting of information and developing of the programme for registration-and-search system is under way. Unlike the existing similar systems of CVs, this system will have certain distinctive features. The advertisements on activities under the TELEBALT project in Estonia, as well as the information on conducting seminars in Riga and Vilnius will be placed on the pages of Infopress portal in the Internet, too.

As mentioned above, the TELEBALT is going to promote the IST programme in three Baltic countries, i.e. Estonia, Latvia, Lithuania, by means of quick and efficient steps aimed at spreading out the details throughout the Baltic countries as new member-states of the European Union. Apart from that, the TELEBALT is going to study the current situation in respect of developing the IST programme in the said countries so that to provide appropriate feedback recommendations for scientific and marketing institutions of the European Union. In this connection, Inforing Ltd prepared the project managers' visit to Estonia. The visit was held at the beginning of July 2002. The project managers, namely Professor J. Bonnin, President, EDNES Association, Professor A. Gvishiani, Vice-President, EDNES Association, and

programmes simulate movements of ships in the narrows, i.e. straits and channels, so that radar display unit apart from a virtual sea state could reveal positions of sea vessels. The questions pertaining to co-operation in the field of developing the virtual library of files were raised during this visit, and an exchange of opinions on other matters connected with training was conducted among the participants of the meeting. When visiting the Mairie of Kohtla-Järve, the project participants got to know about the problems of both the town and provision of labour employment in the north-eastern region of Estonia, as well as the methods of management of



Ms. T. Shuljakovskaja, the Project Executive Secretary visited Tallinn, Kohtla-Järve and Jõhvi. The team visited the State Maritime Academy, Institute for Cybernetics. While visiting Kohtla-Järve and Jõhvi, the team got familiarised with the performance of the shale extracting company, and also, the activities of the Inforing publishing house. The meeting between the team and Mr. Valeri Korb, Chairmain, Kohtla-Järve Town Council, and Mr. Juri Kollo, Maire of Kohtla-Järve was also held.

In the course of the visit, both the project participants and the team members came to know about the opportunities, which are provided by new curricula as envisaged for training maritime specialists. The curricula were developed by the Academy instructors under the guidance of Mr A. Boronin, Programmer & In Charge, Radar Simulator Centre. Those curricula provide wide opportunities for computeraided training of the students, and furthermore, in the future, they are aimed at distant training of students of the Academy and the Courses for Improving Qualification. Two unique

the town which comprises several areas separately located from each other. Visiting the shale extracting stripping was useful in visualising the process at one of the biggest Estonian companies backed up by technical and computerised equipment, the working conditions, training principles and methods of training the personnel. Based on the results of the meetings and details collected in the course of the visits, the major conclusion arrived at was on possible development of other projects in Estonia. One of the main tasks of the TELE-BALT project is the submitting of new feasible projects to the European Commission. In this connection, a proposal was advanced to the representatives of the Maritime Academy, Institute for Cybernetics, and Mairie of Kohtla-Järve to visit the seminar to be held in Vilnius and deliver the appropriate reports. As to the immediate future, testing the registration and search system as the provider of labour employment is planned for August and September, 2002, apart from some other steps aimed at advertising the activities under the project in Estonia.

## From e-Europe 2002 to e-Europe 2005

Jacques Babot, Dinnija Mudure

#### Economic and political context

In the time period between the European Economic Community of the year 1957 and the European Union of 2002 the European economic and competitiveness landscape has been changing in radical ways.

Recently, the Euro has become a reality, and the common currency is being used by the largest part of citizens in our continent

The Lisbon agenda of structural reforms is an ambitious project aiming to put Europe at the top in international competitiveness.

And, finally, together with the enlargement, the Europe of the immediate future will be a larger one embracing those nations that until a decade ago were thought to have been lost to us behind the iron curtain.

In contrast to the EU, the productivity growth in the US continued at a steady pace during 2001, a year of recession, and has accelerated the rate in the first quarter of this year. Irrespective of whether this rapid pace is sustainable or not, the US is reaping the benefits of past investments, in particular, the investments in ICT and innovation assets, in the form of high productivity growth.

ICT (Information and communication technologies) is an enabling technology providing a powerful set of instruments to be used by producers and consumers alike. As an enabling technology, ICT has transformed in fundamental ways the characteristics of economic life. It has also enhanced our possibilities to innovate further. A future without ICT is clearly inconceivable.

#### Europe's yet to be realised technological possibilities

The 2001 Competitiveness Report stressed that the Europe's poor record in ICT investment and diffusion and in innovation could be at the background of the weak

productivity growth in the second half of the 1990s.

ICT expenditure in the EU has been declining relative to US expenditure from a little over 90% in the beginning of the 1990s to around 75% in 1999. The average share in GDP over the period 1992-1999 was 5.6% whereas in the US it was 8.1%. The US has made great advances in spending and use of ICT during the past decade while Europe has lagged behind. It should not be surprising that our productivity growth has also slowed down.

Yet, if one were to look at Europe today, one would be struck by the diversity of technological advancement. In some Member States the ICT investment and diffusion is comparable to what one finds in the US. Here also productivity and employment growth have been comparable if not better in some cases than the US record in the second half of the 1990s.

Clearly, it is essential to achieve comparable and high rates of ICT use across the Member States. The present diversity can not be acceptable. The new technological opportunities must be available to and be used by all citizens of Europe wherever they reside and choose to exercise their economic interests.

There is now a considerable evidence that the productivity resurgence of the second half of the 1990s reflects those innovations in the organisation and work that have been introduced at the work place and that affect white-collar workers. Apparently, little of this revolution has affected the traditional shop floor. This is not surprising since ICT and innovation depend on the availability of specialised knowledge and are intensive in human capital.

#### E Europe 2002 Action plan and Achievements:

The Lisbon European Council set the objective for the EU to become the most dynamic knowledge based economy in the world by 2010. The eEurope Action Plan 2002 - endorsed at the Feira European Council in June 2000 - is the central element of this strategy to transform the European economy.

The overall objective of eEurope is to bring Europe online as fast as possible. In pursuing this objective the Action Plan targets three areas are:

- i. cheaper, faster and secure Internet
- ii. investing in people and skills
- iii. stimulating the use of the Internet

The eEurope Action Plan is built upon a methodology, which consists of accelerating legal measures; existing financial support programmes' re-focusing; and benchmarking. There have been two previous reports, one to the Nice European Council and one to the Stockholm European Council, to assess progress in the execution of the Action Plan.

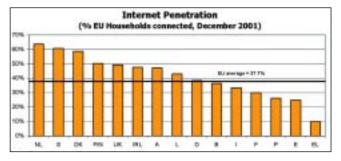
#### **Internet penetration**

The assumption behind the 64 targets of eEurope was that they would have an impact on Internet penetration and eventually the Internet use, which are the central objectives of eEurope. **This section will first review where the EU is in Internet penetration** before the following chapters will show what progress has been made in the three action areas.

Internet penetration is measured in two ways: how many private households have the access to the Internet; and, how many people use the Internet regularly whether at work, at home, at school, or elsewhere. Internet penetration in EU households increased from about 18% in March 2000 to 28% in October 2000, 36% in June 2001, and now, in December 2001, stands at 38%. This means that the rapid take-up during 2000 and early 2001 may have reached a plateau. The next measurement in May 2002 will test if this is true. Available national statistics seem to confirm this trend.

The slowdown in Internet take-up may be explained by the fact that Internet connections are linked to the availability of Personal Computers, which sets an upper ceiling to penetration. Internet through TV sets and mobile devices remains marginal but may grow rapidly in future. The EU countries with the highest penetration levels have reached Internet penetration rates of around 60% of households and further growth will be limited. The fact that they may no longer be driving EU Internet take-up may also explain the slowdown in EU growth.

Internet use in the whole population is higher than that shown by household penetration rates. In November 2001, almost 50% of the population (over 15 years) used the Internet either at home, at work, at school, in public access places or on the move. Over 80% of Internet users go online at least once a week. In absolute numbers there are nearly as many Internet users in the European Union as there are in the USA. Usage has increased in all different locations but by far the highest growth is in use at home. However, growth in Internet penetration in Europe has last year still been slower than in the US.



Source: European Commission (Eurobarometer, December 2001)

Chart 1 shows Member States Internet penetration in November 2001<sup>2</sup>. A group of 3 countries leads the EU with household penetration rates of close to or above 60% and 4 others are significantly higher than the EU average<sup>3</sup>. There are 4 countries within 5% points of the average whilst 4 countries are well behind the EU average. Greece is having penetration of less than 10% - a figure, which has remained stable over the past year. The leading Member States are better placed than the US, which can be considered as a benchmark for Internet penetration. The results are generally encouraging but there remain areas of slow growth and big differences between and within Member States. For example, 40% of women use the Internet, in comparison to 56% of men. This difference changed only marginally during the last year: in October 2000, 35% of women and 50% of men answered that they used the Internet. Internet usage is

<sup>&</sup>lt;sup>1</sup> Nice: The eEurope Update, COM(2000) 783, November 2000; Stockholm: Impacts and Priorities COM (2001)140, March 2001.

Note that surveys are based on telephone interviews. Households without a fixed telephone can be considered not to have an Internet connection at home. Therefore, penetration rates tend to be slightly overestimated.

<sup>&</sup>lt;sup>3</sup> This is a weighted average based on the national populations.

particularly high amongst young people, those with higher education and those who live in a city.

Internet penetration in businesses is far higher than the household rate and now almost 90% of enterprises with more than 10 employees have got an Internet connection. More than 60% have a web-site. A notable exception is Portugal where Internet penetration in businesses reaches only two thirds of all enterprises and only about a third of companies have their own site. More details on Internet use by businesses are given in the discussion of eCommerce below.

The conclusion is that several EU Member States should make more efforts to create a more favourable environment to reach higher levels of Internet penetration. By the end of 2002, a minimum of 30% household penetration and an EU average of 50% could be achieved.

#### **Internet in schools**

The public sector promotes skills development mainly through education. eEurope concentrates on infrastructure and access to the Internet whilst the eLearning initiative<sup>4</sup> promotes new ways of learning in the knowledge based society. Connecting all schools to Internet by the end of 2001 was an eEurope target. This was all but achieved in May 2001 when more than 80% of EU schools were on-line. However, being a student in a school connected to the Internet does not necessarily mean that one has access to the Internet. Neither does it imply that the Internet is being used for learning. In over 10% of schools connected, pupils did not have access as the Internet was being used for administrative rather than educational purposes.

#### The eEurope 2005 Action Plan

Last March, at the Barcelona Summit, EU leaders invited the Commission to draw up a comprehensive eEurope 2005 Action Plan, which was adopted on 28 May. It comes in the wake of the eEurope 2002 Action Plan, which was a wake-up call for Europe to catch up in the information age. eEurope 2002 aimed at enhancing Internet connectivity. Much progress has been achieved. About 40% of homes are now connected and over 70% of companies have Web access.

On this basis of much improved connectivity eEurope 2005 aims at realising more of the benefits of information society in Europe in terms of increased productivity, employment and inclusion.

eEurope 2005 addresses both demand and supply side. It is built on two strands of actions that reinforce each other, namely:

- First, promoting services, applications and content that are attractive for users, save them time, and have day-to-day relevance. The focus in eEurope 2005 is on eGovernment, eLearning, eHealth and eBusiness;
- Secondly, stimulating the widespread availability and use of the underlying broadband infrastructure and of platforms next to the PC (such as interactive digital TV and 3G mobile) to let many more people be able to take part in the information society.

By addressing at the same time content and infrastructure eEurope 2005 aims to help breaking the chicken-and-egg dilemma. Content, services and applications will stimulate broadband rollout; secure broadband and multi-platform will stimulate new content and services.

Of course, the larger part of content and infrastructure will come from the private sector. eEurope 2005 aims at creating a more favourable environment for private investment.

eEurope 2005 focuses on those actions where public policy and the public sector can make a difference and where there is a justified role to play in relation to the market.

<sup>4</sup> COM(2001) 172.



#### EU Community 6th Framework Programme



Jacques Babot, Dinnija Mudure

#### **Objectives**

The activities carried out in this area, pursuant to the conclusions of the Lisbon European Council and the objectives of the e-Europe initiative are intended to stimulate the Europe's development of technologies and applications at the heart of the creation of the Information Society. This is done in order to increase the competitiveness of European indus-

try and to provide European citizens in all EU regions with the possibility of benefiting fully from the development of the knowledge-based economy.

#### Why?

Information Society Technologies (IST) are the major underpinning technologies for realising European policies for the knowledge society. This has been acknowledged politically through recent resolutions of the European Parliament, in particular those relating to the Next Generation of Internet and the European Research Area, as well as being identified as highest priorities at the European Councils of Lisbon, Feira and Stockholm. Progress in IST is essential to address major societal and economic challenges and to support all other research fields.

- The strategic objectives of IST in FP6 are to ensure European leadership in the generic and applied technologies at the heart of the knowledge economy and to ensure the development of an ALL inclusive knowledge society.
- There is an urgent need to invest in RTD, now, with the upcoming new generation of technologies and applications. It responds to socio-economic needs and supports the Union's policy orientations.
- Europe is still lagging behind as regards investing in research in IST. The IST research effort in the USA is three times as much as in Europe, and in Japan it is 50% more than in Europe. The research effort in the EU in IST is also often fragmented: member states cannot build critical mass on an individual basis.
- The EU RTD programmes in IST provide a unique opportunity to aggregate the RTD effort of the member states, build consensus towards future standards and assert leadership as exemplified by successes such as GSM.
- The EU RTD programmes act as a major driving force for research in Europe. Although the EU effort represents almost 5% of total RTD investment in IST in the EU, it represents up to 25% of the high-risk and long-term part of the RTD effort. It is therefore an essential component of the EU total effort.

IST in FP6 will therefore concentrate on forward-looking, high-risk research - this is vital for developing the future generations not only of technologies, but also of applications and services.

#### How?

Realising the above objectives requires research on both the **core technologies** and **specific applications.** 

#### **Developing the core technologies**

Progress is required in **three main technology** building blocks:

- 1. Pushing the limits of miniaturisation and minimising the costs and power consumption of **microelectronic** and **micro-systems components**. This also requires the exploration of new materials, such as organic flexible materials for displays and sensors so that they can be placed anywhere, even in the human body, and take any shape.
- 2. Developing mobile, wireless, optical and broadband **communication infrastructures and computing technologies** that are reliable, pervasive and can be adapted to accommodate new applications and services. They will lead to the next generation Internet and will have to support the exchange of increasingly large amounts of information. In the next ten years, it is expected that the average household will be managing terabytes of photos, music, videos,

THINK Baltic extension



Inga Bakane, Henrique Relogio

THINK - Towards Handicap Integration Negotiating Knowledge - is a project that will professionally integrate

software and documents.

3. Developing **user friendly interfaces** which are intuitive, can interpret our senses such as speech, vision and touch and that understand gestures; preparing for the **Next Generation Web** technologies that make access to knowledge simpler and more effective.

### Building innovative applications and solving complex problems

A strong applied and application-specific research effort is needed to address in an integrated way the socio-economic challenges. Research will aim at:

- Solving the "**trust and confidence**" problems in the areas of security, privacy, property and individual rights and dependability. Improving trust in the knowledge society is a key requirement for its development.
- Addressing the **societal challenges** such as health, inclusion, transport, environment and cultural heritage as well as **business challenges** such as support to new value chain management, mobile commerce (allowing for a concrete step forward towards 3G functionality) and ework tools and processes.
- Developing the tools and applications of **knowledge and computing GRIDs** for complex problem solving in science industry and businesses. These are the key elements of the **Next Generation Internet** and will enable the harnessing of the computing and storage resources across Europe and will bring it to the desktop of any researcher, engineer or end user.

European researchers already enjoy one of the world's fastest and most extensive research networks, developed through the GEANT project. The support for the research networking infrastructure in FP6 and the extension of GEANT will be provided through the Specific Programme: Structuring the ERA. The objective is to upgrade the research infrastructure to beyond 100 Gbit/s, enabling researchers across Europe to share knowledge and collaborate on solving complex scientific problems. Such networks will serve as a major cornerstone towards the realisation of the ERA.

Research into the GRIDs technologies in the IST priority and the upgrade of the research infrastructure complement each other. In addition to applications in science, they will enable complex problems' solving for societal (e.g. environment, health...), engineering and business needs. These will pave the way for the full rollout of the next generation Internet. Close articulation is therefore needed between the work on the research infrastructure in the relevant specific programme and the IST priority.

More information on this subject is available on http://www.cordis.lu/fp6/

300 disabled people, as teleworkers, in five European countries, up to July 2002. Professional integration implies transfer of skills in different areas so that they become productive, lucrative and self-sufficient using information and communication technologies for telework. The THINK project is already a technological, organisational and social model, recognised in Europe as an innovative solution for disabled people.

The success achieved by the previous PORCIDE project (1997-2000), now called PORCIDE I, with the integration of



20 disabled people from all over the country into services such as Help Desk, Programming, Web-design, Creation of Templates and Audio Transcription, has not only given rise to its re-launching in Portugal, now designated PORCIDE II/THINK, but also to the export of this innovative socio-economic model to another eight countries. There are 60 vacancies in Portugal, 60 in Spain, 60 in Italy, 40 in Greece, 20 in Scotland, 20 in Latvia, 20 in Lithuania and 20 in Estonia.

In a European perspective, the project intends to demonstrate and develop a model of social, organisational and technological dimensions that enables people with disabilities to work as a team across different countries.

In this way we will improve the quality of life of a population who has been discriminated from the labour market. And since the future of Europe "in terms of innovation, growth, competitiveness and employment depends on the human resources development and the information and communication technology", THINK BALTIC is a truly helping hand in a very competitive world, giving primacy to people with disabilities in a new area: telework, which becomes the instrument of socio-economic cohesion. On the other hand, by taking the advantage of the new technologies we will contribute to the European Commission's programme eEurope, since one of its objectives is to "give to all Europeans the benefits of the Information Society."

The management approach to be used in the project - as explained further on - will secure tight communication and collaboration between the co-ordinator and the participants, and later also the teleworkers. Information technology sup-



## E3WORK (Eastern Europe E-Work)

#### Iveta Bieza

Goal of E3WORK project is furtherance of distance working methods in Latvia by promotion of advantages and potentials offered by IT. Information on e-work and e-learning praxis will be disseminated within the project.

E3Work project offers great opportunity for exchange of experience on employment and ratio of distance work and

port will be used to facilitate work group management and development. This provides an easy way to keep up to date, share information, and collaborate on documents and projects. Another tool to be used is Intranet, so as to be interconnected and flexible. Intranet reduces the cost of paper document distribution, increases communication, and improves access to current information.

As a collateral effect, we foresee the creation of a virtual community, where teleworkers and all project participants can exchange opinions and thoughts in a virtual space emerging from common experience. This infrastructure enables us to learn much more about individual and group experiences, and to make it possible to support both inter-company as well as inter-organisational working.

THINK and THINK BALTIC are clearly different. As others focused on training the unemployed or disabled in performing teleservices, not guaranteeing employment opportunities, THINK BALTIC has the employment potential, linking the usage of the features of the Information Society with the social-professional integration of citizens suffering from a handicap. This aim of inclusiveness is common to another European project: Helios - Social Integration and Independent Living. The ultimate expected result is to give disabled people a real control over their lives and consequently the autonomy and independence to participate actively in society.

In THINK BALTIC participants from different organisations are involved, each contributing with their specific skills, complementing each other, and making the project possible. Only this way, are we able to foster the creation of new working methods (telework) and to develop systems and services for social integration of the disabled. THINK is a unique concept, which will help the disabled to be autonomous and self-sufficient, while contributing to better employment conditions and social inclusiveness, according to the Amsterdam Treaty. It is also an example of the power behind civil partnerships, how private companies can collaborate to help solve a public problem profiting from it. But in the end the society as a whole will benefit.

associates partners from Poland, Lithuania, Hungary, Romania and France (co-ordinator-state of E3Work).

There are organised pilot-projects in all five acceding countries. Each project team recruits at least 6 distance workers. All necessary infrastructure and technical equipment will be ascertained during the project, main inner managerial and social obstacles in distance working praxis also will be clarified, as well as all questions casing social security guaranteed for distance workers by legislation of Latvia that will be reassessed.

## Introduction of this working method offers real benefits for society:

- Improvement of working ambience
- Growth of employment
- Decrease of discrimination on labour market

#### Pilot partners

The first pilot-team in Latvia is completed of Public

<sup>1</sup> www.eun.org, Report of 26 June 1999.

<sup>&</sup>lt;sup>2</sup> www.ispo.cec.be, Office of the Project Information Society.



Foundation "Open Latvia" and company "Baltijas Suveniri" Ltd., while Riga Technical College forms the second pilot-team.

#### Advantages of e-work

E-work offers new-type organisation of working day, more flexibility for scheduling tasks, obligations and business trust, improvement of working time balance with personal life, increasing productivity, psychological independence and professional self-motivation, reduce of life costs on transportation, catering etc.

#### **Dissemination activities**

Meetings with various organisations involved in development of e-work and e-learning in Latvia.

#### Example of distance work

NPO "Public Foundation "Open Latvia"" already uses distance working methods in everyday life that optimises material, financial and human resources in organisation. As an example of working we can mention creation of tourism information database. In this case interpreters are using ework applications for translation and improvement of information from their home. Home workstation of distance worker must be provided with convenient hardware and software as well as Internet access. Contact and co-ordination of distance worker with employer is realised by phone or network. In some cases it is also possible to organise collective meetings on development of organisation and consultations in official bureau.

## Simulation and IT-Solutions: Applications in the Baltic Port Areas of the Newly Associated States

Eberhard Blumel, Leonid Novitski, Yury Merkuryev, Egils Ginters

After the political changes in the former Soviet Union, the ports in East European harbours faced and are facing a lot of problems. Since 1995, the EU-funded projects like AMCAI and DAMAC-HP try to improve this situation. In 2001, a new project has been started which is called BALTPORTS-IT.

The BALTPORTS-IT project has many international partners: Fraunhofer IFF (co-ordinator) and University of Magdeburg (Germany), University of Ulster (UK), Port of Gdansk and Warsaw University of Technology (Poland), Klaipeda State Seaport Authority and Kaunas University of Technology (Lithuania), Baltic Container Terminal, Ventamonjaks, IDC Information Technologies, Latvian Intelligent Systems and Riga Technical University (Latvia), Institute of Cybernetics (Estonia). Their goal is to reorganise the Baltic Ports in the Newly Associated States.

The economic changes often. Therefore, it is very important to integrate these ports in European logistic chains. Necessary as well is an improvement of the ports' competitiveness. Furthermore, Free Port Areas need to be developed in contrast to the now existing central control systems. Those Free Port Areas should be composed of port authorities,

agencies, forwarders, trucking companies, stevedoring and insurance companies, customs authorities, banks, railway and warehousing companies.

The infrastructure must be improved so that a fast and steady flow of goods can be guaranteed.

In order to reach these goals, the partners want to redesign IT-processes and give simulation based decision support.



Expected results for Baltic maritime companies are presented in Figure 1.

#### ARTIFICIAL INTELLIGENCE ALGORITHMS ON-LINE FOR BALTIC COUNTRIES

#### Alexei Gvishiani

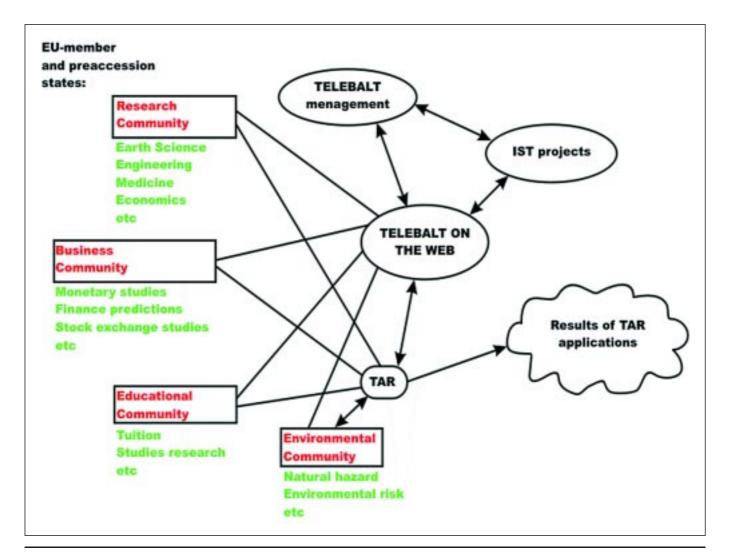
The four TELEBALT project countries (France, Latvia, Lithuania and Estonia) are among the leaders in the algorithmical aspects of Artificial Intelligence (AI) studies. Thus, it makes it natural that these countries will join their efforts in this modern important direction of nowadays research. TELEBALT project plans to help making the first effort in this direction.

Computer science departments of Vilnius and Riga Universities, Institute of Cybernetics at Tallinn Technical University, Institute of Physics of the Earth in Paris and CODA-TA consider to start working together in the framework of TELEBALT project. The goal of this collaboration is the creation of a joint on-line algorithmical resource for wide usage of research communities of the Baltic States and other European countries. This activity will be developed in close collaboration with the four TELEBALT partners (contractors) - EDNES (France), Open Latvia (Latvia), INFOBALT (Lithuania) and Inforing (Estonia). The first meeting on "TELEBALT Algorithmical Resource (TAR)" took place in Tallinn, Estonia on 5 July 2002. Prof. Jaan Penjam, director of Institute of Cybernetics at Tallinn Technical University,

Dr.; Jaan Kalda, leading researcher in AI algorithms of this institute, Prof. Jean Bonnin (University Louis-Pasteur, France) and Prof. Alexei Gvishiani (Russian academy of sciences) discussed the first steps of the TAR planning. As the next step it was decided to organise a special meeting on TAR during the TELEBALT conference in Vilnius 22-23 October 2002.

The TELEBALT Algorithmical Resource (TAR) will mainly include three types of algorithms: vector classification with learning, clustering in finite sets and time series recognition. It is planned as an on-line accessible collection of AI tools applicable to wide range of scientific and business oriented data. Well-known fields for TAR algorithms application are geophysics and Earth science data in general, financial analysis and prediction and medical data recognition problems. TAR can be also useful within the problems of human resources distribution. In this way it can provide an important contribution to telematic applications in searching new employment opportunities for the Baltic States. The latter is one of the main TELEBALT targets.

TAR is going to be designed as a Web based resource efficiently accessible on-line by the project participants and collaborating organisations from TELEBALT countries. It will also be made available on request to other IST projects interested to collaborate with TELEBALT on this matter. Each algorithm included in TAR will be represented by the following items: summary description, detailed mathematical description, references, the computer programme accessible remotely, conditions of the algorithm usage.



## Implementation of multilingual Collaborative Browsing User Agent as an extension of the CoBrow concept

Holger Christein, Anatoly Soloviev

#### **Summary**

Presence Awareness lets people realise who else is around. In the web context Presence Awareness allows people to 'see' each other while they are browsing the same web page or web site. This fundamental property of Presence Awareness enables ad-hoc communication of people and also a more substantial communication since people with similar interests meet on the same web locations.

When installed at IDCs it will ease the getting in touch between people from EU and the CIS working in research, education, business or just between people who are simply browsing the web for fun. This is because presence awareness provides for encounters similarly like in the real world.

This article focuses on implementation of a multilingual Collaborative Browsing User Agent (CBUA), which will support Russian language so that it is well fitting for use within the CIS countries. To allow EU-CIS teamwork in areas such as research and education it will also support the English language.

In the following we give an overview of the presence awareness service developed by Ulm University, which is the backbone of CBUA currently compiled in the framework of the WISTCIS project. Then we discuss the main implementation issues of CBUA. Finally we conclude with a sample of important current screen shots of it. Here we use the opportunity to describe prominent functionality of CBUA.

## Presence Awareness Information Broker (PAIB) (former Virtual Presence System)

The new multilingual Collaborative Browsing User Agent, which will be named CBUA in the following, is based on the PAIB (Presence Awareness Information Broker) (former Virtual Presence System) service [1], developed by Ulm University. PAIB can be regarded as a successor of the CoBrow system.

PAIB in general delivers presence awareness information of vicinities [2] or in other words it tells which users are within a certain neighbourhood. It thus allows tracking of vicinities. A neighbourhood in the context of collaborative browsing is a group of users who have opened the same web page or related web pages e.g. web pages of a web site. As a default means of communication, PAIB provides chat functionality. Chat refers either to all users within a neighbourhood or to a selected user. In addition to CoBrow it allows also tracking of presence information of specified users (or presentities [2]). Furthermore, it provides status information of users like 'user is busy/idle'. So overall it tells who is around and what people being around are doing.

Since it is completely implemented in Java it can be installed on every operating system that provides a Java virtual machine (every relevant operating system provides a Java virtual machine meanwhile).

The database layer, where properties of users like photos, names, e-mail addresses etc. are stored, has become much more flexible. Now even pre-existing LDAP databases with arbitrary schemes can be imported in the PAIB simply by providing a scheme description in XML style to PAIB. Databases, which implement LDAP (Lightweight Directory Access Protocol), store their data in a hierarchical manner.

Figure 1 displays an overview of the architecture of PAIB. PAIB has client/server architecture with a lean client side API. CBUA makes use of this API.

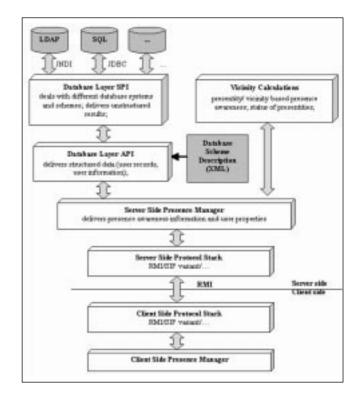


Figure 1: PAIB overview

#### Collaborative Browsing User Agent (CBUA)

#### Overview

The communication between a CoBrow user agent and its presence awareness service is done via a dedicated protocol, which is transmitted over HTTP. Additionally to the presence awareness service at server side there is a web server specific plug-in. Its main task is to add some Java Script code. This piece of code which we call scout tells the presence awareness service which web page is currently viewed by a user.

The communication between CBUA and PAIB is done via the client side API of PAIB. Instead of using web server specific plug-ins for WISTCIS we use a Java proxy Servlet. The result is that presence awareness is not only related to a specific web site but to the whole web. Again with Java Servlets we remain in the Java world, which provides the independence of the platform. It is, of course, possible to use CBUA for a dedicated site only, too.

Figure 2 shows the whole system currently compiled for WISTCIS, which consists of PAIB and the proxy Servlet at server side and CBUA at client side.

#### Displaying neighbouring users

To display neighbouring users CBUA has to know which URL or web page is currently viewed by its user. Therefore CBUA subscribes to presence awareness information of its user at the PAIB service with aid of PAIB's client side API. This means that CBUA gets a notification whenever its user opens another web page. Each time it gets a notification CBUA subscribes to presence awareness information of the web page currently viewed by its user. Thereby the PAIB service delivers initially all current neighbouring users as well as changes, those users who have entered the neighbourhood as well as users who have left.

To make the whole thing work, the web page currently viewed by a user has to be reported to the PAIB service. This is a two-step process: first - the scout has to be added to each retrieved web page. Second - the scout reports the URL of a retrieved web page to its PAIB service.

For WISTCIS we have implemented a special proxy Servlet that tunnels each request and response. Before a response or a web page is sent to a client's browser, the scout is added to it. If a user follows a link within a web page it must be ensured that this link is tunnelled through the proxy Servlet so that it can do its job. Therefore each link has to be rewritten. The proxy Servlet does this, too. The following example shows what the proxy Servlet does:

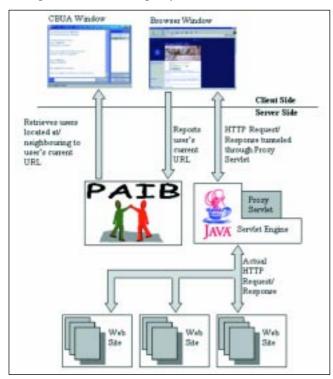


Figure 2: System overview

#### Multilanguality

To internationalise CBUA we have to provide translations for every text label that appears at the GUI. The Java programming language provides therefore the commonly used resource bundles. For each supported language, at least Russian and English, there is a separate resource bundle, which contains the appropriate translations. For example, a user living in Russia speaking Russian decides to have a Russian CBUA. Therefore, he would select Russian language at the corresponding control of CBUA and internally the appropriate resource bundle would be loaded.

Using of resource bundles makes the task of internationalisation quite easy and beyond it supporting of other languages can be done rather quickly at any time simply by adding new resource bundles containing the corresponding translation.

#### **Current screen shots**

In the following there is a selection of important current screen shots of the CBUA.

New user registration window: Figure 3 displays the new user registration and login window of CBUA. There are two kinds of login. The first kind only requests a user name and the password of a user. This login is used when the user is already known by the CBUA. The second kind of login requests also the properties of a user apart from the user name and the belonging password (Figure 3 requests properties homepage, e-mail address, phone number and postal address). In this case the new user logs on to the system and is also created.

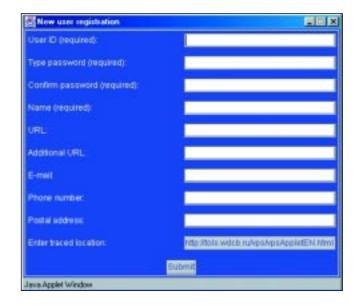


Figure 3: New user registration window

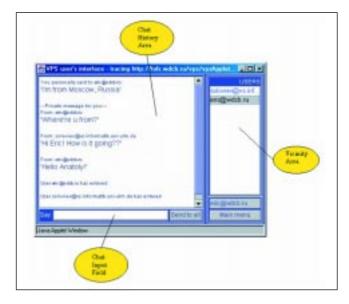


Figure 4: CBUA main window

CBUA main window: Figure 4 displays the CBUA main window. It displays the user IDs of neighbouring users, the URL of the web page currently viewed by the user and the chat history. It provides an input field for entering chat. A chat message can be either sent to all neighbouring users or to only one certain user.

Properties window: Figure 5 displays the properties of a user. If a user displays its own properties they are editable. If properties of other users are viewed they cannot be changed. A user (whose e.g. phone number or mail address have been changed) is able to update the corresponding information within CBUA at any time.

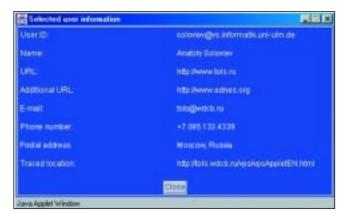


Figure 5: Properties window

#### Teamware Pl@za 3.4

#### Anu Peltola

#### **Standard Edition**

- Interactive Business Card for accessing contact information
- Personalised views based on user preferences and access rights
  - Who's on-line for person-to-person networking
- Content provision by easy inserting and updating of the information
  - Searching of site content
  - Feedback Form
- User administration including User Registration and Access Control for Security
  - Group management
  - System administration

Making web sites interactive

Teamware Pl@za is a modular software solution for creating interactive Web sites. Pl@za offers functionality for creating Web communities and increasing interaction between people. It provides personalised, interactive Web sites, tailored according to the preferences and access rights of individual users and groups.

Each Pl@za site can be tailored to meet the demands of the look and feel of your site. Other information sources can be integrated into Pl@za so that, if required, other Web functions or data from other data sources can be utilised.

Pl@za is available on Solaris and Windows 2000 platforms.

#### Teamware Pl@za Standard Edition

#### **Current state of implementation**

A great deal of work is already done. Displaying of neighbouring users is completely implemented and works quite well. Multilanguality is also ready to use. Most of the necessary functionality is available. For oncoming reporting periods there are anyway still some tasks to do. The whole system has to be installed at the WISTCIS main web site. Therefore a Servlet engine as well as an LDAP database, which stores the user properties has to be set up. We plan to deploy the latest Version of PAIP. CBUA have to be adapted to some changes within the current client side API of PAIP in order to make use of it. The final step is the rollout, where the whole system is installed at different IDCs (Azerbaijan, Belarus, Moldova, and Ukraine).

Besides the works described above, the following milestones, which are named in work-package WP 4, have already been reached: Demonstration of CoBrow at WIST-CIS kick-off conference and at two WISTCIS workshops in 2001. The requirements of collaborative browsing for EU-CIS teamwork have been defined and are taken into account in the so far compiled CBUA.

#### References:

- [1] PAIB on the web: http://www-vs.informatik.uni-ulm.de/virtual\_presence/
- [2] A General Purpose Model for Presence Awareness; Holger Christein, Peter Schulthess, University of Ulm, Germany; To appear in the Proceedings of the 4th International Conference on Distributed Communities on the Web, Sidney, Australia, 2002

Teamware Pl@za Standard Edition offers easy tools for building interactive Web communities. It offers the personalization and customised user rights enabling users to receive only relevant information and controlling the access to confidential sections. It provides easy content provision with readymade form-pages and Interactive Business Cards for displaying user information and contact details as well as messaging services for contacting other community members, searching site content and feedback service for user comments.

#### Teamware Pl@za Additional Functionality

On top of the Teamware Pl@za Standard Edition you can choose Pl@za Additional Functionality in order to further utilise your Pl@za solution. The functionality can be added one at a time according to your current requirements. Further descriptions on Pl@za Additional Functionality can be found on Teamware Pl@za Additional Functionality Fact Sheet.

Pl@za can be integrated with Teamware Office (Mail, Calendar, Forum and Library). Further descriptions on Teamware Office can be found in Teamware Office Fact Sheet.

Pl@za can also be integrated with Intelligent Information Management services offered in association with BTexact Technologies. These services include interest profile management, contact finding, information retrieval and personalised newspaper based on interest profiles. Further descriptions on these services can be found on Pl@za Additional Functionality: Knowledge BrowserTM Fact Sheet.

#### Pl@za capabilities Standard Edition

Pl@za 3.4 is available on Solaris and Windows 2000 platforms.

#### **Teamware Interactive Business Card® (IBC)**

The IBC offers individuals or organisations their own Web pages for displaying contact information. By templates, the site owner can control the site style and the user can edit its content. To allow contacting users through the site, IBCs are integrated with mail. The user can decide how visible the information should be - public, meant to fellow group members or private.

#### **User Profiling and Personalization**

The Pl@za system controls the user session and resources. The user interface is customisable for language, style and access rights. Preferred communication channels can also be selected. A Pl@za site recognises the needs of individual users and dynamically creates pages to reflect their preferences, roles, and access rights, to create a personalised site that reflects their interests and activities.

#### Who's online

With the help of Who's online the users can check who else is currently logged in. Who's online assists in networking between people by providing an easy way to call others to online meetings or checking their IBCs.

#### **Content Provision With Formpage**

Keeping the Website information up to date is a major task in most organisations. Pl@za has a utility that allows users to build standard page displays and form based pages for data input and changes.

#### Search

Pl@za provides a comprehensive search functionality enabling information to be searched from discussion groups, document folders, web pages, Help pages and IBC's. Search supports simple and detailed searches, prefix searches and more complex query syntax. Search also makes use of a stop word file of words that should not be added to the index. Finnish Stemmer (Solaris) is available as optional component.

#### **Feedback**

Both registered and non-registered users can send feedback through a feedback form. The different types of feedback can be forwarded to different places, like a responsible person's mailbox, a file, or a discussion group.

### User Administration including User Registration and Access Control for Security

User level security consists of User Registration (requiring each user to be identified before being allowed access to services), Access Control (verifying which services are allowed to which user) and Accountability (controlling the critical operations performed by the user).

#### **Group Management**

Pl@za is built around the structure of an organisation with different types of membership and committee structures, special interest groups and team working. In addition to pre-defined group types (Special Interest groups and Committees) it is possible to define tailor-made group types. Each group has a manager who can introduce users to the group and change the "home page" of the group.

#### **System Administration**

Pl@za provides easy-to-use HTML based administration tools. Usage statistics can be displayed or printed for managers to monitor the popularity of the system. In addition, standard Web analysis tools can provide a list of site visits and data downloads etc.

#### Pl@za Client requirements

The end-user only requires a standard browser. To benefit from all the functionality in Pl@za, it is recommended

that any of the following versions of browsers be used:

- Microsoft Internet Explorer 5.0 to 5.5.
- Netscape Navigator 4.5 to 4.7.3.

#### **Additional Functionality**

#### **Discussion Groups**

The Discussion Group service allows users to continue debating topics of interest outside of normal meetings. The user can select which discussion groups to monitor and how the topics in them are sorted and displayed. The user can choose to view the topics as flat lists or hierarchical threads. Authorised users can create new discussion groups. URLs written in messages starting with e.g. http: are automatically recognised and shown as links when viewing the messages.

#### **Document Folders**

Sharing documents makes the interaction easy. The Document Folder service provides this facility, which allows an organisation or individuals to publish papers easily on the Internet. Any type of document can be saved and downloaded. Document folders allow documents (including Pdf files) to be searched. Users can add access controls and permissions to documents and folders.

#### **Special Interest Groups and Committees**

Special Interest Groups (SIGs) and Committees offer shared pages for groups of people who need to interact and communicate with each other. SIG managers or Committee chairmen and secretaries can manage and modify the content of the shared pages. Other Pl@za capabilities can be associated to SIGs and Committees to provide, for example, dedicated discussion groups and document folders to a SIG or Committee.

#### Formpage Management

Formpage Management allows new pages and templates to be constructed. Existing pages can be modified, copied and moved.

#### **Event Management**

Event Management provides a publicly viewable graphical event calendar, listing all meetings relevant to the organisation or filtered to list only those events dedicated to a specific group. Users and visitors can register for meetings. Organisers can design their own meeting types and registration forms or, to save time, can select from predefined ones. Organisers can also define events dedicated to a particular group. An authorised user can view and modify the list of attendees for an event. The attendee list includes links to the attendees' IBCs.

#### **Notifications**

To help keep abreast of new information, users can choose to view notifications about specific changes on the site. Users can choose to have notification summaries sent to them via e-mail or view them when logged into the Pl@za site. Users can subscribe notifications of changes on Discussion Groups, Document Folders, SIGs or Committees, and other formpage base pages.

#### **On-Line Meeting**

With On-Line Meeting users can meet on-line and have real-time discussion by groups or one-to-one. All discussions can be recorded in a file. On-Line Meeting provides moderated meetings and configurable welcome messages to welcome those who join a meeting.

#### **Survey Management**

Survey provides easy-to-use tools for setting up and managing on-line surveys and opinion polls. Surveys can be targeted to a specific group of users or the general public. The service provides basic statistics of responses received. The

data can be exported in XML and CSV formats for more detailed analysis with other tools.

#### **Message Centre**

Message Centre provides the ability to read received messages and to send messages to other users during their current session, on next log on or by their preferred route. SMS Messaging can be provided to offer the ability to send messages from the site to other users via SMS. Users can select their preferred messaging route from the options including Message Centre, e-mail or SMS messages. This service also provides group electronic mailing, which allows individuals who are most receptive to the information to be targeted.

#### e-Commerce and Payment system integration

Pl@za allows organisations to sell advertising space on their pages. To allow organisations to sell goods on-line, Pl@za is integrated with WorldPay®. This allows credit card payments to be made from all over the world.

#### **Data Synchronisation**

Pl@za allows user, group and event related information to be stored in a relational database, a directory server or the file store. By using XML the Pl@za Data Synchronisation service can synchronise Pl@za data with other community databases. The community's database controls the synchro-

## PARTNERINFORM Internet-based funding opportunities service for scientific, educational and cultural projects

#### Valentin Mikhailov, Sergei Tikhotsky

The main purpose of the PARTNERINFORM project was the wide dissemination of information about national and international funding agencies that can support educational, research and cultural projects in Russia. The main objective was the creation of Web site that contains Russian-language information about these agencies, their activities and news.

Project purposes and objectives were successfully attained: Web-site created containing database of actively working funding agencies that support activities in the New Independent States. The site is constantly maintained and new information is periodically added. Internet address of the site is http://www.wdcb.ru/grants.

Prior to the construction of the site, the existing Russianspeaking Internet resources containing information about the funding agencies were analysed. It was found that the existing sites contain only very brief information about the funding agencies, they do not distinguish between the foundations working actively in the NIS and those almost passive, and they are not having any tools for searching the foundation most suitable for the concrete goal. Most of the existing Web resources do not contain the Internet-addresses of the foundation web-sites.

According to this experience, the conception of the PARTNERINFORM Web-site was formulated in the manner to fill up the gap in information of Russian-speaking

nisation process. It dictates the frequency and the action to take if inconsistencies are detected.

#### Security

As network security is of great importance the Apache web-server can be used as a front-end to Pl@za. This allows SSL (Secure Sockets Layer) to be used. Note: Use of SSL encryption is not available on Pl@za for Windows 2000.

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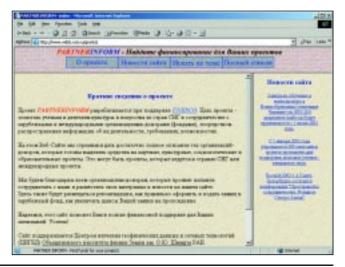
#### For further information contact:

Teamware Group Oy, P.O. Box 135, FIN-00381 Helsinki, Finland.

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Internet. This site contains information about those foundations that work actively in the NIS. Each foundation is comprehensively descriptive regarding its fields of activity, current programs, requirements, on-coming calls for proposals, etc. PARTNERINFORM site contains a catalogue that helps in finding the most appropriate foundation for particular needs. The site contains news section, which is routinely refreshed. The submission forms for many foundations are also placed at the site.

Web-site is tested with the Internet Explorer, Netscape and Opera browsers under Windows platform and with the Netscape and Opera browsers under Linux platform. The site is placed at the fast (1 Gigabit/sec) Internet server situated in Moscow at the Center of Geophysical Data Studies and Telematics Applications JIPE RAS. It works successfully with all these browsers and with the screen resolution from 640x480 pixels and better. Thus it is available for almost all the Internet users in the NIS, even if they work with rather old computers and low-speed Internet connections.



## E-LEARNING DEVELOPMENT IN LATVIA

#### Atis Kapenieks

#### Regional development

Regional e-development programmes are being carried out in a number of regions. The most successful e-learning development programme is going on in Livani District. In year 2000 the first e-learning group with 15 participants was organised there (12 participants completed the business course, now 3 SMEs are running based on the business plans developed during this course).

In May 2002 new Computer Classroom was set up, which organised 4 e-courses and videoconference. Altogether 165 participants completed the courses "Business planning for open markets", "IT for beginners", "IT for users", "Technical Communication".

The following project is accepted for craft development. It includes the training of 240 participants in 6 e-learning courses (the courses on e-commerce and English language will be added). A new course on selected craft related topic is also planned to be prepared. Another activity of the project is the development of the knowledge repository in Internet, exploiting the results of 5th Framework project "Hyper-knowledge".

#### E-learning in universities

The Blackboard software in Riga Technical University (RTU) was installed in December 2001 with intention to open it also for other universities of Latvia. Currently Liepaja Teacher Training Academy is also active in using RTU blackboard.

The University of Latvia is testing the WebCT software.

The private college "Turiba" is using a self-developed virtual learning environment to deliver the study programmes in business and economics.

The distance learning study centres in the University of Daugavpils, Latvian University of Agriculture, Valmieras Augstskola and others are interested in e-learning, too.

#### E-learning delivery by companies

There are some companies delivering ready-made courses from commercial partners abroad, mainly on IT engineering related topics.

#### E-learning university-industry co-operation

In spring 2002 the Latvian Mobile Telephone Company "Latvijas Mobilais Telefons" sponsored a large-scale project. More than 4500 Interactive Multimedia CD-ROMs with printed learning materials were presented (packages sent by surface mail) to all 1247 Latvian schools. This big campaign was organised through TV, newspapers and popular journals.

#### E-learning at schools

The LIIS project is the central national project on IT development in schools. The project secures the purchasing and maintenance of computer classes at schools. A learning component, oriented to production of printed text materials for learning and submitting into open www pages, is also available mainly for teachers.

There is a number of international projects and virtual communities of teachers interested in e-learning development.



#### **Innovations in e-learning**

A great deal of innovative solutions in e-learning have taken place. They are developed through international e-learning development projects, where universities and schools of Latvia participate actively. (For example, Riga Technical University Distance Education study centre has participated in more than 15 international projects during the last 5 years.) The style and Course Content Development virtual envi-

The style and Course Content Development virtual environment has been created in Riga Technical University. It allows carrying out the interactive course materials development in different places sharing the resources and working also internationally in different languages.

Multimedia systems are also among the national research priorities.

The new project of Multimedia Institute at the Academy of Arts is recently presented.

Institutions of Latvia are participating in many international e-learning development projects, too.

## Interest of Latvia's partners to attend at 6th Framework programme

Several universities of Latvia are interested in participating in Networks of Excellence, especially in e-learning technology development, e-learning delivery development, knowledge management solutions in e-learning related projects.

In Integrated projects Latvia's partners are interested to participate in the same priorities. Riga Technical University has already submitted the Expression of Interest. Unfortunately, I do not have a complete information on other Expressions of Interest yet.

In EU Contribution to Joint National Programmes: The government of Latvia has conceptually supported the Virtual University Programme on December 18, 2001. Similar programme exists in Lithuania, too. I could find out the current situation in Estonia, but I think that it could be possible to design a joint national programme in the three Baltic Countries.

## International conference TELEBALT

"Teleworking, Business, E-commerce, Education and Scientific Research" October 21-22, "Le Meridien Villon" hotel



Organisers of the conference:
INFOBALT Association (Lithuania),
EDNES (France), Open Latvija (Latvia)
Sponsor of the "Telemedicine" seminar: "Siemens",
UAB (Lithuania)

#### Edmundas Zvirblis, Dziugas Juknys

Information communication technologies are rapidly changing lifestyles and working methods of an individual and organisations by means of creating the foundations for the information society in which we live. The most important role in this process is played by teleworking, e-learning, telemedicine, internet and mobile technologies.

The objective of the IST (information society technologies) programme - to speed up the development of information technologies by taking into account the needs of an individual and companies. By giving particular attention to technologies and application programmes necessary for an economic and social transformation, the IST programme provides a technological basis for the information society and a new digital economy.

An exclusive quality of European business, education, teaching, medicine, scientific research systems should be linked with information and knowledge technologies in order to secure the leading position of Europe on this market.

The International Conference TELEBALT "Teleworking, Business, E-commerce, Education and Scientific Research" is a major event of the two-year European Union IST project TELEBALT in the Baltic countries. The TELEBALT project is dedicated for the dissemination of information about the IST programme on application of teleworking methods and technologies in activities of companies, organisations and individuals.

Teleworking is applied when information and information society technologies (IST) are utilised to make the work possible in places remote from the workplace requiring work results or areas distant from customary workplaces.

Although teleworking has emerged a couple of decades ago, public interest in this type of work is as keen as never before.

#### The key advantages of teleworking:

- Increase in working quality and efficiency;
- Cut off of the organisational costs, firstly on premises;

- Reduction of stress felt by employees;
- Lower work losses, particularly due to staff illnesses;
- Reduction of time for travelling to and from work, reduction of related air pollution;
- The manager may concentrate on the evaluation of the work results rather than on continuous control of employees.

### Teleworking may help to partially solve problems of Lithuania in the following fields:

- Reduction of unemployment;
- Regional development;
- Rural development;
- Problems of employment in Visaginas (Ignalina nuclear power plant);
- Departure of specialists and employees abroad;
- Reduction of traffic jams and air pollution in cities;
- Increase of the level of employment of specific groups of the working force:
  - People with a disability several hundred thousands;
  - Women housewives, raising children;
  - Students additional work and practice;
  - Pensioners;
  - People suffering from certain types of illnesses.

## The TELEBALT Conference has been subdivided into the following several subject-based seminars:

- Teleworking and awareness raising about the IST programme (Oct 21, 11.00 am- 7.00 pm);
- Teleworking and education (Oct. 21-22);
- Safe teleworking infrastructure (Oct. 21 d. 11.00 am 1.30 pm);
- Teleworking and business (Oct. 21, 11.00 am 7.00 pm);
- Teleworking and mobility (Oct. 21, 2.30 pm 7.00 pm);
- Technologies in the field of services: transport, mail, real estate (Oct. 21, 2.30 pm 19.00 pm);
- Teleworking and cooperation networks (Oct. 22, 9.00 am 1.00 pm.);
- Telemedicine (Oct 22, 9.00 am 6.00 pm.);
- Media and culture (Oct 22, 2.00 pm 6.00 pm.);
- Semantic network and virtual scientific research (Oct 22, 2.00 pm 6.00 pm);
- Teleworking technologies (Oct 22, 2.00 pm 6.00 pm.); Each of these will be reviewed briefly in the text below.

## 1. According to Dr. Danguole Rutkauskiene, the key objectives of the "Teleworking and Education" seminar are as follows:

- Discussing the strategy for the application of ICT (Information and computer technologies) in science and education.
- Familiarising the public with current and future national and European initiatives related to the ICT application possibilities in science and education.
- Defining challenges posed by the information society to educational establishments trying to respond to market needs and developing favourable conditions for lifelong learning.
- Familiarising with national projects as well as EU science research and development projects; analysing achievements and future prospects for e-learning and ICT development in the area of developing forward-looking learning environments, open platforms and consumer friendly learning aids.
- Revealing practical problems of ICT application in e-learning and discussing possible solutions.
- Defining the role of education for personal and professional

enhancement of learning adults, the unemployed and disabled, in particular.

- Highlighting problems of computer literacy in schools, universities and society in general.
- 2. According to Prof. Arunas Lukoševicius, the topic of the "Telemedicine and e-Health" seminar application of state-of-the-art information and telecommunication technologies in health care. Health, healthy way of living, medical services of high quality and affordable to everyone are the vital needs of the society. The average spending on health services in the European Union amounts to 8 per cent of the national product, while one per cent goes to information technologies servicing the health sector. In Lithuania the health reform is ongoing, here the entirety of telemedicine and information telecommunication technologies, called in short as "e-health", could make a significant contribution to ensuring high quality medical services for patients, particularly those living in remote areas.

The seminar will present first results of international projects, which have demonstrated that patients in Lithuania can already make use of remote consultations given by highly qualified national and international specialists, doctors can exchange experience and concrete data with participants of the international telemedicine network as well as improve their proficiency. Experts from the European Committee, international telemedicine associations, Norway, Germany, Sweden with present in the seminar prospects for e-health, possibilities of support from Europe, most recent telemedicine technologies, programmes of international cooperation. Together with Lithuanian specialists, the methods will be discussed how these remarkably developing and cheapening technologies could be utilised to solve health care problems of the country: to assist doctors in their work, and improve the quality and access to medical treatment.

3. The topic of the "Semantic Network and Virtual Science Research" seminar was defined in a nutshell by Mr. Zigmas Bigelis, TELEBALT project consultant:

The semantic network is a next stage of development of the global network which provides opportunities to solve the issue of information surplus, enhance the efficiency of information processing on the global network.

At the first stage the attention will be focussed on preparation of information and publication on the global network (often the wrong term of Internet is used).

This objective has been successfully accomplished, however, now the problems of information search and information surplus have emerged, because the information found is usually processed manually as it has not been made fit for computer processing.

The inventor of the global network (World Wide Web), Tim Berner-Lee, has come up with a proposal to supplement information on the web with category-based structure which would allow application of computer information.

Rules are rather simple, but these require common agreement

The implementation of the semantic network is taken care by the global consortium W3C, which in its working groups develops recommendations in various fields aimed to draft recommendations for the creation of semantic web, etc. ontology language.

There is a group of projects funded by the European Union related to the establishment and implementation of the semantic web. It is important to draw attention to the fact that information structuring is necessary to create ontologies in specific areas - terminology of these areas with clearly defined terms and inter-relations.

Teleworking is closely related to the development of semantic web, because this organisational method of work requires much more intelligent information search, collection and processing.

The developing world wide web has created preconditions for the formation of various interest groups which are not limited by geographical position nor national boundaries. Already a couple of years ago the so-called virtual laboratories have emerged whose staff live and work in various places all over the world, there are no laboratory premises, while communication and exchange of results takes place by means of modern information society technologies. Such method of work organisation allows the creation of flexible working groups capable of working all around the clock (individual members of staff work in different time zones) and to attract specialists from various countries.

It has to admitted, however, that organisation of teleworking as well as virtual organisations do have a number of unsolved organisational, managerial and psychological problems.

Baltic IT&T 2003 Forum: eBaltics April 2-5, 2003,

April 2-5, 2003, Riga, LATVIA



Mara Jakobsone, Andris Melnudris

The Baltic IT&T 2003 Forum "eBaltics" will attract about 800 industry leaders from the Baltic Sea and Central,

Eastern Europe Region including:

- Government officials and decision makers;
- Business executives and directors;
- ICT managers and specialists;
- Senior researchers and representatives of academic sector;
- ICT auditors, consultants and investors;
- Marketing and new service managers;
- Representatives of operators, service and content providers and regulators;
- Representatives of IT&T companies;
- ICT skills, information security specialists and linguists.

The Forum will include Conference Baltic IT&T 2003, as well as several other important events – workshops, seminars and roundtables, providing an extensive and relevant programme with distinguished speakers and presenters, offering discussions and exchange of experience.

The honorary chairman of the Forum is Prime Minister of the Republic of Latvia.

#### FORUM EVENTS:

The 7th International Conference "Information Technologies and Telecommunications" in the Baltic Sea and CEE Region:

**eSolutions**: eGOVERNMENT, eCOMMERCE, ePROCUREMENT

**eSecurity**: POLICIES, MANAGEMENT, TECHNOLOGIES

**eSkills**: R&D, PROFESSIONAL ICT EDUCATION, HR **Workshops**:

IT for Wireless

EU Community Framework (FP6)

Global Cities Dialogue

**Seminar**: Languages of Baltic Countries and New Technologies

Roundtable: The Baltic Sea and CEE Associations

Executive seminar: Information Security

The 10th Annual Information Technology, Telecommunications and Office Automation Expo Baltic IT&T 2003

#### **ABOUT FORUM:**

The Baltic States is a challenging and promising region in Europe. ICT is one the most significant sectors, counting many successful eGovernment, eBusiness, security and other implementations.

Baltic IT&T Forum traditionally brings together industry leaders and experts, sharing visions on ICT trends, enlarging international and local project experience and giving valuable contacts and inspiration.

The 7th International Conference "Information Technologies and Telecommunications" in the Baltic Sea and CEE Region will include sessions on eSolutions, eSecurity and eSkills covering topics, which are of great importance today. eSolutions track will be much about eGovernment, eCommerce, eProcurement and other themes related to Information Society. eSecurity is providing a ground for safe eGovernment and eCommerce transactions. At conference this track will cover most of the information security issues - management, data privacy and technologies which are behind today's eBusiness systems. In the development of a knowledge-based society the availability of ICT skills is recognised as one of the key conditions for the competitiveness of European enterprises in the global economy. eSkills sessions at Conference will look at human resources, professional ICT education, R&D specialists.

IT for Wireless Workshop is organised together with IEEE Communication Society. This event named "Modern Information Technology for Wireless Business" will be held on the leading edge of the technology and R&D in mobile communications, giving a rich insight in this area for specialists from the region. The workshop will examine the current business drivers and information technologies for wireless network managers in the emerging eCommerce world. It will focus not only on the latest wireless networking strategies and technology alternatives, but also the present state of enhanced applications and services that promise new vistas of global eBusiness opportunities for the complete spectrum of business enterprises.

Today's enterprise networks including wireless must deliver seamless broadband connectivity and integrated multimedia services across geographically dispersed enterprises. They enable distributed software component-based eBusiness solutions within and across enterprises operating in a global business context. IP-based public data networks are being positioned to provide end-to-end QoS, security, reliability, and inter-network service management. Professionals both from industry and academic sector will participate in the workshop.

EU Community Framework (FP6) Workshop will cover applied IST for major societal and economic challenges. This workshop is organised in the framework of Telebalt project in close collaboration with Open Latvia on behalf of EDNES and is supported by EU (European Commission, IST Programme). The new Community Framework for research and development introduces important shifts in the approach to EU funded research, both in terms of content and instruments. The IST priority in FP6 is an important part of the specific programme on "Integrating and strengthening the European Research area". Before the workshop the new programme will be just launched and the event will give the newest information about the IST Programme and about opportunities of potential participants from Pre-accession countries and EU member states participants to meet and prepare proposals for the next call.

The main objectives of the workshop will be: to present to the research community the concepts and the details of implementation of IST in FP6 (including the new funding instruments) and to provide support for partnership building; to present the work plan on applied IST for major societal and economic challenges; to stimulate the participation in the new IST programme, specially regarding the Baltic States.

Global Cities Dialogue Workshop is organised together with Global Cities Dialogue - a globally recognised cities network of more than 100 cities from 38 states -, and Riga City council. During the workshop the Steering Committee Meeting of the Global Cities Dialogue will also be held. Delegates of the workshop will talk about the achievements of cities in the implementation of electronic administration. The workshop will provide participants with an excellent opportunity to study the most successful eCities within and outside of the region. New members will be admitted to the organisation.

Seminar on Languages of Baltic Countries and New Technologies is organised in co-operation with the State Language Commission at the Chancellery of the President of Latvia, as well as Latvia's Committee of UNESCO, Center of Lettonica of the University of Kaunas, Tartu University, Elsnet network and other partners. The seminar will provide a significant push for development and a widespread implementation of support for languages of Baltic countries in new technologies. Language is the primary mean for human communication, and new technologies are becoming the most important environment and medium for this communication. The impact of these tendencies has been particularly harsh on small languages such as languages of Baltic countries. The Human Language Technologies has been considered by European Community as a major aspect of development of inclusive information society. The following objectives are among the main goals of the seminar - to raise the public awareness about the new

role of the national languages in information society, to share information about the latest developments in the area of computer linguistic, to build interdisciplinary ties between specialists of computational science, linguistic and information management, and to introduce programmes and activities of European Union in this field.

The 3rd Baltic Sea and CEE Associations Roundtable will be organised by LITTA, and its aim is to promote an effective co-operation among the various associations, as well as to collect international experiences and form new contacts. Association's Roundtable will include professional IT&T association and other non-governmental organisation representatives. The main focus region of associations presented will be the Baltic Sea region countries and CEE countries. The Roundtable discussions and experience sharing will be focused on the following main topics: co-operation in developing international ICT education and HR policy, best practices of helping SME's to find international partners and the new role of Associations for countries entering EU.

**Executive seminar: Information Security,** organised together with the leading security experts, will give a deep insight in the today's information security field, security's role for management, users and auditors, understanding and applying the best technologies. Seminar participants will learn more about implementing different security strategies in organisations, management guidelines, risk analysis, security awareness, information classification, security audit. Case studies will be provided as well.

The 10th Annual Information Technology, Telecommunications and Office Automation Expo "Baltic IT&T 2003" is the traditional largest ICT spring exhibition in the Baltic region. Exhibitors include telecommunications, software development and system integration, eBusiness, security technologies, ICT training and education, eGovernment solutions, products and technologies of different computing platforms, information services for society, digital entertainment and other sectors. Exhibition is a good addition to the forum displaying the latest technologies and products.

#### BENEFITS OF THE FORUM:

- Co-ordination of the Information Society projects and programmes in the Baltic Sea Region and the Central and Eastern European Countries
- Stimulation of high quality scientific and technological innovation projects, especially concerning the Languages of Baltic countries and New Technologies;
- An extensive and timely programme with distinguished speakers and presenters;
- Discussions, exchange of experience and an opportunity to develop new contacts;
- An ideal place for government and international organisations officials and policy makers, industry leaders, R&D specialists and IT&T experts to meet;
- The ability to find new ideas, new clients and new cooperation partners;
- Acceleration of ICT sector development, thus boosting the national economy, establishing new jobs, developing educational opportunities and raising the standards of living.

#### FORUM LANGUAGE:

**English** 

#### **ORGANIZERS:**

LITTA (The Latvian Information Technology and Telecommunications Association)

The Information Technology Committee of the Baltic Council of Ministers

Data Media Group

#### **ORGANIZATIONAL PARTNERS:**

IEEE Communication Society, Riga City Council, Open Latvia, EDNES, KPMG, State Language Commission at the Chancellery of the President of Latvia

#### **SUPPORTED BY:**

EU (European Commission, IST Programme), Global Cities Dialogue, IDC, Ministry of Transport and Communications (Estonia), Ministry of Transport (Latvia), Ministry of Foreign Affairs (Latvia), Government Information Society Development Committee (Lithuania), Association of Information Technology Telecommunications and Office Equipment Companies of Lithuania Infobalt (Lithuania)

#### PAST BALTIC IT&T CONFERENCE SPONSORS:

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### COUNTRIES REPRESENTED AT PAST CONFERENCES:

Armenia, Australia, Austria, Azerbaidzhan, Belgium, Byelorussia, Canada, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Iceland, India, Ireland, Israel, Italy, Latvia, Lithuania, Luxembourg, the Netherlands, Norway, Poland, Portugal, Russia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Ukraine, the United Kingdom, the United States.

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