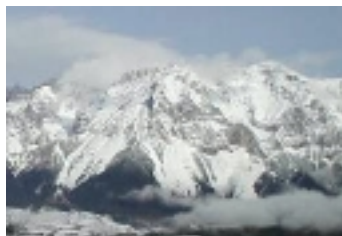




Winter Dreams



We borrowed this title from F. Scott Fitzgerald not to associate with Dexter Greene but simply to say that we also have beautiful dreams. They are based on the unique opportunities that IT STAR offers for synergies and activities in the region, for sustaining channels for partnership and assisting policy and strategy development and implementation.

With respect to this newspaper, the support of the Institute for Prospective Technological Studies in Seville and the ECDL Foundation, as well as the recent decision of the Slovenian Society INFORMATIKA to distribute hard copies of the autumn issue to all its members, foster these dreams. We hope they remain when it thaws in spring.

*Chestita Nova Godina * Sretna Nova godina * Scastny Novy Rok * Prosit Neujahr * Kenourios Chronos * Boldog Ooy Ayvet * Felice anno nuovo * Laimingu Naujuju Metu * Srekjna Nova Godina * An Nou Fericit * Sretna nova godina * A stastlivy Novy Rok * sreèno novo leto*



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We wish you and your loved ones health, peace and happiness during the Holidays and throughout 2006!

Happy New Year

Organization

Vienna Meeting and New Initiatives

IT STAR held its regular business meeting on 5 November 2005 in Vienna, at the premises of the Austrian Computer Society. General satisfaction and support to the Association was extended by many of the participants on behalf of their organizations. The external relations with IPTS, the FISTERA project and the ECDL Foundation were singled out as promising. A prototype of the IT Professional Pool Database was demonstrated (see p. 4). The Turkish Computer Society (TCS), whose representative was in attendance, was welcomed as an associate member. A formal letter of application is expected so as to revisit the matter with the objective to admit the TCS as a full member of IT STAR.

Prior to the meeting, a letter was circulated to all member societies to identify activities and areas of interest for future work. In the same vein, and also on the basis of a concrete proposal, a Task Force was established to prepare a position paper for introducing an IT STAR series of conferences involving representatives of academia, business and the political establishment.

The Vienna meeting recognized that it would be important to appropriately mark the 5th Anniversary of IT STAR during 2006 and several societies offered to play host (see p. 4). ■

Letters to the Editor

[We publish below some extracts from letters to the Editor with regard to the last issue of our NL. Your comments and suggestions will be most welcome. The coordinates are given on p.1]

“I am very thankful to you for including me on the mailing list of IT STAR and sending me the 2005 Autumn Newsletter, which I read with great interest for more than one reason:

- It is interesting;
- Several colleagues that I know well, some of them already friends, beginning with you, are involved in this Association. I know some of them from IFIP (I still represent Argentina). For example: Jean Claude Laprie, Reino Kurki-Suonio, Jan Wibe, Ashley Goldsworthy. Others, I know from ECDL/ICDL (I am President of ICDL Argentina) - Olga Stepankova, E. Telesius from Lithuania, G. Occhini from Italy, and so on. I see Niko Schlamberger at meetings of IFIP and of ECDL because, as myself, he represents his country in both Associations;
- The poster of ECDL, and the mention of ECDL in which I am interested a lot, in several parts of the document;

- The mention and picture of IFIP GA 92 in Toledo, where not only I was present, but the Chairman, a very good looking Spanish gentleman (I do not remember his name), discovered that I spoke Spanish, English, French and a little bit of Italian. He put me in a multi-language and nationalities table to help him and I did well. There were English and American members. I met at that occasion the editor of the newsletters of IFIP, Jack Rosenfeld.

I hope you will keep me on the IT STAR mailing list and send me Newsletters and news.

Have my warmest regards,”
Cecilia Berdichevsky, AR

“Good work, I hope you are doing well.”
John V. Atanasoff II, CEO, MedEfficiency Inc., US

“...Your e-NL is certainly great, my most sincere congratulations!”
Angel Alvarez, ES

“... fine, as usual.”
Balint Domolki, NJSZT Representative to IT STAR, HU ■

Joke of the Issue

As a little girl mounted onto Santa's lap, the Old Man asked the usual, "What would you like for Christmas?"

The child gazed at him for a while, open-mouthed and dismayed, and then gasped, "Didn't you get my email?"

[Visit www.starbus.org/jokes for the best anecdotes on the Internet!] ■

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*Source: CAP Gemini Ernst & Young study, Norway, (8th of Oct 2001)

Anniversaries

5th Anniversary of IT STAR

In April/May 2006 IT STAR, the Regional IT Association for Central, Eastern and Southern Europe, will celebrate its 5th Anniversary. Since the adoption of the Portoroz Declaration in 2001, there were many positive developments: IT STAR grew organizationally, its current membership comprises 13 societies and one associate member and there are new applications and expressions of interest, which will be considered soon. There are several areas of successful development and achievement: the Association was helpful in promoting activities and events of its national members, it recently demonstrated a valuable quality to partners with EU programs and institutions and is recognized as an authoritative and representative regional forum. IT STAR's members are leading national IT societies and this fact offers unique opportunities to create synergies and generate activities, sustain channels for partnership, assist policy and strategy development and implementation.

During the recent IT STAR meeting in Vienna, it was very encouraging to receive the invitations of five IT STAR members – AICA (Italy), CITS (Croatia), LIKS (Lithuania) and SSI (Slovenia) to play host to this notable event and to the spring 2006 business meeting of the Association. Discussions are under way.

[For more detailed information on IT STAR please check www.starbus.org and in particular <http://www.starbus.org/download/charter.pdf> (Charter), <http://www.starbus.org/memsoc.htm> (Membership) and <http://www.starbus.org/NL/index.htm> (Newsletter)]. ■

Projects

IT Professional Pool Database (IT PP DB)

by G. Franza and N. Schlamberger



[Giovanni Franza (left) owns his software company and is a consultant to AICA for EUCIP - IT Administrator certification and the OpenSource side of ECDL in Italy.



Niko Schlamberger is President of the Slovenian Society INFORMATIKA and currently serves as IT STAR

Coordinator. He is a senior officer of several other international ICT organizations.]

The first concept for a regional database for ICT professionals was produced by a team of three and presented during the IT STAR meeting '02 in Bratislava and further refined and confirmed during the 2004 meeting in Prague. Then, the concept was further researched to allow its practical implementation. Since the IT PP DB was to contain personal data and since national computer societies were to warrant that all professionals entered into the database have proper credentials, some formal acts were necessary to complement the purely technical development. For that reason, all interested societies were asked to formally agree with the underlying principles of establishing, keeping, and deploying the database. In parallel, an entity-relationship and a data model were proposed, refined, discussed, and applied as a basis for development of a practical prototype. It was envisaged that the working prototype solution is presented during the 2005 fall meeting of IT STAR in Vienna. The project was designed as a low-cost enterprise in which each of participating parties would cover its costs, whereas the results would be shared by all of them. The objective is to set up and maintain a network of national databases for IT professionals allowing queries from a central site in order to obtain lists of professionals of given experience that match the inquiry parameters.

The requirements naturally lead to an open source infrastructure. Such an infrastructure can be found in what is usually called LAMP infrastructure. LAMP stands for Linux, Apache, MySQL, PHP, meaning that the procedures are Web-based (web-server Apache that runs on a Linux server) and use a database (built with MySQL) with some programming features (carried out by PHP). This architecture has proved its stability. For example, AICA's ECDL centralized database uses MySQL on Linux to manage more than 680,000 personal entries and more than 3.200,000 exams.

At the Vienna meeting on 5 November 2005, the first prototype of the system was demonstrated. The chosen architecture represents a simple three-tier web architecture and all the operators could use only a web browser to manage the data. The national databases are managed by web applications that create user interface to the database. The national databases are kept independent of each other but a central authority would have the control to extract data according to queries it receives. To be more precise, in this architecture all national sites consist of a web server accessible from persons using a PC equipped with a web browser. Using the browser, persons can read the web pages provided by the web server, fill forms and interact with the database by making queries or enter and update information.

The central site works similarly to the national sites: it can make queries and has the authority to access the national databases. The important limitation is that it cannot manipulate data of the national databases. It is

important to know that national sites are not required to be public or have a public IP address. They can be in a LAN and the only requirement is that they are able to reach the central site creating a cryptographic link that the central site can use to query the database. The link itself does not have to be permanent: it must be up and ready only when the central site is performing queries.

Another interesting aspect of this architecture is its simple replication. Without limit to distribution and fees to pay, the deployment of a new service is not only technically but also administratively simple.

Most of the components are readily available “out-of-the-box” and need only simple configuration - the Linux server needs only the definition of the IP address of the interface, the web server Apache2 needs no more than twenty rows of configuration, the database MySQL only has to run a script to configure ownership, the same is true for PHP. The only *ad hoc* developed component is the application that manages the user interface. This application is heavily based on database tables: four tables contain all the configurations (tables, columns, interface) so the application can be configured without changes to the PHP code.

Working on the configuration tables it is possible to achieve a full localization of the interface. The application is, of course, free software and will soon be made available to all the member societies involved in the project to let them test and practice the environment.

Next comes the development of an administrative, business, and working environment and providing information to interested parties concerning the availability of the service. Interested parties are expected to be of two types: IT professionals ready to offer their services, and entities that have a need of such services. Plans are to present and announce the service during the spring 2006 IT STAR regular meeting. There will be value added to that: an appropriate gift to celebrate the 5th Anniversary of IT STAR. ■

Information Society

Information Societies: Turning Point for Eastern European Member States?



by M. Bogdanowicz

[After working 15 years at the University of Liège (Belgium), Marc Bogdanowicz is today leading the Foresight for Information Society Trajectories in Europe (FISTE) research line at the ICT Unit of the European Commission's Institute for Prospective Technological Studies (JRC-IPTS) in Seville, Spain.]

The International Economic Forum of Krynica (Poland)¹ has established itself for over a decade as a very important annual gathering of politicians, executives, policy makers and media representatives from Central and Eastern Europe, with over 2000 mid to high profile participants from more than 30 countries this year. The Forum, organized by the Foundation Institute of Eastern Studies (Warsaw) aims to foster debate on national and European development and enhance co-operation between countries in this region: this year's edition was focused on the topic of “The Model and Boundaries of Europe”. Among the very diverse and numerous sessions of the Forum, the European Commission Institute for Prospective Technological Studies, DG Joint Research Centre² was organizing a full day of debates focused on the “The integration of the New European Member States: The contribution of ICT strategies and technologies”.

This session raised some very essential issues about the nature, the political options and the possible economic outcomes of the present period of “after-enlargement” in the 8 Eastern European Member States.

Professor Carlota Perez, an eminent scholar presently working at both Cambridge and Sussex universities³, presented convincingly that those economies which might be considered the core economies of the global world are today at a turning point of their economic history, as much as they have been, in a cyclical way approximately every 60 years under capitalistic regime, during the last 230 years. The speed and length of technological change is the explanatory factor of those regularities, while a set of other aspects is the determinant of the direction countries take under the “rule” of each specific technological paradigm. Today Information and Communication Technologies – in particular cheap microelectronics and world digital telecommunications - have become that new and leading technological paradigm, playing a dominant role in the transformation of our economies and societies towards a new period of wealth, as much as – states Professor Perez - machinery and canals in the 1790-ies, steam and railway in the 1850-ies, steel and electricity in the 1890-ies, oil and automobiles in the 1930-ies played an essential role in the decades of wealth that followed.

Nevertheless this is to happen after an installation period - that of 1970-2000 in this case - when the new technology gained forces (development of infrastructure, adaptation of products and services, improved human resources capabilities) but also when major tensions developed such as economic and social polarization, market saturation due to the impoverishment of part of the population and dominance of financial

¹ For more, see http://www.forum-ekonomiczne.pl/index_eng.php

² For more, see http://www.jrc.es/home/pages/ict_unit.htm

³ Author in particular of: *Technological Revolutions and Financial Capital: The Dynamics of Bubbles and Golden Ages*. Edward Elgar, Cheltenham, UK. 2002.

capital submitting production capital to its short-term interests.

Such analysis, based on a close observation of economic history across over 2 centuries and most of world countries, applies to the core economies, mainly the US and Western Europe. In that sense, it raises a question about its validity for the Eastern European Member States. Their present conditions seem to be different to ensure they might be labeled “core economies” in this specific context of analysis. This is a major question to be answered. This short article provides a first basis for reflection.

Two major transformations have occurred in the last 15 years in the Eastern European Member States. On the one hand, the transition period has brought a very important transformation of the economic and political structure of all those countries together with the surge of extremely important economic investments, partly linked to the privatization process of a multiplicity of sectors and companies by foreign and domestic capital. These changes have affected in a visible way the overall structure of the economy but also the business processes and the markets, the products and the services of the companies, in particular those that were affected by foreign ownership, technological transfer and change in management. It is true that the nature and objectives of the capital flows in the Eastern European Member States have not been equivalent in their nature to those in western economies but their scale and impact might be seen as an important step towards the modernization of the economies of those countries, encompassing the production and use of Information and Communication Technologies. This one essential point has still to be well investigated as other scholars, such as Professor Erik Reinert (Oslo and Tallinn universities) questioned precisely this point in the same conference, arguing that we may have entered – for having taken wrong investment decisions at the national and multinational level – a loose-loose economic relation between the countries of the west and the east of Europe. In an even more targeted way, M. Piatkowski (International Monetary Fund) who has studied at large the specific case of Poland⁴ also questions the reasons and conditions for traditional economic activities in Poland to modernize... or disappear. Hence, following Professor Perez, the relevant question is now to understand better if the last fifteen years of investment have helped the Eastern European Member States install sufficient new ICT infrastructures, create the financial and regulatory tools to launch easily new businesses, support the emergence of new and adapted skills – including change management in private and public entities, upgrade the ICT production capacities of the country to serve its needs (installation, maintenance, application developments, etc.) and experiment new ways of making business in a more global and ICT supported environment. Even though still very broad, such questions are not naïve as

⁴ In particular, Doctor M. Piatkowski has participated on behalf of the IPTS in a broad research exercise covering all New Member States. Several reports are available at: <http://fiste.jrc.es/pages/enlargement.htm>

many indicators point, for example, at the still low accessibility to upgraded telecommunication networks across some of the Eastern European Member States, the lagging behind of the financial institutions in particular in terms of support to innovative activities, the fragility and weak profiling of the ICT industry in low added value assembling, etc.

Second, the European accession process might also be seen as a major step forward to join the group of countries that might reap the future benefits of the digital revolution, to become part of the “core economies”. While adapting quite radically its institutions to the European norms – the so-called “*acquis communautaire*” – those countries succeeded also in transforming their administrative and political institutions, meeting very rapidly the criteria of western older democracies. Questioning if all details of this transformation were perfectly adapted to the local contexts and implemented in real terms is secondary. One of the major benefits of such massive change is that all those countries extended their economic potential to the European single market, and beyond to the rest of the world. Such market extension went hand in hand with a trade openness, which today is seen as one of their major assets for the future. The institutional and economic changes have offered to all those countries a modernized basis for confronting the challenges and the opportunities of the Information and Communication paradigm. Still, identically as for the impacts of transition, those challenges of the accession process have to be further investigated. The reorientation of the external markets – from the East to the West to make it simple – has not gone without serious obstacles and new interdependencies: a German recession is today as much of a problem as was a Russian crisis a few years ago. Also, the relevance of the inherited institutions for the future socioeconomic paradigm dominated by the ICT is still to be assessed, as well as more dynamically, its capacity and costs of adaptation.

Seen in the perspective of those two transformations – transition and accession – one might hope that the installation period in those countries since the 90-ies has been beneficial and active, possibly as in the traditional core economies of Western Europe.

Additionally, those two complementary changes have been usually accompanied by difficult political decisions, macro-economic misbalance, and often, human distress. In terms of tensions, those countries show today similar issues as those of Western Europe, but to a much stronger degree⁵ due to the much harsher initial conditions of the late 80-ies. Part of the capital flows related to privatization has sometimes been seen as driven by short-term interests rather than production oriented investments, serving vested interests rather than modernization. Observable in everyday life as well as in statistical terms, a minority has been reaping the

⁵ Even though in some western countries, strong tensions have shown to be present during the latest years also (unemployment and relocations, social discontentment, oppositional voting, etc.).

major benefits of growth while a majority has rather lost part of its revenues: the revenue distribution has been worsening together with other social indicators. Finally, average household revenues running at half - or below - the European ones, market saturation for new products and services has shown to be a limit for the expansion of the market. The very slow rise of a middle class, the partial collapse of the pre-existing social security nets reducing spending capacity and several other factors participate also to the weakness of demand.

Such changes and such tensions are those which are - from a historical perspective, says Professor Carlota Perez - expectable when core economies meet the "turning point" and the rest of the world is affected by the transformation occurring in those main countries. If considering that Eastern European Member States have gone through an installation period that is somewhat comparable - even if very different in nature and conditions - to the western ones, in such a case we might expect ICTs to play their role of dominant technology, enabling and structuring their economies for the first half of the XXI century. But history tells us that to do so successfully, political decision has to address simultaneously the challenges raised by the earlier installation period - supporting production investment, guaranteeing social welfare and the conditions for market expansion - and those emerging from the new socioeconomic paradigm - the adaptation of the economic structure and the reorganization of the national and international institutional setting. ■

IS in Hungary

[Short summary of the Hungarian report, which was presented at the IT STAR-FISTERA WS on "ICT and the Eastern European Dimension". The full report is published in the proceedings of the Workshop at <http://fistera.jrc.es/pages/roadshows/prague%2004/FINAL%20REPORTrevised.pdf>]

Many of the usual Information Society indicators for Hungary have rather poor values. Internet penetration figures in particular are rather low, while in some areas (e.g. schools, hospitals, central government) the situation is somewhat better

An important step towards the development of the information society in Hungary was the adoption in 2003 of the Hungarian Information Society Strategy (HISS) by the Government. The general aim of the strategy is to satisfy objectives like improving competitiveness, enhancing quality of life, etc. The application of Information and Communication Technologies in achieving these goals make up the eHungary program, and HISS is the strategy for its realization, based on factors such as the analysis of the present status, (world) economy tendencies and technology trends.

The purpose of HISS is to review and systematize the tasks related to the formation of the Information Society in order to ensure that the responsibilities arising

therefrom - to be fulfilled by the whole society - will proceed in a coordinated manner.

In the strategy, the 4+2 fields of intervention are *Content and services, Infrastructure, Knowledge and skills and Legal and social environment*, complemented by two horizontal fields: *Research & Development and Equal opportunities*.

The tasks are divided into 13 key areas, and the developments attracting the highest governmental interest are concentrated into 19 high-priority central programs.

The viewpoint of the Hungarian ICT industry on this strategy is based on the strong conviction that ICT is the key factor to improve national competitiveness, and innovation (which should be considered in a broader sense than just R&D) is a very important element of competitiveness. The contribution of the ICT industry to GDP should increase.

R&D is an important element of the Information Society. Recently, there are several important developments in this area, including the establishment of a new National Innovation System, consisting of a Science and Technology Policy Board (chaired by the Prime Minister) and its advisory body, the Science and Technology Advisory Committee. Further on, a new government office, the National Office for Research and Technology (NKTH) was established, assisted by the Research and Technology Innovation Council. For financing the creation and exploitation of R&D results, an independent Research and Technology Innovation Fund was established with equal contributions from the private and public sectors.

The major forms of government support for R&D activities in ICT include the Infocommunication Technologies and Applications Program (IKTA), established in 1996, and the National Research and Development Programs (NRDP), one of the five subprograms of which is Information and Communication Technologies. A summary of the Hungarian expertise in ICT, some new challenges in industrial R&D and initiatives for improving the conditions for innovation are also given.

An important next step is the elaboration of the National Development Plan-II for the 2007-2013 period, started in 2004. „Information Society and Innovation” is one of the key areas. Planning is based on the experience in the execution of HISS, an analysis of the current situation and international economic and technological trends. ■

Framing the NMS & CC IS Insights *Current State and Future Prospects of the Information Society in the EU New Member States and Candidate Countries*

*by Prof. Andrzej Skulimowski
President, Progress and Business Foundation, PL*

The period that passed since the EU accession of the

New FISTERA Publications

- "IST at the service of a changing Europe by 2020: Learning from world views"- ISBN 973-27-1252-X - available early December 2005;
- "Challenges and Opportunities for IST Research and Applications", R. Compano, C. Pascu & M. Weber (eds.), ISBN pending - available mid-December 2005;
- "Prospects for the Development of the Knowledge Society in the New Member States and the Candidate Countries", R. Compano, C.Pascu (eds.), ISBN pending , available mid-January 2006; [A chapter of this book is based on material from the joint IT STAR-FISTERA WS in Prague]
- "Economic dimension of IST" - C. Pascu, R. Compano, JC Burgelman (eds), planned for publication during the 1st quarter of 2006.

Copies of these books will be available upon request to Ms. Corina Pascu <corina.pascu@cec.eu.int> at JRC-IPTS

For further information please visit <http://fistera.jrc.es/pages/latest.htm>

ten New Member States (NMS) in May 2004 turned out to be a challenging, yet fruitful transition, touching upon the Information Society (IS). During that time three Candidate Countries (CC) continued their preparations for Accession, encouraged additionally by the successful 2004 Enlargement. This development, although expected, had been earlier considered as an optimistic scenario and its realization gave an impulse to plan next steps in the European integration.

The related development of the Information Society in all NMS & CC encouraged FISTERA (Foresight of Information Society Technologies in the European Research Area) to order a report on "Framing the NMS & CC IS Insights". FISTERA is a network of twenty organizations, including six Core Partners, led by the Institute for Prospective Technological Studies (IPTS) – DG JRC in Seville. The Progress & Business Foundation won the FISTERA tender in March 2005, whereas the experts from its Center of the Decision Sciences and Forecasting were the performers of the study.

The main objectives of the report were to "catch" elements of new trends, processes and phenomena and describe those aspects and activities, which were considered in less detail in previous studies performed for the Commission, rather than to present a complete image of the Information Society's current status and trends in all NMS & CC. It has, moreover, allowed to identify topics, aspects and areas, which are worth further penetrative studies.

The information already available by the Commission as a result of earlier studies has been updated and enhanced with relevant information on the R&D strategies, IST relevant applications, and IST foresight. Due to the strict temporal limits of this study we have mostly made use of existing information rather than carrying-out our own research. However, a number of well-known IST experts provided valuable input to the study, whereas especially the contributions from Balint Domolki (on Hungary), Plamen Nedkov (on Bulgaria), Rukiye Özcivelek, Haluk Zontul and A.Küçükçınar (on Turkey) and Niko Schlamberger (on Slovenia) served as a base to redefine earlier findings on the appropriate

countries.

The report, which resulted from the studies is organized in a synthesis study, containing four chapters and a series of appendices with basic characteristics and the background of the IS in all thirteen NMS & CC. To sum up, the studies undertaken allowed a response to the following questions:

- What are the common characteristics and differences of R&D strategies, innovation strategies and foresight exercises in the different countries;
- What is the self-perception of New Member States and Candidate Countries on their respective status of the Information Society / Knowledge-based Society;
- Future IST scenarios in the NMS and CC, including issues like changing societal patterns (migration, labor reserve pool, skills etc), key ICT applications as listed in the FISTERA IST Challenges and Drivers report (a.o. e-Health, e-Learning, e-Government, etc.).

A more global process accompanies the economic and political integration within the EU, namely, the integration of Information Societies around the world, specifically, by falling telecommunication prices, exchange of information through the Internet and access to web information sources worldwide. The study confirms the obvious but not commonly accepted fact that the rapid development of attributes of the IS corresponding to the above trends - Internet access, growing availability of e-government services and content growth on the web - are stable, durable and sustainable in all NMS & CC, while the observed rates of growth for most of the indicators are higher than in the EU-15.

The study has, moreover, contributed new insights to the questions which arose in the NMS after the EU accession and were not studied in detail within the Enlargement Futures and other Commission's projects. These include the following problems:

- How is the present state of the information society in NMS&CC from the points of view of its development capacity, and human resources;

- What are the scenarios for the convergence of the IS in these countries in the enlarged EU in future until 2020/2025.

To know the basic information, background and indicators of the IS in the NMS & CC used in this study, the reader is referred to a series of FISTERA country reports (www.fistera.jrc.es/pages/enlargement), where one can also find two recent specialized studies on IS in Poland and Romania, as well as other reports produced for FISTERA, such as the report on the IT STAR – FISTERA Workshop on "ICT and the Eastern European Dimension held in Prague in October 2004.

The underlying study will be available on the FISTERA web-site after final approval by the DG JRC – IPTS. ■

ITU Digital Access Index (DAI)

The first global index to rank ICT access was developed and released by the International Telecommunications Union in late 2003. Countries were classified into four digital access categories: high, upper, medium and low and the results suggest that the ICT access potential should be redefined. To measure the overall ability of individuals to access and use ICTs, the study goes beyond ITU's traditional focus on telecommunication infrastructure, such as mobile phones and fixed telephone lines. The index combines eight variables, covering five areas, to provide an overall country score.

The areas are:

- **Availability of infrastructure**
- **Affordability of access**
- **Educational level**
- **Quality of ICT services**
- **Internet usage**

Digital Access Index - 2002 Ranking:

HIGH ACCESS		UPPER ACCESS		MEDIUM ACCESS	
First 10		Selected countries in this group		Selected countries in this group	
Sweden	0.85	Estonia	0.67	Romania	0.48
Denmark	0.83	Spain	0.67	Turkey	0.48
Iceland	0.82	Malta	0.67	TFYR	0.48
				Macedonia	
Korea (Rep.)	0.82	Czech Rep	0.66	Serbia & Montenegro	0.45
Norway	0.79	Greece	0.66		
Netherlands	0.79	China	0.64		
Hong Kong, China	0.79	Hungary	0.63		
Finland	0.79	Poland	0.59		
Taiwan, China	0.79	Slovak Rep	0.59		
Canada	0.78	Croatia	0.59		
Other		Lithuania	0.56		
United States	0.78	Latvia	0.54		
Japan	0.75	Bulgaria	0.53		
Austria	0.75	Russia	0.50		
Australia	0.74				
Italy	0.72				
Slovenia	0.72				

* On a scale of 0 to 1(1 = highest access)

Source: ITU ■

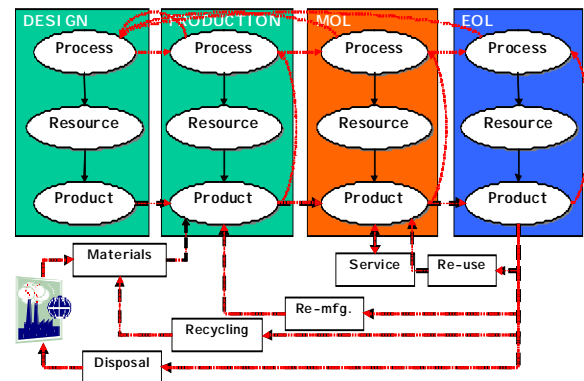
Product Lifecycle Management and Information Tracking using Smart Embedded Systems – PROMISE



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The breakthrough contribution of PROMISE is to allow information flow management to go beyond the customer, to close the product lifecycle information loops, and to enable the seamless e-Transformation of Product Lifecycle Information to Knowledge

A product system's life cycle is characterized by the three phases: Beginning-of-Life (BOL), including Design and Production, Middle-of-Life (MOL), including Use, Service and Maintenance and End-of-Life (EOL), characterized by various scenarios such as: reuse of the product with refurbishing, reuse of components with disassembly and refurbishing, disposal with or without incineration, etc.



The product lifecycle

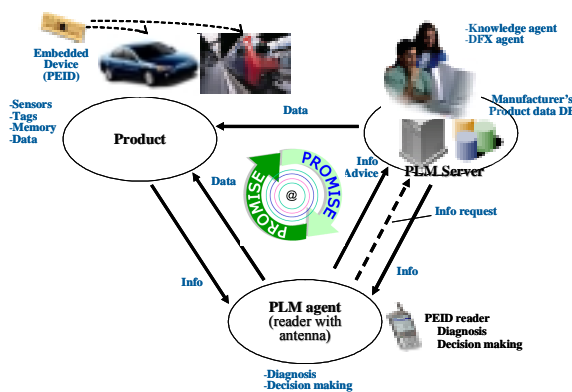
PROMISE focuses on the complete lifecycle of a product with special emphasis in tracking and managing of information at the last two phases of the product's life cycle, i.e. Use, Service and Maintenance or MOL and EOL and the possible feedback of information from these phases to BOL (Design and Production). The reason for PROMISE to focus on the two last phases of a product's lifecycle is the following:

- Between the first phases, design and production, the information flow is quite complete and supported by intelligent systems like CAD/CAM. Product Data Management (PDM), and Knowledge Management systems are effectively and efficiently used by the industry and, through their influence, by their suppliers
- The information flow becomes less and less complete in and from the MOL phase to the final EOL

phase. In fact, for the majority of today's technological products and especially for those producing "hi-tech" waste, consumer electronics, household "white" machines, vehicles etc. It is fair to say that the information flow breaks down after the delivery of the product to the customer.

PROMISE will develop appropriate technologies, including product lifecycle models, Product Embedded Information Devices with associated firmware and software components and tools for decision making based on data gathered throughout a product lifecycle. This is done to enable and exploit the seamless flow, tracing and updating of information about a product, after its delivery to the customer and up to its final destiny (deregistration, decommissioning) and back to the designer and producer.

The breakthrough contribution of PROMISE, in the long term, is to allow information flow management to go beyond the customer, to close the product lifecycle information loops and to enable the seamless e-Transformation of Product Lifecycle Information to Knowledge.



The concept of PROMISE

The PROMISE R&D implementation plan includes fundamental and applied research activities in the disciplines of information systems modeling, smart embedded systems, short and long distance wireless communication technologies, data management and modeling, statistical methods for preventive maintenance, End-Of-Life planning, Adaptive production management and Design for X.

PROMISE integrates **Research Cluster** activities which will result in a prototype *PROMISE PLM System (Product Lifecycle Management)*, **Application Cluster** activities covering applications of the PROMISE concepts with *11 PROMISE Demonstrators* in the Automotive, Railway, Heavy Load Vehicle, EEE and White goods sectors, **Innovation Cluster** activities covering *Integration & Standardization* and *Business Development* issues and **Training Cluster** activities covering development and delivery of *specific training packages* for an extended trainee audience involving potential PROMISE technology developers as well as end-users.

PROMISE offers the following business proposition to the Product Lifecycle stakeholders: to create value by transforming information to knowledge at all phases of the product lifecycle and thus improve product and service quality, efficiency and sustainability. The product and service value may be created at various levels, with respect to the above statement, as follows:

- **Technical:** optimal accomplishment of the expected functions and user expressed and unexpressed needs, after exploiting "field" knowledge gathered through the product lifecycle.
- **Economic:** creation of value for the producer (better products, better CRM (Customer Relation Management)), for the service provider (new business opportunities, better CRM), for the product owner (extended product life).
- **Environmental:** minimization of pollution, of resources and of energy consumption by applying optimal BOL (Beginning of Life), MOL (Middle of Life) and EOL (End of Life) planning.
- **Social:** comfort, safety, security and satisfaction of the product user, either the operator of the product (e.g. the driver of a truck) and /or the user of the service (e.g. the passenger of a bus, the user of an elevator, etc.).

The development of Product Embedded Information Devices (PEID) is expected to progress rapidly and be largely used for advanced Product Lifecycle Management and real-time data monitoring throughout the Product Supply Chain and it will expand greatly and explode into a **multi-billion dollar market in 2006 and beyond**. This technology will particularly allow producers to dramatically increase their capability and capacity to **offer high-quality after-sales services** while, at the same time, being able to **demonstrate responsibility as producers of environmental friendly and sustainable products**. Some examples of new after-sales services and breakthrough improvements that will become possible through PROMISE are: new types of leasing services, closing of the information gap in customer relationship management, proof of producer, damage management, and enhancement of security.

PROMISE is an FP6 IP project with duration of 42 months (started in November 2004) and a total funding of 8.000.000 EUR. The PROMISE consortium consists of 22 partners from 7 EU member states, Norway and Switzerland: BIBA (DE), Bombardier Transportation (CH), Cambridge University (UK), Caterpillar (FR), Centro Ricerche FIAT (IT), CIMRU (IE), COGNIDATA (DE), ENOTRAC (CH), EPFL (CH), FIDIA (IT), HUT (FI), ITIA-CNR (IT), Indyon (DE), Infineon (DE), InMediasP (DE), INTRACOM (GR), MTS (IT), POLIMI (IT), SAP (DE), SINTEF (NO), Stockway (FI), WRAP (IT). More information about the PROMISE project may be found at: www.promise.no. ■

Member Society News

ITALY - Associazione Italiana per l'Informatica ed il Calcolo Automatico (AICA)

AICA at Tunis WSIS Summit

Mrs. Daniela Rovina, AICA's Marketing and Communication Manager, presented "**ECDL in Italy: narrowing the digital divide and increasing productivity**" within the "Italy@ ICT4All" Exhibition during the WSIS Summit in Tunis, 15-19 November 2005.

The presentation outlined the level of diffusion of ECDL, the European Computer Driving License, in Italy. A specific focus was dedicated to all national programs, including the ECDL, their contribution to digital literacy, results among the working population and the ECDL contribution to business development and revenues in the ICT Education & Training and Publishing Sectors. An analysis on cost and productivity improvements that are positively influenced by a proper IT basic training was also delivered.

The ICT 4 All Exhibition (www.italy4all.org) presents Italy's international best practices in ICT by public, private and civil society organizations through an intense agenda of events and a permanent exhibition. ■

LITHUANIA – Lithuanian Computer Society (LIKS)

Computer Days – 2005

On 15-17 September 2005, the traditional biennial umbrella event *Computer Days -2005* took place in Klaipeda. The first national conference on a similar subject was held in 1981. LIKS was founded during the fourth conference (in 1989) and since then the event is a priority in LIKS' activities. Currently, *Computer Days* aim to provide Lithuanian computer experts and users with a possibility to meet, exchange ideas, learn about the IT innovations, establish and strengthen professional contacts.

The main events during the three days of *Computer Days -2005* included:

- Twelfth International Scientific Conference;
- Seventh Conference on Informatics in School Education;
- Plenary Session, Workshop and Discussion on Information Society Issues;
- Ninth Congress of the Lithuanian Computer Society;
- Meeting of the Representatives of the Authorized ECDL Test Centers;
- Tutorials for graduate and post-graduate students. ■

SLOVENIA – Slovenian Society INFORMATIKA (SSI)

Information Society Day – a New Initiative in Slovenia

The Slovenian Society INFORMATIKA will celebrate its 30th Anniversary in 2006. In 1976, a group of twenty four visionary citizens mostly working at a university institute established the society and started a scientific journal and a conference. Since then, the membership grew slowly, the conference developed to become undisputedly *the* Slovenian information science and technology event of the year. The society started a professional journal, became a member of the International Federation for Information Processing and a member of the Council of European Professional Informatics Societies, introduced ECDL and holds distinguished positions in international organizations. However, a paradoxical net result was that it became much more visible internationally than within the country. Until recently, that is.

In 2004 a group of major Slovenian IT companies started an initiative for closer collaboration with the society which resulted in an attempt to inaugurate a special day devoted to informatics. Slovenian universities and government bodies were invited to take part in the initiative. Most of the preparatory work has been done, to result in a ceremonial signing of an open-ended memorandum of understanding where all parties would agree to co-operate to this end. The date for the Day has been chosen; its name as well - the Informatics Day - the content proposed... but as happens often in life, the happy end did not come about for reasons that were beyond power of influence of the participants in the initiative. Nevertheless the SSI believed in the idea and restarted the process with the same stakeholders and genuine support of the government starting early in 2005.

The idea has since developed so that the proposed day has a wider content and also an accordingly changed name, namely the Information Society Day. The plan too is now somewhat different and also more promising. It is expected that the government will first pass a decree to the effect that such a day be inaugurated. Next, a ceremonial signing of the memorandum would follow, possibly as an accompanying event at the Days of Slovenian Informatics in April 2006 in Portorož whereupon the Day itself and its planned contents could take place in fall 2006. The stakeholders from industry, now one more than during last year, agree, and some government offices have taken an active part which is regarded as a token of genuine interest. The initiative is again open-ended so as to attract universities and other entities that should or may have an interest in promoting information society. The bottom line is that Slovenia, small as it is, cannot compete with rich and large countries in the domain of production and services, but may be successful in deploying existing knowledge and offering its own. ■

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