

The global applied ICT research community comes together in Slovenia for 72 hours in October to discuss and research current and future ICT-related challenges. But what can they expect to find when they get there? **Paul Cunningham** reports...

Thile exploitation of information and communications technologies (ICT) is critical to building the knowledge economy, many of the challenges being faced today are human-centric rather than technological in nature. Never has it been more important to share knowledge and experience, not just between individuals and within departments, but also increasingly between commercial, government and research organisations, and across cultural as well as geographic borders.

The eChallenges e-2005 Conference and Exhibition – which takes place in Ljubljana, Slovenia this October – facilitates exploitation of applied ICT-related innovation through knowledge sharing and global community building. Over 500 delegates from leading commercial, government and research organisations around the world will spend an intense three days reacting to and discussing over 270 presentations representing both cutting-edge research and practical e-adoption issues and case studies from 38 countries in five continents.

Continuing a trend of increasing international participation in the eChallenges Conference Community, almost eight percent of presenters this year are from outside Europe, compared to four percent at e-2004. By showcasing contributions on commercial, government or societal exploitation of the internet and ICT from around the world, eChallenges e-2005 provides a unique opportunity to gain a better appreciation of some of the cultural, technological and training issues impacting on global e-adoption today.

As well as selecting from 70 thematically focused paper and workshop sessions over three days and networking at a gala reception and dinner, conference delegates will have the opportunity to share strategic ICT thinking with keynote speakers from Slovenia, Belgium, Ireland, the Netherlands, the USA and Japan.

Delegates will also be able to network in the exhibition, which features over 30 demonstration stands from 16 countries, including a unique ICT Slovenian pavilion.

e-2005 plenary speakers

Jure Zupan, the Slovenian Minister of Higher Education, Science and Technology, will discuss the contribution of regional cooperation to the i2010 initiative recently launched by Commissioner Vivienne Reding as a means to achieve the goals of the Lisbon Agenda. This is a very timely contribution from an innovative new member state; as Commissioner Reding noted, a "bottom-up approach is a pre-condition for real ownership and for concrete political actions to be carried out".

João da Silva, Director of DG Information Society and Media at the European Commission, will discuss some key aspects of Framework Programme 7 (FP7) and its underlying policy goal – enabling Europe to master and make the best use of ICT. With a duration of seven years (2007-2013) and double the annual budget, FP7 blends continuity from FP6 with a greater focus on joint technology initiatives, technology platforms and mainstreaming NEST/FET and international cooperation. The main ICT themes and activities include ICT technology pillars,

PROGRAMME OVERVIEW

To provide a flavour of the richness of topics being discussed at eChallenges e-2005, a few examples from each conference track are provided below.

- The e-business conference track this year features discussion on a range of interesting issues including distributed applications, GRID, interoperability, QOS, service oriented architectures and SME exploitation of e-commerce and ebusiness
- The e-democracy track focuses on issues, applications and case studies related to e-voting and eparticipation, as well as discussing the political digital divide.
- The e-government track includes presentations focused on crossborder access to information, customer centric services, reducing risks associated with large-scale egovernment projects, regional case studies, security issues, service models and a survey of Citizen Service Number use in 12 EU member states to access services.
- The knowledge management track focuses on applications, collaboration both within organisations and across organisational boundaries, semantic-based knowledge retrieval, story-telling techniques and sectoral applications in healthcare.
- The digital content track includes presentations focused on digital

- rights management, digitisation of culture heritage, the impact of P2P and file sharing on the music industry, cameraphone-enabled news blogs and semantic and knowledge-based systems.
- The mobility track features discussion on a range of interesting issues including business models, GRID, IM applications, location-based services, quality of service, results of a Mobility-Delphi study about the future of mobility and mobile services, security, standardisation and sectoral applications including cultural tourism.
- The networked, smart and virtual organisations track features discussion on communities of practice, distributed collaboration, innovation management and management challenges.
- The new working environment track this year features discussion on a range of interesting issues including collaborative work, gender differences, knowledgebased SMEs, multi-modal interfaces, semantic web, as well as the impact of ICT on sectors including automotive, construction, healthcare and transport.
- The SME track discusses a range of industrial and ICT adoption issues related to e-commerce and e-business, interoperability and standardisation, supply chain management and barriers to SME

- take-up of open source software (OSS).
- The training and education track features discussion on a range of interesting topics including elearning challenges, case studies, design issues, support applications, ICT for development and a comparative study of innovation management education. As in previous years, CEPIS is organising a workshop on skills and certification.

Complementing plenary presentations by João da Silva, Mark Frequin and Rosalie Zobel, a workshop on Friday entitled "Investing in Europe's Future, Research and Policy" will provide more insight into the opportunities and challenges presented by both FP7 and i2010. This is followed by a workshop discussing the impact of structural funds on the information society and opportunities this presents.

International cooperation is a key aspect of the eChallenges conference series, aiming to open up the European Research Area (ERA) to the rest of the world. As well as thematic presentations dotted across the programme, this year there are three workshops and two paper sessions specifically focused on showcasing current initiatives, lessons learnt and highlighting cross-border collaboration opportunities.

integration of technologies, application research and future and emerging technologies.

Chris Horn, Vice Chairman of IONA Technologies, will share insights based on his experience of successfully commercialising European funded research results. His presentation "What could e-business do even better in Europe?" will review the progress of global e-business to date and issue a call-to-arms, providing delegates with food for thought by discussing the dichotomy between the often limited economic and social benefits enjoyed by European citizens despite the world-class potential of European technology innovation (e.g. the web and mobile technology).

Ingo Juraske, VP EMEA at Hewlett-Packard Europe, will discuss the significant challenges associated with large-scale ICT implementations, particularly by government. His presentation addresses critical factors to be taken into account during the planning and implementation stages of e-government projects to reduce financial and technological risks and ensure a successful outcome. These include ensuring proper assessment of cultural issues and objectives, target user groups, shared/common services and interoperability issues, before public funds are allocated.

Noriyuki Yonemura, Counsellor at Fuji Xerox, will focus on the potential impact and challenges associated with "New workware in the coming ubiquitous era". This is based on research carried out since 2001 by the Next Generation Office Scenario Committee established by the Japan Business Machine and Information System Industries Association. Yonemura-san will describe key characteristics of a collaborative working environment that is human-centric in focus, and discuss some of the applied research challenges to making this future office concept a reality.

Todd Ramsey, General Manager for Global Government Industry at IBM Corporation, will discuss the potential for ICT-related public private partnerships (PPP) and provide insights and identify key challenges based on examples of successful collaboration.

Mark Frequin, Director General, Telecommunication and Post at the Ministerie van Economische Zaken in the Netherlands, in his presentation on the new European ICT agenda, discusses the political initiatives by recent European Presidencies recognising the economic impact of ICT that led to the recently launched i2010 action plan. Describing ICT as "an indispensable driver for an inclusive, dynamic and knowledge-based economy and a modern social society", Mark discusses the need for both national and European-level action to build an inclusive European information society, and calls for the necessary political will to achieve this goal.

Finally, Rosalie Zobel, Director of DG Information Society and Media at the European Commission, will discuss the critical importance of ICT for the European manufacturing sector. Rosalie will focus on presenting current research issues, including adding value through internet-enabled services; customisation; upgrades and maintenance; the productivity impact of wireless technologies for manufacturing; challenges for design and systems engineering, the potential for nano-manufacturing and customised mass-manufacturing techniques for miniaturised, embedded ICT.

Thematic priorities

Conference sessions focus on issues, applications and case studies related to e-business, e-government and e-democracy; digital content; knowledge management; mobility; networked, smart and virtual organisations; new working environments; SME issues; and training and education. Major horizontal issues addressed include challenges to e-adoption, collaborative innovation, GRID, interoperability, standardisation, international cooperation and opening up the European research area (ERA).

Conclusions

Building a truly global knowledge economy requires ever-greater transparency of public and private initiatives, whether commercial, legislative, political, social or technical in nature. Bridging the digital divide requires a willingness to share successes and failures, providing an opportunity to replicate successful implementations, avoid previous mistakes and apply scarce resources to adapting lessons learnt to cultural and regional requirements. Sharing such knowledge highlights that problems experienced or exploitation lessons learnt in one domain or location are often directly relevant or applicable to e-adoption elsewhere.

Presentations – whether focused on issues, applications or case studies – will facilitate knowledge-sharing and benchmark regional and national developments, as well as helping to identify potential partners and exploitation opportunities for the future.

"On behalf of the Government of Slovenia I am glad to welcome you to a country strategically placed at the crossroads of two major European mobility corridors," notes Jure Zupan, Minister of Higher Education, Science and Technology, Slovenia, welcoming eChallenges presenters and delegates to Ljubljana. "Slovenia has pioneered the adoption of ICT in this region, and it is very important for us to host the European applied ICT research community at this event. For Slovenia, the contemporary concept of mobility and interoperability is

not only a matter of competitiveness and development, but is key to European cooperation. I believe that your discussions at eChallenges will propel the developments of the fully integrated European knowledge-based society."

Successful innovation is increasingly driven by collaboration between different stakeholders sharing complementary expertise, skills and experiences to address commercial and societal requirements that would be very difficult to address alone. Standardisation, interoperability and trusted networks have never been more important in enabling seamless collaboration.

The eChallenges community is unique in that it brings together representatives of leading commercial, government and research organisations from around the world to share their experiences of ICT collaborative research, innovation and e-adoption. Todd Ramsey suggests that: "Governments, business, academia and industry must work together to create a climate and a culture that facilitates cross-border, cross-organisational and cross-disciplinary collaboration. That is an environment in which innovation will thrive. eChallenges plays an important role in this collaboration and I look forward to participating in this year's event."

Encouraging participation at eChallenges e-2005, Mark Frequin says: "Whether you are a researcher or an industry delegate, your presence at eChallenges demonstrates that cooperation is important to you and that you are willing to share your ideas. Cooperation at the European-level and elaborating ideas are necessary to contribute to the success of i2010, the overall ICT strategy of the EU. Therefore, I challenge you to challenge the policy-maker. Don't go Dutch, but cooperate!"

Commenting on the importance of applied ICT as a social and economic driver, Ingo Juraske, notes that: "ICT has the potential to dramatically alter how, when and with whom we interact – in business, government and in social settings. HP has been at the forefront of adaptive enterprise and government in new member states with innovation both in technology and finance. In this light, HP welcomes the decision to have eChallenges e-2005 in Slovenia – one of the most innovative and active players in ICT in business and government."

Reflecting on the nature of the eChallenges Conference Community, Chris Horn says: "The European ICT industry faces many opportunities and challenges in bringing its benefits to European society and to the global market. The eChallenges e-2005 Conference, supported by the European Commission, will bring together key players and professionals in the commercial, government and research sectors across Europe, and indeed from North America, Asia and Africa, and as a result will be amongst the most significant industry events in Europe this year."

An enticing social programme includes a networking reception sponsored by IBM on Wednesday 19th October and a Gala Reception sponsored by the Slovenian Ministry of Higher Education, Science and Technology on Thursday 20th October. The weekend programme provides the opportunity for delegates and partners to network in a relaxed setting while enjoying visits in and around Ljubljana.

Sponsors for eChallenges e-2005 include the European Commission, the Slovenian Ministry of Higher Education, Science and Technology, HP Europe and IBM. Special delegate rates are available for participants from new member states, candidate countries and developing countries, reflecting the international perspective of eChallenges. Details are provided on the Conference Portal (www.eChallenges.org).

For further information, please contact Paul Cunningham, IIMC. Tel: +353 1 8170607.

E-mail: paul@ilmg.com. To register, please visit www.eChallenges.org or contact ADERA Service
Tel: +33 (0) 556 151199. E-mail: e2009@adera.fr.