



COIN Newsletter

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In this issue

Word from the editor	1
Requirements finalisation	1
Introduction of the COIN end-users, Part IV	2
FlNES cluster activities	2
Past COIN events	3
Upcoming events	6

COIN Vision

“By 2020 enterprise collaboration and interoperability services will become an invisible, pervasive and self-adaptive knowledge and business utility at disposal of the European networked enterprises from any industrial sector and domain in order to rapidly set-up, efficiently manage and effectively operate different forms of business collaborations, from the most traditionally supply chains to the most advanced and dynamic business ecosystems.”

The mission of the COIN IP is to study, design, develop and prototype an open, self-adaptive, generic ICT integrated solution to support the above 2020 vision, starting from notable existing research results in the field of Enterprise Interoperability and Enterprise Collaboration.

COIN has been awarded financial support by the European Commission through the contract No. 216256 in the EU FP7 area of “ICT in support of the networked enterprise”; work programme “ICT-2007-1.3 Enterprise Interoperability”

More about COIN at www.coin-ip.eu

Word from the editor

You are viewing the fourth issue of the biannual COIN newsletter. The COIN project has nearly reached the end of its second year of development and indeed many challenges have been faced in the run to fulfil the mission.

Project progress and scientific results

In the course of the past 2 project years COIN has designed and developed prototypes for Enterprise Collaboration and Enterprise Interoperability Innovative Services as well as an ontology-based instantiation of the Generic Service Platform to search/discover, compose/execute EI/EC services.

The COIN project is now progressing against the milestone “First Integrated COIN Systems”, representing the first deployed integrated prototype, to be tested by the programme end-users in the context of the first cycle of trials, including Innovative Enterprise Collaboration - Web Services for c-Product Development, c-Production Planning, c-Project Management, and c-Human Interaction - and Interoperability Services – Web Services for Information Interoperability, Knowledge Interoperability, and Business Interoperability - accessed from a Network Collaboration Platform. The COIN Integrated System represents both a technical as well as conceptual result - starting point for the challenges of the next project phases.

In the context of the European Commission overarching activities the work towards progress of the far-reaching targets of the “Internet of the Future”, the last months have been productive and in the activities COIN has represented the voice of manufacturing Enterprises and SMEs in particular. COIN’s contribution to the field and vision has recently converged interests towards the Future Internet Assembly in Stockholm, where COIN has co-organised the Enterprise Session “What does Future Internet mean for enterprise?”, the first, dedicated session on enterprise issues in the FIA setting.

In this newsletter we will provide further news on COIN project progression in terms of results of the requirements finalisation phase. We will also continue our series of introducing the fourth one of our end-users, the Automotive Cluster of Slovenia, and provide news about COIN involvement on the FlNES cluster. In addition to this, we have collected information about COIN related events at the end of the newsletter.

Yours sincerely,
Claudia Guglielmina, Editor-in-chief

Requirements finalisation phase

The elicitation of end user requirements in COIN was divided into two different phases. During the first phase requirements were identified and collected mainly by means of serious games (see [COIN Newsletter 1/08](#)). These requirements represent the basis for the COIN innovative EC and EI services. The second requirements phase was concerned with the finalisation of the requirements documentation and had a special focus on the end users’ inter-organisational business processes, which were documented in terms of business use case descriptions. A Benefits Analysis workshop was held with the end users in October 2009 at BIBA in Bremen. During this workshop the end users stated additional requirements in terms of goals to be achieved in future and it was worked out how COIN can contribute to achieve this goals. The results were documented in terms of expected benefits with respective performance indicators and complement the analysis of industrial end user’s networked business process.

A novelty in the second requirements phase was the organisation of so-called Cross Teams. One Cross Team is the group of people including the [\[>>\]](#)

stakeholders of the research result joining the team with the owner of the applicative business use case. Hence, the Cross Teams consist of end users, developers and other interested stakeholders and are representing inherently cross work-package organisational structures. This approach ensured a wider and more specific discussion with respect to the end user requirements and resulted in more detailed business use cases.

Introduction of the COIN end-users, Part IV

The COIN project involves six end-user partners coming from a variety of industrial branches and geographical distribution. The industrial partners will demonstrate, experiment, trial and assess the project results into realistic Industrial Scenarios with test cases in following sectors: *Aeronautics* (Spain), *Automotive* (Slovenia), *Aerospace* (Italy), *Pulp & Paper plants design and management* (Finland), *Healthcare* (U.K.), and *ICT* (Hungary). The scenarios represent a wide spectrum of collaboration contexts varying from supply chains, to collaborative networks, and to the most dynamic forms of enterprise business ecosystems.

In this fourth part of the series we present our Slovenian partner ACS, a business association of the Slovenian automotive cluster. The remaining end-users will be introduced in the subsequent issues of the COIN newsletter.

ACS, Automotive Cluster of Slovenia



Automotive Cluster of Slovenia (ACS) is a business association based on interest of its members uniting Slovenian automotive suppliers and currently joining together 63 members (57 companies and 6 R&D or scientific institutions). Cumulated annual turnover exceeds 3.2 billion Euros, 80% of which comes from the export of goods and services to the EU and employing around 20,800 employees of which more than 2,000 registered researchers. Its members' aim is to reinforce the competitiveness and create greater added value.

ACS is the central communication point of the automotive cluster and it is supported by infrastructure. ACS provides support for its members to integrate into the global automotive industry and to improve the range of their products and services. Therefore it accelerates the efficiency of its members by providing adequate research and development and co-operating with expert development and scientific institutions both in Slovenia and abroad. Automotive cluster of Slovenia and its members wish to evolve into a development-intensive and reliable network of suppliers for global vehicle manufacturers in selected segments with products with higher added value.

Members of business association are automotive suppliers of components, modules and systems for OEM and aftermarket customers in the field of cars, commercial vehicles and special vehicles industry. Our members are also important suppliers of equipment, tooling, research and development, production, logistic and

other services focused for automotive suppliers and automotive industry. The automotive sector in Slovenia is today represented by the production of personal vehicles Renault in company Revoz where 900 Clios, Storias and Twingos are produced per day and a well developed automotive suppliers industry with about 95 big, medium-sized and small companies that are followed by several hundreds specialized small companies that they cooperate with. The whole section of automotive industry, vehicles and production of automotive parts, has around 24,500 employees, it represents 20% of all export of goods and services of Slovenia and it creates 6% GDP.

Automotive Cluster of Slovenia brings into the COIN project:

- Extensive experience in a cluster development process in automotive sector and knowledge about other EU programs such as ERDF, Interreg, PHARE, 6th and 7th FP.
- Strong innovation–technology platform.
- Several joint projects have been successfully performed within the cluster.

One of the COIN objectives is to demonstrate the COIN project results into realistic industrial scenarios. ACS sees the COIN platform as a potential integrator between its members which are large companies, with well developed CIM and ICT, institutes and faculties and SMEs with usually poor developed CIM and ICT. The integrated set of tools and methodologies of COIN platform can be utilized for collaborative operations by combining business interoperability.

Future Internet Enterprise Systems (FInES) Cluster activities

The FInES Cluster is uniting the previous *Enterprise Interoperability and Collaboration* (EI) and *Digital Ecosystems* (DE) clusters in order to encompass the past and current research experts and organizations focusing on benefiting all by offering an increased opportunity for synergy and enhanced collaboration among research projects in the European Commission, Information Society and Media Directorate-General, Networked Enterprise & Radio Frequency Identification (RFID) Unit.

Scope of FInES

The Future Internet is expected to give rise to new opportunities of creativity and innovation, enable new forms of participation, further catalyse the formation of networked enterprises and business ecosystems that span the world, thereby ushering in a new generation of enterprise systems. Future Internet Enterprise Systems (FInES) describes a field of activity with the aim to enabling enterprises, including SMEs, by means of ICT, to exploit the full potential of the Future Internet. The Internet thus becomes a universal business system on which new values can be created by competing as well as collaborating enterprises – incumbent as well as new – through innovation in a level playing field, with sustainable positive benefits for the economy, society and [\[>>\]](#)

the environment. Individual enterprise systems of the future are likely to be leaner, more adaptive, flexible, portable and open. They need to enable value innovation at the business level. They also need to deliver value beyond economic value and drive innovation that meets a set of business objectives and sustainability concerns much broader than those of today, including societal and environmental objectives.

The *Future Internet Enterprise Systems Research Roadmap* currently being prepared by the Research Roadmap Task Force of the FInES cluster will be used as an input to the next FP7 ICT Work Programme 2011-12. The starting point of the document is the FInES Cluster Position Paper, Final Version (V3.0), published in September 2009.

A *FInES Cluster Meeting* was organised by in Brussels, 12 November 2009. The meeting concentrated on two topics: "Business Models for Future Internet Enterprise Systems" and the FInES Research Roadmap exercise.

The morning agenda contained presentations from Cristina Martinez - European Commission, Paolo Dini - OPAALS project, Sergio Gusmeroli, Man-Sze Li and Michele Missikoff - COIN project, Charlotte Stausholm - Gate2Growth project, Thomas Monath - 4WARD project. Hans Schaffers - Helsinki School of Economics.

The afternoon was devoted to knowledge cafes type of discussions to collect feedback on the first version recently released and prepare for the second release of the roadmapping document. The meeting was attended by over 30 experts.

An open call for contribution for the second release of the roadmapping document closed on 20 November. A Full Draft version will be available on 15 December 2009. For more information visit:

- http://cordis.europa.eu/fp7/ict/enet/fines-positionpaper_en.html
- http://cordis.europa.eu/fp7/ict/enet/fines-meeting-20090616_en.html

Past COIN events

PRO-VE 2009

Thessaloniki, Greece, 7-9 October 2009

"*Leveraging knowledge for innovation in Collaborative Networks*". PRO-VE 2009 – The 10th IFIP Working Conference on Virtual Enterprises took place in Thessaloniki, Greece, at 7-9 October 2009. More information is available at <http://www.pro-ve.org/>.

eChallenges 2009

Istanbul, Turkey, 21-23 October 2009

The nineteenth in a series of annual conferences supported by the European Commission, within the areas of ICT for Networked Enterprise & RFID, eGovernment & eDemocracy, eHealth, Collaborative Working Environments, Living Labs, eInfrastructures; Technology Enhanced Learning and ICT Skills, Knowledge and Con-

tent Technologies, Security and Identity Management, High Performance Computing - Applications and Mobility.

The goal of e-2009 was to stimulate rapid take-up of Research and Technology Development (RTD) results by industry and in particular SMEs, and help open up the European Research Area (ERA) to the rest of the world. More information about e-2009 is available at <http://www.echallenges.org/e2009/>.

COIN Community @ ICE 2009 – 15th International Conference on Concurrent Enterprising

Leiden, The Netherlands, 22-24 June 2009

The ICE Conference was the main event for the COIN Community in 2009. COIN organised a total of three separate community events that took place during the conference: on June 22nd a thematic session on *exploring the scientific bases of enterprise Interoperability*, on June 23rd a session on *business cases for EI*, and on 24th June the *COIN4LL workshop*. For more information about ICE 2009 visit the web address <http://www.ice-conference.org/>.

Thematic Session at ICE 2009: Exploring the scientific bases of Enterprise Interoperability

22nd June 2009

For more than a decade, Enterprise Interoperability has been on top of the agenda for CIOs in a growing number of enterprises, and for various research teams in Europe and beyond. Existing state-of-practice solutions, referred to as *Enterprise Application Integration, EAI*, represent today a good technological option. Nevertheless, a number of limitations, in terms of development costs and times, scalability, and flexibility, are reported. But the research on the sector is starting to provide innovative answers. However, the inherent complexity of the matter is hindering a fast and effective progression towards the more effective and applicable innovative solutions.

For this reason, there is a growing awareness that the EI scientific community needs to perform a "quantum leap" towards a better and deeper understanding of the problem space, and towards more sound and scientifically-based solutions. The research on the science base of EI has recently received a special attention. *The Enterprise Interoperability Cluster* has started a Task Force on this theme, and also an international Advisory Board on the same topics.

Thematic session held at ICE09 in Leiden on June 22nd represented a primary opportunity for exchanging ideas and positional opinions on the matter.

Business Cases for Enterprise Interoperability

23rd June 2009

The key motivation for the EI Business Cases workshop was that, while it is generally agreed and felt that in the EI/EC research context some outstanding technical work and good business practices are available and demonstrable, there is still an insufficient level of [>>]

awareness within the European Manufacturing Industry about the real, concrete short and long-term business benefits that a wide adoption and take up of EI/EC IT and business solutions could provide them.

To better focus this challenge, COIN has recently identified some issues (named *COIN Capital Sins*), against which some professional virtual communities, led by eminent experts of the domain external to the COIN consortium (named *COIN Angels*), will be created with the aim to discuss and find together a convincing answer to the posed challenges. Two of the COIN Capital Sins were seen as relevant for the workshop: *EI value proposition is unclear*, and *EI solutions are too complex and specific*.

The objective of the workshop, jointly organised by the *COIN Project*, the *Interop-VLab* and the *FinES EC Cluster*, was to start collecting and analysing different business cases relevant to EI/EC, with the three main short-term aims:

- Collecting a set of comprehensive EI business cases – aim of COIN
- Providing potential adopters with concrete information and knowledge about current EI methodologies and frameworks, scientific bases and practical solutions – aim of INTEROP-VLab
- Evaluating the possibility of creating an “EI Implementation Guidelines Manual”.

Additionally, in conjunction with the final medium-term aim to structure the proper scientific and business base for identifying the COIN Angels and organizing the proper professional virtual communities, which will try to overcome the above two sins.

COIN for Living Labs (COIN4LL) Workshop: Towards User Centred Open Innovation and IT Services for Living Labs

24th June 2009

On the third day of the ICE 2009 conference, a workshop named *COIN4LL* was proposing an interaction space among several communities – namely the *CWE community*, *Interoperability community* and *Living Lab community*. The interaction space had a specific focus on needed interoperable collaborative services for Living Labs that could be provided by the COIN Platform and looking at how the User Co-Creation Living Lab approach could be applied for developing those services. This workshop was supported by the COIN project and ENoLL.

A keynote presentation of the workshop was given by Sergio Gusmeroli, TXT eSolution. It provided an overview on the COIN project and objective on services supporting open innovation. Following, Marco Conte, ESoCE-NET, presented the expected role of Living Labs within the regional innovation through his presentation. These two presentations were setting the scene before looking at the possible ways for involving users/citizens in the research and innovation processes that were illustrated by Marc Pallot, CCE at Nottingham University.

These three presentations were followed by several Living Lab presentations that provided insights from regional Living Labs and innovation activities in eHealth, eMobility, eParticipation, AAL, and media sectors. Later on, an example of services to support open innovation was provided through a presentation by Alberto Olmo, ISOIN and Drago Trebežnik, Josef Stefan Institute.



Figure 1 – COIN4LL workshop at ICE 2009.

After the presentations, a brainstorming session took place for identifying needs, requirements and the most useful or expected services in the context of a collaborative platform for developers/users involved in living labs.

As a conclusion of the workshop, it was proposed to set up a predictive market on ideas of IT services for living labs, where the above list of services identified during the workshop have already been entered. The following step consists of inviting everyone, especially members of the AMI@Work communities and those involved in living labs, to contribute in entering other IT service ideas and in trading shares of those services. The predictive market can be accessed through web address <http://enoll.game-host.org/>.

For sure, a living lab may also have some owned specific tools or software (e.g. data or usage mining, user profiling, or value modelling) that they can turn into specific LL IT services that could be plugged into the COIN platform and made available to all ENoLL Living Labs across the EU. Such an IT platform, as proposed by the COIN project, would ensure a minimum level of standardisation and interoperability among the LL IT services enabling a real market to be established in between LL IT service developers and users. This approach is part of the COIN4LL white paper presented at the ESoCE-NET Industry Forum on December 7th 2009.

COIN General Meeting

Bled, Slovenia. November 9-11, 2009.

The fourth COIN general meeting, kindly arranged by our Slovenian partner The Jožef Stefan Institute, took place at Hotel Park right beside the beautiful lake Bled.

The three-day meeting covered all the aspects of the COIN project including the present advancements and the challenges of the future work. In the multiple tracks of workshops the separate work packages had their opportunities to co-operate to ensure the best possible future outcome of the project. The next COIN general meeting is planned to take place in May 2010. [>>]

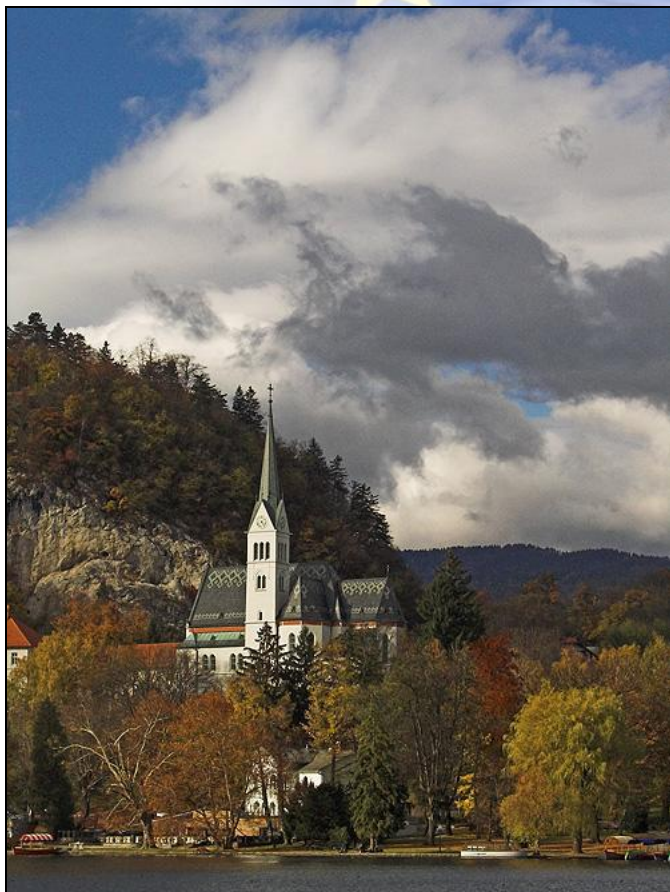


Figure 2 – Bled provided a beautiful setting for the fourth COIN general meeting.

The Future Internet Assembly

Stockholm, Sweden, 23-24 November 2009

FIA'09 Stockholm brought together about 300 stakeholders in the Future Internet developments from policy makers, industry and academia, coming from mainly from EU member countries and abroad. FIA'09 is now clearly positioned as "the" European Future Internet Research and Innovation conference.

Breakout Session: What does Future Internet mean for enterprise?

This breakout session was the first opportunity of an open, dedicated discussion of the topic of "Enterprises" in the FIA setting, focusing on the problem statement: What will the Future Internet deliver for Enterprises? The objective of the session was to elicit opinions from a broad spectrum of stakeholders of FIA, with a view to creating a common baseline for identifying and prioritising issues in research. Building on that, the intention was also to determine, where possible, what needs to be done to ensure that European enterprises including SMEs would benefit from Future Internet research and its outcomes. The session had an emphasis on the application of Future Internet technologies in support of business innovation and enterprise transformation.

The caretakers were Man-Sze Li (FISO, FISE, and COIN-project), Sergio Gusmeroli (FISO, RWI, and COIN-project), Jean-Dominique, Meunier (FCN), Michele Missikoff (FISO, COIN-project) and Sergios Soursos

(FISE), with the support of Stefano De Panfilis (Future Internet PPP) and Paul Moore (FCN). The preparation of the session involved the Future Internet Enterprise Systems (FIeS) Cluster of DG INFSO1, which has over 600 registrants to its activities.

The session was divided into two parts. The first included position statements from representatives of initiatives and stakeholders in the field. The second included three parallel knowledge cafes which actively engaged the participants. The three *Knowledge Cafes* were:

- Visions & Policy aspects: Enterprise Interpretation of the Future Internet (Moderators: Man-Sze Li, Jean-Dominique Meunier, with the assistance of Stefan Schuster)
- Socio-economics aspects: The emergence and impact of new interconnection economics paradigms (Moderators: Sergios Soursos, Paul Moore)
- Technology aspects: Enterprise transactions, service composition, information management (Moderators: Sergio Gusmeroli, Michele Missikoff)

Conclusions and Next Steps towards Valencia

Discussions at the three knowledge cafes have elicited a wide range of issues and opinions. Further discussion involving even more stakeholders in an open setting is needed. The session concluded on the following next steps:

- Populating the session wiki with all the materials related to this session (<http://services.future-internet.eu/index.php/Enterprises>).
- Continuing the discussion via the session wiki and engaging all interested stakeholders in the discussion, including Open Consultation.
- Investigating the possibility of preparing a Position Paper on the enterprise topic in the FI context.
- Continuing the debate in a dedicated session in FIA Valencia (request has been made to the EC).

Note on Follow-Up

Key Points from Presentations and Discussions and a large set of materials relating to the session have been made available online at address <http://services.future-internet.eu/index.php/Enterprises>, including a detailed description of the problem statement of the session, presentation slides, additional contributions open consultation and survey of the prioritisation of research topics, and the results so far of the ongoing survey.

Please use the above link to access the full set of documentation related to the session, and participate in the open consultation via the session wiki.

ESoCE-NET Industrial Forum 2009

Rome, Italy, 7 December 2009

The COIN project organized a workshop within the ESoCE-Net Industrial Forum 2009, which was held in Roma on 7th December 2009. The main objective of such a workshop was to understand how the COIN project and the Living Labs can collaborate to increase [\[>>\]](#)

the overall impact of the COIN system and available solutions. Are Living Labs just users of interoperability and collaboration solutions or can they effectively contribute to populate COIN solution offer? Can they play a catalyst role for enabling SMEs IT developers in jointly developing more COIN solutions? Can they be also used for testing new IT services, thus contributing to their evolution and deployment in real life settings?

In order to address this topic, the COIN project presented a White Paper entitled "COIN4LL: Towards Service Platforms For Living Labs" while a number of Living Lab experiences were described, together with the supporting IT services.

With respect to COIN, it was concluded that Living Lab entities can actually play the role of COIN multipliers, as they group Public Administrations, Regional Development Agencies, Industry, Research Centres and Academia, freelance Professionals and Citizens, at

territorial level. They all share the objective of such an initiative, thus bringing together all the necessary ingredients (financial resources, technology providers, societal stakeholders, customers) along the value chain of the identified product/service, needed for the successful establishment and sustainable operations of COIN pilot experiences.

The main results achieved by COIN Results obtained from this workshop were:

- Established collaboration processes between COIN and the Living Labs ENoLL community,
- An initial survey of Living Labs solutions, which can be potentially federated with the COIN systems;
- Engagements of a number of Living Labs as potential COIN multipliers

More information about the Industrial Forum is available at <http://www.esoce.net/>.

Upcoming events

Future Internet Assembly (FIA) Workshop 2010

Valencia, Spain. 15-16 April 2010

The Future Internet Assembly (FIA) groups 100 projects who subscribed to the Bled Declaration. They agreed to coordinate their R&D activities to foster a strong European footprint on Future Internet. More than Euro 650 million is invested by the participants and by the European Commission to make this happen. FIA mobilises a community of some 400 experts active in shaping the European Future Internet vision.

FIA'10 is positioned as "the" European Future Internet Research and Innovation conference. What makes it attractive is the mix of policy makers, industry and academia, debating research and innovation strategies and then best way forward for a stronger European position in Future Internet developments. For more information visit: <http://www.future-internet.eu/news/view/article/the-future-internet-assembly-fia-workshop.html>

Next event for the COIN Community @ ICE 2010 – 16th International Conference on Concurrent Enterprising: "Collaborative Environments for Sustainable Innovation"

Lugano, Switzerland, 21-23 June 2010

The ICE conference is a premier forum to enable practitioners, researchers as well as tool vendors to present, demonstrate and share the results and achievements of their work in the broad domain of Concurrent Enterprising. More information about the conference is available at <http://www.ice-conference.org/>

The ICE Conference will be the main event for the COIN Community in 2010. Don't miss any information and opportunities for getting involved in COIN supporting tasks and stay tuned on the COIN Community.

I-ESA 2010 - International Conference on Interoperability for Enterprises Software and Applications

Coventry, UK. 13-15 April 2010

Making the internet of the future for the future of enterprise. The conference will be guided by keynotes coming from high level government officers, industrial leaders and researchers from Europe, China and worldwide.

The main conference will take place on 14th and 15th of April, parallel streams of research paper presentations, together with keynote plenary presentations from research and industrial perspectives, as well as a presentation of the European Commission perspective by M. Gerald Santucci. Tuesday 13th April will be a Pre-Conference Workshop Day, with up to 8 subject specific workshops scheduled, and there will be a meeting of the IFIP WG 5.8 (Working Group) "Enterprise Interoperability" belonging to the Technical Committee TC5 "IT Applications", on Friday 16th April. More information available at: <http://www.coventry.ac.uk/iesa2010/Pages/IESAConference.aspx>.

ICEIS 2010 – 12th International Conference on Enterprise Information Systems

Funchal, Madeira, Portugal. 8-12 June 2010

ICEIS 2010 is organized by INSTICC (Institute for Systems and Technologies of Information, Control and Communication). More information available at: <http://www.iceis.org/>.