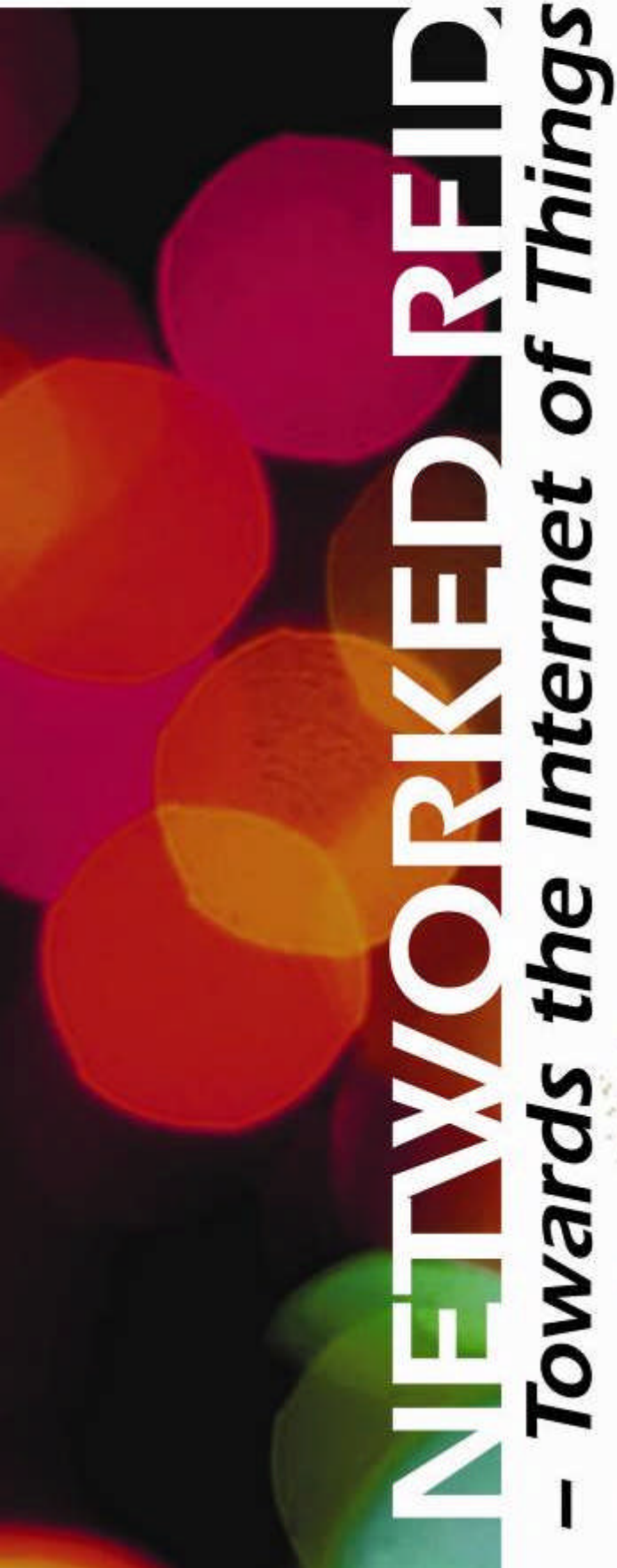
CASAGRAS2

an EU Framework 7 Project

@ RFID JOURNAL LIVE!

Tuesday April 12th, Orlando Conference centre, FL



The need for authoritative, on-going international cooperation in respect of the European agenda for taking the concept of the Internet of Things (IoT) to reality is pivotal in putting it into the global context it demands. CASAGRAS2 is the acronym for an EU Co-ordination and Support Action providing the necessary conduit for taking the next steps in international collaboration. Partners from the project will present a one day preconference session at RFID LIVE 2011 in Orlando, on Tuesday April 12th. CASAGRAS2 identifies a much broader base for international cooperation, with partners from Brazil, mainland China, Hong Kong, India, Japan, Korea, Malaysia and USA. The European partners are from Belgium, France, Germany, Russia and the UK. CASAGRAS2 also identifies a group of experts to participate in the project that will target stakeholders based in Argentina, Chile, Peru, Mexico, North America, Africa and the Middle East, Asia and Australasia.

CASAGRAS2 draws upon the outcomes of a completed CASAGRAS1 project and the resulting recommendations. It seeks to contribute to the European research cluster for IoT development (IERC) , offering an important holistic input characterised by the generic nature of the work packages in respect of architecture, identification and data capture protocols, applications and services framework, R&D roadmap, education and training and the important multi-dimensional features of governance; all with respect to international deliberation. Each component of these work package activities will be developed in cooperation with international partners through the international platform work package. Outcomes will be delivered through a dissemination infrastructure, exploiting a range of delivery platforms and serving a wide range of project, stakeholder and end-user delivery needs, with substantial foundations for innovation and enterprise in respect of applications, services and products, and socio-economic benefit.

Well known drivers of the European automatic identification and data capture industry are among the leaders of the CASAGRAS project and will be among the speakers in Orlando. Other speakers will be travelling from South America,and Europe to share their insight into a topic that is gaining global recognition.

THE PROGRAMME

Chairman – Mr Ian Smith, President AIM UK & CASAGRAS2 Coordinator

11.00 - 11.15 Europe's Commitment to RFID and the Internet of Things – Ian Smith

An overview of Europe's commitment to RFID and the Internet of Things with particular reference to the EU supported RACE network RFID Thematic Network project. Ian will also discuss Europe's Research Cluster for the Internet of Things (IERC) in which he has responsibility for International Affairs.

11.15 - 11.40 Internet of Things Around the World – Ian Smith

An overview of IoT developments around the world that relate to the implementation of the IoT, drawing particular attention to the EU supported CASAGRAS projects that are directed specifically at international cooperation.

11.40 - 12.05 Network RFID - Automatic data capture and identification meets the Internet – George Roussos

Recent advances in low-power wireless networking have led to automatic identification and sensing systems being increasingly connected to the Internet. This allows the efficient and effective remote control of such systems but also had implications for data traffic patterns on the Internet. In this presentation Dr Roussos explores the co-evolution of AIDC technologies and the Internet and the implications of this trend in the medium term.

12.05 - 12.30 Sensory Technologies and Networking - José Roberto de Almeida Amazonas

Developments in sensors and networking technologies are presenting a significant foundation for wide ranging IoT applications and services. Many of these developments have radio frequency identification as a platform for the sensory and networking capability. This presentation will look into the developments and the impact they are likely to have on IoT development.

12.30 - 1.00 Carrier Based Functionality and Energy Harvesting in IoT Applications - Anthony Furness

With the concept of the Internet of Things (IoT) at the forefront of consideration with respect to the future of information and communications technology (ICT), within the European Union, RFID is being seen as an important enabling technology. Attention in this respect is also being directed at the importance of ubiquitous computing and networks where again RFID is being seen to be significant, including developments in RFID that can support enhanced functionality, processing and sensory capabilities. This raises too the powering and energy conservation requirements for these more sophisticated RFID devices and the importance of energy harvesting as a means of satisfying these demands.

1.45 to 2.15 Privacy, Security and Behaviour Issues – Trevor Pierce

Privacy, security and behavioural issues have attracted significant attention in developments concerning radio frequency identification (RFID) and its applications and positioning with respect to the Internet of Things (IoT). Trevor will provide insight into these issues, particularly in relation to developments in Europe, but also in relation to the global developments concerning the IoT.

2.15 to 2.40 Cloud Computing – An Enabling Technology for IoT Applications - José Roberto de Almeida Amazonas

Most IoT applications will certainly depend on accessing external databases and on processing huge amounts of data. This presentation will show how cloud computing associated to CPU capacity and network virtualization are key technologies to enable IoT to become of paramount importance in the decision making process of many business and environmental scenarios.

2.40 to 3.10 Web-based System for Monitoring Location, security and Status of Hazardous Materials transported by Rail - Craig Casto

Integration of technologies is being seen as a very significant aspect of IoT applications and services, particularly where the need is seen for satisfying multiple requirements such as location, security and real-time data collection. The application presented here demonstrates the powerful nature of integration and web-based application support. It demonstrates how Dow Chemical uses web-based software linked with bar codes, GPS and SatCom, as well as sensors, to monitor in real-time the location, security status and tank levels of highly hazardous materials transported by rail. The Internet enables Dow to have a common "version of the truth" that can be shared and acted on by numerous people involved, including suppliers.

3.30 - 3.55 What IoT Means for Standards – Steve Halliday

The IoT covers a vast array of technologies and applications, how will we pull this together in a standardized fashion. Learn about the standards that will be the backbone of the IoT.

3.55-4.15 QUESTION & ANSWER SESSION

Session Chairman – Ian Smith

Ian G. Smith, president of AIM UK, is co-ordinator of the EU CASAGRAS2 project.

In 1984 he was the founding general secretary of AIM UK and AIM Europe. He is a member of the prestigious AIDC 100 Club. He was project co-ordinator of the EU Framework 5 Esprit dissemination programme (Notepad) for radio frequency data communication; co-ordinator of the EU FP5 FoodTrace Concerted Action Programme which developed a generic framework for traceability; and co-ordinator of the Framework 7 Support Action for Global RFID-related Standardisation Activities (CASAGRAS). Currently he is work package leader of the Framework 7 BrightAnimal project on precision livestock farming and Chairman of the Management Board of the RACE networkRFID project. Hde is editor of a new global magazine “IoT Essentials.”

George Roussos is a Reader in Pervasive Computing in the Department of Computer Science and Information Systems at Birkbeck College, University of London.

Dr Roussos researches ubiquitous computing, with a focus on the effects of human dynamics on system architectures and mechanisms to support navigation and findability. Roussos received a PhD in scientific computation from Imperial College, University of London. He is a member of the IEEE, the IEEE Communications and Computer Societies, and the ACM.

José Roberto de Almeida Amazonas, Associate Professor at the Communications and Control Engineering Department of the EPUSPo, Brazil

José graduated in Electrical Engineering from EPUSP in 1979. MSc (1983), PhD (1988), Post-doctorate (Livre-Docência, 1996) in Electrical Engineering from the same university. Followed specialization courses at Ecole Supériéure d'Eléctricité (SUPELEC, Paris), Massachusets Institute of Technology (MIT, USA) and University of California at Berkeley (USA). Worked as visiting professor at the Humboldt Universität (Berlin, DDR) and at Dresden Technische Universität (Dresden, DDR). Coordinated several research and development projects with European and American companies as, for example, AMI Inc., AMS GmH, European Silicon Solutions - ES2, Ericsson Telecommunications.

José is currently Associate Professor at the Communications and Control Engineering Department of the EPUSPo, where he is in charge of optical communications and high-speed network courses. He was the coordinator of the Signals and Communications Laboratory of the same department (2007-2008) and is the leader of the Network QoS Management research group.

THE SPEAKERS

Anthony Furness, Technical Director, AIM UK
Prof/Dr Anthony Furness is Visiting Professor to the Advanced Manufacturing Research Centre with Boeing, The University of Sheffield, Technical Director for AIM UK (the UK Association for Automatic Identification Manufacturers) and Director of AIDC Global Ltd, a start-up company specialising in Automatic Identification and Data Capture (AIDC). He was also Chief Technology Officer (CTO) and a founding Director for the European Centre for AIDC.
Prof Furness is a specialist in AIDC technologies and the development of the ontology and principles of identification and object-connected ICT. Specialist interests include radio frequency identification (RFID) and natural feature identification.
With more than twenty years experience in the AIDC technologies, he receives national, European and international recognition in the field. He is a member of the AIDC 100 Group, has served as a member of the European Commission Expert Group on RFID, and in 2002 received an AIM UK 2002 Special Award for "major contribution to developing awareness and understanding of the use of AIDC technologies in the UK and around the world". He has been involved, often in the technical lead role, in specifying and delivering a number of AIDC-related national and European projects. He is technical co-ordinator for CASAGRAS2 and has also been the lead academic in two Government-funded RFID Global Watch missions to the USA & Japan.

Trevor Pierce, AVANTA, Belgium. Trevor Peirce started as an independent RFID consultant in July 2006. Trevor has a leading role in European and International RFID standardization through RACE networkRFID, GRIFS, CASAGRAS 1 & 2, EC RFID Mandate Phase 1 & EC Recommendation Informal Work Groups, EC China RFID Plugtest, EU China IoT Expert Group, IERC privacy and security stream coordinator. Aditionally Trevor works for a global sector leading medical device manufacturer and a large automobile manufacturer in advising them on RFID and other AutoID technology strategies and implementations. Prior to this Trevor led DHL's RFID Programme since 1998 and the RFID Programme of Deutsche Post/DHL since 2003. In 2005 Trevor left Deutsche Post/DHL to become the Standards Director for EPCglobal Inc,

Craig Casto, Dow Chemical. Craig has more than 30 years of logistics, production planning, and auto ID experience, holding various leadership positions in marine transportation, inventory and production management, and supply chain technology. Craig has held his current role as Auto ID Technology leader since 2001 having joined Dow during the merger with Union Carbide. Craig is also a founding member of Dow's RFID/GPS Steering Team. Formed in 2005, this team developed a strategy for deploying RFID and GPS technology within Dow and to provide guiding direction to RFID/GPS enabled "Most Effective Technology" as developed by the Expertise Center.

Stephen G. Halliday, President, High Tech Aid. Steve is the President of High Tech Aid, a company based in Pittsburgh, PA providing consulting services about Automatic Identification and Data Capture technologies. He graduated from the University of Manchester, UK, with a degree in Electronic Engineering and he has been involved in automatic identification and data capture technologies since 1980. He is a member of the AIDC 100 and is the 2010 winner of the Richard R Dilling award for services to the AIDC industry. Prior to forming High Tech Aid, Steve was vice president, technology for AIM Inc. Steve has had numerous papers and articles published on technology subjects. He is the chairman of the SC31 committee responsible for creating RFID air interface standards and a co-chairman of the EPCglobal™ Technical Standards Committee. He is the editor/publisher of High Tech AIDCourier, a free monthly newsletter for the AIDC community and is a frequent speaker at events around the world.

Steve works with companies that are looking at Automatic Identification and Data Capture technologies and helps them to understand where the technology is going, what standards they may need to encompass, and how to achieve their requirements. His client list includes both technology providers and technology users.

Steve is also the co-owner of a company offering RFID solutions in the document management and asset tracking world. More information can be seen at http://www.RFIDTraxxllc.com. Steve can be contacted by email at steve@hightechaid.com, web site http://www.hightechaid.com, or by phone at +1 724 443 7518.