World Class Standards

http://www.grifs-project.eu

GRIFS Workshop - Tokyo, 26 September 2008

Patrick GUILLEMIN

ETSI – Strategy and New Initiatives

GRIFS

Building the Global RFID Standards Forum

ETSI - http://www.etsi.org

- ETSI was established 1988 as a European standardization body and retains European responsibilities.
- ETSI's Members are global players &
- ETSI' standards are adopted worldwide
- Over 20% of ETSI's ~700 members have no established operations in Europe
- Many of the other 80% are headquartered outside Europe
- Global success stories like GSM, 3G, DECT, DVB, TETRA …

ETSI: a ‘must consult’ body

- Supporting European telecoms regulation
  - Response to European Mandates
  - Harmonised Standards in support of R&TTE Directive
- Supporting European Frequency Harmonization
  - Harmonised Standards for European frequency allocations
  - Produced by ETSI ERM TG28 and TG34 committees
- World leader in creating cryptographic algorithms and protocols to prevent fraud, unauthorized access and privacy
- Producing ICT standards for global use
- ETSI is a unique resource to meet European and Global standardization requirements for the Internet of Things

ETSI Technical Bodies in RFID Networks?

- TC ERM: RFID Radio Interface and Spectrum Management
  - TG28 SRD (Short Range Devices) Generic Standards at all frequencies
  - TG34 RFID (Radio Frequency IDentification) Standards for particular RFID bands – currently only UHF
  - TG30 Medical Devices …
- EP EHEALTH
- TC HF (Human Factor)
- TC SCP Smart Card Platform (NFC and SIM/USIM)
  - 3GPP + links with NFC Forum, ECMA
- TC ITS: Intelligent Transport Systems
- TISPAN/NGN: Next Generation Networks, IMS, IPTV
- Security
- Plugtests Service, Workshops, Global dialogue
- Privacy

RFID Interoperability?

- Most importantly, the development of standards should follow established best practices for engineering design:
  - Establish and analyse requirements
  - Develop a functional model and architecture
  - Specify the detailed design

- Mass RFID could not take off because of
  - The non application of these best practices
  - The lack of trust in the technology (security by design)
  - Too many fragmented landscape of non interoperable proposals

…This is changing!

ETSI EU FP7 active projects and RFID

- GRIFS and CASAGRAS + CuteLoop (all RFID)
  - CASAGRAS – http://www.rfidglobal.eu
  - GRIFS - http://www.grifs-project.eu
  - CuteLoop - http://www.cuteloop.eu
- WALTER (UWB)
  - http://www.walter-uwb.eu/
- EU REG (EU Regulation on RFID)
  - http://ec.europa.eu/information_society/policy/rfid/doc/reg.pdf
  - Future CIP ICT PSP RFID TN in 2009
- CERP Cluster of European RFID Projects – ETSI Coordinator
  - http://www.rfid-in-action.eu/cerp
- Link to EPoSS ETP (RFID WG lead by Hitachi)

GRIFS

World Class Standards

The Global Interoperability Forum for Standards (GRIFS) is a 2 years Support Action Project funded by the European Commission with the aim to improve collaboration and thereby to maximise the global interoperability of RFID standards.

GRIFS started in January 2008 and is managed by

- GS1
- ETSI
- CEN

The GRIFS project will initiate a forum that will continue to work constructively after the end of the project through a Memorandum of Understanding between key global standard organisations active in RFID.

World Class Standards

CASAGRAS

CASAGRAS: Coordination and Support Action (CSA) for Global RFID- related Activities and Standardisation: 18 Months

Provide a framework of foundation studies for EU consideration and for the development of standards and regulatory foundations that can best assist the EU executive and member states in influencing and accommodating international issues and developments concerning radio frequency identification (RFID) and the emerging 'Internet of Things".

- AIM UK
- YRP Ubiquitous Networking Laboratory (YRP) - Japan
- Hong Kong Science and Technology Parks Corporation (SCIC) -China
- AIDC UK
- ETRI - Electronics and Telecommunication Research Institute -Korea
- FEIG Electronic GmbH (FEIG) - Germany
- ETSI - France
- QED/ Craig Harmon – USA

CASAGRAS
an EU Framework 7 Project

Next meeting in December 2008 in China with GRIFS

20 Research Projects in CERP

The CERP coordinates the actions between ~20 EU RFID research projects and AITPL Cluster:

AMI-4-SME, ASPIRE, BRIDGE, **CASAGRAS**, CE RFID, CoBIS, **CuteLoop,** DYNAMITE, EU-IFM , EURIDICE, **GRIFS**, INDISPUTABLE KEY, iSURF, LEAPFROG, PEARS Feasibility , PRIME, PROMISE, SMART, SMMART, StoLPaN, STOP, TraSer

http://www.rfid-in-action.eu/cerp

CERP Objectives

- Facilitate networking of different European projects
- Coordinate research activities and establish synergies between projects
- Assure coherence of work in Europe
- Leverage expertise, talents and resources
- link to RFID standardization (GRIFS and CASAGRAS)
- review the scope in the context of the Internet Of Things

European Commission
Information Society and Media

CERP
Cluster of European RFID Projects

Recognition of CERP 2007 achievements

- CERP Working Paper on future RFID Research Needs http://www.rfid-in-action.eu/cerp/cerp-working-paper/working-paper-on-future-rfid-research-needs
- CE RFID Standard roadmap (as a key starting document for GRIFS and CASAGRAS) http://www.rfid-in-action.eu/public/final-reports/workpackage-3/
- www.rfid-in-action.eu website with login, brochure, flyer, mailing list, collection of projects, workshop and fair participation to promote CERP
- CERP cluster meetings organization, location and frequency, collaboration room on the website and dissemination of information, yearly Cluster report, liaison with AITPL cluster and ETP EPoSS

Who is working in GRIFS?

Patrick GUILLEMIN, Strategy & New Initiatives at ETSI, in charge of RFID and Internet Of Things

- European RFID Expert Group Member
- CERP Coordinator Cluster of 20 European RFID Research Projects
- Active in 3 EU FP7 RFID projects GRIFS, CASAGRAS and CuteLoop (+WALTER)
- “RACE network RFID” proposal for the EU RFID Thematic Network funded by EU

Working with 4 ETSI Experts involved in both GRIFS and CASAGRAS

- Robert Williams, CSI (UK) Ltd bw@2-csi.com
- Scott Cadzow, CADZOW COMMUNICATIONS scott@cadzow.com
- Trevor Peirce, avanta@scarlet.be
- Josef Preishuber-Pflügl, CISC Semiconductor GmbH/LPRA j.preishuber-pfluegl@cisc.at

ETSI role in GRIFS – WP2

WP2 (Lead by ETSI) is "On-going liaison with other EU RFID projects"

The objective of work package 2 of the GRIFS Project is

- to liaise with all active Commission funded RFID-related projects in both FP6 and FP7.
- to inform them about the work of this project on global standards co-ordination and to understand their issues and requirements from RFID standardisation actions.
- In addition to participate in the European Research Area (ERA) collaboration

Thank you for your attention
patrick.guillemin@etsi.org

Background slide: CASAGRAS IoT and RFID

- WP1: Standards and Procedures for International Standardisation
- WP2: Regulatory issues in respect of RFID standards
- WP3: Global coding systems in relation to RFID standards
- WP4: RFID in relation to Ubiquitous Computing and Networks
- WP5: Functional, including sensory, developments in RFID and Associated Standards
- WP6: Applications *and the emerging Internet of Things*
- WP7: Socio-economic components of RFID usage *and the emerging Internet of Things*
- WP8: Dissemination

CASAGRAS
an EU Framework 7 Project

Background slide: ETSI activities in GRIFS

ETSI work plan for WP2 is in the main lines:

- to work with hired ETSI experts providing assistance to Patrick Guillemin in both GRIFS and CASAGRAS to ensure delivery of planned effort in the two projects (GRIFS and CASAGRAS) where ETSI is a consortium member. The fact that ETSI in these 2 supporting action facilitates the coordination of efforts in RFID-related projects.
- to use the role of Cluster of European RFID Projects (CERP) Coordinator to liaise with all FP6 and FP7 projects (current and future) to collect standardization requirements in all active RFID research projects. This will be ensured with CERP mailing list discussions, CERP conference calls and during regular face-to-face CERP meetings and associated minutes.
- GS1 in GRIFS is also members of other RFID research projects (like BRIDGE) and the liaisons with its standardization requirement will be facilitated.
- FEIG is co-author of the CE RFID report on RFID standardization and is also a consortium member of CASAGRAS like ETSI. The direct link with author of such valuable reports will ensure accurate RFID standardization analysis in both GRIFS and CASAGRAS supporting actions.
- to use the EC RFID Expert group to liaise with DG INFSO and participate in the European Research Area (ERA), mainly with
  - EU Research Framework Programme FP7,
  - the European Technology Platforms (like EPOSS via leader of RFID wg),
  - following the ICT PSP calls (like Theme 3 on RFID Thematic Network call for 2008)
  - watching Policy discussions like held in the EU RFID Expert Group where ETSI is member and Patrick Guillemin its representative (about RFID Recommendation, Communication and Mandate).
  - DG INFSO D4 Unit (An ERA Pilot Initiative in the Networked Enterprise and Radio Frequency Identification) http://cordis.europa.eu/ist/ict-ent-net/era.htm
  - the European Institute of Technology (EIT).
- ETSI will follow-up the RFID related initiatives conducted by DG ENTR and EC RSCOM and TCAM groups.
- to participate in RFID events organized by EC DG INFSO like EC/EPOSS workshop, information days, policy workshops, "RFID Outlook" workshop under EU presidencies, Internet Of Things EC events, etc.. where the activities of GRIFS (and CASAGRAS) will be described
- ETSI is uniquely placed to liaise with other standard organizations and the dissemination of GRIFS (and CASAGRAS) activities will be realized during ETSI standardization events (like ERM meetings), workshops (like the 2nd RFID Workshop organized on 25 February 2008), RFID conferences where ETSI is participating (very often as speaker). ETSI will use its CASAGRAS project participation to ensure the liaison with its worldwide members from Japan, Korea, China, Europe and USA.
- ETSI will ensure an RFID standardization follow-up for GRIFS using other sources available on-line and will consolidate it with CASAGRAS similar findings on the Internet Of Things.
- The CE RFID output on standardization is a key input for the RFID standardization knowledge allowing to start from an already well detailed list of bodies to liaise with about RFID and GRIFS.