CASAGRAS PROJECT FILES ITS

INTERIM REPORT

ON RFID AND THE INTERNET OF THINGS WITH EUROPEAN COMMISSION

Partners in the EU Framework 7 CASAGRAS Project on the future standards and applications of RFID are to take a broader approach to their brief during the project's final year as they seek to develop an inclusive model for the emerging Internet of Things.

In their interim report, filed this week with the European Commission, the partners say that following a review of European-based project and conference developments it was clear that the concept of the Internet of Things required further definition and development in terms of scope and content.

In addition, the review showed that RFID, although seen as a key enabler for the Internet of Things, was not the only technology that could contribute to a networked infrastructure exploiting the potential for connecting to the physical world.

The partners conclude that a more inclusive model for the Internet of Things should be considered. The model identified distinguishes an "object space" in which a variety of "edge" technologies including RFID could be exploited to:

- **Connect with and identify objects using natural feature and data carrier techniques and technologies.**
- **Network objects and object-connected readers, both fixed and mobile.**
- **Facilitate, as appropriate, the location of objects.**
- **Facilitate, through object-connectable sensor devices, sensing of environmental quantities to which the object is subjected.**

The report also states that a wider framework for standards is required:
"*CASAGRAS will seek to specify the framework for standards and standards development, together with a strategy for developing a knowledge base of information on standards appropriate for the development of the Internet of Things. In doing so it will take into account the developments and outcomes of the GRIFS project.*"

The CASAGRAS project partners, who represent the UK, France, Germany, USA, Korea,China and Japan, say that achieving a global coding approach to identification would be "*extremely challenging and extremely unlikely*" due to the divergence of communication-based systems for RFID, including near field communication. "*The challenge for CASAGRAS is to take a resolution approach as the basis for accommodating the global coding problem, seeking to derive a Global Resolver solution,*" they add.

With privacy and security recognised as vital considerations in relation to RFID and the Internet of Things - where personal identifiers and carriers of personal data will be involved - CASAGRAS will consider the framework for a design standard to address these issues. It will also report on other socio-economic issues such as personal and product safety, the environment, recycling and waste management and developments relating to the home and built environment and personal support services.

Ian G Smith, co-ordinator of the Casagras project said: "*Our brief is to make recommendations and to propose standards and best practice that can be agreed and applied world-wide.*" RFID stakeholders around the world could add their views to the debate and help shape the final CASAGRAS report and findings that will be presented to the EC in summer, 2009.

"*I urge anyone with an interest in the future of RFID to join our free global forum at **www.rfidglobal.eu**. All views and opinions are welcome as we seek to arrive at an international consensus on a way forward to enable everyone to maximise the exciting opportunities that RFID and related technologies can provide with respect to the Internet of Things.*"

Among the key topics being addressed by CASAGRAS are:

- **the need for a global coding or numbering system that embraces existing legacy systems including EPC and ubiquitous ID**
- **an adopted set of data carrier and natural feature technologies and associated data structure and communication protocols to meet the needs of the Internet of Things**
- **a universal data appliance protocol to accommodate the range of heterogeneous network technologies and protocols called for with respect to the Internet of Things**
- **service oriented architecture (SOA) and grid services as an approach to accommodating Internet of Things services and network applications**
- **migration strategy to specify a pathway development and agreements that will be necessary in realising the Internet of Things**
- **the need for supporting international standards**

To:
- download the CASAGRAS Interim Report
- read the CASAGRAS newsletter
- join the RFID Global Forum
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Please visit www.rfidglobal.eu

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