

**Speech of Luis Magalhães, the President of Portugal Knowledge Society Agency (UMIC),
Representing the Secretary of State of Science, Technology and Higher Education of Portugal,
at the Conference “RFID: Towards the internet of things” Closing Session,
organized by the German Presidency of the European Union Council,**

Berlin, 25-26 June 2007

Secretary of State,
Ladies and Gentlemen,

I would like to thank the German Presidency for the invitation to address this audience in name of the Portuguese Secretary of State of Science, Technology and Higher Education who had to give up coming to Berlin today because he had to be in the Portuguese Parliament.

We want to congratulate Germany for organizing this conference, but specially for having decisively contributed in the past few months to advancing the ideas leading to **THE INTERNET OF THINGS** in the European agenda.

RFID is perceived as a very important enabler of a new phase of the Information Society. Potentially, the net will interconnect any of the surrounding objects to context-data, automated applications and business processes. **THE INTERNET OF THINGS is a tremendous challenge and opportunity for Europe**, both in a further development of the Information Society, as a contribution to widening social opportunities and increasing quality of life of **the people**, and also in potentially providing the grounds for new economic advantages transversally to many businesses.

The acceleration of the movement in this direction is of strategic importance to the European Union, and it requires concerted efforts of many persons and organization, as well as **clear solutions to the challenging security, privacy and consumer protection concerns** involved.

Important steps were recently taken in Europe in this direction, in particular with the Commission Communication “RFID: Steps towards a policy framework”, the setting up of a specific stakeholders group, a first exchange of views brought to the Telecommunications, Transports and Energy Council at the beginning of this month, and this Berlin Conference and its outlook paper.

This subject is in a position within the European Union technological policy today much more developed than it was at the beginning of the year, thanks to the contributions of both the German Presidency and the Commission.

Portugal will pursue these efforts with the aim of accelerating the advancement of the issues to be handled at the European and Member States levels, taking benefit of the momentum that has been built.

It is necessary **to widen the debate** along the different lines involved besides the Telecommunications, Transports and Energy Council formation of the European Council. Certainly in the Competitiveness Council – for both **research** and **economic competitiveness** – but also in what concerns the development of **appropriate regulatory and standards frameworks**, the need to organizing **education and training of the very high numbers of people** required for the desired development and critical to the **necessary involvement of SMEs**, the impacts in areas such as **health and environment**, and the concerns with **security, privacy and consumer protection**.

Let me emphasize that the confidence of people and organizations necessary for the development of this area relies on properly solving security, privacy and consumer protection concerns. The social dimension of this undertaking should not be underestimated. **THE INTERNET OF THINGS** will, at the end, be a component and a contribution to **THE INTERNET OF PEOPLE**.

Besides these general efforts, the Portuguese Presidency will host a conference “On RFID – The next step to THE INTERNET OF THINGS”, whose main organizers are among us today. It will be held in Lisbon, the 15th and 16th of November. Look at the Internet address www.rfid-outlook.pt. Easy to remember: just like for

this Berlin conference, changing only the top domain .de to .pt. A clear sign of the intended continuity we would like to assure to the German contribution.

This conference will be a further opportunity to address existing barriers to the massive adoption of RFID and the answers provided by the business, the technical and research communities, the standardization and regulatory bodies, the policy agencies, and the public interest nongovernmental associations.

A special point is that we plan to run a call for IDEAS to potential participants, so that the conference can provide an opportunity for interested participants to contribute with ideas on application areas in which they think the technological, business and social aspects could be worked out in the fashion, let us say, of pilot projects that could be used as real scale test-beds.

A special emphasis will be given to **international partnerships** oriented towards **new businesses** and the **advancement of knowledge** leading to **THE INTERNET OF THINGS** and the associated **ubiquity of communicating sensors, devices and complex systems**. We need to look at this area with a broad view:

- **Knowledge networks oriented towards market applications** such as supply chain management, retail, specialized logistics, quality control and anti-counterfeiting, transportation of people and goods and intermodality, environment and health.
- **Research based international partnerships oriented towards new knowledge of strategic value** in areas leading to:
 - Miniaturization (in particular with micro and nano technologies)
 - Tag and sensor cost reduction (exploring polymer electronics)
 - Energy supply (with novel energy supply – harvesting – storage – saving systems)
 - Embedded intelligence and smart things
 - Very large scale networks and information systems.

Another very important point is to provide **easy and ready participation of SMEs** in the market evolution in this area, as together they represent a very important share of the opportunities involved and without them there will not be real massification of RFID use.

Portugal and Germany are presently well on their way of a new and very operational research based partnership. It is a partnership involving strong links of several Fraunhofer Institutes with Portuguese research institutions and businesses, and the installation in Portugal of the first Faunhofer Institute outside Germany.

Let us take this opportunity with our hands and work together committed to a further step towards THE INTERNET OF THINGS in Europe.

We welcome you all to the November conference.

Thank you very much. Let us meet again in Lisbon.