

European Commission public consultation on the early challenges regarding the "Internet of Things"

POSITION PAPER

Date: 28 November 2008

Organisation's name: EuroCommerce

Type of organisation: Other (business/employers' association)

Location: Brussels, Belgium

Size: EuroCommerce's membership includes commerce federations in 31 countries, European and national associations representing specific commerce sectors and individual companies.

Scope of activities: Representing the retail, wholesale and international trade sectors in Europe, EuroCommerce champions the cause of free and open markets both within the European Union and beyond, to the benefit of consumers. It stands for sound and fair competition where all actors in commerce have free access to the activities and markets of their choice. EuroCommerce's strategic priorities are focused on the following issues: improving the image of commerce, better and less regulation, Europe's competitiveness and servicing consumers.

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EuroCommerce agrees that this document is made public.

EXECUTIVE SUMMARY

The Commission's staff working document is a starting point for an important discussion but unfortunately its findings are founded on a limited analysis of the concept of the Internet of Things. EuroCommerce would have welcomed a broader analysis of the huge potential that the Internet of Things offers.

For EuroCommerce, it goes without saying that a secure environment for RFID applications using the internet is a prerequisite for the acceptance and growth and hence the success of the emerging Internet of Things.

As far as privacy and data protection is concerned, EuroCommerce supports self-regulation, which is the best way to ensure that the data protection legislation is properly implemented in the whole value chain and adapted to the many and varied specifications and to the many sectors using the RFID technology.

Regarding the Commission's proposal for a mandate to Standardisation Organisations to define the functional requirements that identity and naming schemes should respect, EuroCommerce calls for the inclusion of all stakeholders including business in this process.

The availability of a sufficient number of spectrum bands is essential for the Internet of Things to reach its full potential. From EuroCommerce's point of view, the efforts made by the European Commission so far go in the right direction and a regular update of the relevant EU Decisions makes therefore sense. The extension of the Commission's efforts to the global level in order to reach a globally harmonised spectrum for Internet of Things devices, e.g. through the International Telecommunications Union, would be welcomed by EuroCommerce.

As for the development of standards for RFID-based applications, EuroCommerce agrees that standards are vital to European competitiveness since they will provide a level playing field for industry and all other actors.

On the subject of radiation, EuroCommerce is not in line with the proposal to apply the precautionary principle. EuroCommerce fears that following this principle would hinder innovation and technological progress.

For the future discussion, EuroCommerce suggests to organise an annual Internet of Things summit in order to follow and analyse closely the ongoing developments and to assess their impacts on society and economy. Representatives from outside the EU, in particular the USA and Asia as well as the main emerging countries, should also be invited.

1. Preliminary remark

EuroCommerce welcomes the fact that the European Commission carries out a consultation on the Internet of Things among the stakeholders prior to the publication of its communication on this topic which is foreseen for the second quarter of 2009. The staff working document is a starting point for an important discussion but unfortunately its findings are founded on a limited analysis of the concept of the Internet of Things, predominantly based on an existing subset of ID technologies, in particular RFID.

As far as RFID is concerned, EuroCommerce has until now been following closely the developments and has been contributing to the political discourse at European level by issuing position papers on the main political initiatives from the Commission.

For the time being, it might be too soon to make new policy decisions for the future Internet of Things, as these decisions would require a careful assessment and accurate understanding of the current and emerging developments. Rather than taking decisions now, it is important to put a process in place that would identify what the issues are where guidance is needed and address their impact on applications and society as they emerge. For that, a continued comprehensive dialogue representing all parties and supported by the European Commission would be very helpful. In this regard, no meaningful debate on the future Internet of Things can exclude other regions from the process. Rather than supporting European centric approaches to the Internet of Things, it would be preferable to assure that the input of European stakeholders is considered and acknowledged in broader global discussions.

Notwithstanding these remarks, EuroCommerce would like to make some general comments on the policy challenges which are addressed in the Commission's consultation document.

2. Policy challenges in RFID architectures

2.1. Security

A secure environment, i.e. protection against unauthorised access and manipulation, for RFID applications using the internet is a prerequisite for the acceptance and growth and hence the success of the emerging Internet of Things. With the appearance of new technologies, developers and promoters of new technologies will have to make sure to comply with existing security measures. Users, and particularly enterprises which handle confidential data, will only be prepared to make use of these new technologies if the protection of confidential data can be guaranteed.

2.2. Privacy and Data protection

In spite of the increasing usage in companies, with the retail sector at the forefront, RFID deployment is still at its first stage and EuroCommerce fears that excessive privacy and data protection legislation might slow down the spreading of RFID applications. For business it is of utmost importance to operate in an environment with legal certainty and predictability.

Earlier this year, EuroCommerce has already issued a position paper on the draft recommendation regarding the implementation of privacy, data protection and information security principles in applications supported by RFID. In its position paper, EuroCommerce pointed out that the commerce sector supports self-regulation, which is in our opinion the best way to ensure that data protection legislation is properly implemented in the whole value chain and adapted to the many and varied specifications and to the many sectors using the RFID technology. Self-regulation also leaves operators enough flexibility to adapt to the rapidly evolving RFID technology and its applications. The commerce sector also recognises the need to ensure that consumers be provided with the relevant information on RFID usage and benefits, in line with data protection law.

From EuroCommerce's point of view, at this stage the current privacy and data legislation is sufficient. In case of a review of existing legislation, EuroCommerce pledges for an in-depth assessment before any modification is made. Any new data protection measure should be proportionate to the proven risk involved for the consumers as it could have a huge impact on investment for companies. It will be crucial to maintain the equilibrium between individuals' privacy and business' interests. In this respect, it is essential to also take into account the SME dimension.

2.3. Control of critical global resources and subsidiarity

The key characteristic of the internet is its peripheral organisation which ensures its stability. For security and stability reasons, an over-centralisation of critical RFID application resources would not be desirable. Any governance schemes for the operation of RFID applications should therefore be organised in the same peripheral way.

At the same time, flexible tailor-made solutions need to be found in order to meet the many diverging needs of the different users, e.g. individuals, business, public authorities etc. Since commerce operates at local, national and global levels, EuroCommerce stresses the necessity that these governance schemes are upwards and downwards compatible and will not create technical or administrative barriers.

2.4. Identity management, naming and interoperability

The interoperability of technologies is key to the widespread deployment of RFID technologies and the development of the Internet of Things. Regarding the Commission's proposal for a mandate to Standardisation Organisations to define the functional requirements that identity and naming schemes should respect, EuroCommerce calls for the inclusion of all stakeholders including business in this process.

2.5. Fostering innovation

The Internet of Things is still in its early stages. EuroCommerce agrees with the Commission that the openness of RFID architectures should become a driving requirement for the further development of the Internet of Things. Monopolies arising from a centralised architecture must be prevented and therefore interoperability of existing architectures is key to maintaining the global nature of architectures. In this regard, open interfaces will facilitate the use across multiple applications and enable economies of scale. Competition will also facilitate consumer choice, generate competitive pricing and sufficient incentives for further innovation. In addition, market entry barriers should be avoided so that smaller actors can benefit from the new technologies.

Currently, the EU is the world's largest ICT market. EuroCommerce calls on the Commission to further encourage research and development and to make the EU a leader in the development of the Internet of Things. Innovation and the further development of the Internet of Things could become a major driving force for economic growth in the EU and could therefore be a significant contribution to the achievement of the Lisbon strategy's targets, especially in the context of the current economic crisis.

2.6. Spectrum

The number of RFID applications is growing steadily. With the emerging Internet of Things the number of applications will very likely increase exponentially. The availability of a sufficient number of spectrum bands is therefore essential for the Internet of Things to reach its full potential. From EuroCommerce's point of view, the efforts made by the European Commission so far go in the right direction and a regular update of the relevant EU Decisions makes therefore sense.

The extension of the Commission's efforts to the global level in order to reach a globally harmonised spectrum for Internet of Things devices, e.g. through the International Telecommunications Union, would be welcomed by EuroCommerce.

When we speak about the development of the Internet of Things, the availability of spectrum bands for RFID applications is not the only issue that needs to be addressed. We must also address the availability of internet connections for the end users of the Internet of Things which will offer many new possibilities not only to enterprises and public authorities but also to individuals. Currently, the penetration rate for DSL connections is still very low in many parts of the EU. In the majority of Member States it is even below 20%. The EU and the Member States should therefore increase their efforts to augment the availability for high-speed internet connections.

2.7. Standardisation

As far as the development of standards for RFID-based applications is concerned, EuroCommerce agrees that standards are vital to European competitiveness since they will provide a level playing field for industry and all other actors. EuroCommerce calls on the European Commission to continue its efforts already made through the R&D programme and, once more, extend its approach to the global level in order to avoid a fragmentation or diversity of standards which would hinder the development of the Internet of Things. All users would clearly benefit from a global approach.

3. Policy challenges of the Internet of Things

The Internet of Things will offer new possibilities beyond imagination both for business and individuals. The development of the Internet of Things will lead to a fundamental change of the economy and society and it will affect many areas such as health and welfare, education, energy efficiency, road safety, transport and logistics etc. With its great potential for innovation it will increase the standard of living and foster entrepreneurship and economic growth since many new business opportunities will open up.

As pointed out in the preliminary remark, the RFID technology is certainly a key enabler for the Internet of Things. However, if we want to fully understand the potential of the Internet of Things, which is likely to change fundamentally our societies and economies, a broader discussion is necessary. EuroCommerce therefore suggests to the European Commission to engage in open platform discussions with all stakeholders concerned such as academics, legal experts, technical experts, business, consumers, and public authorities. Concretely, EuroCommerce proposes to organise an annual Internet of Things summit to follow and analyse closely the ongoing developments and to assess their impacts on society and economy. Representatives from outside the EU, in particular the USA and Asia as well as the main emerging countries, should also be invited.

In order to raise awareness, make the possibilities and benefits known to both individuals and business and trigger action, EuroCommerce proposes to run information campaigns at EU, national and local levels. Particular efforts should be made in order to include those individuals who do not use information and communication technologies yet or those who have special needs, e.g. older people or people with disabilities. In times of demographic change, all generations should have the opportunity to benefit from the technical developments. It is therefore essential to close the digital gap between generations.

As far as the issue of exposure to electromagnetic fields is concerned, EuroCommerce does not go along with the Commission's proposal to apply the precautionary principle. EuroCommerce fears that following this principle would hinder innovation and technological progress. It goes without saying that intensive research is undertaken before a new product is put on the market. EuroCommerce suggests to follow the same approach as with microwave ovens and mobile/cordless phones, wireless LANs and other already existing WIFI

technologies and pledges for a proportionate, non-discriminatory, transparent and coherent approach.

4. Conclusion and outlook

For EuroCommerce the Internet of Things has many more aspects than just the RFID technology and we would welcome a much broader discussion on this issue in the future with all parties concerned.

Retail has been one of the main drivers for the spreading of RFID applications and EuroCommerce is determined to participate actively in future discussions and the further development of the Internet of Things. We look forward to the Commission's communication following this consultation as well as the other future initiatives that are mentioned in the staff working document.

EuroCommerce and the commerce sector

EuroCommerce represents the retail, wholesale and international trade sectors in Europe. Its membership includes commerce federations and companies in 31 European countries.

Commerce plays a unique role in the European economy, acting as the link between manufacturers and the nearly 500 million consumers across Europe over a billion times a day. It is a dynamic and labour-intensive sector, generating 11% of the EU's GDP. One company out of three in Europe is active in the commerce sector. Over 95% of the 6 million companies in commerce are small and medium-sized enterprises. It also includes some of Europe's most successful companies. The sector is a major source of employment creation: 31 million Europeans work in commerce, which is one of the few remaining job-creating activities in Europe. It also supports millions of dependent jobs throughout the supply chain from small local suppliers to international businesses.