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accompanying the

Commission Recommendation on the implementation of privacy and data protection principles in applications supported by radio frequency identification

SUMMARY OF THE IMPACT ASSESSMENT

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1. PROCEDURAL ISSUES AND PUBLIC CONSULTATION

The European Commission has played an active role since 2003 in shaping the discussion around Radio Frequency Identification (RFID), both in research and in consultation with stakeholders. In 2005, an Inter-service Coordination Group on RFID was established to coordinate the RFID-related activities of various Commission Directorate-Generals and to identify the need for Commission intervention. A wide public consultation on the policy issues and public concerns raised by the deployment of RFID technology and its applications was launched by Commissioner Viviane Reding in March 2006. Subsequently, different thematic workshops were organised on RFID security, data protection and privacy, and health and safety issues, followed by public online consultation on 'Your voice in Europe'.

These consultations resulted in the Commission Communication on 'Radio Frequency Identification in Europe: steps towards a policy framework', which was adopted in March 2007. The Communication explicitly addressed the need for a legal and policy framework to protect privacy and security so as to make the technology more acceptable to consumers and citizens. It also set out its intention to publish a Recommendation to Member States to define the principles that public authorities should apply with respect to RFID usage. In parallel, an RFID Expert Group was created in June 2007 to advise the Commission on different issues related to the deployment of RFID, in particular privacy, data protection and information security issues. In the wake of this activity, the Commission launched another public consultation in 2008 on a draft Recommendation on the privacy and security aspects of RFID applications.

This impact assessment takes into account the wide input received from the RFID Expert Group and collected from stakeholders during the public consultations.

At its meeting on 3 September 2008, the Impact Assessment Board formulated recommendations for improvements, which are duly reflected in the current impact assessment report.

2. PROBLEM DEFINITION

Given the large potential for RFID applications, the market for RFID is expected to grow significantly in the coming decades. RFID also promises to become one of the key technologies for the 'Internet of Things', where smart objects communicate with each other and new services and applications can be offered by linking RFID information to databases and communication networks. It offers the potential to become a powerful catalyst for innovation in the European economy and our daily lives. However, the regulatory uncertainty and higher costs of deployment in Europe can weaken Europe's competitive position.

The key challenges for the wider deployment of RFID technology are the risks to privacy and data protection, the interpretation of and compliance with data protection legislation (in particular the Data Protection Directive), low awareness of RFID technology, and security-related issues. The potential privacy and data protection risks lie in the presumption that RFID offers the possibility to establish profiles (e.g. on purchasing behaviour), track and trace

people's movements, or misuse personal data stored on the RFID tags or in a database forming part of a back-end system.

In April 2008, the European Data Protection Supervisor (EDPS) adopted an opinion in response to the Commission Communication on RFID. The EDPS agrees with the view that RFID systems could play a key role in the development of the Information Society. Furthermore, the EDPS states that RFID may have a fundamental impact on our society and on the protection of fundamental rights in our society, such as privacy and data protection.

As there is no explicit coordination at European level in the field of RFID, and since the sensitivity of Member State governments to privacy, data protection and security concerns will differ, potential responses from Member States are likely to diverge in time and scope, with negative consequences for the deployment of RFID in Europe. As a result, not only would the potential benefits of RFID applications be delayed, but the competitive position of the EU's RFID industry would also worsen in comparison to countries that are applying RFID technology at a faster pace.

The cross-border nature of RFID applications and the risk of diverging responses in Member States in the presence of regulatory uncertainty, combined with the high importance of RFID from the viewpoint of privacy and security and also economies of scale, justify intervention at EU level. Coordinated action at EU level will provide added value as Member States cannot tackle the challenges satisfactorily by themselves, and will be more efficient and effective in ensuring the wider deployment of RFID and mitigating privacy, data protection and security concerns.

3. OBJECTIVES

The principal objective of the intended Commission intervention is to address the privacy, data protection and security problems associated with RFID use. These problems pose challenges to wider and faster RFID deployment in Europe and may therefore delay the benefits to the economy and all stakeholders concerned by RFID, both individuals (citizens, consumers, travellers, patients, etc) and businesses. The objectives of 'guaranteeing privacy and security' and 'promoting a fast and comprehensive deployment of RFID across the EU' are intertwined: on one hand, the unresolved privacy and security issues generate a lack of trust and consumer acceptance, which hinders the further deployment of RFID technology and applications; on the other hand, the fact that Europe trails behind other countries in the world in implementing large-scale pilots and trials makes it relatively difficult to draw concrete lessons from experience with regard to potential privacy and security issues in actual settings (sectors/applications).

The following specific objectives have been identified for the medium term:

(1) mitigating security, data protection and privacy risks related to RFID use, especially in business-to-consumer environments,

(2) avoiding uncertainty among investors as to the applicability of existing privacy and data protection legislation to RFID applications,

(3) stimulating innovation through wider adoption of RFID applications,

(4) facilitating the development of harmonised, interoperable uses of RFID in Europe and similar privacy and security approaches in the different Member States of the EU.

4. POLICY OPTIONS

4.1. Definition of policy options

Based on the problem definition, the impact assessment examines policy options in two stages. First, the choice of a suitable policy instrument is discussed and assessed (first stage). Second, the specific content of the chosen policy instrument is then presented and assessed (second stage).

The following options are assessed for the **choice of instrument** (first stage):

Option 0 — no change (baseline option),

Option 1 — introduce a comprehensive set of 'soft' law instruments, including a Commission Recommendation,

Option 2 — introduce 'hard' legislative instruments.

4.2. Assessment of policy options for choice of instrument

The assessment of these options focuses on the main differences between instruments with regard to the specific case of RFID policy, using the following criteria:

(1) cost-effectiveness of the intervention (administrative and compliance costs in relation to effectiveness) for business (RFID industry, RFID applications providers) and public authorities,

(2) flexibility of the instrument,

(3) regulatory certainty and consumer trust, and

(4) time needed to implement the instrument.

Underlining the crucial role of the time dimension of Commission intervention, the impact assessment shows that the most appropriate policy option at the moment is **option 1** ('soft' law instruments such as a recommendation), as it offers the most flexibility, is faster to implement and is much more cost-effective than any other policy option that could be considered at this stage. A recommendation would only interpret and provide guidance on the application of the general legislation to the specific case of RFID rather than extend the existing legislation (in particular the Data Protection Directive). It is noted, however, that the current preference for a recommendation does not preclude any further legislative measures in future, including binding measures, should the need arise.

5. ANALYSIS OF CONTENT OPTIONS

Following the choice of the most appropriate instrument (i.e. Option 1 — a recommendation), the report then considers the possible content, examining sub-options for various aspects.

5.1. Countering privacy and security risks

As regards **assessment of the privacy and security risks** related to the roll-out of RFID applications, the following content sub-options are examined:

I.a — no change in prior assessment requirements,

I.b — privacy impact assessments and systematic security risk management for RFID application operators,

I.c — certification by authorised third-party organisations and/or public authorities.

This aspect involves an assessment of a set of multiple criteria, including: the associated compliance costs and social benefits (such as citizen trust and risk perception, regulatory certainty and harmonisation, awareness), the impact on third countries, the main direct economic impacts (e.g. on competitiveness, innovation, jobs, SMEs), and the impact on the speed of RFID deployment. Furthermore, an in-depth analysis of the broader economic, social and environmental impacts of RFID technology as such is also provided.

Based on the above assessment criteria **option I.b** is selected, mainly because it will create trust among citizens and will greatly contribute to technology awareness-raising while keeping costs low.

5.2. Information and awareness-raising

Section 5.3 examines sub-options for **the information to be provided to individuals and awareness-raising**:

II.a — no change in requirements for information and communication,

II.b — development and dissemination of a written information policy for each RFID application, describing its intended use,

II.c — same as II.b + indication of RFID presence by means of images and logos.

Option II.a is discarded as it does not achieve the objectives of raising awareness and informing about RFID. The impact assessment shows that combining a written policy with the use of logos (option II.c) is likely to achieve the best impact in terms of deployment speed at a cost only slightly higher than for option II.b. Furthermore, this approach has already been adopted by the industry, although not uniformly (different logos, etc.).

5.3. Retail sector

The impact assessment examines specific provisions for **the retail sector** (section 5.4) as this is an area where important concerns are often raised. The options for the use of RFID in the retail sector are the following:

III.a — implementation of the opt-in principle, with no additional requirements for retail environments beyond existing legal requirements,

III.b — implementation of the opt-in principle in all cases, including those not covered by the existing legal framework,

III.c — implementation of the opt-in principle with some degree of flexibility for the time being.

The impact assessment demonstrates that, given the current technical possibilities available to retailers, the option of a **flexible 'opt-in principle'** (option III.c) seems to be the most cost-effective and offers the best compromise between what is affordable today in terms of deactivation and what consumers seem ready to accept. The recommendation would therefore state that in some particular situations, to be assessed case by case, the responsibility for removal of the RFID tag could be left to the consumer.

5.4. Risks and uncertainties

It must be stressed that as RFID technology and the market for this technology have still to mature, further development of the technology is hard to predict, and consumer perception of RFID is also likely to change over time. These and other **risks and uncertainties**, including the risk of low compliance, are taken into account in this impact assessment.

6. EVALUATION AND MONITORING

Given the fast-moving developments in the field of RFID, **evaluation and monitoring** through periodic review of the Recommendation is needed to judge its effectiveness and to adjust the Recommendation or add new RFID application areas. Member States will be required to inform the Commission of action taken in response to the Recommendation within 2 years from the publication of the Recommendation in the Official Journal of the European Union. This will ensure that the Recommendation is kept up-to-date with the most recent market and technological developments. It will also allow the Commission to judge whether it is appropriate to replace the 'soft' Recommendation with hard legislation if its objectives are not being met. The Commission will provide a report on the implementation of this Recommendation and its impact on economic operators and consumers within 3 years of its publication in the Official Journal.