

Guidelines on the Use of the Common European RFID Sign

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Disclaimer:

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The opinions expressed in this document do not necessarily reflect the views of the European Commission.

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1. FOREWORD

Between September 2010 and April 2011, the European Commission consulted RFID stakeholders on the definition of *Guidelines on the Use of the Common European RFID Sign* in order to provide relevant additional support to the work specified in Section 11 and Annex E ("Common European RFID Emblem and Sign") of the Coordinated ESO response to the first phase of EU Mandate M/436¹.

These *Guidelines* are based on the work performed by the EU-funded 'RFID in Europe' project in its Work Package 5 and on the results of an additional consultation of potential stakeholders carried out by the European Commission in July-October 2011. They are intended to establish and summarise best practices for the use of the future Common European RFID Sign by identifying and addressing the technical and organisational challenges of real-world RFID application implementations.

As the second phase of the Mandate M/436 starts, a CEN Technical Specification (TS) for the Common European RFID Sign should be developed by year 2013, eventually progressing at a later stage to a European Norm (EN) if needed.

Such an interdependent combination of self-regulation (the enclosed *Guidelines*) and standardisation (the execution of the second phase of the Mandate M/436) offers best prospects for the successful implementation of points 8 and 9 of the RFID Recommendation (COM(2009) 3200 final)².

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¹ <http://www.cen.eu/cen/Sectors/Sectors/ISSS/Activity/Documents/m436EN2.pdf>

² http://ec.europa.eu/information_society/policy/rfid/documents/recommendationonrfid2009.pdf

2. INTRODUCTION

The European Commission has through stakeholders' input determined that in the best interest of European citizens and also operators of RFID applications within European Member States, there must be a common European RFID sign displayed at locations. This sign provides public notification and transparency. Through appropriate and consistent application of a common European sign, consumers benefit from being notified in a way which neither confuses nor alarms them.

2.1. Background

The foundational reference to the common European sign is the European Commission RFID Recommendation³, in particular its clauses 4 (developing a privacy and data protection impact assessment framework), 8 (informing individuals of the presence of readers) and 9 (informing individuals of the presence of tags in the retail sector). The RFID Recommendation clearly states the broad requirements for such a sign and the instances when the sign must be displayed.

It is worth noting that the wording of the RFID Recommendation deliberately draws a close alignment with the European Data Protection Directive⁴ and the European ePrivacy Directive⁵.

The draft version of this document 'Guidelines on the Use of the Common European RFID Sign' was initially developed on the basis of the work performed by the EU-funded 'RFID in Europe' project on RFID and Privacy, in particular in its Deliverables D.5.1.3.1 (Call for ideas), D.5.1.3.2 (Compilation of existing signs and their conditions of use) and D.5.1.3.1-2 (WP5 common European sign "Guidelines for Use" position paper)⁶. The last deliverable is the aggregation of stakeholder input to formulate requirements for the best possible approach to inform about the presence of readers and tags through common European signs.

On 29th July, 2011, the 'Networked Enterprise and RFID' Unit of the EC's Information Society and Media Directorate-General launched a consultation by e-mail of the potential stakeholders through contacts in the former RFID Expert Group⁷ and the current Internet of Things Expert Group⁸. This consultation was closed on 31st October, 2011, and precise and comprehensive comments were received from the following organisations:

- European Network and Information Security Agency (ENISA)
<http://www.enisa.europa.eu/>
- European Retail Round Table (ERRT)
<http://www.errt.org/>
- Chamber of Commerce and Industry of Munich and Upper Bavaria
http://www.muenchen.ihk.de/mike/ihk_geschaeftsfelder/
- The Retail, Wholesale and International Trade Representation to the EU (EuroCommerce)
<http://www.eurocommerce.be/>

³ COMMISSION RECOMMENDATION of 12.5.2009 on the implementation of privacy and data protection principles in applications supported by radio-frequency identification {SEC(2009) 585}{SEC(2009) 586}
http://ec.europa.eu/information_society/policy/rfid/documents/recommendationonrfid2009.pdf

⁴ Directive 95/46/EC of the European Parliament and of the Council of 24 October 1995 on the protection of individuals with regard to the processing of personal data and on the free movement of such data.
<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:31995L0046:en:HTML>

⁵ Directive 2009/136/EC of 25 November 2009 amending Directive 2002/22/EC on universal service and users' rights relating to electronic communications networks and services
<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:337:0011:0036:En:PDF>

⁶ http://www.rfidineurope.eu/sites/default/files/RACE_deliverable_D5.1.3.1-2.pdf - 16th May, 2011.

⁷ <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2007:176:0025:0030:EN:PDF>

⁸ <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2010:217:0010:0011:EN:PDF>

- The European Consumer Voice on Standardisation (ANEC)
<http://www.anec.eu/anec.asp>

These comments have been taken into account in the final version of this document.

2.2. Purpose

The purpose of this document is to provide early support to the work to be carried out by CEN on RFID signage and emblem under the second phase of the Commission Mandate M/436 to European Standardisation Organisations (ESOs)⁹.

These guidelines on the use of the common European RFID sign are only voluntary and aim at supporting the raising of public awareness as to the presence of RFID and thereby build greater confidence and trust in RFID applications across Europe. It is indeed important that there is consistency in the way the common European sign appears and also in how, where and how often it is displayed.

2.3. Scope

It is acknowledged that the RFID Recommendation impacts upon a large, growing and diverse range of applications and technologies. It is therefore challenging to define guidelines that offer sufficient flexibility to make adoption possible and encourage suitable widespread adoption.

The common European RFID sign includes:

- An RFID emblem¹⁰, plus
- Other details, as specified in point 8 of the RFID Recommendation.

This document puts emphasis on notifying the application rather than the technology.

A list of “concerned stakeholders” invited to support RFID application Operators is provided for both RFID readers (4.1.) and RFID tags (4.2.).

⁹ <http://www.cen.eu/cen/Sectors/Sectors/ISSS/Activity/Pages/RFID.aspx>

¹⁰ It is expected that these guidelines will use the ISO/IEC 29160 RFID Emblem, which is a unique, visually distinctive logo that provides a simple, visual guide to identify RFID-enabled labels, tags and readers. The Emblem contains either a generic ‘RFID’ designation or a two-character code to indicate the frequency range, air interface protocol standard and, typically, data content. The use of this emblem is referenced for use in a number of pending ISO/IEC RFID standards.

3. TERMINOLOGY

Term	Meaning	Reference	Comment
Article 211	1.3.8. The Commission LEGAL BASIS Articles 211 to 219 TEC.	1.1.4 Current prospective for the European Union: the Treaty of Nice and Convention on the future of Europe I. TREATY OF NICE The Treaty was signed on 26 February 2001 and entered into force on 1 February 2003.	
Common	Prevailing, widespread, regular	Collins Concise English Dictionary, 2 nd Edition, 1988	
Controller	d. 'controller' shall mean the natural or legal person, public authority of agency, or any other body which alone or jointly with others determines the purpose and means of the processing of personal data; where the purpose and means of the processing are determined by national or Community laws or regulations the controller or the specific criteria for his nomination may be designated by national or Community Law; Data Protection Directive	European Data Protection Directive http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:31995L0046:en:HTML	
Data Controller	(d) 'controller' shall mean the natural or legal person, public authority, agency or any other body which alone or jointly with others determines the purposes and means of the processing of personal data; where the purposes and means of processing are determined by national or Community laws or regulations, the controller or the specific criteria for his nomination may be designated by national or Community law;	European Data Protection Directive http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:31995L0046:en:HTML	
Emblem	A visible object or representation that symbolises a quality, type, group, etc.	Collins Concise English Dictionary, 2 nd Edition, 1988	ISO/IEC 29160 is expected to be used as an EN standard.

European	A person or attribute of the continent of Europe	Wikipedia	Use of the word European within the RFID Recommendation refers to all member states of the European Union.
European Data Protection Directive	<p>Directive 95/46/EC of the European Parliament and of the Council of 24 October 1995 on the protection of individuals with regard to the processing of personal data and on the free movement of such data.</p> <p>In addition, there is a separate Directive, Directive 97/66/EC that deals specifically with the protection of privacy in telecommunications. (See below)</p>	<p>http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:31995L0046:en:HTML</p> <p>In order to remove the obstacles to the free movement of data without diminishing the protection of personal data, Directive 95/46/EC (the data protection Directive) was developed to harmonise national provisions in this field.</p> <p>As a result, the personal data of all citizens will have equivalent protection across the Union. The fifteen Member States of the EU were required to bring their national legislation in line with the provisions of the Directive by 24th October 1998.</p>	Article 8 of the Charter of Fundamental Rights of the European Union expressly recognises the fundamental right to the protection of personal data.
European ePrivacy Directive	<p>Directive 2009/136/EC of 25 November 2009 amending Directive 2002/22/EC on universal service and users' rights relating to electronic communications networks and services, Directive 2002/58/EC concerning the processing of personal data and the protection of privacy in the electronic communications sector and Regulation (EC) No 2006/2004 on cooperation between national authorities responsible for the enforcement of consumer protection laws.</p>	<p>http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:337:0011:0036:En:PDF</p>	

European RFID Recommendation	COMMISSION RECOMMENDATION of 12.5.2009 on the implementation of privacy and data protection principles in applications supported by radio-frequency identification {SEC(2009) 585}{SEC(2009) 586}	http://ec.europa.eu/information_society/policy/rfid/documents/recommendationonrfid2009.pdf	
ISO/IEC	<p>ISO (International Organisation for Standardisation) is the world's largest developer and publisher of International Standards.</p> <p>ISO is a network of the national standards institutes of 159 countries, one member per country, with a Central Secretariat in Geneva, Switzerland, that coordinates the system.</p> <p>ISO is a non-governmental organisation that forms a bridge between the public and private sectors.</p>	<p>ISO/IEC Web site: http://www.iso.org/iso/about.htm</p>	
ISO/IEC RFID Emblem	<p>ISO/IEC 29160:2010 specifies the design and use of the RFID Emblem: an easily identified visual guide that indicates the presence of radio frequency identification (RFID). It does not address location of the RFID Emblem on a label. Specific placement requirements are left to application standards developers.</p> <p>It also specifies an RFID Index, which can be included in the RFID Emblem and which addresses the complication added by the wide range of RFID tags (frequency, protocol and data structure). The RFID Index is a two-character code that provides specific information about compliant tags and interrogators. Successful reading of RFID tags requires knowledge of the frequency, protocol and data structure information provided by the RFID Index.</p>	<p>ISO/IEC 29160 http://www.iso.org/iso/iso_catalogue/catalogue_tc/catalogue_detail.htm?csnumber=45239</p>	<p>Operators of RFID applications used in the retail trade should inform individuals of the presence of tags that are placed on or embedded in products optionally <u>ONLY</u> through use of ISO/IEC 29160 <u>Line option 52</u>. RFID Special Case: For tag and reader with unregistered tag frequency/protocol/authority/data content or where this data is not considered relevant. Standard sub-</p>

			ject to changes prior to the planned publishing date, 27/01/2011.
Logo	A commercial emblem that is often associated with specific implementation rules or conditions		The RFID Recommendation intentionally refers to a "sign" (emblem plus other details), not to a "logo".
Monitoring	(g)'monitoring' means any activity carried out for the purpose of detecting, observing, copying or recording the location, movement, activities or state of an individual.	European Data Protection Directive http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:31995L0046:en:HTML	
Notification	The act of notifying (to make known, announce). Formal announcement. Something that notifies; a notice.	Collins Concise English Dictionary, 2 nd Edition, 1988	
Operator	(e)'RFID application operator' or 'operator' means the natural or legal person, public authority, agency, or any other body, which, alone or jointly with others, determines the purposes and means of operating an application, including controllers of personal data using an RFID application	COMMISSION RECOMMENDATION of 12.5.2009 on the implementation of privacy and data protection principles in applications supported by radio-frequency identification {SEC(2009) 585} {SEC(2009) 586} http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:31995L0046:en:HTML	http://www.rac-e-net-workrfid.org/sites/default/files/images/end_users/RFID_Definitions_and_Terminology_5_version_1.pdf
Packaging	Packaging is the science, art, and technology of enclosing or protecting products for distribution, storage, sale, and use. Packaging also refers to the process of design, evaluation, and production of packages. Packaging can be described as a coordinated system of preparing goods for transport, warehousing, logistics, sale, and end use. Packaging contains, protects, preserves, transports, informs, and sells.[1] In many countries it is fully integrated into government, business, institutional, industrial, and personal use.	Wikipedia http://en.wikipedia.org/wiki/Packaging_and_labeling [1] Soroka (2002) Fundamentals of Packaging Technology, Institute of Packaging Professionals ISBN 1-930268-25-4	The definition identifies „informs“ as a comment of packaging and therefore use in this document of the word „packaging“ also encompasses labeling.

<p>European Commission Recommendation</p>	<p>A recommendation in the European Union, according to Article 288 of the Treaty on European Union (formerly Article 249 TEC), is one of two kinds of non-binding acts cited in the Treaty of Rome.</p> <p>Recommendations are without legal force but are negotiated and voted on according to the appropriate procedure. Recommendations differ from regulations, directives and decisions, in that they are not binding for Member States. Though without legal force, they do have a political weight. The Recommendation is an instrument of indirect action aiming at preparation of legislation in Member States, differing from the Directive only by the absence of obligatory power.</p>	<p>Wikipedia http://en.wikipedia.org/wiki/Recommendation_%28European_Union%29</p>	
<p>RFID</p>	<p>(a) 'radio frequency identification' (RFID) means the use of electromagnetic radiating waves or reactive field coupling in the radio frequency portion of the spectrum to communicate to or from a tag through a variety of modulation and encoding schemes to uniquely read the identity of a radio frequency tag or other data stored on it;</p>	<p>COMMISSION RECOMMENDATION of 12.5.2009 on the implementation of privacy and data protection principles in applications supported by radio-frequency identification {SEC(2009) 585} {SEC(2009) 586} http://ec.europa.eu/information_society/policy/rfid/documents/recommendationonrfid2009.pdf</p>	<p>Reference: http://www.racenet-workrfid.org/sites/default/files/images/end_users/RFID_Definitions_and_Terminology_5_version_1.pdf</p>
<p>RFID tag or 'Tag'</p>	<p>(b) 'RFID tag' or 'tag' means either a RFID device having the ability to produce a radio signal or a RFID device which re-couples, back-scatters or reflects (depending on the type of device) and modulates a carrier signal received from a reader or writer;</p>	<p>COMMISSION RECOMMENDATION of 12.5.2009 on the implementation of privacy and data protection principles in applications supported by radio-frequency identification {SEC(2009) 585} {SEC(2009) 586} http://ec.europa.eu/information_society/policy/rfid/documents/recommendationonrfid2009.pdf</p>	<p>Reference: http://www.racenet-workrfid.org/sites/default/files/images/end_users/RFID_Definitions_and_Terminology_5_version_1.pdf</p>

RFID reader or writer or 'Reader'	(c)'RFID reader or writer' or 'reader' means a fixed or mobile data capture and identification device using a radio frequency electromagnetic wave or reactive field coupling to stimulate and effect a modulated data response from a tag or group of tags;	COMMISSION RECOMMENDATION of 12.5.2009 on the implementation of privacy and data protection principles in applications supported by radio-frequency identification {SEC(2009) 585} {SEC(2009) 586} http://ec.europa.eu/information_society/policy/rfid/documents/recommendationonrfid2009.pdf	Reference: http://www.racenet-workrfid.org/sites/default/files/images/efnd_users/RFID_Definitions_and_Terminology_5_version_1.pdf
RFID application	(d)'RFID application' or 'application' means an application that processes data through the use of tags and readers, and which is supported by a back-end system and a networked communication infrastructure;	COMMISSION RECOMMENDATION of 12.5.2009 on the implementation of privacy and data protection principles in applications supported by radio-frequency identification {SEC(2009) 585} {SEC(2009) 586} http://ec.europa.eu/information_society/policy/rfid/documents/recommendationonrfid2009.pdf	
R&TTE directive	The European Radio equipment and Telecommunications Terminal Equipment (R&TTE) Directive (1999/5/EC) was published in the Official Journal of the European Communities on 7 April 1999. It covers all radio equipment and all equipment intended to be connected to public telecommunications networks.	http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:31999L0005:en:NOT	
Sign	A board, placard, etc., displayed in a public and intended to inform, warn, etc.	Collins Concise English Dictionary, 2 nd Edition, 1988	
Transparency and Information	(38) Whereas, if the processing of data is to be fair, the data subject must be in a position to learn of the existence of a processing operation and, where data are collected from him, must be given accurate and full information, bearing in mind the circumstances of the collection;	European Data Protection Directive http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:31995L0046:en:HTML	

Further RFID related terminology can be found on the 'RFID in Europe' website (<http://www.rfidineurope.eu>).

4. GUIDELINES FOR USE

The common European RFID sign can be a useful and effective measure towards raising public awareness only when it is implemented in a general context of an information security and data protection / public responsibility mind-set of organisations.

The European Commission also wishes to caution against over-reliance on the use of the common European RFID sign as a sole measure to inform and keep aware citizens; additional measures are required in this respect, as specified in the RFID Recommendation, in particular points 4 and 5 (privacy and data protection impact assessments) and point 7 (information and transparency on RFID use). For example, the signage alone will not be capable of conveying all the relevant consumer information needed for informed choice; therefore, the information that can be placed on the sign must be put in context.

In addition, the European Commission reaffirms that the common European RFID sign needs to be accessible to the majority of individuals, irrespective of their age and ability. Therefore, provision of information in alternative format than mere visual information should be considered, where appropriate.

It is considered that the retail sector has a vital interest in openly informing consumers, where RFID is applied. Only a high level of transparency will enable trust in the technology. Establishing a common European RFID sign will contribute to this process significantly.

It is acknowledged that individual organisations, or groups of organisations such as trade associations may develop their own use guidelines. Therefore, the common European RFID sign should ideally provide for the possibility of an extension so that existing signs can be combined with it. This document aims to assist such future initiatives.

4.1. Guidelines with respect to RFID reader operators

The RFID Recommendation, page 7 states:

"8. Member States should ensure that operators take steps to inform individuals of the presence of readers on the basis of a common European sign, developed by European Standardisation Organisations, with the support of concerned stakeholders. The sign should include the identity of the operator and a point of contact for individuals to obtain the information policy for the application."

The "concerned stakeholders" invited to support operators of RFID readers in the implementation of point 8 are the following:

- Government organisations
- RFID application developers
- RFID technology providers
- Industry Associations, Standards Bodies and other operators.

It is recommended that RFID reader operators:

1. In general terms place the common European sign¹¹ at entrances to locations within the reach of RFID devices where beyond the entrance threshold there are RFID readers installed and/or operated e.g. facilities, bordered open areas, etc.¹²
2. In general terms place the common European signs where the public interfaces¹³ with and/or use RFID applications and/or RFID readers.
3. In general terms place the common European sign on the pages of websites¹⁴ of RFID reader operators where these website pages offer a public level explanation of the RFID reader application. Such website pages may assist RFID reader operator staff in informing the public accurately and directly through public access to the website pages.
4. In general terms do NOT place the common European sign to notify the public as to the presence of RFID readers at other locations.

In order to neither over-notify, nor alarm the public due to the presence of the common European sign it is recommended that any organisation or individual:

1. In general terms do NOT place the common European sign at other locations such as upon other signs, nor information displays which are NOT related to RFID in order to avoid wrong notification and, incorrect associations.
2. In general terms do NOT place the common European sign on or within the boundaries of safety/hazard signs which could create a false association or, detract from the safety/hazard warning, UNLESS RFID forms a part of the safety information display or, system.
3. In general terms do NOT place the common European sign at entrances, nor areas beyond the location entrance(s), nor elsewhere where there are no RFID readers installed or operating.

4.2. Guidelines with respect to RFID tags

The RFID Recommendation, page 7 states:

"g. On the basis of a common European sign, developed by European Standardisation Organisations, with the support of concerned stakeholders, operators should inform individuals of the presence of tags that are placed on or embedded in products."

The “concerned stakeholders” who should support operators are here the following:

- Government organisations
- RFID device manufacturers
- RFID application developers
- Retailers and including retail service providers

¹¹ Common European sign mentioning the operator name and operator contact details.

¹² Due to the nature of electromagnetic fields it is impossible to permanently define the boundary of RFID reader influences over tags. The boundaries of locations are considered physical boundaries where the operator can legally place a sign.

¹³ The ‘interfaces with’ refers to application instances where the public may not be considered users of the RFID application e.g. RFID readers established to harvest information for which individuals may have provided consent but where the actual instance of collection does not constitute use by an individual.

¹⁴ Here ‘websites’ may be replaced by other information channels related to RFID application public notification and information e.g. email, poster campaigns, etc.

- Possibly others, e.g. operators who fall outside the RFID Recommendation's scope but who wish to contribute to public notification.

It is considered that the Recommendation's reference to "individuals" refers primarily to consumers but could extend to operators' staff and all other members of the public.

There is no specific or implied mention that operators who are required to inform individuals of the presence of tags which are placed on or embedded in products are the same organisations involved in attaching or embedding the tags. It is also acknowledged that the RFID Recommendation text implies that products refer to retail products which can be interpreted as products that would be purchased by consumers. To avoid an extended debate about who in this context is an "operator", it is recommended the following organisations take action whether they are operators or not:

- Product manufacturers of retail goods which add RFID tags to their retail products;
- Packaging suppliers which provide RFID tagged retail product packaging;
- Logistics e.g. third-party logistics providers (3PLs) which add RFID tags to retail products or retail product packaging;
- European importers which import RFID tagged retail products, or RFID tagged retail product packaging, or apply RFID tags to retail products or their retail product packaging;
- All other organisations which add RFID tags to retail products or retail product packaging;
- Others which add RFID tags to retail products or retail product packaging.

For a sound information policy, it is considered essential to maintain flexibility as the use of RFID differs from sector to sector, from company to company, from location to location and from product to product. In particular, the following considerations should be taken into account in the implementation of the guidelines:

- Retail items extend to include both service and physical objects;
- The scope of the retail sector is quite large encompassing small retailers using, for instance, contactless cards or phones, right through to car manufacturers who use RFID for security in ignition keys.
- The retail sector covers a broad range of interfaces with the public from e-tailers, self-service, department stores, super markets, etc.

Operators can use the common European sign to meet their obligations to notify of RFID tags embedded in or attached to retail products through the following recommendations:

1. The common European sign may optionally avoid mention of the operator's name and operator's contact details – but only with respect to recommendations in this section.
2. The RFID sign should provide a link where more information, in particular about the Privacy Impact Assessment, can be obtained, e.g. on the operator's website.
3. In cases of outsourcing the operation of RFID to a third party, the operator still needs to ensure that the third party follows the guidelines specified below. Operators

should also consider including this in their Service Level Agreement with the third party.

4. If a retail product has a tag attached or embedded then the common European sign should be displayed on the retail product AND where retail product packaging is used also on the retail product packaging¹⁵.
5. The RFID emblem alone should be displayed on the retail product packaging if only the retail product packaging has a tag embedded or attached.
6. If ISO/IEC 29160 is followed, the recommended minimum size of the RFID emblem is quite large, and would be difficult to incorporate into the small self-adhesive RFID labels retailers are using on the back of promotional tickets. Therefore, on packaging and labels, the size of the emblem should be reduced to 5mm x 5mm (i.e. the size commonly used for wash-care symbols).
7. The common European sign should be displayed ONLY¹⁶ after careful consideration by the operator upon the retail product sales presentation infrastructure (e.g., store shelf, automated self-service cabinet), even when this infrastructure is associated with distributing the RFID tagged retail product, or the RFID tagged retail product packaging.

4.3. Other guidelines

In general it is recommended that the common European sign is used:

- On websites, in catalogues, etc. of organisations which distribute RFID tag attached or embedded retail products, or RFID tagged retail product packaging, thereby providing the public an informed choice before receiving the RFID tagged item(s).

- On websites, in presentations and other public accessible communications which reference RFID applications, RFID technology, the RFID Recommendation, etc.

4.4. Common European RFID Sign Text

The common European RFID sign must identify the RFID application operator and their contact details. Aligned with the precautionary assumption that the introduction of the common European RFID sign will not be associated with an initial nor sustained education of the European public it is important that they can intuitively recognise that the information presented on the common European RFID sign refers to the RFID application operator and their contact details. Further it is important that language does not create a barrier.

The sign's design and standardisation contribute to facilitating a harmonised approach, and to encouraging broad consistency, thereby aiding European wide public recognition of the RFID operator name and their contact details. For this reason it is recommended that the only text provided on the common European RFID sign respects the following principles:

¹⁵ Product packaging being all elements which are not considered to contribute to the prime functions for which the item is purchased e.g. wrapping, labels, etc. Retail product packaging being all packaging presented to the consumer, whether containing the individual retail product or group of retail products.

¹⁶ Stakeholders highlight that the potential shortcomings of this approach may be less than optimal for operators and the public. Reference 'RFID in Europe' document page 14
http://www.race-networkrfid.org/sites/default/files/images/end_users/RACE_deliverable_D5.1.3.1-2.pdf

- The name of the RFID operator is displayed in human readable text format using European language fonts¹⁷. The name must be the name of a legally recognised entity. A company identifier may supplement the RFID operator's name but cannot replace it. The company identifier must be presented on the same row and follow the displayed name. No other information in any form should be present on the same row as the RFID application operator's name or RFID application operator's identifier. Only one RFID application operator's name and identifier are to appear on any example of the common European RFID sign. The company identifier must appear on the same row as the RFID application operator's name (or part, if the name must be split over two or more rows) to avoid that it be confused with the contact details.

- The name of the RFID application operator and their organisational identifier must be presented above and before the contact details.

- The minimum requirement is that one of the RFID operator's contact information is displayed in human readable form using European language fonts¹⁸. Where there are more than one set of RFID operator contact details, the other may be in human or machine readable form. With the exception of a Postal address each contact detail must be displayed on a separate row to limit the opportunity for confusion. A Postal address expressed over several rows must be clearly distinguishable from other contact details.

- All numbers are to be presented in numeric form and not their text representation e.g. "1" and not "one". Exceptions include where the name of the RFID application operator has numbers in text form. Similarly for contact details where Web site references or email address include numbers in text form, e.g., one@yahoo.fr.

- No text is included to mention "RFID application operator", neither in English nor any other language. No other forms of text or wordings are to precede or follow the RFID application operator's name.

- No text is included to mention or indicate that the following information relates to the RFID application operators contact details, neither in English nor any other language.

- All telephone numbers are to include the international and local area prefixes.

Future possible provisions in the common European RFID sign's design and standards processes are anticipated in order to allow for the Privacy Impact Assessment (PIA) reference number. It is not possible to comment on the format of this until this development is further advanced.

¹⁷ Latin 1, Greek, Cyrillic, Eastern European, Turkish, Baltic.

¹⁸ Latin 1, Greek, Cyrillic, Eastern European, Turkish, Baltic.

5. EXAMPLES OF APPLICATIONS

The following examples do not explore all combinations of possible choices but rather offer a selected consideration of likely scenarios based upon dialogue with stakeholders.

5.1. Shoe manufacturer

A manufacturer of shoes destined for European retailers wishes to attach RFID tag embedded labels to their shoes. The manufacturer's processes verify the RFID tag by performing a read operation with an RFID reader application or equivalent. The manufacturer records the RFID tag identifier and/or encodes an identifier in the RFID tag memory. The manufacturer as the RFID operator ensures that the common European sign appears:

- On the RFID tag label attached to the shoe.

- On the external surface of all packaging the manufacturer supplies which may be presented to the retail consumer.

- The manufacturer may display the common European sign elsewhere. Suggestions include:

- ◇ On their Web site in association with any pages introducing the RFID tagged product to the public, or describing the manufacturer's use of RFID, or similar ways which support an RFID information campaign.

- ◇ On media accompanying the product which references RFID ,e.g., a user instruction guide which mentions RFID, a ticket which indicates how to remove an RFID tag, cleaning instruction label which mentions how to preserve the RFID tag for consumer use, etc..

- Where the manufacturer offers the RFID tag labelled shoes directly to consumers through catalogues, or Internet sales, or any other direct to consumer channel then the manufacturer ensures the common European sign appears on all media offering the RFID tag labelled shoes for sale to the public. This allows the potential consumer to be notified and informed prior to purchasing or receiving the goods.

5.2. Retailer

A retailer wishes to install RFID readers in order to monitor and confirm goods receipt in their back-store areas. The retailer operates the RFID application and ensures that the common European sign is displayed:

- At all location entrances to the areas where there are one or more RFID readers installed.

- As a stakeholder the retailer assists the operators and other stakeholders to ensure suitable consumer and public notification of the presence of RFID tag embedded or attached retail items.

5.3. Public transport provider

A public transport provider wishes to offer RFID based contactless payment or consumer identification cards associated with payment. The public transport provider contracts the operation of the application to a third party.

The public transport provider needs to ensure that the third party actually observes these guidelines. Since the provider has outsourced the RFID Application operation to a third party, this

should be ideally included in the Service Level Agreement between the operator and the third party, since ultimately it is the responsibility of the public transport provider to use the RFID sign appropriately.

The third party operating the RFID application ensures:

- That all entrances to the public transport provider locations where there are RFID readers, display the common European sign.
- That all locations where the public interact with RFID readers display the common European sign.
- The RFID based contactless payment or consumer identification cards are purchased by consumers and are therefore retail items. The supplier of the RFID based contactless payment or consumer identification cards ensures that:
 - ◇ Each card displays the common European sign.
 - ◇ All card packaging which may be presented to the consumer displays the common European sign.

5.4. Public service organisation

An administration organisation seeks to have, or has RFID based contactless building entrance, lift, access doors to each floor and meeting room access control application. Each employee and guests are registered and issued with RFID badges which are read by fixed installation RFID readers located at entrances to the building, lift, access doors to each floor and meeting rooms. The administration organisation leases the building and a third party security provider operates the access control system.

The public service organisation needs to ensure that the third party actually observes these guidelines. Since it has outsourced the operation of the access control system to a third party, this should be ideally included in the Service Level Agreement between the public service organisation and the third party, since ultimately it is the responsibility of the public service organisation to use the RFID sign appropriately.

The third party security provider ensures:

- That at each building entrance the common European sign is displayed.
- That at each RFID reader location the common European sign is displayed.
- That each RFID tag badge is labelled with the common European sign.

NOTE: The third party security provider may legitimately seek the cooperation, or participation of the building owner, and/or the owner of the access control system in fulfilling the above.

APPENDIX A: RFID Recommendation – common European sign related references

Within the Recommendation issued by the European Commission on the 12th May 2009 there are several direct and a number of supporting or related references to the need for a common European RFID sign. These references are summarised in the order they can be found within the Recommendation as follows:

THE COMMISSION OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Community, and in particular Article 211 thereof,

After consulting the European Data Protection Supervisor,

Whereas:

...

(21) The use of international standards, such as those developed by the International Organisation for Standardisation (ISO), codes of conduct and best practices which are compliant with the EU regulatory framework can help to manage information security and privacy measures throughout the whole RFID-enabled business process.¹⁹

Comment: This reference is relevant because there is an existing recently developed ISO RFID emblem and clearly the Commission places an importance upon such contributory standards.

...

(23) Society as a whole needs to be aware of the obligations and rights that are applicable in relation to the use of RFID applications. The parties that deploy the technology therefore have a responsibility to provide individuals with information on the use of these applications.²⁰

Comment: This reference is relevant because the common European RFID sign can contribute to assisting parties who deploy the technology with their responsibility to provide information on the use of the applications. Parties deploying the technology may use signs and where they do it is likely to be in the interest of society that all aspects of the common European RFID sign are respected.

(24) Raising awareness among the public and small and medium-sized enterprises (SMEs) about the features and capabilities of RFID will help allow this technology to fulfil its economic promise while at the same time mitigating the risks of it being used to the detriment of the public interest, thus enhancing its acceptability.

*Comment: This reference is relevant because the common European RFID sign contributes to raising awareness among the public and SMEs. In particular this reference highlights a need to communicate RFID features and capabilities.*²⁰

...

¹⁹ Ref. COMMISSION RECOMMENDATION of 12.5.2009 on the implementation of privacy and data protection principles in applications supported by radio-frequency identification, {SEC(2009) 585}, {SEC(2009) 586}, page 4.

²⁰ Ref. COMMISSION RECOMMENDATION of 12.5.2009 on the implementation of privacy and data protection principles in applications supported by radio-frequency identification, {SEC(2009) 585}, {SEC(2009) 586}, page 5.

HEREBY RECOMMENDS:

...

Information and transparency on RFID use

...

8. Member States should ensure that operators take steps to inform individuals of the presence of readers on the basis of a common European sign, developed by European Standardisation Organisations, with the support of concerned stakeholders. The sign should include the identity of the operator and a point of contact for individuals to obtain the information policy for the application.²¹

RFID applications used in the retail trade

9. On the basis of a common European sign, developed by European Standardisation Organisations, with the support of concerned stakeholders, operators should inform individuals of the presence of tags that are placed on or embedded in products.²¹

...

Awareness raising actions

15. Member States, in collaboration with industry, the European Commission and other stakeholders, should take appropriate measures to inform and raise awareness among public authorities and companies, in particular SMEs, of the potential benefits and risks associated with the use of RFID technology. Specific attention should be given to information security and privacy aspects.²²

Comment: This reference is relevant because it mentions raising awareness. Importantly it points to a potentially wider responsibility for Member States to inform and increase awareness. The common European RFID sign and the objectives expressed in 15. above will be most effective if there is a harmonised approach which minimises conflicts or opportunities for confusion within different public facing communication initiatives.

...

Follow-up

...

20. Within three years from the publication of this Recommendation in the Official Journal of the European Union, the European Commission will provide a report on the implementation of this Recommendation, its effectiveness and its impact on operators and consumers, in particular as regards the measures recommended in points 9 to 14.²³

Comment: This reference is relevant because it highlights that the common European RFID sign deliverables will be measured in relation not only to the essential parts of defining the sign design and implementation rules but also to roll-out, conformance compliance and ultimately its effective impact upon operators and consumers.

²¹ Ref. COMMISSION RECOMMENDATION of 12.5.2009 on the implementation of privacy and data protection principles in applications supported by radio-frequency identification, {SEC(2009) 585}, {SEC(2009) 586}, page 7.

²² Ref. COMMISSION RECOMMENDATION of 12.5.2009 on the implementation of privacy and data protection principles in applications supported by radio-frequency identification, {SEC(2009) 585}, {SEC(2009) 586}, page 8.

²³ Ref. COMMISSION RECOMMENDATION of 12.5.2009 on the implementation of privacy and data protection principles in applications supported by radio-frequency identification, {SEC(2009) 585}, {SEC(2009) 586}, page 9.

