



Common European signage for RFID technology

ECCA – 28.5.2013





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1. Background – steps towards common RFID signage in EU

2006 – EC Online public consultation on RFID



**2007 –
EC Communication
RFID in Europe**



EC Communication {SEC(2007) 312}

- ✓ RFID technology may be used to collect information that is directly or indirectly linked to an identifiable or identified person and is therefore deemed to be **personal data**
- ✓ RFID tags may store personal data such as on passports or medical records
- ✓ RFID technology **could be used to track/trace people's movements or to profile people's behaviour** (e.g., in public places or at the workplace)



EC Communication {SEC(2007) 312}

**Radio Frequency Identification (RFID) in Europe:
steps towards a policy framework**

CONCLUSIONS:

RFID has a big potential to deliver industrial innovation and many social benefits, but a clear and predictable **legal and policy framework is needed** to make this new technology **acceptable to users**.

The Commission calls upon the European standardisation bodies, in co-operation with relevant industry forums and consortia, to **ensure that international and European standards meet European requirements**

2006 – EC Online public consultation on RFID



**2007 –
EC Communication
RFID in Europe**



**2009 –
EC Recommendation 387
Privacy and data protection**



Recommendation 2009/387/EC (1/2)

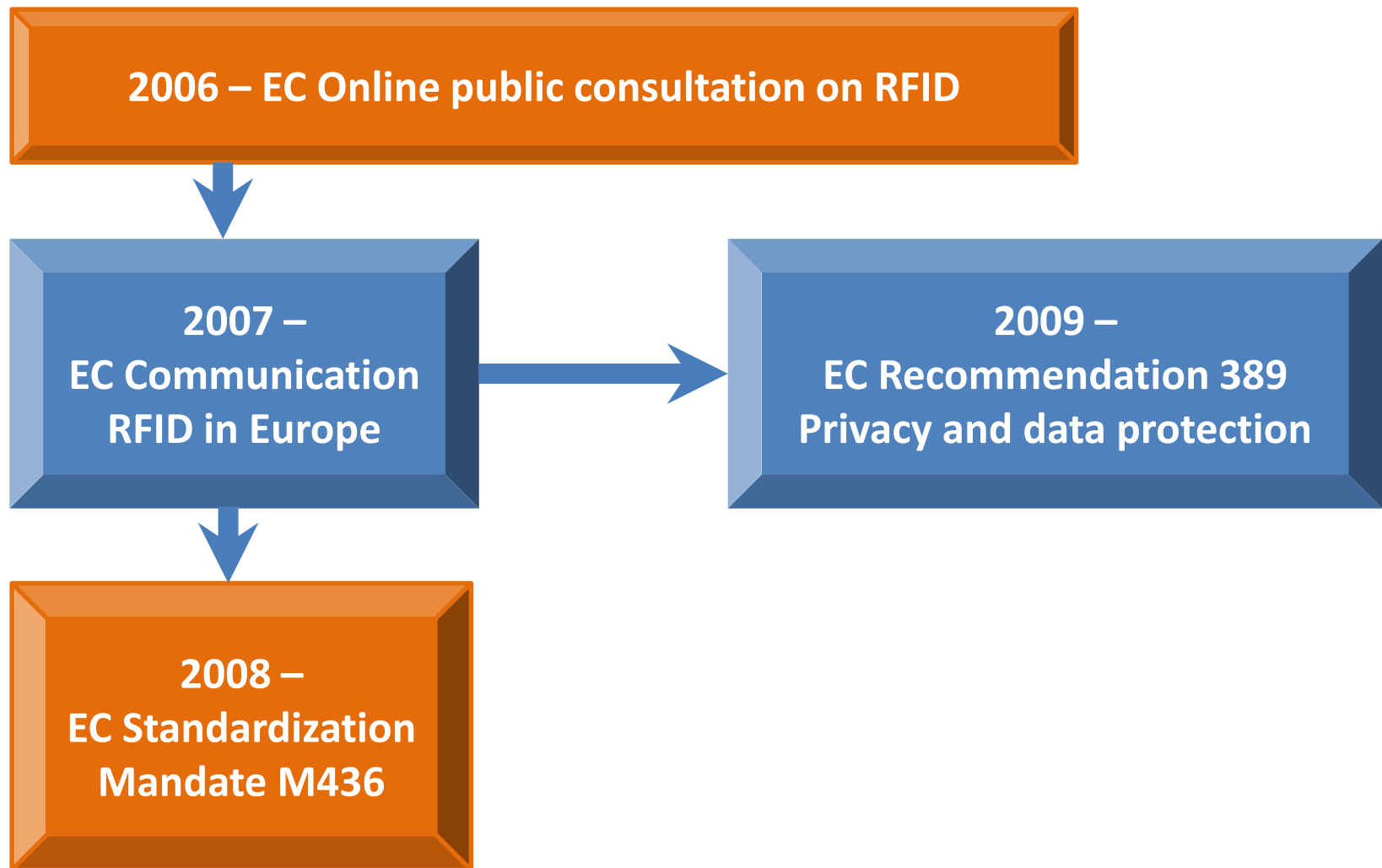
Key points of Recommendation 2009/387/EC on implementation of privacy and data protection principles in applications supported by radio-frequency identification (May 2009) are:

- ✓ Data Protection Directive 95/46/EC ... and Directive 2002/58/EC ... are fully applicable to the use of RFID applications that **process personal data**
- ✓ RFID application operators should take all reasonable steps to ensure that **data does not relate to an identified or identifiable natural person**



Recommendation 2009/387/EC (2/2)

- ✓ An assessment of the privacy and data protection impacts carried by the operator prior to the implementation of an RFID application...
- ✓ ... **operators should inform individuals of the presence of tags that are placed on or embedded in products.**
- ✓ Retailers should deactivate or remove at the point of sale tags used in their application unless consumers... give their consent to keep tags operational.





Mandate M436 - DG ENTR/D4 Dec/2008

Standardization Mandate to the European Standardization Organizations CEN CENELEC and ETSI in the field of Information and Communication Technologies applied to Radio Frequency Identification (RFID) and systems

- ✓ **Phase 1:** Jan 2010 – Sep 2011 Standardization gap analysis (Deliverable: ETSI 187020)
- ✓ **Phase 2:** Jan 2012 – May 2014 Standardization program under CEN TC 225 (11 different deliverables in form of TR, TS and ENs)

M436 – Phase 2

Signage and emblem

- ✓ **EN: ISO/IEC 29160 Information technology -- Radio frequency identification for item management -- RFID Emblem**
- ✓ TS: Notification of RFID: The information sign to be displayed in areas where RFID interrogators are deployed
- ✓ TR: Notification of RFID: Additional information to be provided by operators
- ✓ **EN: Notification of RFID: The information sign and additional information to be provided by operators of RFID data capture applications**

RFID device privacy

- ✓ TR: Privacy: Capability features of current RFID technologies

Privacy impact assessment

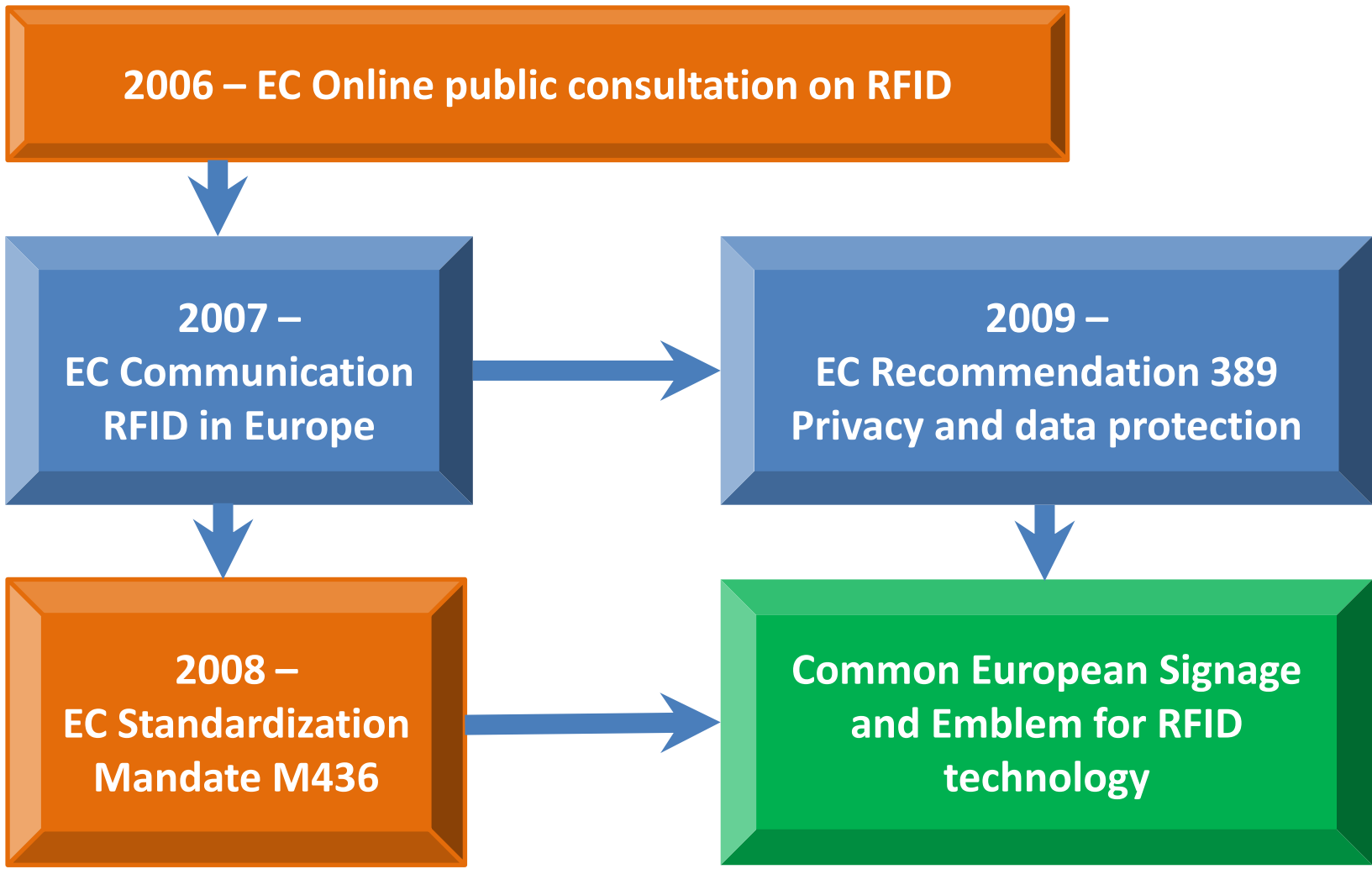
- ✓ TR: RFID PIA analysis for Specific Sectors
- ✓ TR: Analysis of PIA methodologies relevant to RFID
- ✓ **EN: RFID privacy impact assessment (PIA) process**

RFID penetration testing

- ✓ TR: Threat and vulnerability Analysis

Extended RFID device security capability

- ✓ TR: Authorisation of mobile phones when used as RFID interrogators
- ✓ TS: Device interface to support ISO/IEC 18000-3 Mode 1 and Mode 3 tags



2. RFID Signage and Emblem



Signage and emblem

- ✓ The Common European RFID Notification Signage system will provide a simple means to notify citizens to the **presence of RFID interrogators in public areas**, including shops, public transport locations, libraries, etc.
- ✓ The Signage system will allow citizens to be advised of the **presence of RFID tags placed on or in items**, including contactless bank and public transport cards, library books, and tags used to assist in warranty, maintenance and recycling of durable household goods.
- ✓ RFID **signage** system will be **similar to the familiar CCTV signage**



CCTV

For your personal safety and security, video linked CCTV cameras maintain recorded surveillance of this train.

CCTV evidence can be used in a Court of Law.

This System is controlled by Southern.

For more information please phone 08451 27 29 20



Common European RFID Emblem

- **What?:** The Generic version of the **ISO Emblem** as per **29160 Standard**.
- **Where?** On the sign to be displayed in **areas where RFID interrogators are deployed**. Also on **items** depending on the result of the **PIA**
- **Purpose:** Unlike the logos that serve the purpose of communicating a trademark of a proprietary system or a business application, the Common European RFID emblem shall be utilized as a **generic emblem** to indicate the presence of an RFID application **for the notification of citizens about the RFID** technology utilization



Common European RFID Signage

- **Three elements**
 - Common Notification Emblem
 - Scope and purpose of RFID system
 - Contact information
- **Two general signs**
 - Areas where readers may be operating (2009/387/EC - 8)
 - Tagged items (2009/387/EC 9)
- **One Emblem!**



The image shows a template for an RFID signage sign. It consists of a blue-bordered square containing a black icon of a card with a radio wave symbol and the text 'RFID'. Below the icon, there is a section titled 'ROZSAH A ÚČEL POUŽITÍ RFID:' followed by a list of applications. At the bottom, there is a section titled 'DALŠÍ INFORMACE NAJDETE NA:' followed by contact information and a QR code.


ROZSAH A ÚČEL POUŽITÍ RFID:

Technologie RFID je využívána v rámci ČVUT v Praze pro:

- Provoz přístupového systému (vstup a výstup z budov a učeben)
- Platební operace v rámci Transakčního Zúčtovacího Systému - TZS (Tisk, parkování, poplatky, knihovny, ...)
- Platební operace v rámci menz

DALŠÍ INFORMACE NAJDETE NA:

ČVUT v Praze, VIC, Vydavatelství průkazů
IČO: 68407700
Bechyňova 3, Praha 6
projektRFID.is.cvut.cz




Additional information

- ✓ Operator of the application
- ✓ Purpose of the application
- ✓ Data processed
- ✓ Summary of the Privacy Impact Assessment
- ✓ Likely risks and the mitigation measures

3. CTU Pilot project to the implementation of the Common European Signage

Basic information about the pilot project




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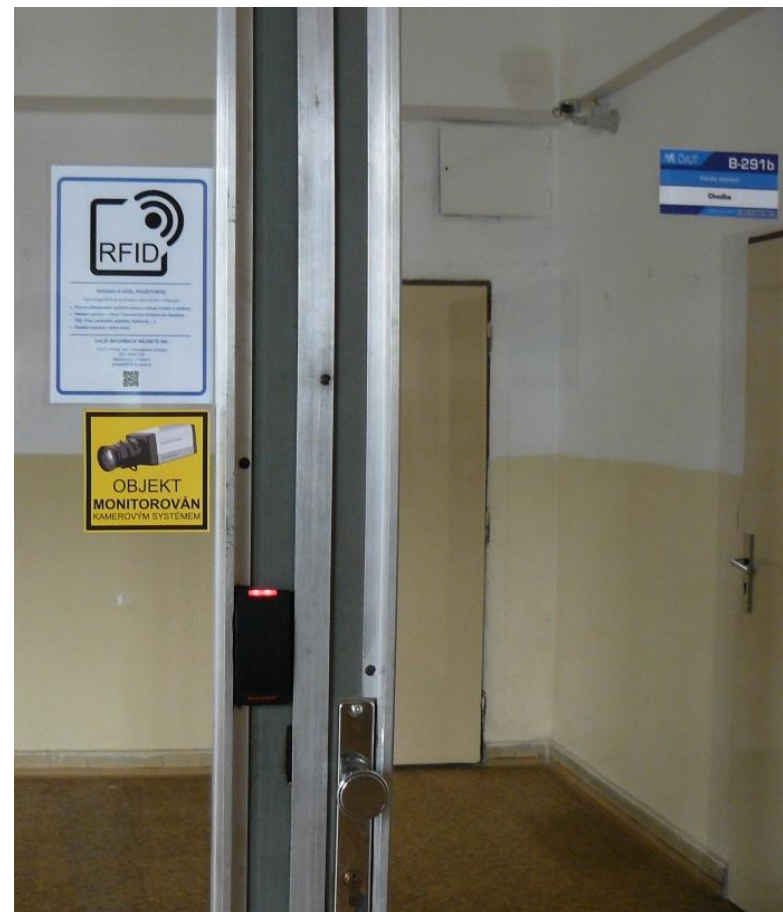
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April 2013

- Placement of the signage at 12 locations
- Main entrances to areas equipped with PCD
- Emblem is printed at the back side of PICC
- **Questionnaire - ca 100.. respondents**

Placement of the signage and emblem at the University premises

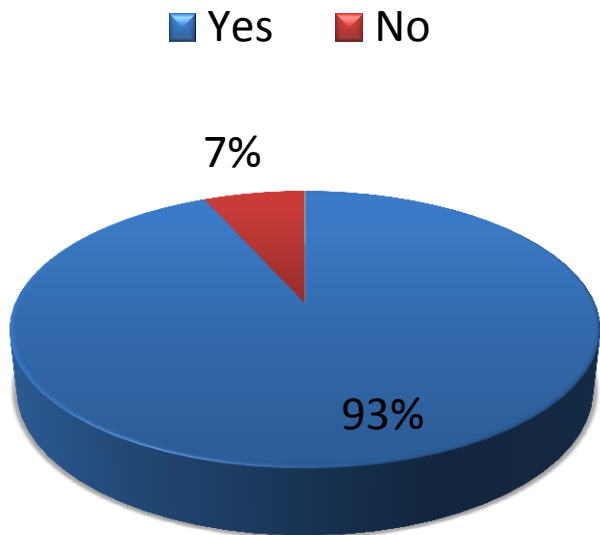


Placement of the signage and emblem at the University premises

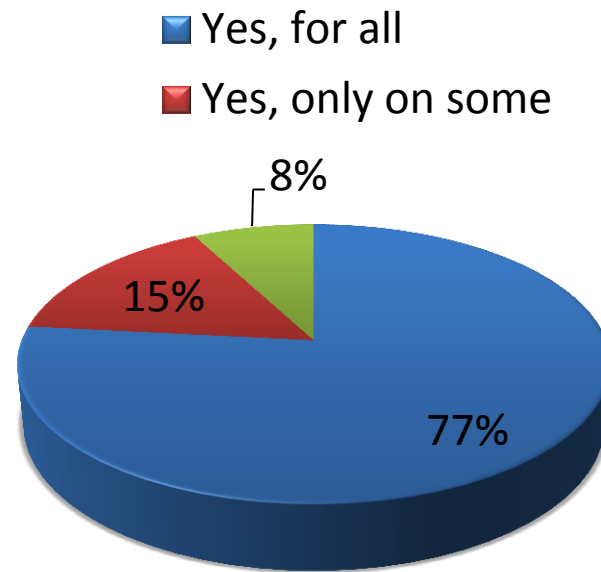




Do you appreciate to have information about the presence of RFID tag readers in your neighborhood?

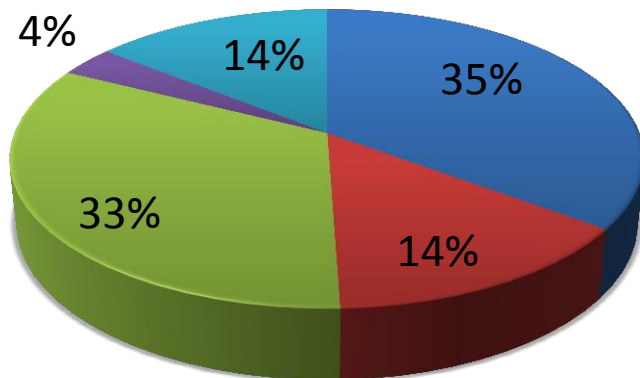


Do you appreciate to be notified via an emblem placed directly on the RFID tagged item?



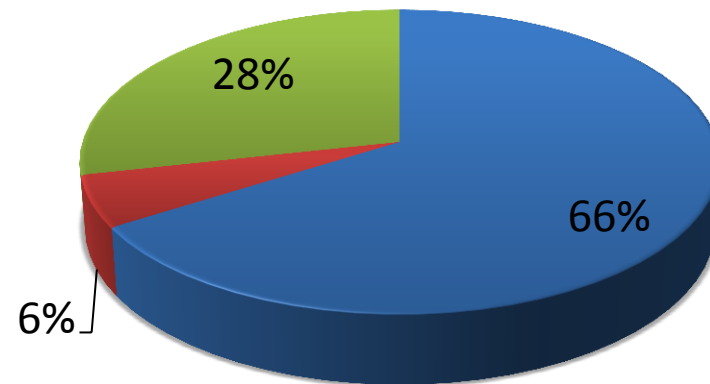
What main information should the signage contain?

- Purpose of RFID application
- Contact information
- Transferred datas
- Type of technology (UHF,HF)
- Range of technology



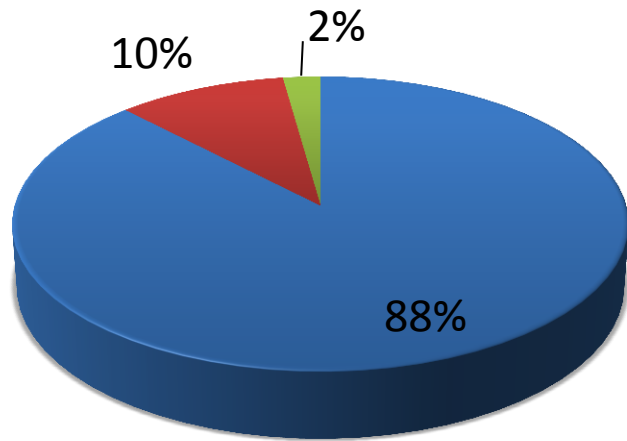
Which would be the ideal location of the signage?

- Before entrance to the area
- After entrance to the area
- In close proximity of RFID reader



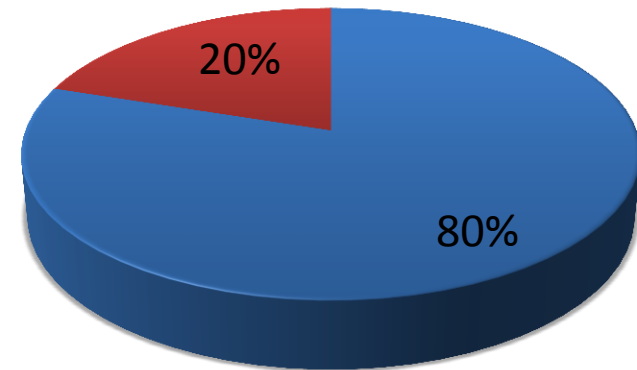
Do you consider the size and layout of the signage and emblem reasonable?

- Yes
- Partially, write more:
- No, write more:



Would you agree to be informed about the presence of RFID through the signage also in other institutions such as: banks, public transportation, stores, libraries?

- Yes
- No



Conclusions of the pilot project

The placement of the Common European RFID signage and emblem at the selected university premises and subsequent questioning of approximately 100 respondents (users of CTU in Prague campus cards) has shown that:

- ✓ The initiative of the EC to inform about RFID presence through common **signage** at public areas and on tagged items was **positively accepted** by respondents
- ✓ Majority of the respondents are in agreement with the placement of the signage at the entrance to an area where RFID might be used
- ✓ Respondents are **interested to obtain information mainly regarding purpose of the RFID application and what data are transferred**, followed by contact information and technology read range
- ✓ Size and layout of the signage is well understood
- ✓ Vast majority of respondents would be **in favor of placement** of the signage also in public areas **outside of University campus**, where RFID is used

Thank you for the attention



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