

Eurosmart/Japan Delegation Meeting

Workshop on Contactless Card Interoperability

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Description of contactless technology

- Communication
 - Radio Frequency : 125 KHZ, 4.915 MHZ,
 - 13.56 MHZ, 443 MHZ, 2.45 GHZ, etc.
 - Vocal transmission
- Power supply
 - Battery
 - RF magnetic field



Description of contactless technology

Tag

- Read only memory (ROM)
- OTP (PROM)
- Memory (LOGIC + EEPROM)
- Microprocessor
- Support
 - •ID-1
 - Other supports (Tag, electronic ticketing, paper..)



Description of product technology

ID-1 Cards

- Read only
- Memoryq
- Hybrid cards
 - Ohybrid without any link
 - OHybrid with I/O link
 - OHybrid sharing memory
- Single micro processor
- Dual Interface



Description of product technology

Other format

- Keys
- Passports
- Electronic ticketing
- Etc...
- Proximity coupling devices (readers)
 - Compatibility with the norms (multistandards)
 - Compatibility with the software (PC/SC, CT API, OCF etc...)



State of the art for standardisation

- ISO 10536 (close coupling)
- ISO 14443 (proximity) type A to …
- ISO 15693 (vicinity)
- Coherency, similiraties, differences between the 3 norms



State of the art for industrialisation

Different type of chip

- ISO 14443 Type A to ...
- ISO 15693
- ISO 10536
- Inlet
 - Who provide what
 - How to resolve industrialisation problems
- Proximity reader device
 - Reader for production/ personalisation
 - System integrator



Market overview

- Main applications
 - Transport
 - Access control
 - Epurse
 - Multi-application
- Market analysis
 - Trends
 - Strength, weakness, oportunities and threats



Conclusion

Compilation and identification of the problems

Collaboration with NMDA