



The why and how Cornerstones for a European RFID research policy

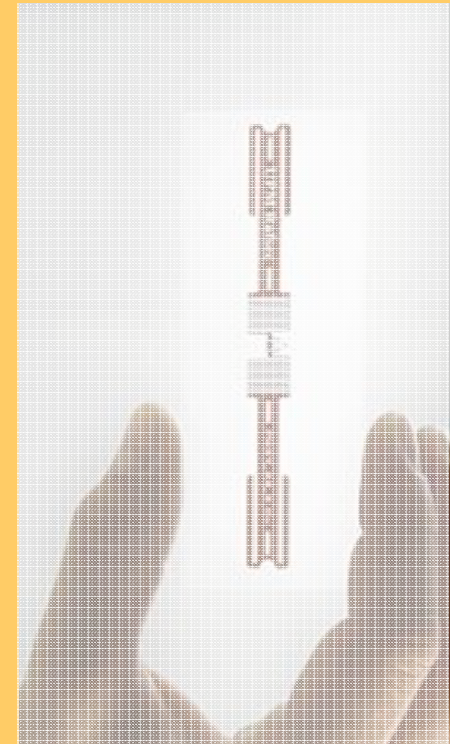
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A mismatch of perception and reality

- Public perception:
Technology of RFID is already available
- Reality is different:
 - technology-related bottlenecks are still an obstacle, plus:
 - The business model is unclear
 - Public acceptance is lacking
- We want to show that:
 - A consistent and aligned European (EU and national) R&D policy can be instrumental in overcoming those bottlenecks





The process

- Analysed current RFID applications ,identified issues & bottlenecks (literature, interviews, workshops)
- Derived evaluation criteria for R&D programme analysis
 - Technology-related
 - Business case
 - Privacy/data security
- Analysed European and national R&D support programmes (strengths & weaknesses)
- Formulated recommendations: how can progress be accelerated and bottlenecks removed by specific policy-induced actions or programmes



The results: Analysis of national R&D programmes

- High “visibility” of RFID vs. little public support for RFID
- No national programmes in new CEE Member States
- Big differences in programme types:
 - Germany: emphasis on dedicated thematic calls
 - France: national/regional cluster formation, earmarked money
 - Finland, Austria: support single company projects, support projects close to market introduction





Best practices/weaknesses of national programmes

- Weaknesses:
 - Big differences in focus & support, little/no activity in new Member States
 - State aid rules apply, sometimes restrictive policies vs. larger companies, cut off point for support
 - In general, national programmes support national industries (national competition), with some first tendencies to go transnational
- Best practices
 - France: regional & national clusters with long term funding perspective
 - Germany: dedicated thematic RFID programmes, linked to a technology and application roadmap view
 - Finland (+Norway, Sweden): transnational funding of RFID-focused R&D programme (NORDITE)
 - Growing awareness & support for “the last mile” (NL, UK, GER)



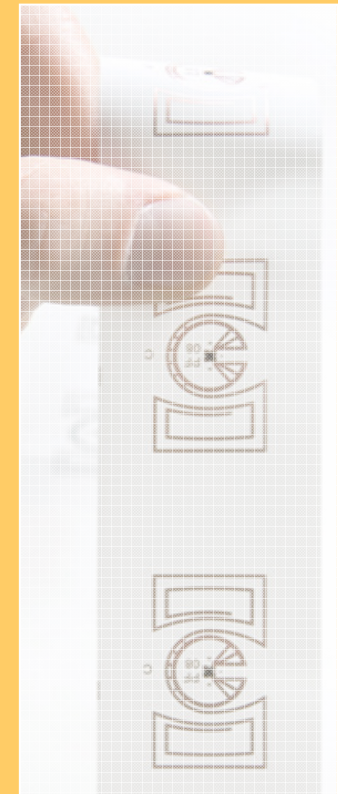
Analysis of European/transnational programmes

- Considered: Framework programmes (FP), Eureka (E), regional / transnational programmes
- Weaknesses:
 - Little inter-linkage between individual projects (FP, E)
 - Overlap/redundancy in project topics (FP, E)
 - Topics of short term relevance underrepresented (FP)
 - Little focus on data security / privacy (all)
 - Differences in funding / no earmarked money (E)
- Strengths:
 - Regional/transnational programmes support local RFID competence (Interreg, ERA-Net)
 - Newly formed cluster initiatives (CERP)
 - Active participation of SMEs (FP, E)



Recommendations for a future RFID R&D policy

1. Create and support an Open Innovation Environment
2. Support Europe-wide deployment
3. Ensure balanced support for R&D themes and topics
4. Support “go to market” of novel (and risky) applications





1) Create an Open Innovation Environment

- Characteristics of Open Innovation:
 - Close cooperation (and frequently co-location) of large companies, Research Institutes and SMEs
 - Rapid flow of ideas up- and downstream the R&D&I chain; successful innovation needs interaction and iteration
 - Concurrent activities in research, development, prototyping and market testing
 - Critical mass of R&D competence and capacity
 - Continuity



Create an Open Innovation Environment (cont.)

- How:
 - By not discriminating specific partners (e.g. large companies) through restriction in type and level of support
 - Through support for the creation and operation of a European Research Infrastructure with integral participation of Industry
 - By allowing and encouraging national support for regional (national, transnational) cluster formation (do not forget: even in the age of IT geographical proximity matters)



2) Support Europe-wide deployment

- Why:
 - Awareness and level of dedicated RFID R&D differs greatly throughout Europe: CEE states lag behind
 - To reap the benefits of RFID for public application a balanced introduction is needed
- How:
 - EC should use the Competitiveness & Innovation framework programme to promote the RFID uptake in lagging countries/regions





3) Balanced support for R&D themes and topics: The process/programme part

- Support lasting cooperation and programme focus: Use the European Technology Platform and their Strategic Research Agenda approach to come to a structured approach and lasting focus on RFID → e.g. EPOSS and ARTEMIS
- Do not exclude support for short-term/urgent technology-related topics
- Support Public Private Partnerships to create application labs that support testing and validation of technologies and concepts who and generate information on best practices and use cases relevant for the business case issue



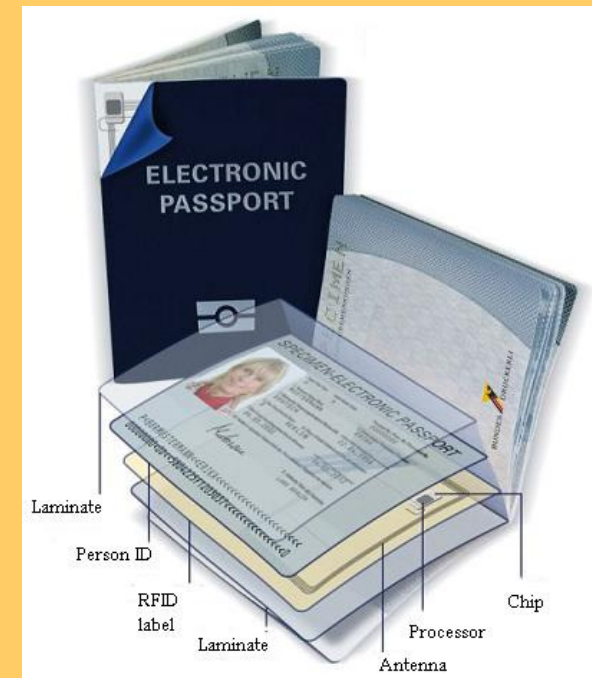
4) Support “go to market” of novel (and risky) applications: create demand

- RFID can contribute to solutions for societal issues
 - Examples: health, security, road traffic volume & safety
- Entry into some of these markets difficult or unattractive because of market fragmentation/national rules & regulations
 - Example: RFID tagging of pharmaceuticals (anti-counterfeiting, reduced risk of wrong medication)
- Clear recommendations on EU level (similar to the FDA recommendation: “combating counterfeiting drugs”) can help



Support “go to market” of novel (and risky) applications: create demand (cont.)

- Open up public procurement for advanced solutions, do not focus entirely on lowest price/no risk
- Example:
the breakthrough of e-passport applications (as consequence of enhanced security requirements worldwide)





Thank you.



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