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Smart ID Cards in Europe: Different Views, Uncertain Future

In spite of their claimed relevance, smart identity cards are proving to be more a constraint than an enabler to the provision of online government services.

Core Topics
Government: E-Government and E-Governance Drivers, Strategies and Management Issues

Business and Public Policy: Globalization

Key Issues
How will governments implement and manage electronic-government strategies?

How will legal, regulatory and policy regimes evolve for the Internet?

Strategic Planning Assumption
By 2010, less than 20 percent of the EU population will make any significant use of a national smart ID card (0.7 probability)

One of the most frequently discussed subjects when it comes to e-government in Europe is the development and deployment of smart ID cards. These cards can hold personal citizen information, electronic keys for digital signature — and possibly biometrics information such as retina scans or fingerprints — and information relevant to the delivery of a variety of services (e.g., social security or healthcare).

In some cases, the massive deployment of smart cards to citizens has been the centerpiece of an entire e-government strategy. It has been assumed that without the level of identification and authentication made possible by a national smart ID card, the delivery of most services would be inappropriate, if not impossible.

After several years of discussion, trials and actual deployment, of the nine European Union (EU) countries where a single number exists that identifies a citizen, only one (Finland) uses a smart ID card on a relatively large scale. Plans for future use exist in three other countries (Italy, the Netherlands and Belgium), but only a few small trials have been carried out. Figure 1 shows the situation for all EU countries at the end of 2001.

Figure 1
National ID Cards in Europe

Country	National ID for	Smart ID card — Number of Users/Plans
Austria	No	Plan for a multifunctional citizen card extending social security card
Belgium	Yes	Planned. Distribution starts in 2003
Denmark	Yes	No plans
Finland	Yes	In use since 2000 — more than 10,000 already issued
France	Yes	No plans. Healthcare in use
Germany	No	No plans
Greece	No	No plans
Ireland	No	No plans
Italy	Yes	Piloted
Luxembourg	Yes	Studied
The Netherlands	Yes	Advanced plan
Portugal	No	Longer-term plans
Spain	Yes	No plans, but social security in use
Sweden	Yes	No plans
United Kingdom	No	No plans

Source: European Institute of Public Administration

Apart from technical constraints — such as the availability of a robust public-key infrastructure able to support millions of users — and the privacy concerns voiced by various parties, there are three fundamental reasons for the relatively slow uptake of smart ID cards in Europe.

Resistance to a Single Citizen Identifier

In countries such as Germany and Austria, there are historical, cultural and constitutional barriers to the introduction of a unique means of identifying citizens. Germany's power as the largest and most-influential country in an enlarged EU mean that these barriers will play a significant role in slowing down the uptake of smart cards all over the continent.

By 2010, it is reasonable to expect that the level of integration will increase, with much easier mobility of workers and citizens across the EU. For countries that participate, or will participate, in the Schengen Treaty (by which the identity of a European citizen is not checked when crossing the border between two participating countries), ID cards may become less important to identify citizens and give them access to services.

For instance, if Belgium requires all citizens and residents to carry electronic identification, this could be seen as an infringement of the right of a German citizen working in Belgium not to be uniquely identified by a government. Furthermore, cross-border mobility will require e-government services to be made available to citizens, residents, temporary workers and tourists, and only a few of the service users will carry a government-issued ID card. Therefore, even smart ID cards will be just one possible means to identify and authenticate users, and will coexist with many others. Last, but not least, immigrants in Europe may have religious or other cultural constraints regarding the use of an ID card (e.g., pictures of Muslim women may not be allowed).

There Are Already So Many Cards

It is remarkable to note how many private- and public-sector cards are already in use in Europe. From credit cards to electronic purses (very popular in Belgium, where this is adopted by the majority of the population), from Subscriber Identity Module (SIM) cards for GSM phones to healthcare, social security or driving license cards. Assuming that these different cards will integrate into a single, government-sponsored scheme is unrealistic. It is the financial sector that would have the most justifiable and urgent reasons to strengthen security and authentication (given the losses connected to fraud). Therefore, it would be more logical to expect governments to rely on infrastructures and standards developed and agreed to by the financial sector, rather than the other way around.

How Much Authentication Is Really Needed?

Not all e-government services require the strict authentication and security made possible by electronic keys stored on a smart card. Most existing services — such as social security or tax filing and payment — work with passwords, personal identification numbers and other software authentication mechanisms, and no significant problems have been reported so far. The most-delicate and most-vulnerable transactions are those concerning payments and fund transfers, but the key players here ought to be financial services providers.

Other services, such as those related to policing and national security, clearly benefit from the adoption of smart cards. However, in some countries, it is not acceptable to oblige citizens to provide proof of their identity. Instead, the authorities must prove that the citizen’s identity is false.

Undertaking a classification of e-government services almost inevitably leads to the conclusion that — from a citizen’s perspective — the only motivation for a smart ID card would be convenience, i.e., avoiding the use of multiple cards. This is unlikely to actually happen.

By 2010, less than 20 percent of the EU population will make any significant use of a national smart ID card (0.7 probability). Nevertheless, smart ID cards remain useful on a smaller scale.

For example, inside public administrations, pen-and-paper signatures can be replaced with electronic signatures, and can be used for specific purposes, such as single-service cards. There have been and there will be more local experiments — e.g., city cards — but the wide distribution of electronic national ID cards in Europe is well beyond the planning horizon.

Bottom Line: Government agencies and departments — both central and local — should develop their electronic services without assuming that a smart ID card will be available. Even if it is, they must prepare to serve citizens or residents who will not be in possession of such a card. At the same time, smart ID card pilots and plans should focus on areas where identity authentication is more critical, such as in government-to-government applications and processes.

Acronym Key

EU	European Union
GSM	Global System for Mobile Communications
SIM	Subscriber Identity Module