

Estonia's Mobile-ID: Driving Today's e-Services Economy. An Executive Summary



Policy makers around the world have come to Estonia hoping to learn from and replicate the country's open and decentralised digital identity infrastructure. Mobile-ID (Mobiil-ID) was launched in 2007 by the mobile operator EMT, and later extended to the two other leading operators Elisa and Tele2, as an extension of this technically advanced nation's digital ID scheme through which citizens can access and authenticate online transactions using the secure PKI infrastructure in the national ID-card.

The success of Estonia's Mobile-ID rests on a number of important learnings to date:

- The Mobile-ID service was originally built and launched by EMT, which in 2009 made its platform available to the country's other operators, Elisa and Tele2. This was recognised as key to driving scale among users and encouraging service providers to join the service. Prior to this point, investment in advertising campaigns was low due to the narrow availability of the service; equally, government and public services authorities could only begin to advertise and actively encourage use of the Mobile-ID services once it was available from multiple operators.
- Contrary to popular assumption, uptake of Mobile-ID in Estonia has been very much private-sector driven. While adoption of the service was slow during its initial stages, with around 40,000 Mobile-ID users recorded as of March 2013, uptake of Mobile-ID has been increasing rapidly in recent months due to rising smartphone penetration and increasing consumer demand for services that are directly accessible via their mobile device. Particularly appealing to users is the elimination of the need for a smartcard reader for the e-ID card - which often are incompatible with tablets. As a result, there has been an explosion in the number of businesses rushing to meet this demand by directing more and more of their services through the mobile channel.
- In addition to the potential increase in revenue generation, businesses are also recognising the significant role that Mobile-ID also plays in terms of cost reduction by eliminating paper processes and the time required for processing contracts, which cost businesses up to hundreds of thousands of dollars per year. The operators have seen an increase in corporate businesses signing their employees up to the service en-masse.
- Unlike in neighbouring Finland, banks in Estonia were among the first entities to adopt Mobile-ID, and have continued to be some of the product's most active proponents. One bank attributes significant increase in transactions using its mobile banking app to Mobile ID: 26% of its mobile banking customers use Mobile ID and make up 38% of logins. Currently, Mobile-ID can be used with over 300 organisations in both the private and public sector, ranging from electronic banking, applying for a driver's license, entering or accessing academic grades at University or changing a pension plan, all through the electronic signature function of the mobile which holds legal equivalence to a wet signature. In 2011, the country was the first in the world to allow m-Voting in the national Parliamentary elections, with 3% of all votes conducted via mobile.
- Easing the process of registration was an important barrier to overcome. The system is based on a specialised Mobile-ID compliant SIM card, which the customer must request from the mobile phone operator. Private keys are stored on the SIM card along with a small application for authentication and signing. Customers can now register for the service and activate the Mobile-ID certificates on their SIM card via the web page of the Police and Border Control using their existing national ID-card credentials. This online method was implemented in order to simplify the registration process and reduce barriers to adoption.

Nevertheless, despite increasing uptake of Mobile-ID across many sectors, some challenges still remain to the wide-scale adoption of the product. Primarily, lack of awareness of the service from both consumers and businesses, as well as attempts by political groups to distort public conceptions of Mobile-ID as lacking in the sufficient levels of security for mobile voting. As such, there has been increased commitment by the operators and from the government to dedicate more attention to raising awareness of Mobile-ID and its benefits, as well as clarifying misconceptions regarding the perceived complexity of Mobile-ID compared to existing digital or 'traditional' paper-based processes.

Additionally, there is significant price competition among the operators for Mobile-ID, with operators such as the market leader, EMT offering the service for free for a specific period of time in order to incentivise consumers and drive uptake. Because the operators do not charge service providers for the Mobile-ID service (service providers wishing to adopt Mobile-ID sign up with SK, the private certificate authority), the end-customers are therefore key to ensuring that sustainable revenues can be derived from the service.

Discussions are also underway to allow cross-border acceptance of mobile signature in neighbouring countries following the acceptance of citizen-ID based digital certificates for public services and business procedures. Since 2011, citizens of Belgium, Portugal, Lithuania and Finland can access state websites, sign contracts and conduct business online in Estonia using the national ID-card of their originating country, such as in the State Portal. The three Estonian operators believe that initiatives such as these will be central to driving further uptake and scale of Mobile-ID.

Read about the case study in full and find out more about the Mobile Identity Programme on our website: <http://www.gsma.com/mobileidentity/>

1 Estonian Information Systems Authority, August 2011.

2 The certificates are issued by a commercial certificate authority called SK, a private entity jointly owned by EMT, Elion (both of TeliaSonera Group) and SEB Swedbank.

3 Consumers are generally charged 10 Euros for a new SIM card and between 65c and 1 Euro per month, which is added to their phone bill.