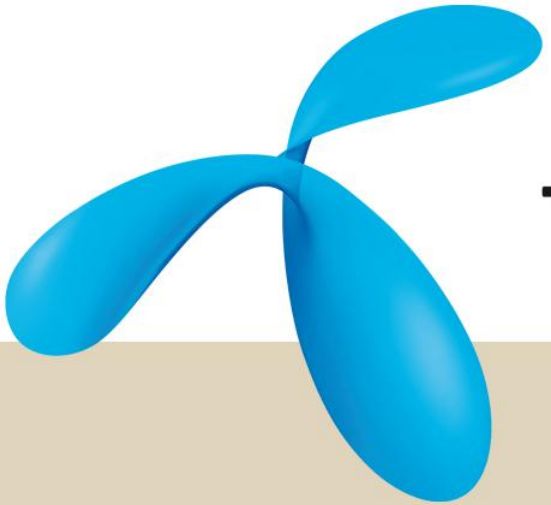


telenor

BankID on Mobile Phones

Dr. Do van Thanh

bankID

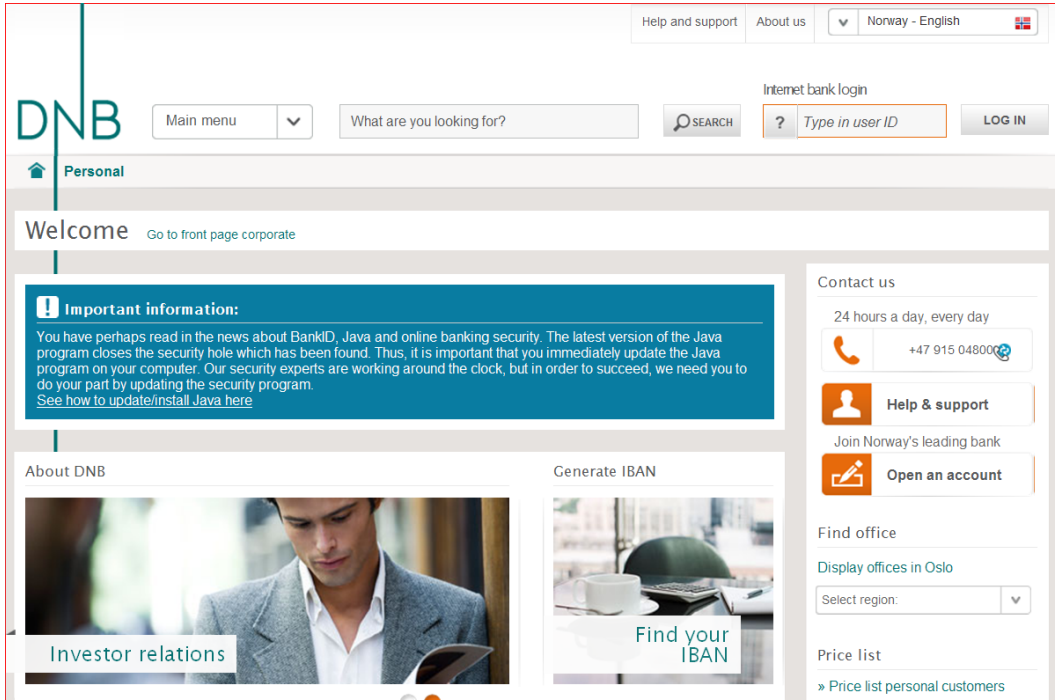
What is BankID?

- A personal and simple **electronic proof of identity** for secure identification and signing online.
- Offered and issued by Norwegian banks
- Primarily intended for Internet bank login from computers
- Could be used to sign documents electronically and send as mail attachment for:
  - A day nursery place application
  - Changing your address with the postal service
  - Placing a bid on a property
  - Applying for a loan,
  - Publicly registering documents
  - Signing a payment.



What is BankID?

- Based on a coordinated infrastructure
  - developed by the banking industry
  - through the BankID Cooperation,
  - under the direction of Finance Norway (FNO)
- More than **2,7 million** active personal certificates (Personal BankID) have been issued
- A total of between **800.000** and **900.000** BankIDs used every day.



What is BankID?

- Based on PKI (Public Key Infrastructure)
- Formally called bank-stored BankID, is an electronic certificate centrally stored stored at the Norwegian Banks' Payment and ClearingCenter (Nets).
- To access your BankID
  - Use a Java Applet downloaded and installed in your PC
  - Enter your personal ID number
  - Then the code from your code unit
  - Then the personal password you have chosen



BankID on mobile phones



Mobile Identity

- An electronic identification and signing system with the security elements stored in the mobile phone's SIM card
- Launched in March 2009.
- Give internet bank users the opportunity to log in to their internet bank
  - without the code unit
  - as long as they have access to their mobile phone.
- Many will find this a great advantage
  - as they nearly always have their mobile phone on them
  - but not the code unit that is currently required.
- To access your BankID on your mobile phone
  - Use your mobile telephone number
  - Your date of birth and a PIN code of your own choice.

bankID™ telenor

BankID on mobile phones



Mobile Identity

- Initially intended for internet banking customers of **DnB NOR** (DNB) and **Skandiabanken**, with a **Telenor** mobile phone subscription.
- From 2011 also offered by the **Terra Group** and **Sparebank1** to their customers.
- Developed by the banks in cooperation with Telenor:
  - DnB NOR has been a key participant on the part of the banks
  - Skandiabanken has been involved in testing and implementing the system.
  - Other banks in the BankID Cooperation have both joined the system and contributed during the process.
- Had 140 000 customers in Aug 2012 og the average usage is 9 times per month per customer.

bankID™ telenor

BankID on mobile phones

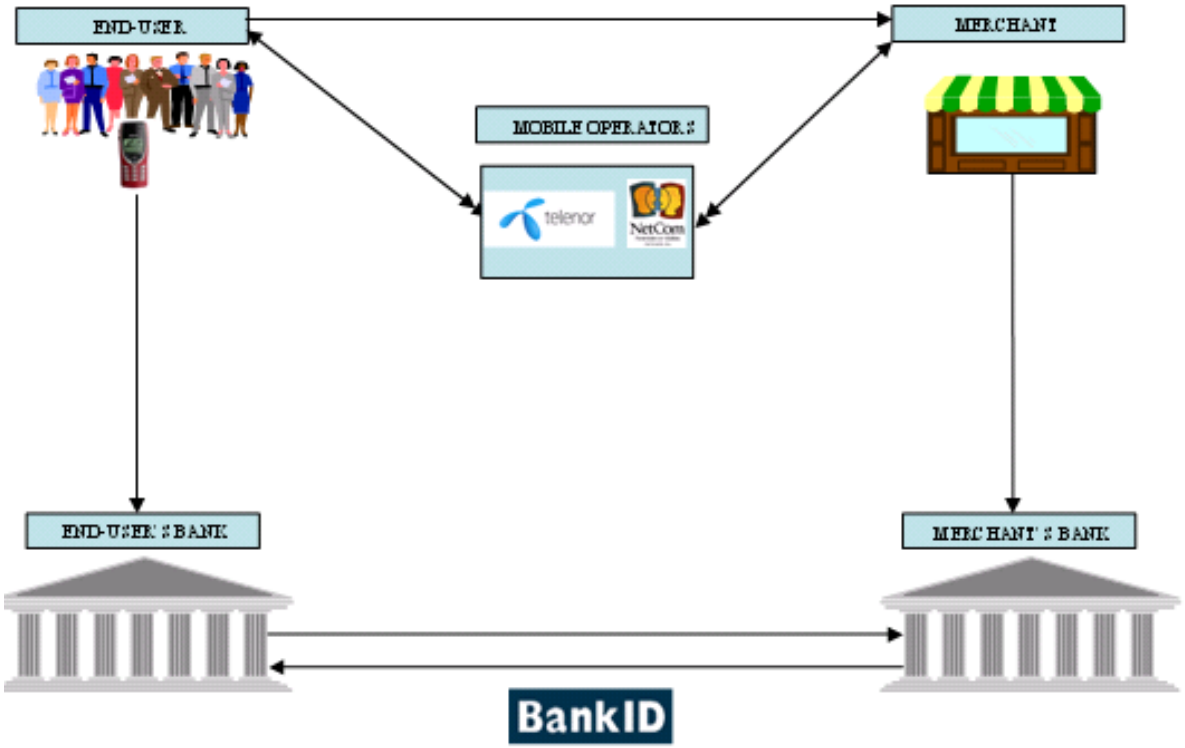


Mobile Identity

- The banking industry is also very keen to see other mobile phone operators joining the cooperation.
- The aim is to ensure that BankID on mobile phones is used:
  - At more websites/user sites outside the banking world
  - And in more situations where secure identification and signing are required.
  - For example, customers will eventually be able to use BankID on their mobile phone when shopping online. They will
  - Also be able to increase their bids on properties via their mobile phone because they will be able to identify themselves and sign electronically using BankID on mobile phone.
  - BankAxess – online account payments using BankID on mobile phone – and charging of cash cards are other areas of use.

bankID™ telenor

Business models



- Per today the service does not generate direct revenues
- Considered as differentiation tool to increase loyalty and reduce churn
- Different business models to get payment from end-users and merchants under study.

Challenges

- Biggest challenge:
  - Not every MNO in Norway offers BankID
  - Participation of Netcom (Telia) to create the momentum is highly desired.
- The digital certificates did not yet have Class/Level 4 of assurance (Very high confidence in the asserted identity's validity):
  - The Banks as Certification Authority is working on the self-declaration of the certificates at the Norwegian Post and Telecommunication Authority
  - Should be ready late Autumn 2012
- Another minor issue:
  - The signing is currently limited to 120 character (SMS size)
  - Ongoing work to enable the signing of larger documents