



ENCAP

Mobile Authentication

September 11th 2008

UNIK AF security



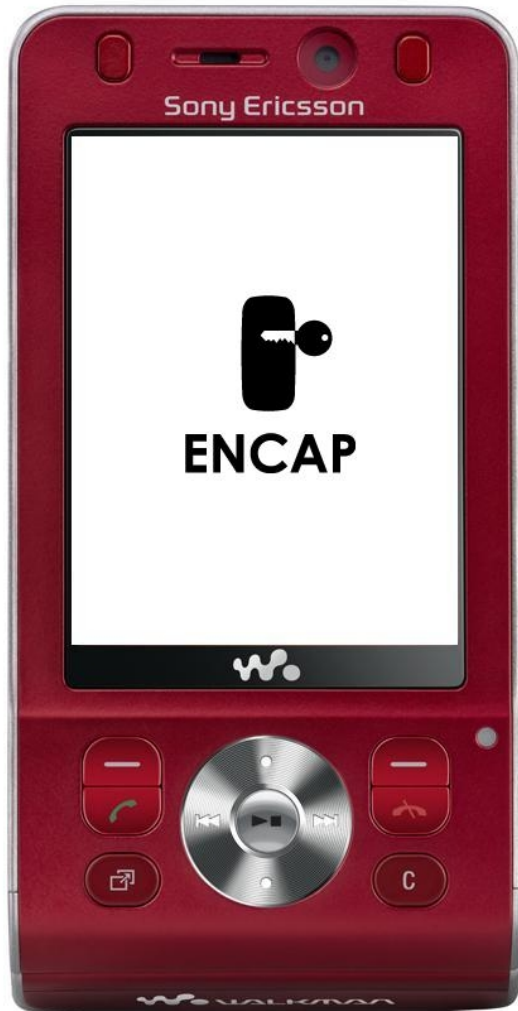
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What is Encap?

Replace tokens with the mobile phone

A grid of PIN codes, representing traditional tokens. The grid contains several rows of numbers.

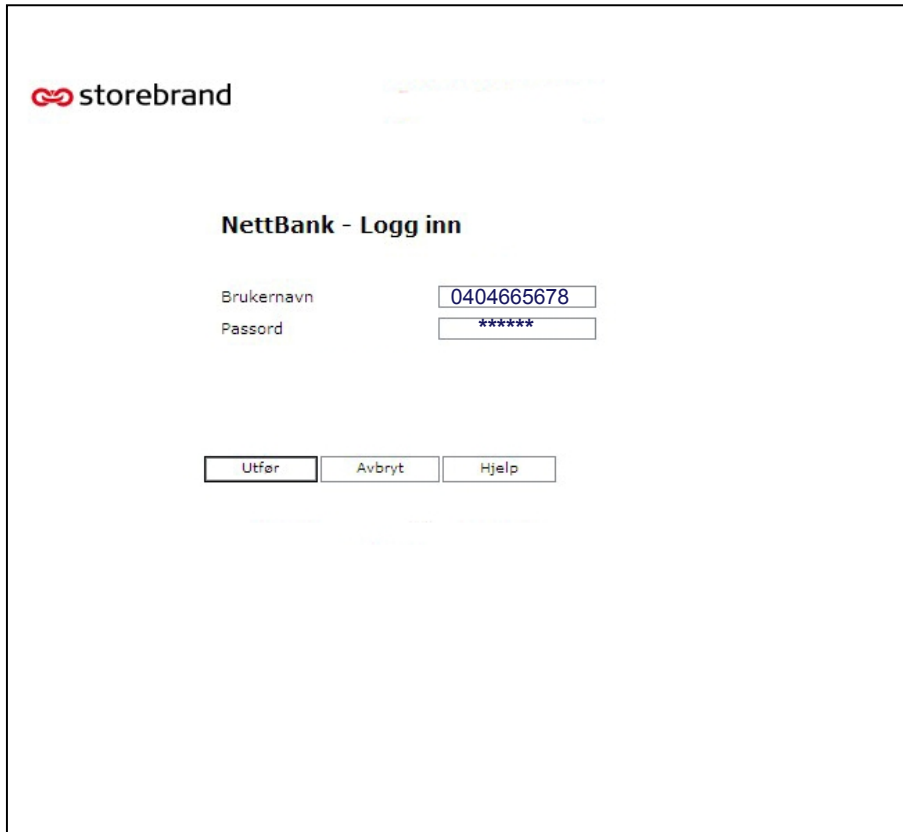
9914	0683	45	2419	22	1669	28	4327	
0772	9	4864	16	2625	23	0497	30	7915
1160	10	1328	17	2441	26	8334	31	9055
6210	11	8703	18	0137	25	5223	32	6085
3885	12	0662	19	5599	26	1942	33	0064
6375	13	3296	20	8377	27	7246	34	2573

Benefits

- Only one token: Your phone!
- No need to remember several PIN-codes



Logging on to your online bank



storebrand

NettBank - Logg inn

Brukernavn

Passord



Market drivers for secure user authentication

- The enormous growth in on-line services, like online banking, requiring secure authentication of end users.
 - A market need to combine user friendliness and cost-effectiveness with strong security
- Growing problems of ID theft and online fraud
- The establishment of eServices in all areas of society
 - eGovernment
 - eHealth
 - Business to business processes
 - Business to consumers
- High penetration of mobile phones globally .



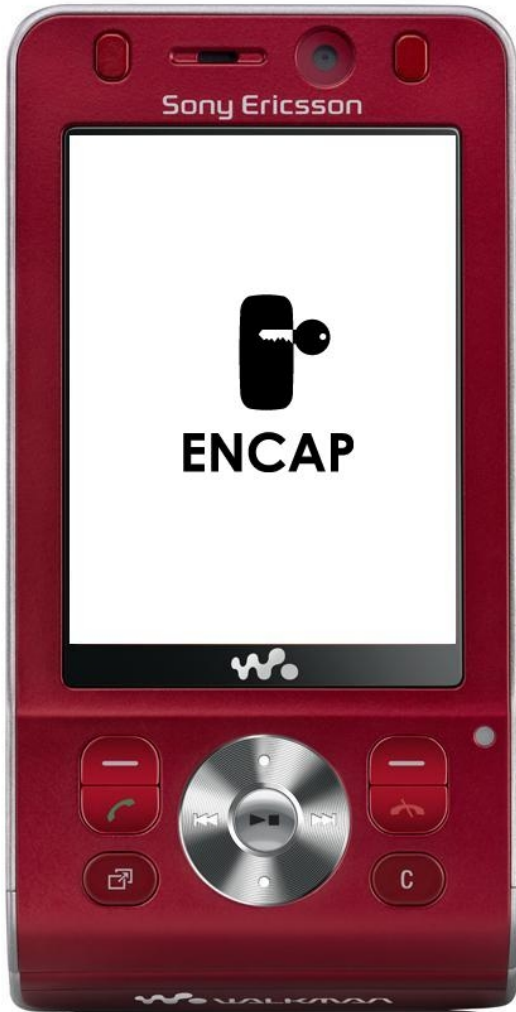
Fraud (UK)

- Even with the rollout of Chip and PIN, credit and debit card losses for UK-issued cards increased by 25% to GBP 535.2 million in 2007.
- It has been discovered that Chip and PIN data can be stolen and used in fake cards by tampering with card terminals.
- A big reason for this is the sharp increase in fraud committed overseas (a 77% jump) by criminals using stolen UK card details. Total international fraud amounted to GBP 207.6 million. Fraud usually occurs in countries that do not use the Chip and PIN system.
- In 2007, card-not-present fraud increased by 37% to GBP 290.5 million, while counterfeit card fraud increased by 46% to GBP 144.3 million.
- 2007 online banking fraud losses were down by 33% to GBP 22.6 million, although phishing attacks in the first half of 2008 increased by 180%.

Unique properties and advantages

- The user is in the centre
 - An enabler for improved user applications
 - User driven adaptation
 - Same security mechanism for many online services.
- Security
 - Effective protection against cloning and tampering (Patented)
 - 2-channel, real time
 - Online challenge – response
 - Context sensitive
- Provisioning
 - The end user already owns the hardware
 - Encap is online. 24/7 everywhere
 - Attractive license model
 - Only activated users
 - Low total cost of ownership

The security of a HW-token, the benefits of a SW-application!



- Mobile phone based security mechanism
- Meets bank's security requirements
- No HW dependencies
 - SIM card from any operator
 - Works on your existing phone
- One mechanism for many service providers

Encap value proposition

- **Security upgrade**
 - Upgrade from traditional ID and PW to 2-factor or other improvements.
- **Value chain security**
 - Service providers which have complementary services that are interlinked.
- **Cross border markets**
 - International service providers can use the same solution across markets instead of having to adapt to different local market solutions.
- **Secure mobile applications**
 - Application or Service providers who offer mobile applications that need security.
- **Customer base cross selling**
 - Service providers that can benefit from a cooperation and cross sell services to the union of their customer bases.

Creating user value



My job online



My eTickets



My online banks



My preferred eID



My online payments



My medical record



My member services



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