OffPAD Project

Offline Personal Authentication Device

AFSecurity Seminar
October, 9th 2015

Project Context

Eurostars program – http://www.eurostars-eureka.eu

- European innovation programme managed by EUREKA
- Funding market-oriented R&D
- With Small and Medium-sized Enterprises (SME)

Duration

- 36 months project
- Oct. 2013 – Oct. 2016

Background

- Build upon the results of Lucidman EUREKA project
- Supported by French-Norwegian Foundation (FNF/FFN)

Project Partners

Industrial Partners

- **TazTag** (France) – Project Leader
  Mobile secure hardware device manufacturer
- **TellU** (Norway)
  System provider and software development
- **Sonitor** (Norway)
  Indoor localization devices manufacturer
- **Vallvi** (Norway)
  Business development in the security sector

Academic partners

- **ENSICaen** — National Engineering School of Caen (France)
  GREYC lab, E-payment & Biometrics research unit
- **University of Oslo** (Norway)
  Network and Distributed Systems research group

Goals

Bring OffPAD concept to market

- Design user-centric authentication device
- Design OffPAD Hardware device
- Develop OffPAD-based solutions
  - Actors authentication
  - Biometric modalities
  - Use-cases and services
- Experiment and qualify user-acceptance

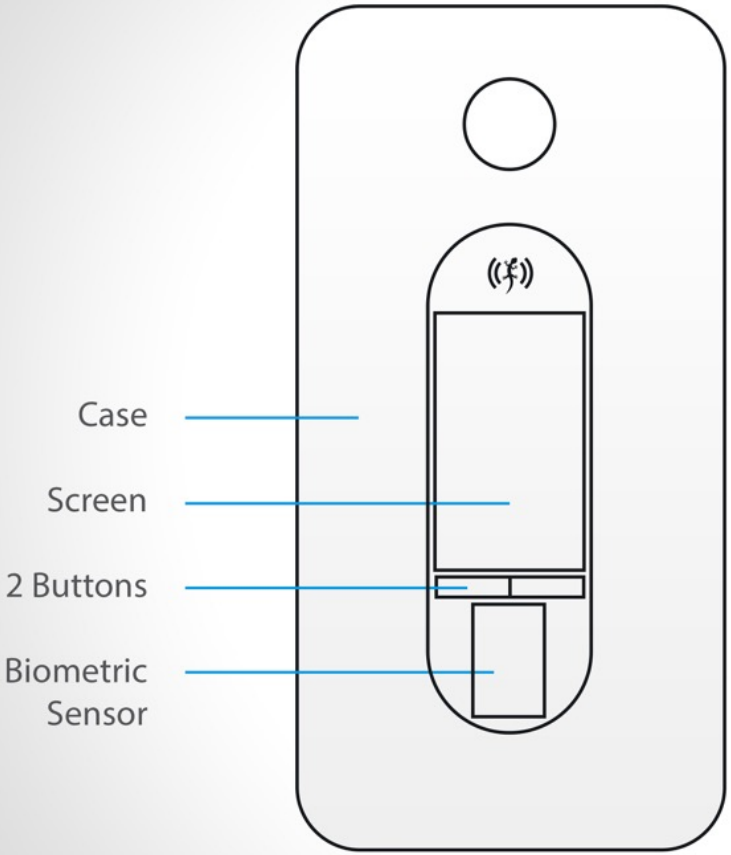
Secure online interactions

- Manage users credentials
  - True user authentication via biometrics
- Manage trust in service providers
  - Online services server authentication
- Data Authentication
  - User to server and server to user

OffPAD device design

OffPad

Secure Case Project



OffPAD device design

Easy to use

Your OffPAD and your phone are **fused toghether** to become a **unique mobile** object in your pocket

Secure environment

- Embedded javacard **secure element**
- **Autonomous execution environment** independent from mobile phone OS
- **Encrypted storage** independent from the phone

Secure interactions

- **Secure display** independent from phone's screen
- **Fingerprint sensor** for user authentication
- Four buttons

OffPAD-based solutions

Biometric modalities

- Three new biometrics modalities for mobile phones
- Are currently experimented in France and Norway

Authentication classes

- Allow to authenticate all on-line interactions
- Four authentication classes already implemented
- One pattent in preparation

OffPAD-based solutions

Use-cases

- e-Health sector
  - Three use-cases identified, two implemented
- Electronic transactions
  - Two scenarios developed
- Secure communication
  - E-mailing, Text messenching, Voice communication
- Pilots will start in next April

Thank you for your attention!

Project supported by