

# NEWP@SS

## New Electronic Passport technologies and platforms

### General description

The NewP@ss project targets the development of advanced (microelectronics and embedded software) secure platforms suitable for the coming **3<sup>rd</sup> and 4<sup>th</sup> e-Passport generation** under discussion at the ICAO.

The project is key for designing usable and **recognized approved travel documents at European and International level**. These documents could also be used for e-services and applications of private nature (boarding ticket support, airline services,..) in addition to governmental applications (e.g. electronic visa, time stamping).

These new e-passport technologies **based on a world standard** will be introduced from 2015 to 2020 and represent a **complete shift of paradigm** that will be demonstrated in the project through **innovative and sometimes disruptive technology concepts** : high-speed contactless interface, multi-applicative embedded software platform, on-card components (display, keypad,..), mobile and readers integrated in use cases showing a large scope of new possibilities.



### Goals / Objectives

- Develop **advanced hardware and software platforms** supporting the next generations of e-passports deployed from 2015 and beyond.
- Develop **technology bricks** needed for reaching the performance, security and functionality levels requested by the ICAO and the international bodies  
Cryptography, High-Speed Contactless Interfaces, Biometry
- Develop **complete Proofs of Concepts** of new e-passports and associated compact fixed or mobile readers suitable for multi-application support
- Provide **functional test suites** and **reference implementation** for interoperability
- Demonstrate proof of concepts of e-passports **in complex multipurpose use-cases**

### Societal impact / Results

The results of the project will have numerous impacts, especially for:

- **Border control**: enhance the **reliability and fluidity** of the process by diminishing queuing time at the gates and reducing fraud rates
- **Government & Citizens**: provide robust and convenient platforms with highest level of **privacy-enabled and security-preserving capabilities**
- **Business**: enforce world **European leadership** in e-Identity and e-Travel documents
- **Service Industry impacts**: offer multi-application, multi-stakeholder platforms enabling travellers to access and manage a scalable and dynamic portfolio of government, public and private e-travel services

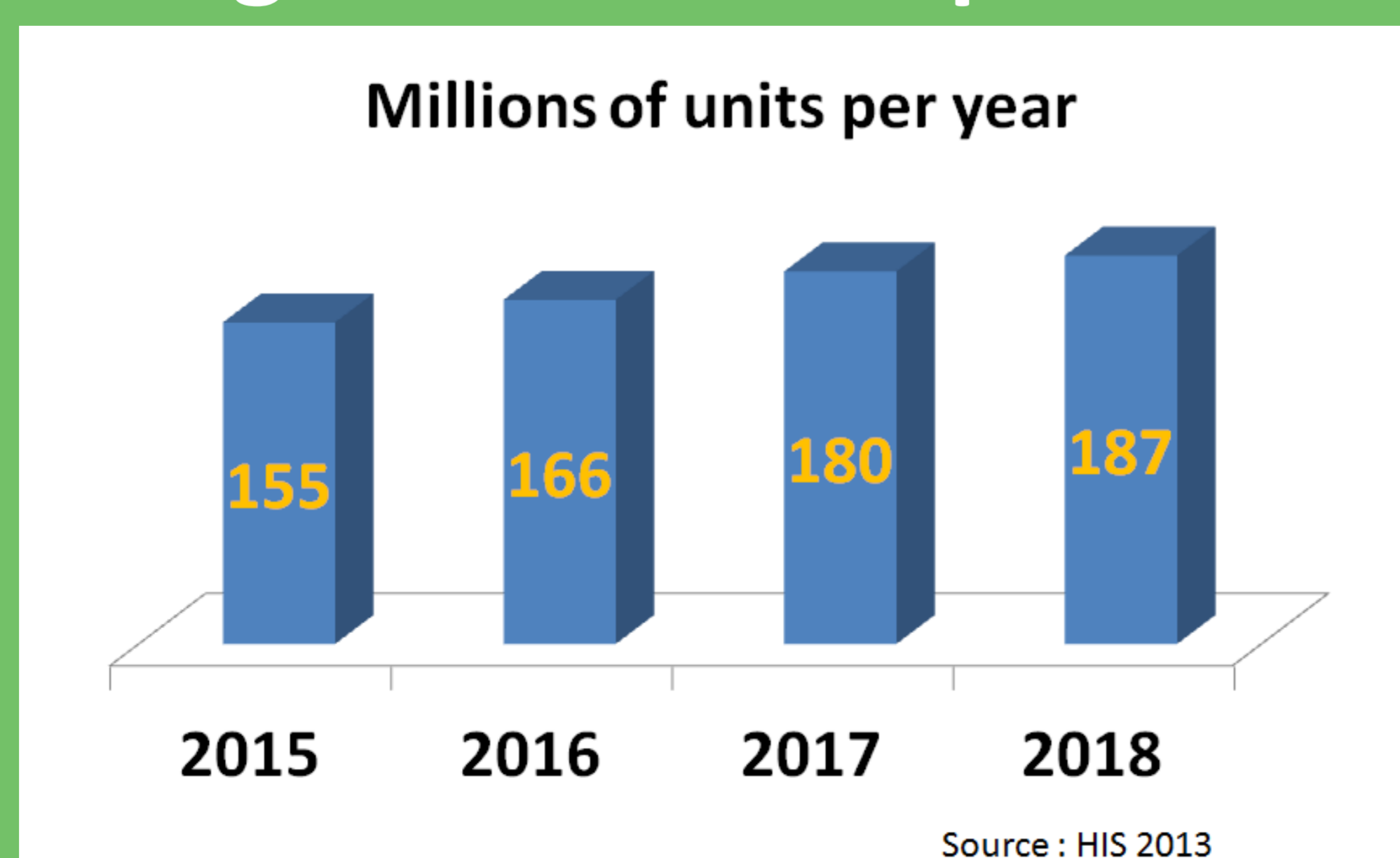
### Partners

- Gemalto
- STMicroelectronics
- NXP Semiconductors France
- ID3 Technologies
- Institute CEA LETI
- ISEN Toulon
- Infineon Technologies AG
- Giesecke & Devrient
- NXP Semiconductors Germany
- Infineon technologies Austria
- NXP Semiconductors Austria
- TU Graz
- Evoleo Technologies
- Instituto de Telecomunicações

### Countries involved

- Austria
- France
- Germany
- Portugal

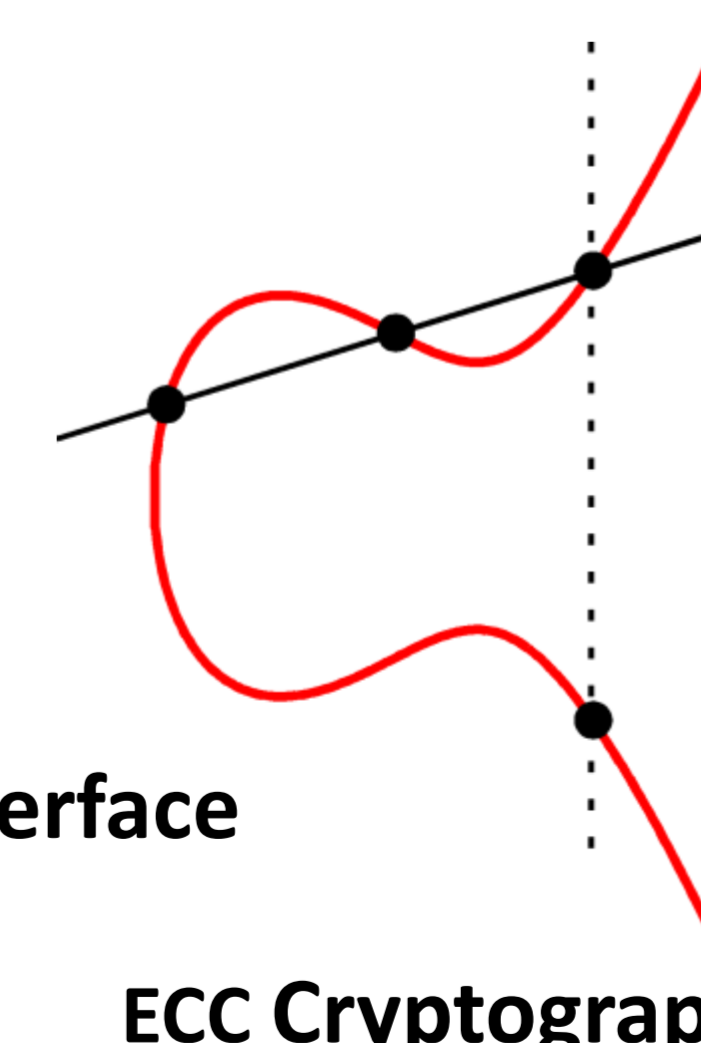
### Looking ahead: e-Passport market



### Key enabling technologies



VHBR Contact-less Interface



ECC Cryptography



Advanced Biometry