## A first successful review for FastPass

FastPass went through its first review on Tuesday 8th of July 2014. After a period of 16 months, the Consortium had to report on its scientific work, progress and achievements, as well as its management, financial and dissemination activities. Held in Brussels in presence of the Project Officer and three reviewers- recognized experts from Infineon Technologies AG, Marine Vision, and Frontex- the review lasted one day and was divided into presentations, discussions and first demonstrations.

The Consortium was represented not only by the Executive Board, gathering all the WP Leaders, but also by some partners expert in legal or demonstration issues. The reviewers **welcomed positively** the work undertaken by the Consortium and provide some very useful observations. The review report asseses a **good progress of FastPass**, both towards the **project objectives** and the **individual worck packages**. **All deliverables produced were accepted**. After having gathered a lot of requirements from several end-users and established first concepts and draft scenarios aimed at the harmonisation of border crossing, the next challenge for the Consortium in the upcoming period will be to focus its work on a precise line. You will know more about it in our future newsletters…

A successful work achieved thanks to the whole FastPass team - © FastPass Consortium

Dealing with ABC issues- EAB Research Project Conference
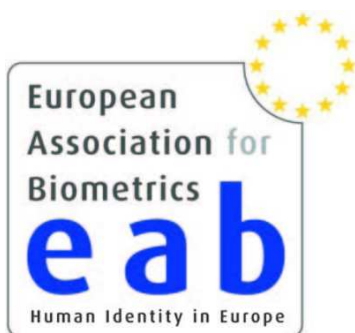
On September the 8th 2014, members from the FastPass consortium will present their research results at the EAB Research Projects Conference (EAB-RPC) in Darmstadt, Germany. Organized under the umbrella of the European Association for Biometrics, this event aims at providing information about the current work of various FP7 projects (FIDELITY, FastPass, BEAT, Future-ID, INGRESS, MobilePass…) focusing on biometrics and identity management. The objective is offering to the targeted audience a broad scope on these topics with dedicated sessions for each project and general sessions for joint aspects.

Therefore, the FastPass consortium will hold six distinct presentations covering many important aspects from the Automated Border Control (ABC) area. The project coordinator Markus Clabian (AIT-Austrian Institute of Technology) will first give an **overview presentation** of FastPass, before other partners of the consortium enter in more specific topics. Thus, Günter Schumacher from the Joint Research Centre will give an introduction to the **security evaluation of ABC systems**. Diana Dimitrova, from the Katholieke Universiteit Leuven, will broach the **legal aspects of ABC**. Sirra Toivonen from the VTT Technical Research Centre of Finland and Gunther Grasemann from the Fraunhofer IOSB, will hold a presentation dealing with **ABC requirements** (collection and prioritization) **and ABC stakeholders** (classification and management). Last but not least, Andreas Kriechbaum-Zabini (AIT) will detail the possibility of using **monitoring technologies** to provide an additional service for the travelers. The whole programme of the event can be consulted here. We are looking forward to meet you at this occasion!

First Ethical Report submitted

FastPass submitted its first Ethical Report on April 2014. This Deliverable, written with the contribution of the External Expert Advisory Board (see the members on our website), dealing with the ethical aspect, was required by the Ethic Review Committee of the European Commission. Divided in several chapters, the document:

- recalls the outcome of the ethics review during the proposal phase of the project and describes the activities undertaken to fulfill the requirements of the ethics review
- highlights the research ethics that shall be followed in the project's activities
- offers a first survey of ethical issues concerning ABC technology in general
- gives a first indication of the specific sections of the FastPass project that may have determined ethical impacts

- outlines the further plan of activities of the FastPass with regard to ethics issues

Ethics remains then a central concern for FastPass and the Consortium has at heart to produce a high-quality work, fully complying with the ethical requirements. Its activities in this field **will be regularly reported** through the future Ethical Reports, to be delivered on August 2015 and December 2016.

Biometrics for a faster and harmonized Automated Border Control

by Prof. James Ferryman, member of the FastPass Consortium, leader of the Computational Vision Group (CVG) within the School of Systems Engineering at the University of Reading. In FastPass Prof. Ferryman is leading the work on traveller identification and monitoring.

We are all familiar as travellers, arriving at a destination, of immigration procedures. At large transport hubs we may well encounter long queues to check our eligibility to enter the country. This usually involves queuing up to speak to an immigration officer with passport in tow. However, around the world the process is starting to change. At airports such as Schipol in Amsterdam and at various US ports of entry respectively the Privium and Global Entry Registered Traveller Programmes (RTPs) are enabling frequent travellers to DIY (do-it-yourself) border checks in a significantly expedited approach. Increasingly being adopted in Europe are the use of Automated Border Control (ABC) e-passport gates, which again offer an alternative to conventional passport checks by a border officer at a booth. Our e-passport is scanned at a barrier and a face recognition check is run against the chip in the passport.

However, while these systems are certainly making our lives as travellers easier, none of these approaches to traveller identification are harmonized. The FastPass project is aiming at exactly this - a standardized "e-gate" that could be deployed at airports Europe wide. A key aspect to harmonization is the usability - we would use, for example, an e-gate in Helsinki in exactly the same way as Vienna, just in the same way that today we all know how to use an ATM in whichever country we are.

The time taken to pass through existing e-gates is known as the transaction time and a major bottleneck is the time taken for the e-gate to read the information (i.e. face image) from the chip in the passport. What if we could shorten this time through the use of a token, for example a machine readable barcode and/or even our own face? The document check would still need to be done beforehand (for example at check-in for a flight, to satisfy current Schengen code) however at the e-gate we would then not need to present the passport at all, but simply place the barcode on a reader and show our face - a much quicker transaction.

Can we do even more? As we would be using a token to securely link our travel document to our identity there is an

opportunity to go beyond a single biometric. We could link our document to multiple biometrics to include, for example, iris, in addition to face. This opens up new opportunities to study the use of multi biometrics in border control, increasing security checks (good for border guards) while maintaining a fast transaction time (good for passengers). And if we could do all of this 'on the move' across the border, instead of physically stopping at an e-gate, even better. Such innovations for the traveller and the border guard do come at a cost though. The use of multiple biometrics, for instance, demands new ways of automatically checking for counter spoofing as well as automated surveillance to ensure that travellers are not attempting to spoof their identity or circumvent checks, something which currently a manual check would almost certainly detect. And it goes without saying that, privacy aspects have to be considered very carefully too.

The FastPass project is examining exactly these issues and a demonstration of proof-of-concept will be realized as a demonstration at Vienna International Airport in 2015-2016. In the future immigration control and entering a country will really be as easy as A B C.

Meet the Consortium !

At the Future Security Conference (FuSec) 2014 in Berlin (16th-18th September), FastPass will present a part of its work with the topics "Investigation of the impact of various IEMI sources to electronic passport readers" (paper presentation) and "Multi-Criteria Evaluation for Automated Border Control" (poster session).

FastPass will present at the IEEE Joint Intelligence and Security Informatics Conference (JISIC) 2014 (The Hague, Netherlands, 24th - 26th September) several papers. Their topics? "Security Components in a One-Stop-Shop Border Control System ABC", "Understanding the factors affecting user experience (UX) and technology acceptance in ABC context" and "Optical Security Document Simulator for Black-Box Testing of ABC Systems"

Our archived newsletters are available here !