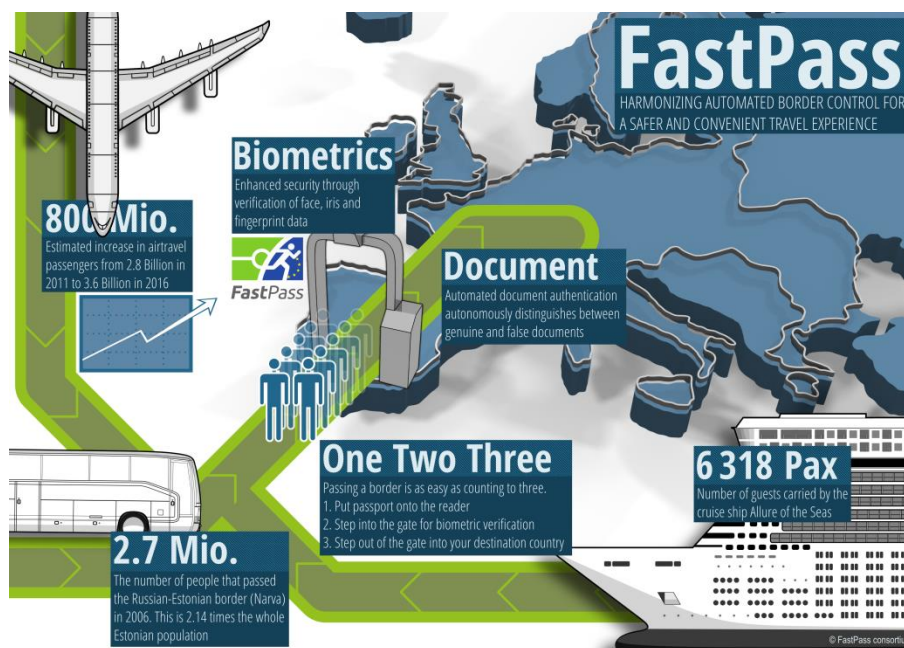


WHAT IS FASTPASS?

Security, mobility, harmonisation: these are the key challenges for border control in the European Union. Indeed, as passenger flows increase, more and more travellers want to cross the Schengen external borders with maximum convenience and speed, while at the same time border guards should secure the zone against various threats, among which can include terrorism, irregular immigration or crime.

Set to address these diverse challenges, the FastPass project, co-funded by the European Union under its Seventh Framework Programme (FP7), will establish and demonstrate a harmonised, modular approach for Automated Border Control (ABC) gates.



Picture 1: FastPass takes up the challenge of increasing demand for effective and faster border control

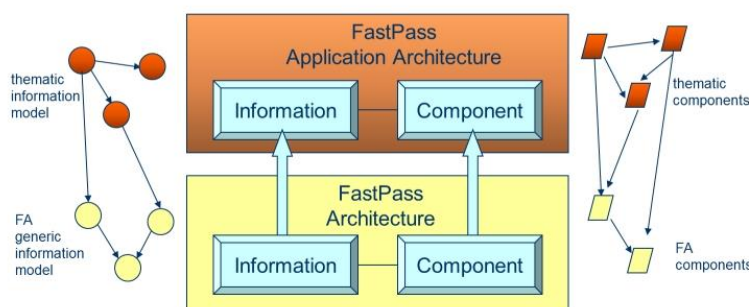
Uniting the experiences of 27 partners from nine different member states, FastPass takes into account the entire ABC value chain – system and component producers, research institutions, governmental authorities and end-users – and develops all technologies in a user-centric way. Moreover, the project will propose a solution fulfilling the special needs of all types of borders – air, land and sea – and all stakeholders who take part in the border crossing process – from private airport companies to cruise lines to border guards and border management authorities themselves.



A REFERENCE ARCHITECTURE

FastPass provides both a modular and harmonised reference architecture. On the one hand, its modularity allows the exchange of single components of the system and allows for the possibility to establish a clear comparison between vendors. This constitutes a concrete advantage for producers to be part of this solution.

Furthermore, the harmonised architecture proposed by FastPass supports all known processes in border control. Hence, buyers are able to choose the most appropriate solution for them while maintaining the same architecture. The solution can also cope with process evolutions through a simple change of the configuration. In addition, the same architecture can apply for different border types. FastPass is indeed the first European ABC solution for land borders where passengers can remain in their cars, and also the first solution for cruise ships.



Picture 2: FastPass develops a reference architecture system

Therefore, the harmonised FastPass solution will help reduce buyers' costs and make them more independent towards suppliers. In this sense, harmonisation can empower the development of the market.

A HIGHLY RELIABLE SYSTEM

FastPass provides an innovative but also highly reliable solution, taking into account all security aspects in the design and development process. Indeed, the project is developing modules against the most recent attacks both on identity documents and biometrics, such as face or finger spoofing, attacks with mobile devices and piggybacking in ABC gates. In this way, FastPass guarantees a better detection of counterfeit documents and identification of fraud. It reduces false alarms by a factor of three in case of piggybacking and presents new liveliness detection systems.





Pictures 3,4,5,6: FastPass offers a better detection of fingerprint spoofing

Moreover, in case of a pre-registration process, it provides information before the border crossing process starts. All these features then allow border guards to improve their efficiency and focus their tasks on risk assessment and/or the control of foreign passports.

More generally, FastPass will furnish methods for security assessment under a common procedure: security can then be consistently compared among EU Member States and with other countries.

However security cannot be fully respected without also taking into account privacy: thus, this hot topic is given an important focus within the project. Indeed, FastPass is the first ABC-project to be assessed for privacy implications by an external privacy advisory board. The consortium also develops new tools and methods for privacy impact assessment. This ensures that border security increases, by providing more and advanced information about travellers while also guaranteeing the confidentiality of personal data.

A SOLUTION ANSWERING YOUR NEEDS

FastPass is a solution developed in a user-centric way: the whole innovative process is regularly evaluated by two end-user groups: travellers and border guards.

For the latter, a new User Interface has been developed with border guard feedback, allowing for more intuitive use and a well-arranged overview. Background checks can be done automatically and are warned and displayed with configurable and intelligent rules. Consequently, FastPass uses advanced decision support for helping border guards in their tasks.



Picture 7: The FastPass solution targets a high end-users acceptance

As for the traveller, the system developed by FastPass will be clearly easier to use. It will also help to reduce stress linked to travelling by fostering a faster throughput (in the range of 500 persons per hour), a simple interaction and a paperless process. Accordingly, buyers may use less space for manual checks and therefore expend fewer costs. Adapted to each kind of border and stakeholder of the border control process, FastPass answers your needs.



Pictures 8, 9, 10: FastPass answers the needs of each type of border: sea, air and land

PARTNERS

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FURTHER INFO

Be continuously informed about the progress of our project and subscribe to our newsletter through our website: www.fastpass-project.eu



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Picture 3: S. Chang, K. V. Larin, Y. Mao, C. Fluoraru, and W. Almuhtadi. Fingerprint spoof detection using near infrared optical analysis, 2011 InTech.
Picture 4: D. Yambay, L. Ghiani, P. Denti, G. Marcialis, F. Roli, and S. Schuckers. Livdet 2011 - fingerprint liveness detection competition 2011. In Biometrics (ICB), 2012 5th IAPR International Conference on, pages 208–215, 2012.
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Picture 9: source: http://upload.wikimedia.org/wikipedia/commons/1/10/Vienna_International_Airport_20091011_16.JPG



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