

e-passport switzerland

Biometric passport for Switzerland

“The solution is technically sophisticated and has matched our challenging requirements. Based on a positive co-operation and the flexibility of Atos, we were able to implement the very complex project in time. The solution is user-friendly and very well accepted by our users and customers. The professional after sales support of Atos helps us to keep our systems running - 24 h a day - 7 days a week - worldwide.”

Markus Waldner

Project Manager Biometrics at Federal Police Switzerland

“The solution provided by Atos enables the Swiss government to capture biometric data required for the production of the Swiss e-passport. The developed software and hardware components are also used to capture biometric data for Schengen visas, Swiss identity cards and permits issued to foreigners residing in Switzerland. Additionally the technical solution developed by Atos is used for the verification of biometric data and was tailored to the specific needs of the Swiss biometric applications. The system is also in use by Swiss embassies worldwide. The integration of the components delivered by Atos into the overall system developed by ISC-FDJP (IT Service Centre of the Swiss Federal Department of Justice and Police) could be completed successfully due to a strong collaboration between these parties. We are highly satisfied with this stable solution that has been in use since the beginning of 2010.”

Heiner Peters

Head of Division Projects, ISC-FDJP

The Challenge

On behalf of the Swiss Federal Police, an inter-departmental project group was responsible for performing the rollout of the biometric passport systems. This project shall

- ▶ ensure that national borders remain secure
- ▶ dramatically minimize the risk of identity fraud
- ▶ provide exceptional biometric data capturing quality
- ▶ provide unequivocal verification of biometric data
- ▶ improve the ease of use for government officials and citizens

Facial image, fingerprint and signature biometric data is captured and saved according to the recommendations and standards of the International Civil Aviation Organization (ICAO). This is also in line with EU regulations that require facial image and fingerprints in biometric passports for all EU member states.

The Solution

Based on the Atos Homeland Security Suite (HSS) an advanced passport system is developed for one of the most secure identity documents of the world. This system is a market proven modular solution for biometric data capture and biometric verification. Live capturing of facial images, fingerprints and signatures according ICAO standards and customer

requirements are provided to facilitate the passport production / personalization system. Therefore a state of the art capture environment (Enrollment Station) is implemented to guarantee best conditions (e.g. lightning) for high quality biometric data capturing to reach complete ICAO conformity. Distinguished features cover the accessibility for handicapped individuals and a “baby” option to capture ICAO compliant face images due to a unique facial image capturing technique. Apart from these Enrollment Stations located within the Swiss regional capture centers, there are various Back Office- and Swiss foreign mission Enrollment Stations. Atos provides self-service Checkpoint Stations (also named Public Reader Stations) allowing passport holders to inspect the stored biometric data and check whether or not their passports work correctly - an enhancement in citizen convenience and at the same time implementing a Swiss legal requirement. Due to the modular architecture of the Atos Homeland Security Suite a re-use in all these different system components is possible, reducing the system complexity and maintenance cost. The latter is also achieved by introducing a centralistic system maintenance concept allowing a world wide update distribution.

Atos Homeland Security Suite integrates best-in-class 3rd Party Technologies for passport reading and fingerprint capture, facial image recognition and signature live capture.

Use of best-in-class components to ensure best-in-class performance

Benefits for Switzerland

With this new solution Switzerland meets the ICAO standards based on international requirements for electronic passports, that is also compatible with EU specifications and US requirements (Visa Waiver Program) and allows to issue one of the most secure passport documents in the world. Therefore US visits of, for example, Swiss citizens are possible without a visa. Passport controls are becoming even more efficient, identification reliability increases and travelling under a false passport will become more difficult. In addition, Special-purpose Checkpoints Stations in regional capture centers and at international airports in Switzerland provide for passport holders a self-service to inspect their passport including biometric data. This increases the trust in electronic passports, which improves citizen satisfaction.

Further benefits:

- ▶ Optimal biometric data capturing environment
- ▶ Modular construction - re-use of different system components (Enrolment Station with different assembly types & Checkpoint / Public Reader Station)
- ▶ Singular IPC used for all peripheral devices (Enrolment, Public Reader- & Back Office-Stations)
- ▶ Baby option - unique facial image capture technique for babies
- ▶ Use of best-in-class components to ensure best-in-class performance

Our Contribution

- ▶ Development and delivery of a solution for capturing and verifying biometric data and checking electronic travel documents on the basis of Atos Homeland Security Suite product
- ▶ Customization of Atos Homeland Security Suite product in respect to the special requirements and needs of the Swiss administrative system and embassies.
- ▶ Acceptance testing, maintenance and support, third-level support and training



Checkpoint System
a so-called Public Reader Station



Enrollment Station in regional and international
capture centers (Face, Fingerprint, Signature)



Mobile Enrollment Station

For more information please contact: shss.at@atos.net