Gemalto ABC solution
(Automated Border Control)

Where security, convenience and efficiency meet

Security and speed, cost-efficiency and convenience have long represented conflicting goals for airports and border control authorities. The Gemalto new ABC solution is designed with these challenges in mind, and leverages leading biometric recognition software to ensure best user experience and traveler recognition accuracy.
Immigration authorities and airports now face a series of critical challenges

- Air traffic has soared, and the trend is set to continue. Over the next 20 years, the number of air passengers will double.
- Whether departing, arriving, or in transit, travelers are becoming more demanding. Convenience, speed and intuitive technologies are all high on their list of priorities.
- From a simple point of passage to enter or leave a country, airports have evolved into sophisticated leisure, retail and business centers.
- Security threats are now global - and evolving every day. National borders are strategic transit points where the highest standards of control must be implemented to protect passengers and citizens alike.

Automation of Border control can leverage an array of different equipment, from a 2 door ABC gate to a kiosk or smaller one door gates. Gemalto ABC offer is declined into modular ABC gates and kiosks to provide airports and border operators the flexibility they need in terms of deployment and operations.

Key benefits of Gemalto ABC

Slash queues with smarter, faster processes
With ABC, a bona fide traveler can pass the border in a matter of seconds, making it one of the most efficient technologies on the market.

To further improve border crossing time, our solution has been carefully designed to be intuitive and user friendly. As a result, even first time users can use the solutions easily.
- When facial is the prime modality, the biometric authentication starts as soon as the passenger steps in. A digital mirror is placed by the camera on the exit pole, instinctively attracting eyes in the correct direction for successful image capture. This allows the passenger to pass through the gate intuitively, minimizing the risk of human error and associated time loss.
- The use of abstract or figurative pictograms, compliant with ISO 7001 and ISO 9196, as well as the adaptation of existing airport symbols, break down language barriers and increases daily traffic through the eGate lanes.

Ensure secure crossings
All Gemalto ABC configurations benefit from our document verification expertise to detect fraud with high quality checks on the electronic chip (authenticity, data), document security features and photo / data integrity.
Our biometric verification software (facial, fingerprint or a combination of both), with live quality assurance checks and globally-recognized matching engines, ensures the passenger is the rightful owner of the document.
Risk assessment is then performed through automated comparison of identity against text-based and biometric control/alert lists.
Our unique Single Person Detection system identifies intrusion, passenger substitution, piggyback and tailgating. It also discriminates passenger and luggage in any situation.

The use of transparent material eases visual control through the gates, whilst improving the passenger experience.

**Modular hardware configurations**
To meet the challenge of increasing traffic whilst still adhering to financial and operational constraints, it is crucial for airports and border control authorities to implement durable, low maintenance solutions. We have therefore selected field tested materials that meet the demanding requirements of transportation applications including subways, trains and boarding gates.

With the benefits of seamless preventive maintenance, our solution has the best Machine Cycle Before Failure (MCBF) rate on the market. As a result, it saves on maintenance and replacement costs to quickly deliver financial payback.

The modularity of the gate hardware allows to choose from an integrated or a segregated control process, with or without a mantrap.

**Flexibility and cost efficiency**
Providing a flexible and space saving solution is essential for any airport installation. To optimize both floor usage and cost efficiency, our eGates can be configured in lanes.

When space constraints are too high, one door gates or kiosks provide a good alternative to the 2 door ABC gate with a mantrap.

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**The three key benefits our clients value most for our ABC gates**

| centrally managed Document Authentication | Flexible and modular  
|-----------------------------------------|----------------------------------
| All updates can be managed from one central post, and automatically delivered in the field. Border guards can add new travel documents to the eligible list, and add or modify verification actions. | A choice of form factors to adapt to the floor space, control level and future evolutions in passenger traffic: one door, 2 doors ABC gate, integrated or segregated control process, ABC kiosks |

| Fast and robust  
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<td>Passengers look intuitively towards the camera; images are captured on-the-fly with live quality assurance and fast matching results. The absence of mechanical parts ensures a more robust system.</td>
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**Convenience for passengers, airports and authorities alike with fully automated, fast and secure border operations**
- Automated travel document identification (nationality, type and verification (electronic chip, security features etc)
- On-the-fly facial verification, including portrait capture and live quality assurance
- Fingerprint capture, quality assurance and authentication
- Automated comparison of identity against text-based and biometric control/alert lists

**Single Person Detection system for intrusion detection in the gate:**
- Movement analysis and movement direction
- Detecting side and front presence
- Detecting inanimate objects
- Segregating passenger and luggage (all configurations)
- Detecting piggyback and tailgating
- Detecting passengers crouching under or jumping over the barriers
ABC monitoring station supports effective eGates supervision

- Allowing an officer to react in the case of emergency, misbehavior, technical alarms or fraud suspicions
- Featuring CCTV streams, status of the gates and process flow
- Logging all events in the gate, in accordance with relevant national regulations
- Focusing on real-time assessment of passenger behavior
- Monitoring screen language, functions and layout are customized to match individual cultures and immigration business processes

ABC Gate administration tool

- Document Verification Administration provides potential to expand eligibility criteria (e.g. add a nationality)
- Production of customizable reports for officers to improve control and throughput performance
- Production of customizable reports and statistics for border authorities and other government agencies, such as customs and airport authorities
- Detailed identity and access management for operators through central user and role management with defined access rules and strong identification mechanisms
- Nationals or Third Country Nationals holding an ePassport, RTP programs with traveler pre-registration

Experience and services for an end-to-end solution

Gemalto’s experienced service teams are on hand to support you. Our expertise and best practices, derived from direct involvement in over 200 national government programs, will be key assets in the success of your project.

With Gemalto’s professional services capabilities, you benefit from:

- Experience-based solution design with:
  - Audit of airport layout and legacy system
  - Written recommendations in accordance with Frontex and ICAO guidelines
  - Design driven by operational and passenger experience considerations, together with relevant national safety rules / regulations
- Stringent project management, including coordination with all stakeholders (border authorities, airport security, airlines, etc)
- Fast and seamless system integration
- Efficient deployment
- Complete knowledge transfer
- Operational support from our worldwide network for fast and effective results

Ghana

In 2013, Ghana entrusted Gemalto with its eImmigration system, which is central to the eGhana project—an ambitious plan to create a modern IT infrastructure that can support sustainable development in the years ahead. Gemalto delivered ten 2 door ABC gates with a segregated verification process, single person detection and on-the-fly facial verification.

France

In 2016, Paris Aéroport selected Gemalto to provide 87 ABC gates to allow passengers to save time on departure and arrival in Paris Charles de Gaulle and Paris Orly airports. The Coesys ABC eGates provide passengers with a fast and secure passage through immigration, relying on a fully automated verification of the electronic passport and on biometric traveler authentication. Border protection officers can monitor the information in real-time for increased detection of potential fraud cases.

Government programs very often requires partners with industrial strength and skills. Gemalto’s global presence is key to the way we serve governments and authorities, with 17 manufacturing sites and 31 personalization facilities and expertise centers strategically spread across every continent.

Beyond this, it’s our 14,000+ employees of some 106 nationalities who make the difference.

About Gemalto

Gemalto is the world leader in digital security with 2018 €3 billion. In the civil identity sector, Gemalto provides secure documents, robust identity solutions and services that address government programs for ID management and road safety, eGovernment/mGovernment infrastructures for trusted eServices, and border and visa management requirements. Gemalto also addresses public safety and law enforcement challenges, offering best-in-class forensic solutions. The company’s products and solutions are deployed in over 200 active programs worldwide, with specific expertise in secure document issuance, biometrics, document readers, authentication, ID management and data protection.

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