



# A challenging context

odern border management is a complex balancing act, ensuring national security, maintaining operational efficiency, and enabling the seamless movement of people and goods. As passenger and trade volumes continue to grow, border agencies must process increasing flow without compromising control, safety, or compliance.

This evolving landscape calls for a shift toward person-centric, data-driven operations. Technologies, such as biometrics and AI, and system interoperability are becoming essential to enhance identity verification, support real-time decision making, and detect threats with greater accuracy.

To stay ahead, border control strategies must prioritize flexibility, scalability, and collaboration, enabling faster clearances, improved resource allocation, and stronger resilience across all border environments.

IDEMIA Public Security's BORDERGUARD™ suite is built for this transformation. With a person-centric and modular architecture, it delivers a flexible set of interoperable technologies that strengthen identity verification, streamline operations, and support educated decision making—across every layer of border control, from national command centers to individual crossing points.

IDEMIA Public Security developed **BORDERGUARD**<sup>TM</sup>, a **comprehensive end-to-end suite of modular, scalable solutions**, built around **three core pillars** to support the modernization of any border control ecosystem:

Border crossing points

Digital. Secure. Seamless.

BORDERGUARD™ fixed (counter, kiosk, gate), mobile, and on-the-go front-end solutions for an efficient traveler clearance process at air, land, and sea locations

2 Border management

Person-centric. Scalable. Modular.

BORDERGUARD™ Intelligence for real-time, centralized management

BORDERGUARD™ Bio Matcher for accurate, fast, and fair traveler identity verification Risk assessment

Anticipated.
Targeted. Actionable.

BORDERGUARD™ Targeting for threat identification and risk profiling

These solutions are complemented by a set of services covering every stage of projects' lifecycle—from design and build to run, maintain, evolve, and innovate—that help border authorities anticipate risks, deploy seamlessly, and operate with confidence.



## **BORDERGUARD™**

**IDEMIA's suite of products** and services to help you design your border control solutions



Mr. Smith has been planning his dream journey for six months. He organized everything in the smallest details and obtained all the necessary authorizations for his trip.

#### A secure and fast border crossing experience

Upon his arrival, Mr. Smith breezes through the ABC<sup>3</sup> gate. He is securely identified with his biometrics.

After visiting the country of arrival Mr. Smith is travelling by bus to discover the landscape and visit a neighboring country.



**eGate** Operational supervision and exception management services

Smooth land border crossing

To speed up the border crossing process, Mr. Smith performs a simple, fast immigration pre-check. Now he can enjoy a quicker and more pleasant border crossing experience.

#### In-vehicle clearance

Multi-biometric, modular self-service kiosk for in-vehicle clearance at entry or exit checkpoints

If he were

#### An efficient Entry/Exit System for a smart border clearance process

Mr. Smith's risk profile and eligibility to cross the border are checked within a few seconds. His entry/exit movements are registered into the national system.

## **Kiosk**

Multi-biometric, self-service kiosk for immigration pre-checks

### assessment As soon as Mr. Smith boards

Threat and risk

the plane, his data is sent to the country of arrival. Upon reception, his data is cross-checked against reference databases and analyzed via a risk assessment procedure, in compliance with law and privacy principles.







- 1: Electronic Travel Authorization
- 2: Advanced Passenger Information Passenger Name Record
- 3: Automated Border Control



Pre-border processing anytime, anywhere

On his way to the country of arrival, Mr. Smith can fill in all the information requested by the border agency.





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## **Border crossing equipment:** Digital. Secure. Seamless.

Facilitating the flow of travelers and streamlining the border control process are key to optimizing efficiency at borders.

The combination of fixed and mobile front-end solutions maximizes throughput while keeping the highest level of security without having to expand resources.

Designed as a combination of equipment—eGates, selfservice kiosks, handheld devices, smartphone-based solutions. and eCounters—supported by operational and technical monitoring systems, these solutions address all border environments (air, land, sea) and traveler profiles.

Driven by accurate, fair, multibiometric technologies, these front-end solutions must support border guards to focus on their core mission rather than performing cumbersome and repetitive tasks.

Going beyond traditional legacy approaches, innovative solutions have to be considered. They help extend automation to a wider range of travelers, including families, assisted passengers, and individuals crossing by vehicle or bicycle, enabling more inclusive, efficient, and secure border crossings. In some configurations, even frictionless, on-the-move processing of multiple travelers is possible, allowing secure identification without stopping and significantly improving throughput while maintaining the highest standards of control.

#### **BORDERGUARD<sup>TM</sup>** front-end solutions

#### BORDERGUARD™ eCounter

#### BORDERGUARD™ Kiosk

#### BORDERGUARD™ Totem

#### BORDERGUARD™ Lane

#### BORDERGUARD™ Conveyance

#### **BORDERGUARD™ SmartLane**

#### **BORDERGUARD™ Capture SDK**

### Complemented by our leading biometrics devices:

MorphoWave™ TP (fingerprint—contactless)

OneLook™Gen2 (iris and face)





#### A long-lasting partnership with the Australian Department of Home Affairs

In 2004, the Australian Department of Home Affairs (DHA) entrusted IDEMIA Public Security with the deployment of its cutting-edge automated border control system at eight international airports.

In 2019 and 2021, DHA demonstrated its confidence in IDEMIA Public Security by agreeing to upgrade airports' outdated arrivals systems with advanced biometric technology, locally known as the end-to-end Gen3 border solution.

This project was carried out in two phases. Phase one, in 2019, consisted of the replacement of the existing kiosks with BORDERGUARD™ Kiosk and the refurbishment of the existing eGates. Phase two, in 2021, involved the installation of new eGates, BORDERGUARD™ Lane, with advanced biometric functionalities and capabilities.

Through premium biometric technology, the end-toend Gen3 border solution allows the Australian Border Force to stay at the leading edge of technology, border security, and passenger experience.



#### A comprehensive border management system for Iceland's air and sea border crossing points

In 2020, the National Commissioner of the Icelandic Police (NCIP) and Isavia selected IDEMIA Public Security to support the modernization and transformation of Iceland's borders in compliance with the European Entry/Exit regulation.

Iceland has been among the earliest Member States to deploy a comprehensive Entry/Exit solution, leveraging IDEMIA Public Security's BORDERGUARD™ suite, to offer a faster and safer border clearance at airports and seaports.

As the technological partner, we provided a modular and scalable Entry/Exit System (EES), BORDERGUARD™ Intelligence, ensuring continuous interaction between the European EES and the National Uniform Interface. To complement the EES, a local biometric engine, BORDERGUARD™ MBSS, has been implemented for fast, accurate, and fair multibiometric identification.

In addition, a wide range of fixed and mobile border crossing equipment has been provided—selfservice kiosks, eGates, mobile solutions, and manual eCounters—supported by operational supervision and the relevant maintenance services.



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## Border management: Person-centric. Scalable. Modular.

Effective border control relies on more than frontline infrastructure, it requires a centralized, interoperable system that connects national oversight with real-time local operations. Yet many agencies still operate on fragmented legacy platforms, where immigration, law enforcement, and transport data remain siloed, limiting coordination, delaying responses, and creating blind spots.

Modern border management requires a shift toward modular, person-centric systems powered by advanced biometrics, Al, and real-time data fusion. These next-generation platforms unify oversight across travelers and transport modality, transforming static checks into dynamic, intelligence-led processes. Built on scalable, modular, and cloud-ready architectures, they offer the flexibility to deploy stand-alone capabilities or integrate them into a comprehensive national system, depending on operational needs.

This adaptable approach allows authorities to standardize workflows, have better understanding of travelers' movements, and enable border guards to make insightful decisions based on the traveler's complete profile, all while maintaining operational continuity and improving coordination across agencies.

#### BORDERGUARD™ Intelligence

National border management platform with centralized control and real-time intelligence, offering:

- Unified situational awareness: one platform for real-time oversight
- Al-powered decision making: intelligent rule enforcement and risk alerts at every border crossing
- Flexible, future-ready architecture: modular, scalable design with seamless integration into legacy systems

Powered by our flexible, high-performance multimodal Automated Biometric Identification System—BORDERGUARD™ Bio Matcher—for accurate, fast, and fair identity verification:

- Latest-generation algorithms: powered by artificial intelligence for better results
- Robust to real-life conditions: ensuring
   high performance in all types of environments.
- Designed for scale: ensuring seamless performances even during peak demand



## United Arab Emirate's multibiometric Entry/Exit program

Given one of the fastest-growing economies in the Middle East and a highly mobile population, effective and efficient border control is a matter of both national security and economic growth in the United Arab Emirates (UAE). The country turned to IDEMIA Public Security to launch its eBorders program, a comprehensive border management solution with a multibiometric Entry/Exit system.

Building on a long history of implementing innovative solutions, the UAE's Ministry of Interior (MOI) wished to include face, iris, and fingerprint biometrics in its eBorders program. With an integrated traveler database, the program's backend system interfaces with the MOI's systems for background checks in national law enforcement databases. This ensures maximum security at the border while offering a seamless experience to bona fide travelers.

Today, airports in the UAE can process more than 15,000 passengers per hour at multibiometric Automated Border Control eGates, thus reducing waiting time and allowing staff to focus on their core tasks.

¹ https://www.unwto.org/news/international-tourism-recovers-prepandemic-levels-in-2024



#### A centralized matching system for the Schengen Area

Europe is the most visited region in the world, with 747 million travelers in 2024. Since the creation of the Schengen Area in 1995, there has been free circulation of people and goods, eliminating border control at internal borders between Member States.<sup>1</sup> One major benefit is that a short-term visa granted by any Schengen country is valid throughout the Schengen

The biggest challenge for the EU visa management system is ensuring that a non-EU visitor who is refused a visa by one Member State cannot apply for visas from other Schengen countries.

That is why the Directorate-General for Migration and Home Affairs of the European Commission turned to IDEMIA Public Security in 2011 to implement a Biometric Matching System (BMS).

In 2020, IDEMIA Public Security was selected by the European agency, eu-LISA, for the design and implementation of the new shared Biometric Matching Service (sBMS), one of the largest biometric systems in the world, along with its partners Sopra Steria and Accenture. This EU central BMS, launched in May 2025 with the Visa Information System (VIS), serves the identification needs of the EU, and aims to fight irregular immigration and transborder crime.

The sBMS embeds our best-in-class multibiometric search engine BORDERGUARD™ MBSS, which is designed to provide high accuracy and availability. IDEMIA Public Security is proud to participate in Europe's initiative to make the continent more secure by leveraging the power of biometrics.



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## Risk assessment system: Anticipated. Targeted. Actionable.

Risk assessment has become a cornerstone of modern border operations, enabling authorities to anticipate threats before they materialize. By analyzing advanced passenger data—such as API, PNR, and other relevant information collected from air, land, and sea carriers—governments can shift from reactive control to proactive targeting. This allows border guards to focus on high-risk individuals without disrupting the journey of legitimate travelers.

A well-designed passenger data system supports this shift by uncovering patterns, anomalies, and potential threats in real time. It empowers agencies to make faster, more informed decisions, even before departure using real-time data exchange (iAPI) while staying compliant with evolving regulations.

Designed for flexibility, short deployment cycles, and interoperability, such systems can integrate with open-source environments and adapt to national requirements, supporting both strategic and operational objectives in passenger risk management.

#### BORDERGUARD™ Targeting

Smart analytics for efficient risk assessment at borders

- Proactive risk detection
   Anticipates threats early by analyzing passenger data from air, land, and se carriers
- Modular & scalable design
   Deployable as stand-alone modules or a
   full system, easily integrated into existing
   environments
- Advanced analytics
   Supports smart profiling, targeting, and investigation to focus on high-risk individuals
- Real-time operational insights
   Delivers live dashboards and boarding
   directives to support timely decisions.
- Regulatory readiness & global reach
   Aligned and compliant with ICAO Annex
   9, UN Resolutions, IATA, and the EU API
   Directive, and already connected to 200+
   airlines



## A Public-Private Partnership API-PNR program for Kazakhstan

To improve the country's border security and be better equipped to combat transborder crime, the Government of Kazakhstan decided, in 2019, to put in place a comprehensive API-PNR solution.

They turned to IDEMIA Public Security to provide a ten-year Public-Private Partnership (PPP) program. In this agreement, we have been entrusted to build, operate, and then transfer a turnkey API-PNR solution, including:

- API-PNR data collection and processing
- · Smart data analytics
- Interfacing with national and international security systems

A local joint venture, named Qazaqstan Identity & Security (QIS), has been created with a local partner to make this project a success.

Since the implementation of the PPP, the system has collected data from up to 40 different airlines and processed annually up to 12 million passengers crossing through Kazakhstan borders.

Thanks to the high quality of the airline data gathered and processed by IDEMIA Public Security's risk assessment solution—BORDERGUARD™ Targeting—the Government of Kazakhstan can now strengthen its borders and increase national security.



#### An end-to-end API-PNR solution for France

France is one of Europe's most popular tourist destination. This is why border control represents a major security challenge. Not only does the French government need to know who is entering and exiting at all times, but French law enforcement agencies aim to prevent, detect, and investigate criminal activity and terrorist threats, while maintaining efficient passenger flow facilitation systems.

To this end, the French government chose IDEMIA TAS—a sophisticated and automated risk assessment solution designed to detect persons of interest and identify suspicious patterns, all in full compliance with legal requirements as well as EU PNR directive and privacy regulations.

Using flexible and standardized connectors, IDEMIA TAS collects data simultaneously from up to 230 airlines and allows secure real-time data sharing between ten French government agencies. They represent 70 passenger information units and more than 200 secure workspaces. Overall, up to 3,500 end users and operators will process some 1 billion records over five years.

With IDEMIA TAS, French law enforcement agents now have the advanced, automated crime-fighting tool they need to detect risks and threat patterns in real time from a huge and growing volume of passenger



