Travel and identity document verification forms an integral part of sensitive processes like enrollment and registration, as well as in situations where certified identity is crucial—such as at border stations or during bank transactions. Reliable verification is vital to combating identity fraud and related criminal activities.
Tackling ID fraud efficiently

Identity theft profoundly affects the public and private sectors worldwide. In 2013, according to Javelin Strategy and Research, one incident of identity fraud occurs every 3 seconds in the United States. Clearly, there is a growing need for reliable identity document verification, to enable public and private organizations to combat fraud and adhere to best practices in compliance with international laws and regulations.

Coesys Document Verification is a distributed software system that automatically verifies the electronic and physical security features of identity documents. Passports, visas, ID cards, driver’s licenses and many other identity documents can be checked against templates that are stored in a database, administrated centrally and automatically synchronized into all local repositories.

More than just software, Coesys Document Verification is a fully customizable editing platform that enables our customers to pilot each and every verification action on any identity.

As part of our Coesys Border and Visa Management suite, Coesys Document Verification can be deployed together with our biometric identification solution to determine whether the document bearer is the rightful owner.

Coesys Document Verification also addresses the needs of the private sector (telecoms, currency exchange, money transfer, post offices, car rental companies and more). It can be delivered as a standalone application or a software development kit (SDK) that integrates into a proprietary or third-party system.

In particular, Coesys Document Verification enables financial institutions to adhere to compliance requirements laid out by OECD’s Financial Action Task Force on Money Laundering (FATF) regarding customer identification and data recordkeeping.

Main objectives of our customers today

- Mitigate risk of identity fraud and its inherent security, financial and reputational losses
- Implement a future-proof system flexible enough to keep up with the demands of changing infrastructures, technologies, document standards, security feature and attempts to perpetrate fraud
- Ease of use with the peace of mind of automated, reliable checks
Automated checks for every document
Automated checks for every document
Verifying identity documents is becoming increasingly more complex. Border authorities and public and private administrations face the challenge of detecting suspected fraud on various types and versions of documents (passport, ID card, driver’s license, etc.) from an array of issuing countries.

With Coesys Document Verification, each document type and version is recognized. Dedicated checks on electronic and physical security features are performed automatically. Combined with high-resolution reference images, our solution provides unmatched results identifying counterfeit documents and accepting genuine ones.

Every document—whether paper or electronic, ICAO-compliant or not, old or new—can be verified automatically using our solution.

Distributed updates
The identity documents are checked against reference information [templates] that are stored in a database, administrated centrally and automatically synchronized into all local verification stations. With our solution, no need to manually install updates on each workstation. Our distributed model is unique and provides an easy way to update reference information whenever or wherever you decide.

Take ownership of the solution
Customers have complete control over templates, which they can customize by adding documents at will or even focusing on specific documents. Forensic experts can use our administration tool as part of their methodology to enable border officers to benefit from their knowledge and experience. While many other solutions on the market offer black box systems, none offers the same level of autonomy and control.

Agility to meet existing needs
> Coesys Document Verification can be deployed as a standalone solution, coupled with identity verification for full-range inspection systems, or interfaced with national and international information systems and databases (Interpol) for risk assessment.
> Our solution’s compliance with international standards enables easy integration with existing and legacy systems.

Flexibility and scalability to fight emerging fraud
A Gemalto template is not just a set of document characteristics, but rather a set of actions to carry out during verification. To fight emerging fraud trends, these sets of actions can be re-evaluated and adjusted for specific documents. Administration of the document templates then becomes an essential tool to ensure continual adaptation to fraud threats.

Hardware agnostic
All solutions are built hardware-agnostic to ensure independence from past or future suppliers. This guarantees the flexibility to select the best document scanner for a given need, today and into the future.

Ease of use
Coesys Document Verification’s fully automated document identification and verification, automated distribution of updates from the central location to verification workstations and its intuitive graphic user interface (GUI) deliver genuine ease of use for both operators and administrators.

Built-in privacy and protection
Information security is built-in to all levels of our Coesys Document Verification solution, ensuring protection and privacy of all sensitive information during data acquisition, handling, communication, storage, and deletion.

Key benefits of Coesys Document Verification

Is the document authentic?
Step 1: Start
The officer or bank employee takes the document and places it into the scanner.

Step 2: Identification
Data are extracted and the passport or document is identified: country, type, version, etc.

Step 3: Verification
The document is referenced and checked against the corresponding template in the database. Specific verification actions are performed to verify data integrity, the electronic chip and security features.

Step 4: Visualisation
Overall and detailed results are shown, together with data extracted from the chip, datapage, bar code and MRZ.
What Coesys Document Verification delivers

Coesys Document Verification offers convenience with highly reliable automated verifications

Automated document identification (country, type, version)
Automated verification of the electronic chip, which is supported by an interface to the established PKI systems
Automated data integrity check (MRZ vs. datapage vs. chip)
Automated photo integrity check (datapage vs. chip)
Automated verification of security features under all given light sources (visual, UV, IR, co-axial): presence and absence of patterns, UV dull paper, UV ink pattern, photo replacement, retro-reflective laminate, optically variable devices (OVD), etc.
Extracted data and verification results are automatically presented to the viewer and, where necessary, uploaded to back-end systems
Centrally administered document repository with high-resolution and optimized images

Coesys Document Verification packaged for private and public sectors

The solution is part of our Border Management and Visa Management suites. It is embedded in our

Automated Border Control product.
The solution can be packaged as a standalone application or an SDK for integration
Its flexible architecture enables customization to suit any customer deployment configuration.

Coesys Document Verification provides the ultimate control for your organization

The administration module allows documents to be added to, deleted from or adjusted in every document template. Customers can fully control and monitor verification operations.
Documents unique to organizations and governments—such as employee IDs, birth certificates, utility bills, specific government-issued documents and more—can also be added.
Access management for operators based on user, role, workstation, and/or site is also supported, using strong identification mechanisms.
The fully distributed solution is supported by a truly scalable platform.
**Experience and services for an end-to-end solution**

Mobilize our experienced service teams to support you. Our expertise and best practices—derived from our involvement in programs for national governments and major financial institutions and telecom operators—will be key assets for the success of your project.

**Gemalto professional services to benefit from:**

- Experience-based solution design
- Rigorous project management
- Fast and seamless system integration
- Efficient deployment
- Complete knowledge transfer
- Operation support
- Operated services

**Expertise under a single roof**

With the acquisition in 2005 of Setec—formerly Finland’s National Printing House—Gemalto has a background in secure government printing dating back to 1886. Our printing expertise includes banknotes, stamps and identity documents. Gemalto has produced millions of conventional and electronic identity cards, passports, driver’s licenses and healthcare cards, working closely with law enforcement and border authorities to develop security features and document design.

As the leading provider of electronic documents worldwide—over 25 ePassport programs and over 25 eID initiatives to date—Gemalto is uniquely positioned to offer you the most suitable document verification solution, whatever the document type.

In addition, Gemalto actively contributes to the work of standardization bodies and organizations such as the International Organization for Standardization (ISO), American Association of Motor Vehicle Administrators (AAMVA) and International Civil Aviation Organization (ICAO). This is why your document verification solution will always be up-to-date and fully compliant with the latest standards.

In April 2013, Gemalto joined forces with Avalon Biometrics, consolidating the group’s position in document verification.

Each company brings unique expertise to the secure document verification market. Gemalto’s strength lies in secure document expertise and its solid industrial footprint, while Avalon Biometrics’ core competencies span software and platforms for document verification. The two companies have been working together for many years. As one entity under the Gemalto name, they have now set out long-range plans and objectives.

**Ghana**

In 2013, Ghana entrusted Gemalto with its e-Immigration system, central to the eGhana project - an ambitious plan to create a modern IT infrastructure that can support sustainable development in the years ahead. The issue of migration and document verification have never been more at the forefront. Coesys Document Verification is an integrated part of the e-Immigration system, deployed now on each visa and border stations, as well as at headquarters.
Croatia

In late 2010, Gemalto was chosen to upgrade Croatia’s border control system with Coesys Document Verification and a fully mobile version of Coesys Border Management system to run in biometric handheld devices.

Our local partner, IN2 Croatia, turned to us to provide a secure quality assurance solution for the manufacturing of the Croatian passport. Coesys Document Verification has been deployed by the National Printing House (AKD) to analyze and validate all personalized passports prior to issuance.

High-profile European bank

In 2012, Gemalto signed on as prime contractor with a high-profile European bank (name confidential) to deploy Coesys Document Verification at each branch location. Each station is connected to a central document verification repository that will hold more than 2,000 travel and ID documents.

The central system is connected to each agent station to provide document repository updates as well as to perform management and operational reports.

New customer demographic data, which are captured automatically from the document, are entered directly into the bank’s enterprise management system.

The project is now up and running, with over 1,000 Coesys Document Verification workstations enabled.