ePassport components and solutions for government printing works

For seamless electronic passport migrations

A comprehensive range of ePassport components and issuance solutions to suit your individual requirements.
Sealys Inlays transform conventional passports into an ePassport
Sealys Inlays hold ePassport electronics and the embedded antenna:
➢ The ePassport application and OS run on a microprocessor
➢ Contactless communication is enabled by the embedded antenna
➢ The eCover includes both the cover material and inlay; manufacturing process steps remain unchanged

When moving from traditional chipless passport to ePassport, electronic personalization adds a new step to issuance. Data that have already been visually personalized will be encoded onto a microprocessor.

Choice: Inlay or eCover
The ePassport Inlay: all you need to go electronic
➢ For attachment to cover before binding
➢ Chip and antenna housed in synthetic paper inlay
➢ Gemalto expertise and support available for integration of inlay into booklet
➢ Just a single additional step to incorporate into production

The eCover: go electronic with ease
➢ For immediate incorporation into binding line
➢ Chip and antenna housed in inlay and attached to cover
➢ Cover material upon your choice, qualified by Gemalto
➢ No changes are necessary to the existing production process
Sealys Inlays are based on field-proven technologies such as Teslin® for inlay layers and copper wire for the antenna.

Thanks to cooperation with leading suppliers of cover material, such as ICG Holliston, Fibermark and BN International, Gemalto offers a wide selection of cover materials. You can choose either textile or paper cover material with suitable adhesives.

**Sealys eDatapage for high-end security and durability**
For government printing works wanting to produce fraud-resistant passport booklets with high quality personalization features and security elements, Gemalto offers Sealys eDatapage. Made of 100% polycarbonate, Sealys eDatapage offers long lifespan due to fused polycarbonate material with an integrated hinge, tamper-resistant laser engraving personalization as well as fraud prevention from built-in, leading-edge security features, such as Sealys Window or Sealys Secure Surface. It can be supplied with or without a chip, according to your needs.

**Long lifetime up to 10 years thanks to superior durability**
Sealys ePassport components sustain the real-world stress of stringent day-to-day use and thus have a long lifetime up to 10 years in the field. This is ensured by rigorous durability requirements surpassing ICAO standards. Gemalto tests more cycles and greater strain than specified by ICAO in-house test laboratory as well as performs additional tests not covered by ICAO. Enhanced durability translates into fewer field returns and more satisfied citizens, who can enjoy the swift border crossing enabled by a functional chip.

**Stringent durability requirements**
Gemalto sets higher target levels beyond standards to deliver highest quality. For example:

➢ When it comes to high protection from visa stamping, the ICAO standard calls for 45 impacts. Gemalto tests with parameters 10 times higher.

➢ To test pocket bending—which determines that the ePassport can withstand the stress of wear inside a back pocket—the ICAO calls for 20 bends whereas Gemalto tests 2,000.

**Secure and reliable manufacturing**
Gemalto operates several state-of-the-art manufacturing sites worldwide. Production environment, security and quality processes are certified by ISO 9001, 14001, 14298, 27001 in addition to BSI-PP-0017, BSI-PP-0026 for ePassport inlay production as well as Visa & Mastercard. Business continuity is ensured by dual sourcing of key components and backup inlay supply.

Thanks to industrial integration and world-class supply chain, Gemalto has the capacity to deliver large volumes to support national ePassport rollout and offer a high degree of responsiveness for shortened lead times. Leveraging large volumes and efficient material supply Gemalto can offer optimized lead times for unexpected peak demand.
Security, interoperability and performance

The secure embedded software must strike a perfect balance between security, interoperability and performance.

Gemalto’s in-house developed embedded software has a strong set of Common Criteria Evaluation ratings (EAL 5+ for SAC and EAC) and supports a wide range of algorithms and long key lengths. Sealys eTravel is one of the fastest products on the market, according to recent international test sessions, where it is 20% faster than the average reading time. The main interest of performance is faster personalization at time of issuance and faster verification at time of border crossing. It is also among the most interoperable products. No issues have been reported to date by the 30 customers who have used our products for the last decade.

A continually upgraded platform for increasingly enhanced performance

Gemalto’s secure embedded software is available on several silicon platforms, offering interchangeable microprocessor sources for guaranteed delivery, transparent at personalization and at usage level.

Chip platforms are upgraded on a regular basis, with performance improvement and constant security enhancement such as improved mechanism for anti-eavesdropping.

Gemalto’s participation in standard bodies enables to rapidly integrate the latest technologies, such as SAC and the forthcoming LDS2 for speedy time-to-market, thus providing you the latest products at the earliest opportunity with the lowest risk.

Gemalto has been delivering its secure embedded software to 30 national ePassport programs.
Support and seamless migration
Migration to electronic passport with Sealys ePassport components is seamless thanks to Gemalto’s extensive knowledge of passport manufacturing and physical and electronic issuance. Dedicated support facilitates all steps of migration. At later stages, passport issuers can address upgrades to security and expansion of functional requirements with peace of mind.

Gemalto has strong know-how and full control over the complete value chain, offering you convenience with one-stop shop approach. This significantly mitigates risk for a government agency seeking to roll out ePassports.

Smooth issuance of ePassports with Coesys Issuance Solutions
Coesys Issuance Solutions consist of the combination of software, hardware and integration services delivered by Gemalto, enabling you to personalize and issue ePassports and other secure documents while adapting to any legacy infrastructure. It offers a modular approach tailor-made to suit your individual needs and rely upon proven technology that has already been used on many successful projects worldwide. Thanks to being equipment-agnostic it works with all major brands of personalization equipment. Its flexible design is suitable for both centralized and decentralized issuance. Gemalto’s integration and consulting services teams worldwide are ready to support you in project implementation.

Experienced trusted partner
Gemalto has extensive experience in the passport and ePassport business:
> 150 years of experience in security printing and passport booklet manufacturing
> 30 years of experience in secure embedded software development, Common Criteria certification and development of personalization solutions and issuance services
> 20 years of experience in polycarbonate datapage production
> 10 years of experience in ePassport inlay manufacturing

Gemalto currently provides products, solutions and services to over 30 countries worldwide.
A few of our customer implementations

**Turkey**

Gemalto is supplying its Sealys eCover for ePassports to Darphane, the Turkish Mint & Stamp Printing House. In 2010, Gemalto was selected for the Turkish ePassport personalization program and deployed the Coesys Issuance personalization solution. As of 2015, Gemalto now delivers a complete end-to-end passport service, offering Darphane a one-stop implementation plan.

For Turkey’s 75 million citizens, electronic passports are issued for new applications as well as renewals as of June 1, 2010. More than two million ePassports are issued each year.

**Algeria**

In May 2014, Gemalto announced that it has been chosen to provide the Algerian governmental agency Hôtel des Monnaies de la Banque d’Algérie with its Sealys eCover for ePassports and embedded eTravel software to support the country’s ePassport program, as well as to increase its production capacity.

The embedded Sealys eTravel software is ICAO Common Criteria certified and achieves industry-leading speeds for both personalization and secure data access. As a result, Algeria will benefit from improved personalization performance and cost reduction of ePassport issuance. In addition, Gemalto’s Sealys eCovers meet the durability and quality requirements of the Algerian program, thanks to their excellent wear resistance over the lifetime of the ePassport.

**Singapore**

In Singapore, Gemalto has been providing its ICAO-compliant operating system and its highly durable electronic cover since 2006. The project was awarded to a consortium led by NEC solutions Asia Pacific in March 2005. The team included SNP Security Printing Pte Ltd as the local passport booklet manufacturer, NCS Pte Ltd, a local application developer and Gemalto.
Indisputable proof of identity now in high-definition color for passports

The security printing industry has long pursued to unite the benefits of laser-personalized polycarbonate ID with the detail and richness of color photography. Color photo protected with overlay resulted in compromised passport integrity, while personalization at the time of manufacturing made issuance entirely inflexible. Now Gemalto makes it possible to print a high-resolution color photo directly inside the data page using laser personalization.

Sealys Color in Polycarbonate solution is available for Sealys eDatapage, offering an unalterable color image combined with the high security and exceptional durability of polycarbonate. For government printing works producing polycarbonate documents by themselves, Gemalto offers needed components with technical support for smooth integration into the manufacturing.
About Gemalto

Gemalto is the world leader in digital security with 2014 revenue of €2.5 billion.

In the public sector, Gemalto provides secure documents, robust identity solutions and services for governments, national printers and integrators, all in the aim of making life easier for citizens. Its products and solutions are deployed in more than 100 government programs worldwide.

Gemalto is contributing to more than 30 eID initiatives and 30 travel programs with specific expertise in border and visa management projects. The company is active in major eHealthcare schemes and numerous e-driving license and vehicle registration projects. Gemalto also collaborates with its clients to report and share best practices from around the world.

As experts of both documents and related solutions, Gemalto strongly supports the ICAO TRIP initiative and share the vision that there must be a global fight against fraud by securing all the links in the security chain.