

Turnkey implementation of ICAO compliant eMRTD

The practice

ICAO/OACI Regional Seminar Rio de Janeiro, April 2012

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**MORPHO,
A SAFRAN GROUP COMPANY**

AN INTERNATIONAL HIGH TECHNOLOGY GROUP

→ Safran, an International tier-1 Supplier of Systems and Equipment



Morpho strengthens Safran's position capitalizing on high growth Security Markets.

SAFRAN MARKET LEADERSHIP POSITIONS

Aerospace

No.1 worldwide

- Engines for mainline commercial jets (over 100 seats), in partnership with GE
- Helicopter turbine engines
- Landing gear
- Flight controls for helicopters
- Wheels and carbon brakes for mainline commercial jets

No. 2 worldwide

- For cryogenic propulsion

No. 4 worldwide

- Military aircraft engines

No. 1 in Europe

- Solid rocket motors for space propulsion

A world leader

- Aircraft engine nacelles
- Onboard power electronics
- Aircraft wiring

Defense

No. 1 worldwide

- Flight controls for helicopters

No. 3 worldwide

- Inertial navigation

No. 1 in Europe

- Tactical UAVs
- Optronics systems

Security

No. 1 worldwide

- Biometric systems and equipment
- Biometric ID documents
- Automated Fingerprint Identification Systems (AFIS)
- Explosive Detection Systems (EDS) for Hold Baggage

No. 2 worldwide

- Gaming Terminals

A world leader

- Smart Cards



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**MORPHO,
A GLOBAL SECURITY LEADER**

INTRODUCING MORPHO

→ Morpho:

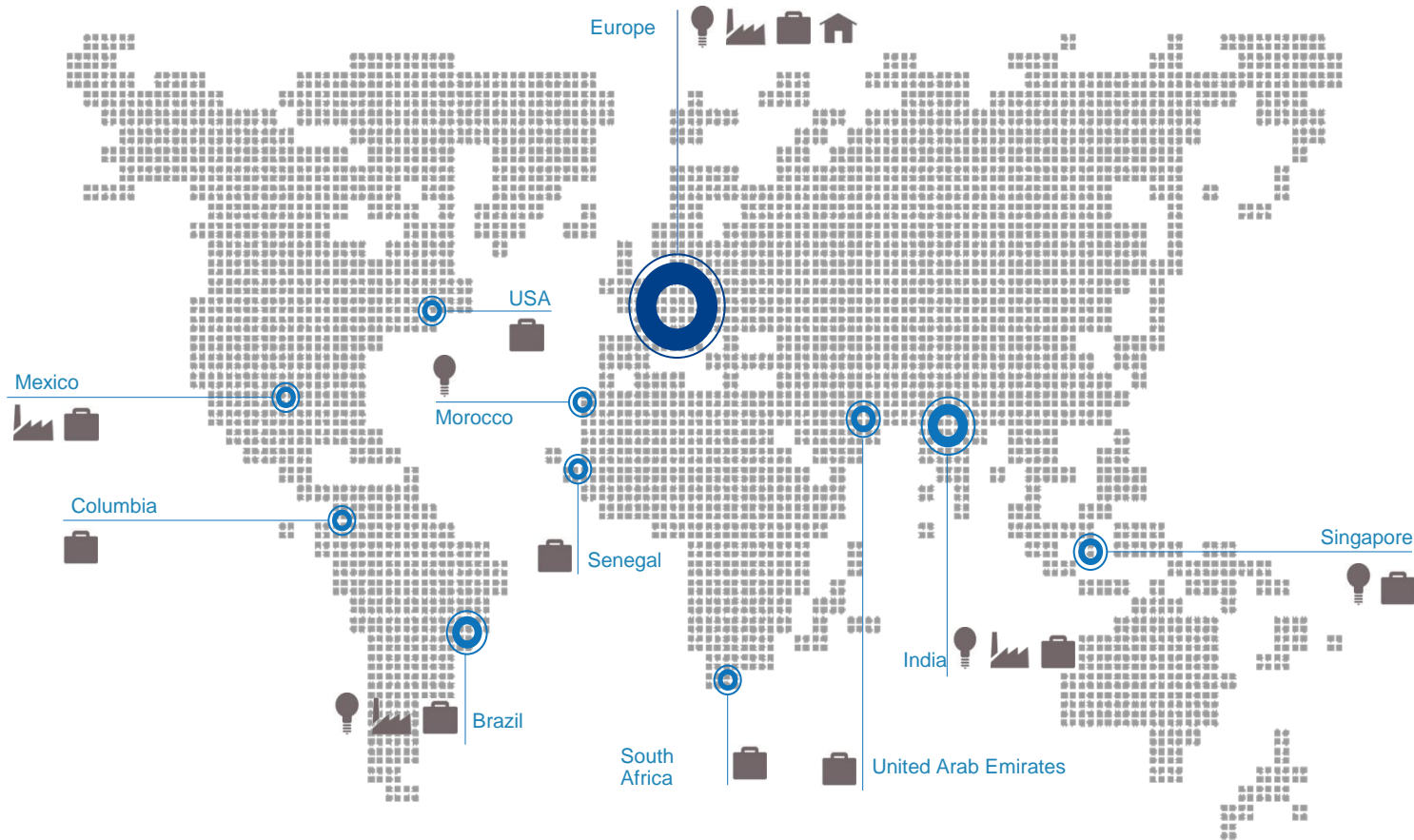
- Biometric ID documents
- World leader in multi-biometric technologies for fingerprint, iris and facial recognition
- Global leader in the smart card industry
- Acknowledged expert in identification and detection systems.



EMPLOYEES

7550 employees in over 40 countries (2011)

WORLD WIDE PRESENCE, MORPHO E-DOCUMENTS



Morpho Sucursal Colombia in Bogotá

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Document solutions

MORPHO DOCUMENT SOLUTIONS

DOCUMENTS

- ePassports: ICAO/OACI compliant
- ID cards & e-ID cards

DOCUMENT PERSONALIZATION

- Electronically and graphically
- ICAO/OACI compliant
- BAC, SAC, EAC

COMPONENTS

- Data pages in polycarbonate with/without chip
- Chip modules and operating systems
- Inlays

INFRASTRUCTURE

- Biometric terminals
- Enrolment & Issuance solutions
- Civil databases

IMPLEMENTATION MODELS

- **Full service provider**
- **BOT**
- **Public-private partnership**
- **Solution integrator (TURNKEY)**
- **Supplier of components**
- **Knowledge and technology transfer**

Some quality and compliancy requirements

- ICAO Doc 9303, part 1, machine-readable passports, fifth edition, 2003;
- ISO/IEC 7810, Identification cards – physical characteristics, 1995;
- ICAO NTWG, introducing biometric machine-readable travel documents, technical report, May 21, 2004;
- ISO/IEC published standard 19794-2,4,5, formats for biometric data exchange;
- ISO/IEC published standard 14443, identification cards;
- ICAO NTWG, development of logical data structure - LDS for auxiliary technology capacity enhancements, technical report;
- ICAO NTWG, PKI for machine-readable travel documents offering read-only access, technical report, v 1.1;
- ICAO NTWG, Amendment to Doc 9303 – ePassports;
- ISO/IEC 7816-4, Identification cards – cards with integrated circuits – part 4: Organisation, protecting and commands for transfer;
- Access control for machine-readable travel documents, preliminary proposal, 2004;
- ANSE/NIST-ITL 1 -2000 standard "Format of Data for Exchange of Information Concerning Fingerprints, Face, Scars and Tattoos"; FBI: Wavelet Scalar Quantization (WSQ) (biometric data volume compression);
- CWA 14890-1:2004, Application interface for smart cards used as devices for safe creation of electronic signature;
- ISO/IEC 7501-1 :1997, Machine readable passports;
- ISO 1073-2: 1976, Alphanumeric character sets for optical recognition - Part 2: Character set OCR-B -shapes and dimensions of the printed image;
- ISO 1831: 1980, Printing specifications for optical character recognition,
- ISO 8601: 1988, Data elements and interchange formats – Information interchange; Representation of dates and times;
- ISO 3166: 1993, Codes of representation of names and countries.

REFERENCES: PASSPORTS & SERVICES



Ireland



Netherlands



Switzerland



Mauritania



Albania



Finland



Slovakia



Croatia



Kazachstan



Romania

2012:
 ■ Chile
 ■ Panamá

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TURNKEY: The Albania Project

TURNKEY SCOPE

→ e-Passport (ICAO/OACI compliant) and e-ID card

- Design
- Development
- Production

→ Personalization centre (centralized, secure, full service)

- Design
- Development
- Commissioning hardware, software, infrastructure (ICAO/OACI compliant)
- Operation

→ Enrolment centres (private-public)

- Design
- Development

→ IT infrastructure

- Design
- Development
- Commissioning hardware, software, communications (ICAO/OACI compliant)





THE ALBANIA PROJECT, SUMMARY

→ Turnkey implementation:

- within time
- within budget
- ICAO/OACI compliant

→ **BASED ON MORPHO DOCUMENTS THE CITIZENS OF ALBANIA NO LONGER REQUIRE A VISA FOR EUROPE**

→ **CREANDO CONFIANZA EN EL MUNDO**

→ **CRIANDO CONFIANÇA NO MUNDO INTEIRO**

THANK YOU

