

The David & Goliath Challenge, High-secure documents for small volumes

ICAO Regional Seminar MRTDs, Biometrics & Identity management
St. Maarten, July 2013

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SAFRAN GROUP



Aerospace



Defense



Security



Morpho

July 2013

ICAO Regional Seminar St. Maarten

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SAFRAN: A WIDE RANGE OF HIGH-TECHNOLOGY PRODUCTS

→ Aerospace Propulsion

- Large and low-thrust jet engines
- Helicopter engines
- Rocket engine components

→ Aircraft Equipment

- Wheels, brakes, landing gear and associated systems
- Aircraft wiring and engineering
- Engine nacelles
- Power transmissions and power electronics
- Filtration and ventilation
- Ram Air Turbines

→ Avionics

- Inertial navigation units
- Flight controls
- Aircraft Information Systems

→ Security & Identification

- **MORPHO**



MORPHO INTRODUCTION

→ Revenues:

- € 1.3B in 2011

→ Global team:

- 7,550+ employees
- 40+ countries
- 85+ subsidiaries and branches

→ Worldwide solutions

- 450+ government agencies equipped
- Integrated solutions in 100+ countries

→ 35+ years' experience in biometric innovation

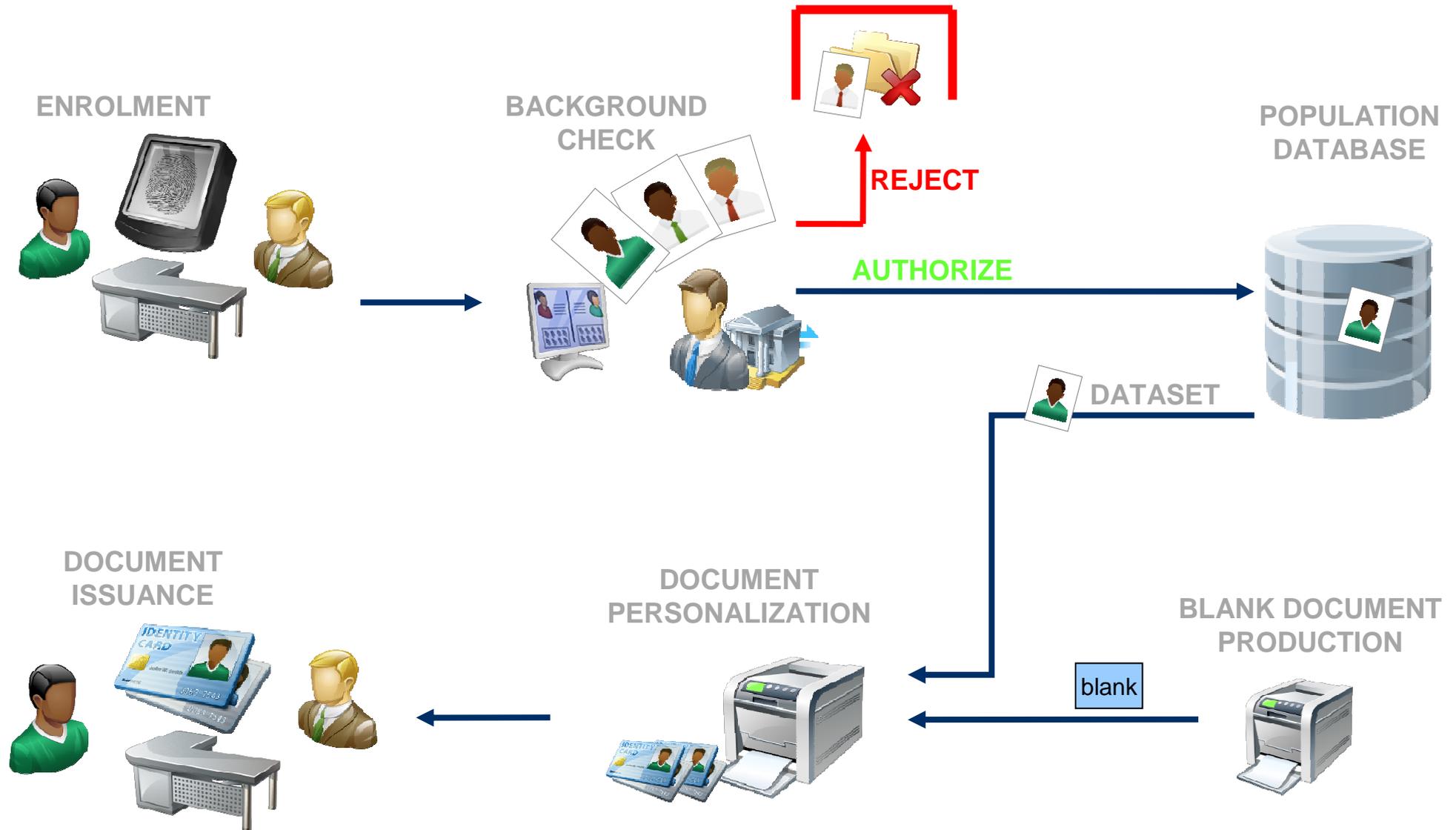
→ Main markets

- Passport & ID Documents
- Criminal Justice (AFIS)
- Civil databases
- Biometrics (finger, face, iris)
- Border Control
- Detection
- Road registration (vehicle based)

→ ID documents

- E-Passports
- E-ID cards
- Driver licenses
- Voting cards
- Health cards

MORPHO END-TO-END SOLUTIONS: ECOSYSTEM



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The David and Goliath Challenge

David's realities

- Independent country
- Limited number document applications
- Limited budget

Goliath requirements

- One person, one identity, one document
- High secure ID document (card body, perso, infrastructure)
 - International respect for both State and its citizens
 - Correct use of social services
 - Correct use of medical care
 - Correct voting
 - Others
- Security: national and international

HIGH SECURE DOCUMENT: ECOSYSTEMS

→ ECOSYSTEM

→ POLYCARB CARD BODY

- All security features
- Surface structures
 - Tactile relief
 - Lens structures

→ INFRASTRUCTURE

- Secure perso site
- Secure communication
 - personal data (dataset)
 - PKI, keys, certificates
- Local hardware
- Software

→ PERSONALIZATION

- Graphical
 - Laser engraving
 - Laser perforation
- Electronical (chip)
- Equipment
- Perso management software

→ CLASSIC ECOSYSTEM

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→ DAVID'S ECOSYSTEM

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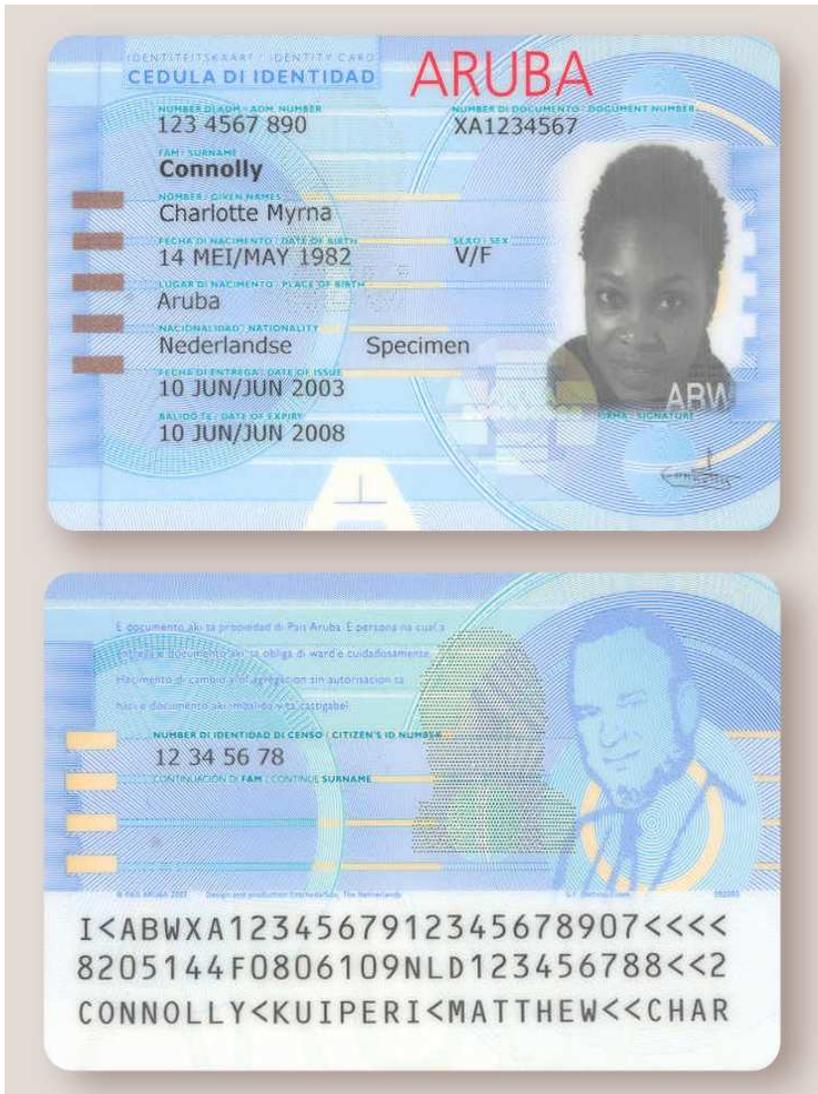
'ONE HAPPY ISLAND': ARUBA



- ✓ **Gross Domestic Product \$ 21,800 (2004)**
- ✓ **Population 104,494 (as of 2007)**
- ✓ **33 km long island, 193 km², area slightly larger than Washington DC**
- ✓ **In southern Caribbean Sea, 27 km north of Venezuela**
- ✓ **Country comparison to the world: 108**

'One Happy Island'

MORPHO: ARUBA CEDULA DI IDENTIDAD / BBSB



DAVID'S ECOSYSTEM

→ **CARD BODY**

- All security features
- Surface structures
 - Tactile relief
 - Lens structures

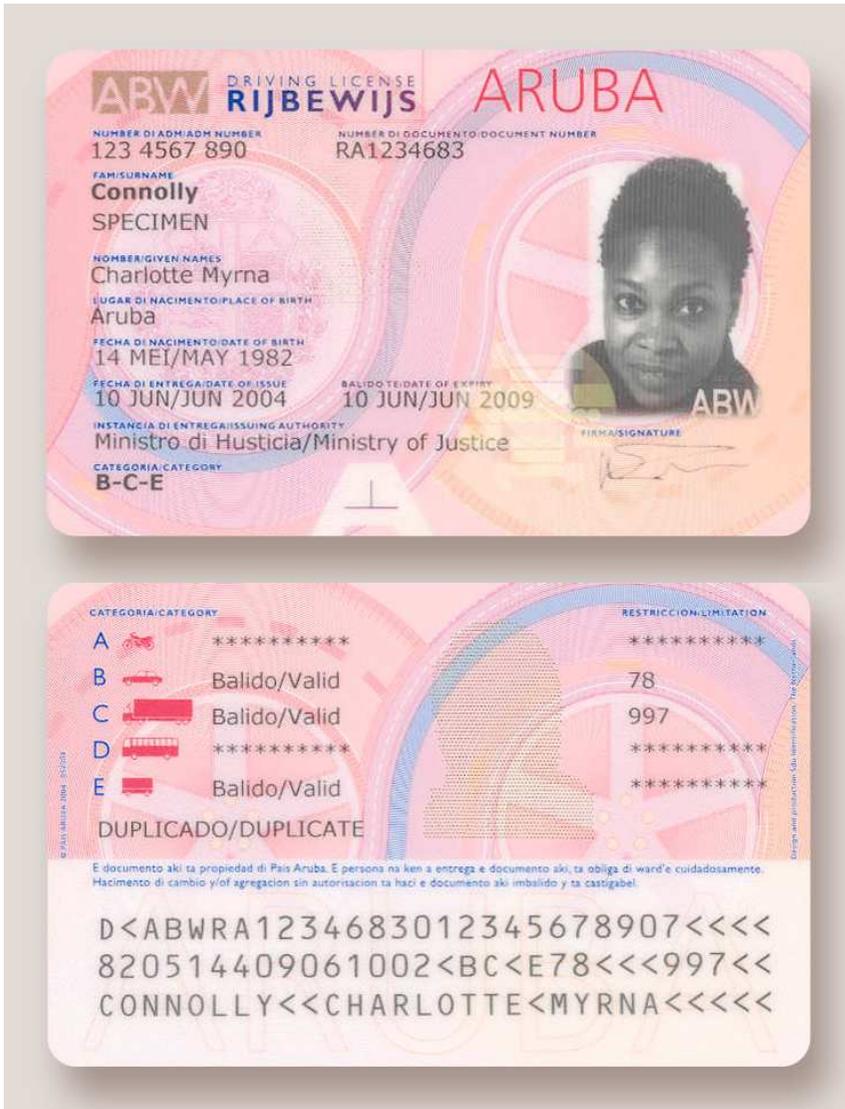
→ **INFRASTRUCTURE**

- Secure perso site
- Secure communication
 - personal data (dataset)
 - PKI, keys, certificates
- Local hardware
- Software

→ **PERSONALIZATION**

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- Electronic (chip)
- Equipment
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MORPHO: ARUBA DRIVING LICENSE / KPA



DAVID'S ECOSYSTEM

→ CARD BODY

- All security features
- Surface structures
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→ INFRASTRUCTURE

- Secure perso site
- Secure communication
 - personal data (dataset)
 - PKI, keys, certificates
- Local hardware
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→ PERSONALIZATION

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MORPHO: DOC MANUFACTURER & PERSONALISATOR

→ High secure site

- Physical security
- IT security
- Data communication
- Staff screening 100%

→ High-end document manufacturing

- E-passport with polycarbonate datapage
- E-ID cards
- Driving licenses
- Health cards

→ High-end document personalization

- Laser engraving
 - Electronic perso (chip)
 - Variable laser perforation
- image, data, secondary image, MLI/CLI, 3D
 - ICAO compliant, PKI keys, BAC, SAC, EAC
 - ImagePerforation, TLI, document number

→ Certificates

- ISO: 9001, 14001, 27001
 - Mastercard
 - Intergraf
 - ETSI
 - Others
- quality, environment, IT security
 - bank cards
 - security printing
 - certificate issuance
 - PKI keys, security IC's/CC, BAC, SAC, EAC



Morpho Haarlem, The Netherlands

Global references Morpho ePassports

Including new references 2013

Netherlands



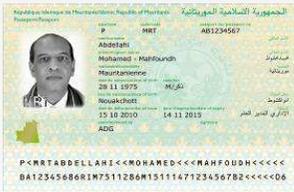
Panamá



Switzerland



Mauritania



Chile



Croatia



France



Albania



Finland



Slovakia



Interpol



Romania



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DAVID'S SOLUTION TO THE GOLIATH CHALLENGE

- Local document application
- Apply strict one person = one identity screening and application
- Chose high secure document: polycarbonate
- Allow approved applicant dataset to be send outside country, encrypted
- Outsource personalization to recognized high secure central facility
- Receive personalized document
- Issue ready document to applicant

THANK YOU