



Mauritania integrated ePassport Project

JW ter Hennepe
Sales Manager
Morpho

October 10, 2012 – Montreal

BACKGROUND



A LARGE COUNTRY WITH A STRATEGIC POSITION IN NORTH AFRICA



MAURITANIA

★ 1,030,631 KM²

★ HIGH FOCUS HOMELAND SECURITY

★ POPULATION IS AROUND 3.4 M PEOPLE

- 800,000 people in Nouakchott
- Bilingual : Arabic & French



OBJECTIVES AND KEY DRIVERS



1

TO MODERNISE THE ADMINISTRATION

- Build up a reliable population registry (citizens and residents)

2

TO ENFORCE SECURITY

- Increase security and reliability at all steps:
enrolment, data processing, identity documents, identity control
- Implement connections between population registry, criminal AFIS and border control
- Introduce state-of-the-art tools and services

3

TO PROVIDE NEW GENERATION DOCUMENTS & SERVICES

- Protect citizen's rights
- Set up a Biometric passport
- Set up Smart cards (ID card, Resident card, Vehicle Registration card)
- Introduce new services



ENROLMENT in REGISTRY

ONE NATIONAL IDENTIFICATION NUMBER IN ALL DATABASES



A COMPLETE ENROLMENT PROCESS



ENROLMENT



OBJECTIVES

- To enrol the entire population aged > 15 (seniors first)
- Issuance of one national identification number for all data bases: NIN
- NO-HIT checking at enrolment and real time NIN issuance

PROCESSING



DATA BASE

- 10 fingerprints
- Portrait
- Signature
- Scanned supporting paper documents

OUTPUT



OUTPUT

- NO-HIT checking at enrolment
- real time NIN issuance
- Reliable data base
- Creation of checked and approved data set for ID documents

FULLY INTEGRATED SYSTEM



ENROLMENT



- Population
- Visa: Enrolment at consulates or at border
- Police

PROCESSING

- Civil AFIS (fingerprints, facial recognition)
- Criminal AFIS (with print and latent processing)
- Card Management System
- Visa
- Document request (smart cards and passports)

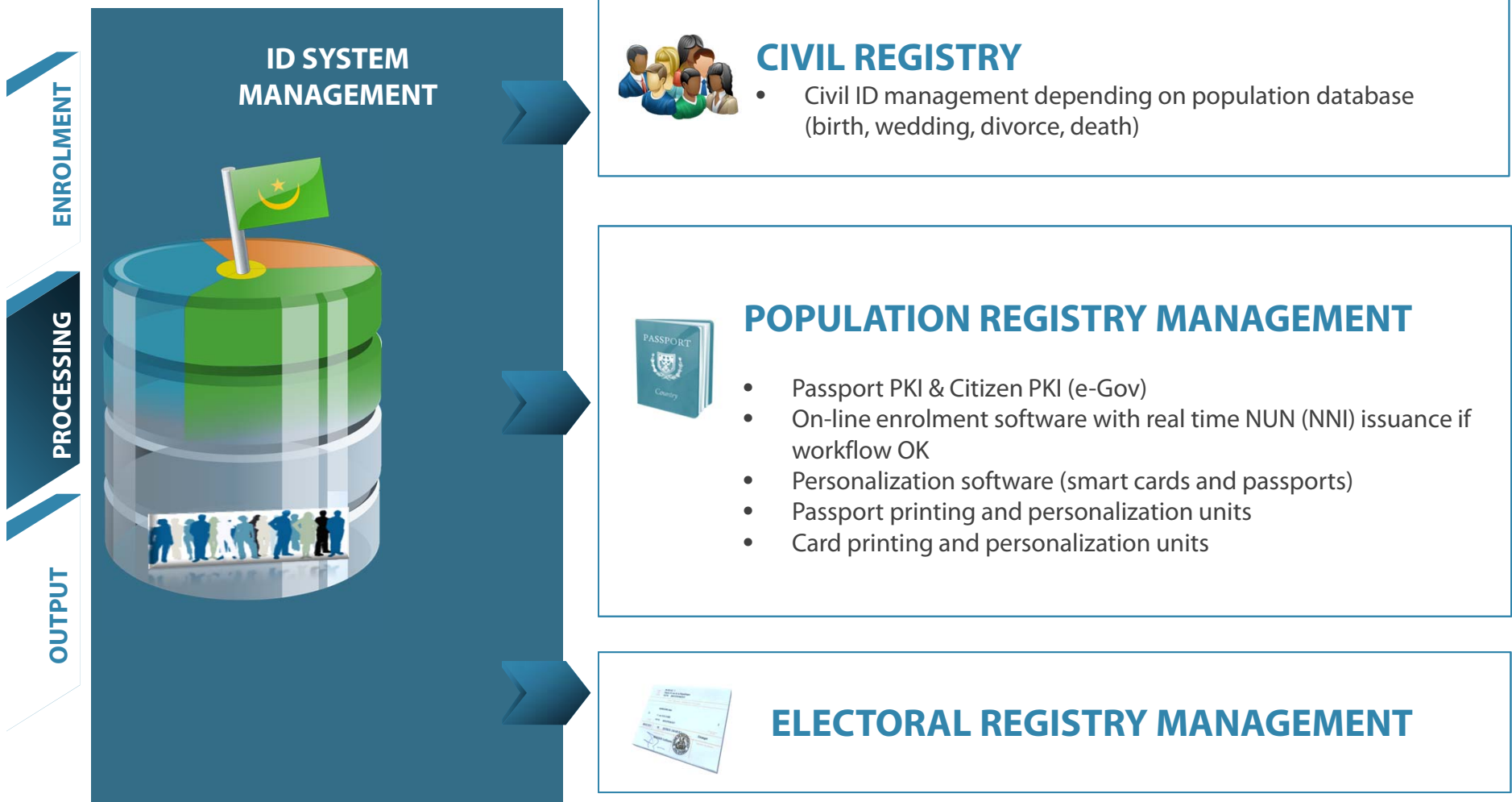
OUTPUT

(database & doc)



- Civil Registry and Electoral Registry
- Document personalization and issuance
- Multi-application biometric passport & smart card
- Public Key Infrastructures
- Visa: Visa issuance and Visitor Registry
- Equipment for document verification

KEY APPLICATION 1: REGISTRY



KEY APPLICATION 2: BORDER CONTROL



ENROLMENT

PROCESSING

OUTPUT

1

Biometric acquisition



* portrait and 2 index acquisition

2

Remote acquisition at consulate level



* biometric visa sticker (minutiae in 2D barcode)
* connection to the central registry for 1:N search

4

Visitor verification at the border



* biometric visa 1:1 verification at the border
* interface with civil registry: 1:N search in visitor registry at citizen enrolment

3

Local visitor registries with 1: N AFIS at the border



* enrolment of visitors without biometric visa
* linked to central visitor registry for synchronization



Passport development



STEPS IN DEVELOPING A CUSTOMIZED PASSPORT

- Agree on the technical specifications
- Make a new **graphical** design
- Get the design approved
- Make a new **security** design
- Get the security design approved
- Order production material
- Production of test passports
- Approval of test passports
- Production of live booklets

STEPS IN DEVELOPING A CUSTOMIZED PASSPORT

First customer meeting

- Agree the technical specs with the customer
- Discuss ideas/wishes from the customer in relation to the new documents
- Discuss ideas from the designer in relation to the new documents
- Texts that need to be printed in the new documents
- Planning

STEPS IN DEVELOPING A CUSTOMIZED PASSPORT

Agree on technical specifications

- Printing techniques and colors on
 - inside cover page
 - data page
 - visa pages
- Use of OVI and UV inks
- Use of intaglio/silk screen printing
- Paper specs (visa pages and inside cover page)
- Use of tactile relief, MLI and or 3D photo

STEPS IN DEVELOPING A CUSTOMIZED PASSPORT

Design meetings with the customer

- Several meetings
 - Approval of basic design
 - Approval of security design

Mauritania: Change in design at approval session security design

- RFC
 - Impact on design
 - Impact on timeline → new basic design for component

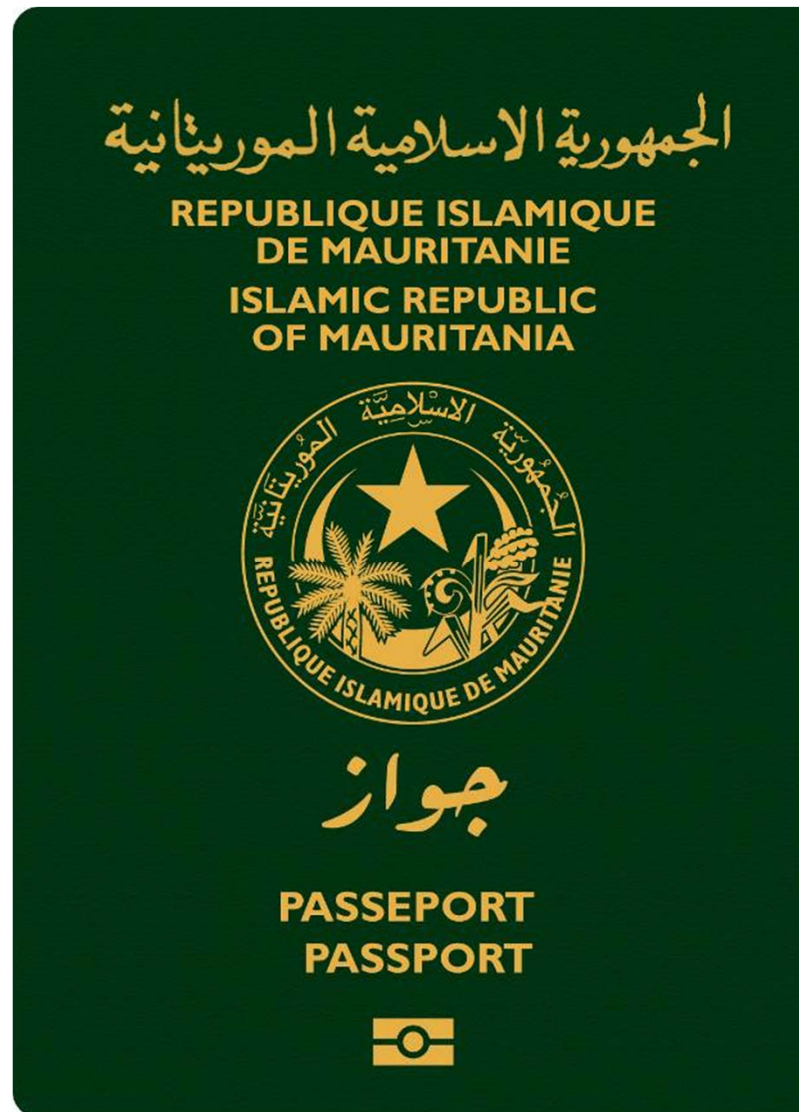
STEPS IN DEVELOPING A CUSTOMIZED PASSPORT

What we need before we can start preparing the production:

Approved security design, including:

- Printing on Inside cover, data page and visa pages
- Gold foil printing
- Relief on outside cover page
- Relief on data page (incl. MLI/CLI or 3D photo ID)
- Watermark
- Security strip in paper
- Sewing thread
- Kinegram[®]
- All texts

PASSPORT COVER



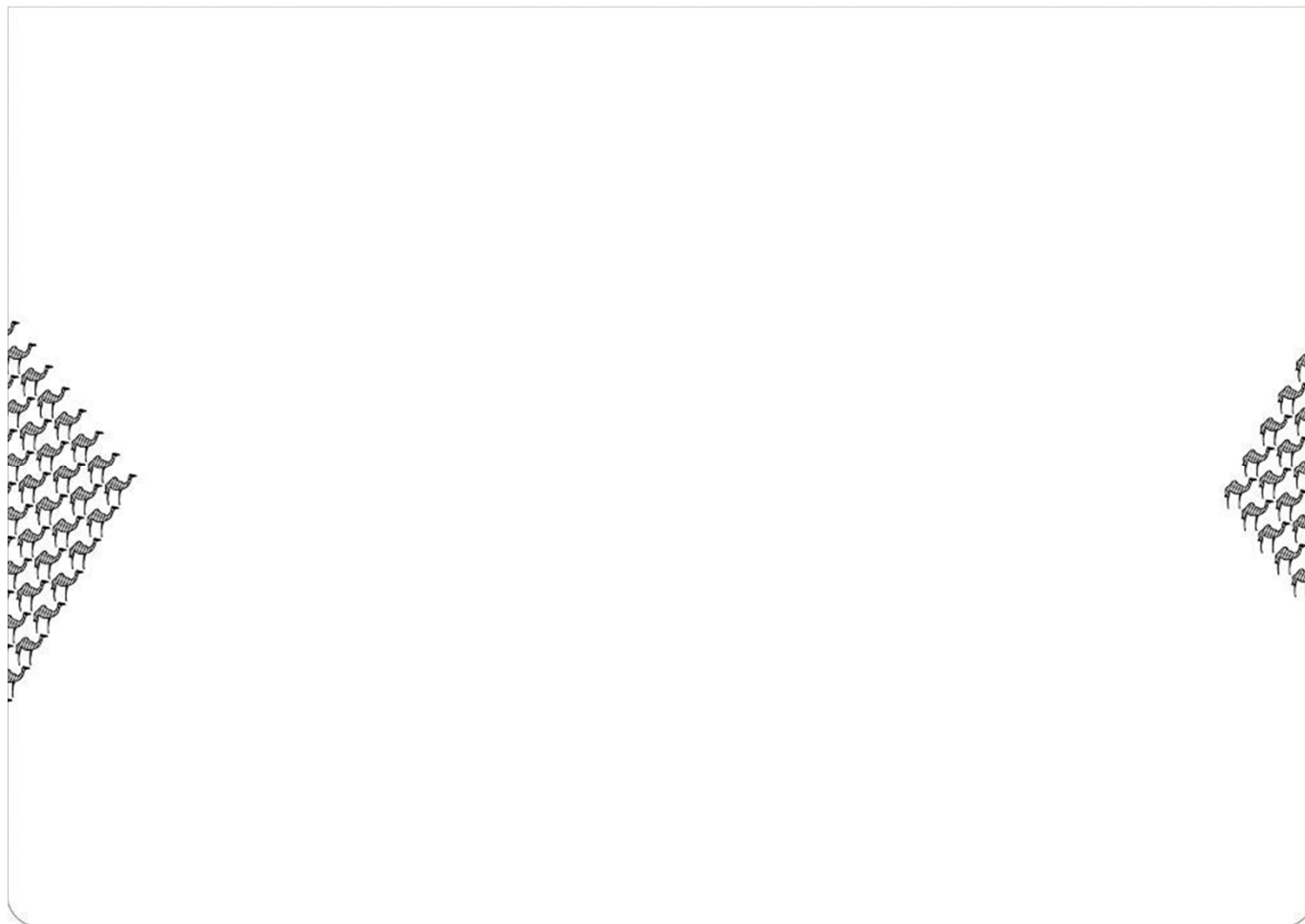
INSIDE COVER PAGE AND TITLE PAGE



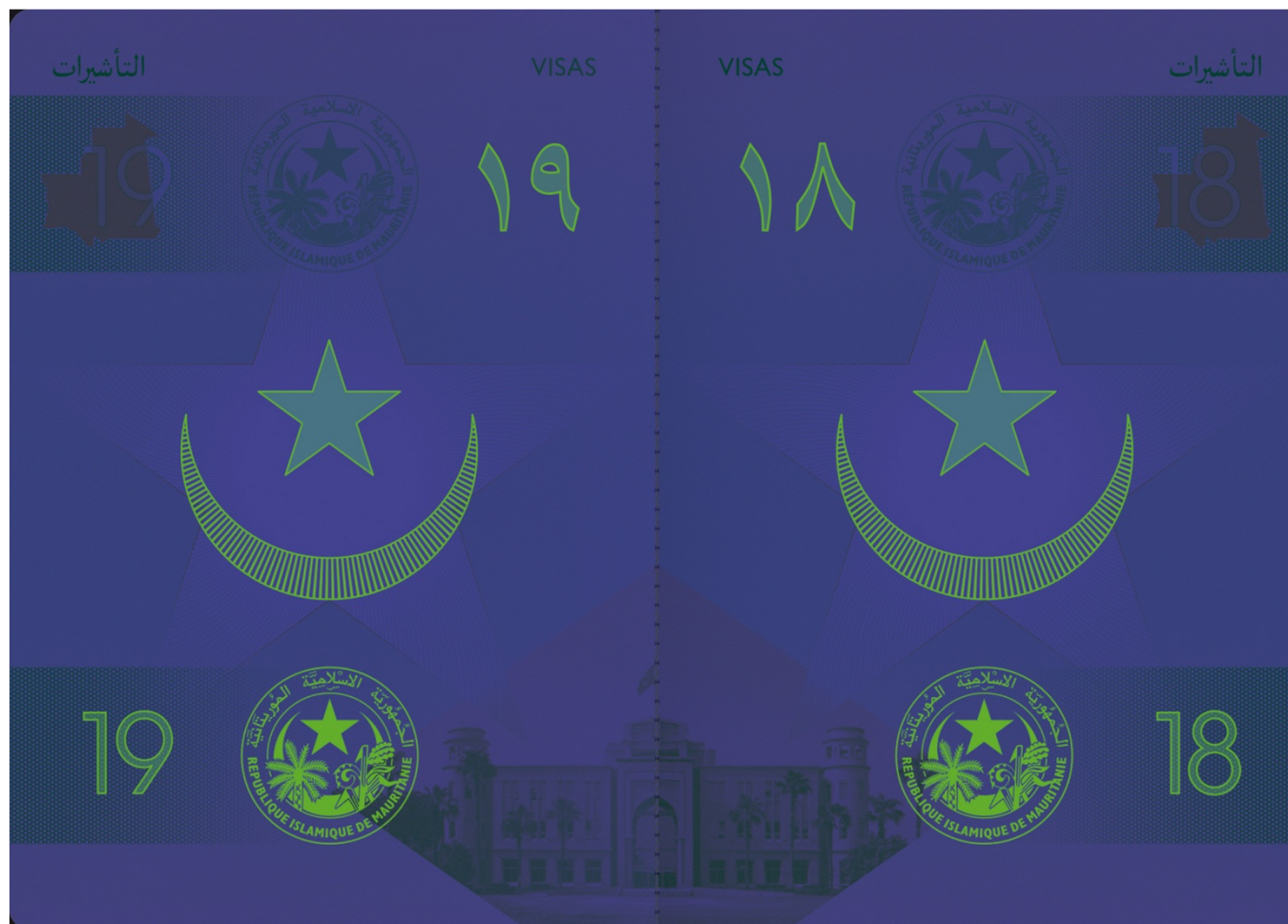
POLYCARBONATE DATA PAGE: UV

REpubLIQUE ISLAMIQUE DE MAURITANIE		الجمهورية الإسلامية الموريتانية	
PASSEPORT/PASSPORT جواز		رقم الجواز	
Type/Type النوع	Code/Code الرمز	Numéro du passeport/Passport number	
Nom de famille/Surname		الاسم العائلي	
Prénoms/Given names		الاسم الشخصي	
Nationalité/Nationality		الجنسية	
Date de naissance/Date of birth تاريخ الميلاد		Sexe/Sex الجنس	
Lieu de naissance/Place of birth		محل الميلاد	
Date de délivrance/Date of issue تاريخ الإصدار		Date d'expiration/Date of expiry انتهاء الصلاحية	
Signature توقيع المعني	Profession/Occupation المهنة	Autorité/Authority السلطة	

POLYCARBONATE DATA PAGE: TACTILE RELIEF



VISA PAGES: UV



KEY APPLICATION 3: IDENTITY DOCUMENTS ISSUANCE



ENROLMENT

PROCESSING

OUTPUT

Biometric Passeport

DATAPAGE



- Body in polycarbonate
- Bilingual Arabic-Latin
- Chip with contacless interface and 80 Kb EEPROM
- Extended Access Control (´ICAO´ EAC)

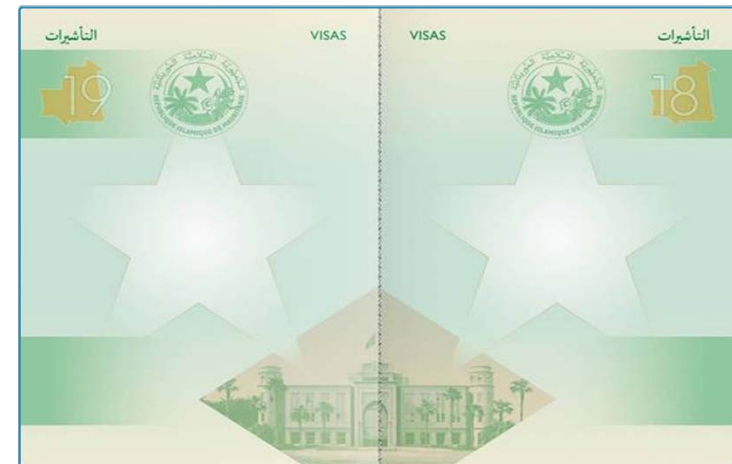
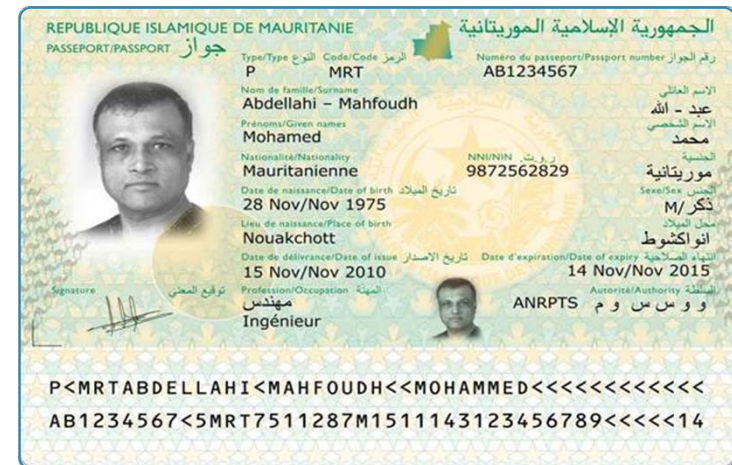


- Security features through pre-personalization
- Security features through personalization

BOOKLET



- Inner covers with security features
- Visa pages with security features





Project summary



MAURITANIA INTEGRATED SOLUTION & EPASSPORT



CREATION OF A RELIABLE POPULATION REGISTRY



IMPROVING DATA SYNCHRONIZATION AT GOVERNMENTAL LEVEL



PROVIDING AUTHORITIES WITH SECURED ACCESS TO DATA



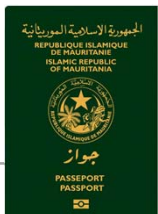
FACILITATE IMPLEMENTATION OF SECURITY SYSTEMS



BETTER DETECTION OF FRAUDULENT ATTEMPTS



PROTECTION OF CITIZEN'S RIGHTS



ICAO COMPLIANT ePASSPORT and other ID documents



THANK YOU