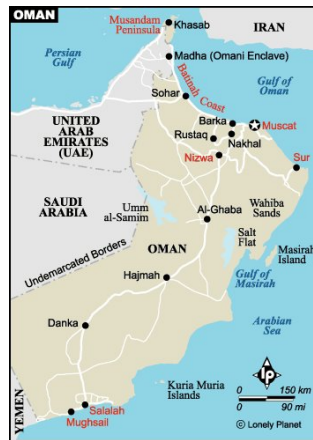


## National ID program in the Sultanate of Oman

**The Sultanate of Oman's national ID card program is the first smart card-based citizen ID solution ever to be deployed in the Middle East, making it a landmark project of its kind.**

### Background

The Sultanate of Oman, located in the Persian Gulf, has a population of 2,9M citizens and residents (2004).



Although 68% of the Sultanate's revenues derive from Oil, the economy also relies on non-oil producing sectors, such as agriculture, industry, tourism, mining and fishing.

### Program objectives

The issuance of Royal Decree n° 66/99 has established the constitution of a new Civil Status Register and the creation of an Electronic ID card. The Royal Oman Police (ROP), which is the local Omani authority managing the project, made a decision to launch a smart card-based ID program, not only to enhance the country's identification processes, but also to improve its IT infrastructure.

Main objectives of the program were to:

- Modernize the National Registry System
- Simplify and speed up administrative processes
- Provide better qualitative public services to Omani citizens and residents
- Pave the way to e-Government services
- Strengthen citizens' identification security

### Gemplus awarded contract

The ROP's objective was to build a state of the art solution and to offer best-of-breed services to the citizens and residents of Oman. After a strict and professional bid tender selection process managed by the ROP, in October of 2002, Gemplus was awarded the contract to deliver the first smart card-based identity solution ever to be deployed in the Middle East.



The contract appointed Gemplus to provide an integrated turnkey solution comprising of hardware, software and smart cards as well as training and skill transfer services to the ROP staff.

Over the next five years ROP will issue approximately 1,5 million Gemplus smart identification cards to Oman's citizens and expatriates above the age of 15.

### Smart chip benefits

In order to achieve its ID program objectives, Oman chose to capitalize on the security and convenience advantages enabled by smart chip card technology.

Smart cards provides the ideal means to store and manage identity credentials:

- Highest level of security with unrivalled storage capabilities
- Interactive technology with ability to update, delete, add and compute data
- Enables on-line/off-line authentication and digital signatures
- Bridges physical and digital worlds as the same card can be used for identification in both on- and offline mode



- Convenient form-factor capable of handling visual security printed features
- High durability of ID card
- Multi-application and post-issuance capabilities

### Solution components

Oman is using the relevant components of the Gemplus "ResIDent" ID Solution. They have been carefully customized

and integrated to meet the specific requirements and needs of the ROP:

- PET Card body
- Card body security features
- Smart card modules, OS and applets design
- Smart card readers (PC)
- Biometrics (fingerprint recognition) delivered by third party technology partner
- Enrolment solution (enable to capture demographics, picture, fingerprints etc.)
- Personalization services
- Consulting, Software Development, Integration, Training and Maintenance services
- Fully Arabic and English Software User Interface

### Building the system

One of the biggest challenges in the project was to build a National Registry System (NRS). NRS is the central population database that allows the country to build a record with data collected from different databases where data is stored per category, e.g. pictures, fingerprints, demographics etc. Previously Oman did not have such a population registry service in place.

Through the new National Registration System (NRS) authorities can now register details for each Omani and foreign resident (i.e. births, marriages, divorces and deaths), in a single centralized system.

Data is collected in real-time in regional offices (12 initially) where each citizen can receive his/her ID card within just half an hour.

The creation of NRS is an integral part of Oman's ID program, and will act as the pillar of the country's future e-government initiatives.

Based on the NRS, the country's regional enrollment & issuance centers possess the components to operate:

- Registration/Enrolment operations
- Civil Events Certificate Issuance (e.g. births, marriages etc.)
- Smart Card Personalization & Issuance

#### What does the card do?

The multi-purpose cards are fitted with a biometrics-based ID system for enhanced security and contain all the holder's particulars: name, address, fingerprints etc.

Cardholders are able to use their smart ID card in order to visually and electronically identify themselves at various authorities all over the country and through mobile terminals carried by the members of the ROP.



The ID card supports the following applications:

- Driving License
- Passport
- Work permit

Over time the very same ID card will be able to host additional applications, such as:

- PKI authentication & Digital signatures
- E-Purse
- Healthcare Card
- Electronic Voting

#### Obtaining the ID card

Getting the electronic ID card is quick and easy. The main steps involve, verification, registration and issuance, and takes place at the regional enrolment and issuance centers.

First, the authenticity of an individual's identity documents is verified. When validated the data is entered into the NRS. After reviewing the entered information the applicant signs the registration documents.

Next the applicants picture and fingerprints are captured and stored on the card. The card is finally issued and given to the citizen/expatriate.



Citizen ID card



Expatriate ID card

### **ID system based on Java®**

In full compliance with the current worldwide trend, the Sultanate of Oman selected chip technology based on Java Card™.

By using Open Platform technology, the ID cards become more versatile in terms of functionality, as it allows several applications to reside on the very same card.

Applications can easily be upgraded, removed or added onto the card over time, so called "post-issuance", giving the ID document a longer lifespan as it eliminates the need to issue a new card every time a citizen's personal information changes.

### **Mutual advantages**

Both the Omani government and its population can benefit from the establishment of its secure nationwide ID program:

- Improved Security
- Clean population database
- Streamlined administration
- Enhanced services to citizens
- Reduced identity fraud
- Enabler of e-Government applications
- Strengthen IT infrastructure
- Durable and versatile identification documents

### **Roll-out in 2004**

The ROP pursued an aggressive time plan that aimed for issuance of the first smart ID card beginning of 2004, with nationwide roll-out in the summer. According to schedule, the first card was issued to His Majesty the Sultan Qaboos bin Said himself on the 3rd January 2004.

### **Project success factors**

When implementing any nationwide ID program, there are multiple factors that need to be taken into consideration in order to achieve successful deployment that matches the customer's expectations. In the case of Oman, some of the key success factors were:

- Local presence
- Strong project Management & Organization
- Coordination of team & sub contractors
- Control customer requests within project scope
- Cross team efforts with the customer
- Skills transfer
- Full control of end-to-end Solution

## Helping our ID customers succeed

Gemplus puts strong emphasis on building a close relationship with our clients in order to develop a clearly defined strategy, which is key for the successful deployment of any nationwide ID project.

Through our long and proven expertise, Gemplus was able to design, develop and deliver a solution consistent with the Sultanate's requirements, while meeting the latest release of technology standards.

With dedicated teams all over the world, Gemplus is committed to offering a unique and aggressive roadmap, and is actively involved in the relevant standardization bodies

Based on our vast experience in the identity field, Gemplus is able to offer the support and direction necessary in order to benefit our customers.

Due to Gemplus's early presence in the ID market, we are perfectly positioned to offer our clients the guidance needed to define and enrich their service offering.

*"Gemplus was selected as the final vendor, due to their expertise and professionalism. They were selected according to very careful and stringent criteria. We are looking forward to work with Gemplus as partners and are keen to transfer the required skills for business continuity to our staff."*

Dr. Soulayman Al-Harthy, Director  
General of Civil Status, Royal Oman  
Police

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