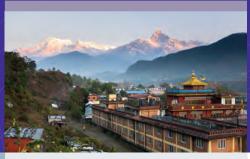# A Multi-Purpose Biometric eID for Nepal

Nepal is on a mission: The country embarked on a nationwide eGovernance scheme aimed at bolstering economic growth and alleviating poverty. The country's eGovernance Master Plan (2015-2019) involves, among other things, the digitalization of government services. Key to this digital infrastructure is the creation of an electronic national identity system, which will provide each citizen an eID for use across all eGovernment services. IDEMIA has been chosen to support this aim.

NEPAL

- **Population (2018 est.):** 29.71 million

- **Land mass:** 47,181 km²

- **Agriculture is the main economic activity**, employing about 65% of the population and providing 31.7% of GDP

- **1 million tourists** visit Nepal every year, estimated to create a revenue of $41 billion a year by 2025

IDEMIA

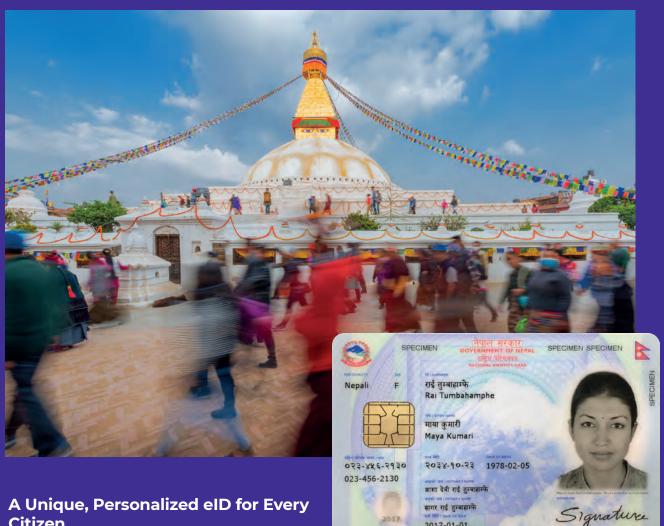## Key Aim: Secure Access to eServices through Biometrics

The national welfare system was one of the key use cases for the new national identity card identified by the Nepalese government. The previous system to access social benefits relied on live authentication of the citizen, making it vulnerable to fraud and money leakage. It was difficult to prove that the person in front of the official really was who the person claimed to be. Furthermore, the live authentication often required the use of intermediaries, opening up the system to the risk that the actual beneficiaries did not receive the full amount they were entitled to. Governmental eServices enabled and secured by biometrics in the national ID card were the answer.

The document had to meet critical criteria:

> Inclusion of the latest innovative security features

> Storage of multiple biometric data of the citizen, as large parts of the Nepalese population are manual laborers resulting in fingerprints that are hard to read at a higher age

> Data in the card had to be readable offline due to the limited network coverage in some of the remote areas of the country

A Plan to Digitalize Government Services

Nepal did not previously have a national identity document for its estimated population of 29 million people. Roughly 81% of them live in rural areas, according to the World Bank – far away from the cities where government service centers are located. Therefore, accessing these services may necessitate a long overland trip and even staying overnight in the city, increasing time, cost and inconvenience involved.

In 2015, Nepal developed an eGovernance Master Plan to bring its services online and provide convenient access to citizens nationwide. The plan encompasses a range of initiatives, such as improving internet access in rural areas and developing an eID.

With the eID, Nepalese have a secure and efficient way to authenticate their identities when accessing eGovernment services.

Key Figures

- **Project start:** September 2016

- **1 central system** in Kathmandu

- Photograph, **10 fingerprints and 2 iris captured**

- **1,000 enrollment stations** at the start; 3,000+ enrollment stations planned for a later stage, covering all Village Development Committees (VDCs), Municipalities and Metropolitan cities when fully deployed

- **50,000 enrollments** per day

- **1,000 cards** personalized per hour

- **20 million IDs** to be delivered

- **Capacity to store 30 million** enrollment records

SPECIMEN   नेपाल सरकार   SPECIMEN SPECIMEN
GOVERNMENT OF NEPAL
राष्ट्रिय परिचयपत्र
NATIONAL IDENTITY CARD

NATIONALITY   SEX
Nepali   F

सर | SURNAME
राई तुम्बाहाम्फे
Rai Tumbahamphe

नाम | GIVEN NAME
माया कुमारी
Maya Kumari

राष्ट्रिय परिचय | NIN
०२३-४५६-२१३०
023-456-2130

जन्म मिति
२०३४-१०-२३   DATE OF BIRTH
1978-02-05

आमाको नाम | MOTHER'S NAME
आशा देवी राई तुम्बाहाम्फे

बाबुको नाम | FATHER'S NAME
सागर राई तुम्बाहाम्फे

जारी मिति | DATE OF ISSUE
2017-01-01

2017

SIGNATURE
Signature

A Unique, Personalized eID for Every Citizen

IDEMIA, the world leader in Augmented Identity, has been chosen to work with the Department of National ID and Civil Registration (DoNIDCR) on providing the new eID cards to all Nepalese citizens over the age of 16 in continuation of their longstanding partnership.

Initially, the DoNIDCR and IDEMIA agreed on a phased approach to rollout the new identities. Fully operational in the country since November 2018, IDEMIA delivered 117,000 national ID cards through 66 enrollment stations, initially only capturing a photo, the personal information and ten fingerprints of the enrollee.

Due to the great success and smooth deployment of the project, the phased approach was quickly abandoned and IDEMIA was tasked to increase the capacity of its solution to deliver all 20 million new national IDs as quickly as possible.

"It is a major step in creating an ecosystem of trusted identities which promises to transform the lives of citizens, from the busy streets in Kathmandu to villages in the Himalayas. I would like to express my sincere thanks and appreciate the efforts and coordination put forward by IDEMIA to bring the project up to National Identity card distribution level."

Dipak Kafle,
Director General of DoNIDCR

Upscaling to Full Capacity

After the initial pilot phase, full deployment is now underway. Twenty million Nepalese citizens are to receive the new national IDs, which in this second stage will not only capture ten fingerprints but also the data of the two irises.

For this, IDEMIA is upgrading the national ID system to process national ID requests for the entire population. The existing Automated Fingerprint Identification System (AFIS) is changed to a multimodal biometric identification system (10 fingerprints and 2 Iris) and its capacity increased to de-duplicate and authenticate all citizens. IDEMIA is also enabling the nationwide enrollment of citizens with adequate infrastructures for the national ID system.

The Way Forward

The Nepalese government, together with IDEMIA, has a sophisticated plan to empower the new national ID card even further. When linked to an individual's bank account, the national ID can be used to provide e-KYC to service providers. Through its unique number, the card will also ultimately serve as the citizen's voter card, linking the national ID database directly with the Election Commission's database. The new national ID database will recreate the electoral database with the accurate biometrical data. IDEMIA is excited to accompany Nepal on this path.

Benefits

For the government
· Ensure the accuracy of citizens' information
· Delivery of comprehensive, effective and secure eGovernment solutions
· Reduction of fraud in social welfare scheme

For the citizens
· Easier, more convenient access to eGovernment services
· Secure identity verification, no duplication
· Secure access to social welfare scheme
· One card for everything: personal identification, travel, welfare access, vote, bank access