

Case Study

# TURKISH NATIONAL ID PROJECT



**Modality:**  
FingerPrint  
and PalmVein.



**Database Size:**  
80 million



**Client Name:**  
General Directorate of Population  
and Citizenship Affairs

## Problem Statement

The General Directorate of Population and Citizenship Affairs of Turkey wanted to collect biometric data of their citizens to make a smart ID card. They wanted to replace the old version, which was bigger and contained no information beyond the basic facts printed on them. They wanted to create a smart card that would include biometric data and all the personal information of the citizen. To do that they were looking for a solution that could accurately collect their 80 million citizens' data so that they could create a unique biometric smart card for their population.

## Client Profile

The General Directorate of Population and Citizenship Affairs is the national ministry for population and citizenship, headquartered in Ankara, Turkey.

## Challenge

There were several important reasons why Turkey's government wanted to create a unique biometric list of their citizens. The unique biometric list of the population would help the government to identify illegal citizens, mitigate crimes, and

ensure proper distribution of government facilities to the right person and to create a centralized database of the Turkish population.

## Solution

To ensure all these benefits, the General Directorate of Population and Citizenship Affairs was looking for a solution that could reach 80 million citizens and could collect their biometric data accurately. This solution needed to be fast and accurate and capture multimodal biometric data.

Working in partnership with M2SYS Technology, the General Directorate of Population and Citizenship Affairs chose the Bio-Plugin™ a biometric capture tool and matching engine to collect accurate biometric data of the population so that they could ensure proper government service to their citizens. The solution from M2SYS has many outstanding features. The unique features of this solution include:

- Biometric verification (1:1) and robust identification (1:N) and performance of live check
- Easily mix-and-match biometric modalities and devices without additional programming
- Remains focused on core competencies
- Saves time as system integrates within a couple of hours
- No system dependencies between host and biometrics software

- Avoids burdensome internal development and ongoing support requirements
- Scalable, high-performance matching server for large implementations
- Capable of matching 100 million fingerprints/sec
- Multi-modal biometrics system that supports fingerprint, finger vein, palm vein, iris, facial and voice recognition

M2SYS Bio-Plugin™ is a revolutionary biometric software development kit (SDK) that allows developers to rapidly integrate multi-modal biometric software for identification and perform a live check without the development work required for a low-level biometric SDK. Bio-Plugin™ allows its user to utilize fingerprint, finger vein, and palm vein biometric identification and its robust matching engine performs live check of the collected data.

## Benefits

By utilizing Bio-Plugin™ from M2SYS Technology, the General Directorate of Population and Citizenship Affairs was able to collect millions of biometric data points of their citizen. Bio-Plugin™ helped them to collect this data accurately and efficiently without any error or hassle. The system provides hassle-free deployment without any development work, which saves thousands of hours. Here are some major benefits that Bio-Plugin™ ensured:

- Captured and matched both the fingerprint and the palm vein of the citizen
- Accurately captured and matched a total number of 12 million fingerprint and palm vein biometric data points within just five years
- Provides built-in support for segmented database searching

## About M2SYS

With over a decade of experience and millions of end users in more than 100 countries worldwide, M2SYS Technology delivers innovative, scalable, and practical identity management solutions that increase security and convenience while saving money, building accountability and establishing a trust for governments and businesses around the world. M2SYS is ISO 9001:2008 Quality Management System (QMS) Certified Company and registered vendor for The United Nations Global Marketplace portal (UNGM # 377090).