



Biometric ID software for government field teams

Proekspert delivered software for Safran to collect, encrypt, and manage biometric ID data in challenging regions, integrating diverse hardware without costly redesigns.

Client

Safran is a global high-technology group headquartered in Paris, employing 100,000 people. Safran’s expertise in government biometrics and secure ID began with Sagem Sécurité, a pioneer in multi-biometric and security technology, and continued as Morpho. These capabilities now form Safran’s secure identification division, delivering advanced biometric and identity solutions for governments and regulated sectors worldwide.

Project duration

August 2005 – June 2009

Technologies

C#, embedded software, cryptography, role management, multi-device integration, secure data transfer

CASE STUDY

Accelerating secure citizen registration in demanding environments

Ensuring reliable government ID enrollment in the toughest environments

Safran (formerly Sagem Sécurité) leads in biometrics for government identity programs. Their teams work in places like West Africa, the Balkans, and Latin America – where climate, infrastructure, and politics constantly create risk for large-scale data collection.

The challenge: field kits built from laptops, fingerprint readers, cameras, and barcode scanners sourced from different vendors, using prototype or undocumented hardware. The goal was to run secure, compliant biometric enrollment and verification without any hardware overhaul or last-minute fixes.

Solving multi-vendor integration and security by software

Proekspert unified over 30 device types for Safran, building robust software to handle scanning, data encoding, encryption, and uploads – no matter how raw or unreliable the hardware. We took full ownership for integration, troubleshooting, and process design, investing 11,700 hours across 44 government-focused projects.

Delivered features:

- Reliable fingerprint scanning and verification
- Barcode capture for efficient process
- Encryption and signing for all sensitive files
- Upload to central databases even with poor connectivity
- User and role management for field and admin crews

Our approach let Safran skip expensive hardware redesigns and avoid operational panic. Software solved the problems, minimizing total cost, deployment time, and field risk.

Results: operational certainty and future leverage

Safran’s government clients deployed field kits across five countries, enrolling millions. The software enabled seamless field operations with prototype hardware, uncompromised data protection, and full compliance – even under unpredictable conditions.

Lessons from this project built Safran’s core expertise: they now deliver new biometric or security programs faster, reusing proven methods and code. That means more contracts and smoother scaling across sectors.

Impact for the client’s business

By removing integration risk and streamlining field deployment, Proekspert’s solution delivered measurable business value for Safran:

- Eliminated field failure risk: Reliable software integration enabled secure biometric data collection, even in the harshest environments.
- Cut deployment costs and delays: Enabled government projects to launch quickly without the need for expensive hardware redesign.
- Created leverage for future contracts: Built scalable expertise Safran now applies to new identity and security deals, reducing time-to-market.