Biometric Data Capture System
Committed to Defence

Biometric Data Capture System (BDCS) is a solution developed by Sopra Steria for the UK Ministry of Defence (MOD). The system has revolutionised the way in which access control to secure sites is managed. Designed to verify identity reliably and quickly, BDCS uses multiple biometric criteria to check and guarantee the identity of an individual.

The BDCS uses cutting edge technology incorporating the latest practices developed and delivered by Sopra Steria. It is an excellent example of Sopra Steria’s capability in the field of identity assurance and demonstrates innovative use of biometrics technology.
BCDS is a highly complex biometric solution for the MOD that is considered to be an important tool in securing Military facilities. It uses finger and iris recognition to positively verify individuals’ identities and consists of both static and mobile biometric components. The system is currently operational across 22 military sites with a core, forensic level, biometric database that can be extended as required.

A subject is enrolled onto the system by entering biometric and demographic details. During enrolment each iris, all 10 fingerprints and a facial photograph are captured. Biographic details, like surname and forename, are also collected. This data is regularly synchronised between the mobile and fixed systems to ensure that users always see the same, up to date, information.

Identity duplication checks are conducted by the system to prevent an individual registering more than once, an important step in the enrolment process. Following approval an individual is issued with an ID smart card displaying a facial photograph and biographic details. This card is used to access biometric information as required.

BCDS is being used to provide access control for entry into UK bases for locally employed civilians.

- An individual presents their ID card to the guard who will:
  a. Conduct a visual comparison of the ID card photo against the individual
  b. Use the ID card to access and verify biometric information
- The individual also looks into the iris camera for comparison with the loaded template
- The system will then verify the individual and provide a visual display to the guard to allow access
- BDCS will also display an alert if an individual is not allowed entry.
For mobile identity verification the solution includes biometric devices which are ruggedized and sized so they can be easily carried. The mobile multi-modal biometric device is capable of registration and verification functions including capturing:

- Both irises
- All 10 fingerprints
- A digital facial photograph and distinguishing marks
- Biographic alpha data.

Using its touch-screen display, information can be quickly input using the supplied stylus or entered whilst wearing standard military gloves. Identification is fast and efficient with an iris one-to-many search across the large onboard database taking only three seconds.

Operation

An operator can check an individual’s ID card, irises and or fingerprints and confirm a subject’s identity within a few seconds, which is key, with a throughput of several hundred people to be processed every hour by each operator station.

In the event that a card is lost or damaged, a subject’s record can still be accessed using alternative information, and the fingerprint check still provides the required identity verification.

If an individual attempts to gain access to a site using an incorrect or counterfeit ID card, this will be detected immediately by the system.

BCDS also provides a reporting facility allowing the operator to produce instant reports on individuals who have entered or exited the site over a specified period.

Service

The system is designed to provide a reliable, high availability security solution, with ease of maintenance to a particular priority, all supported by Sopra Steria’s ITIL-based IT service management expertise.
Sopra Steria in Defence

Sopra Steria has been a key provider of specialist systems and services to the Ministry of Defence (MOD) for over 30 years. Independence, broad capability and knowledgeable people with a reputation for operational and commercial flexibility have secured our position as one of the MOD’s top ten ICT suppliers.

Through our involvement in the LSRC, MJDI, UNICOM and EMS projects we have developed core solutions spanning secure systems, identity management, end-to-end logistics and operational environments.

Our focus is always on establishing strategic partnerships with our customers and delivering innovative, practical IT solutions based on our core capabilities which include:

- Security
- Systems Integration
- Infrastructure Services
- Enterprise and Network Management
- Business Process Outsourcing.

About Sopra Steria

Sopra Steria, European leader in digital transformation, provides one of the most comprehensive portfolios of end to end service offerings in the market: Consulting, Systems Integration, Software Development and Business Process Services. Sopra Steria is trusted by leading private and public organisations to deliver successful transformation programmes that address their most complex and critical business challenges. Combining high quality and performance services, added-value and innovation, Sopra Steria enables its clients to make the best use of information technology.

+ 37,000 people

+ 20 countries

+ 45 years’ experience