

ISO/IEC 24787-1:2024-06 (E)

Information technology - On-card biometric comparison - Part 1: General principles and specifications

Contents	Page
Foreword.....	iv
Introduction.....	v
1 Scope.....	1
2 Normative references.....	1
3 Terms and definitions.....	1
4 Abbreviated terms.....	3
5 Conformance.....	4
6 Biometric data handling and encoding.....	5
7 Architecture of biometric verification using an ICC.....	5
7.1 General.....	5
7.2 Off-card biometric comparison.....	5
7.3 On-card biometric comparison (sensor-off-card).....	6
7.4 Work-sharing on-card biometric comparison.....	6
7.5 Biometric system-on-card.....	7
8 Framework for on-card biometric comparison.....	8
8.1 General.....	8
8.2 Application selection using AID.....	8
8.3 Data for on-card biometric comparison.....	8
8.3.1 General.....	8
8.3.2 Format of biometric data.....	9
8.3.3 Specific data objects.....	10
8.3.4 Use of biometric reference for multiple applications (informative).....	12
8.4 Processes.....	14
8.4.1 Enrolment and re-enrolment.....	14
8.4.2 Biometric verification.....	14
8.4.3 Biometric comparison process and decision.....	14
8.5 Termination.....	15
9 Security policies for on-card biometric comparison.....	15
9.1 Minimum security policies for on-card biometric comparison.....	15
9.1.1 General.....	15
9.1.2 Minimum security policies.....	15
9.1.3 Retry counter management.....	15
9.2 Security policies for multiple on-card biometric comparison applications.....	16
9.2.1 Taxonomy of biometric comparison applications used in ICC.....	16
9.2.2 Security policy for universal verification mechanism (SP1).....	16
9.2.3 Security policy for shared biometric reference with independent verification mechanism (SP2).....	17
9.2.4 Security policy for independent applications (SP3).....	18
Annex A (informative) Sample APDU for on-card biometric comparison.....	19
Annex B (informative) Example for implementation of global biometric reference.....	22
Annex C (informative) Examples of security status transition model.....	27
Annex D (informative) Considerations for security mechanisms in on-card biometric comparison.....	30
Annex E (informative) Example of biometric information template including CBEFF-3 data elements.....	32
Bibliography.....	35