FREQUENTLY ASKED QUESTIONS (FAQs) ABOUT THE ECAC COMMON EVALUATION PROCESS OF SECURITY EQUIPMENT

1. General information about the CEP

1.1. What is the ECAC Common Evaluation Process (CEP) of security equipment?

The CEP is a joint testing programme of security equipment, organised and undertaken by ECAC Member States to provide a common reference for national administrations to certify/approve the security equipment deployed in airports, according to ECAC/EU performance standards.

The CEP determines whether the tested equipment meets the required ECAC/EU performance standards under laboratory conditions only.

1.2. Does ECAC issue certification for the piece of equipment that meets a performance standard?

No. ECAC communicates the test results for configurations that meet a valid ECAC/EU standard to the Appropriate Authorities of the forty-four (44) ECAC Member States. Certification/approval remains the responsibility of each ECAC Member State.

The ECAC Secretariat issues a Closing Letter to the manufacturer specifying whether a standard has been met and updates the ECAC CEP website with the lists of systems that meet the ECAC/EU performance standards.

As EU Regulation 2015/1998 (chapter 12.0.2.2) recognises the CEP as the main process to obtain the EU stamp, the ECAC Secretariat also transfers the test reports (level 1 and level 2) of the configurations that meet an ECAC/EU standard to the European Commission (DG MOVE).

1.3. Who recognises CEP results?

CEP results are recognised by all ECAC Member States. As ECAC lists are public, non-ECAC States and organisations may also use them to certify/approve equipment.

According to EU Regulation 2015/1998, chapter 12.0.2.2, security equipment endorsed by the CEP becomes automatically eligible for the "EU Stamp" marking and receives a temporary "EU Stamp – Pending" status until final approval.ICAO is provided with updated CEP test results, which are then listed on the ICAO AVSECPaedia website.

Non ECAC States also recognise CEP results and participate in ECAC technical meetings to support the harmonisation of testing procedures and standards.

1.4. Can a piece of equipment be considered under different categories of security equipment?

Yes, a piece of equipment can be considered under different categories of security equipment (e.g. EDSCB and LEDS), but it would need to be tested separately for each category.

1.5. Are items and consumables used by security equipment tested as well?

Yes. They are tested as part of the overall configuration, not independently. Before the test, all items and consumables must be identified and referenced.

Items and consumables used by security equipment that could affect its detection performance (e.g. trays, swabs) are integral part of the tested and approved configuration.

1.6. Where are the tests conducted?

Tests are conducted at various Participating Test Centres located in ECAC Member States.

Currently seven (7) Test Centres are participating in the CEP, covering one or more security equipment categories depending on their facilities and resources (the references below are concerning only Full Tests):

- Defence Science and Technology Laboratory (DSTL), United Kingdom;
- Fraunhofer Institut für Chemische Technologie (ICT), Germany;
- Forschung- und Erprobungsstelle der Bundespolizei (Federal Police Technology Centre) in cooperation with Fraunhofer ICT Energetic Materials - EM, Germany;
- Instituto Nacional de Técnica Aeroespacial (INTA), Spain;
- Service Technique de l'Aviation Civile (STAC), France;
- The Netherlands Organisation for Applied Scientific Research (TNO)
- Transportation Security Laboratory (TSL-United States)

The tests performed in each of the CEP participating test centres are depicted in the table below (September 2025):

Test Centre	APIDS	EDS	EDSCB	ETD	EVD	LEDS	MDE	SSc	WTMD
Defence Science and Technology Laboratory (DSTL-United Kingdom)	✓	✓* STD 3.1 -FT/SRT STD 3.2- SRT		✓					
Fraunhofer Institut für Chemische Technologie (ICT-Germany)	✓* SRT	✓	✓	✓	Scoping only	✓			
Federal Police Technology Centre (FPTC-Germany)	✓* SRT	✓* SRT only						✓	✓
Instituto Nacional de Técnica Aeroespacial (INTA-Spain)		✓* SRT only		✓	Scoping only			✓	
Service Technique de l'Aviation Civile (STAC-France)	✓* SRT	✓* STD 3.1 -FT/SRT STD 3.2- SRT	✓* C1 & C2-FT/SRT C3-SRT	✓			✓		✓
The Netherlands Organisation for Applied Scientific Research (TNO)	✓	✓	✓	✓	✓	✓		✓	
Transportation Security Laboratory (TSL-United States)		✓						✓	

1.7. Does the CEP involve operational testing at airports?

No, the CEP is a testing programme which tests security equipment under laboratory conditions.It usually does not include any operational tests at airports or any other aviation facilities with the exception of the EVD CTM that includes an aspect of operational testing at an air cargo facility.

1.8. What is the CEP Management Group?

The CEP-MG oversees the policy framework, implementation process (approval of test allocations, endorsement of testing methodologies and test reports, quality control activities of the CEP etc.). It consists from representatives of:

Contributing Authorities: ECAC Member States national authorities whose Test Centres participate in the CEP: **France, Germany, Netherlands, Spain, United Kingdom**.

Supporting Authorities: ECAC Member States provide resources such as financial contributions and/or other support**: Ireland, Portugal, Switzerland, Norway**.

Associated Authorities: non-ECAC Member State whose Test Centres participates in the CEP following the signature of a relevant MoU: **United States**.

1.9. How can a manufacturer access the performance requirements for security equipment?

They are classified as ECAC/EU Confidential. Manufacturers may contact their national Appropriate Authorities to access them.

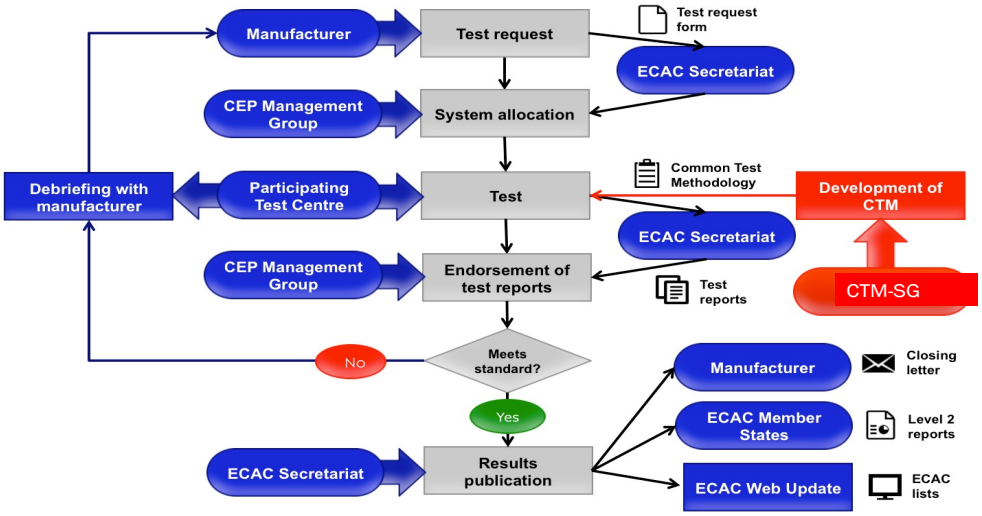
2. Testing process

2.1. What types of tests are conducted in the ECAC Common Evaluation Process (CEP)?

There are three main types of tests performed under the CEP:

- **Full Test (FT)**: It is conducted for equipment involving previously untested system hardware. It involves a comprehensive evaluation to verify the detection performance of the entire system.
- **Simulator Re-Test (SRT)**: This test is used for modifications to detection software only, such as the implementation of new detection algorithms.
  - It requires the use of raw data which were collected during a previous Full Test of identical hardware and with the identical common testing methodology.
  - Results may be impacted by missing or corrupted data and errors in the runtime simulator.
- **Configuration Change Management (CCM)**: This process is used for modifications that do not affect the detection capabilities of an already tested configuration. Typical changes include:
  - Updates to accessories or consumables (e.g. interfaces, computer hardware, batteries).
  - Introduction of new software features that do not involve detection algorithms.

2.2. Which are the steps involved in the CEP testing process?



2.3. What is the procedure to request a test under the Common Evaluation Process (CEP)??

The procedure involves the following steps:

- Submission of the request form: Manufacturers can submit requests for CEP testing of their equipment to the ECAC Secretariat using the test request form available for download on the official website. For any inquiries please contact the ECAC Secretariat cep@ecac-ceac.org.
- Review by the CEP Management Group (CEP-MG): The CEP-MG will consider the request during its next scheduled meeting (general timeline March, June, October each year), or sooner in case of an urgent request.
- Elements considered for the allocation: Test requests are allocated based on the availability of designated test centres, applying a rotation principle to ensure impartiality. Additional factors include:
  - Type of test requested
  - Test centre workload
  - Manufacturer priorities and timeframe constraints
  - Previous testing history
  - Efficiency (parallel testing)
  - Logistical and administrative considerations
  - Emerging security priorities

While test requests are typically allocated quarterly, Full Tests and SRTs may exceptionally be allocated outside meetings. CCM allocations may take place at any time following the established procedure.

- Test request approval (allocation): Once the request is approved, the manufacturer is notified through an allocation letter. This letter is sent to both the manufacturer and the designated test centre to enable them to proceed with the necessary contractual arrangements.

- Costs: The **ECAC administrative fee** does not include the cost of the testing, which is specified in the contract with the test centre performing the evaluation. According to the decision of the Coordinating Committee (CC/203, 17 November 2024), the CEP administrative fees as from January 2025 are as follows:

Type of Test	**From Jan 2024** ***(2022's + 5.8%)***	**From Jan 2025** ***(2024 + 2.5%)***
Full Test (FT)*	€4,761	€4,880
Simulator Re Test (SRT)*	€3,174	€3,253
Configuration Change Management (CCM) (Documental evaluation)	€1,587	€1,627
Configuration Change Management (CCM) (Changes on equipment critical elements)	€4,761	€4,880

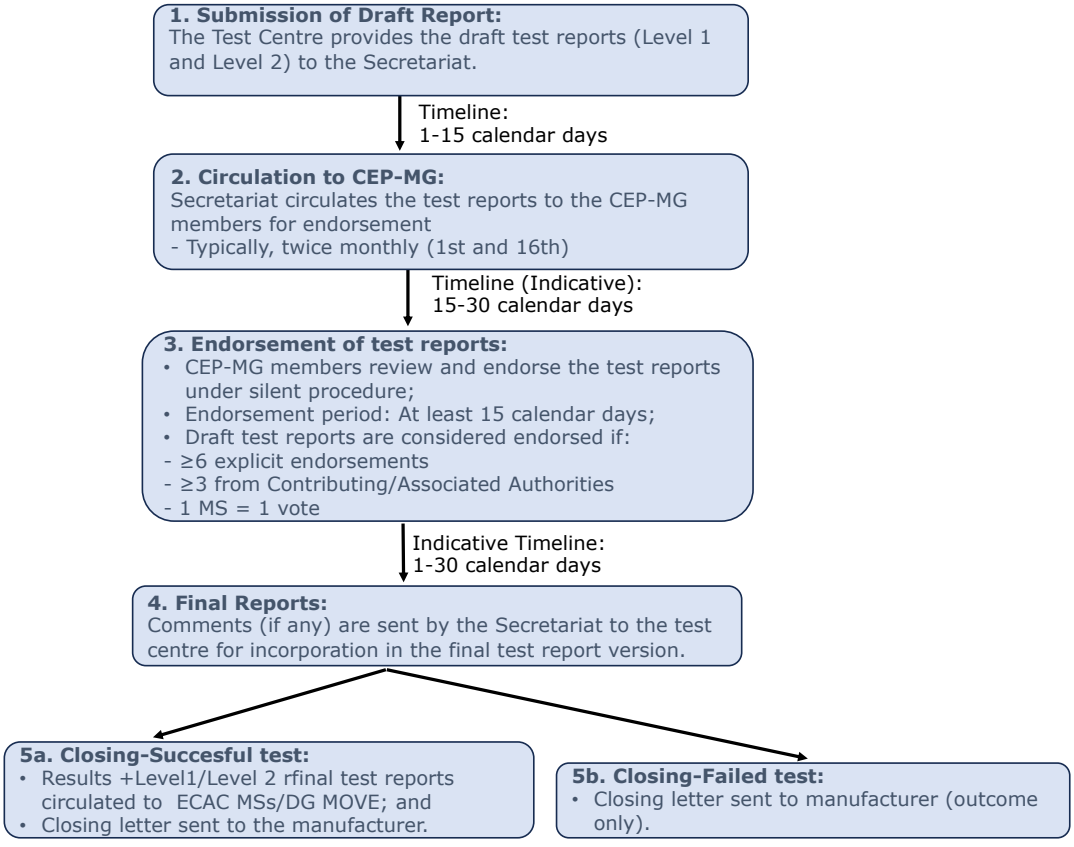
*The test allocation is valid for up to three configurations (Unique combinations of distinctive critical or potentially critical elements of detection hardware, auxiliary hardware detection software (i.e. reconstructing and/or detecting algorithms) and CONOPS).

2.4. What are the expected timelines of the testing process?

Timelines on allocations and conducting of tests may vary depending on the type of test and the availability of test centers (see question 2.3).

2.5. Once a test has been concluded what are the next steps and their associated timelines?

The next step following the test is the reporting/closing process. An overview of the reporting process with the expected timescales is depicted below:



- The **Closing Letter** is issued by the ECAC Secretariat to the manufacturer and it confirms only the completion of the evaluation and whether the equipment met the ECAC/EU performance standard or not.

2.6. Is it possible to request for testing against ECAC/EU standards (STDs) which are no longer valid?

As a general principle, as of 1 January 2022 the CEP-MG does not to accept requests for testing equipment against standards whose instalation is no longer allowed (e.g. EDS STD 2, SSC STD 2, etc), as testing resources are limited and should be prioritised for testing against currently valid standards. Under exceptional circumstances, the Management Group might consider such requests if having an added value for the CEP and ECAC Member States, and only if all other requests for testing have been met.

3. Performance of tests

3.1. Can we have additional information about how tests are conducted?

Yes, the CTM summaries, available in the restricted part of the ECAC website, describe the ECAC Common Testing Methodology (CTM) for for all categories of security equipment.

The CTM summaries do not contain performance requirements or confidential details about the testing procedures described in the full CTM, but give enough information to the manufacturers in order for them to be prepared for the testing.

3.2. Is the presence of the manufacturer allowed during the test?

No, however, the presence of the manufacturer staff is required prior to the test to appropriately train the Test Centre staff, who will conduct the test, on the concept of operation (CONOPS) and how to address potential troubleshooting related to the operation of the equipment.

3.3. What are the main phases of a Full Test?

In general, a Full Test comprises the following three different phases:

- **Scoping Test**, which is the initial part of any Full Test. The Test Centre conducts a scoping test to assess whether the system's performance justifies the resources and expense to complete the full testing process. The Scoping Test takes the form of a reduced-scale version of the 'Detailed Statistical Test' phase and will give an early indication if the system is likely to meet a standard;
- **Detailed Statistical Test**, the main testing phase during which the Test Centre evaluates whether the configuration is able to achieve an ECAC/EU performance standard in the different tests, as outlined in the CTM; and
- **Exploratory Test**, which is an additional performance testing phase that does not test against ECAC/EU requirements, but instead addresses other useful parameters that would give an indication of how the configuration may perform in an operational environment.

3.4. Does the manufacturer have the opportunity of making changes to the system if the scoping test is not passed?

If the system does not pass the necessary threshold in order to proceed to the Full Test, the equipment manufacturer may choose one of the following options:

- Halt the testing and the official CEP test is cancelled;

- Request that the Full Test be carried out, in order to allow collection of a complete data set for the purpose of future SRTs and benefit from the post-test debriefing (see question 5.1); and
- Undertake one single attempt to make changes to the system being tested. Following the update then run through scoping test with only the options to proceed or not with the test if scoping fails.

3.5. Which additional parameters, beyond those directly related to performance standards, are measured during the Exploratory Test and included in CEP reports?

For each category of security equipment, the following additional parameters are measured during the Exploratory Test, included in the CEP report, and could be discussed (orally) during the debriefing session with the manufacturer:

Equipment Type	Additional Parameters
Explosive Detection Systems (EDS)	• Belt speed (if stated in CONOPS; not measured) • DTAT results (mandatory for Standard 3.1; exploratory for Standard 3 and below)
Explosive Detection Systems for Cabin Baggage (EDSCB)	• Belt speed (if stated in CONOPS; not measured)
Liquid Explosive Detection Systems (LEDS)	• Identification capability (correctly identifying the explosive) • Capability to screen liquids <100 ml
Security Scanners (SSc)	• Observed scanning time • False Alarm Rate (FAR)
Explosive Trace Detection (ETD)	• Identification capability • Type of source (radioactive or non-radioactive) • Self-cleaning time (if excessive)
Walk-Through Metal Detectors (WTMD)	• Laboratory Non-Threat Alarm Rate (LNTAR)
Metal Detection Equipment (MDE)	• No additional parameters measured

4. Communication of test results

4.1. How is the manufacturer informed of the test results?

Once the testing has been completed, the Participating Test Centre organises a debriefing session (face-to-face or via telephone) with the manufacturer, in which the manufacturer is informed of the provisional test results using a debriefing template with classified codes for the threats to avoid revealing any CONFIDENTIAL information to the manufacturer. The manufacturer is also advised (where possible) about the parts of the test results that may be useful for its future Research and Development. The manufacturer receives neither the completed debriefing template nor any written information with provisional test results.

According to the CTMs, the following information is to be shared (orally) during the debriefing session:

Equipment Type	Debriefing Elements
Explosive Detection Systems (EDS)	• Standard achieved • LNTAR • DR of solid threats (1TQ, 0.75TQ, 2TQ), overall and by category • DR for overall categories (4TQ, 8TQ) • DTAT (pass/fail) • Brass shim test and sheet to bulk transition-Exploratory test • Partial Shielding Test (PST)- Exploratory test

Explosive Detection Systems for Cabin Baggage (EDSCB)	• Standard achieved • LNTAR • DR of solids and liquids when applicable (individual and HQ) • DR of liquids and HQ solids (C3+ only) • IQT and DTAT (pass/fail)
Liquid Explosive Detection Systems (LEDS)	• Standard achieved • Threats needed to reach next standard • LNTAR • DR of best/worst 3 threats • DR by container material and fill rate • DR for G1/G2 by size (<300ml, >300ml, overall)
Explosive Trace Detection (ETD) equipment	• Standard achieved (passenger/cargo), incl. missing threats • LNTAR (pass/fail) • DR (direct injection, surface), individual/overall • DR for surface sampling (per threat, per surface and overall for passenger/cargo) • DR for interference, HQ, and continuous (exploratory testing)
Security Scanners (SSc)	• Standard achieved • LNTAR • DR by category and overall • DR for HQ threats
Walk-Through Metal Detection (WTMD) equipment	• Standard achieved • LNTAR • Relevant sub-tests (pass/fail)
Metal Detection Equipment (MDE)	• DR for TA1–TA5 (forward/backward) • Interference, Discrimination (pass/fail) • Environmental conditions (humidity, temperature, voltage)

Additional Debriefing Comments (if applicable)

The test centre may provide general feedback, without revealing CTM details, including:

- **LNTAR/DR comments**: e.g. causes of false alarms, performance across article types or conditions, DTAT/IQT observations.
- **Breakdowns:** e.g. LNTAR breakdowns for LEDS, ETD, and SSc; DTAT for EDS/EDSCB.
- **General remarks:** e.g. handling, ConOps, malfunctions, error rates, or hardware-related issues.

4.2. Is there any validity period for CEP test results?

No, CEP test results have no validity period and once a piece of security equipment achieves an ECAC performance standard, it remains published on the ECAC CEP website unless the standard achieved becomes obsolete.

5. Complaint procedure

5.1. How can I submit a complaint regarding the ECAC Common Evaluation Process (CEP)?

- Compaints should be submitted by e-mail to Dimitris Kyprianou-CEP Programme Manager (dkyprianou@ecac-ceac.org) with copy to the CEP secretariat (cep@ecac-ceac.org).
- The e-mail title should include the "[subject of the complaint]" followed by the ECAC reference number;
- The e-mail body should include the explicit description of the complaint.
- The CEP Secretariat shall answer within a week.

5.2. What is the procedure to complain about participating test centres?

In case of a dispute between manufacturer and Test Centre, the complaint procedure which is described in the bilateral agreement between the manufacturer and the Test Centre should be followed.

If no solution is found the ECAC Secretariat may be requested by the Test centre or the manufacturer to act as a mediator between both parties. The CEP-MG may therefore, try to help both parties to find a consensus.

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