The Leonardo Security Evaluation Facility (LVS) is operational since 2017 following the incorporation into Leonardo of the pre-existing Consorzio RES LVS (active since 1997), in response to the ICT market growing needs in the framework of security processing and maintenance of electronic data. Consorzio RES operates in accordance with the international standards ISO/IEC IS-15408 (Common Criteria) and ISO/IEC 27001 (ex BS 7799).

FEATURES

LVS, qualified by the Information Security Certification Body (Organismo di Certificazione della Sicurezza Informatica - OCSI), meets the following requirements:

- Ability to guarantee impartiality, independence, confidentiality and objectivity that regulate the evaluation process
- Availability of premises and assets to carry out the security evaluation in the field of Information Technology
- Ability to monitor the compliance with security and quality measures foreseen for the security evaluation process
- Availability of skilled personnel on the evaluation criteria and in general on IT security issues. This personnel is qualified by the Security Certification Body to conduct evaluation and assistance activities for the purposes of security evaluation process
ACTIVITIES

LVS operates as:
• Security Evaluation Facility qualified by OCSI
• Global Consultant in the physical, organizational and ICT security
• ICT consultant for military security certifications (consistently with the national certification schemes).

EVALUATION PROCESS

The Security Evaluation is a set of activities which are carried out by a LVS concerning the Security Certification of a product/system (Target of the Evaluation - ToE).

Evaluation is in particular a verification activity covering all stages of development, implementation and management of the product/system that are of relevance from information security point of view.

Preliminary to the Evaluation process is the definition of a document that identifies security requirements that are satisfied by the product / system to be evaluated. In the standard Common Criteria this document is called Security Target (ST) and it is defined by the Supplier or a third-party company interested in the Evaluation of the ToE.

Based on the results of the Evaluation, the Certification Body will issue the certificate, thus concluding the process.

The Evaluation is carried on through three phases:

• **Preparation**: during this phase the adequacy of the Security Target and ToE is analyzed, verifying the absence of elements that may affect the success of the same. The laboratory will prepare, based on the contents of that document, an Evaluation Plan (EP) to be presented to the Certifying Body. The evaluation process starts takes place when the Certification Body will approve the Evaluation Plan.

• **Conduction**: LVS conducts the Evaluation activities according to the national scheme, the activities specified by the Evaluation referenced standard (Common Criteria) and the timing defined in the EP. In fact, most of the LVS’s activities are concentrated in this phase.

• **Conclusion**: during this phase LVS produces the ETR (Evaluation Technical Report) that collects a summary of all the activities carried out during the conduction phase of the Evaluation process. The conclusions documented in the ETR demonstrate and describe if the TOE meet the Evaluation Assurance Level (EAL) defined in the ST. The Certification Body will use ETR to prepare, in case of a positive result, the Certificate, so ending the certification process.
CONSULTING ACTIVITIES

The LVS also carries out training and consultancy activities to support the customer in addressing the processes of evaluation and certification. In particular, it deals with:

• definition of the security documentation during the preparation phase of the evaluation;
• analysis of the ST/ToE/PP (Protection Profile) to verify if it is evaluable;
• training on general security issues in the information technology environment and, in particular, on evaluation techniques.

To guarantee impartiality, independence, confidentiality and objectivity in the evaluation process, LVS consultants that provide assistance to a supplier or customer for the evaluation of a ToE or part of it, cannot participate as evaluator in the same process. LVS is able to offer a complete security assessment, not limited to the evaluation process, including security risk assessment, security requirements definition and their formalization in the ST and the definition of the whole documentation necessary to face the evaluation process.

DURATION AND RELATED COST

The duration and related cost of an evaluation process is dependent on the following factors:

• Complexity of the product/system to be evaluated – it can be requested the certification of whatever kind of product/system provided that it is characterized by the security point of view in terms of Confidentiality, Integrity and/or Availability in its data processing;
• Assurance level defined for the Certification process;
• Availability of the essential security documentation for the Evaluation process - activities related to definition of the documentation required by the evaluation process are very important and require a good knowledge of the chosen criteria (e.g.: Common Criteria). The quantity and level of detail of such evidence depend on the complexity of the ToE and on the chosen assurance level (e.g.: EALx).
**FUNDAMENTAL ELEMENTS**

The availability of the following elements is fundamental to start the evaluation process:

- ToE definition with precise characteristics of security that you want to submit to Evaluation
- ST that clearly defines the security requirements that ToE satisfies.

Number and content of security evaluation documents depend on the evaluation assurance level. A greater assurance level implicates a greater number of the produced documents as well as a more in-depth description of the contents.

**ADVANTAGES OF CERTIFICATION**

A certified ToE has the following advantages:

- It increases the product/system competitiveness compared to similar products/system with the same characteristics, but not certified
- It increases the national and international prestige of the company that evaluate its products/systems. The Common Criteria standards are recognized all over the world by a multinational board
- It allows to obtain improved insurance conditions
- It involves the adoption of a well-defined and documented development environment and process, of which products that are not submitted to certification also take advantage
- It increases the level of trust in the use of the system/product.