

**1. Introduction**

When a supplier signs an escrow contract, it warrants that the provided escrow material contains an accurate and complete reflection of the product licensed by escrow beneficiary at the time of deposit.

The ever-increasing complexity of software, however, makes it increasingly difficult for a supplier to provide Escrow Europe with this accurate and complete reflection.

In a level III verification Escrow Europe:

- assists supplier in fulfilling this contractual obligation
- examines to fullest extent possible that the deposit is complete.

**2. Objective of a level III verification**

Main objective of a level III verification is to examine to fullest extent possible, given the assigned number of hours, that the deposit contains all components necessary to enable beneficiary to continue maintenance, correction, modification and/or extension of the software.

**3. Procedure**

A level III verification will always be customized. Escrow Europe provides the basic framework a level III verification should adhere to but all parties concerned decide among them what the level III verification will finally entail.

Basic framework for a level III verification:

- 1) Escrow Europe consults parties.
- 2) Escrow Europe presents action plan; involved parties give their approval to this plan.
- 3) Software supplier provides Escrow Europe with following material:
  - Source code
  - Documentation
  - Completed Escrow Deposit Specification Form (EDSF)
  - Compilation/Build instructions.
- 4) Escrow Europe verifies material on correctness (location Escrow Europe).
- 5) Escrow Europe and software supplier compile software/create run time version (location software supplier):
  - Operating system is installed on a clean system
  - Development environment is installed
  - Source code is placed on the system
  - Parameters are set
  - Source code is compiled
  - Escrow Europe and software supplier discuss several technical aspects.
- 6) Compiled software is tested:
  - Runtime environment is created and escrow beneficiary tests functionality OR
  - Escrow Europe tests results of compilation.
- 7) Escrow Europe creates interim verification report.
- 8) Software supplier approves this verification report.
- 9) Parties involved receive final verification report.
- 10) Update procedure is initiated (source code has to be deposited on a frequent basis).

**2.1 Escrow Europe consults parties**

Object of this process is to:

- obtain detailed information on the software to be verified
- provide detailed information on the actual content of a level III verification
- determine the way how this level III verification should be executed.

**2.2 Escrow Europe presents action plan; involved parties give their approval to this plan**

Information obtained from the consultations is used to create an action plan. This action plan is approved by all parties and used as a guideline for the verification.

**2.3 Software supplier provides Escrow Europe with material**

Escrow Europe makes sure that material required for a level III verification is provided.

**2.4 Escrow Europe verifies source code on correctness (location Escrow Europe)**

Escrow Europe aims to prevent that precompiled material (for which no source code has been deposited) of software supplier will be used during compilation of the source code. Furthermore Escrow Europe aims to determine whether all third party software required for compilation has been documented.

To achieve this, Escrow Europe "cleans" the source code: all precompiled and non-essential files are removed from the escrow material.

Besides this, compilation instructions as provided are reviewed.

**2.5 Escrow Europe and software supplier compile software/create run time version (location software supplier)**

Escrow Europe and software supplier compile source code and if applicable create a run time version using provided compilation/build instructions.

**2.6 Compiled software is tested**

As a rule an escrow beneficiary is requested to test software created during the verification, since beneficiary is the most ready party to judge whether all functionality is available.

However, when required Escrow Europe will create and execute a test plan.

**2.7 Escrow Europe creates interim verification report**

Interim verification report is created and made available to software supplier.

**2.8 Software supplier approves interim verification report**

Escrow Europe provides software supplier with the opportunity to review and resolve any issues discussed in the verification report.

**2.9 Parties involved receive final verification report**

Approved verification report is made available to all parties.

**2.10 Update procedure is initiated**

One of the prerequisites of a quality escrow arrangement is that the source code is frequently updated. Escrow Europe actively initiates and monitors this process.

**4. Facts**

- All features of level I are included in this verification.
- This verification is generally executed at depositors' site by the technical staff of depositor and Escrow Europe.
- Detailed information on hard/software technical environment will automatically become available once verification is completed.
- Cost for this level of verification is based on time/material and additional to the yearly fee.

There are numerous aspects that determine number of hours required for a level III verification. Size and complexity of a software package and method of testing are most important in this. Minimal number of hours for a level III verification is 24. The actual number of required hours is determined after consultation with parties.

- Level of certainty to be reached with a level III verification depends largely on method of testing. If the result of the "compilation process" is not properly tested, one cannot be certain that the deposit is complete.

In real world terms it means that when party wants 99.9% certainty it will have to:

- allow Escrow Europe to execute "the compilation" using Escrow Europe standards
- execute a full acceptance test on the results of "the compilation".

As a full acceptance test might take many weeks to execute, we do not advise this.

In view of the main purpose of escrow, we think that a "guaranteed" level of certainty of 95% - 98% (that can be reached by a comprehensive/simplified test procedure) in general should be sufficient.

In the end, however, it is up to the parties to decide the extent of testing and the level of certainty desired.

- A level III verification is an interactive process between parties and our Technical Department. Parties decide the depth of the verification together with Escrow Europe.
- Please contact your local Escrow Europe office or email our technical staff at [technical@escroweurope.com](mailto:technical@escroweurope.com) should you have any questions.