

The Irish approval scheme and validation procedure of non-domestic building energy calculation software: flow chart description

This document describes each element in the flow chart in more detail.

Box 1.1 Get info/perform tests on software

The vendor registers interest with SEI. In response, SEI supplies an information package containing the relevant documents and files for the respective software classes. These are:

[a] FI-SBEM class

- Scheme process map
- Procedure document
- Submission pro-forma or checklist
- Document containing building input information
- Benchmark iSBEM input files (*.nct files)

[b] DSM class

- Scheme process map
- Procedure document
- Submission pro-forma or checklist
- Document containing building input information

[c] ORCalc class (not yet active)

- Scheme process map
- Procedure document
- Submission pro-forma or checklist
- Document containing building input information
- Benchmark ORCalc input files (*.orc files to run in SEI ORCalc software)

The vendor performs tests on software and compiles relevant files and documents for the submission package. These are:

[a] FI-SBEM class

- Submission pro-forma or checklist
- vendor's FI-SBEM software input files (.inp file, and .nct file if applicable)
- BRIRL summary document (in .pdf format)
- Building Energy Rating (BER) Certificate (in .pdf format)

[b] DSM class

- Submission pro-forma or checklist
- BRIRL summary document (in .pdf format)
- Building Energy Rating (BER) Certificate (in .pdf format)
- Documentation of additional results from test models

[c] ORCalc class (not yet active)

- Submission pro-forma or checklist
- vendor's ORCalc software input and output files (in .xml format)
- Display Energy Certificate (in .pdf format)
- Advisory Report (in .pdf format)

Box 1.2 Submit application

When the tests are completed and the submission package is put together, the vendor submits an application via email to SEI to have its software validated.

Box 1.3 Acknowledge application

SEI acknowledges the application submission by sending an email in response to the vendor quoting a reference number.

Box 1.4 High-level sanity check of submission

SEI conducts a high-level sanity check on the following:

- the application is for a software package already approved for commercial use in England & Wales by UK CLG
- applicant have completed the submission pro-forma
- self-assessment summary report within the pro-forma indicates applicant software output is compliant with benchmark, and
- all relevant test case output are included in the submission package

to ascertain validity of application. If the application meets the criteria of the check, the application will be forwarded to the Software Testing House. If it fails, it will be deferred and application will be bounced back to the vendor.

Box 1.5 Process application and validate test results

The Software Testing House begins checking the submission and validates the test results. If there are issues arising, it will correspond with the vendor directly to facilitate consultation on software fixes and compliance.

Box 1.6 Validation results

At the end of the validation process, the Software Testing House forwards a recommendation to SEI based on the validation results on whether to approve or defer the software for commercial use.

Box 1.7 Final decision

SEI receives the recommendation from the Software Testing House and with this, SEI makes the final decision to approve the software or defer it until outstanding issues are resolved. SEI produces an official approval letter and sends it to the vendor attaching the recommendation letter. SEI also notifies the Software Testing House of the final decision.

Box 1.8 Software approved

The vendor has the submitted software package approved by SEI and it will then be valid for commercial use in its relevant class of calculations.

Box 1.9 Application deferred/modify software

In cases where the submission has been deferred, the vendor needs to resolve any outstanding issues before further application is made. In some cases, recommendation will be given to the vendor on modifications requirement to facilitate future compliance.