# Validation of animal-free methods within the EU





Methods that are to be used in regulatory risk assessment need to be formally validated to assess their reliability and relevance for the intended use Formal validation is a rigorous, science-based evaluation to establish performance, i.e. robustness and reproducibility, and fitness for a given purpose, i.e. scientific validity

EURL ECVAM<sup>1</sup> is responsible for formal validation within the EU according to Directive 2010/63/EU



EURL ECVAM will consult with its expert and stakeholder panels and perform a preliminary assessment of the method status with respect to development, optimisation and/or prevalidation as well as potential relevance for the 3Rs

## Submission and assessment

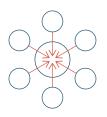
The method developer should submit the method to EURL ECVAM via their test presubmission form<sup>2</sup>

This includes information on:

- Test system
- Mechanistic relevance
- Intended purpose
- Potential 3Rs impact
- Known limitations
- How well investigated and described the method is
- Whether IP protection exists for any part

Who are consulted?

- Academia
- Civil society
- Governmental organizations worldwide
- Industry
- Scientific advisory committee (ESAC)
- National regulators in the EU (PARERE network³)



All methods that have been submitted to EURL ECVAM can be found in the TSAR Tracking System<sup>4</sup> If the method is found to be promising, the submitter will be invited to provide a complete submission with more extensive information on the method

EURL ECVAM decides on the type of validation process most suitable for assessing and/or establishing the scientific validity of the proposed test method

- Prospective validation: generation of experimental data required
- Retrospective validation: information and data already available
- Validation based on performance standards: 'catch-up' validation





EURL ECVAM regularly prioritizes all methods that have been submitted, particularly those that are likely to enter the validation process

The prioritization process is based on pre-defined criteria and the available capacities that EURL ECVAM has in the immediate future

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## Step 1 - The validation study

The validation study is performed according to the OECD Guidance on Validation<sup>5</sup>, following standardized test method protocols and preferably in compliance with GLP principles<sup>6</sup>

The validation study can also be arranged by the method developer An independent scientific peer review is always needed and can be performed by EURL ECVAM

# Step 2 - Scientific peer review



Completed validation studies undergo independent scientific peer review by the EURL ECVAM Scientific Advisory Committee (ESAC)

### **EURL ECVAM recommendation**

EURL ECVAM can draft a recommendation on the validated test method

The EURL ECVAM expert and stakeholder panels, the method submitter as well as the general public are allowed to comment before the document is finalized



OECD and ISO work globally to standardize and harmonize guidelines and ensure reliable data

### **OECD**

The process to develop or update guidelines is described in OECD Guidance Document No. 17; proposals are submitted to OECD via the member countries

In Sweden, the National Coordinator is located at the Swedish Chemicals Agency

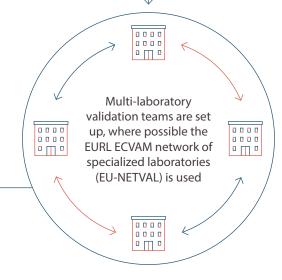
### ISO

The experts in the ISO committees can propose new standards to be drafted to meet a need in the industry; the drafting is based on consensus between members

In Sweden, the national partner is the Swedish Institute for Standards

EURL ECVAM plans and designs the validation study

A public call is used to ensure all relevant information on the method is taken into account



Submission for uptake in an international guideline or standard

Assessment

Commenting

Peer review

International acceptance through adoption as OECD Guideline or ISO standard

- 1. EU Reference Laboratory for alternatives to animal testing
- 2. Test method submission to EURL ECVAM
- 3. The Swedish 3Rs Center is the national contact point for the EURL ECVAM Network for Preliminary Assessment of Regulatory Relevance
- 4. TSAR Tracking System for Alternative methods towards Regulatory acceptance
- 5. OECD Guidance Document No. 34 on the Validation and International Acceptance of New or Updated Test Methods for Hazard Assessment
- 6. OECD Principles of Good Laboratory Practice
- 7. OECD Guidance Document No. 1 for the Development of OECD Guidelines for Testing of Chemicals