SCAHT

SWISS CENTRE FOR APPLIED HUMAN TOXICOLOGY

Stakeholders' Perception on the Roadmap: Academic RegTox Perspective

Ellen Fritsche
SCAHT – Swiss Centre for Applied Human Toxicology
Associated to the University of Basel
Email: ellen.fritsche@unibas.ch

Workshop on implementing EC Roadmap on phasing out animal testing in pesticides and biocides, 21/22 October 2026

UNIVERSITÉ DE GENÈVE

Universität Basel

UNIL | Université de Lausanne

Fachhochschule Nordwestschweiz
Hochschule für Life Sciences

Questions

1. Which elements of the Roadmap provide the strongest basis for **accelerating the replacement, reduction and refinement** of animal testing in pesticide and biocide assessments, and why?

2. What are the main **scientific, regulatory or practical barriers** that could prevent promising non-animal approaches from being routinely accepted and used in pesticide and biocide dossiers?

DNT – a Role Model for the Sustainable Regulatory Implementation of NAMs

2006
DNT TestSmart

2014
ISTNET DNT

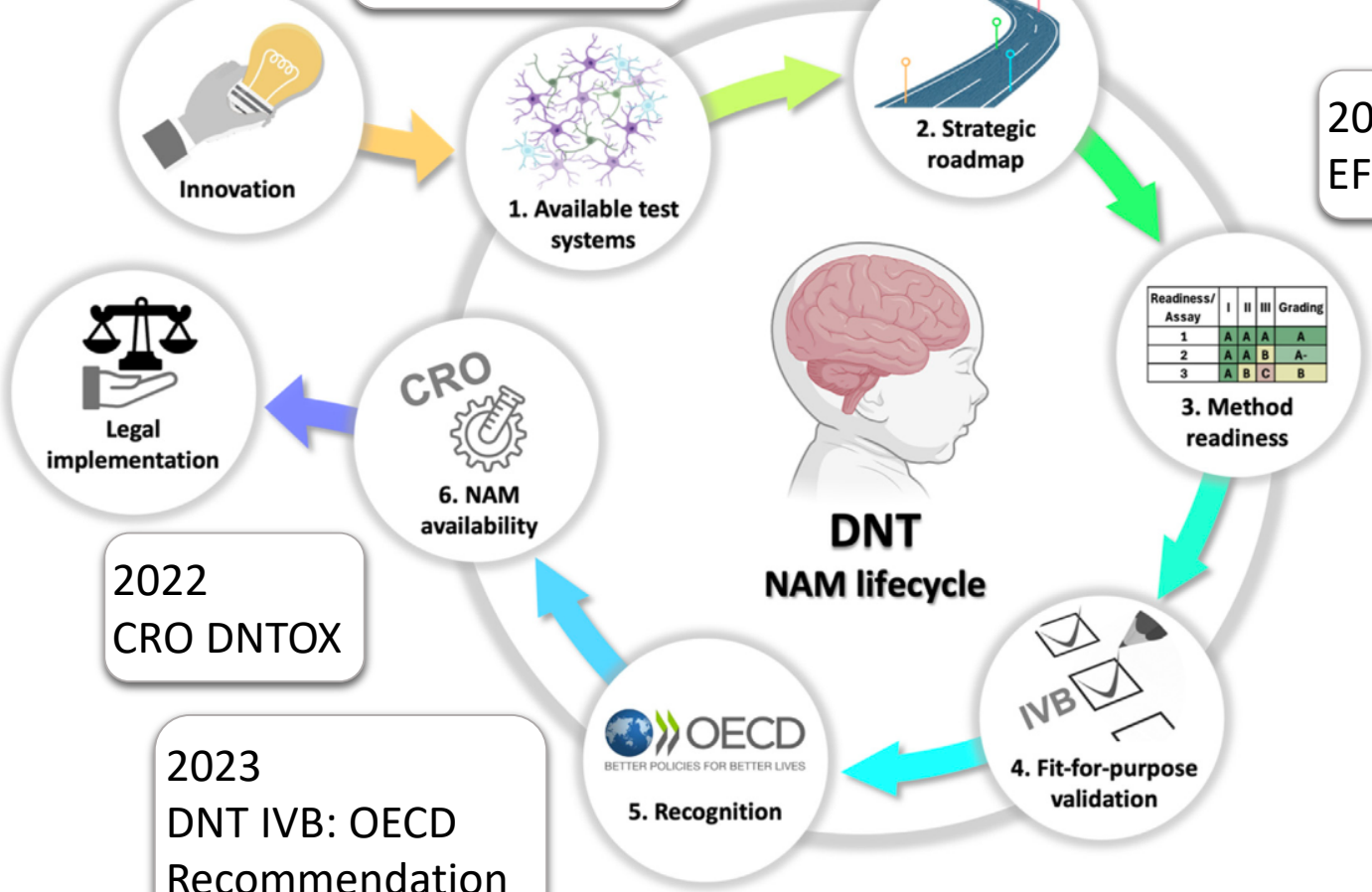
2015
EFSA/OECD

2018
Readiness
(Bal-Price et al. 2018)

2022
CRO DNTOX

2023
DNT IVB: OECD
Recommendation

2026
Pesticide
Legislation?

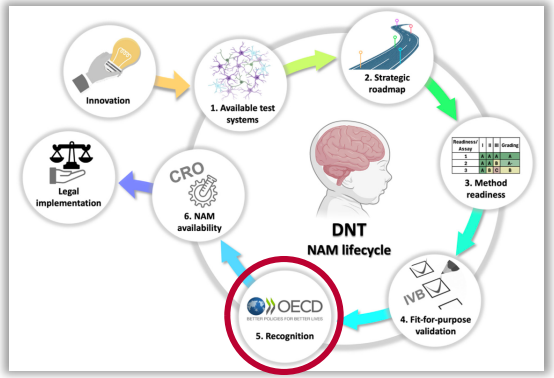


DNT – Developmental Neurotoxicity

Blum, Bartmann, de Paula Souza, Fritsche Curr Opin Toxicology 2025 doi.org/10.1016/j.cotox.2025.100528
2026 European Roadmap towards phasing out animal testing for chemical safety assessment

Accelerating NAM uptake for pesticide & biocide assessments

- Making NAMs data requirement: the **DNT IVB** might be accepted for **pesticide assessment**
- Opening **DNT IVB** use to **biocides** should be facilitated by **political will**
- The life cycle of the DNT IVB can serve as a **role model** for other NAMs suited for speficic **Contexts of Use** in pesticide and biocide assessment
- The Roadmap might influence **European calls** geared towards acceptance of NAMs by requesting:
  - **Biological plausibility**
  - **Toxicological relevance**
  - **Human disease relevance**
  - **Technical performance**



Barriers for NAM uptake for pesticide & biocide assessments

- Lack of **funding for validation** efforts
- Very **stringent validation** constraints (e.g. 3 laboratories needed)
- DNT: **Communication** on regulatroy acceptance of NAMs between different stakeholders
- **Lack of information** on promising NAMs especially for national regulators, industry, CROs and consultants
- **Lack of harmonization** between regulations
- **Fear of NAMs** (e.g. false-positive and false-negative results)


MY MAIN PROBLEM IS I'M UNCERTAIN HOW TO DEAL WITH MY UNCERTAINTY.
B. Rich HEDGEYE