



# Development of MetaPath Risk assessor's view

**Anja Friel**

Trusted science for safe food

# Upcoming assessment demands

- Coming soon (OECD Series on testing and assessment)

New OECD guidance on residue definition soon completed: includes several steps of metabolite characterisation, categorisation and assessment

- Longer term vision (EC Chemicals Strategy for Sustainability)

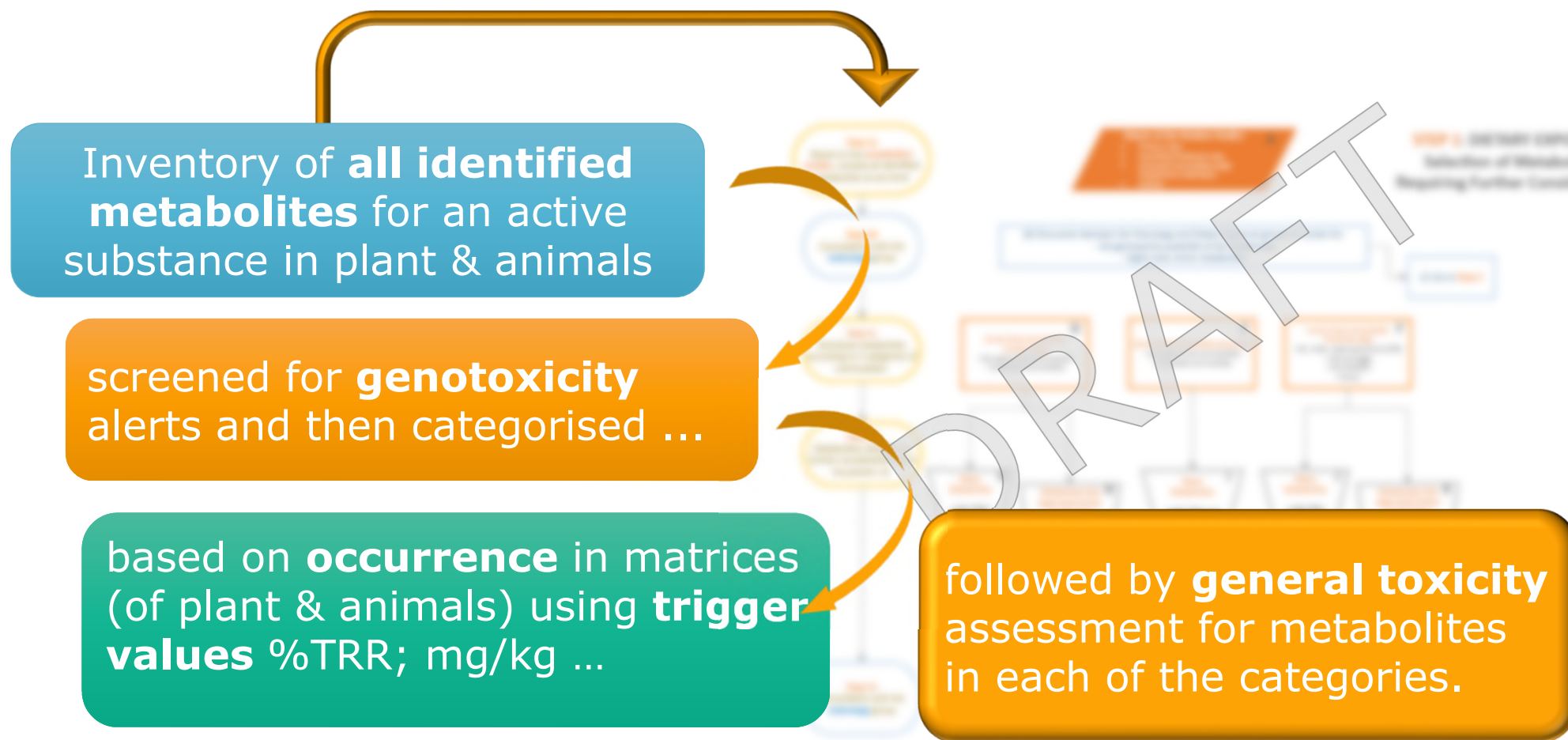
EU research and innovation agenda for chemicals: filling knowledge gaps, promoting innovation and alternative testing methods

One substance – one assessment' concept

- Implementation of new OECD guidance (publication intended in 2023)
- MetaPath has potential for facilitation of metabolite analysis as it holds information on metabolite's
  - occurrence in different matrices
  - % TRR, concentrations mg/kg
  - structures and structural changes
  - position in pathway (upstream/downstream)

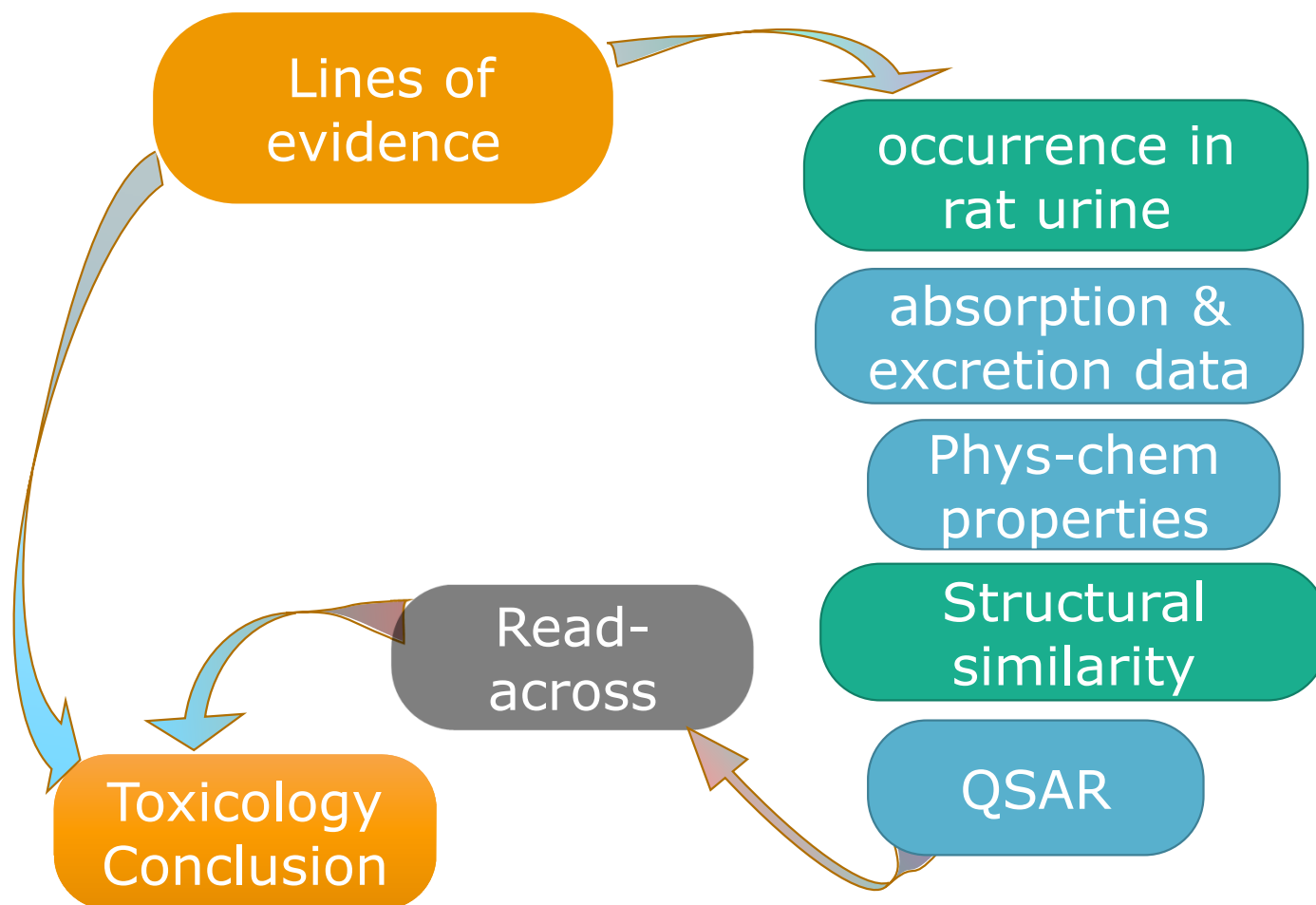
How can MetaPath be developed further / integrated with other tools (e.g. OECD Toolbox) to facilitate assessment of pesticide metabolites (new OECD guidance)?

# Residue metabolite assessment (OECD draft)



# Toxicological metabolite assessment (OECD draft)

If we do not have toxicology data for the metabolite:



# Desired functionality – risk assessor's view

- Support & facilitate
  - Human health risk assessment of pesticide metabolites in line with OECD guidance
  - Generate pertinent inventories and reports
  - Use data beyond structural information, (e.g. occurrence, kinetics & distribution, position in pathway)
  - Interoperate with computational toxicology tools (e.g. OECD toolbox)
- Predict
  - Reconstruction metabolic pathways to refine incomplete pathways (e.g. using reference pathways)
  - Pathway construction for chemicals without any metabolism data
- Extend & connect
  - Environmental assessment area
  - Beyond pesticides area 'One substance – One assessment'

# Stay connected



## Subscribe to

[efsa.europa.eu/en/news/newsletters](https://efsa.europa.eu/en/news/newsletters)  
[efsa.europa.eu/en/rss](https://efsa.europa.eu/en/rss)



## Receive job alerts

[careers.efsa.europa.eu](https://careers.efsa.europa.eu) – job alerts



## Follow us on Twitter

[@efsa\\_eu](https://twitter.com/efsa_eu)  
[@plants\\_efsa](https://twitter.com/plants_efsa)  
[@methods\\_efsa](https://twitter.com/methods_efsa)  
[@animals\\_efsa](https://twitter.com/animals_efsa)



## Follow us Linked in

[Linkedin.com/company/efsa](https://linkedin.com/company/efsa)



## Contact us

[efsa.europa.eu/en/contact/askefsa](https://efsa.europa.eu/en/contact/askefsa)



one

SAVE  
THE  
DATE!

HEALTH • ENVIRONMENT • SOCIETY

**21-24 JUNE 2022** - Brussels and online

**One2022.eu**

**#OneEU2022**