2024 / 03

Human Health Transformational Programme.
Programme 2: Development of an Integrated Approach for Chemicals Assessment

Richard Currie on behalf of ECETOC

RESOURCES.

Staged assessment task force
Smart Studies task force

Best practices in Quantitative AOP development – workshop report 38

Numerous Omics reports and task forces including those for

- Applying omics in regulatory toxicology
- Omics data reporting
- Omics data interpretation framework for regulatory applications task force

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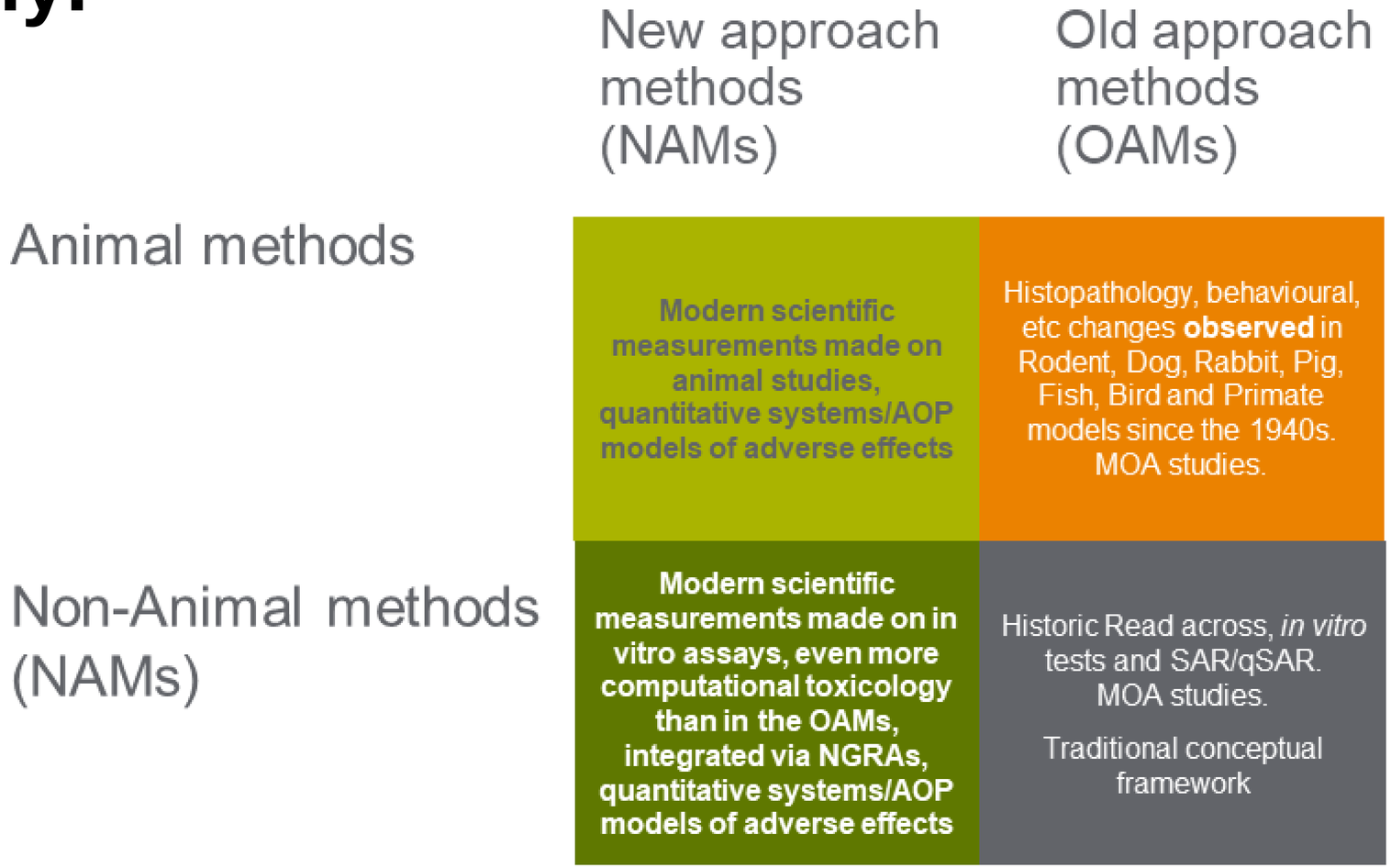
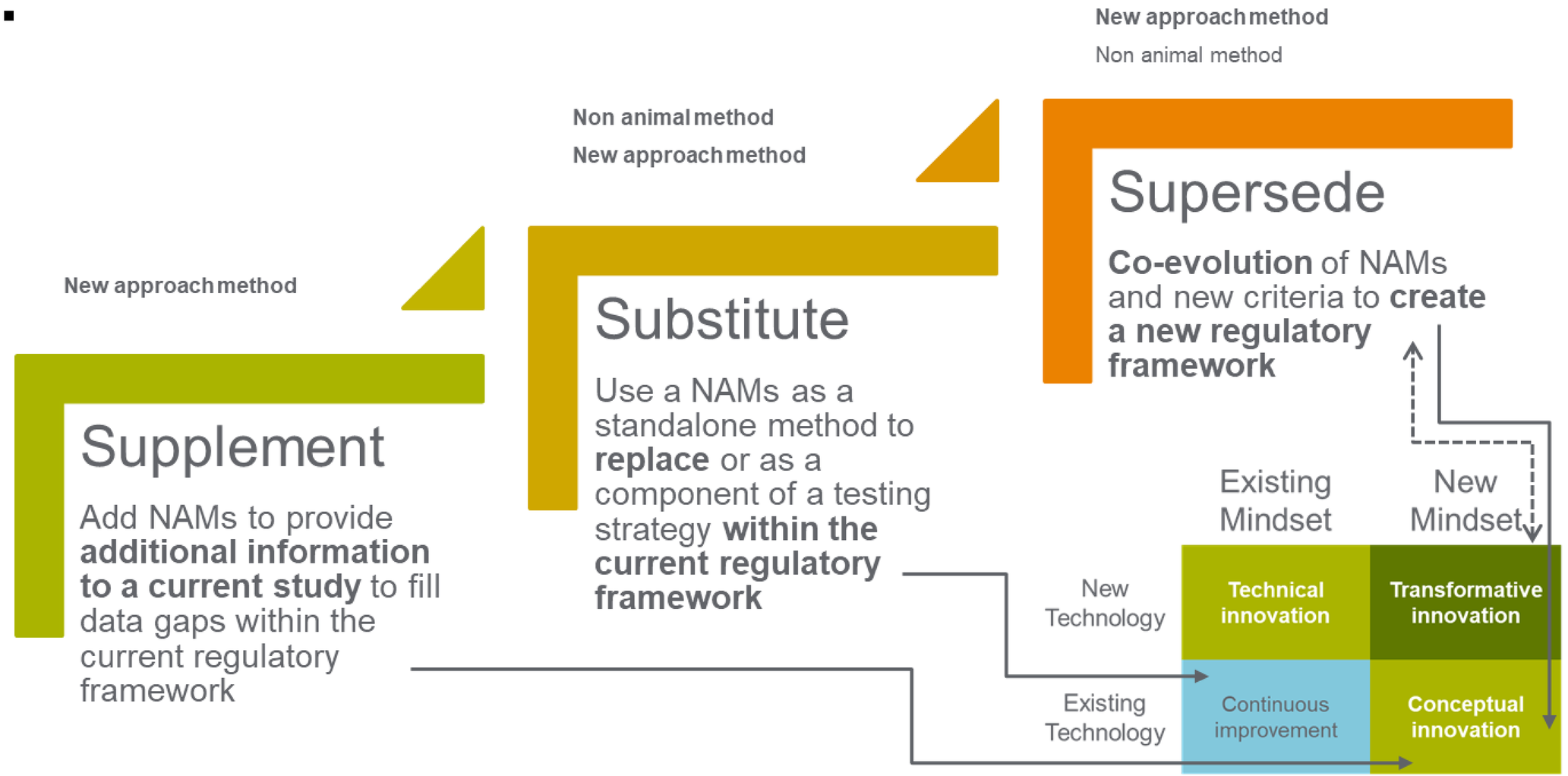
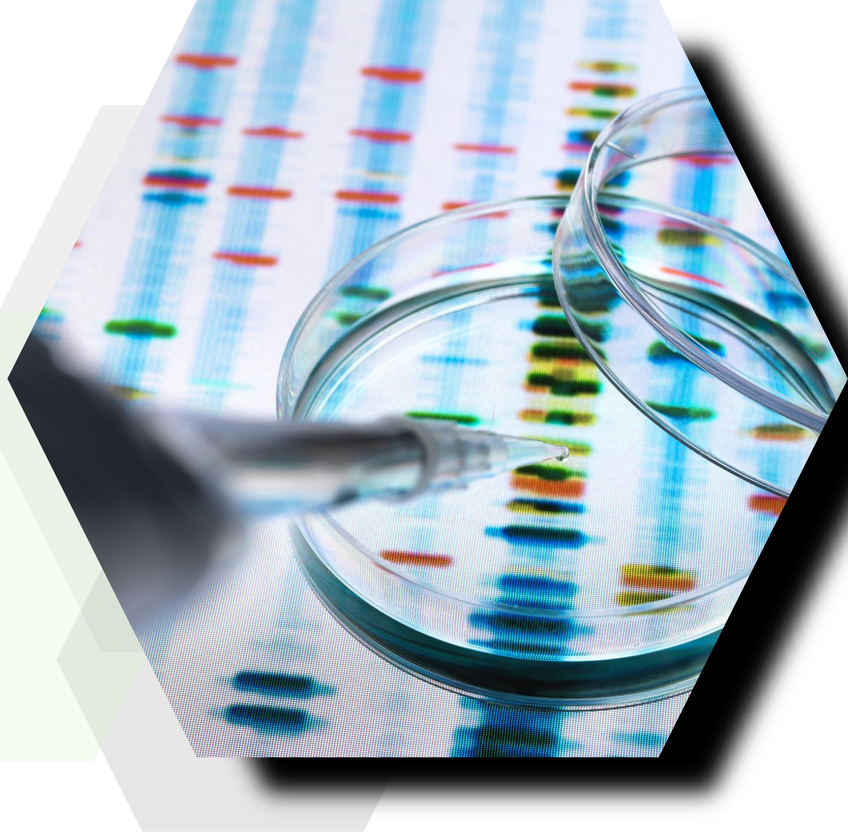
Modern Science has provided many potentially useful tools and existing data that are not used or reused, respectively.



Modern Science could be applied in different ways.



Development of an Integrated Approach for Chemicals Assessment (Transformational Programme 2)



Why

- Much of the technology for new approach methodologies (NAMs) exists, but standardized agreed implementation frameworks required

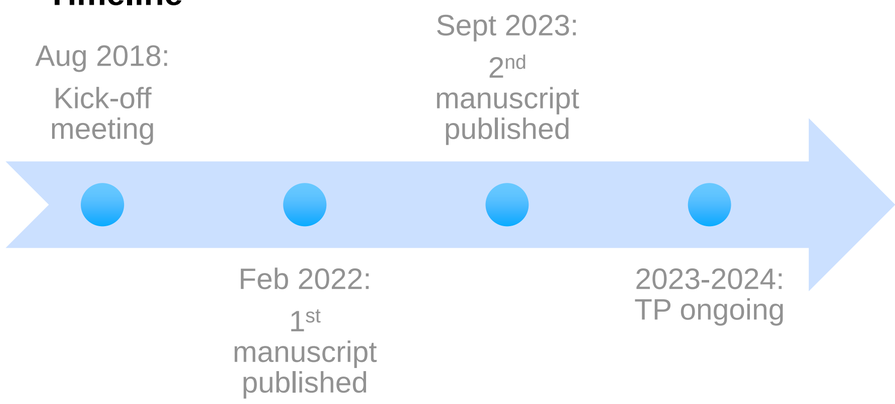
Objectives

- Identify opportunities for application of NAMs in next generation risk assessment (NGRA)

Deliverables

- Two peer-reviewed manuscripts: Ball et al. 2022 (framework for incorporating NAMs in REACH); Botham et al., 2023 (use of NAMS for low tonnage chemicals in REACH)
- Two Task Forces initiated 2023: Staged assessment for low tonnage chemicals TF; Smart in vivo studies TF

Timeline



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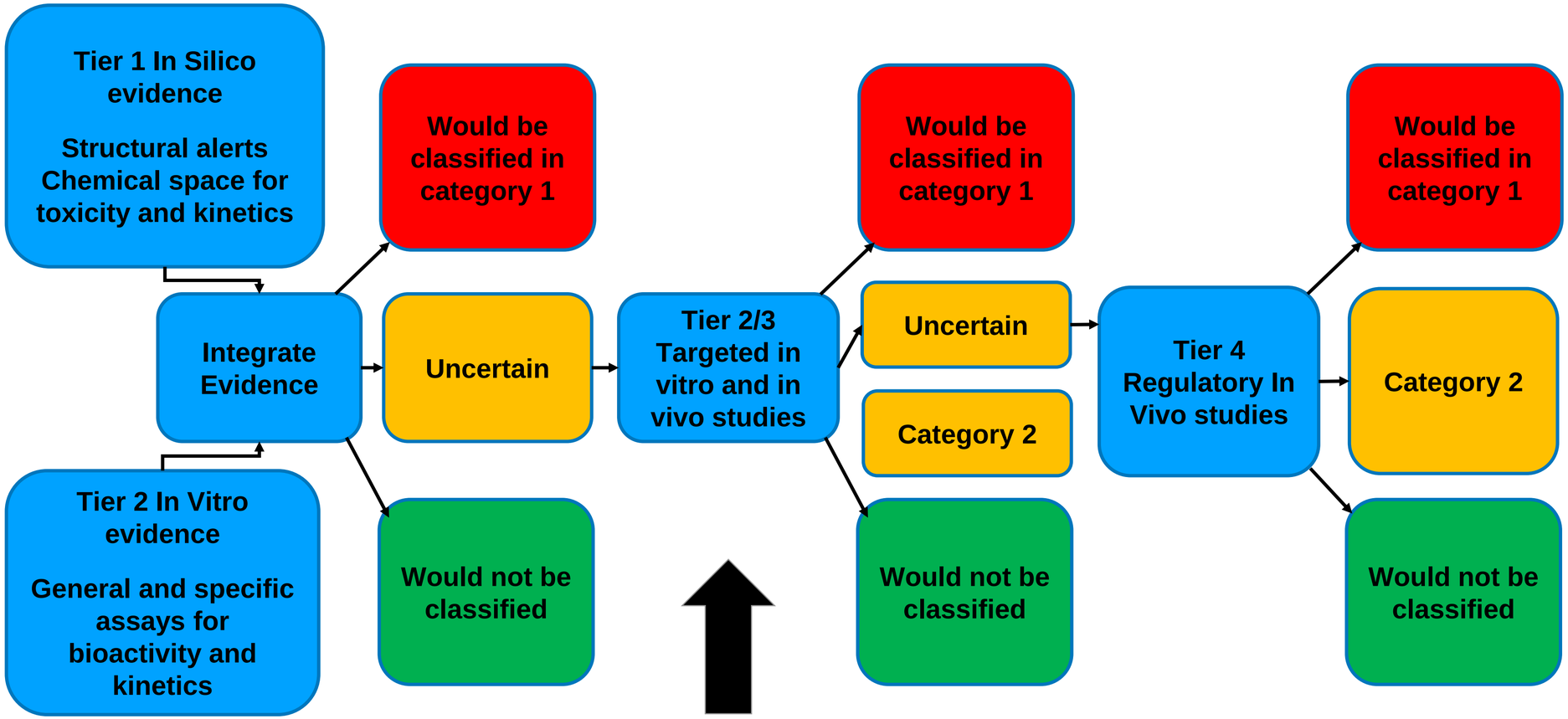
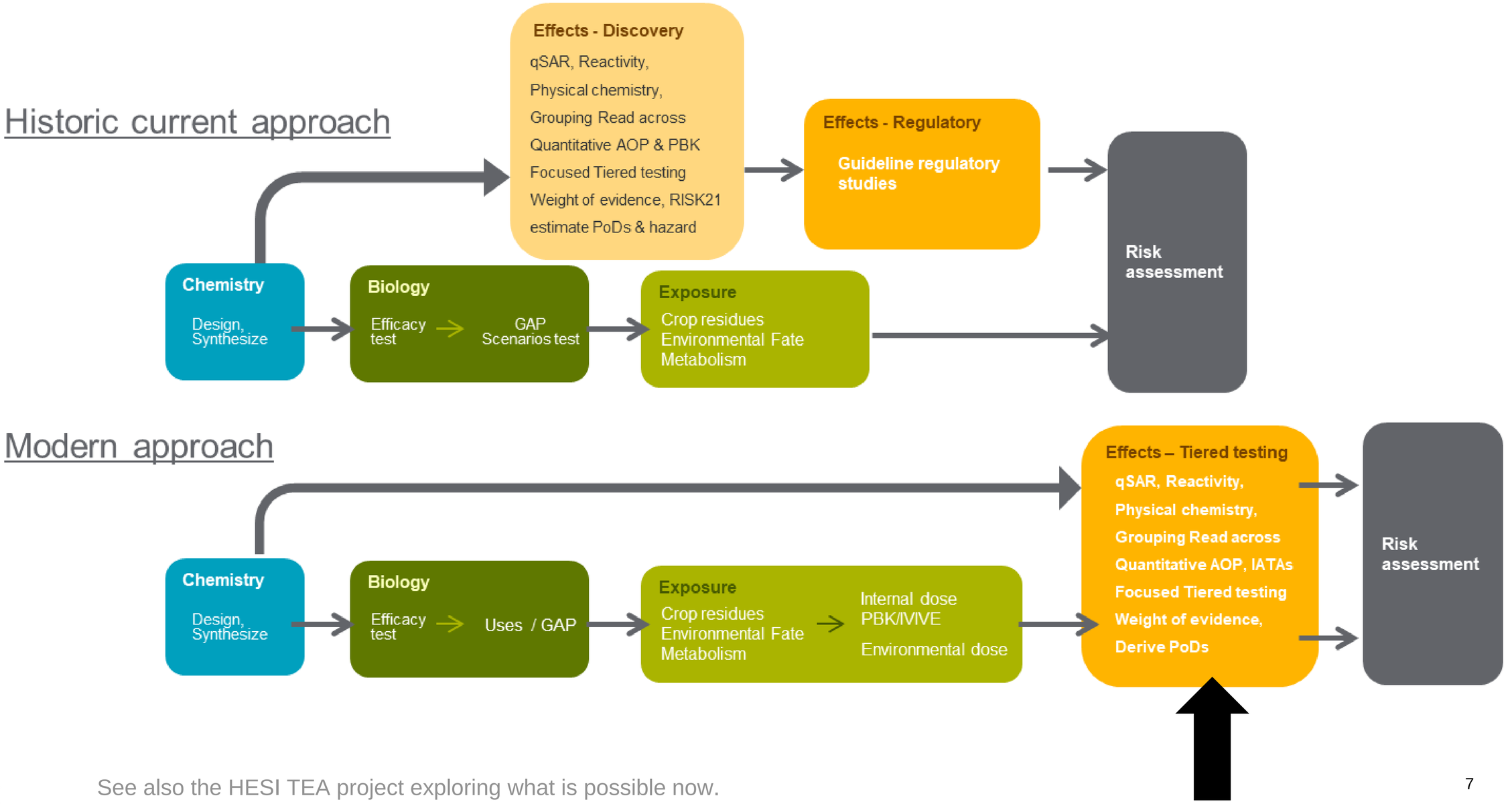
ECETOC Human Health Staged Evaluation aims to use modern science and tiered testing to reduce uncertainty to enable a decision



SMART studies using additional endpoints including omics data, interpreted for regulation (collaboration with others e.g. HESI eSTAR committee)

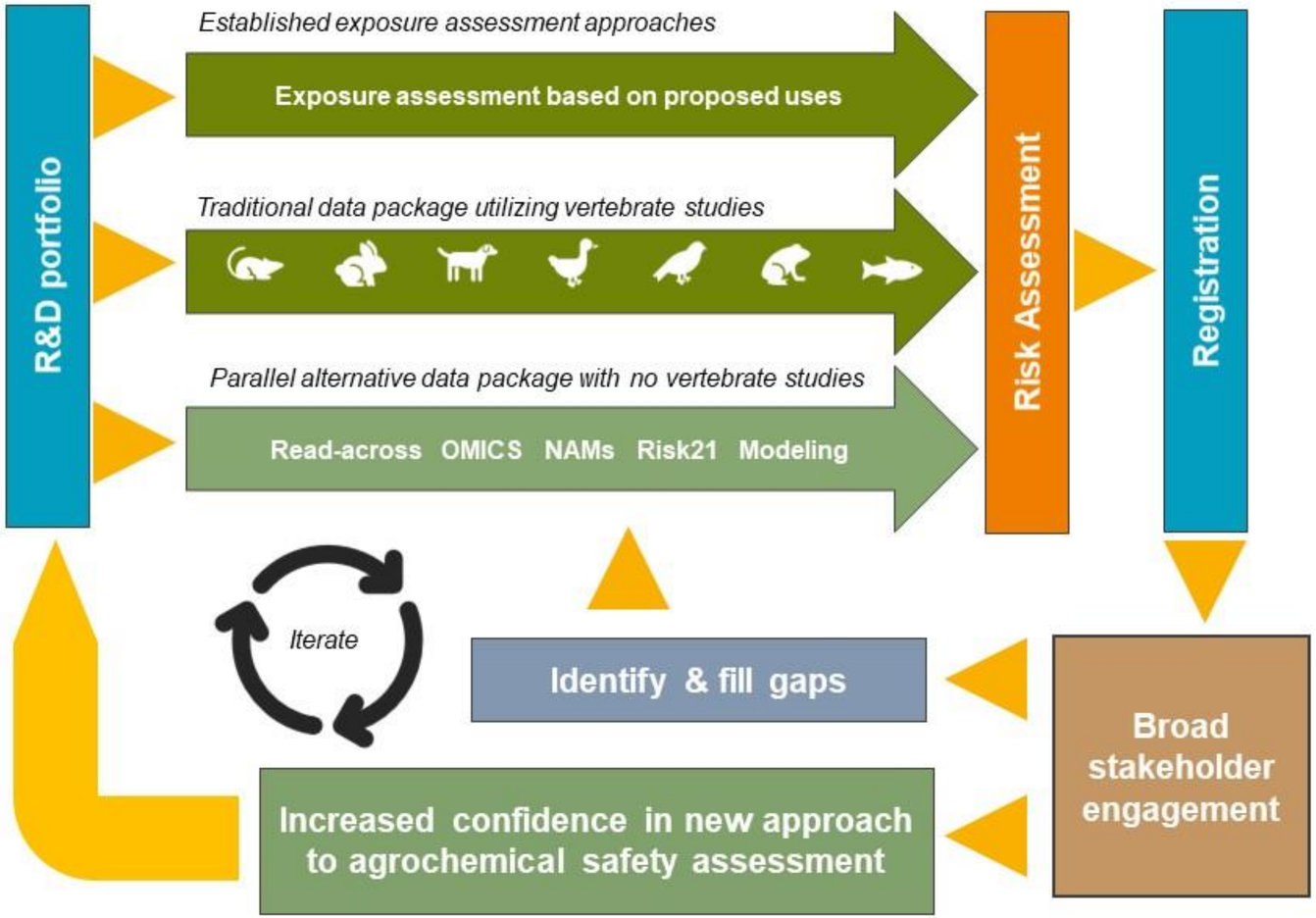
Quantitative AOPs using mathematical modelling

How might a modernised approach be built?



See also the HESI TEA project exploring what is possible now.
https://hesiglobal.org/transforming-the-evaluation-of-agrochemicals-tea/

Industry case study – suggesting adaptations needed to build a trusted change by iterative exploration & learning



https://www.altex.org/index.php/altex/article/view/2671

Thank you.

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