

## Boosting EFSA's readiness for future risk assessment requirements

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### INTRODUCTION

Upcoming challenges in risk assessment can only be tackled by implementing the latest scientific knowledge in partnership with all relevant actors. The Science Studies and Project Identification & Development Office (SPIDO) was created in 2020 to commission projects to support EFSA's preparedness for future risk assessment requirements and hence reduce the need for 'Verification studies' (Transparency Regulation, Article 32d). An annual budget of €15 million is foreseen.

The aim is two-fold: to invest in developing roadmaps for actions that identify scientific and methodological knowledge gaps within EFSA's regulatory processes and to foster connectivity and partnerships with Member States and other EU Agencies, as well as international organisations, third countries and stakeholders. Considering the challenges posed by the rapidly increasing scientific complexity and the greater societal expectations for more informative communication of risks, the development and use of more efficient tools is required for future risk assessment. In addition, establishing partnerships is an essential pillar to fulfil EFSA's 2027 strategy.

### METHODOLOGY

Scientific themes are selected to support EFSA to i) reduce the risk of scientific divergences, ii) address critical knowledge gaps and promote innovative technologies in regulatory science and complement European and international research projects, and iii) establish long-term multi-partner collaborations.

Each scientific theme is framed by a 'theme paper' that outlines the theme's vision, scope, opportunities, cooperation and impact for EFSA and its partners. Following a consultation with our partners and key stakeholders, the paper is revised in consideration of the comments received.

The theme paper serves as a basis for developing a 'roadmap for action'. The objectives of the roadmap are to provide a full understanding of ongoing activities, knowledge gaps, societal interests and concerns as well as collaboration opportunities and potential partners, and provide a basis for the prioritisation of and decision-making for high-value (> €1 million),

multi-annual (>2-5 years) project calls (grants or procurements) to be launched in connection with the scientific theme over a 5-year period.

## RESULTS

Six scientific themes and their respective roadmaps will be finalised by 2022:

- -Artificial intelligence for evidence management in risk assessment (AI): to reduce workload and build holistic systems
- -New Approach Methodologies in risk assessment (NAMs): to implement non-animal based approaches, e.g. in vitro or in silico techniques
- -Building a European Partnership for next generation, systems-based Environmental Risk Assessment (PERA): to expand risk assessment from food to the environment, considering cumulative effects and life-cycle implications
- Risk Assessment of Combined Exposure to Multiple Chemicals (RACEMIC): to develop the risk assessment of multiple chemicals from dietary and non-dietary sources
- -Advancing the Environmental Risk Assessment of Chemicals to Better Protect Insect Pollinators (IPol-ERA): to advance the environmental risk assessment for insect pollinators
- -Application of OMICS/Bioinformatics Approaches: Towards Next Generation Risk Assessment: to integrate the approaches in food regulatory science.

Further topics, such as animal welfare, risk communication, exposure science, microbiomes or sustainability, will be tackled.

## DISCUSSION

In two years since the approval of the 'Transparency Regulation', six scientific themes designed to improve EFSA's preparedness for future risk assessment challenges were brought forward. The benefits gained from these activities have already started to emerge, such as the harmonisation of terminology under the PERA roadmap or the identification of potential collaboration/cooperation opportunities under the AI theme.

EFSA's readiness for future challenges in the area of food and feed safety will be kept up to date via the integration of scientific advancements into risk assessment. Investing in readiness by incorporating innovative technologies and new scientific findings in close collaboration with EFSA's partners and other actors will allow for updated, effective and efficient risk assessments and thereby increase the quality of EFSA's scientific advice. In turn, this will ensure that its risk assessment model is sustainable and that the scientific advice provided remains relevant, e.g. for policy makers and society.

For more information: Preparedness: integrating the latest scientific developments in regulatory science. In preparation.