

Trusted science for safe food

79th Advisory Forum meeting Virtual meeting, 03-04 March 2021

Update on SPIDO (Science Studies and Project Identification & Development Office

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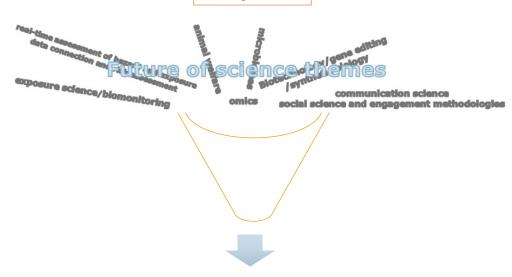


Recap

Science Studies and Project Identification & Development Office (SPIDO)



1st Q 2020



PERA





NAMS

•<u>N</u>ew <u>A</u>pproach <u>M</u>ethodologies in risk assessment

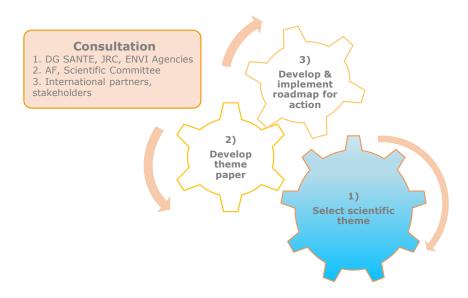
RACEMIC

• $\underline{\mathbf{R}}$ isk $\underline{\mathbf{A}}$ ssessment of $\underline{\mathbf{C}}$ ombined $\underline{\mathbf{E}}$ xposure to $\underline{\mathbf{M}}$ ult $\underline{\mathbf{i}}$ ple $\underline{\mathbf{C}}$ hemicals



ΑI

•<u>A</u>rtificial <u>I</u>ntelligence for evidence management in risk assessment



Consultation

- 1. DG SANTE
- 2. Advisory forum
- 3. EU Agencies

Process Scientific theme selection





Aim to develop 2-3 theme papers each year



Consult with EC (DG SANTE) & partners (EU Agencies, Member States through AF) to identify candidate themes foreseen



Ensure **complementarity** with **DG Research activities**, particularly EU Partnerships



Ensure alignment with EFSA's 2027 Strategy

Selection criteria with associated weighting factors (details see notes)



Reduces risk of divergencies (VS)



Requires involvement of partners (EU agencies, MS, international)



Addresses a critical gap, complementary to research projects & facilitates preparedness



Promotes innovative technology in regulatory science, reduces uncertainties & supports RM



Explores opportunities on potential controversies which may arise through implementation of strategies



Allows for multi-annual & high-value grants & procurements

Reference: framework document (EFSA, 2020)

2021 candidate themes: *Proposal under consultation*



Theme 1: OMICS



Application of OMICS & bioinformatic approaches: next generation risk assessment

Ranking (FWD) **12** out of 14 Maturity **2.3** out 3 Theme 2: INSECT POLLINATORS



Advancing the environmental risk assessment of chemicals for insect pollinators

Ranking (FWD) **11** out of 14 Maturity **2.3** out 3 Theme 3: COMMUNICATION



Evidence-based communication in the EU food safety system

Ranking (FWD) **9.6** out of 14 Maturity **2** out 3

OMICS & Bioinformatics Approaches: Next Generation Risk Assessment



Why

Science

 Opportunities to produce new evidence for next generation risk assessments

Farm to Fork Strategy

 Utilising innovative technologies is critical to transition to sustainable food systems

Draft EFSA strategy 2021-2027

 Consolidate new methods and make use of big data to deliver fit for purpose and faster scientific advice

Challenges

- Need to shift away from traditional observational tests to understand mechanisms of adverse effects
- Data interpretation for regulatory confidence
- Address insufficient harmonisation
- Establish consistent framework for OMICS data collection, processing storage & curation
- Implement appropriate bioinformatic tools.

Areas of work

Build the needed confidence for wide implementation

- **Harmonise** risk assessment tools & methodologies
- Use publicly available omics datasets to fill existing data gaps in food safety RA
- Advance to next generation RA in several work areas areas, e.g.:
 - Animal/plant health
 - Biotechnology products
 - Antimicrobial resistance
 - Microbiome

Advance insect pollinator risk assessments



rivers of change

Science

- Unprecedented insect pollinator declines (→ biodiversity loss & impaired pollination service delivery)
- Scientific developments & progress

Farm to Fork Strategy

- Reduce **pesticide** risk/use
- Promote safer **alternatives** (to combat pests & diseases)

Biodiversity Strategy & EU Pollinators Initiative

- Halt insect pollinator declines
- Bring back some arable land under high-diversity landscape features

Goals

Risk assessment methodologies & tools

- Consolidate, update & harmonise
- Be more **context** dependent
- Consider more realistic (real world) conditions (e.g. exposure to multiple chemicals & other environmental stressors)
- Promote integrated systemsbased approach
- Promote uptake in regulatory context
- Ensure **preparedness** (for future challenges)

Risk assessment process

- Be more **collaborative**
- Promote data/expertise sharing

Areas of work

Proposals

- Support definition of specific protection goals
- Integrate knowledge on insect pollinator health
- Characterise routes/levels of exposure to chemicals
- Integrate methodologies & tools to: (1) assess sublethal/chronic/indirect effects; (2) extrapolate adverse effects across species, different levels of biological organisation & relevant spatiotemporal scales; (3) consider cumulative effects
- Establish & complement relevant **partnerships**

Communication science: Evidence-based risk communication in the EU food safety system



Why

- Transparent, continuous and inclusive risk communication throughout the risk analysis process is needed to strengthen citizen trust in the EU food safety system
- Need for General Plan for Risk Communication (GPRC)

(as evidenced in the Transparency Regulation)

Challenges

- Use of evidence from social sciences to meet TR provisions is needed and critical
- Roles of actors in risk analysis roles and key concepts to be clarified to the public (increase awareness and understanding)
- Risk communication models to achieve coherent communication, at EU and MS level

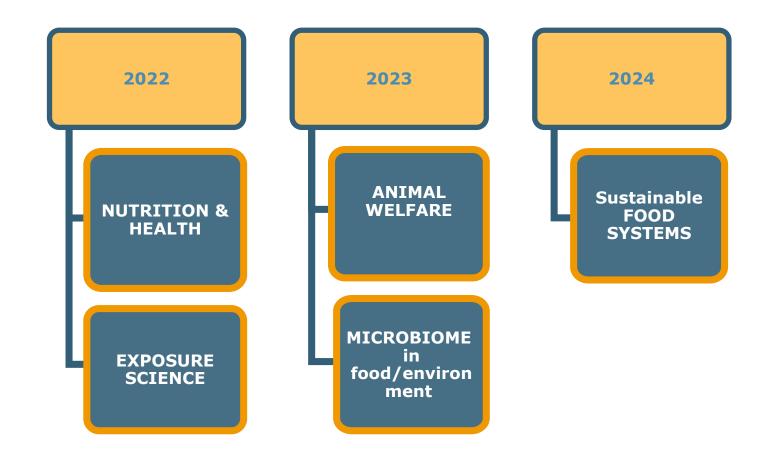
(Questions addressed in ongoing EFSA technical assistance work)

Areas of work

- Explore setting a **joint coordinated platform**managed by risk managers,
 risk assessors and
 stakeholders.
- Foster further investigation on disinformation in the area of food safety
- Research on effectiveness of different transparency initiatives in the EU
- Integrate psychological and socio-cultural factors with behavioural models, in risk communication
- Strengthen cooperation/dialogue with EC, MS and stakeholders

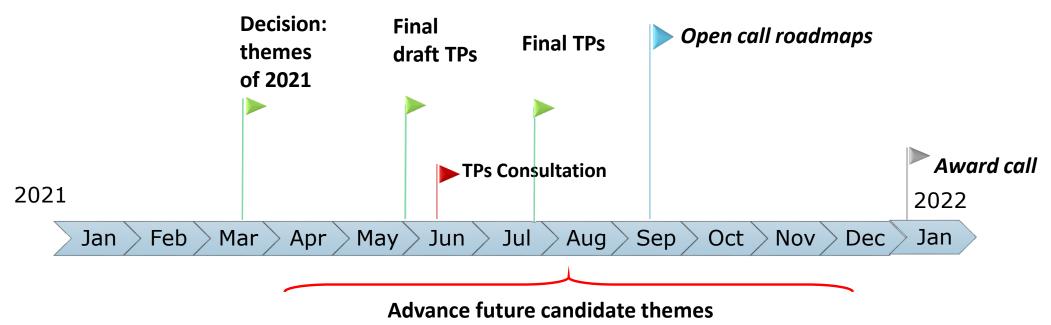
Multi-annual theme development plan: Proposal under consultation





Retro-planner themes of 2021





- Identify 2021 candidate themes and consult with partners (DG SANTE, AF, EU Agencies) (Jan-Mar)
- Drafting of theme papers (TPs) of 2021 (Mar-May)
- External consultation of TPs (June)
- Launch open call for roadmap generation (Sep)

Discussion



- 1. What is your view on candidate themes of 2021 proceeding to themes?
- 2. What is your view on the multi-annual plan?
- 3. How would you like to be involved in advancing candidate themes beyond 2021?



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Annex



Retro planner themes of 2020



OPEN CALL 3 Lots

- Environmental RA
- Multiple chemical RA
- New approach methodologies in RA

FRAMEWORK CONTRACT CT/EFSA/FIN/2019/01)

Artificial intelligence in RA

