ENGAGEMENT AND COOPERATION UNIT

Advisory Forum

73rd meeting: 18-19.09.2019, Helsinki, Finland

Presentation/Document title: EFSA's Work Planning and Strategy cycles:

a) Draft 2020 Work Programme (including MS input)

b) Update on EFSA Strategy 2021-2027

Presenter: Ilias Papatryfon

Item 7a: Draft 2020 Work Programme (including MS input)

Background & key points of agenda item / presentation:

Earlier this year EFSA launched a survey with the aim to collect input from Advisory Forum (AF) members for EFSA's multiannual planning cycle for the period 2020-2023 and to also identify main themes for strategic discussions in future AF meetings.

The request for input was structured around priority areas that were pre-selected based on the following information: AF input to EFSA's work plan for 2019 and the 2017 feedback survey; EFSA Strategy 2020 gap analysis; Management Board recommendations on EFSA's external evaluation 2018; 2018 EFSA annual quality management review; ongoing work for setting food safety research priorities.

The AF members were provided with criteria to apply when selecting the most prominent priority areas of work. These criteria were tested and fine-tuned with a small pilot group of focal point member and are the following:

***Criterion 1** | Health/environmental impact: the priority area of work impacts (or may impact) on the health of a high number of citizens / has high severity or mortality from an animal or plant health perspective / has high environmental impact;*

***Criterion 2** | Societal impact: the priority area of work raises (or may raise) high concerns and diverging views in society;*

***Criterion 3** | European dimension: the priority area of work has high relevance to most European countries;*

***Criterion 4** | International dimension: in addition to its European relevance, the priority area of work is of high relevance also on an international scale (to third countries, international organisations, etc.);*

***Criterion 5** | Horizontal relevance: the priority area of work is highly relevant in domains beyond EFSA's remit, for example in the areas of medicines, chemicals, disease prevention and control, environment, which are covered by other EU Agencies;*

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Criterion 6 **|** *Collaborative approach: the priority area of work highly requires a specific collaborative approach among different countries/organisations to increase efficiencies in the EU Risk Assessment and optimise the use of resources (e.g to avoid duplication of work/prevent scientific divergence);*

Criterion 7 **|** *Data gaps: the priority area of work highly requires additional / new data in order to be adequately addressed;*

Criterion 8 **|** *Methodological gaps: the priority area of work highly requires new / harmonised methodologies in order to be adequately addressed;*

Criterion 9 **|** *Research needs: the priority area of work highly requires systematic investigation in order to establish facts and reach new conclusions;*

The Survey was open from 20th May till 14th June 22 MS provided their feedback to the survey (versus 5 last year) while 6 MS proposed additional priority areas.

The survey replies where analysed and the key results are presented here.

Methodology

The analysis was focused to answering the following questions:

1. *How the areas of priorities are ranked overall by the AF? i) at domain level, and ii) at specific area of work level?*
2. *Which is the criterion that most influenced the priorities setting by the AF, per domain and per specific area of work?*
3. *Based on the above, which activities should EFSA and the MS consider for the SPD 2020-2023 to address the key priority areas?*

Results

Question 1: *The 10 domains and the specific areas of work within each domain were ranked based on the replies of the AF members:*

- *The total score (number of replies) per domain provided the ranking across domains (Annex 1, table 1);*
- *The total score (number of replies) per specific area of work provided the ranking across areas of work (Annex 1, Table 2).*

Question 2: *The full picture on which criteria influenced the ranking of EFSA's WP specific areas of work is given in table 3.*

Question 3: *The analysis concerns:*

-which priority areas to focus on (based on overall and domain-specific ranking of each area of work)?

-with whom to cooperate (analysis of criteria on relevance, e.g. EU vs International, vs Sister Agencies)

-what gaps to fill-in via new projects (data, methodological, or wider knowledge gaps)

A set of 19 priority areas of work have been identified based on the overall ranking of topics (12 highest ranked topics; cut-off applied was above 90 points) and the highest ranked topic by domain (7 additional topics). For each of these, the possible type of follow-up will be defined based on the importance of the individual criteria. It will be ensured that these topics are highlighted in EFSA's

work-programme, indicating, where already known, the type of follow-up. Examples are provided in the presentation.

Expected discussion outcomes:

The results of the survey (Annex 1) confirm the initial prioritisation of work of EFSA and the Member States for the coming years, as for example looking at the first five on the list:

Anti-microbial resistance (AMR) – Environment; developing harmonised methods for the RA of combined exposure to multiple chemicals; Data collection on endocrine activity for oestrogen, androgen, thyroid and steroidogenesis (EATS); Microplastics; Emerging risks.

-The AF endorses the ranking, the proposed priority areas, and the approach to follow for identifying follow-up activities;

-Exploring and presenting at the next AF meeting the activities to address the priority areas;

Timelines/Next steps:

EFSA will include the outcome of the survey per area in its work programme by:

-highlighting the key priorities for cooperation with the Member States in its Programming Document 2020-2023, currently under finalisation.

Item 7b: Update on EFSA Strategy 2021-2027

Background & key points of agenda item / presentation:

A) The key steps in EFSA performing its Environmental Scan were:

1. Identifying external drivers and creating future scenarios

a. Scanning the environment for a holistic representation of future drivers.

b. Creating plausible and contextualized ideas of what the future holds.

2. Performing a SWOT analysis

a. Identifying (external) opportunities and challenges and relevant (internal) strengths and weaknesses.

b. Analysing the SWOT elements to identify exploratory recommendations for EFSA's Strategy Definition.

3. Consolidated SWOT analysis structured against 3 strategic clusters

1. Food Systems & Risk Assessment

Sub-Clusters: Holistic & Fit-for-Purpose Risk Assessment, Risk-Risk and Risk-Benefit Analysis, New Data and Methods, Preparedness, Nutrition Advice

2. Knowledge, Data, People & Funding

Sub-Clusters: Governance, funding & cooperation, people & expertise and data, innovation & technology

3. Society and Risk Communication

Sub-Clusters: Communication & Engagement

B) Update on EFSA Strategy 2021-2027

1. Presentation of current state of play of the reflection on Strategic Directions

2. Presentation of selected questions for the survey and ways forward

Expected discussion outcomes:

- *Agreement and clarity on the plan for the AF input on Strategic Directions.*

Timelines/Next steps:

- *Week of 23rd September: survey validation by AF volunteers*
- *1-18 October: AF members replies to the survey*
- *From 18 October to mid-November: Integration of the results in the draft Strategy Direction to be presented to the December Management Board*
- *AF meeting 27 November: presentation of survey results and discussion*
- *17 December: Presentation of the DRAFT Strategy Direction to the Management Board*
- *Strategy 2021-2027 approved by Management Board during June 2020 meeting*

Date approved by Head of Department / MT responsible

12/09/2019

Annex 1

Table 1. Ranking of domains of work

SO	Domain of work	Score	Ranking
SO4	**Preparedness**	834	**1**
SO4	**Developing and implementing Chemical RA**	551	**2**
SO1	**Risk assessment (General and regulated products)**	455	**3**
SO4	**Developing and implementing Biological RA**	369	**4**
SO4	**Harmonisation of methodologies & tools**	364	**5**
SO1	**Risk communication and engagement**	277	**6**
SO3	**Capacity building**	254	**7**
SO3	**Cooperation**	247	**8**
SO4	**Developing and implementing Environmental RA**	207	**9**
SO2	**Data standardisation and quality**	181	**10**

Table 2. Overall ranking of specific areas of work. The domain is indicated in bold. The follow up actions will consider the items scoring up to 90 (highlighted in pink). The specific areas of work scoring higher within their own domain are highlighted in yellow and they will also be followed up.

SO	WP Priorities - Specific areas of work	Score	Ranking
SO4	**Developing and implementing biological RA:** Anti-microbial resistance (AMR) - Environment	136	1
SO4	**Developing and implementing chemical RA:** Chemical mixtures: developing harmonised methods for the RA of combined exposure to multiple chemicals	128	2
SO4	**Developing and implementing chemical RA:** Data collection on endocrine activity for oestrogen, androgen, thyroid and steroidogenesis (EATS)	110	3
SO4	**Preparedness:** Microplastics	107	4
SO4	**Preparedness:** Emerging risks	106	5
SO4	**Developing and implementing biological RA:** Whole Genome Sequencing (WGS) and/or Next Generation Sequencing	105	6
SO1	**Risk Assessment:** Pesticides	104	7
SO4	**Developing and implementing chemical RA:** Carcinogenesis studies guidance	102	8
SO4	**Preparedness:** Food waste and cyclical economy	99	9
SO4	**Developing and implementing chemical RA:** Exposure assessment - Pesticides in food for infants and young children	98	10
SO2	**Data standardisation and quality:** Data quality: common language and harmonization of processes and formats (e.g. for metadata, IT systems)	97	11
SO1	**Risk Assessment:** Biological Hazards	96	12
SO1	**Risk Assessment:** Contaminants - Heavy metals	89	13
SO1	**Risk Assessment:** Food packaging	89	13
SO3	**Capacity building:** Innovative approaches to increase capacity: Machine learning techniques (MLT) for literature and systematic reviews	87	15
SO3	**Capacity building:** Scientific RA Training & Teaching activities e.g. EFSA training courses open to external experts, BTSF RA training courses, EU-FORA Fellowship Programme, Parma Summer School	85	16
SO3	**Cooperation:** EU Research Agenda	85	16
SO2	**Data standardisation and quality:** Dietary surveys	84	18
SO3	**Capacity building:** Integrating regulatory needs in research for H2020 / Horizon Europe, from food safety priorities identification to project set-up, implementation and results exploitation	82	19
SO4	**Preparedness:** Animal disease outbreaks	82	19
SO3	**Cooperation:** EU Risk Assessment Agenda	81	21
SO3	**Cooperation:** Partnering projects	81	21

SO	WP Priorities - Specific areas of work	Score	Ranking
SO4	**Developing a pan-EU holistic and integrated approach in environmental RA:** ERA: GIS use of spatial data (landscape, farms, pastures, enterprises, animals densities…)	81	21
SO4	**Developing and implementing harmonised methodologies & tools:** Animal welfare	81	21
SO4	**Developing and implementing harmonised methodologies & tools:** Cross-cutting guidance implementation (weight of evidence, benchmark dose, uncertainties)	81	21
SO4	**Developing and implementing harmonised methodologies & tools:** Endocrine disruptors guidance	81	21
SO4	**Developing and implementing chemical RA:** Computational toxicology, QSAR and read-across	79	27
SO1	**Risk Assessment:** Nutrition, enzymes, food additives	77	28
SO1	Risk Communication and Engagement: Evidence-Based Approach to Risk Communications	77	28
SO4	**Developing and implementing biological RA:** Biological Predictive modelling	76	30
SO4	**Developing and implementing harmonised methodologies & tools:** Human variability in Risk Assessment	71	31
SO4	**Preparedness:** Food-borne parasites	71	31
SO4	**Preparedness:** Risk prioritisation	71	31
SO4	**Developing a pan-EU holistic and integrated approach in environmental RA:** Environmental RA and protection goals	70	34
SO4	**Preparedness:** Hazards and risks from aquaculture products and processes	70	34
SO1	**Risk Communication and Engagement:** Risk perception	66	36
SO4	**Preparedness:** New food preparation processes as a result of increased migration of human populations	66	36
SO4	**Preparedness:** Application of residue definition to plant extracts/botanical active substances	58	38
SO4	**Developing a pan-EU holistic and integrated approach in environmental RA:** ERA: guidance on non-target terrestrial organisms	56	39
SO4	**Preparedness:** Arthropod vectors	53	40
SO4	**Developing and implementing biological RA:** Synthetic biology	52	41
SO1	**Risk Communication and Engagement:** Consumer insights surveys	51	42
SO4	**Preparedness:** Plant pests (e.g. xylella)	51	42
SO1	**Risk Communication and Engagement:** Stakeholder engagement	50	44
SO4	**Developing and implementing harmonised methodologies & tools:** Residue definition – QSAR guidance	50	44
SO4	**Developing and implementing chemical RA:** Evaluation of phototoxicity and photomutagenicity	34	46
SO1	**Risk Communication and Engagement:** Reputation Management	33	47

Table 3. Scoring per criteria and per domain of work. Highlighted in yellow the high impact criteria.

SO	Domain of work	Specific area of work	Prioritisation Criteria									Total score
			Health / environmental impact;	Societal impact	European dimension	International dimension	Horizontal relevance	Collaborative approach to avoid	Data Gaps	Methodological gaps	Research needs	
SO1	Risk assessment	Biological Hazards	20	6	15	18	10	6	7	3	11	**96**
		Contaminants - Heavy metals	18	9	15	14	11	6	5	6	5	**89**
		Risk Assessment: Food packaging	12	7	12	10	11	7	11	9	10	**89**
		Nutrition, enzymes, food additives	9	13	12	11	8	6	6	6	6	**77**
		Pesticides	17	18	16	17	11	10	3	8	4	**104**
	Total score in RA		**76**	**53**	**70**	**70**	**51**	**35**	**32**	**32**	**36**	**455**
SO1	Risk communication and engagement	Consumer insights surveys	3	12	12	4	5	3	5	2	5	**51**
		Evidence-Based Approach to Risk Communications	9	14	13	11	10	7	2	4	7	**77**

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SO	Domain of work	Specific area of work	Prioritisation Criteria									Total score
			Health / environmental impact;	Societal impact	European dimension	International dimension	Horizontal relevance	Collaborative approach to avoid	Data Gaps	Methodological gaps	Research needs	
		Reputation Management		10	8	4	4	3		2	2	**33**
		Risk perception	8	19	10	10	6	3	2	3	5	**66**
		Stakeholder engagement	3	9	10	9	7	5	2	2	3	**50**
	Total score in Risk communication and engagement		**23**	**64**	**53**	**38**	**32**	**21**	**11**	**13**	**22**	**277**
SO2	**Data standardisation and quality**	Data quality: common language and harmonization of processes and formats (e.g. for metadata, IT systems)	8	2	20	13	10	15	10	11	8	**97**
		Dietary surveys	11	8	14	4	6	11	14	8	8	**84**
	Total score in Data standardisation and quality		**19**	**10**	**34**	**17**	**16**	**26**	**24**	**19**	**16**	**181**
SO3	**Capacity building**	Innovative approaches to increase capacity: Machine learning techniques (MLT) for literature and systematic reviews	5	4	14	7	10	11	7	17	12	**87**

SO	Domain of work	Specific area of work	Prioritisation Criteria									Total score
			Health / environmental impact;	Societal impact	European dimension	International dimension	Horizontal relevance	Collaborative approach to avoid	Data Gaps	Methodological gaps	Research needs	
		Integrating regulatory needs in research for H2020 / Horizon Europe, from food safety priorities identification to project set-up, implementation and results exploitation	11	6	17	11	8	11	6	7	5	**82**
		Scientific RA Training & Teaching activities e.g. EFSA training courses open to external experts, BTSF RA training courses, EU-FORA Fellowship Programme, Parma Summer School	7	4	21	14	11	17	3	5	3	**85**
SO3	**Total score in capacity building**		**23**	**14**	**52**	**32**	**29**	**39**	**16**	**29**	**20**	**254**
SO3	**Cooperation**	EU Research Agenda	11	4	20	9	8	14	6	5	8	**85**
		EU Risk Assessment Agenda	12	2	20	11	9	14	4	4	5	**81**
		Partnering projects	8	6	19	10	7	15	5	5	6	**81**
	Total score in Cooperation		**31**	**12**	**59**	**30**	**24**	**43**	**15**	**14**	**19**	**247**
SO4	**Developing a pan-EU holistic and**	Environmental RA and protection goals	10	11	12	10	8	9	5	2	3	**70**

SO	Domain of work	Specific area of work	Prioritisation Criteria									Total score
			Health / environmental impact;	Societal impact	European dimension	International dimension	Horizontal relevance	Collaborative approach to avoid	Data Gaps	Methodological gaps	Research needs	
SO4	**integrated approach in environmental RA**	ERA: GIS use of spatial data (landscape, farms, pastures, enterprises, animals densities…)	7	8	12	9	10	11	10	6	8	**81**
		ERA: guidance on non-target terrestrial organisms	8	6	11	9	5	7	5	2	3	**56**
	Total score in environmental RA		**25**	**25**	**35**	**28**	**23**	**27**	**20**	**10**	**14**	**207**
SO4	**Developing and implementing biological RA**	Anti-microbial resistance (AMR) - Environment	22	12	14	21	16	15	13	9	14	**136**
		Biological Predictive modelling	11	2	9	11	8	8	8	7	12	**76**
		Synthetic biology	3	9	4	6	4	3	6	5	12	**52**
		Whole Genome Sequencing (WGS) and/or Next Generation Sequencing	12	4	18	17	12	14	8	9	11	**105**
	Total score in biological RA		**48**	**27**	**45**	**55**	**40**	**40**	**35**	**30**	**49**	**369**

SO	Domain of work	Specific area of work	Prioritisation Criteria									Total score
			Health / environmental impact;	Societal impact	European dimension	International dimension	Horizontal relevance	Collaborative approach to avoid	Data Gaps	Methodological gaps	Research needs	
SO4	Developing and implementing chemical RA	Carcinogenesis studies guidance	13	10	15	15	10	12	5	12	10	**102**
		Chemical mixtures: developing harmonised methods for the RA of combined exposure to multiple chemicals	13	8	18	17	15	14	14	14	15	**128**
		Computational toxicology, QSAR and read-across	6	2	12	12	9	10	7	8	13	**79**
		Data collection on endocrine activity for oestrogen, androgen, thyroid and steroidogenesis (EATS)	14	6	14	13	13	13	16	8	13	**110**
		Developing and implementing chemical RA: Evaluation of phototoxicity and photomutagenicity	4	1	6	6	5	5	1		6	**34**
		Exposure assessment - Pesticides in food for infants and young children	14	14	11	11	11	12	9	5	11	**98**
	Total score in chemical RA		**64**	**41**	**76**	**74**	**63**	**66**	**52**	**47**	**68**	**551**

SO	Domain of work	Specific area of work	Prioritisation Criteria									Total score
			Health / environmental impact;	Societal impact	European dimension	International dimension	Horizontal relevance	Collaborative approach to avoid	Data Gaps	Methodological gaps	Research needs	
SO4	Developing and implementing harmonised methodologies & tools	Animal welfare	8	16	13	9	8	10	5	6	6	**81**
		Cross-cutting guidance implementation (weight of evidence, benchmark dose, uncertainties)	4	5	15	12	10	10	7	10	8	**81**
		Endocrine disruptors guidance	9	8	13	9	12	11	7	5	7	**81**
		Human variability in RA	9	5	8	8	7	9	9	8	8	**71**
		Developing and implementing harmonised methodologies & tools: Residue definition – QSAR guidance	5	2	8	7	5	9	4	5	5	**50**
	Total score in harmonisation of methodologies & tools		**35**	**36**	**57**	**45**	**42**	**49**	**32**	**34**	**34**	**364**
SO4	Preparedness	Animal disease outbreaks	15	7	17	14	7	8	6	3	5	**82**
		Application of residue definition to plant extracts/botanical active substances	9	6	7	5	4	6	6	7	8	**58**
		Arthropod vectors	11	2	11	7	4	5	4	2	7	**53**
		Emerging risks	12	10	12	13	9	11	12	12	15	**106**
		Food waste and cyclical economy	11	17	14	13	10	8	8	8	10	**99**

SO	Domain of work	Specific area of work	Prioritisation Criteria									Total score
			Health / environmental impact;	Societal impact	European dimension	International dimension	Horizontal relevance	Collaborative approach to avoid	Data Gaps	Methodological gaps	Research needs	
		Food-borne parasites	14	5	13	9	4	7	8	4	7	**71**
		Hazards and risks from aquaculture products and processes	14	6	10	10	4	6	9	3	8	**70**
		Microplastics	15	14	13	16	6	10	11	10	12	**107**
		New food preparation processes as a result of increased migration of human populations	12	12	8	7	2	6	7	2	10	**66**
		Plant pests (e.g. xylella)	7	4	10	9	4	5	4	1	7	**51**
		Risk prioritisation	7	7	12	8	4	8	7	11	7	**71**
	Total score in Preparedness		**127**	**90**	**127**	**111**	**58**	**80**	**82**	**63**	**96**	**834**