



Horizon 2020

- Its Final Work Programme from 2018 to 2020 and Contribution to EFSA's Priorities -

George Kass
SCER Unit

HORIZON 2020 – BACKGROUND INFORMATION

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- Horizon 2020 is the biggest EU Research and Innovation programme ever with €77 billion of funding available over 7 years (2014 to 2020)
 - The biggest EU research and innovation funding programme ever
 - The programme is entering its final round: 2018-2020
 - Launched on 27 October 2017
 - Covering the budgetary years 2018, 2019 and 2020
 - Representing an investment of around €30 billion

2018 - 2020 – WHAT'S NEW?

➤ Interim analysis of Horizon 2020 (2017)

- Confirmed validity of objectives, attractiveness to stakeholders, flexibility
- More efficient than FP7 but large-scale oversubscription (success rate down to 11.6% from 18.4%)
- Increased internal and external coherence
- Impact of EU versus national funding: more researchers, faster results more collaborations



‘Horizon 2020 is an attractive and well performing programme’

2018 - 2020 – WHAT'S NEW?

- The Work Programme responds to the **European Commission's political priorities**
- Paves the way for its successor programme (FP9)

10 Commission priorities for 2015-19

Jobs, growth and investment

Digital single market

Energy union and climate

Internal market

A deeper and fairer economic and monetary union

A balanced and progressive trade policy to harness globalisation

Justice and fundamental rights

Migration

A stronger global actor

Democratic change

2018 - 2020 – THE NEW FOCUS



1

- Market creating innovation
 - European Innovation Council (EIC)
 - New technologies
 - Innovations that cut across technologies and sectors

2

- Political priorities
 - 'Focus areas' with exceptional impact, addressing 'big ticket' challenges

3

- Strengthening international R&I cooperation
 - 30 flagship initiatives



NEW FOCUS: POLITICAL PRIORITIES (EXAMPLES)



- 'Building a low Carbon, Climate-resilient Future' (budget of €3.3 billion)
- 'Connecting economic and environmental gains – the Circular Economy' (budget of €941 million)
- 'Digitising and transforming European industry and services' (budget of €1.7 billion)
- 'Boosting the effectiveness of the Security Union' (budget of €1 billion)
- Migration (budget of >€200 million)



2018 - 2020 – THE NEW FOCUS



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- Market creating innovation

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- Political priorities

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- Strengthening international R&I cooperation

- 30 flagship initiatives

NEW FOCUS: STRENGTHENING INTERNATIONAL R&I COOPERATION (EXAMPLES)



Africa – food, nutrition security and agriculture, renewable energies

COP21 – climate change action support

Multiple international partners – safe nanotechnology

OPEN INNOVATION, OPEN SCIENCE, OPEN TO THE WORLD

■ Open Innovation

■ Open Science

- EC's core strategy to improve knowledge circulation and thus innovation
- Open research data approach
- Creation of a **European Open Science Cloud**
 - To offer Europe's 1.7 million researchers and 70 million science and technology professionals a virtual environment to store, share and re-use their data across disciplines and borders.

■ Open to the World



Direct Relevance to EFSA's remit

■ CALL: SUSTAINABLE FOOD SECURITY

Call identifier: H2020-SFS-2018-2020

Publication date: 27 October 2017

➤ Several topics of direct relevance to EFSA's remit

- Personal nutrition
- Alternative proteins for food and feed
- New and emerging risks to plant health
- Stepping up integrated pest management
- Making European beekeeping healthy and sustainable
- Improving animal welfare
- Anti-microbials and animal production



Direct Relevance to EFSA's remit (contd)

■ CALL: IMPLEMENTING THE EUROPEAN OPEN SCIENCE CLOUD

Call identifier: H2020-INFRAEOSC-2018-2020

Publication date: 27 October 2017

■ CALL: FOUNDATIONS FOR TOMORROW'S INDUSTRY

Call identifier: H2020-NMBP-TO-IND-2018-2020

Publication date: 27 October 2017

➤ Several topics of direct relevance to EFSA

- Real-time nano-characterisation technologies
- Nanoinformatics: from materials models to predictive toxicology and ecotoxicology
- Safety by design, from science to regulation



Direct Relevance to EFSA's remit (contd)

■ CALL: BETTER HEALTH AND CARE, ECONOMIC GROWTH AND SUSTAINABLE HEALTH SYSTEMS

Call identifier: H2020-SC1-BHC-2018-2020

Publication date: 27 October 2017

➤ Several topics of direct relevance to EFSA

- Exploiting research outcomes and application potential of the human microbiome for personalised prediction, prevention and treatment of
- New testing and screening methods to identify endocrine disrupting chemicals
- The Human Exposome Project: a toolbox for assessing and addressing the impact of environment on health



Topics of general interest to EFSA's remit

- Developing research standard operating procedures, research practice, research integrity, data re-use.
- Green and circular economy: contaminants, recycling and health.
- Climate action in support of the Paris agreement.
- Training opportunities
 - Marie Skłodowska-Curie research and innovation staff exchange
 - Widening fellowships (re-integration)





TECHNICAL REPORT

APPROVED: 17 January 2017

doi:10.2903/sp.efsa.2017.EN-1166

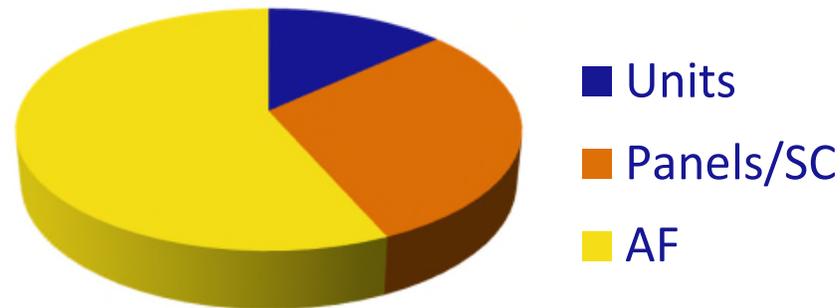
Horizon 2020: EFSA’s Priority Research Topics

European Food Safety Authority (EFSA),
Georges Kass, Jeffrey Moon and Tobin Robinson



➤ SCER activities on H2020

- Call for project ideas to all units, scientific panels, SC and AF (June 2016)
- 60 proposals received (September 2016)



- Proposals checked against
 - ✓ Criteria of the programme
 - ✓ Innovation (i.e., not previously funded under H2020 or FP7)
 - ✓ EFSA's strategy

HORIZON 2020 – REPRESENTATION OF EFSA'S 2016 PRIORITY RESEARCH TOPICS

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1. Microplastic and nanoplastic particles in food
 2. Honey bee health
 3. Foodborne viruses
 4. Risk assessment methodologies
 - Genotoxicity
 - Non-animal tests methods for developmental neurotoxicity
 - Development of new methods to measure nanomaterials in food
 5. Development of European Cloud-based integrated data collection, data management, data analysis and reporting system for food safety

CONCLUSIONS

1. The last round of the H2020 programme is now published.
 - The content of the last round is driven by market creating innovation, the Commission's political priorities and international cooperation
 - Focus areas and big impact projects
2. A number of calls with direct relevance to EFSA's remit and its mission are identified
 - Representation of EFSA high priority current and past topics
3. Next opportunity: **FP9**
4. Let's collaborate!



