



Aktuální příležitosti v H2020 – společenská výzva 2, KET-biotech, strategie výzkumu pro 2018-2020

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Horizon 2020 – SC2



H2020 Societal Challenge 2 4 výzvy 2017

**Sustainable
food security**

**Blue
Growth**

**Rural
Renaissance**

**Bio-based
innovation
for
sustainable
goods and
services**



Sustainable food security - Témata 2017

Resilient, resource-efficient value chains

- In-situ conservation – partnerships, tools (CSA)
- Robotics for precision farming (RIA)
- Organic breeding (RIA)
- Organic inputs (RIA)
- Emerging diseases in plants and livestock (RIA)
- Diagnostic tools for plant and animal health (IA)
- Breeding livestock for resilience and efficiency (RIA)
- Bee health, polination (RIA)
- Plant protection innovation (RIA)
- Eranet cofunds – bioeconomy
- Regionalisation of CFP (RIA)
- Fish and seafood – biological knowledge and management (RIA)
- Smart fisheries technologies (IA)

EnvironmentCli mate-smart primary production

- Permanent grassland – farming systems and policies (RIA)
- Functional biodiversity – interplay crop pollinators and crops predators (RIA)
- Socio-eco-economic – socio-economic in ecological approaches (RIA)
- Mitigation of GHG emissions and environmental contamination (RIA)
- Eco-intensification of aquaculture (including freshwater) (RIA)

Sustainable food security - Témata 2017

Competitive food industry

- **Innovative agri-food chains – competitiveness and sustainability (RIA)**
- **Innovative solutions for sustainable food packaging (IA)**

Healthy food and diets for all

- **One Health co-fund (zoonoses)**
 - **Childhood obesity epidemics (RIA)**
 - **Sweeteners and sweetness enhancers (RIA)**
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Sustainable food security - Témata 2017

EU-Africa Partnership

- **Earth observation services for the monitoring of agricultural production in Africa (RIA)**

EU-China Flagship

- **Management of soil water resources in the EU and China, impact on agro-ecosystems (RIA)**
- **Livestock production and antimicrobial drug use, animal welfare and health (RIA)**
- **Resource efficient urban agriculture for multiple benefits (IA)**

Blue Growth - Témata 2017

Boosting innovation for emerging Blue Growth activities

- Multi-use of the oceans marine space, offshore and near-shore (CSA)
- High-value added specialised vessel concepts (IA)

Linking healthy oceans and seas with healthy people

- Interaction between people, oceans and seas (CSA)
- Blue green innovation for clean coasts and seas (IA)
- Innovative sustainable solutions for improving the safety and dietary properties of seafood (IA)

The Arctic Dimension

- Climate impacts on Arctic permafrost and its socio-economic impact, with a focus on coastal areas (RIA)

Valorising the Mediterranean Sea basin

Rural renaissance - Témata 2017

Policies and governance

- Coastal-rural interactions – enhancing synergies (RIA)
- Towards 2030 – policies and decision tools for managements of natural resources (RIA)
- Novel public policies and mechanisms for forest ecosystems services (IA)

New value chains and business models

- Business models for modern rural economies (RIA)

Innovation and skill development

- Thematic networks – knowledge to practice (CSA)
- Networking european farms – thematic knowledge exchange and closing innovation gap (CSA)
- Building future science and education systems to deliver to practice (RIA)
- Fostering social capital in the farming sector (CSA)
- Interactive innovation project delivery of EU policies to speed up innovation in rural areas (RIA)

Bio-based innovation - Témata 2017

Securing Sustainable biomass supply

- **Statistical data on bio based industries and bio based products (RIA)**
- **Tree breeding strategies and tools for forest production systems resilient to climatic change and natural disturbances (RIA)**

Building the bio- based markets of the future

- **Bio based products – mobilisation and mutual learning action plan (CSA)**

H2020 - SC2 Výzvy 2017

| Opening | Submission | | <u>Deadlines</u> |
|-------------------|--|---------------------|-------------------------|
| 4 OCT 2016 | two-stage submission (RIA with some exceptions) | 1st stage | 14 Feb 2017 |
| | | 2nd stage | 13 Sept 2017 |
| | single stage submission (IA, CSA, ERA Net) | Single stage | 14 Feb 2017 |

H2020 – KET - biotech



- BIOTEC-5: Microbial platforms for CO₂-reuse processes in the low-carbon economy (RIA)
 - BIOTEC-6: Optimisation of bio-catalysis and downstream processing for the sustainable production of high added-value platform chemicals (IA)
 - BIOTEC-7: New Plant Breeding Techniques (NPBT) in molecular farming: Multipurpose crops for industrial bio-products (RIA)
 - BIOTEC-8: Support for enhancing and demonstrating the impact of KET Biotechnology projects (CSA)
 - *SME Instrument: Dedicated support to biotechnology SMEs closing the gap from lab to market*
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| Publication | Submission | | <u>Deadlines</u> | Budget |
|--------------------|--|---------------------|-------------------------|----------------|
| 10 May 2016 | two-stage submission (RIA) | 1st stage | 27 Oct 2016 | € 48 M |
| | | 2nd stage | 4 May 2017 | |
| 20 Sep 2016 | single stage submission (CSA) | single stage | 19 Jan 2017 | |
| Continuous | SME Instrument | | | € 7,5 M |

Základní typy projektů H2020 a schémata financování

| VYNIKAJÍCÍ VĚDA | VEDOUČÍ POSTAVENÍ EVROPSKÉHO PRŮMYSLU | SPOLEČENSKÉ VÝZVY |
|--|--|-------------------|
| Výzkumné a inovační akce - RIA (100 %) | | |
| Inovační akce – IA (70 %, výjimka pro neziskové subjekty 100 %) | | |
| Koordinační a podpůrné akce - CSA (100 %) | | |
| ERC (100%) | Fast track to innovation (70 %) | |
| Marie Curie (jednotkové náklady) | Nástroj pro MSP (fixní částka + 70 %) | |
| | Rizikový kapitál | |

Vyhledání partnerů

- Pro výzvy H2020 – SC2 a KET biotech Brokerage event v Bruselu 28.6.2016 (možnost vyhledat nabídky účastníků)
– <https://www.b2match.eu/foodbrokerage2016>
- Pro výzvy H2020 Blue Growth – konference a partnerská burza Gdaňsk 19.-20.9.2016
– <https://www.b2match.eu/smartblue2016>
- Další možnosti – Cordis partner search
– <https://cordis.europa.eu/partners/web/guest/home>

WP 2018-2019 (20) STRATEGICKÉ PROGRAMOVÁNÍ

Získávání strategických informací – trendy, potřeby, očekávané dopady

- **Konference**
 - **Global bioeconomy summit** (Berlin 2015),
 - **Bioeconomy investment summit** (Brusel 2015),
 - **Strategie zemědělského výzkumu a inovací** (Brusel 2016),
 - **European bioeconomy stakeholders conference** (Utrecht 2016),
 - **SK presidency BE conference** (Bratislava, říjen 2016)
 - **Food research area strategy 2030** – (Brusel, říjen 2016)

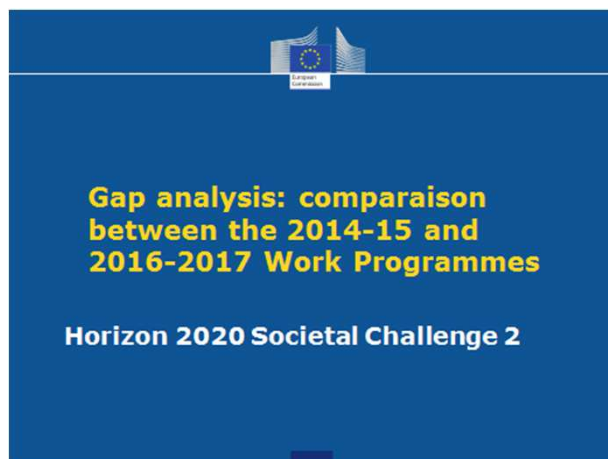
- **Poradní skupina EK (advisory group) – zpráva a doporučení 07/2016**
- **Stálý výbor pro zemědělský výzkum SCAR – foresight exercise – scénáře dalšího vývoje (2015)** <http://ec.europa.eu/research/scar/index.cfm?pg=home>
- **Programový výbor pro H2020 (SC2)**
- **Veřejná konzultace k pracovnímu programu – otevřena do 28.8. na:**
http://ec.europa.eu/research/consultations/sc2-wp2018-2020/consultation_en.htm

WP 2018-2019 (20) Strategické programování

- **Konference - A strategic approach to EU agricultural research and innovation – Brusel, leden 2016** <http://ec.europa.eu/programmes/horizon2020/en/news/designing-path-strategic-approach-eu-agricultural-research-and-innovation>
- **Účinné řízení zdrojů** (produktivita, klimat.změna, emise, kruhové hospodářství, ICT, životní prostředí, úrodnost půdy, spotřeba vody, lepší využití genet.zdrojů)
- **Zdraví rostlin a zvířat** (systémový přístup, prevence, vznikající rizika, nástroje, alternativy pesticidům a antimikrobiálním léčivům)
- **Integrované ekologické přístupy** (ekosystémové služby, udržitelnost hospodaření, biodiverzita, ekologické a smíšené systémy hospodaření..)
- **Nové možnosti rozvoje venkova** (modernizace politik, udržitelné produkční řetězce, veřejné statky, digitalizace)
- **Posílení lidského a sociálního kapitálu** (vzdělávání, dovednosti, školení, znalostní a inovační systémy, participativní přístupy...)
- **Průřezové priority:** systémový přístup, rozvoj ICT, rozvoj výzkumné infrastruktury, posílení socioekonomického výzkumu napříč výzkumných a inovačních oblastí

WP 2018-2019 (20)

- Společné pracovní workshopy organizované EK
- Účastníci: členové SCAR, členové Programového výboru (PC), zástupci relevantních evropských iniciativ – JU BBI, JPI FACCE, JPI HDHL, JPI Ocean...



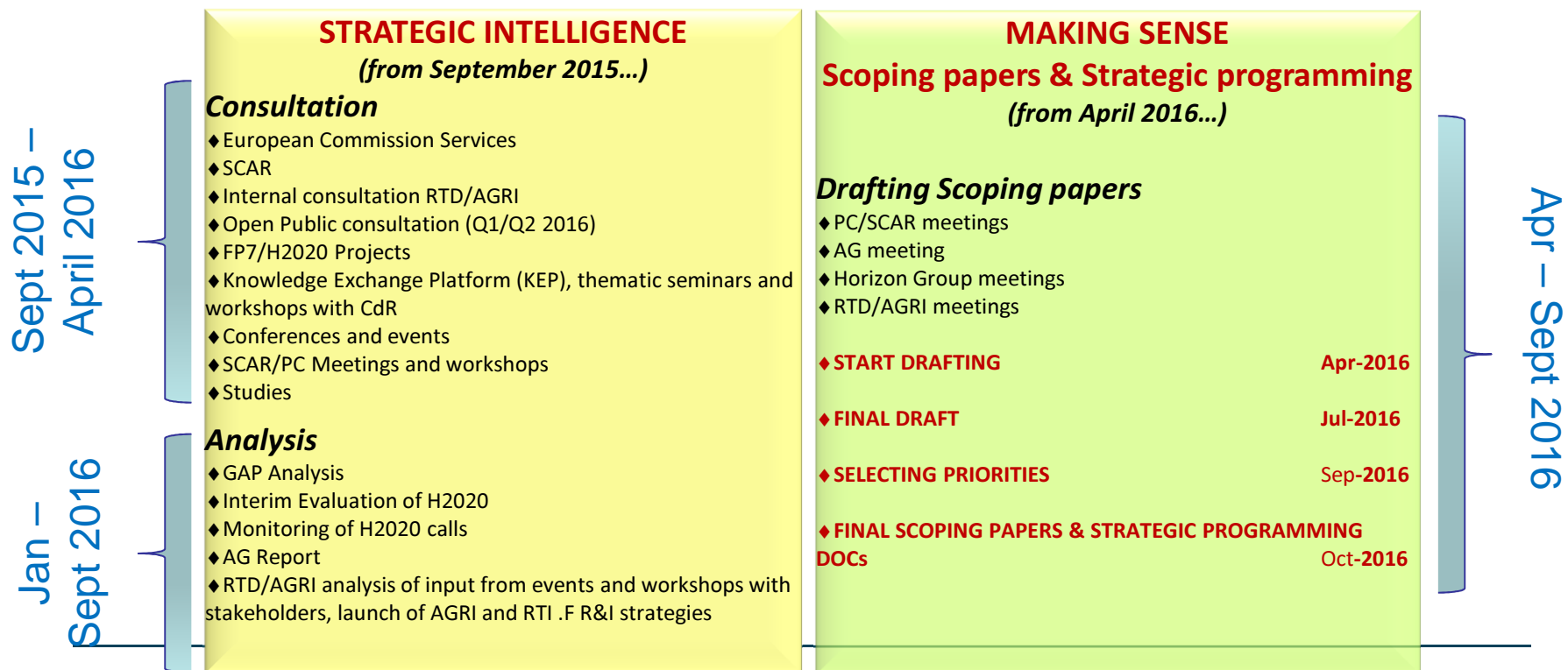
- Společné pracovní workshopy SCAR/PC
- What are the challenges compared to the last programming phase?
- What has changed at political level as priorities?
- Expected impact of strategic programming based on challenges and objectives?

- Food and nutritional security
- Sustainable development
- Climate change/resilience
- Consumers/citizens/stakeholders
- Circularity
- New skills/technologies/multidisciplinary approach
- Smart digitalization
- Policy coherence
- International dimension



H2020 - Work Programme 2018-19 (20) planning

STRATEGIC PROGRAMMING (2015 – 2016)



H2020 - Work Programme 2018-19 (20) planning

WORK PROGRAMME (2016 – 2017)

Oct 2016 – June 2017

DRAFTING WORK PROGRAMME (from Oct 2016...)

Start drafting Work Programme

- ◆ **START DRAFTING WP** Oct-2016
- ◆ Meetings with AG/PC/SCAR
- ◆ Horizon Group
- ◆ PC Meeting
- ◆ Meeting with DG & CAB on topics orientations
- ◆ **1st DRAFT WP (Roadmap, indicative topics & timing of actions)** Jan-2017
- ◆ Input draft Interim evaluation H2020
- ◆ **2nd DRAFT** Apr-2017
- ◆ **FINAL DRAFT** Jun-2017

ADOPTION and COMMUNICATION (from June 2017...)

Adoption procedure

- ◆ **Inter-service consultation** Jun-2017
- ◆ **PC vote** Jul-2017
- ◆ **e-Greffe procedure** Sep-2017
- ◆ **ADOPTION** Oct-2017

Communication

- ◆ NCP meetings
- ◆ Central Info days

July – October 2017

Informace k H2020:

http://ec.europa.eu/research/horizon2020/index_en.cfm

Účastnický portál:

<http://ec.europa.eu/research/participants/portal/desktop/en/home.html>