



Management Board meeting  
16 December 2021

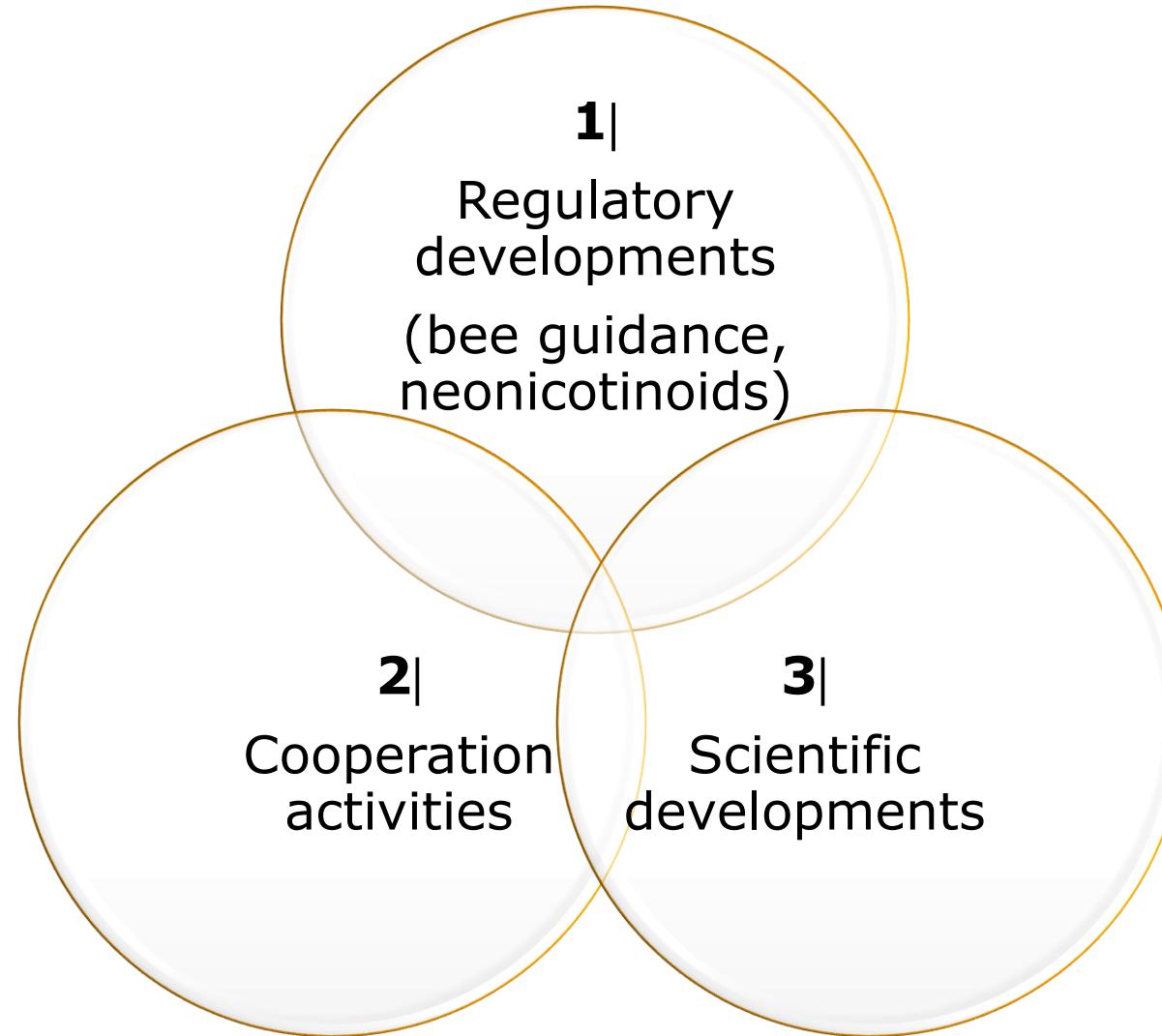
## Update on EFSA's work on bees & other insect pollinators

Domenica Auteri

Pesticide Peer Review Unit



Trusted science for safe food



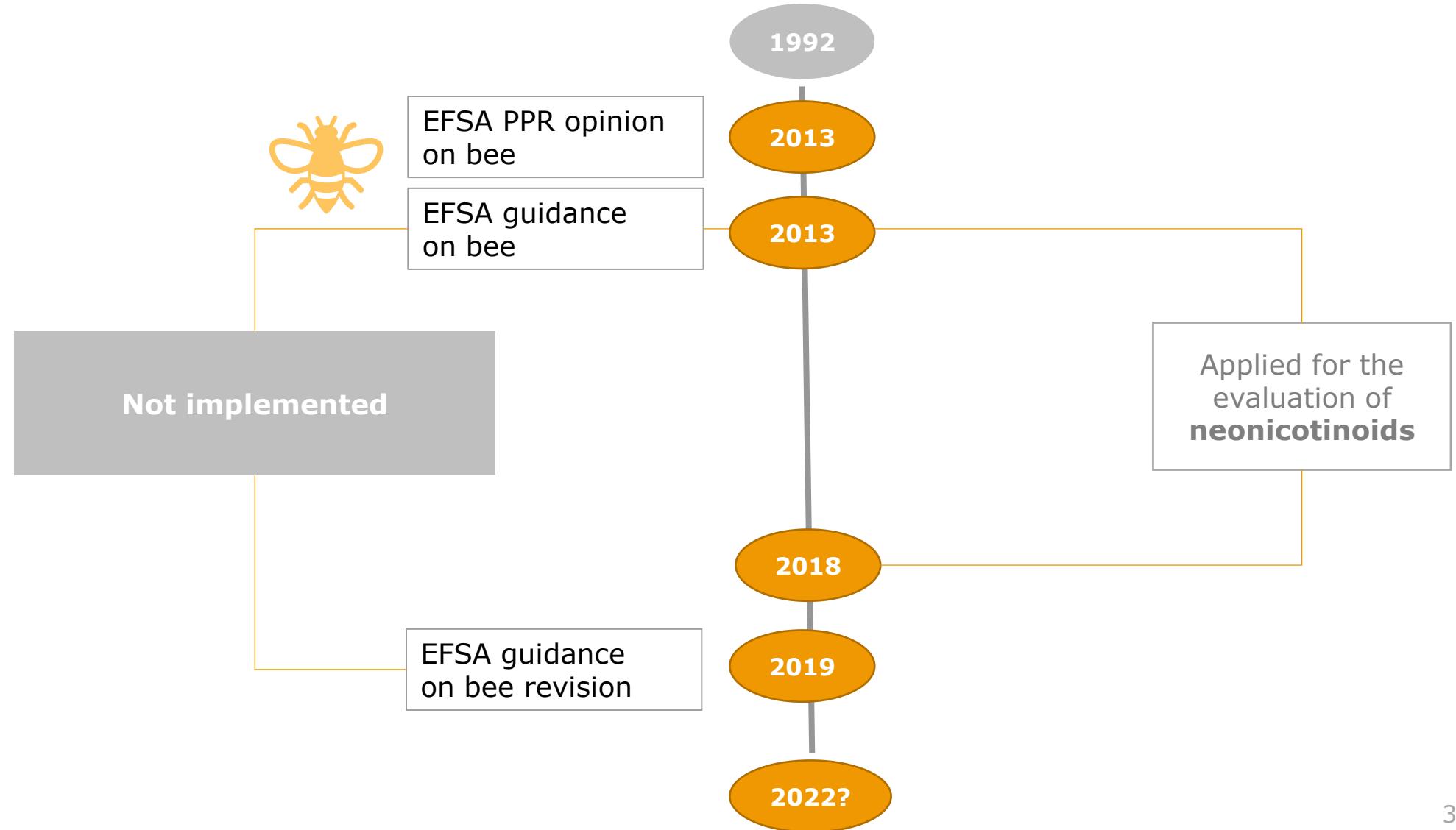
# 1| Regulatory development

Development of regulatory **risk assessment (RA) guidance**

accelerated after 2008



**Trigger:** concerns on bee decline due to use of neonicotinoids



# 1| Neonicotinoids

## EFSA outputs



2013



**EFSA identifies risks to bees from neonicotinoids**

Published: 16 January 2013

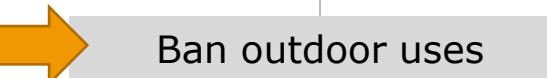


2015



**Neonicotinoids: foliar spray uses confirmed as a risk to bees**

Published: 26 August 2015



2016



**Neonicotinoids: risks to bees confirmed**

Published: 28 February 2016

EU member states support near-total neonicotinoids ban

By Matt McGrath  
Environment correspondent  
27 April 2016 | 1 Comment



2018



**Neonicotinoids: EFSA assesses emergency uses on sugar beet in 2020/21**

Published: 18 November 2021





**European Union expands ban of three neonicotinoid pesticides**

Concerned about pollinators, governments forbid use in all field crops

27 APR 2016 • BY ERIK STOKSTAD

**EU Court backs Commission's ban on controversial neonicotinoid pesticides**

Home / News / Agrifood / Pesticides / EU Court backs Commission's ban on controversial neonicotinoid pesticides

By Natasha Foote | EURACTIV.com

May 6, 2021 (updated: May 14, 2021)

Advertisement

12 EFSA reports

2021

# 1| Bee guidance

## State of the art

March  
2019

- WG setting
- ad hoc stakeholder group setting

80 WG meetings

December  
2021

### Consultations/ Collaboration



- ❖ 3 Consultations with Stakeholders and MSs
- ❖ 3 Consultations with Risk Managers on SPGs
- ❖ 5 Info-sessions with Stakeholders and MSs
- ❖ Cross-fertilization with 1 ECHA WG, 2 EFSA WG
- ❖ 1 external Expert panel (EKE-crop attractiveness for pollen and nectar)
- ❖ Several contractors on specific issues (JKI, ICPS, etc.)
- ❖ Several hearing experts (modellers, agronomists, etc.)

### Work completed



- ❖ Technical report on **background mortality**  
(EFSA, July 2020)
- ❖ 1<sup>st</sup> supporting document for **SPG** definition  
(EFSA, July 2020)
- ❖ 2<sup>nd</sup> supporting document for **SPG** definition  
(EFSA, December 2020)
- ❖ Technical report on **analysis of the background variability**  
(EFSA, March 2021)

### About the review



#### Evidence-based approach:

- ✓ SR - Food consumption
- ✓ SR - Sugar content in nectar of various crops
- ✓ Residue database
- ✓ Routes/scenarios of the exposure
- ✓ Interspecies sensitivity, sublethal
- ✓ Risk for mixture and metabolites
- ✓ Revision of the **requirements** for field studies



Input to decision to establish a SPG for honey bees (*Apis mellifera*) for the entire EU  
→ **10%** as the maximum permitted level of honey bee colony size reduction following pesticide exposure



Support for decision-making process on SPGs for bumble bee & solitary bees  
→ 3<sup>rd</sup> Supporting document (in progress)



- Public consultation: March 2022 (TBC)
- Final guidance: Autumn 2022 (TBC)





**2017: Scientific conference** on collecting and sharing data on bee health: towards an European Bee Partnership<sup>1</sup>



**2018: Set up stakeholders' partnership**<sup>2</sup>



**2021: Design of a prototype platform**<sup>3, 4</sup> with a user Tutorial<sup>5</sup>



**2021: EFSA co-organises EU Pollinator Week 2021 events with European Parliament, European Commission and Slovenian Presidency of Council**

**Next steps:** Implementation of the prototype platform by broadening the scope to insect pollinators & EU Pollinator Week 2022



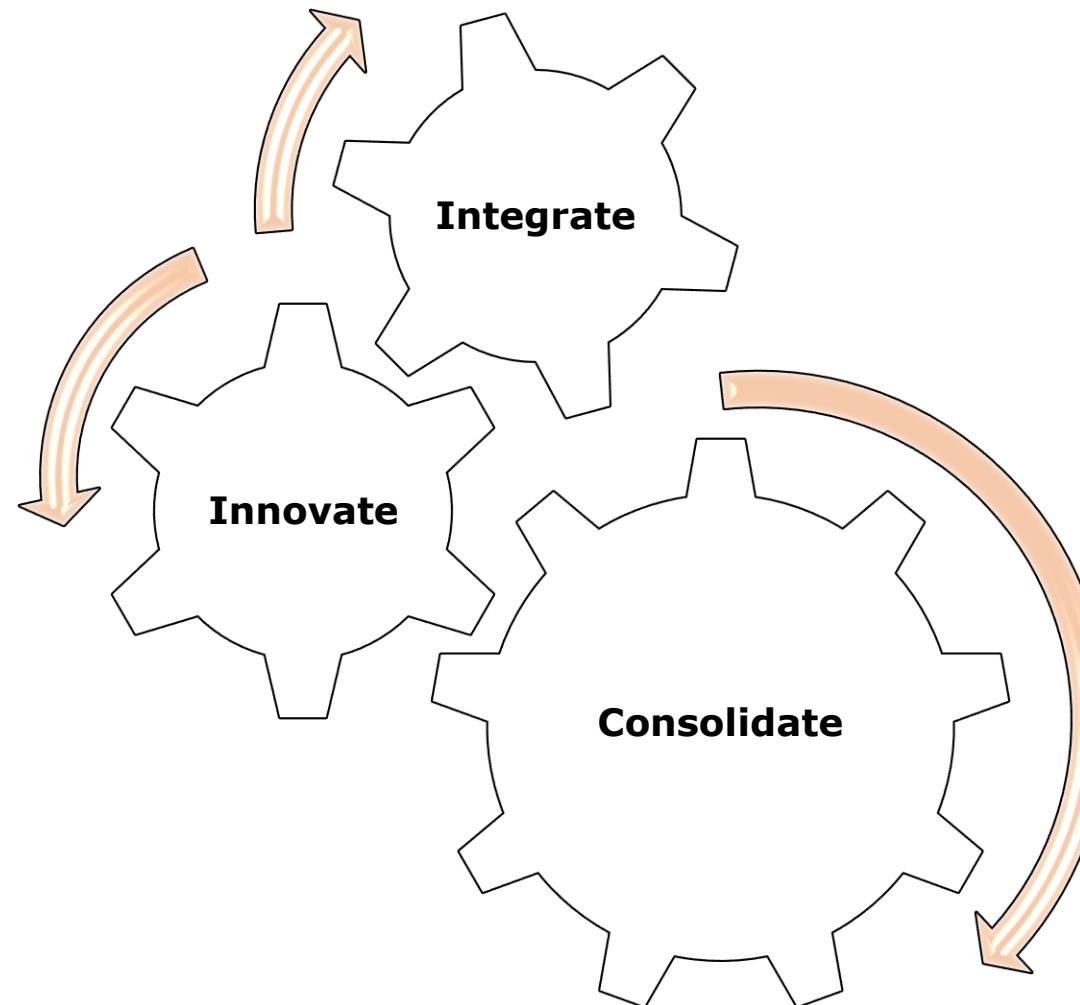
### **WORKSHOP 29 April 2021**

**Participants:** ECHA/EEA/JRC/EFSA/DG SANTE/D ENV  
**Aim:** Feedback & discussion on draft IPOL scope, objectives & risk assessment development areas

### **WORKSHOP 25 June 2021**

**Participants:** ECHA/EEA/JRC/EFSA/DG SANTE/DG ENV  
**Aim:** Discussion of ongoing & planned pollinator projects in the EU & discussion of synergies & cooperation opportunities

### 3| Scientific developments

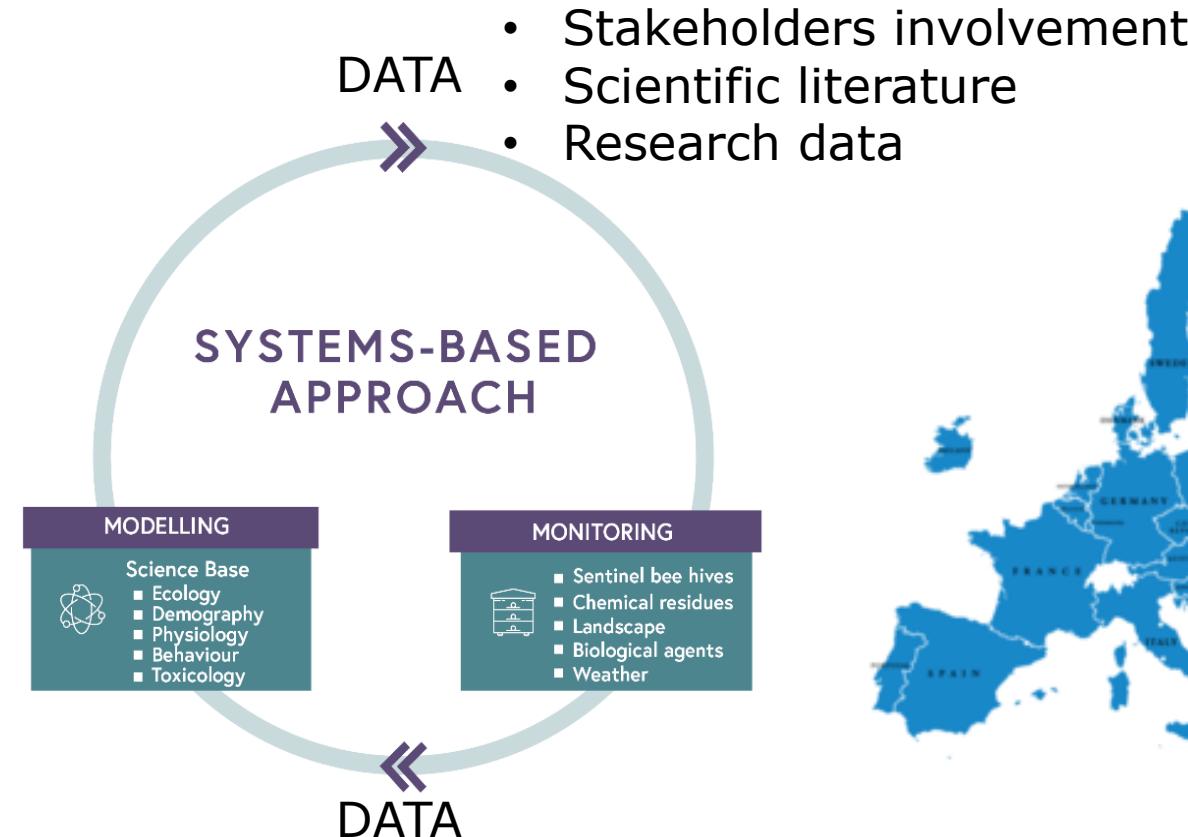


### 3| New future for ERA

Transition to more holistic & integrated ERA for honey bees

ApisRAM model<sup>1</sup>  
calibrated with  
field data<sup>2</sup>

(1) EFSA, 2016; (2) Dupont et al, 2021



For predictive & post-authorisation RA of pesticides



Next steps (2022-2025): To further develop APISRAM for its implementation in risk assessments

### 3| Scientific developments

#### Advance ERA of chemical to better protect insect pollinators (IPOL-ERA)

##### ➤Main objectives of theme paper:

1. Engage towards a joint *IPol-ERA* **partnership**
2. Assess **ecological consequences** of chemical effects
3. Advance **hazard & exposure** characterisation
4. Advance RA of **combined exposure to multiple chemicals**
5. Develop **landscape scale population level based environmental risk assessment tools** that account for environmental stressors
6. Develop & implement a **systems-based approach** & promote its use/uptake in a regulatory context

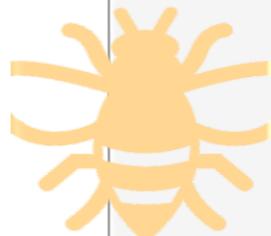
Call for 4-year project on non-target arthropods (NTAs, incl. pollinators)  
<https://etendering.ted.europa.eu/cft/cft-display.html?cftId=8625>

Call for a roadmap (for action) development launched in Sept 2021  
(open until **18/01/2022**)  
Several envisioning projects in the next years

#### ➤ Main objectives:

1. Gather information to identify **vulnerable taxa** among the main provider of ecosystem services
2. Get insights on the **link** between how level of **effects** at the population level translates into effects on the **provision of ecosystem services**
3. Improve quantitative understanding of different routes of exposure, & assess their relative relevance (**via experimental work**)
4. Gather/generate data on differences in species sensitivity to PPPs, in order to better calibrate RA (**via experimental work**)

# Acknowledgments



## Co-authors

- Agnès Rortais
- Yann Devos
- Julia Febregas
- Steve Pagani
- Simon Terry

