The new draft guidance for birds and mammals from the perspective of practitioners

Helena Crosland¹, Anja Russ², Amy Brooks¹, Benedikt Giessing², Olaf Fuelling², Andrea Rossbach², Christian Wolf²







Introduction

- Risk to B&M from PPPs currently assessed according to EFSA GD (2009)¹
- Tiered approach: Screening → Higher tier refinements
- New draft update to the GD released for public commenting (2021)^{2.} Includes: new data, clarifications on technical points, technical meeting decisions etc.



¹[EFSA] European Food Safety Authority. 2009. Guidance Document on Risk Assessment for Birds & Mammals. EFSA J 7:1438.

²[EFSA] European Food Safety Authority. 2021. Risk Assessment for Birds and mammals. DRAFT Guidance Document.

This presentation

- Part 1: CEA presents the risk assessor's view of changes in draft GD
- Basis, practicality, realism, and potential impact on risk assessment
- Part 2: tier3 presents the view of CRO on new requirements for higher tier studies
- Opinions, practicality, and proposals



CEA: risk assessor's view

CEA

- GD should be updated with developing science
 - New draft includes updated residues data which is good!
- It should also be easy to interpret and use
 - Clarifications/decisions from expert meetings now included
 - More detail provided for performing/assessing HT studies
 - Appendix F easy to select crop and BBCH to find the relevant generic model species
- Complexity and data requirements for RAs are increasing
 B&M draft is definitely a more complex assessment
- Lack of calculator tool difficult to assess impact on RA...
- Are these increases in complexity necessary or relevant?

Example: Use of EL_{10}



- Effect level of 10% supported in draft GD in line with Reg. 283/2013
- Scientifically supported?
 - ~20% effects detectable in B&M studies
 - Ecological relevance: 10% for all endpoints doesn't make sense. What evidence?
 - Behaviour: "Effects of 10% or greater will be considered relevant, unless extensive literature/data is provided that this is not the case". How to measure? Onus placed on applicant to prove not ecologically relevant
- Draft argues that ELL_{10} would not significantly change screening/tier 1 RA³ so what is the benefit..? What about BMDL?
- Has monitoring demonstrated NOAEL not protective?

³Comparison of NOEC values to EC10/EC20 values, including confidence intervals, in aquatic and terrestrial ecotoxicological risk assessment. EFSA Supporting publication. 2015:EN-906

Example: Use of fTWA



- fTWA included in LT assessments to account for degradation of a.s.
- Default TWA = 0.53 (assuming LT exposure = LT effects, 21d averaging period, and DT_{50} 10 days)
- New Draft: need to prove LT effects are not caused by ST exposure (both critical and higher effect endpoints from B&M LT studies)
- Examples given for where not appropriate to use fTWA, some where case-by-case needed, few where fTWA can be considered appropriate
- If not appropriate also no DT50 refinement possible. Decision could change during review after studies performed!
- Could be significant extra work for applicants, regulators, EFSA... where is evidence previous approach not protective?

Risk assessor's view - conclusions

CEA

- Several updates to the GD are welcomed and should assist risk assessors
- Two examples provided where the RA will become more complex*
- Not clear if new approaches will provide greater protection (or give the same outcome with greater effort)
- No evidence available as to why current approaches were considered under protective
- Could B&M population monitoring since EFSA (2009) implementation help?



Acknowledgement
Thanks to Gabe Weyman for assistance in reviewing this presentation

*For another example, see poster - Secondary Poisoning of Birds and Mammals via Benthic Invertebrates, Weyman *et al.* 2022.

This presentation

- Part 1: CEA presents the risk assessor's view of changes in draft GD
- Basis, practicality, realism, and potential impact on risk assessment
- Part 2: tier3 presents the view of CRO on new requirements for higher tier studies
- Opinions, practicality, and proposals





tier3

tier3: Practitioner's view on higher tier studies

+ all routes of exposure taken into account

- high variability

+ real species present in the field

Sufficiently worst-case environmental scenario to cover the extremes of possible species exposure and vulnerability

- uncertainty
- difficulty to exclude a risk

- + direct measurements under realistic field conditions
- + possibility to reduce uncertainties about a risk

Request for additional data

Landscape characteristics provided by habitat mapping

 Recent use of pesticides / agricultural practices not practicable for large-scale studies

Assessment of food availability – What is 'worst case'?

Further considerations

- Agricultural activities cannot be avoided in large-scale studies and might attract animals
- Full tillage practices may represent worst-case conditions



PT studies

Choice of focal species

 Duration of a tracking session depending on activity period of species (diurnal/nocturnal)

 Tracking sessions of one individual on nonconsecutive days

PD studies

- PD represents the diet selection from a specific area rather than general diet
- Reduce handling stress by observing foraging individuals





Practitioner's view - conclusion

 The new draft B&M guidance strengthens higher tier studies.

 Some additional data requests need further specification.

 Higher tier studies offer most realistic approach to assess risks from PPPs if conducted appropriately.



Thank you for listening!

Contacts:

Helena Crosland Cambridge Environmental Assessments, UK

Helena.Crosland@cea-res.co.uk

Anja Ruß tier3 solutions GmbH, Germany anja.russ@tier3.de

