391 General framework for assessing the risks for in-soil organisms exposed to Plant Protection Products (PPP) S. Pieper, German Federal Environment Agency (UBA) / Plant Protection Products; P. Craig, Durham university / Department of Mathematical Sciences; K. Dinh, DTU (Technical University of Denmark) / Section for Marine Ecology and Oceanography, DTU Aqua; M. Klein, Fraunhofer IME; R. Laskowski, Jagiellonian University / Ecotoxicology & Stress Ecology Group; B. Manachini, University of Palermo; R. Smith, School of Applied Sciences, University of Huddersfield; J.F. Sousa, University of Coimbra / Department of Life Sciences of University of Coimbra; I. Sundh, Swedish University of Agricultural Sciences; K. Swarowsky, German Federal Environment Agency UBA; A. Tiktak, PBL Netherlands Environmental Assessment Agency / Water Agriculture and Food; E. Topp, Agriculture and Agri-Food Canada (AAFC); M. Arena, EFSA - European Food Safety Authority / Pesticides. The Panel on Plant Protection Products and their Residues (PPR Panel) at the European Food Safety Authority (EFSA) and its Working Group on “Non Target Arthropods and In-soil organisms” has published a Scientific Opinion addressing the state of the science on risk assessment of plant protection products for in-soil organisms, which was open for public consultation. The main scope of the work was to take into consideration: (i) the entry into force of the Regulation 1107/2009 replacing the Directive 91/414/EEC; (ii) the need for developing specific protection goals and (iii) the inclusion of new scientific elements in the environmental risk assessment of in-soil organisms. The present contribution focuses on the general framework elaborated in the Scientific Opinion on how the risk for in-soil organisms should be addressed in an improved assessment strategy. The group reviewed available knowledge on ecology, ecotoxicology and exposure of in-soil organisms in agricultural landscapes, focusing on species (group) traits determining the organisms’ vulnerability to intended uses of PPP. In order to provide an appropriate prospective risk assessment for in-soil organisms following a tiered approach, it was important to identify different sources of uncertainties in the extrapolation from single species tests to responses of in-soil organisms’ communities after PPP intended uses. It was concluded that, for the time being, different sources of uncertainties need to be addressed specifically in an amended risk assessment scheme. The proposed scheme has two components: (i) assessment of effects in laboratory, field or semi-field studies; (ii) assessment of long-term effects using population modelling. The first component, which has the goal of assessing the effects of PPP on in-soil organisms’ communities, addresses possible direct and indirect effects of intended PPP uses. The second component addresses the effect of year on year application of PPPs with appropriate population models. In order to link exposure assessment and ecotoxicological responses of in-soil organisms, the Panel and its Working Group has reviewed the available knowledge on temporal and spatial profiles of PPP active substance in soils after application and the distribution and movements of different organisms groups in the soil profile. The conclusions on how to link best exposure and effect assessment are presented together with the specific requirements for different soil organisms’ groups.