

NanoFASE Deliverable D1.1

Presentation of the exposure assessment framework specification

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Research Report Summary

After manufacture, nanoparticles may undergo various physical and chemical transitions, which may affect their properties relevant to risk assessment. NanoFASE is addressing this and developing an Exposure Assessment Framework.

This report details the development of the NanoFASE Exposure Assessment Framework (EAF). It lays out its specification, comprising the stakeholder-required outputs, desired form, format and detail level required of scientific understanding, knowledge and guidance associated with the EAF.

The document describes the steps taken to develop understanding of which features of the EAF are seen as most beneficial by each stakeholder group (e.g. regulators, industry and academics). The steps taken included:

- Consultations with Industry and Regulators regarding desired outputs of the exposure assessment framework
- The initial specification of the Exposure Assessment Framework
- Presentation of the EAF at the first NanoFASE Advisory Board resulting in recommendations to the Executive Board on planning, development and achieving greatest impact.
- Presentations to the project partners by the coordinator, OECD WPMN chair (as AB representative) and WP2 leader at the NanoFASE kick-off meeting.



From the early Stakeholder consultation the Executive Board developed the idea of the “Clickable Framework” as a web based platform where the outputs from NanoFASE could be brought together around a graphically based access point. The NanoFASE overview schematic of the EAF will be presented on the project website; through clicking on graphic elements the user can move down through successive layers to eventually reach a) the detailed models developed for specific release and fate processes b) the experimental and analytical methods used to derive the parameters required to use these models and c) the protocols for such investigations. This final layer is to include the links to the “NanoFASE model catalogue” brought together in WP2 and the Standard Operating Procedures (SOPs) library collated by the NanoFASE “Characterisation Facilities Group” in WP3 after development of these models and methods in WPs 4-9. A final ambition, which may be beyond the scope and ability of this project which is limited to 4 years, is to try and make this “Clickable Framework” interactive, so that external users can provide feedback on the models and methods presented and possibly even suggest modifications or alternatives from their own experiences.

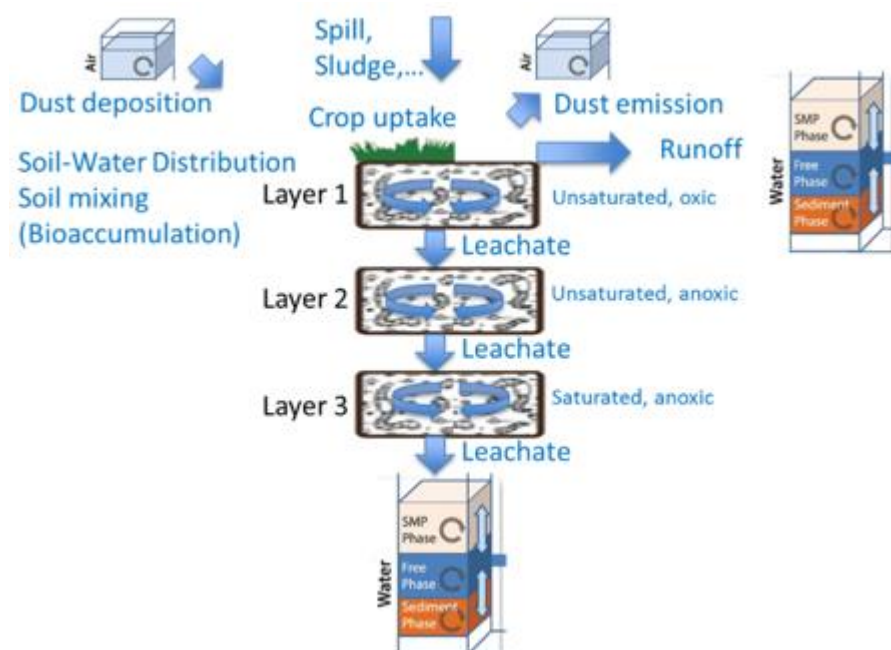


Figure 1: Consideration of nanoparticle transformations in soil – an example of clickable elements of NanoFASE EAF.

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