NORMAN WG7 Task 2 meeting

23-06-2025

Participants

Laetitia Six
Paula Guedes
Annegret Biegel-Engler
Eldbjørg Sofie Heimstad
Mathieu Renaud
Sara Rodriguez
Elodie Bouhoulle
Louise van Mourik
Diana Vieira
Pia Kotschik
Valeria Dulio
Sandrine Andres

Objective of the meeting: Define the actions to take

Status update on the JRC activities:

Diana Vieira (JRC) explains that the Watch List would need to be delivered 1,5 years after coming into force of the SML. Diana shared the internal timeline:

Process and timeline (within 18 months after entry into force: estimated April 2027)

- July 2025: work plan, responsibilities, stakeholder involvement and overview of sources to be used ready
- September 2025: methodology for prioritisation and format of the table to be delivered ready (what type of data to include and what not) in collaboration with external stakeholders such as Norman or Common Forum
- October 2025: consultation of the soil expert group or its sub-group on work plan, sources, methodology for prioritisation and format of the table
- November 2025: consultation intra-ENV and ISG
- April 2026: first draft of the indicative list and table ready in collaboration with external stakeholders such as Norman or Common Forum
- May 2026: consultation of the soil expert group
- June 2026: consultations intra-ENV and ISG
- November 2026: second and final draft the indicative list and table ready
- December 2026: final consultation of the soil expert group or its sub-group
- January 2027: intra-ENV and ISG consultation
- February 2027: finalisation of the text
- March 2027: Inter-service consultation
- April 2027: adoption by the College of the Commission notice and guidelines

JRC expects to develop a Priority list and a Watch list. DG Env however requires ONE single list. Negotiations on this point are ongoing internally at the Commission.

Diana has updated the prioritisation scheme based on comments received from this group. The middle scheme in the MIRO-board is the current clean proposal (Version with comments at the right-hand side).

Question to the group: Do we (the NORMAN WG 7) align with JRC (submission of a joint proposal) or do we work on our own proposal and we try to merge our views afterwards?

> **Result of the discussion:** NORMAN will continue to prioritise scientific aspects, while JRC will need to take into account specific requests from stakeholders. JRC and NORMAN are very much aligned on the general scheme. However, some methodological differences may arise when defining cut off values, etc.

Discussion on how to prioritise data-poor substances:

Concern: there is a risk that certain substances may be overlooked due to lack of knowledge, thereby leading to prioritisation of the wrong substances. How can we reduce this risk and ensure a more accurate prioritization process?

Discussion:

- Currently, we often encounter situations where the amount of data varies significantly among different substance groups, leading to potential bias. For example, ecotox data are currently available for many pesticides but not for other groups of substances. To address this risk of bias, some potential options have been proposed:
    - Using specific scores (e.g. score 0,1 instead of 0) to lift up substances for which information is missing could help avoid a bias due to knowledge gaps
    - By grouping and prioritising the substances in separate categories based on the specific types of data gaps we can ensure a more unbiased prioritisation process (e.g. identifying candidates for ecotoxicity testing or for enhanced monitoring)
- The goal is to highlight priority substances to be monitored in soils. Lists could be land-use specific.
- Some action categories were suggested to address substances for which monitoring data are currently lacking: - substances relevant for suspect screening (to screen their presence / absence in soil before target analysis which is more expensive); - substances relevant for target screening ; etc. …

How to get started?

Proposal to start from the other end of the scheme (soil relevant substances; occurrence in soil);

- Substances known to be present in soil ((un)intentionally used in/on soil),
- substances that are suspected to be present in soil
- substances that may be released to soil (e.g. via air, floods,…)

- Mathieu explained that in Switzerland at the ecotox centre Soil Guideline values are proposed for PPP (if they are implemented or not is a policy decision which comes later). However to define the thresholds you need a specific context/protection goal. In our case is long term soil "fertility" (habitat, production, regulation function) in agricultural soil but outside the periods of application. The specific context is important because if you have to consider a different protection goal (e.g. human health, ecosystems), spatial conditions (specific land use) or time (e.g. growing season).
- Diana explained that on a large scale, only LUCAS has data on substances in soil. However, the LUCAS monitoring programme covers only metals, pesticides, some PFAS and

microplastics (results in 2 years approximately). Study cases for other substances can be sent to Diana.

- Eldbjörg: There are some other (national) studies around (Phthalates, PFAS, UV-filters,) in soil
- Pia explains: We can use occurrence data but we shouldn't overlook the intrinsic toxicity of the substances. Some pesticides are used in very low quantities but are highly toxic (e.g. insecticides), others are used in high quantities with lower toxicity (herbicides).
- Mathieu suggests validating our prioritization scheme / decision tree with well-documented substances (from Task 1) as 'proof of concept'. This initial step would allow us to assess the robustness and reliability of the approach. We could then apply the same framework to data-poor substances to observe how the decision tree performs, and refine the criteria accordingly based on the outcomes.
- The question came up how to include all the **data**. We need indeed to retrieve the data for our prioritization scheme from existing databases.
- Diana: JRC is establishing a Data management plan. Possibly, all the data will be stored in a DB hosted by Soil Observatory or IPChem. But it could take up to 10 years before it is done!
- Valeria reminds that NORMAN has already the infrastructure (NORMAN Database System) to store this kind of data and automatically interlink them with other types of data, e.g. physico-chemical properties, hazard and (eco)toxicity data which are regularly collected in the various modules of the NORMAN Database. One of the goals of this WG should be to improve the data population of the NDS to improve prioritization of chemical contaminants in soil.

Starting from protection goals as a way forward?

- Different protection goals should somehow go together
- Pia shared Aragon project work: they collected info on hazard data in soils for many pesticides. Other substances groups could be done following the same protocol, but data might be missing for those groups.
- Valeria suggests to use : ecotox, human tox and GW risk and take the most protective value (worst case scenario also applied in the NORMAN prioritization scheme for aquatic environment).
- Diana : The Task 1 list and the decision tree need **validation**. We could enter the list defined from Task 1 into the decision tree and validate the priority using a ranking. This validation is a good way forward. Sometimes, substances we expected to be priority don't show after application of the prioritization scheme, or on the contrary, unexpected substances pop up !
- Sandrine: Suggested organizing the work in separate groups based on protection goals (see below)
- We could assign the people to the different groups based on their expertise. The people will work in small groups defining the data needed, the criteria, thresholds, etc. by protection goal:

    1. Soil health and biodiversity → protect the soil dwelling organisms
    2. Secondary poisoning (terrestrial organisms); trophic transport, bioaccumulation
    3. Human health (groundwater as drinking water, direct soil contact and food protection)
    4. Contamination of groundwater and the risk of further spreading (related to mobility and persistency)

    The exact scope of the WGs would need to be further specified within the WG.

- Land use can be used for the categorization or to prioritise the substances within a category.

- Sandrine suggests that each working group (protection goal) could organise a brief meeting to better define the objectives and agree on how to move forward.
- The group stressed that we need to remain consistent across WGs. So general meetings and/or supervision by Annegret& Laetitia is important.

Next steps:

- Excel sheet with protection goals and corresponding WGs is available at BSCW; interested people should sign up for the group(s) in which they wish to contribute (deadline: 7 July) ; groups can organise themselves until the next meeting (beginning of September: date to be communicated).
- Task: align the scheme (MIRO) in the way suitable for the protection goal and validate it with some substances from task 1
- Next meeting: beginning of September (the date will be communicated later)