

Interinstitutional files: 2023/0232 (COD)

Brussels, 18 March 2025

WK 3624/2025 INIT

LIMITE

ENV CLIMA AGRI FORETS RECH **TRANS CODEC**

This is a paper intended for a specific community of recipients. Handling and further distribution are under the sole responsibility of community members.

MEETING DOCUMENT

From: To:	General Secretariat of the Council Working Party on the Environment
N° Cion doc.:	11566/23 + ADD 1
Subject:	Soil Monitoring Directive: WPE on 24 March 2025 – Presidency steering note

With a view to the WPE on 24 March 2025 delegations will find attached the Presidency steering note.

The 4-column document will be published tomorrow morning.

EN



PRESIDENCY STEERING NOTE

Working Party on the Environment 24 March 2025

Soil Monitoring and Resilience Directive (Soil Monitoring Law) - SML

In preparation for the 3rd political trilogue on the Soil Monitoring Law, aiming to conclude the negotiations, the PRES intends to discuss updated compromise proposals regarding the most important aspects taking into account comments received from delegations at the WPE meeting on 21 February and further technical discussions with the EP. The meeting will focus on the key texts in negotiation as well as on the proposals where substantial changes have been made compared to those presented at the previous WPE.

Delegations are kindly invited to consult the updated four-column table, published in ST 7195/25. The document reflects the current state of technical negotiations with the EP and contains a number of provisionally agreed provisions reflecting the positions of both co-legislators.

During the meeting, delegations will have the opportunity to inform the Presidency about their flexibilities and sensitivities in view of reaching an agreement in the interinstitutional negotiations. Results of the WPE discussion will guide the Presidency in identifying the possible landing zones for the negotiations with the EP.

We propose organising the meeting in two rounds of discussions:

- Round 1 on Articles 10 and 11;
- Round 2 on the list of contaminants, the biodiversity descriptor and LUCAS.



1. Soil resilience (Sustainable Soil Management principles and toolbox)¹

The EP position on Art. 10 remains unchanged and is essential for the EP to accept an overall political agreement on the directive. With a view to make progress in negotiations the PRES suggests to continue discussion in the WPE on the basis of the text which includes a slightly modified definition of *soil resilience* in Art. 10 and no Annex III, bearing in mind Member State's sensitivities expressed during the WPE held on 21 February. The updated text in Annex 1 to this note includes a number of targeted/limited changes (requested either by the EP or suggested by some MS) in Article 10 and related definition of soil resilience as well as in recital 37a. The adaptations in Articles 9, 18 and 24, already sent to delegations in WK 2147/2025, remain unchanged.

The Presidency invites delegations to indicate if they could show additional flexibility in relation to this point.

2. Land take mitigation principles and addressing mining sector concerns²

The EP indicated flexibility as regards the General Approach on land take, leaving article 11 relatively untouched and focusing on soil sealing and soil destruction, in exchange of Council's flexibility on other issues and provided that their concerns of the agricultural and forestry sectors and the mining sector, are addressed in the recitals. The EP insists on including reference to brownfields and abandoned industrial sites in row 190 and a related recital. At the last ITM on 12 March the EP also raised concern related to the use of the term 'renaturation' in addition to 'regeneration' in GA, arguing it may lead to an interpretation detrimental to the interests of landowners and land managers.

¹ Article 10, rows 172-185a, Annex III, rows 328-342, new Article 10a, rows 185b-185e

² Article 11, Article 3(1), Article 3(17), Article 8(2) 2nd subparagraph, recitals 30ca (new) and 30e, rows 186-192b, 78, 94, 146a, 40ca (new), 40e, Annex I Part D



The EP proposals on some of the above issues were discussed at the WPE on 21 February. Delegations broadly supported the change of the term soil destruction to soil removal but opposed the reintroduction of a definition for land take. The updated compromise text, prepared by the Commission, taking into account Member States' and EP's comments, is provided in Annex 2 to this note and contains further technical adjustments on:

- Art. 3 (1), point 17 (Row 94) a simplified definition of soil removal which covers total and partial removal of soil;
- recital on the financial burden of the soil monitoring to landowners clarifying that it relates only to costs and adds a reference to the polluter pays principle;
- recital 30f on compensation (addressing the EP AM in row 192a) to cover all mitigation principles of Art 11(a) and remove ambiguity that the recital would create an incentive to increase land take:
- recital 30e removing the changes proposed by the EP which could restrain the
 MS margin of discretion and flexibility in the implementation of Article 11;

In addition, an updated EP compromise proposal on brownfields and possible changes in the text to address the EP concern related to 'renaturation' are included in Annex 2.

The Presidency invites delegations to indicate their flexibility as regards the compromise proposals in Annex 2.

3. Indicative list of soil contaminants³

During the WPE discussion on 21 February the MS showed some openness for an indicative list of soil contaminants to be monitored in part of the samples under Part C of Annex I and the choice of the contaminants from the list left to the MS, however, further adjustments would have to be made.

Monitoring of soil contaminants continues to be a critical concern for the EP. The EP expressed its openness to an indicative list, but also stressed that they expect the final text to clearly define the minimum number of PFAS and pesticides to be selected. The EP proposes the monitoring of at least 15 pesticides, although there appears to be no clear justification for this specific number, and a single test for PFAS (PFAS-43).

_

³ new Article 7a, row 139a, recital 48b, row 58b



A new compromise text on an indicative list of contaminants under Article 7a and related adjustments has been prepared by the Commission, taking into account the MS comments and the technical discussions with the EP. The text is presented in Annex 3 to this note.

It should be noted that the revised proposal deviates significantly from the original position of the EP and the EP is reluctant to accept it at this stage. The revised text emphasizes the indicative nature of the list of contaminants and introduces more flexibility for the MS regarding the number of sampling points. The proposal does not include PFAS-43 test, as requested by the EP, but a selection of PFAS and a single Total Organic Fluorine test for the presence of PFAS. The specific percentage of points where soil contamination descriptors are to be measured has not been proposed yet and will be subject to further negotiations with the EP.

The Presidency invites delegations to indicate if they could accept the compromise proposal in Annex 3, in particular:

- an indicative list of contaminants with an obligation for Member States to choose a minimal number of PFAS/pesticides to be monitored (please indicate the maximum acceptable number),
- measurement of soil contamination descriptors in a percentage of points (please indicate the maximum acceptable percentage).

4. Proposal on soil biodiversity descriptor⁴

During the WPE meeting on 21 February most delegations showed flexibility as regards the soil biodiversity descriptor based on metabarcoding DNA for fungi and bacteria. At the same time some delegations suggested phased implementation and indicated the need to make it clear on which subset of samples the soil biodiversity descriptor should be analysed.

The EP insists on at least one common mandatory soil biodiversity descriptor in Annex I part C, however is open to consider phased implementation. This could be achieved by analysing a smaller subset of samples during the initial monitoring cycles.

_

⁴ Annex I, part C



Based on the outcomes of the WPE discussions a new proposal, as presented in Annex 4 to this note, has been drafted by the Commission. Potential phased implementation and percentage of samples to be analysed for soil biodiversity to reach 100% in the 3rd cycle, will be subject to further negotiations with the EP.

The Presidency invites delegations to indicate their flexibility on the proposed compromise solution presented in Annex 4, in particular as regards phased implementation with measurements required for a gradually increasing % of sampling points in the first two monitoring cycles and for all sampling points from the third monitoring cycle. If delegations are open to this proposal, they are invited to indicate the maximum acceptable percentages for the phased implementation. If the proposal is not acceptable, delegations are invited to suggest alternative solutions.

5. The role of LUCAS in the monitoring architecture⁵

Based on the latest feedback from the MS, the Commission has revised the proposals regarding the role of LUCAS, quality assurance and archiving. The updated proposals are attached in Annex 5 for the MS's consideration. The proposed compromise version on LUCAS coverage builds on the GA and entails transitionary LUCAS survey in all MS. As for comparability of data the redrafted proposal foresees double sampling only for MS that use methodology other than CEN/ISO and for limited number of samples, with the aim to improve transfer functions. Moreover, harmonising of sampling protocols is proposed. With regard to archiving, the compromise proposal encompasses mandatory archiving by MS of a certain percentage of the samples with an option to archive a portion of samples in Ispra.

The Presidency invites delegations to indicate their flexibility on the proposed compromise solution presented in Annex 5, as regards:

- coverage of the LUCAS soil survey,
- the proposed solution on comparability of data,
- percentage of soil samples that Member States are ready to store in their national archives or transfer to the Commission.

⁵ Articles 6-9, row 130c, rows 142a-142d



Soil resilience (Sustainable Soil Management principles and toolbox)/

Updated compromise text on Article 10 compared to the text annexed to WK 2147/2025 (new changes are highlighted in yellow):

1) Recital 37a:

"The results of the soil health assessment performed under the Directive, will inform the process of identifying the specific practices needed to manage soil sustainably and thus increase soil resilience. Without prejudice to obligations stemming from other Union and national law, the provisions on soil resilience do not impose additional obligations on land owners and managers. At the same time, soil managers, landowners, land managers and relevant authorities should be supported to improve soil resilience. This support should entail, inter alia, information and advice on practices that improve soil resilience considering the local soil conditions, capacity building, promotion of awareness of the benefits of such practices, promoting research and innovation as well as assessing the technical and financial needs and facilitating the access and uptake of available financing. "

1) Article 3(5) - slightly modified definition of "soil resilience"

'Soil resilience' means the ability of soil to preserve its function and maintain its capacity to provide ecosystem services and to resist withstand to and recover from disturbances.

Article 10 – Support to soil resilience

- 1. Member States shall encourage, facilitate and support landowners and land managers to improve soil resilience by, inter alia:
- (a) ensuring easy and equal access to impartial and independent advice provided by suitably qualified and appropriately trained advisors who have no conflicts of interest and to information, training activities and capacity building for soil managers, landowners, land managers and relevant authorities on practices that improve soil resilience;
- (b) promoting awareness on the medium- and long-term multiple benefits of practices that improve soil resilience and drawing attention to the costs of practices detrimental to soil resilience;
- (c) promoting research and innovation on sustainable soil management concepts and soil regeneration practices adapted to the local soil characteristics, climatic conditions and land use;
- (d) providing at local level information on suitable measures and practices to increase soil health **and resilience**, based on the soil health assessment performed in accordance to article 9:
- (e) making available a regularly updated mapping of available funding, instruments and activities that support soil resilience.



- 2. Member States shall also regularly:
- assess the technical and financial needs to improve soil health and resilience, as well as the financial benefits of maintaining soil resilience;
- engage with the public concerned, in particular landowners and managers, and ensure that they are given early and effective opportunities to define the level of support needed;
- assess the expected effects on soil resilience of the measures taken in the frame of the programmes, plans, targets and measures listed in Annex IV.

2) Annex III deleted

3) Necessary adaptations in Articles 9, 18 and 24 (text unchanged compared to WK 2147/2025.



Land take mitigation principles and addressing mining sector concerns

Updated compromise text on Article 11 compared to the text annexed to WK 2147/2025 (new changes are highlighted in yellow):

1) Definition of soil removal

Article 3(1), point 17 (Row 94): 'soil removal 'means the temporary or long-term total or partial removal of [surface layer of] soil in an area resulting in loss of the capacity of soils to provide ecosystem services caused by the alteration of the soil components and characteristics.

2) Recital on costs

"Without prejudice to Member States competence on taxation [and to the polluter pays principle], the provisions concerning soil health monitoring under chapter II of this Directive should not be understood as creating, per se, any obligations or financial burden on landowners and land managers other than Member States and the designated competent authorities."

3) Recital 30f on 'compensation'

"Without prejudice to national rules regarding the system of property ownership, the implementation of the land take compensation mitigation principle under this Directive should also be beneficial to the parties directly affected by the loss of soil ecosystem services due to land take, such as the agricultural and forestry sectors landowners and land managers, in particular farmers and foresters since land take predominantly takes place at the expense of agricultural land."

4) Recital 30e

(30e) The principle of the reduction mitigation of the impact is essential when it comes to soil sealing and soil destruction removal in general. Indeed, it is vital to find a balance between the needed economical and demographic growth, and the provision of ecosystem services. Therefore, it is [...] appropriate to lay down certain principles to mitigate the impacts of [...] soil sealing and soil destruction removal as part of sustainable soil management, by adopting an effort-based approach taking into account a large set of good practices aimed at minimizing and offsetting the loss of soil's capacity to provide ecosystem services. TheyThe principles should be based on the land take hierarchy of the EU Soil Strategy for 2030, taking into account different conditions and geographical and administrative circumstances in Member States. The provisions concerning land take in this Directive should do not impose entail a new permitting procedure and should not prevent permitting of activities, including for projects of overriding public interest for projects of overriding public interest, and should not impinge on the spatial planning decisions that fall under the competence of the national, regional or local authorities.



5) Brownfields

Additional amendment related brownfields to Article 11, first paragraph, point (a)(ii) (row 190), as proposed by the EP:

(ii) selecting areas where the loss of ecosystem services would be minimal, in particular on severely degraded soils, such as brownfields and abandoned industrial sites

New related recital:

Rehabilitation or reuse of brownfield and abandoned industrial sites can in particular play an important role to avoid additional land take and new soil artificialization and therefore it would be useful to keep an inventory of these sites or to identify them. This Directive allows the Member States to have full flexibility on how to implement best the principles on mitigation of soil sealing and soil destruction, including by having recourse to incentives to restore and reuse abandoned areas with sealed soils.

6) Renaturation

To address the EP's concerns linked to the use of the term "renaturation" the following possible changes are proposed:

1. Article 9 para 4

4. Based on the assessments of soil health carried out in accordance with this Article, the competent authorities as referred to in Article 5 shall, where relevant in coordination with local, regional, national authorities, identify, in each soil district, the areas where individual criteria for healthy soil condition are not satisfied and where measures are required to improve the soil health [...] and inform the public, on an aggregated level, in accordance with Article 19.

In addition, in order to contribute to improving the soil health, the competent authorities as referred to in Article 5 shall, where relevant in coordination with local, regional, national authorities, identify, in each soil district, the areas of sealed and destroyed removed soil with high potential to improve soil health through de-sealing and putting the soil back /reconstructing the removed soil renaturation. The potential of areas of sealed and destroyed removed soil shall be assessed based on technical feasibility, cost-efficiency and achievable level of soil health improvement.

2. Article 11 paragraph 1 (b)

(b) [...] aim to offset [...] to a reasonable extent the loss of soil capacity to provide multiple ecosystem services, including with the return of services renaturation, by encouraging the de-sealing of sealed soils and the reconstruction of areas with removed destroyed soils.



Indicative list of soil contaminants

Changes (in bold, highlighted in yellow) after the WPE of 21/2/2025 and ITM of 3/3/2025 to the earlier proposals made by the Commission on the indicative list of soil contaminants

Article 7a - Indicative List of soil contaminants for which [...] data are necessary to be monitored on a limited number of points

- 1. The Commission shall establish an indicative list of soil contaminants for which targeted Union-wide soil monitoring [...] data are to be gathered necessary.
- The soil contaminants to be included in the list shall be selected on the basis of their potential to cause a significant risk for human health or the environment taking into account their toxicity and exposure across the EU, such as pesticides and PFAS.
- 3. Member States shall take into account this list when setting the contaminants for the soil descriptor related to soil contamination referred to in Part C of Annex I.
- 4. The Commission shall measure a selection of the soil contaminants from this list in the LUCAS soil survey in a targeted part of the samples by taking into account the possible sources and occurrence of the soil contaminant, and provide Member States with the results [, if such need is expressed by the Member State and in accordance with Article [xx]]. [deleted because it is confusing here and is dealt with in the overall approach for the LUCAS soil survey in article 8 for all soil descriptors]
- 5. The Commission shall establish the first list by 18 months after entry into force of the directive and shall update it based on the results of the soil monitoring and assessment and in light of scientific and technical progress.

In article 7, add a new paragraph 3a reading as follows:

"Member States shall set the contaminants for the soil descriptor related to soil contamination referred to in Part C of Annex I taking into account the list of soil contaminants referred to in article 7a as well as at least the following relevant criteria information, if available:

- toxicity of the soil contaminant
- persistence and mobility of the soil contaminant
- quantitative data regarding the production, use, consumption or sales volumes in the concerned Member States, **if available**
- data from human biomonitoring and presence in environmental media, if available.

In article 8(4-2) add a subparagraph reading as follows:

"By way of derogation from the first subparagraph, for the soil contamination descriptor referred to in part C of Annex I, Member States shall may also determine for each contaminant the sampling points by taking into account the possible sources and occurrence of that soil contaminant and costs.



[The total number of sampling points determined in accordance with this subparagraph shall correspond For the soil contamination descriptor listed in part C of Annex I, Member States may limit the sampling points to at least [X%] of the total number of sampling points determined in accordance with the first subparagraph of Article 8(1).]"

<u>In Article 9.3 (assessment of part C descriptors) delete the second part of the new paragraph 3</u> to give Member States flexibility to perform the monitoring of the indicative list of soil contaminants in part C in a random or targeted manner, and to make the distinction with chapter IV on contaminated sites sharper.

3. Member States shall analyse the values for the soil descriptors listed in Part C of Annex I with a view to identify whether there is a critical loss of ecosystem services, taking into account the relevant data and available scientific knowledge. "As regards soil contamination monitored under part C of Annex I, MS shall analyse the data with a view to identify whether there is a need to gather more information as regards the extent of the contamination and whether the contamination poses an unacceptable risk for human health or the environment."

In Annex I, Part C, addition after line "Topsoil compaction":

Soil contamination ⁶	 concentration of Total PFAS Organic Fluorine and of selected PFAS set by Member States in accordance with article 7(3a); concentration of selected pesticides and their metabolites set by Member States in accordance with article 7(3a); concentration or presence of a selection of other seil contaminants 		
	 concentration or presence of a selection of other soil contaminants including emerging soil contaminants set by Member States in accordance with article 7(3a). 		

Row 58b: Recital (48)

(48b) It is necessary to gather data on the presence of soil contaminants that may pose a risk to human health and the environment, such as pesticides, PFAS and emerging soil contaminants. This Directive therefore should provide a framework to include such contaminants in an indicative list of soil contaminants for which more soil monitoring data are necessary to improve the information and knowledge basis. In order to limit monitoring costs, a targeted approach to Member States should be allowed to perform measurements on a limited number of sampling points based on possible sources is necessary for these contaminants. This Directive should therefore provide a framework to include these contaminants into a list of soil contaminants for which targeted Unionwide soil monitoring data are to be gathered. The Commission could provide support to Member States by measuring a selection of the soil contaminants from the indicative list in the LUCAS soil survey.

⁶ **To May** be measured on a limited number of sampling points



ANNEX 4 Soil biodiversity

Changes (in bold) after the WPE of 21/2/2025 and ITMs of 3/3/2025 and 12/03/2025 to the earlier proposal made by the Commission on soil biodiversity

In article 8(2), add a subparagraph reading as follows (similar to the proposed subparagraph on soil contamination):

For the descriptor on loss of soil biodiversity listed in part C of Annex I, Member States shall carry out measurements on the following part of the total number of sampling points determined in accordance with the first subparagraph of Article 8(1):

- at least [X%] for the first soil monitoring cycle;
- at least [Y%] for the second soil monitoring cycle;
- 100% for the third and subsequent soil monitoring cycles.

In annex I, make the following changes:

Loss of soil biodiversity ⁷	DNA metabarcoding for fungi and bacteria	
	Member States shall may also select at least	
	one optional soil descriptors for biodiversity	
	such as but not limited to:	
	- metabarcoding of bacteria, fungi, archaea,	
	protists and animals;	
	- Phospholipid fatty acid analysis (PFLFA)	
	- abundance and diversity of nematodes;	
	- abundance and diversity of earthworms;	
	- abundance and diversity of springtails;	
	- abundance and diversity of native ants;	
	 bacterial diversity based on DNA; 	
	- soil biological quality based on arthropods	
	(QBS-ar)	
	- presence of invasive alien species and plant	
	pests	
- soil basal respiration.		

_

⁷ May be measured on a limited number of sampling points in the first two monitoring cycles



In annex II, make the following changes:

Descriptors linked to		Use European or	For other soi	ł
soil biodiversity and		international standards	biodiversity	
biological activity		when available; if such	descriptors:	t
		standard is not	applicable	
		available, the	аррпсанс	
		methodology chosen		
		shall either be available		
		in the scientific		
		literature or publicly		
		available.		



The role of LUCAS in the monitoring architecture

<u>Updated compromise proposal to reinforce comparability and quality of data, addressing MS concerns expressed in WPE 21/2</u>

Coverage of the LUCAS soil survey

This proposal designs a transitionary LUCAS survey in all Member States building on the GA, with all needed operational arrangements. A LUCAS survey would be carried out in all MS for the first monitoring cycle based on soil samples taken by Member States (with the possibility for MS to ask support from the Commission for taking the sample). After that transitory period, the provisions of the GA would fully apply.

Text proposal:

- In Article 8(1) of the GA, add the following sentence at the end of the second subparagraph:
 - "The initial starting sample will contain the proposed sampling points to be measured by the Commission, aiming at representativeness at EU level"
- Add a new article paragraph 8(1b) in GA to introduce the transitionary LUCAS soil survey as follows:
 - "By way of derogation from paragraphs 8(1a), for the first soil monitoring cycle, the Commission shall carry out soil measurements on soil samples taken by all the Member States.

Member States shall ensure that the soil samples on which the Commission shall carry out soil measurements are sent to the laboratory communicated by the Commission in a timely manner preserving their integrity.

If a Member State wants the Commission to take the soil samples, it shall notify the Commission by 31 December 2025, and shall facilitate access to the sampling points.

The Commission shall communicate the results of its measurements to the Member States in time to perform their obligations regarding soil health assessment.

The Commission and the Member States shall coordinate in the carrying out of this transitionary soil survey in particular as to the location of the sampling points, timing and methodologies used."



- Modify paragraph 8(4) GA as follows:
 - Delete "in case of support by the Commission".
- Modify article 6(3), point c and add reference to new paragraph 8(1b) as follows:
 - o "the soil measurements to be carried out by Member States and, if any, by the Commission in accordance with Article **8(1b)**, 8(2) and 8(2a)"

Quality assurance and comparability of data

[Compromise proposal to increase comparability when different analytical methodologies are used

This proposal foresees that, in cases where a Member State uses an analytical methodology other than CEN/ISO, the LUCAS laboratory carries out an additional analysis, with the standard methodology of annex II, on a limited number of samples. The results of these measurements with two different methods would then help to further refine the transfer functions to be used to convert the value measured by the Member States to the value measured by the reference methodology. This option requires that Member States communicate their intention to the Commission and allow the Commission to request a representative number of soil samples in order to validate the transfer function or improve it in case the transfer function has not yet been validated by the Commission.

Text proposal:

- Add in article 8(3) the following subparagraphs:
 - "In case a Member State intends to use a methodology other than the reference methodology in annex II, it shall inform the Commission. Upon request of the Commission, Member States shall provide the Commission with:
 - A representative number of soil measurements performed by their chosen laboratories using the methodology for which a validated transfer function is required and has not been validated yet;
 - The relevant soil samples on which the soil measurements were performed by the laboratories.

The Commission shall perform measurements of the soil samples provided by Member States in accordance with the subparagraph above using the relevant reference methodology referred in part B of Annex II.

The Commission shall communicate the results of its measurements to the Member States and validate or improve, as needed, in cooperation with the Member States, the transfer function."

1



Compromise proposal to harmonise the sampling protocol

To harmonise the sampling protocol and avoid inconsistencies, the Soil Monitoring Law could foresee an implementing act with a detailed sampling protocol. Such provision would help to further define aspects like the sampling tools that have to be used, the season or timing of the sampling, the approach under wet conditions, the preparation, preservation and transport of the sample, etc. However, for further flexibility, by way of derogation, it is proposed to have an opt out clause under specific conditions.

Text proposals:

Add in article 8(2) of the GA the following:

"The in-situ soil sampling shall be carried out in accordance with the minimum criteria for the methodology of field sample survey defined in Part A.2 of Annex II and the sampling protocol established by the Commission in accordance with paragraph 7.

By way of derogation, Member States may decide to follow a different sampling protocol under the following conditions:

- such sampling protocol has been applied by the Member States before the entry into force of the Directive
- an evaluation of the differences with the sampling protocol established by the Commission in the measurements of soil descriptors is provided with the report under Article 18 (1)
- Add a new para 7 reading as follows:

"By 12 months after entry into force of the Directive, the Commission shall adopt implementing acts to establish the sampling protocol referred to in paragraph 2. Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 21. "



Archiving

The European Parliament proposed the following recital 31a (with proposed modification added), which could be further finetuned depending on the options chosen:

(31a) Soil archives preserve a snapshot of soils from a specific time and location, allowing <u>further checks of relevant parameters or future analysis of new emerging parameters in a cost-efficient manner without the need to take new samples.</u> Soil archives enable researchers to re-evaluate soils of the past in the context of the present for an improved understanding of long-term soil change, or for other research purposes, including medical research.

It is therefore imperative that the Commission, including services such as the Joint Research Centre (JRC), together with the Member States and the European Soil Observatory, ensure that the samples, DNA extracts and raw data taken for the compliance with Union and national environmental law are well preserved in physical archives and that the samples and raw data of those archives remain available for further research and innovation.

Compromise for archiving

The compromise foresees by default a mandatory archiving <u>by Member States</u> of a certain percentage of the samples that were taken and analysed by Member States. However, a Member State may decide to transfer that portion of samples to COM to be archived in COM's soil archives (this would be done already for the first transitory LUCAS assessment). This would mean that Member States would have to send part of their soil samples to the JRC in Ispra where the samples would be archived. The compromise also introduces provision on the conditions for access and use of the soil samples.

Add in article 8 the following new paragraph after paragraph 5 and before paragraph
 5aa:

"5aa. For each monitoring cycle, Member States shall store at least [X%] of their soil samples, distributed in a representative way, in dedicated soil archives.

Member States shall define the conditions for access and use of the soil samples that are archived.

Member States shall ensure that access to the archived soil samples is granted upon request to the Commission.

By derogation Member States may decide to transfer [X%] of their soil samples to the Commission's soil archive.



The Member States and the Commission shall define the practical arrangements regarding the shipment of the soil samples and the conditions for their access and use. [Any results coming from further checks of relevant parameters or future analysis of new emerging parameters shall be transmitted to the Member States.]

[The Commission shall preserve the soil samples in accordance with its archiving protocol]."

Note: consistently with what proposed in the "coverage section" (LUCAS survey carried out in all Member States in the first cycle), the following could be added:

"This subparagraph is not applicable for the first monitoring cycle"