EUROPEAN COMMISSION

28.4.2023

SEC(2023) 416

REGULATORY SCRUTINY BOARD OPINION

Soil Health Law
protecting, sustainably managing and restoring EU soils

{COM(2023) 416}

{SWD(2023) 416, 417, 418, 423}

EUROPEAN COMMISSION
REGULATORY SCRUTINY BOARD

Brussels,
RSB

Opinion

Title: Impact assessment / Soil Health Law – protecting, sustainably managing and restoring EU soils

Overall 2nd opinion: POSITIVE WITH RESERVATIONS

(A) Policy context

There are many policies and initiatives with a direct or indirect impact on soil health. However, soil degradation can have far-reaching consequences on a wide range of areas from biodiversity to food security to human health. In this context, this initiative aims to protect and restore all soils across the EU by 2050, focusing in particular on the lack of reliable and comparable information on soil health, on lack of monitoring, on sustainable soil management practices, on soil contamination and restoration objectives.

(B) Summary of findings

The Board notes the additional information added to the report in response to its previous opinion.

However, the report still contains significant shortcomings. The Board gives a positive opinion with reservations because it expects the DG to rectify the following aspects:

(1) The report is not sufficiently clear on the content of the options, on whether all options are feasible, and on the policy choices related to the options.

(2) The impact analysis does not sufficiently reflect the risks of not reaching the objective of healthy soils across EU by 2050. The analysis of the impacts on competitiveness is not sufficiently nuanced.

(3) The report is not explicit enough on the views of Member States.

(C) What to improve

(1) The report should better bring out the main policy choices related to the various options. It should provide further clarification of the content of the options, in particular further detail on stage 1 and stage 2 of implementation, and on how and when these will be applied in the various building blocks, including in the building block on sustainable soil management and the one on restoration and remediation. The report should explain how,

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by whom and based on which criteria the technical and economic feasibility will be decided under the building block dedicated to restoration and remediation measures. The report should revise the intervention logic considering the revised design of policy options and the need to better integrate the 'no net land take' add-on in it.

(2) The report should more systematically address the implementation risks related to the different options, in particular as regards resource implications for Member States and affected actors.

(3) The cost benefit analysis should be improved by better reflecting the uncertainties and the risks of not reaching the general objective to achieve healthy soils across EU by 2050. To this end, the report should undertake a sensitivity analysis. The report should be clearer about the expected short- and long-term impacts. Given the costs incurred by certain stakeholder groups, in particular the landowners and the land users, the analysis of the possible impact on competitiveness should be clearer about the short term impact on those groups.

(4) When comparing the options the report should better reflect the trade-offs between achieving the soil health objective and the objective of food safety and more widely the objective of strengthening the strategic autonomy of the European Union. It should better explain the methodology used to score and compare the options.

(5) The report should be more explicit about the views of all groups of stakeholders, in particular the views of Member States as regards those options and measures that would require the most effort from their side. It should highlight the possible difference between those Member States where there is already in place a monitoring with a good overview of soil health and ongoing deployment of sustainable soil management practices and action plan for restoration and remediation and those Member States with very limited overview of the situation.

(6) The report should clarify the relationship of the net land take definition with the measures in the building block dedicated to monitoring.

The Board notes the estimated costs and benefits of the preferred option(s) in this initiative, as summarised in the attached quantification tables.

(D) Conclusion

The DG must revise the report in accordance with the Board's findings before launching the interservice consultation.

If there are any changes in the choice or design of the preferred option in the final version of the report, the DG may need to further adjust the attached quantification tables to reflect this.

Full title	Proposal for a Directive on protecting, sustainably managing and restoring EU soils - Soil Health Law
Reference number	PLAN/2021/13172
Submitted to RSB on	28 March 2023
Date of RSB meeting	Written procedure

ANNEX: Quantification tables extracted from the draft impact assessment report

The following tables contain information on the costs and benefits of the initiative on which the Board has given its opinion, as presented above.

If the draft report has been revised in line with the Board's recommendations, the content of these tables may be different from those in the final version of the impact assessment report, as published by the Commission.

I. Overview of benefits (total for all provisions) – Preferred option (*Estimates are relative to the baseline)*		
Description	***Amount***	***Comments***
Member States ensure that all soils are used in a sustainable manner. Soils assessed as unhealthy require restoration whenever possible and proportionate so that by 2050 all EU soil ecosystems should be in healthy condition	Quantified saving of up to EUR 52 billion per annum (see main report, table 5.2 page 21). This amount does not include several benefits that could not be quantified, in particular off-site benefits. The annual on-site benefits of some specific measures are quantified to be e.g. up to EUR 9.4 billion for cover crops, up to EUR 12 billion for reduced tillage, up to EUR 2.7 billion when using organic manures, up to EUR 2.7 billion for reduced stocking density. The off-site benefits could not be quantified for the specific measures.	Benefits consist in continued, and enhanced, provision of ecosystem services with benefits including improvements in food production and food security, sequestration of carbon and reducing climate change risks, improve quality of natural resources (soil, air, water, and biodiversity), improvements to public health and safety.
Remediation of contaminated sites	Benefits are largely unquantifiable. The prudent value used is EUR 24.4 billion. In the cases where partial quantification is possible, they are significant e.g. if 166 000 sites were remediated, the increase in land value could represent a benefit of EUR 360 million per annum if used for agricultural purposes, or more if used for higher value activities (e.g. housing, commercial property, etc).	The benefits are considered to outweigh the costs, even if they are difficult to estimate.

Overview of costs of the preferred options

		Businesses		**Administrations**	
		One-off	Recurrent	One-off	Recurrent
Definition of Soil Health & Soil District - preferred Option 3	Direct adjustment costs	N/A	N/A	N/A	N/A
	Direct administrative costs	N/A	N/A	**Member States** incur an upfront burden associated with defining descriptors, thresholds and ranges (around EUR 370 000)	N/A
	Direct regulatory fees and charges	N/A	N/A	N/A	N/A
	Direct enforcement costs	N/A	N/A	N/A	N/A

	Indirect costs	N/A	N/A		
Monitoring-preferred Option 3	Direct adjustment costs	N/A	N/A	N/A	N/A
	Direct administrative costs	N/A	N/A	**Member States** also incur an upfront burden associated with defining the monitoring method for specific descriptors and transfer functions, and setting up reporting and monitoring systems (around EUR 480 000)	**Member States** incur an ongoing cost associated with sampling, transportation and analysis of samples, and reporting (around EUR 42 000 000)
	Direct regulatory fees and charges	N/A	N/A	N/A	N/A
	Direct enforcement costs	N/A	N/A	N/A	N/A
	Indirect costs	N/A	N/A	N/A	•
SSM - Option 3	Direct adjustment costs	N/A	The implementation of SSM practices or the discontinuation of prohibited practices will in many cases incur an ongoing cost, spread over the time period to 2050. The total cost will be driven by a range of factors, including the practices selected for implementation, and which, how many and for what reason certain areas within districts are identified as unhealthy. Restoration is anticipated to present a significant, ongoing cost of the order of tens of billions. However, in some cases, where implemented optimally, some SSM/restoration practices can deliver a positive economic return for the landowner/soil manager. It is uncertain where costs will fall: initial obligation is on Member States. However, there is expected to be a share of costs for Businesses related to the transition to SSM. The share will be determined by the SHL implementation choices taken at Member State level along the years up to 2050. Since on-site benefits of SSM may not always compensate on-site costs, and benefits are often foreseen in the medium and long-term, Member States are expected to facilitate adequate financial incentives that address the financial risks of the transition.	N/A	The implementation of SSM practices or the discontinuation of prohibited practices will in many cases incur an ongoing cost, spread over the time period to 2050. The total cost will be driven by a range of factors, including the practices selected for implementation (either by Member State or EU-wide), and which, how many and for what reason certain areas within districts are identified as unhealthy. It is uncertain where costs will fall but initial obligation is on Member States This is anticipated to present a significant, ongoing cost. However, in other cases, where implemented optimally, some SSM can deliver a positive economic return. Illustrative, order of magnitude, estimates for a selection of SSM practices suggest the costs could be in the €10's billions (e.g. if cover crops would be applied in croplands all over EU it would cost €6bn pa; if reduced tillage was applied in all agricultural land it would costs €13bn pa; similarly: crop rotation €120m pa; use of organic manures €1.5 to 10.5bn pa ; reduced livestock density €8.1bn pa).
	Direct administrative costs	N/A	N/A	**Member States** incur an upfront burden associated with engaging in development of SSM list (around EUR 45 000)	

	Direct regulatory fees and charges	N/A	N/A	N/A	N/A
	Direct enforcement costs	N/A	N/A	N/A	N/A
	Indirect costs	N/A	N/A	N/A	• The implementation of SSM practices would have an overlap (and could reduce) the costs of achieving restoration targets
Definition and identification of contaminated sites - Option 3	Direct adjustment costs	N/A	It is uncertain where the costs of investigation and risk assessment of CS will fall. Historically around 57% of the costs of investigating and remediating sites has fallen on private actors on average. Assuming this would apply to the identification of sites going forward, this implies a cost of €910m per annum. This is not all additional as it also captures costs of activities that would otherwise occur in the baseline, so the actual cost would be a fraction of this. Furthermore, an estimated 1% of these costs would be for the recording of the information, which is a direct administrative cost.	N/A	It is uncertain where the costs of investigation and risk assessment of CS will fall. Historically around 43% of the costs of investigating and remediating sites has fallen on public actors on average. Assuming this would apply to the identification of sites going forward, this implies a cost of €690m per annum. This is not all additional as it also captures costs of activities that would otherwise occur in the baseline, so the actual cost would be a fraction of this. Furthermore, an estimated 1% of these costs would be for the recording of the information, which is a direct administrative cost.
	Direct administrative costs		The direct administrative cost related to the recording of the identification of contaminated sites is estimated to be 1% of the overall cost indicated in direct adjustment costs, that is €9.1 million as best estimate		The direct administrative cost related to the recording of the identification of contaminated sites is estimated to be 1% of the overall cost indicated in direct adjustment costs, that is €6.9 million as best estimate
	Direct regulatory fees and charges	N/A	N/A	N/A	N/A
	Direct enforcement costs	N/A	N/A	N/A	Where the responsibility for investigation and risk assessment of CS is passed through to landowners or operators, Member States may face some additional enforcement costs (but these are likely to be outweighed by the savings in costs of investigation).
	Indirect costs	N/A	Identification of the contamination status of sites and developing the public register will also define the ambition (and direct costs) of remediation activities under building block 5.	N/A	Identification of the contamination status of sites and developing the public register will also define the ambition (and direct costs) of remediation activities under building block 5.
Restoration Option 3 / Remediation- - Option 2	Direct adjustment costs	N/A	It is somewhat uncertain where the costs of remediation measures will fall. Historically, around 57% of expenditure on contaminated site management has fallen on private actors. The total cost is highly uncertain. The cost of remediating CS for businesses could be around €469m pa (spread over 25 years). Not	N/A	• It is somewhat uncertain where the costs of remediation measures will fall. Historically, around 43% of expenditure on contaminated site management is from public budgets. • The total cost is highly uncertain. The cost of remediating CS for authorities could be around €354m pa (Spread over 25 years). Not all of these costs are additional as it also captures costs of activities

			all of these costs are additional as it also captures costs of activities that would otherwise occur in the baseline. Soil restoration measures are expected to imply significant, ongoing costs. As illustrated under SSM, restoration practices could imply costs in the range of EUR 28-38 billion pa. These would be distributed over the 25 year or so implementation period. However, in other cases, where implemented optimally, some restoration practices (e.g. through raw material input savings or yield improvements) and even remediation practices (e.g. through improvement to the value of land) could deliver a positive economic return. There is expected to be a share of soil restoration costs for Businesses. The share will be determined by the SHL implementation choices taken at Member State level along the years up to 2050. Since on-site benefits of soil restoration may not always compensate on-site costs, and benefits are often foreseen in the medium and long-term, Member States are expected to facilitate adequate financial incentives that address the financial risks of the restoration.		that would otherwise occur in the baseline. ● It is somewhat uncertain where the costs of implementing restoration measures will fall. The obligation is placed on Member States to ensure all districts achieve good health status. ● In some cases, there may be significant, ongoing costs. As illustrated under SSM, restoration practices could imply costs in the €10's billions pa. These would be distributed over the 25 year or so implementation period. However, in other cases, where implemented optimally, some restoration practices (e.g. through raw material input savings or yield improvements) and even remediation practices (e.g. through improvement to the value of land) could deliver a positive economic return.
	Direct administrative costs	N/A	N/A	**Member States** incur an upfront burden associated with developing a soil health plan (around EUR 551 000).	**Member States** incur a moderate, ongoing additional burden associated with the 5 yearly reporting, review and possible revision of the soil health plan (EUR 1 400 000).
	Direct regulatory fees and charges	N/A	N/A	N/A	N/A
	Direct enforcement costs	N/A	N/A	N/A	● There may be a small, ongoing cost for Member States to ensure the implementation of restoration and remediation practices.
	Indirect costs	N/A	N/A	N/A	N/A
Action – Land take	Direct adjustment costs	N/A	N/A	N/A	N/A
	Direct administrative costs	N/A	N/A	**Member States** incur an upfront burden associated with establishing monitoring networks, compiling	**Member States** incur a moderate, ongoing burden associated with ongoing monitoring and reporting around land take (where Member States make use of EEA or

				information and reporting – including defining a baseline (around EUR 366 000)	Copernicus services, these costs may be smaller) (around EUR 3 600 000).
	Direct regulatory fees and charges	N/A	N/A	N/A	N/A
	Direct enforcement costs	N/A	N/A	N/A	N/A
	Indirect costs	N/A	N/A	N/A	N/A
				•	

Administrative costs and burden for offsetting		Citizens/Consumers		Businesses		Administrations	
		One-off	Recurrent	One-off	Recurrent	One-off	Recurrent
Costs related to the 'one in, one out' approach							
	Administrative costs (for offsetting)	N/A	N/A	N/A	Administrative cost of EUR 9.1 million pa related to the recording of the identification of contaminated sites. The actual administrative burden element for offsetting will be smaller as not all additional to the baseline.		

EUROPEAN COMMISSION
Regulatory Scrutiny Board

Brussels,
RSB/

Opinion

Title: Impact assessment / Soil Health Law – protecting, sustainably managing and restoring EU soils

Overall opinion: NEGATIVE

(A) Policy context

There are many policies and initiatives with a direct or indirect impact on soil health. However, soil degradation can have far-reaching consequences on a wide range of areas from biodiversity to food security to human health. In this context, this initiative aims to protect and restore soils across the EU, focusing in particular on the lack of reliable and comparable information on soil health, on lack of monitoring, on sustainable soil management practices, on soil contamination and restoration objectives.

(B) Summary of findings

The Board notes the additional information provided and the commitments to make changes to the draft report.

However, the Board gives a negative opinion because the report contains the following significant shortcomings:

(1) The report does not provide sufficient explanation and evidence regarding the scale of the problem. It does not sufficiently demonstrate the remaining gap, given numerous other initiatives and policies also targeting soil health, and the extent to which the baseline takes into account their expected impact.

(2) The report is neither clear about what actions would be necessary to achieve the objectives, nor what the concrete implications are for Member States regarding those objectives and related mandatory targets and binding principles.

(3) The report is not sufficiently clear about the coherence and potential overlap of the options with existing and upcoming EU legislation and initiatives. It is not clear why staged option approaches have not been considered given the uncertainty regarding the scale of problems and expected cost and benefits of measures.

(4) The report does not provide a clear methodology for and substantiated overview of the costs and benefits of the proposed initiative.

(C) What to improve

(1) The report should further explain and better substantiate the scale of the problem. It should be more precise about the proportion of impacted areas, and be more specific about the root causes of the types of degradation, while clearly flagging the lack of data and corresponding level of uncertainty. For each type of soil degradation, the report should clearly set out existing legislation and policies. The report should clearly identify the gaps it needs to fill in terms of EU regulation of type of soils, land use and practices. It should also clearly present the existing measures in different Member States. This should be summarised in a table building on table 1 in Annex 7 (on categories of soil degradation and EU land surface affected) thereby bringing together all the relevant elements.

(2) The report should improve its analysis of the baseline and in particular as regards the expected impact of the existing policies and different initiatives expected to provide incentives to improve soil management practices (e.g. LULUCF, Nature restoration law, CAP, etc.). While the report identifies a gap for soil contamination in existing EU rules, it should be clear about what proportion of the estimated 60-70% of unhealthy soils would already be tackled by existing policies and other initiatives covering other types of soil degradation. The report should better explain what the ranges of the estimated yearly cost caused by soil degradation are. This should be presented per type of soil degradation to better explain the costs and benefits expected by the proposed options compared to the baseline.

(3) The report should significantly strengthen, with evidence, the cross-border nature of the problem. It should clarify any resulting issues with market fragmentation and unfair competition. It should clearly set out how the initiative respects the subsidiarity principle.

(4) The report should clarify how, and which, mandatory objectives and targets and binding principles will be incorporated in the legislation, with what time horizons. It should point to the underlying analysis that would justify such targets and set out realistic pathways to achieve them. The report should clarify if there are trade-offs between the objectives, and show how these have been considered in the analysis, in particular regarding food security and the EU dependency towards the production of biomass.

(5) The report should more clearly show if the options and policy choices are feasible and appropriate to achieve the objectives of the initiative. The description of the content of each option should provide information on expected actions, including what they would imply in addition to existing obligations. The report should better justify why some elements (e.g. mandatory targets) are common to all options without alternative approaches and explain whether there is consensus on this by the stakeholders and Member States. The report should also explain why it has not looked into staged approaches given the uncertainty regarding the scale of the problem and the likely costs and benefits of measures. It should clarify whether it explored alternative combinations of measures (than those presented in the four options) that might be relevant for decision making, and if yes why these were not contained in the analysis.

(6) The report should be explicit about how Member States are expected to achieve far-reaching goals such as the obligation to restore all unhealthy soils, and the mandatory principle of non-deterioration, as well as how, in concrete terms, such immediately applicable principles would work. The report should clarify what tangible actions Member States will be expected to undertake, as well as the scale of such actions (also taking into

account different starting positions) and the expected timelines.

(7) The report should improve its coherence analysis. The report should clearly explain how duplication of actions under the initiative with existing rules and actions that Member States are taking will be avoided. For example, the report, which currently focuses mostly on arable land and agriculture practices, should be clearer how actions proposed for the soil initiative will align with actions taken in the context of CAP, which are currently contained in EU rules as well as national CAP Strategic Plans approved by the Commission. The report should also clarify if relevant information is already being collected and show how the suggested monitoring measures fit with other environmental monitoring systems (like forest, air, water, etc.). It should clarify if the foreseen soil health national plans will make use of existing plans/measures stemming from other legislation and how the integration of various work strands and efforts will be ensured.

(8) Although the initiative would mainly impose obligations on national authorities, these would translate into obligations on stakeholders, and the report should be more granular about the stakeholders likely to be directly and indirectly impacted by the measures that Member States put in place to achieve the objectives. The impact on landowners and managers should be more explicitly described in the impact analysis. The SME test annex is not sufficiently clear about the impact on SMEs and how this was considered in the options. Social impacts, on both rural and urban areas, should be further analysed. The report should also indicate the impact on stakeholders' competitiveness, including international competitiveness.

(9) The distributional impact needs to be further developed by showing which Member States would have to make more of an effort than others to achieve the set of mandatory objectives. The report should clarify whether Member States would have the necessary resources, including access to EU funding, and expertise to implement the presented options.

(10) Costs and benefits should be better substantiated and presented. The report should go beyond listing examples of potential measures and their costs and instead provide a comprehensive overview of costs and benefits of each option. This should include the estimates of the totals for the key categories of costs (such as the cost of investigation of contaminated sites, the cost of remediation of contaminated sites, the cost of sustainable soil management practices, the cost of restoration and the administrative costs) so that it is clear where the biggest impact will be. The report should be clear about the risks of over- or underestimation of the costs and benefits.

(11) The comparison of options and the choice of the preferred option should be clear. The report should explain the methodology of cost and benefit analysis. Given that the report states that the costs will be spread over 15 or 25 years, the costs and benefits should be discounted (with a clear indication of the appraisal period(s)). The analysis should be clear in which year the benefits will occur. It should also calculate the net impact and Benefit Cost Ratio for each option. These, together with non-monetised impacts, should then be used in the comparison of options and justification of the choice of the preferred option. The report should better explain and justify the scoring of the options and the choice of preferred option including by linking it better with the results of the cost benefit analysis.

(12) The report should systematically present the views of the different groups of stakeholders given the potentially significant implications for each and should be explicit about how widespread the support is for certain views. It should transparently point to any campaigns identified in the context of the consultation activities. It will be important to show Member State views on the measures considered and the preferred option given that many measures have significant consequences for implementation by local authorities.

Some more technical comments have been sent directly to the author DG.

(D) Conclusion **The DG must revise the report in accordance with the Board's findings and resubmit it for a final RSB opinion.**	
Full title	Proposal for a Directive on protecting, sustainably managing and restoring EU soils - Soil Health Law
Reference number	PLAN/2021/13172
Submitted to RSB on	18 January 2023
Date of RSB meeting	15 February 2023

Electronically signed on 28/04/2023 18:10 (UTC+02) in accordance with Article 11 of Commission Decision (EU) 2021/2121