SML provisions relevant for urban soils an overview

Soilver event

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SML and SOILveR

- SML entered into force on 16 December 2026 – 3 years for transposition
- Aspirational objective of healthy soils across the EU by 2050, including urban soils
- Recital 80: «[…] The Commission should provide to Member States the necessary **capacity building and assistance** and support **multilateral harmonisation of methods**, and thereby eliminate existing data gaps and workflow bottlenecks by **sharing expertise**. To that end, the Commission should **build on existing mechanisms at Union and international level**, including the Soil BON initiative, Global Soil Partnership, **SOILveR**, NICOLE, EUROSOLAN, the EU Mission's 'A Soil Deal for Europe' Mirror Groups and EIONET. […]. »

Soil Monitoring Law – key features

Directive - EU - 2025/2360



Provisions relevant for urban soils

- Soil districts, soil units, competent authorities
- Assessment of each aspect of soil health, random soil sampling
- Provide support to soil managers and landowners (info and advice)
- Integrate any measure into plans, measures, targets of other EU legislation
- Principles to mitigate land take (minimize and compensate loss of ecosystem services)
- Specific obligations for contaminated sites
- Cooperation, Commission facilitating the exchanges for effective implementation

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Summary of descriptors (Annex I)

Aspect of soil degradation	Soil descriptor (mandatory)	Soil descriptor (optional)
Salinisation	Electrical conductivity	
Loss of Soil Organic Carbon	SOC concentration	soil organic carbon content
	SOC stocks	
Soil compaction	Bulk density in topsoil	saturated hydraulic conductivity (top-and sub-soil)
	Bulkdensity in subsoil	air capacity (top-and sub-soil)
Excess nutrient content in soil	Extractable phosphorus	
	Total nitrogen content in soil	
	SOC to nitrogen ratio	
Soil erosion	Soil erosion rate	
Soil contamination	concentration of heavy metals	
	concentration of a selection of organic contaminants	
	Concentrations of selected PFAS	Concentrations or presence of a selection of other emerging soil contaminants
	Concentrations of selected active substances in pesticides and their metabolites	
Reduction of soil water retention and infiltration	soil water holding capacity	
	saturated hydraulic conductivity	
	air capacity	
Acidification	Soil acidity (pH)	base saturation /effective cation exchange capacity
Loss of soil biodiversity	DNA metabarcoding for fungi and bacteria	metabarcoding of archaea, protists and animals
		phospholipid fatty acid analysis (PLFA)
		abundance and diversity of nematodes
		abundance and diversity of earthworms
		abundance and diversity of springtails
		abundance and diversity of native ants
		soil biological quality based on arthropods (QBS-ar)
		presence of invasive alien species and plant pests
		soil basal respiration
Soil sealing and soil removal	Total sealed soils and areas that underwent soil removal (km² and % of Member State surface)	soil artificialisation
	Soil sealing and soil removal, de-sealing and net-sealing (average per year–- in km² and % of Member State surface)	land fragmentation
	Total settlement area (km² and % of Member State surface)	land recycling rate
	Land use change to and from settlement area (average per year–- in km² and % of Member State surface)	land taken for commercial activities, logistic hubs, renewable energies, surfaces such as airports, roads, mines
		consequences of soil sealing and soil removal, such as quantification of loss of ecosystem services, change in the intensity of floods

Timeline



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Timeline for implementation of indicative guidance

Date	Obligation	For whom
26 November 2025	Publication in the Official Journal	
16 December 2025	Entry into force of the Directive	
17 March 2026	First of the regular exchanges with Member States on application of the Directive	COM
17 December 2026	Support document to facilitate MS to establish a **soil monitoring framework**	COM
17 June 2027	**Indicative list of soil contaminants**	COM
	Support document to facilitate MS to set **sustainable target and trigger values**	COM
	Support document to facilitate MS to set their **list of organic contaminants**	COM
	Support document to facilitate MS to **carry out in-situ soil sampling**	COM
	Support document to facilitate MS to define the **methodology for site-specific risk assessment**	COM
17 December 2027	Establishment of the digital soil health portal	COM
	Support document to facilitate MS to **identify potentially contaminated sites** and set a **list of potentially contaminating activities**	COM
17 December 2028	Transposition deadline	MS
	Support document to facilitate MS to assess **areas not at risk of salinisation**	COM
	Support document to facilitate MS to determine the values of the **soil sealing and soil removal indicators**	COM
	Support document to facilitate MS to determine the **values of the soil descriptors**	COM

Thank you!

Questions?

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