Overview of the current status of national regulations in regards to the specific policy recommendations from SuMaNu. See Policy Brief 1-6 for more details and more detailed explanations from the working paper of "SuMaNu policy recommendations – The Current Status in Partnership Countries" (www.balticsumanu.eu). *Experts in manure handling and management in each country have compiled the information, but the contents have not been fact checked or referenced and should be regarded as personal statements.*

	Estonia	Finland	Germany	Latvia	Poland	Sweden
Coherent P fertilisation policies Regulative measure for P fertilisation	25 kg/ha 5 year average, except areas with high P-demand.	No legally binding P fertilisation limits for manure. For inorganic and organic fertiliser products P limit is 325 kg/ha during 5 years.	The limit value for P application is based on the soil P content and plant requirement (P-surplus cannot exceed 20 kg P_2O_5 per hectare and year on average over the last 6 years).	According to fertilisation plan for individual farm.	No limits for P in manure. Regulation about buffer zones for P fertilisers. In agrienvironment programs according to the fertilisation plan.	Flat rate limit, 22 kg/ha
Economically optimum crop based P fertilisation guidelines that consider minimising losses	Guidelines for crop based P fertilisation.	Guidelines are given in the voluntary agri-environmental scheme including also limits for N and P fertilisation.	Yes, based on soil P content (VDLUFA)	Guidelines, developed by University of Life Sciences and Technologies. Methods of calculations and fertiliser recommendations for agricultural crops. Reference book.	Guidelines for precision farming, guidelines for fertilisation with sowing given by companies.	Updated annually
Use of P-indices	No	No	Yes, but as P-classes	No	No	Required use of some indices in NVZ
Fertilisation planning and nutrient balances Annual field-level fertilisation planning	Yes, over 50 ha farms. Guidelines and digital tool available.	All farms are legally bound to document manure and N fertiliser quantities used. In the voluntary agri-environmental scheme, fertilisation planning is required and limits for both N and P are given.	Yes, N and P fertilisation planning, especially depending on the type of crop/grassland intensity and soil status (Obligation to Documentation for each field both planning and quantity of fertiliser)	Yes. Guidelines given. NVZ farmers should submit summary to the controlling authority. Full plan should be available on farm.	Obligation to prepare N fertilisation plans for farms over 100 ha, 60 LUV or 50 ha of intensive crops. For farms over 10 ha/10 LUV, it is obligatory to calculate that the maximum doses specified in the regulation are not exceeded.	Yes. Guidelines given. Self-control principle with records available for 5 years.
Annual farm-gate nutrient balancing	Not required or recommended.	No	Yes, annual nutrient flow balance on farms	No required, voluntary	No	Not required or recommend. Is part of the free nutrient use advisory consultation.
Regular determination of soil nutrient content	Required if applied support for organic production or environmentally friendly management, 5 year interval.	A measure in the voluntary agri-environmental scheme (every 5 years).	Yes	Every 5 years for farms in NVZ, every 6 years for other farms, which are registered as users of pesticides.	No	Required for farms with permit obligations, (every 10 years). Certain dairies and certification programs require every 7 years.
National standards for handling and spreading manure Establish national standards for manure quantity and nutrient content	Estonian standards base on Danish standars. Rare update.	Yes, for quantity and nutrient content (table values).	Yes	Yes, for quantity and nutrient content.	Yes, for quantity and N content	Yes, for quantity and nutrient content
Limit slurry spreading to spring and summer and allow autumn spreading only for the establishment of winter crops	Prohibited to apply slurry 1.11.-20.03.	No application on frozen, snow covered or flooded field. The amount of N in manure and organic fertilisers applied after 1 Sept must not exceed 35 kg.	Various regulations regarding application times	Forbidden winter spreading.	Only for content up to 170 kg N/ha	Yes in NVZ, no elsewhere
Define minimum acceptable technologies and practices for manure handling and spreading, phasing out techniques with poor environmental performance	Yes	Minimum manure storage capacity 8-12 months. New manure storages must be covered. No requirements for spreading, but support for injection in the voluntary agri-environmental scheme. Guidance for BAT available.	Yes	For handling - requirements for minimum capacity and cover of storages; monitoring for lagune. No requirements for spreading.	Transfer of manure and slurry between farms only on the basis of a transfer contract, specifying the quantity and content N/t /m^3.	Yes in NVZ, no elsewhere
Regional nutrient reallocation Recent accounting of recyclable nutrient-rich biomass	No	Yes	Yes, regulated in the ordinance concerning farm manure placing on the market and transporting of them.	No statistics collected at national level.	National Statistics e.g. consumption of natural fertilisers and area fertilised with natural fertilisers.National Centre for Emissions Management (KOBiZE) performs its activities in gas emissions (e.g. NH_3, N_2O, NOx)	Some independent studies
Incentives to support production of manure-based fertilisers	No	Not at the time of writing, but a nutrient recycling support is being planned.	Yes	No	No	No
Incentives to support use of manure-based fertilisers	No	The voluntary agri-environmental scheme contains support for recycling of organic matter and nutrients.	No	No	No	No
Support for the development of manure processing technologies	Investment support	Investment support and R&D funding	Yes, e.g. the "Investitionsprogramm Landwirtschaft"	Not in current period	No	No
Support for renewable energy production	Investment support	Investment support for biogas plants in all scales	Yes	Yes, but there are negotiations how to change the system.	Investment support program in agriculture, biogas installation from national development program Infrastructure and Environment.	Limited investment support
Support for novel solutions and tools to raise awareness on and practical possibilities for nutrient recycling	Not now, it is in plan.	R&D funding, thematic projects to transfer knowledge	Funding of research projects	No	No	No
Ensure safe recycling of manure nutrients Plans to reduce antibiotic use	An action plan is running to decrease resistence against antibiotics.	Long history in working to decrease use. Use of antibiotics second lowest in the BSR.	Yes	Plan under development	National plan concerning reduction of antibiotic resistance in preparation	Long history of working to decrease use, lowest in the BSR
Minimise use of trace elements, use only according to nutritional need	Yes	Feeding recommendations available.	Yes	No	No	No
Manure-based products must guarantee hygienic security	Yes	In case of handing over or selling manure-based products to others, hygienic quality must be guaranteed.	Yes	For manure no specific requirements. For manure based products which are sold to other users specific requirements are set.	According to the Act on waste and the ordinance on waste management using the R10 method - on the field surface	If digested or sold as fertiliser, not if spreading on another farm
Co-processing manure and sewage sludge should be discouraged	Yes. Co-processing manure and sewage sludge should be discouraged. Co-processing is not prohibited in Estonia.	No co-processing of manure and sewage sludge done. Sewage sludge based products are given more safety-related requirements. Industry driven certification system for organic fertilisers using sewage sludge.	Yes, co-processing manure and sewage sludge should be discouraged	Approval system under development.	Sewage sludge can be used as a production substrate organic fertilisers or plant conditioners. This product can be placed on the market after being obtained a special permit of the minister responsible for agriculture. Some experts have a positive opinion and they support such idea.	Industry driven certification system for digestate quality (since 1999).
Knowledge transfer between farmers, advisors, researchers and authorities Form national manure committees to advise on manure legislation and knowledge transfer	None	No	Yes, scientific advisory board of the BMEL (Federal Ministry of Food and Agriculture)	No officially formed, but current voluntary expert group could be upgraded to the "National manure committee"'	No	No
Build a national manure knowledge transfer systems to support implementation of recommended manure management practices	None	No	No, but it is in progress	There are multiple actors, but no coordinated system.	Decision-making and legislative processes consulted with government research institutes, advisory units and farmers' organisations.	Partially included in "Greppa Näring" free nutrient use advisory consultations.
Build digital systems to increase data collection on nutrient management and nutrient use-efficiency	There is no comprehensive system. Separate registers are existing and calculators are available.	No	Yes, e.g. the tool "Düngeplanung" of the Landwirtschaftskammer Niedersachsen and the tools "DELOS" and "GülleBest"	State Plant Protection Service is developing integrated system for fertilisation and plant protection accounting.	Digital tool for calculating nutrient plans (FAST element) is under development	Digital tool for calculating nutrient balances, manure quantities, fertilisation plan, climate footprint and energy consumption.