

## ROADMAP

<b>TITLE OF THE INITIATIVE</b>	Revision of the Fertilisers Regulation (EC) No 2003/2003		
<b>LEAD DG – RESPONSIBLE UNIT</b>	GROW – D2	<b>DATE OF ROADMAP</b>	October 2015

This indicative roadmap is provided for information purposes only and is subject to change. It does not prejudice the final decision of the Commission on whether this initiative will be pursued or on its final content and structure.

### A. Context and problem definition

- (1) What is the political context of the initiative?
- (2) How does it relate to past and possible future initiatives, and to other EU policies?
- (3) What ex-post analysis of existing policy has been carried out? What results are relevant for this initiative?

#### (1) Political context

The initiative supports the Commission's agenda for jobs, growth and investment<sup>1</sup>, by providing the right regulatory environment for investment in the real economy.

In particular, the initiative will make an important and concrete contribution to the Commission's fulfilment of its commitment to submit a new, more ambitious Circular Economy Package by the end of 2015. It will create a level playing field for all fertiliser materials and facilitate recourse to domestic, secondary raw materials.

Furthermore, the initiative supports the aim to create a deeper and fairer internal market with a strengthened industrial base<sup>2</sup>, by removing existing barriers to free movement of certain innovative fertilisers and facilitating the market surveillance by Member States.

#### (2) Other EU policies

The initiative is related to the following policy initiatives:

- The Circular Economy Package: The Fertilisers Regulation revision aims at establishing a regulatory framework enabling production of fertilisers from recovered bio-wastes and other secondary raw materials. This would boost domestic sourcing of plant nutrients which are essential for a sustainable European agriculture, including the critical raw material phosphorus. It would also contribute to a better implementation of the waste hierarchy, by minimising landfilling or energy recovery of bio-wastes, and hence to solving related waste management problems. A shift towards fertiliser production from organic or secondary raw materials would also reduce CO<sub>2</sub> emissions, hence contributing towards a low carbon economy and the sustainability of the fertilisers sector.
- The Internal Market Strategy: The Fertilisers Regulation revision aims at addressing a well-known barrier to free movement on the internal market. The barrier has the form of heavy and diverging national regulatory frameworks for those fertilisers currently not covered by harmonisation legislation. While economic operators often regard the diverging national rules as a prohibitive obstacle to entering new markets, Member States regard the rules as essential for protecting the food chain and the environment. Because of those concerns relating to health and the environment, mutual recognition has proven exceptionally difficult in the field of non-harmonised fertilisers, and economic operators have asked for the possibility to get access to the entire internal market by complying with harmonised rules addressing those concerns at EU level.
- Horizon 2020: The initiative would stimulate the research activities launched under Societal Challenges 2 ("Food security, sustainable agriculture and forestry, marine and maritime and inland water research, and the Bioeconomy") and 5 ("Climate action, environment, resource efficiency and raw materials"), which aim, among other objectives, at providing innovative solutions for a more efficient and safer recovery of resources from waste, wastewater and bio-wastes, and at encouraging researchers to deliver innovative products in compliance with the market and societal needs. The *Bio*

<sup>1</sup> First area addressed in President Juncker's Political Guidelines for the European Commission.

<sup>2</sup> Fourth area addressed in President Juncker's Political Guidelines for the European Commission.

*Based Industries Joint Undertaking* has identified *i.a.* phosphorus recycling for production of fertilisers as an emerging and economically promising new value chain from (organic) waste.<sup>3</sup> Easy access to the internal market for such fertilizers would be a pre-condition for achieving these goals and bringing results from research to the market.

### (3) Ex-post analysis of existing policy

An ex-post evaluation of the Fertilisers Regulation was conducted in 2010.<sup>4</sup> It concluded<sup>5</sup> that the Regulation had been effective in meeting its objective of simplifying and harmonising the regulatory framework in relation to an important part of the fertiliser market.

However, the evaluation also concluded that the Regulation could be more effective in promoting innovative fertilisers, and that adjustments would also be needed to better protect the environment. Furthermore, regarding the organic fertilisers currently left out of the scope of the Regulation, the evaluation showed that neither economic operators, nor national authorities considered that mutual recognition was the most appropriate tool for ensuring free movement, since fertilisers are products for which legitimate product quality, environmental, and human health concerns can warrant stringent rules.

What are the main problems which this initiative will address?

The initiative will address two important problems:

1) Innovative fertilisers, often containing nutrients or organic matter recovered and recycled from biowaste or other secondary raw materials in line with the circular economy model, have difficulties accessing the internal market due to the existence of diverging national rules and standards.

The Fertilisers Regulation ensures free movement on the internal market of a *class* of harmonised inorganic products belonging to one of the product-types which have been approved by the Commission in comitology and are included in one of the Annexes to the Regulation. Such products are eligible to be labelled 'EC-fertilisers'. Companies wishing to market products of *other* types as EC-fertilisers must first obtain a new type-approval. Virtually all product-types currently included in the Regulation are conventional, inorganic fertilisers, typically extracted from mines or chemically produced in line with a linear economy model. Also, the chemical processes for production of for example nitrogen-based fertilisers are both very energy consuming and CO<sub>2</sub>-intensive.

Around 50 % of the fertilisers currently on the market, however, are left out of the scope of the Regulation. This is true for a few inorganic fertilisers and for all fertilisers produced from organic materials, such as animal or other agricultural by-products, or recovered bio-waste from the food chain. Research, innovation and investment are currently developing rapidly, contributing to the circular economy by creating local jobs and by generating value from secondary, domestically sourced resources which would otherwise have been dispatched on land or disposed as landfill waste, causing unnecessary eutrophication and greenhouse gas emissions. There is also a servitization trend in the business, with increasing product customisation based on analysis of the soil where the fertiliser will be used. SMEs and other enterprises throughout Europe are increasingly interested to contribute to this development. However, for customised products containing organic fertilisers, access to the internal market is currently depending on mutual recognition, and therefore often hindered.

The problem for innovative fertilisers with the existing regulatory construction is two-fold: First, inclusion in the Regulation of types of products sourced from organic or secondary raw material is challenging. Regulators hesitate because of the relatively variable composition and characteristics of such materials. The Regulation as it stands is clearly tailored for well characterised, inorganic fertilisers from primary raw materials, and lacks the robust control mechanisms and safeguards necessary for creating trust in products from inherently variable organic or secondary material sources. Furthermore, the links with existing legislation on control of animal by-products and waste are not clear. Second, even for new, inorganic fertilisers from primary raw materials, the type-approval procedure is lengthy, and cannot keep up with the innovation cycle of the fertilisers sector.

As a result, fertilisers sourced in line with the circular economy remain non-harmonised. Many Member States have detailed, national rules and standards in place for such non-harmonised fertilisers, with environmental requirements (such as heavy metal contaminant limits) that do not apply to EC-fertilisers. Furthermore, free movement between Member States through mutual recognition has proven extremely difficult. As a result, access for fertilisers sourced from organic or secondary raw materials to the market of another Member State than that of establishment is often prohibitively expensive. The resulting lack of critical mass hampers

<sup>3</sup> [http://bbi-europe.eu/sites/default/files/documents/BBI\\_JU\\_annual\\_Work\\_plan\\_2014.pdf](http://bbi-europe.eu/sites/default/files/documents/BBI_JU_annual_Work_plan_2014.pdf).

<sup>4</sup> [http://ec.europa.eu/enterprise/sectors/chemicals/files/fertilizers/final\\_report\\_2010\\_en.pdf](http://ec.europa.eu/enterprise/sectors/chemicals/files/fertilizers/final_report_2010_en.pdf)

<sup>5</sup> See Section 4, *Conclusions and recommendations*.

investment in this important sector of the circular economy. The problem is of particular importance for producers established in Member States with a small domestic market compared to the surplus of organic, secondary raw materials (typically manure) of which they dispose.

In summary, the playing field in the competition between those fertilisers sourced from domestic organic or secondary raw material in line with the circular economy model and those produced in line with a linear economy model is tilted in favour of the latter. This competition distortion hampers investment in the circular economy, in particular in small Member States.

The problem is aggravated by the fact that one of the main fertiliser constituents is phosphate rock, which has been identified by the Commission as a critical raw material. For phosphate fertilisers, the EU is currently highly dependent on import of phosphate rock mined outside of the EU (more than 90% of the phosphate fertilisers used in the EU are imported, mainly from Morocco, Tunisia and Russia). This while domestic waste (in particular sewage sludge) contains large amounts of phosphorus, which – if recovered in line with a circular economy model – could potentially cover about 20-30% of EU's demand of phosphate fertilisers. The related investment potential remains, however, currently largely unexploited, which is partially due to the above-mentioned difficulties to access the internal market.

2) The Fertilisers Regulation fails to address environmental concerns arising from contamination of soil, and ultimately food. A well-recognised issue is, the presence of cadmium in inorganic phosphate fertilisers. In the absence of EU limit values, some Member States have imposed unilateral cadmium limits for EC-fertilisers by virtue of Article 114 TFEU, hence creating a certain market fragmentation also in the harmonised field. The presence of contaminants in those fertilisers which are currently subject to national rules (e.g. fertilisers derived from sewage sludge) poses similar concerns.

Who will be affected by it?

The initiative will mainly affect those producers of innovative fertilisers produced from organic or secondary raw materials in line with the circular economy model, who will be able to reach a critical mass through radically facilitated access to the internal market. Such producers will benefit from the initiative in particular in those Member States which are not providing a sufficiently large home market for new types of fertilisers.

It will also affect private and public recovery operators (such as operators of waste water treatment plants, or of waste management plants producing compost or digestate) who will be able to valorise their output, and thus facilitate investments in such infrastructure.

Many national authorities will see a decreased workload when national registration or authorisation systems for fertilisers are fully or partially replaced by EU-wide control mechanisms.

Finally, farmers and other fertiliser users are likely to see an increase in the product variety offered to them, while the general public will be better protected from contamination of soil, water and food.

Is EU action justified on grounds of subsidiarity? Why can Member States not achieve the objectives of the proposed action sufficiently by themselves? Can the EU achieve the objectives better?

The first objective of the proposed action is to boost investment in production and uptake of effective, safe, innovative fertilisers produced from organic or secondary raw materials in line with the circular economy model, by helping those products reach a critical mass through access to the entire internal market. More efficient recourse to such fertilisers can offer significant environmental benefits, reduced dependency on import of critical raw materials from outside of the EU, as well as an increased variety of high quality fertilising products to farmers. The existing barriers to the free movement of such products, in the form of diverging, national regulatory frameworks, cannot be removed through Member States' unilateral actions. In particular, mutual recognition in this field has proven exceptionally difficult, and becomes an increasingly important obstacle as the interest in producing and trading high-quality fertilisers from organic or secondary raw materials tends to increase. EU action, on the other hand, could ensure the free movement of such fertilisers by establishing harmonised high quality, safety and environmental criteria.

The second objective is to address heavy-metal contamination of soil and food through fertiliser use. Since most of the fertilisers posing the greatest concern (i.e., inorganic phosphate fertilisers) are already harmonised, Member States cannot achieve this objective unilaterally. EU-wide maximum limits, on the other hand, can effectively reduce contaminants in harmonised fertilisers to safer levels.

## B. Objectives of the initiative

What are the main policy objectives?

The main policy objective of the initiative is to incentivise large scale fertiliser production in the EU from domestic organic or secondary raw materials in line with the circular economy model by transforming waste into nutrients for crops. The initiative would provide a regulatory framework radically easing access to the internal market for such fertilisers, thereby levelling their playing field with that of mined or chemical fertilisers produced

in line with a linear economy model. This would contribute to the following circular economy objectives:

- It would allow valorisation of secondary raw materials, hence enabling improved use of raw materials and turning eutrophication and waste management problems into economic opportunities for public and private operators.
- It would boost investment and innovation in the circular economy, hence creating jobs in the EU.
- It would contribute to relieving the fertilisers industry from its current pressure to reduce CO<sub>2</sub>-emissions under ETS, by allowing it to produce fertilisers from less carbon-intensive feedstock.
- It would increase resource efficiency and decrease import dependency for raw materials essential to European agriculture, in particular phosphorus.

Increased production and trade in innovative fertilisers would also diversify the fertilisers offered to farmers, potentially contributing to making food production more cost- and resource-effective.

A second policy objective is to address the current, well-recognised environmental concern stemming from cadmium contamination of fertilisers from phosphate rock, and remove the current market fragmentation to which it currently gives rise in the form of national cadmium limits. The setting of limit values, aiming at minimising the negative impact of fertiliser use on the environment and on human health, will contribute to a reduction of cadmium accumulation in soil and of cadmium contamination of food and water...

Do the objectives imply developing EU policy in new areas?

No. It will cut across the existing policy areas of internal market, protection of the environment and of consumers, and agriculture.

### C. Options

- (1) What are the policy options (including exemptions/adapted regimes e.g. for SMEs) being considered?
- (2) What legislative or 'soft law' instruments could be considered?
- (3) How do the options respect the proportionality principle?

1&2) Five different policy options have been examined in the Impact Assessment, ranging from 'no action' to various levels of regulatory reform.

Option 1: *Status quo*: The Fertilisers Regulation remains unchanged. Since the Regulation is not well adapted to fertilisers produced from organic or secondary (*i.e.*, often relatively variable) raw materials, a large part of the fertilisers market remains non-harmonised, and in many Member States subject to national product authorisation.

Option 2: The regulatory technique of the Fertilisers Regulation, *i.e.* type-approval, remains un-changed, and is extended to the harmonisation of fertilisers from organic raw materials and of other fertiliser-related products, such as 'plant biostimulants'. For the purpose of ensuring the safety of innovative fertilisers from waste and other secondary raw materials, limit values are introduced for heavy metals. In the interest of allowing all fertilisers to compete on a level playing field, these limit values are made applicable to all fertilisers, and hence also address existing environmental concerns with conventional fertilisers.

Option 3: Harmonisation is extended to fertilisers from organic raw materials and to other fertiliser-related products, such as 'plant biostimulants', and achieved through approval of ingredients, leading to a positive, exhaustive list of materials eligible for intentional incorporation into a fertiliser. As under option 2, limit values are introduced for heavy metals for all fertilising materials.

Option 4: Harmonisation is extended to fertilisers from organic raw materials and to other fertiliser-related products, such as 'plant biostimulants', and achieved through the 'New Legislative Framework', which builds on mandatory, essential quality and safety requirements and voluntary, harmonised technical standards. Under different sub-options, various levels of third party involvement in the assessment of conformity with the essential requirements apply across the board. One of the requirements is compliance with limit values for heavy metals.

Option 5: As under option 4, harmonisation is extended to organic fertilisers and to other fertiliser-related products and achieved through the 'New Legislative Framework' with essential requirements and standards. However, third party involvement in the assessment of conformity with the essential requirements *varies* between material categories, and is highest for waste and other secondary materials with potentially variable composition. One of the requirements is compliance with limit values for heavy metals.

Product harmonisation at EU level typically covers all products with a given function. If this default option of **full harmonisation** were to be applied to options 2 to 5 described above, fertilisers *not* complying with the harmonised legislation could not be placed on the market anywhere in the EU.

However, in view of the very local nature of the market of certain fertilisers, this initiative could follow an alternative approach. Under this alternative variant, which could be applied to either of the options 2-5, national legislation in this area could continue to exist, but any fertilisers could comply with the harmonised legislation *instead*, on an *optional* basis (as is the case under *status quo* for inorganic fertilisers). Under this variant of **optional harmonisation**, operators interested to get products CE-marked for easy access to the EU-wide *internal market* would have the option of ensuring that their products comply with the harmonised requirements. However, non-harmonised products could still remain on the *national markets*, subject to any applicable national requirements maintained or introduced by Member States and mutual recognition.

3) The first objective of the initiative is that of boosting investment in production of effective, safe, innovative fertilisers produced from organic or secondary raw materials in line with the circular economy model, with the related benefits for environmental impact, reduced import dependency, and increased variability of high-quality products on offer. The initiative aims at reaching a critical mass through internal market for such products. Mutual recognition of non-harmonised fertilisers has proven extremely difficult in the past, whereas product harmonisation legislation has been an effective way of securing internal market access for inorganic fertilisers produced in line with a *linear* economy model. It is therefore concluded that product harmonisation legislation for fertilisers from organic or secondary raw materials does not go beyond what is necessary for providing the regulatory certainty required to incentivise large scale investment in the *circular* economy. This is true in particular for option 3, which keeps administrative costs at a minimum, and option 5, which leaves economic operators a maximum of flexibility to put new products on the markets without compromising on quality and safety. It is also particularly true for the variant of *optional* harmonisation, which would leave Member States free to allow non-harmonised fertilisers to on the market without depriving those economic operators seeking larger markets of the possibility to opt for the benefits of the harmonised regulatory framework. The form of a Regulation is deemed the most appropriate for harmonisation of products in a field of such technical complexity and potential impact on the food chain and the environment as fertilisers. That conclusion is supported by the fact that the existing harmonisation legislation for fertilisers also has the form of a Regulation.

Regarding the second objective, *i.e.*, addressing heavy-metal contamination of soil and food through use of fertilisers many of which are already harmonised, maximum levels in the product legislation is seen as an effective means of addressing the problem at source. The economic impacts are deemed proportionate to the objective of preventing irrevocable soil contamination affecting current and future generations of farmers and food consumers.

## D. Initial assessment of impacts

What are the benefits and costs of each of the policy options?

Below, *status quo* is compared with the four other policy options described above. The cost estimations of *status quo* include public authorities' and companies' costs for ensuring compliance with the existing Fertilisers Regulation as well as with the existing national regulatory schemes.

### Option 2: Type-approval

**Benefits:** If effective, the type-approval option could achieve the main objective of stimulating investment in and uptake of organic fertiliser production by granting access to the internal market. However, the administration of such a process would make it very slow, unavoidably delaying such access for a large number of products. A large part of the market would therefore *de facto* remain fragmented over many years to come.

**Costs:** Administrative costs of this option would be lower than *status quo* for economic operators, but could be higher than *status quo* for the public authorities involved in the type-approvals. Furthermore, the type-approval-procedure would remain incapable of keeping up with the innovation cycle of the industry, and the absence of rapid internal market access for innovative products would deter investments and hence represent an opportunity cost (albeit difficult to quantify).

### Option 3: Positive ingredient list

**Benefits:** This option, too, could achieve the objective of stimulating investment in and uptake of organic fertiliser production by granting access to the internal market. Abolishing types-approval would significantly increase market flexibility and hence stimulate innovation, whereas agronomic efficacy and protection of health and the environment would still be ensured through the ingredient approval. Increased competition enabled by the flexibility might be expected to reduce fertiliser prices (although this has not been quantified in the assessment). Administrative costs of this option would be lower than *status quo* for economic operators as well as public authorities.

**Costs:** As under option 2, the approval procedure would have difficulties keeping up with the innovation cycle of the industry, although under this option this would only affect new ingredients, and not new mixtures of existing ingredients.

Option 4: NLF applying the same conformity assessment across the board

**Benefits:** This option, too, could achieve the objective of stimulating investment and uptake by granting access to the internal market. Abolishing types-approval would significantly increase market flexibility and hence stimulate innovation, whereas agronomic efficacy and protection of health and the environment would still be ensured through the essential requirements. Increased competition enabled by the flexibility might be expected to reduce fertiliser prices (although, also under this option, that potential price reduction has not been quantified in the assessment). For public authorities, the Impact Assessment estimates that this option will provide lower administrative costs than both *status quo* and the type-approval option.

**Costs:** According to the impact assessment, while the sub-options of this option with high third-party involvement in the conformity assessment would imply significantly higher administrative costs for companies than *status quo*, other sub-options would give them lower administrative costs than *status quo*. However, at the level of individual companies, it can in any event be expected that administrative costs will in certain cases be higher than under *status quo*. This would be the situation for companies currently benefitting from a type-approval, or operating in a country without any authorisation or registration scheme. Under this option, those companies would in the future have to perform a conformity assessment, or have it performed, and might have to contribute to the financing of technical standards.

Option 5: NLF adapted to the potential risks of categories of products

**Benefits:** The benefits in terms of internal market access and market flexibility of this option are very similar to those of option 4. The Impact Assessment estimates that this option will provide lower administrative costs for both public authorities and economic operators than *status quo*, and significantly lower administrative costs for public authorities than the type-approval option.

**Costs:** According to the impact assessment, this option would imply lower administrative costs than the type-approval option for economic operators. As under option 4, it can, however, be expected that administrative costs will in certain cases be higher than under *status quo* at the level of individual companies. This would be true in particular for producers of relatively variable materials requiring a high level of third-party involvement in the conformity assessment.

The variant of optional harmonisation, which can be applied to any of options 2-5 listed above, would have the advantage of affecting only economic operators with a genuine interest in getting access to the market in several Member States, in line with the principles of subsidiarity and better regulation. The potential disadvantage could be that non-harmonised products could continue raising concerns about cross-border food contamination. Furthermore, optional harmonisation could imply higher costs for national administrations than full harmonisation, since they could be expected to maintain national procedures to some extent. As it was not part of the original Impact Assessment, the below mentioned revision of that assessment covers this new variant.

Could any or all of the options have significant impacts on (i) simplification, (ii) administrative burden and (iii) on relations with other countries, (iv) implementation arrangements? And (v) could any be difficult to transpose for certain Member States?

i&ii) The NLF-options 4 and 5 have the highest potential to lead to simplification and reduction of the administrative burden. Comparing the variant of full harmonisation with that of optional harmonisation, the former is likely to provide the greatest administrative simplification for public authorities, since that variant will only require the administration of one single set of rules, whereas under the latter, many Member States could be expected to maintain national rules and procedures for mutual recognition.

iii) All options except *status quo* could have impacts on relations with third countries, as the setting of EU limit values for heavy metals could affect imports of contaminated raw materials.

iv) None of the options is expected to have significant impacts on implementation arrangements.

v) N.a., since under all options the EU legislation would take the form of a directly applicable Regulation.

- (1) Will an IA be carried out for this initiative and/or possible follow-up initiatives?
- (2) When will the IA work start?
- (3) When will you set up the IA Steering Group and how often will it meet?
- (4) What DGs will be invited?

1&2) A draft Impact Assessment report was prepared and scrutinised by the Impact Assessment Board under the former Commission. It integrates the findings of an assessment performed in 2011 on the impacts of imposing a cadmium limit on phosphate fertilisers (hereinafter the 'Cd impact assessment'). The draft Impact Assessment report is currently being revised, and the options assessed are being aligned with the options presented in this roadmap, for the purpose of ensuring compliance with the priorities of the new Commission.

<p>Furthermore, the consistency between the Cd Impact Assessment and a recent SCHER opinion<sup>6</sup> on the accumulation of Cd in soil will be analysed.</p> <p>3&amp;4) The Impact Assessment is being guided by an Inter Service Steering Group including SG, DG ENV, DG AGRI, DG SANTE, DG TRADE, DG RTD, DG TAXUD, DG JRC, DG EMPL, DG GROW, and EASME.</p>
<p>(1) Is any option likely to have impacts on the EU budget above €5m?</p> <p>(2) If so, will this IA serve also as an ex-ante evaluation, as required by the Financial Regulation? If not, provide information about the timing of the ex-ante evaluation.</p>
<p>1) No.</p> <p>2) N.a.</p>

<p><b>E. Evidence base, planning of further work and consultation</b></p>
<p>(1) What information and data are already available? Will existing IA and evaluation work be used?</p> <p>(2) What further information needs to be gathered, how will this be done (e.g. internally or by an external contractor), and by when?</p> <p>(3) What is the timing for the procurement process &amp; the contract for any external contracts that you are planning (e.g. for analytical studies, information gathering, etc.)?</p> <p>(4) Is any particular communication or information activity foreseen? If so, what, and by when?</p>
<p>1) The existing draft Impact Assessment report relies largely on the abovementioned ex-post evaluation of the Fertilisers Regulation of 2010 as well as on the study carried out in 2012 on options to fully harmonise the EU legislation on fertilising materials including technical feasibility, environmental, economic and social impacts<sup>7</sup>. It will be revised as indicated in section D above.</p> <p>Phosphorus recovery and recycling has also been addressed by FP7 research projects, the results of which have been analysed during the workshop 'Circular approaches to phosphorus: from research to deployment', held in Berlin on 4 March 2015<sup>8</sup>. One of the identified priorities is to revise the EU Fertiliser Regulation to extend its scope to nutrients from secondary sources (e.g. recycled phosphates) and organic sources.</p> <p>2&amp;3) The contributions to the public consultation on the Circular Economy Package with regard to this initiative are being analysed. No major further information gathering is foreseen at this stage.</p> <p>4) No.</p>
<p>Which stakeholders &amp; experts have been or will be consulted, how, and at what stage?</p>
<p>Consultation of Member States and other stakeholders has been conducted extensively throughout the preparatory phase starting in 2012, in particular in the context of the Fertilisers Working Group. The public consultation on Circular economy published in May 2015 included questions on this topic.</p>

<sup>6</sup> Scientific Committee on Health and Environmental Risks. SCHER adopted the opinion on 31 May 2015.

<sup>7</sup> [http://ec.europa.eu/enterprise/sectors/chemicals/files/fertilizers/final\\_report\\_23jan2012\\_en.pdf](http://ec.europa.eu/enterprise/sectors/chemicals/files/fertilizers/final_report_23jan2012_en.pdf)

<sup>8</sup> The report of the workshop can be downloaded at <http://bookshop.europa.eu/en/circular-approaches-to-phosphorus-pbKI0115204/>