Questionnaire to MS to report on their experience with Directive 2009/41/EC - Update for 2018

Fields marked with * are mandatory.

Introduction

Directive 2009/41/EC on the contained use of genetically modified micro-organisms ("GMMs")* (hereinafter referred to as "the Directive") provides that every three years Member States must send to the Commission a summary report on their experience with the Directive (Article 17(2)) and that the Commission must publish a summary based on these reports (Article 17(3)).

In accordance with such articles, the Commission has already published four reports for the periods 1999-2003, 2003-2006, 2006-2009 and 2009-2014 (reports are available on this <u>European Commission webpage</u>).

Last year, the Commission invited Competent Authorities of Member States under the Directive to complete a questionnaire covering the period ranging from 6 June 2014 to 31 December 2017.

We are now asking you to complete an updated version of the questionnaire for the period **1 January 2018 – 31 December 2018**, to also cover the impact of the outcome of the ruling of the Court of Justice of the European Union on new mutagenesis techniques (Case C-528/16) in the Commission report, which will therefore cover the period June 2014 - December 2018.

QUESTIONNAIRE

The questionnaire is divided into five parts, to collect information for the year 2018:

- Part I focuses on possible updates on your experience with the general implementation of the Directive.
- Part II aims at getting an overview of contained uses and premises for GMMs. It also contains additional questions on GM animals/GM plants if they are covered under your contained use legislation**.
- Part III focuses on investigational medicinal products that contain or consist of GMOs.
- Part IV concerns gene drive modified organisms.
- Part V allows for additional comments.

A glossary list with definitions of terms used in the questionnaire has been included in Annex.

DEADLINE FOR COMPLETION: 29 March 2019

- * For the definition of "contained use", "micro-organism" and "GMM" see the Annex.
- ** For the notion of "contained use legislation" see the Annex.

Annex - Glossary of terms (for the purposes of this questionnaire)

Download this document to check the definitions of terms or the purposes of this questionnaire

Annex.pdf

Contact details

- *Member State
 - Austria
 - Belgium
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PART I: GENERAL IMPLEMENTATION OF THE DIRECTIVE

*1. Notification and approval systems (and relevant changes)

Was there a change **in 2018** regarding the Competent Authority (CA) for Directive 2009/41/EC on the contained use of GMMs?

Yes

No

* In 2018, has the scope of the transposing legislation been changed in your Member State?

Yes

No

* In 2018, did you have any change in the notification and approval system in your Member State?

Yes

No

* **In 2018**, in your Member State, what was the percentage of notifications* which were not processed within the statutory timeframe?

* For the definition of "notification" see the Annex.

0%

0% > 0

* From your experience **in 2018**, do you have new information to report about difficulties in relation to the notification process (including causes for delays in the notification process, actions taken to reduce those delays)?

- Yes
- No

* What new difficulties specific to the **notification process** did you encounter in 2018, and in your opinion what should be done or is done already to alleviate these difficulties?

Please note that clinical trials and gene drive modified organisms are addressed in dedicated sections of the questionnaire and that any difficulties related to those types of contained uses should be reported in the respective sections. Amount of contained uses notified and submitted in one notification on activities under risk class 3. The complexity of the assessment process threatened to cause delays in the statutory timeframe for decision.

The recipient was M. tuberculosis; one genome of a GMM can contain about 5000 genes and 18 activities were notified using 11 groups of vectors.

The period of time during which the ministry is waiting for the opinion of its advisory body – recommendations from experts and from the Biosafety Committee – falls (is taken) into the statutory timeframe for decision.

If the same notifier submits a new notification under risk class 3, the timeframe of 45 days for decision will apply according to Article 9 par. 2, letter a) of the Directive 2009/41/EC.

We consider the period insufficient.

We think that the period of time during which the ministry is waiting for the opinion of its advisory body should not be taken into account, or, the Competent Authority should have the possibility to influence the extent of the notification.

Isolation of the laboratory suite was doubted by some members of the Biosafety Committee as the enclosed facility of containment level 3 was built inside of another laboratory. We would appreciate a guidance on "the laboratory is separated from other areas in the same building" (Annex IV, table I A, point 1 of the Directive).

*Were there new reasons in 2018 for delays in the notification process and what efforts have been made to lessen or prevent such delays in the future?

No new reasons.

To prevent delays in case of the notification desribed above, we had to find some "problem points" and ask the notifier to submit a new notification related to these points, what reduced (a bit) the number of contained uses considered.

*2. Waste disposal

Do you have changes to report regarding waste disposal for 2018, compared to the information already reported for the period 2014 - 2017?

- Yes
- No

* Is waste from contained use activities recycled after inactivation?

- Yes
- No

* Specify for which purpose(s)

Some materials are recycled in Slovakia. Obligations of waste holders are specified under Article 14 of the Act No. 79/2015 on waste and on amendments to certain acts.

*3. Inspection and enforcement issues

In 2018, did you implement changes in the procedure undertaken for the inspection of contained use premises (Article 16 of the Directive) under your contained use legislation?

- Yes
- No

* In 2018, how many premises/contained uses have been inspected?

48 premises

* In 2018, what were the issues most frequently encountered during the course of inspections carried out?

Contained use without notification (activities classified risk class 1).

*What were the corresponding enforcement actions taken?

A fine to the user.

*What actions were taken by the user (and/or advised by the CA) in order to minimise the occurrence of these issues in the future?

Training of all employees.

What type of corrective and/or preventive actions, if any, did you apply in order to minimise the occurrence of these issues in the future?

	Issue	Enforcement action(s)	Corrective/preventive measure(s)
1	contained use without notification	fine	publication of the decision on the fine on the Inspectorate's website and on the Enviroportal website
2			
3			
4			
5			

*4. Accidents

Provide information reported by the users on accidents* (as required in Article 14(1) of the Directive) to the CA **for 2018**.

* For the definition of "accident" see the Annex.

No accidents were reported in 2018.

* Provide information on the measures taken by you, as a CA, on the basis of Articles 14(2) and 15(1) of the Directive.

No accidents related to contained use activities occured during the reporting period in Slovakia. The notified contained uses did not foresee any transboundary impacts in case of an accident.

Comment on a possible improvement regarding the occurrence of similar accidents, as a result of the measures taken by the user(s) and/or by the CA.

*5. Public consultation

Do you have new information to report regarding public consultation under your contained use legislation (in accordance with Article 12 of the Directive), compared to the information already reported for the period 2014 - 2017?

- Yes
- No

6. Interpretation and implementation of Directive 2009/41/EC

* Please provide information regarding notifications of contained uses of GMMs (and GMOs when appropriate) produced with new mutagenesis techniques:

In Slovakia, 4 users are actively working with new mutagenesis techniques and GMMs/GMOs produced thereof.

Activities are classified under risk class 1 and class 2.

user A

GMO organisms: non-pathogenic bacterial Escherichia coli and yeast Saccharomyces cerevisiae and Pichia pastoris strains used for research laboratory work only.

Aminoacid exchanges of several selected amino acid residues in yeast and human Ire1 proteins and plant nasturtium Tropaeolum majus xyloglukan endotransglycosylase protein TmXET6.3 were performed by mutagenesis of respective genes in cloning plasmids using QuikChange II Site-Directed Mutagenesis Kit (Agilent Technologies). Mutated variants has been cloned into expressing yeast vectors and tested for changed phenotype in yeast or by in vitro assays.

Aim of these works: The amino acid exchanges were made for structure/function analysis of the proteins (enzymes) mentioned above.

user B

The recipient: XL-1 Blue supercompetent cells The donor: Homo sapiens; Mus musculus Targeted mutagenesis, transformation caused by thermal shock Aim of these works: Plasmid storage and isolation / Scientific purposes, antibody testing

user C

1.) bacteria, yeast

Targeted mutagenesis techniques have been performed to exchange codon bases, deletion of genes, labeling of genes of interest, or fusions with various DNA fragments. Purpose: basic research

2.) Mycobacteria

Standardly used e.g. allele exchange methods that result in interruption or deletion of the genes under study that can be considered as targeted mutagenesis.

user D

silkworms - Bombyx mori

(several dozens over several generations)

Purpose: suppression of gene expression for neuropeptides and their receptors by CrisprCas9 system (deletion / mutation of genes) - functional analysis of neuropeptides and their receptors

* Please provide information and views on the impact of the outcome of the ruling of the Court of Justice of the European Union on new mutagenesis techniques for you as CA for Directive 2009/41/EC. Provide also information on how such impact is or will be addressed in your country:

Not known, yet. We rarely get opinions of the scientists, although we have requested them. The users notify all activities.

PART II: OVERVIEW OF CONTAINED USES AND PREMISES

In this part of the questionnaire you are invited to submit information on the number of notifications and amendments submitted for contained uses of GMMs and on the number of premises for contained use of

GMMs, according to the classification of contained use. If also covered under your contained use legislation, similar questions for GMOs (GM animals and GM plants) will be asked.

7. GMMs

How many notifications of contained uses of GMMs were submitted in your Member State under the Directive in 2018?

Report <u>all types of notifications</u> and amendments to existing notifications by class; this includes GMMs, combined uses of GMMs and GMOs (to be reported according to the GMM class), clinical trials (where applicable) and gene drive modified organisms (where applicable).

* Classification of contained use (according to Art. 4(3))

	No. of notifications submitted (according to Art. 6, 8 and 9)	No. of amendments (according to Art. 11)
Class 1	37	
Class 2	4	
* Class 3*	1	
Class 4		
* Total	42	

Number of **premises for contained uses of GMMs** (as referred to in Article 6) with a valid notification* as per December 2018:

* For a definition of "valid notification" see the <u>Annex</u>.

	No. of premises	Comments (if any)
*Class 1	3	
* Class 2	15	
* Class 3		The notification on risk class 3 was submitted in 2017.
* Class 4		
*Total	18	

Number of **contained uses of GMMs** (including combined uses of GMMs and GMOs) with a valid notification* or approval as per December 2018:

* For a definition of "valid notification" see the Annex.

	No. of contained uses	Comments (if any)
* Class 2	23	
* Class 3	18	All 18 activities were the scope of one notification.
*Class 4		
* Total	41	

8. GM animals and GM plants

If also covered under your contained use legislation, how many **notifications** for contained uses of GMOs, i.e. GM animals and GM plants, (excluding combined uses with GMMs) were submitted in your Member State **in 2018**?

* If you use a different classification system (than classes 1, 2, 3, 4), explain the link between the classification and the category of the risk.

	Classification of contained use*	GM animals - No of notifications su bmitted	GM animals - No of amendments	GM plants - No of notifications sub mitted	GM plants - No of amendments
*a	1	6		10	
*b	2				
*c	3				
*d	4				
*Total		6		10	

* Did you encountered specific challenges related to notifications about GM plants or GM animals?

We did not encounter any specific challenges related to notifications on GM plants or GM animals.

PART III: INVESTIGATIONAL MEDICINAL PRODUCTS THAT CONTAIN OR CONSIST OF GMOs

In this part of the questionnaire you are invited to submit information about the different activities related to the manufacturing and administration of investigational medicinal products for human and veterinary use that contain or consist of GMOs.*

If manufacturing of investigational medicinal products is common for both human and veterinary use, please report this activity under the "Human use" part.

* This includes but is not limited to Advanced Therapy Medicinal Products ("ATMPs"). For a definition of ATMP see the Annex.

*9. Human use - Manufacturing

Is the manufacturing of investigational medicinal products for human use that contain or consist of GMOs notified and/or authorised <u>under Directive 2009/41/EC</u> in your Member State?

Yes

No

*What challenges, if any, did you as a CA encounter in implementing the Directive in relation to the manufacturing of investigational medicinal products for human use that contain or consist of GMOs (e.g. notification, risk assessment, authorisation, control, etc.)?

*What in your opinion should be done or is done already to address these challenges	s?
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*10. Human use - Administration (clinical trials)

Is the administration of investigational medicinal products for human use that contain or consist of GMOs notified and/or authorised under Directive 2009/41/EC in your Member State?

Yes

No

*What challenges, if any, did you as a CA encounter in implementing the Directive in relation to the administration of investigational medicinal products for human use that contain or consist of GMOs (e. g. notification, risk assessment, authorisation, control, etc.)?

*What in your opinion should be done or is done already to address these challenges?

*11. Veterinary use - Manufacturing

Is the manufacturing of investigational medicinal products for veterinary use that contain or consist of GMOs notified and/or authorised <u>under Directive 2009/41/EC</u> in your Member State?

Yes

No

* What challenges, if any, did you as a CA encounter in implementing the Directive in relation to the manufacturing of investigational medicinal products for veterinary use that contain or consist of GMOs (e.g. notification, risk assessment, authorisation, control, etc.)?

*What in your opinion should be done or is done already to address these challenges?

*12. Veterinary use - Administration (clinical trials)

Is the administration of investigational medicinal products for veterinary use that contain or consist of GMOs notified and/or authorised <u>under Directive 2009/41/EC</u> in your Member State?

Yes

No

* What challenges, if any, did you as a CA encounter in implementing the Directive in relation to the administration of investigational medicinal products for veterinary use that contain or consist of GMOs (e.g. notification, risk assessment, authorisation, control, etc.)?

*What in your opinion should be done or is done already to address these challenges?

PART IV: GENE DRIVE MODIFIED ORGANISMS

The purpose of this section is to gather information on whether notifications for contained uses of gene drive* modified organisms have been submitted in the Member States and how the Directive is implemented in this respect.

* For the purpose of this questionnaire, the definition of "gene drive" given in the <u>Annex</u> is applicable.

* In 2018, has your Member State taken any measure regarding gene drive modified organisms under the Directive?

- Yes
- No

*In 2018, have you received notifications on gene drive modified organisms under your contained use legislation?

- Yes
- 🔘 No

List all notifications (one notification per line):

* If you use a different classification system (than classes 1, 2, 3, 4), explain the link between the classification and the category of the risk.

	Type of organisms	Scope	Classification of contained use*
a	bacteria, yeast	Basic research on introducing point mutations or deletions into the genes studied. – no success to date	risk class 1
b			
с			
d			
е			

*Are you implementing specific containment measures for gene drive modified organisms?

- Yes
- No

*Are there any particular challenges, for you as a CA, in implementing the Directive with regard to the contained use of gene drive modified organisms (e.g. notification, risk assessment, authorisation, control, etc.)?

Yes

No

*What in your opinion should be done or is done already to address the challenges identified, with the aim to facilitate the implementation of the Directive?

PART V: ADDITIONAL COMMENTS

Thanks for providing comments on any other aspects of the Directive or on other related legislation.

Contact

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