

Biosafety Advisory Council



SECRETARIAT

Guidelines To Compile The Public Dossier

DELIBERATE RELEASES OF GENETICALLY MODIFIED MICRO-ORGANISMS FOR EXPERIMENTAL PURPOSES (PART B) (THE EXAMPLES REFER TO THE CASE OF MEDICINAL SUBSTANCES)

INFORMATION FOR THE NOTIFIER
(VERSION OF 26 FEBRUARI 2003)

GENERAL INTRODUCTION

In Belgium, the Royal Decree (RD) for the deliberate release of GMOs of 18 December 1998, which implemented the European directive 90/220/EEC, stipulated in articles 8 § 1 and 16 § 1 that each application dossier of a deliberate release had to contain **a proposal of information** for the public: article 8 § 1 being of application for experimental purposes (part B) and article 16 § 1 for the placing on the market (part C).

Since 17 October 2002 the European Directive 2001/18/EC repealing Directive 90/220/EEC, is of application. The transposition of this directive into national regulation is still ongoing. Nevertheless, in the new regulation the public dossier will keep a central role in informing citizens and be of importance in the foreseen consultation procedure of the public.

As these regulations do not give any guidance to the notifier to compile the requested public dossier and in order to provide a clear framework to the notifier, to encourage a common homogenous approach to carry out the compilation of the public dossiers and to stimulate open and transparent public information, the Service of Biosafety and Biotechnology (SBB) in collaboration with the experts of the Working Group "Public Information" of the Biosafety Council developed guidelines for part B releases with genetically modified micro-organisms.

The main objectives of the public dossier are to inform citizens about the activities of companies or research institutes in the biotechnology field and to stimulate public awareness and education. The delivered information should enable citizens to gather knowledge, to weigh up the risks and benefits, to form a proper opinion about these products, etc. To stimulate this process the notifier should not only address general and more technical information on the biosafety issues (risk assessment), but should also consider the concerns of the public in a transparent and open way. People have ethical and moral concerns and have questions about the added value of the envisaged trials and used technology, trust, benefits, arguments of choice of technology,

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alternatives, training requirements, etc. It is clear that risk assessment is much too narrow to address people's concerns. Therefore, the guidelines and public dossiers should not only focus on the biosafety aspects but also draw a framework of people's concerns.

In addition, it is important to pay attention to the accessibility of these public dossiers. The public dossier should be readable and understandable. It is therefore important to use a comprehensible language, which is accessible to everyone. Scientific terminology and concepts should be explained, advertising messages and affirmative statements that are not scientifically founded should be avoided, as these are generally received by the public with suspicion and scepticism, and a good transparent argumentation should be used.

The public dossiers will be made available to the public by publishing them on the Internet in three languages (Dutch, French and English). For this reason the submission in electronic format (MS Word document) of the public dossier in the three mentioned languages (by email to mgoossen@sbb.ihe.be) is required.

These guidelines cannot be viewed as being static and will thus be reviewed and adapted as necessary.



CONTACT

If you have any comment on the proposed guidelines or wish to obtain additional information on the guidelines, please contact us at the following address.

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THE GUIDELINES

The section below contains the guidelines to be followed (minimal requirement template) when preparing a public dossier.



LOGO of the COMPANY or RESEARCH CENTRE

INFORMATION FOR THE PUBLIC

NAME of the COMPANY or RESEARCH CENTRE

Title of the experiment

European notification number
B/BE/XX/YY

(Short introduction about the regulatory framework and authorisation procedure.)

The release of genetically modified organisms (GMOs) in the environment is strictly regulated at European level by directive 2001/18/EC of 12 March 2001 repealing directive 90/220/EEC and at Belgian level by a new Royal Decree "regulating the deliberate release and/or marketing of GMOs or products that contain GMOs into the environment" repealing the Royal Decree of 18 December 1998. The transposition procedure is still ongoing for the moment.

To ensure the safe use of GMOs, the provisions of the Royal Decree above stipulate that the release of GMOs for experimental aims is prohibited without prior consent from the competent Minister. The decision is based on a thorough evaluation of the biosafety of the planned release, which is conducted by the Biosafety Advisory Council, composed of different Scientific Committees grouping independent experts from Belgian universities and governmental institutes.

To acquire the necessary authorization from the competent Minister, the company or research centre XXX submitted an application dossier to the competent authority. On the basis of the advice of the Biosafety Council, the competent minister could grant a permission to the company or research centre XXX to conduct experiments with transgenic XXX as stipulated in the application B/BE/XX/YY

The release will take place at one or more experimental locations in Flanders / Wallonia / Brussels in the municipality(ies) of XXX (if applicable precise the name of the Hospital(s)). It is expected to start on XXX and to be completed on XXX.



TABLE OF CONTENTS :

The notifier should foresee a table of contents. This allows to have a general view on the structure of the public dossier.

GENERAL INFORMATION :

DESCRIPTION OF THE GENETICALLY MODIFIED MICRO-ORGANISM (GMM):

Not everyone is familiar with the scientific language and jargon. It would therefore be useful to explain what are genetically modified viruses, bacteria or other micro-organisms, how they were obtained (techniques used) and how they differ from the wild type organisms. This means that a number of basic concepts should be explained (see topic "Glossary").

Further, the type of GMM that is being used, its new traits and the environment where it will be introduced should be mentioned. This includes:

- the common and scientific name of the used GMM
- the identification and the specificities of the host or parental system
- a comprehensible explanation about the function of the new genetic trait(s)
- a comprehensible explanation about the mode of action of the new genetic trait(s)
- the consequences of the new genetic traits in terms of survival, reproduction capacity, dissemination, genetic stability, pathogenicity...
- a description of the potential receiving environment (e.g. animal hosts, susceptible animals, medical indication, etc.)

The purpose of supplying this information is to teach citizens that every genetically modified micro-organism is a specific case, depending on the host system, the introduced trait(s) and the environment it is released into.

TYPE AND PURPOSE OF THE ENVISAGED TRIAL :

The type of trial should be discussed. Is the trial designed to study the therapeutic or prophylactic efficacy or to ascertain the safety of the GMM? Which is the targeted population and how many subjects are expected to be treated?

The public must also be informed concerning the place of the release (hospital, ambulant patients, farm animals, wild animals etc.) and why it is not possible to perform the trial in a strictly contained environment.



RESEARCH/DEVELOPMENT ACTIVITIES:

PREVIOUS DEVELOPMENT ACTIVITIES

Concerning medicinal products, the citizen has to understand that the development of a new medication is a very long process and that the planned trial has a long historical background. Previous activities could be explained; specially the previously performed contained uses or deliberate releases (in vitro and in vivo pre-clinical studies, studies with animals, studies on humans) in Belgium or other Member States should be comprehensively listed and described. For the previously carried out deliberate releases it could be very helpful to mention the European identification number of the concerned notifications.

KNOWLEDGE AND EXPERIENCE OBTAINED IN PREVIOUS DEVELOPMENT ACTIVITIES

The gained knowledge of the previous undertaken activities under contained use or deliberate release should be addressed. It will indicate how knowledge and experience is cumulated through these different steps and could explain the necessity of the planned trial (see further).

FUTURE ACTIVITIES

The trial should be placed in the whole development strategy of the company or research centre. Future plans, objectives, visions (e.g. the marketing of a GMM containing medication) and the future steps in the research process that would be considered when the used strategy has proven to work should be discussed (outline of a vision for the future). Explain how the gained knowledge and experience will influence future development.

BENEFITS :

In this chapter the notifier should give a good argumentation regarding the added value of the envisaged trial and used technology. Citizens need to understand why this GMM could be useful. The argumentation delivered by the notifier should not only be done in technical and environmental terms, but should also consider social and economical objectives.

The following topics should be addressed:

The added value of the envisaged trial for the notifier, patient, stock-breeder, society, citizen, environment, etc. should be discussed as well as the added value of the technology in comparison with other accepted therapies or other existing technologies. The cost/benefit balance should be integrated in a more general framework including all the alternative methods.

RISKS :

In this chapter the relevant potential risks for the human health and/or environment that may result from the deliberate release needs to be identified. The relevant questions need to be identified and explained by the notifier. Available data on the impact of large-scale and long-term use of the product should be addressed. Next to referring to relevant scientific literature the



notifier should try to explain how these risks are investigated, how they arrive at certain estimations and conclusions and how uncertainty was taken into account at different levels in this risk assessment process. In this context the general principles, methodology or steps of the risk assessment procedure could be explained. Within this framework the notifier should compare the risks associated to the GMM technology as compared with the risks of existing and other alternative systems. Different risk scenarios could be compared.

The risks for the human health or the environment should be addressed.

For example the risks for the health of the patient, of his relatives or of the care keepers should be explained as well as the impact of large-scale and long-term use of the product.

CONTAINMENT, CONTROL AND MONITORING MEASURES :

In the previous chapter citizens were informed about the potential risks linked to the deliberate release and the way they were assessed. In this chapter the notifier needs to explain how the identified risks are addressed and limited in the scope of the release. Citizens need to be informed about the containment, control and monitoring measures taken to avoid adverse effects on human health and environment. Trial design and instructions that determine the safety measures to be taken when the medicinal substance is prepared or administered, the safety measures to be taken by the care keepers/veterinaries/farmers and, in case of human medications, by the patient or his relatives. Any other measure or working procedure to limit the dissemination of the GMM should also be mentioned (example: packaging, destruction of waste...). The public should also understand why such measures are required.

CONTROL OF GMM AND GENE SPREADING :

When the GMM is shed in the environment what is its viability?

What is the risk of spreading from the treated patient/animal? How has the GMM been designed to avoid this spreading?

What is the risk to transfer the new genes to wild type micro-organisms? How has the GMM been designed to avoid this transfer ?

When the GMM is administered to a human/animal what is the risk to transfer the new genes to the genetic material of the host? How has the GMM been designed to avoid this transfer?

GENETIC STABILITY OF THE GMM :

What is the risk of reversion of the GMM to the wild-type micro-organism? How has the GMM been engineered to ensure genetic stability and to avoid reversion to the wild type?

DESTRUCTION OF GMM CONTAINING MATERIAL :

It should be mentioned that after the trial the remaining GMM containing material will be destroyed. The way of destruction should also be explained.



It should clearly be stated that this notification concerns a deliberate release of GMM for experimental purposes and that the use of this material for any other purpose is prohibited. Please explain that at that stage of development this prohibition is a common rule to follow and that this rule cannot always be linked to risk/danger/toxicity aspects.

TRAINING REQUIREMENTS :

In this subchapter the undertaken measures (training requirements) regarding the people who will manipulate the GMM should be discussed. Working with a trained and experienced staff can be discussed within this framework.

EMERGENCY SITUATIONS :

Here the notifier should explain how unexpected events will be identified at an early stage and how these will be managed.

OTHER CONTAINMENT, CONTROL AND MONITORING MEASURES :

RESPONSIBILITIES OF THE NOTIFIER:

(to be literally copied by the notifier)

The consent that could be given to the notifier by the competent Minister stipulates that the notifier takes complete civilian liability regarding the damage that could be caused by the deliberate release to the health of humans, animals, or environment.

INSPECTION BY THE PUBLIC AUTHORITIES:

(to be copied literally by the notifier)

Inspectors are in charge of inspecting the trials for compliance with the conditions specified in the consent and to investigate potential breaches of the consent. In case where mismanagement or fraud is identified specific sanctions will be imposed.

ACTIVITY REPORT:

(to be literally copied by the notifier)

At the end of the trial an activity report prepared by the notifier needs to be delivered to the competent authority. This activity report includes at least the following data:

- the site and period of release,
- the precise nature of the actually released GMMs,
- the aim(s) of the trial,
- the measures that were taken to prevent unwanted release of transgenic material,
- if applicable, the measures that were taken to protect the subject (patient/animal) during administration of the GMM-containing study drug,
- if applicable, the measures that were taken to protect the relatives of the treated patients,
- the measures that were taken to protect the workers who had to manipulate the GMM-containing material,
- the method used for the destruction of the unused or contaminated material,
- the results obtained during the trial,
- an overview of the monitoring of patient/animal for GMM shedding,
- an overview of the monitoring of GMM or recombinant DNA in the environment.



REFERENCES:

Research pointed out that the use of affirmative, not scientifically underpinned statements and advertising messages have a negative effect on the public. These are received by the public with suspicion and scepticism. Therefore, the notifier should provide a scientific base for its statements and findings by referring to relevant scientific literature or websites etc.

GLOSSARY:

Since not all citizens are as familiar with the issues discussed, it is recommended to explain particular concepts, terms, etc.

CONTACT:

Notifier:

Citizens who want to address any comments on the public dossier or want to obtain additional information on the deliberate release need to be able to contact the notifier. Therefore, the address, a telephone and fax number, an email address and if available the web site of the company or research centre should be made available.

Notifiers are encouraged to react on the comments and requests raised by citizens as an absence of reaction or constructive reply creates a climate of mistrust. It is desirable to appoint a contact person within the company or research institute who can answer to the raised questions. This contact person should be able to inform citizens about the activities of the company or research institute and to make the link between the notifier, press, public and concerned public. This as well implies the co-ordinates of the contact person.

The SBB would be very interested to be kept informed about the requests raised by the citizens. The feedback of citizens and notifiers in this matter could allow the reassessment of the actual guidelines.

(to be literally copied by the notifier)

If you have any comment on the public dossier or our activities or wish to obtain additional information on the deliberate release, please contact us at the following address.

You can also have access to a summary of the notification (SNIF) on the web site of the Joint Research Centre of the European Commission (<http://gmoinfo.jrc.it/>). Comments can be addressed to the Commission via this web site.



Notifier :

Name of company or research centre:

Address:

Telephone:

Fax:

Email:

Web site:

Contact person :

Name of contact person:

Address:

Telephone:

Fax:

Email:

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