



## Guidelines to the project licence application form

In these guidelines, the three documents that constitute the project licence application form will be discussed:

- *Project licence application for animal procedures* (contact details institute and applicant);
- *Non-technical summary (for the general public)*;
- *Project proposal* (description of project).

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### Project licence application for animal procedures

This form should be used to:

- a. submit an **application for a project licence**;
- b. submit an **amendment to a project licence**. An amendment should be submitted when the proposed alterations will adversely affect the welfare of the animals or affect the basic principles of the project licence;
- c. notify the Central Authority for Scientific Procedures on Animals (CCD) of alterations to a project. It is sufficient to notify the CCD when the proposed alterations do not adversely affect the welfare of the animals.

#### 1. Details applicant

##### *1.1 Approval number from the 'Netherlands Food and Consumer Product Safety Authority'*

In the Netherlands, animal procedures may only be performed in establishments that are authorised by the competent authorities. Licences are issued by the 'Netherlands Food and Consumer Product Safety Authority', also known as the 'NVWA'. These licenced establishments have also received an approval number from the 'Netherlands Food and Consumer Product Safety Authority'. This approval number should be provided here. In Dutch, the approval number is known as '*deelnemernummer NVWA*'. If the project is a collaboration between multiple establishments, only the approval number of the establishment responsible for this project should be provided.

##### *1.2 Contact details of the establishment licence holder*

If the establishment licence holder is a legal entity, the name of the natural person who is mandated to act on behalf of the establishment licence holder should be provided here. This person is also known as the portfolio holder. The portfolio holder, in turn, can authorise another person to act on his/her behalf. In this case, a mandate has to be enclosed with the project application (see 1.7). The mandated person will, in addition to the responsible researcher, receive all correspondence on the project licence application.

##### *1.4 Responsible researcher (project leader/principle investigator)*

This person is responsible for writing the project licence application and performing the procedures according to the project licence. In addition, this person should meet the requirements mentioned in article 9 of the Animal Procedures Act. This person will ensure that when the project is not performed in accordance with its project licence, appropriate correcting measures will be taken which will be registered.

##### *1.5 Acting responsible researcher*

A second responsible researcher can be appointed, and he/she must also meet the requirements mentioned in article 9 of the Animal Procedures Act.

#### *1.6 Person responsible for conducting the project*

This person ensures that when the project is not conducted in accordance with the project licence, appropriate correcting measures will be taken which will be registered.

In many cases, this will be the same person as mentioned in 1.4. However, the establishment licence holder or responsible researcher can delegate these responsibilities to another experienced person. This person should occupy a position that allows him/her to exercise these responsibilities.

#### *1.7 Mandate by establishment licence holder*

The establishment licence holder and the portfolio holder can mandate an employee or a third party to apply for the project licence. The mandate form (Melding Machtiging) should be filled out completely and enclosed with the project licence application. This mandated person can be authorised for one application or indefinitely.

### **2. About your application**

#### *2.1 Type of application*

Select the appropriate category (new application, amendment or notification).

#### *2.2 Amendment to a project licence*

If a proposed alteration will alter the basic principles of the licence, adversely affect the welfare of the animals or requires more animals, an amendment must be submitted to the CCD for approval. The details of the proposed alterations should be described in the project licence application form. A person need only fill out those sections that are relevant for the amendment. In addition, information on the severity classifications assigned to the proposed procedures should be provided. The non-technical summary should be updated by the responsible researcher. The altered procedures may not be performed unless the CCD has authorised the amendments.

#### *2.3 Notifications*

If a proposed alteration does not adversely affect or even positively affect the welfare of the animals and does not require more animals, it is sufficient to notify the CCD of these alterations. Although no authorisation from the CCD is required, the CCD has to be notified in a timely manner so as to ensure that the project does not deviate from its licence.

The details from the applicant may be transferred from the original application, provided that those are still correct. It is sufficient to describe the proposed alterations to the project and to sign the application form.

### **3. About your project**

#### *3.1 Start date and end date*

Keep in mind that the actual start date is dictated by the defined time period for the evaluation of the project licence application, which is, in general, 40 working days. Project authorisations may be granted for a period not exceeding 5 years.

#### *3.2 Title project*

Use a descriptive and unique title which covers the content of the project application.

#### *3.3 Title non-technical summary*

The title of the non-technical summary should be provided here. This title should be informative, with the public able to understand all parts. This title may be different from the title provided in 3.2.

### *3.4 Animal ethics committee (DEC)*

Provide here the name of the preferred animal ethics committee.

### *4.1 and 4.2 Payment details*

The administrative expenses for the evaluation of the project licence application or amendment must be paid by the applicant. Describe how these expenses will be paid to the CCD.

### *5.1 List of appendices*

The appendices which will be enclosed with the licence application form should be listed here. Appendices that are non-compulsory should only be included when they are essential to the evaluation and authorisation of the project. Please note that it should be possible to understand the project licence application without any additional appendices. Before submitting the application, ensure that all necessary appendices have been enclosed.

### *6.1 Signature*

The licence application form must be signed by the establishment licence holder or the mandated person. The person who signs the licence application form will ensure that the administrative expenses are paid within the defined payment period. In addition, the person who signs the licence application form promises that the animals will be housed, cared for and treated according to legal requirements. Furthermore, he/she will ensure that the staff are adequately educated, competent and continuously trained, and that they are supervised until they have demonstrated the requisite competence.

## **Non-technical summary**

The responsible researcher is responsible for formulating the NTS. The Animal Welfare Body (IvD) may assist the researcher in optimising the content and accuracy. The NTS should be written in Dutch and should not exceed the recommended 500 word limit, excluding the pre-printed text. The project should be explained clearly by using non-technical terms that can be understood by the general public. Avoid the use of concealed language, technical details, abbreviations and jargon. Ensure that the text is unambiguous and comprehensible. Only requested and relevant information should be provided.

### **1. General information**

#### *1.1 Title*

Use a descriptive title that can be understood by the general public. Avoid the use of abbreviations and jargon.

#### *1.2 Duration of the project*

This question refers to the requested duration of the project licence. Project licences may be granted for a period not exceeding 5 years. The duration of the individual procedures of the project should not be mentioned here.

#### *1.3 Keywords*

Do not use jargon and technical terms. Only terms that can be understood by the general public should be used. Keywords should reflect the content of the non-technical summary.

### **2. Categories**

#### *2.1 Select a category*

The project should be designed to serve a specific purpose. To answer the question of which purpose will be served, at least one category of study objectives must be selected here. One objective will usually suffice. Secondary objectives should not be selected. For example, allowing non-qualified employees to watch an experienced staff member perform an animal procedure may be considered part of their education and training. However, 'higher education and training' should not be listed as a main objective for this particular procedure. If multiple study objectives are selected, the individual objectives should be described below.

Please note that breeding of genetically altered animals is considered to be an animal procedure when the welfare of these animals is adversely affected by the modifications. The subsequent use of these animals is not considered re-use. This means that breeding and use of genetically altered animals will be registered as one animal procedure.

### **3. Description of the project**

#### *3.1 Describe the objectives of the project*

Describe the objectives with respect to the current situation in your (research) field. Explain how the proposed project will help to advance this (research) field and describe which clinical or social need will be served. If the project serves multiple purposes, please describe all of them. In this section, you are only required to describe the objectives of the project and not the approach itself.

#### *3.2 What are the expected benefits of this project? Why are they worthwhile?*

Explain here the expected benefits of this project. Possible outcomes may include: knowledge, insight, experimental results, generation of genetically altered animals,

serum, qualifications etc. Explain the scientific and educational validity and relevance of these outcomes.

### *3.3 Species and approximate number of animals*

It is sufficient to describe which animal species will be used in this project. A description of the strain is not required. Additional information should not be provided unless it is important for a complete understanding of the project (for example, genetic modifications and age). For each animal species, the total number of animals that will be used during the project should be listed. It is not necessary to justify these numbers. However, the 'refinement' section must be used to explain what measures will be taken to ensure that the number of animals used in this project is kept to a minimum.

### *3.4 What are the expected adverse effects on the animals?*

Describe here how the project may adversely affect the animals' welfare. An overview of the different types of compromised animal welfare should also be provided. This could, for example, include the following factors: pain, fear, anxiety, changes in body weight, behaviour, vulnerability, and condition.

### *3.5 Severity classifications*

Information should be provided on the severity classifications assigned to the procedures. Please state to which category the procedures are assigned (non-recovery, mild, moderate and severe). For an explanation regarding the assignment of the severity classifications, see Appendix VIII of Directive 2010/63/EU. For the assignment of the severity classifications, the cumulative reduction in animal welfare should be considered. If some of the animals/animal groups are likely to experience a different level of reduction in welfare, for each of the classifications should be listed what percentage of the animals will be affected (for example, mice: mild 80%, moderate 20% and rats: mild 60%, moderate 35%, severe 5%).

### *3.6 Fate of the animals*

Information should be provided on the fate of the animals. Describe whether the animals will be killed during/after the procedures or kept alive for potential re-use or re-homing.

## **4. The 3Rs**

### *4.1 Replacement*

The term 'replacement' means replacing animal procedures with alternative procedures that do not require the use of animals. Explain why it is not possible to achieve the objective(s) described above using alternative procedures without animals. Scientific, technical and economic considerations and legal requirements may be included here.

### *4.2 Reduction*

Describe which measures have been taken to ensure that the number of animals used in this project is kept to a minimum. If applicable, relevant information on the general research strategy (conjunction of the individual procedures and the necessity of pilot procedures) may be provided here. It is sufficient to indicate which general strategy will be used for the statistical analyses. Do not describe the statistical analyses in detail. Keep in mind that the IvD will have an important role in optimising the design of the procedures.

### *4.3 Refinement*

Sections 4.1 and 4.2 have described why animals have to be used in this project, which species will be used and how many animals are required. Here justification should be provided regarding the choice of the above described species. In addition, information

should be provided explaining why the proposed procedures are the most refined for the intended purposes. The term 'most refined procedures' refers to experimental procedures that will yield reliable results with minimised animal suffering and a minimal number of animals. The conjunction between the selected species, animal procedures and objectives may be discussed here. In addition, information on preliminary results, the research group's expertise and species' specific features that are important to the proposed procedures may also be included.

The second part of this section focusses on the above described adverse effects on animals' welfare. Describe here which measures will be taken to minimise these adverse effects. Information may be provided on observation strategies, pain relieving methods and the envisaged humane endpoints when animals suffer more than anticipated.

## **Project proposal**

The project proposal constitutes the main document of the project licence application. It must include all information that is required for the CCD to perform the legally required ethical evaluation and project authorisation. The purpose of the project proposal is to inform the members of both the DEC and the CCD of the proposed procedures and the project's scientific or social relevance in a realistic and understandable manner.

The evaluation of the ethical acceptability of the proposed procedures requires a justification of the choices that were made during the design of the project.

It is therefore essential to present a detailed plan of investigation in which the relevance of the project is highlighted. In addition, the project's proposal should explain to what extent the project complies with the legislation in force and meets the requirements for Replacement, Reduction and Refinement of the use of animals in procedures. Please note that experts from multiple disciplines will be involved in the evaluation of your project.

### *Readability*

It should be feasible to understand the project licence application without any additional information. Appendices that are not compulsory should only be enclosed with the project licence application when they are essential to the evaluation and authorisation of the project. Each of these appendices should be cited in the text. Moreover, the relevance/importance of the appendices should be discussed.

### *Project*

The term 'project' refers to a coherent program in which at least one procedure is performed using at least one animal of at least one species. The individual procedures should be correlated and should serve a common, well-defined and verifiable purpose that can be achieved within the authorisation period. A project can be part of a bigger program (for example the program of a department or institute) in which experimental procedures will be performed that do not involve the use of animals. In the project proposal, you should focus on the procedures in which animals will be used. Other procedures should only be included when they are important for the execution, order or coherence of the procedures. For more information on what is meant by the term 'project', see the practical guidance 'Interpretation definition project' on the website of the CCD.

### **1. General information**

Provide general information on the project, including a descriptive and unique title which completely covers the content of the project licence application. This information should be identical to the information provided in the project licence application form.

### **2. Categories**

The project should be designed to serve a specific purpose. To answer the question of which purpose will be served, at least one category of study objectives must be selected here. These objectives should be identical to those selected in the non-technical summary. More than one category may be appropriate. See the guidelines for the non-technical summary (section on 'categories').

Please note that breeding of genetically altered animals is considered to be an animal procedure when the welfare of the animals is affected by the modifications. The subsequent use of these animals is not considered re-use. This means that breeding and use of these animals will be registered as one animal procedure.

### **3. General description of the project**

#### **3.1 Background**

Describe the (inter)national background, context of and motivation for the hypotheses and objectives of this project. These hypotheses and objectives will be described in Section 3.2 of the project proposal. Each of the objectives selected in Section 2 should be discussed here. In terms of which information will be required for evaluation of the project, this is dependent on the selected category.

For fundamental and translational research:

- Describe the current situation in your research area (scientific literature, your own research). You may also refer to a few key publications (summarise the relevant information in these publications).
- Describe the preliminary results, considerations and scientific hypotheses on which this project is based.
- To which extent will the project contribute to the progress in your research area?
- If the current project licence application is a continuation of a previously authorised project, information should be provided on the original project.

For legally required research:

- Explain on which legal requirements (proposed use and/or market authorisation) the proposed research is considered necessary.
- List the admission authorities which demand the tests.
- Explain which legislation will be satisfied by these procedures (see the Implementing decision 2012/707/EU for legislative requirements).

For routine production:

- Describe for which applications the product(s) are necessary.
- Provide information on the expected demand for this/these product/products.

For higher education or training:

- Explain why this project should be part of the educational program and provide information on the learning targets.
- Explain how this project is embedded in the educational program.

### **3.2 Purpose**

Describe both the immediate goal (main objective) and the ultimate goal. Explain what you are aiming to achieve, confirm, investigate, produce, test or obtain by undertaking this project. While the main objective should be clear, realistic and achievable within the duration of the project, the ultimate goal does not need to be feasible within the duration of the project.

The project can be composed of multiple procedures that each serve a specific goal. These individual procedures have to be described in Section 3.4 (research strategy). For all individual components, the relationship to the main objective should be clear.

To justify the project's feasibility, the following aspects should be discussed: the availability of required expertise, the infrastructure and the design of the research plan. The availability of the expertise required to both adhere to the principles of replacement, reduction and refinement (3Rs) and to prevent negative effects on animals, humans and the environment should also be discussed. It is not necessary to describe which methods for replacement, reduction and refinement will be applied in the experimental design. These methods should be described in the Appendices: Description animal procedures.

### **3.3 Relevance**

This section focusses on the importance of achieving the main objective. To describe the *scientific relevance*, information may be provided on the importance of this project for (the progress of) the applicants' own research, the applicants' research field and/or other research fields (national and international). Instead of discussing the importance of, for



example, cancer research in general, the importance of achieving this project's main objective for cancer research should be discussed.

The term *social relevance* should be interpreted broadly. To explain the social relevance of this project, information should be provided on its clinical, educational or economic significance. If applicable, the effects on protection of nature and the environment should be discussed.

### **3.4 Research strategy**

This section focusses on the strategy that will be used to achieve the project's main objective.

If the project comprises multiple components, such as animal procedures and sub-objectives, the individual components should be listed, their coherence should be explained, and their relationship to the main objective discussed. When describing the coherence between the individual components, it is important to discuss whether these components are interdependent in terms of time and/or outcome. The different steps in the project can be visualised using a time line. Specify the go/ no go moments between the different components of the project and during the animal procedures. Describe, for each of the go/ no go moments, the criteria for deciding whether the procedure/project will be continued or cancelled.

In the project proposal, the applicant should focus on those procedures in which animals will be used. A description of procedures in which animals are not used (such as experimental methods or an educational program) may be provided when they are essential to the realisation of the main objective.

For each component, the 'type of animal procedures' that will be performed should be outlined. Explain for each individual type of animal procedure why only the proposed experimental setup can be used to achieve the main objective. It is conceivable that different types of animal procedures are required for the individual components of the project.

The term 'type of animal procedure' refers to a specific combination of experimental procedures for which at least one animal of a certain species is used. Other terms used to describe a 'type of animal procedure' are 'experimental model', 'animal model' and 'a coherent cluster of treatments'. For example, a single 'type of animal procedure' can include a pilot procedure, a condition optimisation procedure and the real procedure.

Each 'type of animal procedure' (i.e. 'oral pharmacokinetics mouse', 'immunisation rabbit', 'auto-transplantation rat', 'surgery education') should be listed in the table below and described in detail in Section 3.

## **Description of the animal procedures**

Each type of animal procedure listed in Section 3.4.4 should be described in detail. Adhere to the numbers appointed to the individual procedures in Table 3.4.4 (for example 3.4.4.1, 3.4.4.2).

### **A. - Experimental approach and primary outcome parameters**

Describe the general design of this type of animal procedure with respect to both the primary and secondary outcome parameters and the procedure's objectives. It is not necessary to provide a detailed description of each individual treatment.

Describe the primary and secondary outcome parameters. Justify the choice for these parameters with respect to the purpose of the project. The nature of the primary outcome parameters will be different for each research category. For scientific research, these may include clinical parameters and/or experimental data. For education and training or routine production, these parameters may include learning targets and productivity, respectively.

Describe the proposed procedures, including the type, frequency and duration of the treatments. A justification of the selected approach should be provided at D. Keep in mind that specific details relating to the approach must be discussed with the Animal Welfare Body (IvD) before the start of the project.

Example: Permanent cannulas will be placed in the jugular vein of adult rats (under general anaesthesia), upon which the rats will be housed individually. After a recovery period of at least one week, the animals will receive once or repeatedly (maximum 2 times per day for a maximum of 7 days) a substance containing solution. Blood samples will subsequently be collected at different time intervals (less than 10 times during 48 hours) using the cannulas to determine the concentration of the substance and the expression of biomarkers. If necessary, the animals can be housed in a metabolic cage for 10 hours to collect faeces and urine samples, and thus determine the concentration of the substance and/or metabolites.

Experimental design: Describe which approach will be used to obtain reliable results. In addition, explain which measures will be taken to ensure that the number of animals will be kept to a minimum in each of the procedures. To justify the maximum number of animals required for each type of animal procedure, both statistical and non-statistical considerations may be included. If it is not possible to use statistical calculations, explain why this is not possible and describe which other considerations were taken into account to determine the number of animals. In this section, it is not necessary to provide detailed information on power analyses for individual experiments.

### **B. - The animals**

Provide for each 'type of animal procedure' information on:

- species (genetic alterations and strain);
- life stage (including, if applicable, foetal forms of mammals in the last third of their developmental period);
- origin according to the registration requirements (see the 'Dierproevenregeling 2014', Guideline to Registration Form 3): A) Re-used animals, including monkeys, B) A registered breeding or supply company in the EU, including the Netherlands, no monkeys C) An unregistered breeding or supply company in the EU, including the Netherlands, no monkeys, D) Other European countries, no monkeys, E) Rest of the world, no monkeys, F) Monkeys born at a registered breeding company in

the EU, including the Netherlands, G) Monkeys born in other European countries, H) Monkeys born in Asia, I) Monkeys born in America, J) Monkeys born in Africa, K) Monkeys born in rest of the world.

- estimated number of animals (the maximum number of animals you consider to be necessary). The total number of animals requested for the duration of the project should be specified here.
- the gender of the animals. To reduce the killing of 'surplus' animals bred for animal procedures, in general, both male and female animals should be used. If only one gender will be used, justify your choice.
- Are special animal categories used? Special animal categories include non-human primates, endangered species, animals in/ from the wild, stray and feral animals and species listed in Annex I of Directive 2010/63/EU. These special categories of animals should, in general, not be used for animal procedures. This may only be allowed if a scientific justification is provided as to why the project's objective cannot be achieved without the use of those animals. For each of these categories, additional requirements have to be met (see below). If applicable, indicate which category applies, provide the requested information and justify your choice.

Justify your choices with respect to the objective(s) of this particular type of animal procedure and the principles of replacement, reduction and refinement.

#### **Special animal categories**

- **Apes**
  - The use of apes is strictly forbidden in the Netherlands.
- **Other non-human primates**
  - A scientific justification must be provided as to why the project's objective cannot be achieved without the use of this specific type of animal.
  - Other non-human primates may only be used in procedures when the objective of the project relates to:
    - a) fundamental research (only if the animals were born in captivity);
    - b) preservation of the species;
    - c) translational or applied research aimed at avoidance, prevention, diagnosis or treatment of disease, ill-health or abnormalities in humans, animals or plants;
    - d) development, manufacture or testing of the quality, efficacy and safety of drugs, food, animal feed and other substances or products.If c) and d) are applicable, research must be limited to avoidance, prevention or treatment of debilitating or life-threatening diseases in humans.
- **Endangered species**

This concerns species listed in Annex A to Council Regulation (EC) No 338/9.

  - A scientific justification must be provided as to why the project's objective cannot be achieved without the use of this specific type of animal.
  - Endangered species may only be used in animal procedures if the objective relates to:
    - a) preservation of the species;
    - b) translational or applied research aimed at avoidance, prevention, diagnosis or treatment of disease, ill-health or abnormalities in humans, animals or plants;
    - c) development, manufacture or testing of the quality, efficacy and safety of

drugs, food, animal feed and other substances and products.

Note: Animals of endangered species that were born in captivity are listed in Annex B to Council Regulation (EC) No 338/9. The above described restrictions do not apply to these animals.

- **Animals in/ from the wild**

- Although legal restrictions are applicable, catching wild animals per se is not considered an animal procedure.
- A scientific justification must be provided as to why the project's objective cannot be achieved without the use of animals in/from the wild.

- **Stray or feral animals**

- A scientific justification must be provided as to why the project's objective cannot be achieved without the use of this specific type of animal.
- Stray or feral animals may only be used in animal procedures when there is an essential need for studies concerning the health and welfare of these animals or studies focussing on serious threats to the environment or the health of humans or animals.

- **Species listed in Annex I of the Directive 2010/63/EU** (species that are not specifically bred for animal procedures).

- A scientific justification must be provided as to why the project's objective cannot be achieved with the use of animals that are specifically bred for animal procedures.
- The following species are listed in Annex 1: mouse (*Mus musculus*), rat (*Rattus norvegicus*), Guinea pig (*Cavia porcellus*), Syrian hamster/ golden hamster (*Mesocricetus auratus*), Mongolian gerbil (*Meriones unguiculatus*), rabbit (*Oryctolagus cuniculus*), dog (*Canis familiaris*), cat (*Felis catus*), frog (*Xenopus laevis*, *tropicalis*; *Rana temporaria*, *pipiens*) or zebra fish (*Danio rerio*).

### **C. – Re-use**

Re-use refers to an animal procedure during which an animal that has already been used in at least one prior animal procedure, is used when a different animal that has not previously been subjected to an animal procedure could be used instead.

If data obtained during previous procedures carried out on an animal is essential for the subsequent procedure, these procedures are not considered to constitute re-use. Similarly, instrumentation of an animal (i.e. telemetry) or a previous surgery (i.e. gonadectomy) may render an animal especially suitable for subsequent procedures. These procedures are also not considered re-use procedures.

If applicable, justify why re-use of the animals should be considered acceptable and describe the extent to which there will be an accumulation of distress. The cumulative discomfort during prior and current procedures should be taken into account while assessing the severity classifications.

Please note that breeding of genetically altered animals is considered to be an animal procedure when the welfare of those animals is adversely affected by the modifications. The subsequent use of these animals is not considered to be re-use. This means that breeding and use of these genetically altered animals will be registered as one animal procedure.

Re-use is allowed when:

- the actual level of distress in the previous procedure was 'mild' or 'moderate'; and

- the animal's general state of health and well-being has been fully restored after the previous procedure; and
- the proposed procedures are classified as 'mild', 'moderate' or 'non-recovery'; and
- the proposed procedures are in accordance with veterinary advice. Deviation from this advice should be motivated.

#### **D. – Replacement, reduction and refinement**

Justify the chosen experimental design as described in Section A with respect to the principles of replacement, reduction and refinement (3Rs). Describe which methods for replacement, reduction and refinement have been/will be applied in the experimental design. Describe each of the 3Rs separately. Describe which other options have been taken into consideration and explain why these options were not considered applicable for this project. Explain why the objectives of this project cannot be achieved:

- without the use of animals;
- using another experimental design that requires less animals; or
- using another experimental design that brings less distress or harm to the animals.

Both the number of animals and the justification of this number are important factors in the project evaluation. Although too many animals are not acceptable from an ethical perspective, too few animals are also not acceptable when the number is too low to achieve the project's objectives.

Describe which measures will be taken to minimise the decline in animal welfare. If applicable, describe to which legislation, other than the Animal Procedures Act, you need to comply during the project. Relevant legislation includes the Flora and Fauna Act and the Animals Act.

Do not elaborate on the environmental effects unless substantial negative environmental effects (in nature and/or scale) may be expected.

#### **E. – Repetition**

This question refers to legally required research. Describe what measures will be taken to ensure that the proposed animal procedures have not already been performed. If at least one of the proposed procedures has already been performed, justify the necessity of repetition. Please note that each member state has to acknowledge procedures performed in another member state that were performed in accordance with European legislation.

#### **F. – Accommodation and care**

The animals should be housed and cared for according to the minimal requirements listed in annex III of Directive 2010/63/EU. The English version can be found at:

<http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32010L0063&qid=1415627717806&from=EN>

If the minimal requirements cannot be met (i.e. individual housing of social animals, cages with a grid/wire floor and restricted diet), provide justifications for these choices (scientific or animal welfare). Describe the potential adverse effects on the animals and describe what measures will be taken to limit these adverse effects. Any potential additional discomfort caused by alternative housing or care should be discussed at Section I.

#### **G. – Location where the animal procedures are performed**

This question does not refer to a situation whereby the animal procedures, due to a collaboration, are conducted in another licenced establishment within the Netherlands. It also does not refer to the housing of animals before or after the procedures.

If the animal procedures will not take place in a licenced establishment, explain why this is necessary and describe how the requirements for animal welfare, housing, care and treatment will be satisfied. Animal procedures may, for example, be performed in the wild, at a zoo, or at a livestock farm that does not belong to a licenced establishment. The minimal requirements for housing and care are listed in Annex III of Directive 2010/63/EU.

#### **H. – Pain and pain relief**

Indicate whether the animals are likely to suffer from pain. If so, explain which steps during the animal procedures will cause pain and describe how pain will be alleviated. When anaesthesia or analgesia is to be used, specify what measures will be taken to ensure that optimal procedures are used. It is not necessary to provide detailed information on alternative care, substances, dosages and administration methods. These details should be agreed upon with the IvD before implementation.

In cases where anaesthesia, analgesia or other pain relieving methods are not to be used, provide scientific justifications for these choices (i.e. when it is not feasible to alleviate pain or when the scientific outcome will become unachievable).

It is forbidden to administer substances that diminish or completely abrogate the animals' capacity to express pain, but do not alleviate pain or reduce consciousness. A thorough scientific motivation is required to obtain authorisation for the administration of such substances.

#### **I. – Other aspects compromising the animals' welfare and measures**

Describe the expected adverse effects on the animals' welfare and explain why these effects may emerge. For example:

- (Alternative) housing;
- Transportation during the procedures;
- Unintended side-effects;
- Genetic alterations (altered phenotype);
- Aging phenomena;
- Experimental procedures (including euthanasia);
- Possible direct and indirect effects of the experimental interventions or treatments.

It is not necessary to describe incidental or improbable effects.

Describe which measures will be taken to prevent or minimise these unexpected effects. Information regarding adaptations to housing or specific postoperative care may also be provided here.

#### **Animals in/from the wild:**

Catching wild animals without sedation/anaesthesia is not considered an animal procedure. However, when the subsequent treatments are considered to be part of an animal procedure, the method of catching must be considered part of this animal procedure and should be described in Section 3.A. The cumulative level of distress should be estimated in Section 3.I.

If wild animals are used, the applicants should estimate the extent to which the treatment of these animals will affect their normal lifestyle after their release. This aspect should also be taken into account when considering the humane endpoints (for example when animals are wounded during or after capture).

The immediate release of animals that are wounded or sick at the moment of catching, without a veterinarian's consultation, should also be scientifically motivated (sick animals are an intrinsic component of the natural populations).

#### **J. – Humane endpoints**

A procedure may be prematurely ended for an individual animal (implementation of the humane endpoints) if a) the level of distress of this individual animal exceeds the project's upper limit; b) the procedure's scientific endpoint has been achieved (i.e. a pre-described tumour size); or c) the scientific endpoint can no longer be achieved (i.e. the side-effects in the animal or its response to the procedures can disturb further treatment or observations).

Indicate whether, during this animal procedure, circumstances may arise which would require the implementation of humane endpoints to prevent further distress. If so, describe the criteria that will be used to identify the humane endpoints (i.e. a certain weight loss, changes in behaviour or body posture, appearance/disappearance of certain biomarkers). In addition, describe how the animal will subsequently be treated. In most cases, the animal will be killed, while in specific cases, it may be possible to prematurely end the procedure for an individual animal by alleviating or ending the distress without killing the animal. If a pilot study will be performed to determine the humane endpoints, please describe this in Section 3.4.4.

If death will be the outcome of the animal procedure, specify why humane endpoints cannot be applied and which measures will be taken to minimise the adverse effects of this procedure. For more information on humane endpoints, see <http://www.humane-endpoints.info/eng/>

#### **K. – Classification of severity of procedures**

Provide information on the severity classifications assigned to the procedures. Indicate to which category the procedures are assigned (non-recovery, mild, moderate or severe). The classification criteria are listed in Annex VIII of the Directive 2010/63/EU. The English text of this directive can be found at: <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32010L0063&qid=1415627717806&from=EN>

The term 'non-recovery' refers to procedures performed using general anaesthesia from which animals will not recover. Instead, the animals will be killed humanely.

However, if some of the animals/animal groups are likely to experience a different level of reduction in welfare, each classification should carry with it information regarding the percentage of the animals that will be affected.

If procedures are classified as 'severe', justify why this cannot be avoided. Animal procedures that can potentially lead to prolonged and severe pain, suffering or anxiety, which cannot be alleviated, can only be permitted as an exemption from the above described rules.

#### **L. – Method of killing**

Justify why it is necessary to kill animals during or after the animal procedures. If animals are killed for non-scientific reasons, justify for non-human primates, dogs, cats and farm animals why it is not feasible to release or rehome the animals. Animals may only be killed using methods listed in Annex IV of Directive 2010/63/EU. For the English version of Directive 2010/63/EU see: <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32010L0063&qid=1415627717806&from=EN>

The CCD may only issue a licence for animal procedures that require the use of alternative methods of killing:

- if the scientific justification convincingly argues why the objective cannot be achieved using an approved method;
- if the proposed method is as humane as the approved methods and exemption is granted by the Minister.

If a method is used that is listed in Annex IV of Directive 2010/63/EU that may only be used if other methods are not possible, provide justification for your choice.

Any potential additional discomfort caused by such an alternative method of killing should be included in the assessment of the severity classifications in Section K.

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