



WRITING NON-TECHNICAL SUMMARIES

A RESEARCHER'S GUIDE

ABOUT THIS GUIDE

This guidance is intended to support researchers who are writing a Non-Technical Summary (NTS) as part of an application for a project licence application under the Animals (Scientific Procedures) Act (ASPA). It may also be helpful for Animal Welfare, Ethical Review Body (AWERB) members, particularly those attending in a lay or independent capacity, as it refers to what can be expected of a well written NTS.

The aim is to help you to write a good summary and to understand where you might need additional help or information.

The NTS is a public and legally required part of your licence application. It is your opportunity to explain your project to lay people beyond your institution and scientific community.

THE PURPOSE OF THE NON-TECHNICAL SUMMARY

The NTS is an integral part of the application and should not be an after-thought. The NTS may be the last part of the project licence application that you write, but it will usually be the first (and perhaps only) section that many others read.

A well-written NTS improves openness around the use of animals in research. It can support the sharing of good practice in the 3Rs and will make your work more transparent and accessible to external people such as Members of Parliament (MPs), Non-Governmental Organisations (NGOs) or the public.

The NTS should be a concise account of your project licence that gives sufficient detail for the reader to understand why and how the work is being undertaken, including how the Replacement, Reduction and Refinement (3Rs) will be implemented. It should be of publishable quality, and able to stand alone. It will usually be the

first part of the licence read by your AWERB, and will be published openly on the Home Office website.

It is your responsibility as the project licence holder to ensure your NTS does not contain identifying information or other sensitive information such as intellectual property.¹

¹http://ec.europa.eu/environment/chemicals/lab_animals/pdf/Recommendations%20for%20NTS.pdf

NTS STYLE: SUMMARISING FOR A LAY AUDIENCE

If I Had More Time, I Would Have Written a Shorter Letter *Blaise Pascal (though often attributed to Mark Twain)*

Summarising complex and technical information in lay terms is a skilled task, and you are strongly advised to seek support from your communications team in writing the NTS. If a science or research communicator is represented on your AWERB they may be able to work with you on project summaries. If this is not possible, try to write the NTS at a different time to the rest of the licence. It is very difficult to change tone and technical level when writing, and taking time to draft it separately will help you to adapt your style. You should ask non-researchers to check the language used, and your AWERB lay-member should be able to provide valuable advice on your NTS.

The summary should be concise. The word limit is normally 1,000 words. Some programmes of work (such as those containing only mild or unclassified procedures) may require less detail than those likely to result in additional societal concerns. The audience for the NTS is 'the general public', and you should therefore assume a reading age of 12.

When the AWERB read your project licence the lay-person should expect to fully understand the summary, which will provide:

- A description of the project of work
- The objectives of the programme
- The predicted harms and benefits of the programme
- The numbers and types of animals to be used
- Evidence that the programme of work has considered and complies with the 3Rs

The style of an NTS should be clear and straightforward, using jargon-free language e.g. "under the skin" rather than "subcutaneous"; "brain cell" or "nerve" rather than "neuron". But remember that most of us are so familiar with jargon that we do not know we use it, so ask lay-people whether they understand your terminology.

Writing plainly when you are used to writing for a technical audience can be harder than you think, but here are some brief guidelines:

- Stop and think before you start writing. Summarise the key components of the project, making a note of the points you want to make, meeting the requirements for NTS content.²
- Provide a balanced view of the project's potential benefits and of the expected harms to the animals, summarising the detail in a full project licence application.
- Prefer short words where possible.
- Use every-day words whenever you can. Avoid jargon and acronyms, explaining any technical terms you have to use.
- Sentences should be short; down to an average of 15 to 20 words. Try to keep to one main idea in a sentence.
- Use active verbs as much as possible. Say 'the mouse may feel discomfort' rather than 'discomfort may be felt by the mouse'. This can be particularly challenging for scientists, who are more used to writing in passive voice.

² https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/670717/Annotated_PPL_v2.0_171221.pdf

THE NTS: TOP 10 COMMON MISTAKES



1) OMITTING THE MAIN IDEA BEHIND THE WORK

Include the purpose of the work in the aims and objectives section. Explain what in particular you expect this project will tell you that you didn't know before.

2) BEING TOO VAGUE ABOUT WHAT ANIMALS WILL EXPERIENCE

Be specific about what may happen, and the steps that will be taken to avoid or reduce any harms to the animals. Making general statements like 'suffering will be minimised' or 'animal welfare is a priority' for example, is not sufficient. Think about the animals' perspective and be honest about the nature and level of potential harms they might experience. Show why the approach taken is the most refined way to meet the project's objectives.

3) ASSUMING THE READER UNDERSTANDS YOUR RESEARCH AREA

The summary must be easily understood by a non-specialist who is unfamiliar with your previous work. Would a family member or neighbour understand what you have written?

4) WRITING IN ACADEMIC LANGUAGE AND STYLE

Assume a reading age of 12 (which is the usual level of lay public) and keep sentences short. Avoid or explain technical terms.

5) LEAVING OUT IMPORTANT DETAILS

Explain the choice of species and model, where relevant. Include the types of procedures that will be undertaken, their frequency, duration and the severity level.

6) OVERSTATING THE POTENTIAL BENEFITS

Avoid making broad, high level claims about what the project will achieve (e.g. 'lead to future cures for breast cancer') or just stating the importance of the research field generally (e.g. 'X number of people in the world suffer from Y'). If this research will lead to novel treatments what will they do? How will they help?

7) ASSUMING THE READER HAS READ THE FULL LICENCE APPLICATION

The NTS should be a stand-alone document that can be read by anyone to give them an understanding of the project.

8) SETTING ASIDE TOO LITTLE TIME TO WRITE A CLEAR SUMMARY

Many researchers write the NTS last, at the end of a long application process and with a pressing deadline. Creating a clear, concise summary takes time to draft and review. Some find it helpful to write the NTS first.

9) CUTTING AND PASTING FROM THE LICENCE APPLICATION

Text in the main application contains far more detail, scientific background and technical terms than should appear in the NTS. The NTS text should be a bespoke piece of writing. Review points 3 and 4.

10) CUTTING AND PASTING FROM THE PREVIOUS NTS

If it is a licence renewal, take the time to properly revise and update the NTS. The context of the research and the scope of the project may have changed significantly. Also, contemporary best practice regarding the 3Rs may be very different from a few years ago.

ESSENTIAL READING

The 'annotated project licence' produced by ASRU provides guidance and helpful tips on what should be included in the NTS:

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/670717/Annotated_PPL_v2.0_171221.pdf

OTHER USEFUL REFERENCES

Guidance produced by the European Commission working group on Non Technical Summaries:

http://ec.europa.eu/environment/chemicals/lab_animals/pdf/Recommendations%20for%20NTS.pdf

Article by Taylor et al (2017) reviewing the quality of current NTSs and highlighting the need for improvement:

http://www.altex.ch/resources/Taylor_of_171129.pdf

The plain English guide to writing medical terminology, with useful tips and examples of rephrasing:

<http://www.plainenglish.co.uk/medical-information.html>