Effective Non-Technical Summaries for Environmental Impact Assessment

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A Non-Technical Summary (NTS) must convey the key findings of an Environmental Impact Assessment (EIA) in a clear and concise format to allow the public to understand a Proposed Development and its likely significant effects. This Advice Note is designed to improve the quality of NTS in EIA practice and follows on from IEMA’s eBrief, *Effective Non-Technical Summaries for Environmental Impact Assessment*, issued in January 2012.

The purpose of an NTS is to make the key issues and findings of the Environmental Statement\(^1\) accessible and easily understood by the general public. The ‘public’ can be defined as ‘any individual or group of individuals, organisation or political entity with an interest in the outcome of a decision’.

However, NTS is also used as a quick guide to an EIA’s findings by a number of other stakeholders, including decision-makers. One should keep this in mind when thinking about the length, content and style of the NTS.

This note provides guidance on the following:

- **Content** – what should be included within an NTS;
- **Key Skills & Competencies** – the key skills required in the team preparing the NTS;
- **Accessibility** – how to ensure suitably non-technical language;
- **Presentation** – how an NTS should be structured and presented; and
- **Digital Approach** – how to make best use of online and digital approaches.
The core of the NTS requirements is set out in Box 1, as outlined in Article 5 of the EIA Directive. However, Annex IV of the Directive sets out a more detailed list of requirements related to Article 5, which require the NTS to be an effective and succinct outline of all the key points set out in an Environmental Statement.

The NTS should inform the reader of the findings of the assessment and provide them with the information required to comment on an application during the determination period. Many complaints have been made regarding the length, number of documents, and technical details of Environmental Statements that make it very hard for a member of the public to access the EIA information. A well-written NTS should make it unnecessary to read any of the Environmental Statement chapters or appendices; it should provide a comprehensive and concise summary in accessible and non-technical language. The failure of NTS to achieve this in practice has been a major driver of dissatisfaction with the EIA reporting process among non-experts.

A good NTS will improve public access to environmental information and is important in terms of compliance with the various EIA Regulations, which reflect the requirements of the EIA Directive (Box 1), as well as the UK commitments to the Aarhus Convention. Article 1 of the Convention requires Parties to guarantee the rights of access to information, public participation in decision-making and access to justice in environmental matters in order to contribute to the protection of the right of every person of ‘present and future generations’ to live in an environment adequate to his or her health and well-being.3

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**BOX 1: EIA DIRECTIVE’S MINIMUM NTS CONTENT**

A Non-Technical Summary of:

- a description of the Proposed Development comprising information on the site, design, size, and other relevant features of the Proposed Development;
- a description of the likely significant effects of the Proposed Development on the environment;
- a description of the features of the Proposed Development and/or measures envisaged in order to avoid, prevent or reduce and, if possible, offset likely significant adverse effects on the environment; and
- a description of the reasonable alternatives studied by the developer, which are relevant to the Proposed Development and its specific characteristics, and an indication of the main reasons for the option chosen, taking into account the effects of the project on the environment.


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An NTS should comply with the specific Regulation under which the EIA is prepared. Members of IEMA’s EIA Quality Mark should also comply with the criteria detailed in Box 2, as part of their commitment to good practice.

The most important role of an NTS is to convey relevant and important environmental information to a public audience, thus the EIA co-ordinator (where relevant and in place) must retain sign-off for the NTS and be responsible for checking that its content is accurate and has been summarised transparently and objectively. It may also be helpful for the NTS to be reviewed by a ‘non-technical’ member of the project team, for example if a project has a communications or stakeholder engagement professional.

The EIA co-ordinator must ensure that the NTS:

- reports all of the assessment’s key conclusions and likely significant effects in an appropriate level of detail; and
- is up-to-date and consistent with the Environmental Statement, particularly the information listed in Box 1 (and as set out in Annex IV of the Directive).

Key considerations in deciding the level of information that needs to be included in an NTS are as follows:

- Some scene setting, without assuming the reader has any prior knowledge regarding planning or EIA. Therefore, a short introduction explaining that an EIA has been carried out, what that entails, why it has occurred, how it feeds into planning decision-making, and at what stage in the process the NTS has been produced.
- A high-level description of methods used to inform the EIA, such as a combination of desk-based research, site visits, surveys, monitoring, the use of computer models and expert opinions. A summary of key terms could be included here, such as ‘mitigation’ and ‘condition’; abbreviations should be minimised.
- A very brief summary of prior stages of consultation that have occurred, with earlier milestone dates, such as scoping reports, and public exhibitions, and how these earlier consultations have informed the process.
- Details about the Proposed Development – this should cover all phases of the development assessed in the EIA (as relevant to the Proposed Development). This includes demolition, construction, and operational and decommissioning phases, particularly when these phases drive any reported adverse effects.

**BOX 2: EIA QUALITY MARK REVIEW CRITERIA**

**COM3: Regulatory compliance H)** Has a Non-Technical Summary been produced containing an outline of the information mentioned in criteria COM3 A) to G)?

**COM6: EIA Presentation B) Non-Technical Summary (NTS)**

- Does the NTS provide sufficient information for a member of the public to understand the significant environmental effects of the Proposed Development without having to refer to main text of the ES?
- Are maps and diagrams included in the NTS that, at a minimum, illustrate the location of the application site, the boundary of the Proposed Development, and the location of key environmental receptors?
- Is it clear that the NTS was made available as a separate stand-alone document?
- Specificity as to the receptors affected to provide local context – it may not be appropriate just to use broad descriptions of receptors where more specific information is available in the main text of the ES. For example, local residents may wish to understand which specific views would be adversely affected, or which properties would be affected by elevated pollution levels within the wider study area. Of course, it is important to make sure the NTS remains proportionate and accessible to the reader. Large linear projects may impact too many receptors to report in one document and it may be appropriate to split the NTS into smaller documents covering smaller spatial extents. Map figures and specific cross-references back to the main ES can be used if needed, but the aim should be for the NTS to be a stand-alone document.

- The likely significant effects should be reported, and it should be ensured that these are entirely consistent with the main EIA Report (although you should avoid using ‘cut and paste’ text from the main EIA Report wherever possible). The NTS author team should take particular care where specific topic chapters deviate from the others in terms of defining significance (i.e., effects that are not just moderate or major). It can be useful (but not always necessary) to state the scale of significance to enable the reader to compare between significant effects; in this instance, terms such as ‘major adverse’, ‘minor adverse’ should be explained within the NTS if used so they can be understood by the reader. Summary tables or other summaries of likely significant effects can be useful.

- Enough information should be provided about mitigation measures, remembering that the public reader may not be familiar with the standard contents of environmental management plans or planning permission conditions. In particular, with regard to mitigations, the mitigation hierarchy should be explained in simple language and how it has been applied, i.e., what avoidance and reduction measures were embedded in the project design and are therefore captured in the project description (primary mitigation). Furthermore, what secondary mitigation has been applied, in the form of active interventions that will need to be applied, prior, during or after construction, who will carry these out and how are they secured? Are there any further or topic-specific mitigation measures of which the public should be aware?

- Enough information should be provided about likely significant effects such that the nature of the effect can be understood, and this should be explained in clear, non-technical language. It is not sufficient to merely state there will be a significant effect on a particular receptor without explaining what that effect would be.

- The NTS, where feasible and if thought to be necessary, could outline the approach the assessment took to assessing the interaction between the topics and cumulative effects, highlighting any significant effects (if any) identified from these assessments and how these will be mitigated.
The team responsible for producing the NTS should have the following skills:

- a detailed understanding of EIA, technical topics and information specific to the Proposed Development sector gained from working with technical teams. This should be sufficient to be able to summarise the findings of technical topic chapters, and for this reason it is useful for the NTS authoring team to include some of the members of the EIA coordination team, including more senior members;

- the ability to write non-technical and engaging text – this is often a similar skill to writing briefings, press releases, scientific journalism, or science engagement copy;

- the ability to create figures that sufficiently communicate the findings of the Environmental Statement, including mapping of any spatial information, graphic design and/or use of creative/publishing software;

- the ability to understand user needs, considering whether an NTS may need to be adapted for specific group, e.g., providing a version with a larger font for visually impaired individuals;

- for the production of Digital NTS, skills in software being used to produce the NTS are essential as well as an ability to design the ‘User Experience’ of the Digital NTS, which builds on the skills stated above.

Graduates may have already acquired the skill of non-technical writing, albeit without the knowledge and understanding of an EIA. Graduates therefore need to be supported by more experienced technical members of staff. A review and sign-off from the more experienced member needs to be developed into the quality assurance process.

It is pivotal that the authors of the NTS are able to read the detailed and technical information and articulate it in an appropriate manner for a non-technical audience.

**Keep it simple and clear:**

- Keep sentences at a moderate to short length without too many different concepts in them. Use active verbs rather than passive verbs. Keep the average sentence between 10 and 15 words. Edit wordy phrases to make them concise.

- Use alternatives for jargon or use a definer word to make a concept more understandable. For example, replace abiotic with non-living, e.g., rocks and minerals. Consider including a glossary or cross-referring to the glossary included within the Environmental Statement.

- Use clear, simple and plain English. This is different from jargon; think about the words used and how they can be as easy to understand as possible. For example, instead of ‘commence’ why not try ‘start’. This also includes when referring to areas, refer to town and village names not chainages. Avoid architectural language.

- Has the clients’ preferred format and communication style been considered when developing the NTS? This needs to be balanced against the purpose and goals of the NTS, as some level of client education may be required. The NTS is not a sales document nor public relations brochure for the development, this needs to be made clear to the client.
Take a step back:

- During authoring, try taking a step back, stripping yourself of all your knowledge, and re-read from the perspective of someone outside of the EIA process.

- Consider getting a junior member of the team or a member of the stakeholder team to review the NTS, this would help to ensure that information is coherent and digestible for all.

- Adequately programme in time to compose, edit and review the NTS.

Consider structure:

- What is the best way to structure the information being provided in the NTS so that it retains attention and focus? For example, would it be beneficial to present it in locational impacts rather than impact topics?

- Have a sufficient understanding of technical (and non-technical topics):

- To be able to translate technical information competently, authors need to have sufficient understanding of what technical documents, such as ES chapters, are reporting.

- GIS skills, or access to someone with GIS skills:

- A picture can paint a thousand words and even for a traditional PDF NTS, the use of maps can better communicate spatial information and replace lengthy text descriptions.

- Use graphic design, photos, diagrams and illustrations:

- As above with maps, the use of graphic design, colour choice, font, layout, diagrams, explainer figures, photographs, photomontages, tables and bullets can all transform the readability, engagement and accessibility of a document. These skills may not be present in the core EIA team and external experts in graphic design should be used to support the design and production of the NTS.
IEMA suggests that in most cases a period of 15 to 20 minutes is a reasonable amount of time for a member of the public to expect to find the information that they need. The NTS should therefore be a short, stand-alone document, with engaging and easy to understand language, and without introducing barriers for people with disabilities.

It may be necessary in some cases to provide the information in different languages and formats, and the NTS should provide information on how these can be requested. Digital NTS can also increase the ability for findings to be communicated to a general audience. However, it must be possible for those without internet access or digital skills to access a paper copy, as required by EIA Regulations, and therefore a version appropriate for printing must be generated. The need to avoid duplication of work and the requirement for a paper copy should be considered when designing Digital NTS.

The NTS should tell a story about what is being proposed, what else was considered, what the environmental implications of the proposal are and how they will be managed. There should be a logical flow, which need not reflect the order of chapters or sections of the EIA Report. The information most important to the reader should be easy to find, and this may decide that this should go at the start of the report or at the start of sections or paragraphs. Well-phrased headings can help signpost readers to the information that they need and break up blocks of text that may be off-putting. Likewise, keeping a consistent structure for summaries of technical topics can help the reader learn to navigate the information as they continue to read. Long text can be off-putting, whereas short bullet point lists can help break up information and summarise key points. Box 3 below provides some examples of frequently used terms which could be avoided.

Box 3. EXAMPLES OF TECHNICAL JARGON TO BE AVOIDED

<table>
<thead>
<tr>
<th>Frequently used term</th>
<th>... instead consider</th>
</tr>
</thead>
<tbody>
<tr>
<td>Receptor, e.g. there are five receptors within 100 m</td>
<td>Use the name of the receptor that you are referring to, e.g., there are five homes within 100m</td>
</tr>
<tr>
<td>Exceedance</td>
<td>Explain the threshold that is being exceeded, then say whether the levels are over it, e.g., the air quality study shows that air pollution levels will be below the thresholds of concern recommended by the World Health Organisation</td>
</tr>
<tr>
<td>‘best practicable means’</td>
<td>Best to state what the measures actually are instead</td>
</tr>
<tr>
<td>‘residential units’</td>
<td>Homes (or houses, if only houses)</td>
</tr>
<tr>
<td>‘residential tenure’</td>
<td>Describe the intended ownership of the proposed homes</td>
</tr>
<tr>
<td>Planning terms such as ‘ancillary uses’ and ‘sui generis’</td>
<td>Describe what uses are anticipated in this area, e.g., ‘Public House’, ‘Plant Room’</td>
</tr>
<tr>
<td>Building ‘façade’</td>
<td>Describing the external building features individually, collectively describe as the façade</td>
</tr>
<tr>
<td>Attenuate</td>
<td>Reduce to a specified level</td>
</tr>
<tr>
<td>CFD, ADMS Roads etc</td>
<td>Computer modelling or technical analysis called ...</td>
</tr>
</tbody>
</table>
Presentation

For an NTS report to be engaging, presentation is one of the key essential elements. A public-facing report needs to be well presented for ease of understanding. The NTS needs to have a clear and logical presentation of facts and information structured in a proportionate manner, and need not necessarily follow the structure of the EIA Report. It is always beneficial to have a consistent structure to improve the effectiveness of communicating information. For example, one could consider providing a simple structure of the NTS so that the key information can be signposted in a clear and helpful way at the start of the document. For longer NTS, headings and contents pages with illustrations/annotations could help the reader navigate to particular areas of interest.

Visuals and creative infographics can help readers to understand the subject and make the document more appealing and should be included. The EIA team should give conscious thought to how information will be presented in the NTS from the early project stages to enable these visualisations to be created. However, it is important to note that visuals and diagrams can become confusing if they are not done in the right way and not tested. The visuals should be complementary to the text and once completed they should be checked to ensure they convey the correct message, e.g., spatial maps are extremely useful in providing context and results in using a lot less text.

A well-presented NTS should generally consider the following recommendations:

- **Structure and storyline** – It is really important for the NTS to be structured in a logical way to make it easier to follow. This will help to create a good, logical story, as it would follow a structured approach for the text and visuals. A good storyline naturally creates a structure and brings together all elements of the report, for example a visual created for the project description could be used to show the various impacts of the Proposed Development and also to show mitigation measures. Using bespoke icons for environmental topics could be part of the structure to use for referencing maps/figures and mitigation tables.

- **Font, style, colour** – These are all part of the theme and extremely important presentation tools. While these are largely associated with the organisation’s branding, it is important to note that commonly used font types for reports/sets of colours and neutral colour schemes make it more accessible for readers. Colours and appropriate font (depending on report layout) help draw attention to the text so should be used appropriately and to emphasise key information. Using small font sizes to reduce page numbers should be avoided. Individual paragraph numbering should be avoided, these add to visual clutter and are not necessary.

- **Layout** – Layout is really important as it provides the space for the text and visuals and the flow of the story. A common mistake is to fill in all empty spaces of the page. It is preferable to create an extra page if needed than to overfill a page with more text, as this could be confusing and non-engaging. A well-presented NTS will always include a good balance of text and visuals. Visuals and creative infographics should be complementary to the text.
The presentation of relevant data can be particularly challenging. Traditional NTS can benefit from the inclusion of creative professionals or skills within the project team or the use of creative software packages such as Microsoft Publisher, Adobe InDesign, Photoshop, ArcGIS, and Illustrator. This can aid in the production of explanatory visuals and infographics. Spatial information, such as the locations of receptors, should be presented using GIS map outputs. The use of technical drawings should be avoided; design teams may be able to provide visuals from consultation exercises or documents that may be more appropriate to a public audience. All figures and illustrations should complement the text and communicate information to the reader, should be well labelled, and should be legible even where online hosting requires smaller file sizes (i.e., lower quality).

Disabilities and accessibility requirements should be considered when producing figures for an NTS. Providing appropriate alternative (‘alt’) text describing images can enable communication of the relevant information to users of screen readers. Tables should also be set up so that they can be easily read by screen readers, which read out the contents of a document or webpage for people with visual impairments. Colour can help communicate a message but should not be the sole purveyor of information, to avoid creating a barrier for people with impairment such as colour blindness, in which case colours used should still be visible to those with colour blindness or other visual impairments. Other alternatives should also be explored such as patterns instead of colours, additional maps using associated groups, if there are too many colours or patterns, and bespoke symbols/symbology.
While it is acknowledged that not everyone will have the facilities to access a Digital EIA or a Digital NTS, the future is rapidly changing with a growing percentage of the population with access to the internet. Increasingly, digital access is a first preference for the majority of the population, therefore practitioners need to embrace the digital approach at the start of the project.

As we make progress towards Digital EIA, the above outlined approach and ideas for NTS are largely transferable and can be applied within the context of a well-presented Digital NTS. There are a number of Digital EIAs and Digital NTSs being developed and prepared, and they are constantly evolving and improving based on feedback from industry and stakeholders.

IEMA’s Digital Impact Assessment Primer covers a broad range of topics related to Digital IA and is being widely used by EIA practitioners. Emerging guidance and practice in the field of Digital IA is encouraged and should be adopted by practitioners. The NTS, once drafted, can be easily incorporated within an overarching Digital EIA output and created using various digital tools such as bespoke no code websites, purpose-built web solutions or ESRI Story Maps. These platforms can host media such as creative infographics, interactive maps, illustrations, videos, and narrative text. Digital NTS provides a number of benefits including the opportunity to locate specific information more quickly – for example, to understand the effects experienced by a particular receptor or at a particular location at once. Therefore, early engagement with the right professionals is recommended during the EIA process.
Non-Technical Summary Checklist

This is a checklist that should be completed when developing a Non-technical Summary to ensure it is created in line with the best practice measures outlined in this Guidance.

The team responsible for producing the NTS should have the following skills:

☐ an understanding of EIA, technical topics and information specific to the Proposed Development sector, sufficient to be able to summarise the findings of technical topic chapters, gained from working with technical teams – for this reason, it is useful for the NTS authoring team to include some of the members of the EIA coordination team including more senior members;

☐ the ability to write non-technical and engaging text – this is often a similar skill to writing briefings, press releases, scientific journalism or science engagement copy;

☐ the ability to create figures that sufficiently communicate the findings of the ES, including mapping of any spatial information, graphic design and/or use of creative/publishing software;

☐ the ability to understand user needs, considering whether an NTS may need to be adapted for specific groups;

☐ access to a member of the stakeholder management or communications team who is able to read through the text to confirm accessibility for a non-technical audience.

Content:

☐ Is it clear that the NTS was made available as a separate, stand-alone document?

☐ Are the EIA’s key messages and important findings clearly identified?

☐ Has a description of the project Proposed Development, including information on the site, design, size and other relevant features, been included?

☐ Has every topic assessed in ES been included in the NTS?

☐ Does the NTS provide sufficient information for a member of the public to understand the significant environmental effects of the Proposed Development (including cumulative effects) without having to refer to the main text of the ES?

☐ Does the NTS provide sufficient information for a member of the public to understand the mitigation measures without having to refer to the main text of the ES?

☐ Does the NTS provide sufficient information for a member of the public to understand the reasonable alternatives studied by the developer without having to refer to the main text of the ES?

☐ Are there any inconsistencies with the information presented in the main ES?

☐ Are maps and diagrams included in the NTS that, at a minimum, illustrate the location of the application site, the boundary of the Proposed Development, and the location of key environmental receptors?
Accessibility:

☐ Have disability and accessibility requirements been considered?

☐ Has any information been presented without interpretation and explanation, in particular, references to tables, figures, maps or images that are not included in the NTS?

☐ Does the NTS replicate any conclusion sections from the ES topic chapters? If so, do they appear in context and are not too technical?

☐ Has spelling and grammar been checked?

☐ Have all sentences been kept short (i.e. up to 15 words)?

☐ Have jargon words been avoided?

☐ Have acronyms been spelt out first time or a glossary provided (and have any technical terms been explained)?

Presentation

☐ Have the themes, layouts, fonts, styles, and colours that will be used to present the information in the NTS been defined?

☐ Have visualisations and creative infographics (CiGs) been utilised where possible?

☐ Have opportunities to present the information in digital format been explored?
This second edition of Effective Non-Technical Summaries for Environmental Impact Assessment was prepared under the guidance of a member working group:

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- Juliette Callaghan (Chair), Partner, Trium Environmental Consulting
- Alex Hampson, Partner (Renewables), ERM
- Ros Boalch, Associate Director, Waterman Infrastructure and Environment Ltd
- Stephanie Ball, Senior Environmental Advisor, National Highways

IEMA’s EIA Quality Mark:

A scheme operated by the Institute allowing organisations (both developers and consultancies) that lead the coordination of statutory EIAs in the UK to make a commitment to excellence in their EIA activities and have this commitment independently reviewed. Founded in 2011, the EIA Quality Mark is a voluntary scheme, with organisations free to choose whether they are ready to operate to its seven EIA Commitments: EIA Management; EIA Team Capabilities; EIA Regulatory Compliance; EIA Context & Influence; EIA Content; EIA Presentation; and Improving EIA practice.
Further information

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About IEMA

We are the global professional body for over 20,000 individuals and 300 organisations working, studying or interested in the environment and sustainability.

We are the professional organisation at the centre of the sustainability agenda, connecting business and individuals across industries, sectors and borders.

We also help and support public and private sector organisations, governments and regulators to do the right thing when it comes to environment and sustainability related initiatives, challenges and opportunities. We work to influence public policy on environment and sustainability matters. We do this by drawing on the insights and experience of our members to ensure that what happens in practice influences the development of government policy, legislation, regulations and standards.