

Public-friendly vs technical presentation of EIA results: Manifestation of presentation bias in EIA reports – Dutch examples



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Introduction

- Assessors: 'public-friendly' and 'complex-technical'
- EIA is decision making instrument
- Provide public with objective environmental information





Objectives

➤ Objective #1

To examine how information is presented in EIA and how it influence comprehensibility and perceived reliability.

➤ Objective #2

To develop practical recommendations and assessment criteria to support EIA assessors.





Research Question

How does presentation bias manifest itself in Environmental Impact Assessments (EIAs) and how can this be prevented?





Research Methods

The research was conducted by
WSP Netherlands, as an
assignment from Rijkswaterstaat

Inventory



longlist of 59 project
in Netherlands
5 years

01

Selection



10 EIA reports
balanced
representation

02

Framework



group discussion
trial of 5 first EIA

03

Assessment



10 EIA reports
4 main frameworks

04

Analysis



scores variations
identify patterns

05

Synthesis

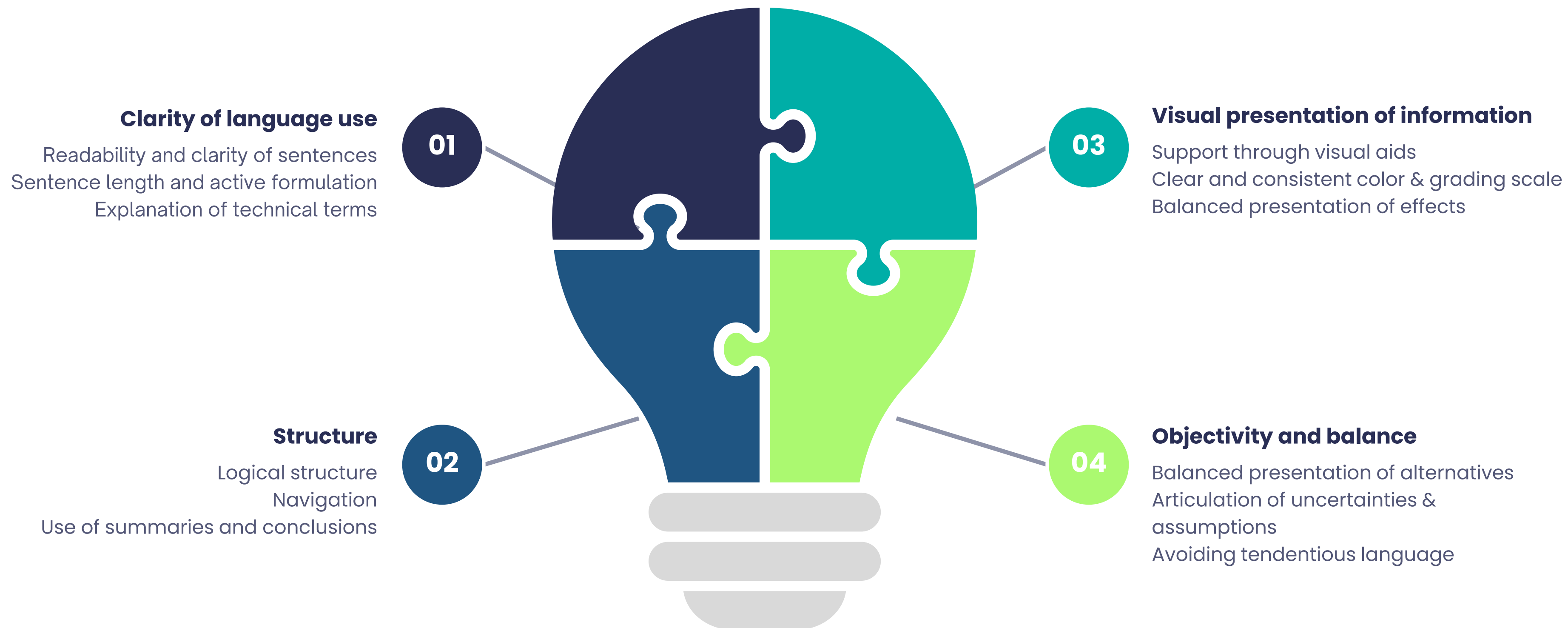


overall conclusions
recommendations

06



Framework





Rijkswaterstaat
Ministerie van Infrastructuur en Waterstaat

Lessons learned





1a

Readability and sentence structure

Unclear meaning caused by sentence structure or word choice, not minor grammatical mistakes.

1. Clarity of language use

Lack of clarity and missing definitions can lead to confusion when such terms are crucial for understanding the report.



1b

Sentence length and active formulation

Active formulations helps readability, but not strictly. Passive sentences + long or poorly structured sentence.



1c

Explanation of technical terms and complex concepts

aanleghoogte	de hoogte van een waterkering, direct na voltooiing
Aanslibben	land dat is ontstaan of groter geworden door het bezinken en zich neerzetten van slib
Afschuiving	het afzakken van grond langs de helling van aardwerken
alternatief	een mogelijke oplossing, een samenhangend geheel van maatregelen
autonome ontwikkeling	een ontwikkeling die plaatsvindt ook wanneer het project niet doorgaat
Bakenbomen	de herkenbare uiting van het kanaliseren van de Maas, ooit aangeplant als bakens voor scheepvaart
beschermingszone	stroken grond aan weerszijden van de kernzone, die bijdragen aan de stabiliteit van de dijk
bestemmingsplan	in een bestemmingsplan worden de gebruiks- en de bouw mogelijkheden vastgelegd voor een gebied. Dit is een juridisch bindend document voor overheden, burgers en bedrijven.
binnendijks	aan de kant van het land
Binnenteen	de onderand van het dijklichaam aan de binnendijkse zijde van de dijk



2. Structure

Presentation bias can arise when structure and coherence are not carefully maintained



2a

Logical structure of chapters and their relationship to the appendices

Conflict with reader expectations: summary in the beginning; unusual division of EIA.



2b

Navigation (table of contents, headings, links)

Coherence. Missing info: harder for readers to find the right information.



2c

Use of summaries and conclusions

Clear summary and conclusion: readers can quickly see what the project is about and what the main outcomes are.



3. Visual presentation of information

Effect assessments are often visualized in summary tables, and these can be prone to bias. Balance does not mean same number of positive and negative effects.



3a

Support through visual aids

Missing legends, captions, references, and poor color use, low image quality → confuse readers.



3b

Clear and consistent use of color or grading scale

Colors are too similar, overlap, or are missing makes interpretation difficult. Associate meanings with colors.



3c

Balanced presentation of positive and negative effects

Accurate reflection of real impacts. Irrelevant topics are discussed in excessive detail.



4. Objectivity & balance

Most framing appears from missing or incomplete information rather than explicit wording → readers might fill in the gaps themselves.



4a

A balanced presentation of the effects of the alternatives

Alternatives are not always fully assessed/mentioned in project EIA.



4b

Articulation of uncertainties and assumptions

Uncertainties/knowledge gap are limitedly explained --> transparency. Assumptions about autonomous developments



4c

Avoiding tendentious language or framing

Framing appears to result from missing or incomplete information, word choices and punctuations.



Moving forward

- Presentation Bias in EIA as an Emerging Concept
- Limited Scope of the Study
 - small sample size
 - predefined criteria
- Content vs Presentation
 - not substantive content
 - blur distinction
 - evaluation assessment thresholds
- Future Research
 - decision-makers' perceptions on visual and textual presentations
 - AI to support EIA review





Moving forward

Main Criterion	Focus Point	✓	Questions / Advice
1. Clarity of language use	Sentence structure	✓	• Is a clear sentence structure used? • Can the sentence be interpreted in multiple ways?
	Grammar	✓	• Is correct grammar used in the sentence? • If not, does this affect how the sentence is read or understood?
	Sentence length	✓	• Is the sentence of a manageable length? • Are the correct punctuation marks used? • Pay special attention to the use of commas, periods, and the formulation of lists.
	Technical terms and abbreviations	✓	• Are all relevant technical terms and abbreviations defined or written out in full? • Does the report include a glossary and/or a list of abbreviations?
2. Structure	Overall structure		• Does the report follow a logical structure? • Is this structure clearly presented at the beginning of the report? • In the case of a public-friendly summary: – Do the structures of the public-friendly summary and the EIA (MER) align? – Is the EIA referenced correctly? – Can further detail easily be found in the EIA?
	References		• Are appendices clearly referenced? • Do the references correspond to the titles and numbering of the appendices?
	Summaries and conclusions		• Is the EIA complete? • Does it contain a summary and a conclusion? • Is it clearly indicated where these can be found? • The summary assessment may also be included here (if it is not shown, it must be clearly referenced).
	Table of contents		• Does the EIA include a clear table of contents? • Do the table of contents, chapters, and numbering (chapter numbers and page numbers) correspond with each other? • Does the table of contents contain sufficient detail? • Detailing up to a second level (e.g., chapter 1.1) is desirable.
3. Visual aspects	Support		• Are sufficient visual aids used? • Is the text visually supported where expected?



Let's continue the conversation!

Message me your questions or comments in the IAIA26 app.

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