

Peer Review Form for Scientific Articles AE2223-I

Fill in this form by typing, not by handwriting. Adjust space to need. The criteria correspond to those mentioned more elaborately on the checklist scientific articles, to be found on Blackboard. Use that checklist for a more elaborate description of the criteria.

| Elements |
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| 1. Abstract Readable as stand-alone text – Informative on research and results – Clear key words |
| Comments: "Ultimately four ... noise annoyance." (pg.1). 1. In order to make the abstract a stand alone text I would like to recommend naming the metrics in the abstract, since this is the main result. 2. In the abstract four metrics are promised while, when looking at the conclusion, only three metrics are mentioned ("The metrics ... and tonality." (pg.7).) Key words are very well defined |
| 2. Introduction Background information on problem – Clear motivation for research – Research question stated clearly – Structure article discussed if necessary |
| Comments: "If the ... noise annoyance." This sentence seems a bit vague to me, you could either elaborate on it a bit more (why is it that the raw data doesn't transcribe reality) or give a reference where this is stated and explained. Same goes for the sentence "A second ... among humans.", show a source that states that metrics are required and/or show that this will work. No research question is given. However, since the knowledge gap is well explained and the purpose of the report is to make a model that will fill this gap, I do not see the need for a research question and feel that the current introduction is sufficient. |
| 3. Method Well-argued – Sufficient definition of concepts – Connection to research question |
| Comments: "In the ... the tone." (pg.4). Where the values mentioned here measured or are they estimated? If estimated, I would suggest justifying the estimations you made. "Loudness is ... called "phone"." (pg.4). Is the unit "phone" or "phon"? Both are used in this particular section. "The calculation ... frequency bands." (pg.4). I assume in this sentence it indicates that 24 different bands, each being 1/3 of an octave are used. It might be helpful to separate the 24 and the 1/3, as now it could be read as a band being 24 1/3 octaves in size. Also, how was the size of the bands determined? Since no research question is present, there is no connection. However, the method do have a good connection to the purpose of the report and therefore I think the connection is sufficient. |
| 4. Results and discussion Results presented clearly - Validity of results discussed and supported – Relation text/illustrations clear |
| Comments: The first paragraph is a short summary of what has been done thus far. For the results and discussion section I feel like this could have been left out, since this section does not require a summary. |

"Loudness is ... Appendix A." (pg.6). I am not sure if the use of appendixes is allowed within the format we are writing in, since I have hardly seen any appendixes in real scientific articles.

"It can ... as well." (pg.9). This sentence seems to be of. It might help to split this into 2 different sentences: one explaining that loudness is the leading term and one showing that a loudness of 0 results in a PA of 0. Also, I think more explanation into why loudness is the leading term is required.

"For instance ... to zero." (pg.7). Figure 5a is mentioned here, but nowhere is it mentioned that this image can be found in appendix B (appendix B is not mentioned anywhere in the report). Same goes for figure 5 and 6a. I have always learned to include figures in the main text if they are needed to explain what is happening. An appendix should only be used in order to elaborate more on a topic, but should be able to be left out when reading the report.

Table 1 is provided in this section, but is not mentioned in the text. Since this table contains all of your results it is probably useful to explain the table in the text. Furthermore, in the results the metrics that are used are discussed but not the results of using these metrics on the provided data. Giving these results in combination with table 1 could give clarity into what these metric result in when it comes to actual data.

No validity of the results is present.

5. Conclusions

Link to research question – Follow from previous material – Recommendations further research

Comments:

"Overall it, ... most annoying." (pg.7). What is this based upon? Since aircraft 2 is only the most annoying in one metric, maybe you could show how the final annoyance is computed and rank the aircraft. Also, this is new information and therefore should not be brought up in the conclusion alone. This could be put in the results section.

I feel like adding more to the future research would be useful, since the data set used for this paper is rather small. This of course is not your fault since the data is handed to you but in this section you could add a small part about follow up research in other countries or other locations around Schiphol for example. This is required to generalize the model you created. In order to see if the plans to limit noise pollution work, other additional research is required as well.

Reference use

6. Use of sources

Correct references – Good use of literal quotes – Good use of paraphrasing

Comments:

"Although this ... or not." It might be helpful to give a reference which shows that the plan actually worked in the particular case (Hoofddorp Noord).

None of the equations used in the method section (except Eq.12) are lacking a source. Using a reference is probably in place since (I assume) most of these formulas are not derived by yourselves.

7. Bibliography

References meet requirements – Correspondence references in text and bibliography

Comments:

For the first reference in the list no doi is given, whereas for the other references it is. The doi is mentioned in the article, so I feel it should be included.

Reference 14 is missing the place where it is released.

Reference 15 has the title "Delft University of Technology". I think this might be a mistake, where this needs to be put in behind the title and the title should be added.

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| Content |
| 8. Data analysis / research sufficiency Your opinion on the data analysis and research sufficiency |
| Comments: <p>The data description section of the report is very brief. However, this is followed up with a detailed data correction part. When looking at the combined data analysis I feel like it is sufficient.</p> <p>I do feel like the research is a bit insufficient. "The purpose ... and annoyance." (pg. 2) Even though you did build a model that does fit the purpose of the report, I miss the usability of this model as of now. Maybe this will become clearer if the data is handled in the results section.</p> |
| 9. Argumentation Your opinion on the academic value of the argumentation – Critical review of literature |
| Comments: <p>The scientific research used in the article are not critically reviewed. However, I feel like this is more a point for in the literature review and the fact that it was not reviewed wasn't bothering me while reading the article.</p> |
| Structure |
| 10. Paragraphs Well-constructed – One topic – Clear topic sentences – Clear paragraph structure |
| Comments: <p>Part A and Part B of the methodology do not use the same style for the subsections. Part B uses highlighted headings, whereas part A highlights the topic within the sentence. Part B : Loudness Part A : "A Background ... fly over."</p> <p>Apart from this minor point, the structure of the report is good. Clear topic sentences are used, the paragraphs are clearly structured and the report is well structured.</p> |
| Style |
| 11. Style and language use Correctness – Objectiveness – Clarity – Attractiveness |
| Comments: <p>When looking at the report as a whole, good use of language is used. It's professional but not too difficult to read. The only section I would recommend to rewrite on the basis of the language used is "In Fig.6a ... or corrupt." (pg.7). This paragraph uses less professional language, and therefore should be rewritten.</p> <p>"(The independent ... plausible model." (pg.9). This sentence starts with a bracket that is not closed after. I am not sure if you wanted brackets in there or whether it is a typing error.</p> <p>"It can ... as well." (pg.9). This sentence seems to be of. It might help to split this into 2 different sentences: one explaining that loudness is the leading term and one showing that a loudness of 0 results in a PA of 0. Also, I think more explanation into why loudness is the leading term is required.</p> |
| Illustrations and layout |
| 12. Tables and figures Functionality - Number and caption – Reference in text – Reference to source – Legend/explanation |
| Comments: <p>Table 1 is provided in the results section, but is not mentioned in the text.</p> |

Some figures are placed in the appendixes, but are referenced in the main text. I feel like these figures should be moved to the main article in order to keep oversight.

All other illustrations are mentioned correctly and help with the clarification of the text.

13. Format

Font – Headings – Page lay-out – Adherence to template

Comments:

The report is adherent to the template provided for this report, and therefore, apart from the subtitles in the method section, I have no corrections for the format used.