

Editor

Dear authors,

Your manuscript has received four reviews, all from solicited referees, whom I herewith would like to thank warmly for contributing their time and expertise to this first Assessment Report of the European Knowledge Hub on Sea Level Rise.

The reviews are very appreciative of the manuscript and request only minor revisions to make the manuscript acceptable. All reviews list some specific points. I would ask you to address all of them in an author comment, in addition to revising the manuscript accordingly. In particular, please consider carefully the suggestions of Referee Comment 4 on increasing clarity of the figures and think of a way to illustrate the workshop outcomes.

In addition, I went through your manuscript with an editor's perspective and am requesting some additional revisions of different kinds. I ask you to consider those and also respond to the substantial ones (i.e. not the language or typo fixes) in an author comment:

Response to Editor

Thank you very much for the time dedicated to edit the manuscript and for very detailed comments and suggestions provided.

In what follows these comments and suggestions are addressed, where each comment is presented as given (in black) and then we specify how it will be addressed (in blue).

This manuscript describes the overall approach as four successive steps: survey, workshops, conference, consultations. The manuscript describes the survey and workshops in detail, but not the remaining two steps. I am aware that the conference will be features in an introduction section to the report. A cross referencing (for now just with a placeholder) should be put in. Also, it would be good to describe, or at least indicate, how the other two components contributed to the co-design, and explain why these components are not described in this manuscript. Alternatively, add a small sub-chapter for this to have the entire co-design process described in one place.

The Editor accurately outlines the steps involved in the scoping process. Our focus was primarily on two of these steps, survey and workshops. We assumed that these additional processes would be detailed in an introductory section. However, if providing a description of the additional steps would enhance understanding of the adopted framework, we are open to incorporating a brief overview of the overall processes, along with details on the two supplementary steps.

Chapter 3.1 on the survey results provides percent numbers from aggregated survey results, e.g. in line 152ff "32% of the respondents expressed that a substantial portion of this information is missing ...". These numbers cannot be retraced anywhere. Fig. 3 is referenced at the end of this first paragraph, but the numbers provided can actually not be seen there, which is confusing. Can this be made more consistent? Reference is also made to Table S2 (actually presumably meaning S1) but here I struggled to follow how the %-numbers were generated. I feel that the manuscript should somehow provide access to the raw survey data. This would also adhere to good practice of transparency and data accessibility.

In the text we referenced the responses in terms of % for both types of participants, whereas the figure shows the corresponding % values for all participants integrated (shown at the bottom figures in colored scale indicating %). The idea behind this was to provide complementary information in both the text and figures.

The editor's comment regarding the reference to Table S1 is correct. It will be changed.

Regarding access to the raw survey data, we will include a properly anonymized copy of data in the supplementary material.

The Knowledge Hub on Sea Level Rise is usually abbreviated without a hyphen, just "KH SLR". For consistency, I suggest to adopt this for your paper also.

We will do it.

As this is about the European Knowledge Hub on Sea Level Rise, I suggest to use British spelling, i.e. the more common use of s instead of z in words like emphasise, prioritise, utilise, visualise, standardise, harmonise, materialise, ...

We will check the use of the British spelling throughout the manuscript and avoid mixing US and British styles.

Throughout the manuscript, the word "significant" is used in different ways. Given that the manuscript has the analysis of survey data as a basis, please use consistently only for statistical or empirical significance. In other contexts, other adjectives like "relevant" might be more fitting (e.g. line 96, 208, 235, and elsewhere).

We will check the wording when referring to results of the surveys to avoid confusions.

Below are some minor comments and editorial fixes:

All these editorial corrections will be adopted. In addition to this, the final version will undergo a complete grammatical revision.

TEXT:

line 24: replace "paper" with "chapter"

line 27: add "sea" to make it European sea basins

line 28: present tense "is" instead of "was"

line 30: long-term SLR: Can you give a semi-quantitative indication what you mean, like multi-decadal? Or multi-centennial? Or end of century? ...

line 37: especially end-users [add "of sea-level knowledge"]

line 41 and following: "uneven coverage in the knowledge ..." This sounds if we had sufficient information which is just a bit unevenly distributed. Is this the case? Or is applicable knowledge missing everywhere? If so, make sure to make this clear.

line 46: The word "is" is missing in "This IS the ambition ..."

line 52: "three key components": Further below it lists four components, including consultations. Please make consistent.

line 53: fix wording to "pertinent in Europe"

line 77: Fix typo 19502 to 1950.

line 99: Fix typo "on IPCC reports" to either in or of.

line 113: Please explain the logic of the maximum score of 600.

line 129: Delete "the" in "each of the Europe's ..."

line 130: For consistency with elsewhere in the text, change ocean basins to sea basins.

line 133: Once introduced the abbreviation KH SLR you may as well use it consistently throughout the text. Same applies to SLR

line 145/6: Be clearer how workshop participation was achieved and interest handled. By invitation only? I believe that the workshops had been advertised also.

line 162: Please choose the more formal "it is" instead of "it's".

line 164: For clarity add "sea" to make it "different sea basins".

line 242: "existing high-quality and up-to-date assessments of SLR-induced impacts" is not a statement. Please fix the sentence.

lines 264 and 514 (and elsewhere): Consider replacing optimistic with positive.

line 269: replace "an" with "this"

line 270: Consider making it "distribution of most frequent responses".

line 319: Please give an indication what sea-level milestones are. It seems to be the first mention in this manuscript here.

line 323: Replace its' with 'it is".

line 347: Budgets should probably be plural?

line 393: Rephrase to "... values were considered a top priority."

line 399: Remove "Sea" to make it "non-European coastal areas".

line 411/412: As you have introduced the abbreviation SLR already, you may use it throughout the text, i.e. also in line 412. On the other hand, I suggest to avoid using abbreviations in headers (like line 411 and elsewhere).

line 448: Make it "European sea basins"

line 450: Replace in with for.

line 455: Please give a better indication what citizen science sensors are.

line 471: Also italicise "low-probability".

line 495: For consistency replace seawater with saltwater.

line 540: The spell Brügge with double-g.

line 549: LP should be LGP.

FIGURES AND TABLES:

Figure 1 caption: Please be a bit more elaborate and precise what this is about (i.e. the KH's distinction of sea and ocean basins to structure the co-design consultations).

[We'll do it.](#)

Table 1: This table contains interesting information but is not used in the text. I recommend to extract a few points that point to the differences and/or characteristics of the sea basins, which is relevant for the discussion then also.

[We will reference the observed differences across basins as presented in the table to provide context for some of the results.](#)

Figure 2: Line 103ff describes the distinction of two professional groups. These could be indicated also in figure 2b to make this clearer.

[Fig 2 b illustrates the members of each basic type of stakeholders. We will slightly modify it by incorporating two colors to indicate which stakeholders contribute to each of the two main groups used throughout the manuscript, government and scientists.](#)

Table 2: heading "N registered attendees" could be just "attendees" or at least just "registered attendees".

[We'll do it.](#)

Supplement Tables: Numbering is inconsistent between text and supplement. It seems that one Table has been removed in the process but numbers in the text have not been corrected.

We will check the numbering.

Figure 3: panel (a) could get a heading such as 'Information deficit' to make it clearer what topic this is about.

Table 3: caption: Can it be made more explanatory, e.g. by starting with "Rankings of perceived knowledge gaps based on ..."?

The heading and caption will be checked and revised to improve the description.

Figure 5: In analogy to Fig. 3, can the Likert-chart be put first (i.e. chart a here) and the colour matrix follow as chart b?

Figure 5: Can the Linkert graph get a keyword such as "Impact information availability"?

Figure 5: Black and Arctic Seas have no government values? Why are they then not identical with the grey bar mean?

As mentioned in the text, the number of government participants from these two basins was too low to be significant. We will also add a note in the figure on this.

Figure 5: caption: For clarity in relation to the other chart in this figure, could you add "specific" to make it read "Relevance of specific SLR-induced impacts ..."

Figure 5: caption: Please replace "colour bar" with "grey bar".

We will review Figure 5 taking into account Editor's suggestions.

Figure 6: Consider adding keywords to the charts for quicker grasping of the content, like effectiveness, flexibility, and NBS appropriateness.

We'll do it.

Figure 7: caption: I can't find the question "Are there other decisions/purposes for which you currently don't consider SLR, but for which you think it would be important to do so?" in the supplement.

Thanks. We will add it.

SUPPLEMENT:

Please structure the supplement more clearly to make it easier to find the relevant information. I suggest to use the numbering 1.-8. on the cover page also within the supplement. Also, please number all elements in the supplement document.

We'll do it.

Figure S1 ICES ecoregions should probably not be S1 any more.

The table below that ICES ecoregions seems partly wrong. Several of the Atlantic labels should probably be Arctic. I would also suggest that you use the exactly same nomenclature as in Figure 1, i.e. if you said East Atlantic Seas there, also name it that way in the supplement.

We will check the equivalence of both regionalization and correct tables to avoid confusion.

I look forward to receiving your revised manuscript.

Kind regards,

Thorsten Kiefer