

## IS-ENES3 Deliverable D7.4

### Second external review report for ENES CDI services

*Reporting period: 01/01/2022 – 31/03/2023*

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#### ABSTRACT

A summary report is produced with respect to the services of the ENES CDI and the review results of the external reviewers. Expected steps to address the issues pointed at by the external reviewers are included. This particular report is an update of D7.2. Thereby, it specifies a revised set of targets, to better gather feedback on the actions undertaken by the project and to address the main points of the previous review.

#### Revision Table

Version	Date	Name	Comments
1.0	8/03/2023	Alessandro Spinuso	Structure and Introduction
1.1	9/03/2023	Alessandro Spinuso	Edited Website and Training review
1.2	10/03/2023	Alessandro Spinuso	Edited Scientific Guidance and Conclusion
1.3	14/03/2023	Fanny Adloff	Review
1.4	20/03/2023	Sylvie Jousaume	Review

#### Dissemination Level

PU	Public
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## Executive Summary

The document presents in the Introduction Section the main rationale of this review, which is aimed at obtaining feedback to the actions that spawned from the previous cycle of comments. The review targets are then presented in Section 2, with the results discussed in dedicated chapters. Specifically, experts' feedback on the new IS-ENES website are reported in Section 3, the training resources in Section 4 and, finally, the recommendations on the scientific guidance in development for the new Climate4Impact platform, in Section 5. Section 6 discusses the corrective actions that have been already addressed. Finally, in the Conclusions, we summarise the most relevant outcomes of the review, including the suggestions that have the greatest impact on improving the content, some of which we could already apply with reasonable efforts.

## 1 Introduction

In this document we report on the review conducted by selected external experts: Dr. Iuliia Polkova, teaching and researching on "Climate Modelling" at the Institute of Oceanography at the University of Hamburg, and Dr. Laurens Bouwer, working as an impact researcher at the Climate Service Center Germany (GERICS). They had both already participated in the first review, providing very valuable feedback which we reported in D7.2 [1]. In this review we decided to ask the experts to focus on the informative content of a selection of public pages that have been recently edited and hosted in the renewed IS-ENES website<sup>1</sup>, as well as on training material and specific user guidance, particularly addressing impact researchers. Between the two reviews, the public content has been updated taking into account the feedback obtained in the previous review, which suggested clarifying the role of the different services and differentiate between projects' outcomes and available online tools that provide data and metadata resources to the community.

## 2 Review Targets

Below some more precise directions given to the reviewers

- New IS-ENES website
  - In this new release the organisation of the website has been completely re-designed to take into account the need for a better focus on the concrete outputs and services that are available to users. Besides a general look, we kindly asked the expert to start the review from the following page.
    - <https://is.enes.org/services-data-metadata/>We asked to browse and review the descriptive web pages of the different services' pages linked from there, within the is.enes.org domain (not the service itself).
- Training Material
  - In the same website we published a training page
    - <https://is.enes.org/lectures-tutorials-webinars/>Here we make available a collection of training material (webinars, recordings) available to users. We asked the experts to indicate whether we should provide additional information to introduce the training, if they are clearly organised and the topics are relevant.
- Climate4Impact (C4I) v2 Scientific Guidance
  - We have started with migrating and adapting domain specific explanatory content from C4I v1 to v2<sup>2</sup>, which is now the official version of the service. Being the

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<sup>1</sup> <https://is.enes.org>

<sup>2</sup> <https://www.climate4impact.eu>

material unfinished we kindly asked to look at the current status of the pages stored in the GitLab repository<sup>3</sup>. This preliminary material includes general outlines and more detailed content. It will be finalised taking into account the reviewers' suggestions and made available in the service public pages. We asked to highlight important missing aspects and whether the current content is still relevant.

In the following sections we discuss reviewers' feedback on these targets.

### 3 New IS-ENES Website

The review highlighted that the structure of the pages has largely improved. Compared to the earlier review in 2021, the structure of the pages is now better, and it is easier to access the information that is needed. Also the presentation is improved, with more graphics and headlines, which will ease user access to the content.

However the way that the “*Which Model Data?*”<sup>4</sup> is organised could be improved from the current setup, which only shows a list of acronyms. For non-expert users, the current acronyms and listing proposed by the page are not really transparent. The reviewers suggest dividing this up into two blocks for instance, indicating global and regional data for instance, and providing some pointers on when to use what (large scale global analyses, versus local analysis).

In addition, CMIP3 and AR4 data and information is largely outdated, and superseded by CMIP5 and 6. If such data is still relevant for specific reasons, these should be briefly explained, pointing to relevant background material. If these are exclusively legacy matters, for instance to keep CMIP3 data accessible, then users should be made aware of this. Besides, most users will also not need access to CMIP3.

In the page *How to Access and Use Model Data*<sup>5</sup>, it would be helpful to expand some of the current descriptions. For instance, to describe the *Long-term Archive* section, using a sentence, such as “*Access IPCC-DDC and long-term archive for older climate simulations*” would better clarify what is expected to be found. Finally, the page *Climate Analytics Service*<sup>6</sup> is very informative,

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<sup>3</sup><https://gitlab.com/is-enes-cdi-c4i/is-enes3/c4i-storybook/-/tree/staticdoc/src/static/documentation/backgroundandtopics>

<sup>4</sup><https://is.enes.org/sdm-which-model-data/>

<sup>5</sup><https://is.enes.org/sdm-access-use-data/>

<sup>6</sup><https://is.enes.org/sdm-climate-analytics-data/>

with some illustrations on what to expect. Same applies to pages such as *How to Access Metadata?*<sup>7</sup>, which is useful and well-written.

The experts also acknowledge the more structural organisation of the website and headlines in the pages that read better than in the old version, which used lots of text and lists. Now, the content can be expanded as needed to obtain more details. Style-wise, the reviewer noticed that in section *Services on Models & Tools*<sup>8</sup>, the headlines in the subsection *European Ocean Platform* have a different font size than in the other two subsections, wondering whether this is a voluntary stylistic choice.

## 4 Training Material

The first remark worth mentioning in this section, goes slightly in the opposite direction of the previous positive comments on the website organisation. One reviewer actually tried to figure out how the training material could be found, instead of directly using the link provided. The attempt resulted in a less intuitive flow, browsing first under *Events and News*, where subsections *Training* and *Workshops* are present. However, the training material turned out to be instead under the *Dissemination* menu item, which was not obvious. The suggestion is to merge these two sections (*Events and News* and *Dissemination*) to improve the current misleading layout.

About the presentation of the training, the reviewers also suggest a short summary of what one can actually learn in the lectures, and how long would it take to watch them, before following the link and obtaining this information on Youtube. Some of the topics include the summary sentence already (such as CORDEX and CMIP) but others not (5th Coupling workshop). Would be ideal to have descriptions everywhere, consistently.

On a positive note, the listed training and tutorials are all highly relevant. One reviewer watched several parts of the IS-ENES Impact School, enjoying its content. Particularly, the availability of lectures on Machine Learning received very positive feedback.

Again on the organisation of the page: the different content blocks seem to be randomly ordered. The suggestion is to list them chronologically: new to old. This would also give the impression that the trainings are being regularly updated; which could motivate people to check again later. Also, the distinction between schools (with more and longer videos parts) and the tutorials (such as on Code Coupling, which is shorter) is not so clear from the start, again suggesting the need for an improved description of the training, including duration and purpose.

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<sup>7</sup> <https://is.enes.org/sdm-access-metadata/>

<sup>8</sup> <https://is.enes.org/services-models-tools/>

## 5 Climate4Impact Scientific Guidance

Climate4Impact (C4I) is a platform that enhances the discovery of climate research data and enables experimentation within impact analysis-ready workspaces. In the last phase of the project we opened to the public Climate4Impact v2<sup>9</sup>, which is the new official release of the system. The functionality and help pages of this version have already been reviewed in D7.2 [1]. In this updated review we asked the experts to take a look at the scientific use guidance material, which is currently being edited, thereby not yet published on the public webpages. Hence, the reviewers were directed to the C4I software repository, where the guidance is stored under version control<sup>10</sup>.

Although still in development and with several missing links (e.g. on regional and global climate models), the review highlighted the relevance of the current content to the C4I target users. The text is considered to be detailed but not too long, which also fits a general audience. However, suggestions were made to double check and link to online resources available on other platforms, even Wikipedia, especially to address the more general topics. A reviewer recommends keeping the pages updated, especially taking into account the evolving available material and approaches. For instance, in the scenario information, reference is made to SRES (Special Report on Emission Scenarios). This is only interesting from a historic or legacy perspective (see also comment on CMIP3 in Section 3), and less for contemporary users who want quick access to the latest information that are available nowadays.

Finally, another suggestion was made to reference Copernicus and WMO resources for seasonal predictions and decadal predictions, respectively. The latter may be also further supported by extracting and referencing content from famous publications [2,3,4].

## 6 Corrective actions

We have initiated some changes on the website following the reviewers feedback:

- In the page *How to Access and Use Model Data*, below the *Long-term Archive* section, the sentence “Access IPCC-DDC” was completed with “for older climate simulations”, as suggested by the reviewers.
- To ease the user experience in finding the material related to our events, each event with recorded video/presentations has been checked to make sure they have a sentence - in bold and as a first line after their title – indicating and redirecting to the material (YouTube video or ENES Portal). On the pages listing the *Trainings* and *Workshops*, the letter “(YT)” after some events indicates that they have a recording available. At the top of those two pages,

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<sup>9</sup> <https://www.climate4impact.eu>

<sup>10</sup> <https://gitlab.com/is-enes-cdi-c4i/is-enes3/c4i-storybook/-/tree/staticdoc/src/static/documentation/backgroundandtopics>

the sentence “*You can also find all those resources in the “Dissemination” section (Presentations - Lectures/Tutorials/Webinars)*” has been added below the already-existing sentence “*Some of our past training and schools are recorded on our YouTube (YT) !*”

- On the page “*Lectures/Tutorials/Webinars*”, the recorded events have been re-organised following this order: Webinars – Workshops – School (which is indicated in capital letter in front of each of those events), from the oldest to the newest. The number of talks in each playlist, as well as their duration, has been added accordingly to the reviewer's suggestion.
- *However the way that the “Which Model Data? ” is organised could be improved from the current setup, which only shows a list of acronyms. For non-expert users, the current acronyms and listing proposed by the page are not really transparent. The reviewers suggest dividing this up into two blocks for instance, indicating global and regional data for instance, and providing some pointers on when to use what (large scale global analyses, versus local analysis). Answer:* general short description of CMIP and CORDEX has been added as well as links to WCRP web sites. For each of the experiments, their link with IPCC Assessment Reports has been emphasised, providing better information on their relevance to IPCC.

Those feedback have been acknowledged:

- “*In the section Services on Models & Tools, the headlines in the subsection European Ocean Platform have a different font size than in the other two subsections, wondering whether this is a voluntary stylistic choice.*” **Answer:** the headline font-style is different because it was part of the Jekyll template used to create our website. However, it seems to us that it is a good way to establish a clear distinction between the headline and the text below it, adding to the difference in size.
- “*The suggestion is to merge these two sections (Events and News and Dissemination) to improve the current misleading layout.*” **Answer:** It requires some significant technical efforts to merge the two sections, and it might be confusing to have the Events and Resources (such as deliverables/milestones and presentations/posters) merged. To ease the user experience in finding the material related to our events, see the changes that have been made (above).



## 7 Conclusions

The review reported in this document focuses on the organisation and presentation of the different sources of data and metadata available on the new IS-ENES website. It extends then to the dissemination of the existing training material and scientific guidance, the latter still in development and targeting the users of Climate4Impact. The experts appreciated large improvements with respect to the previous review, and provided very useful insights, especially on the training pages, recommending improvement to the type of content to be included in the descriptions, suggesting more clarity in the purpose and chronological ordering of each training item. Also findability of the training resources was not obvious, which may require combining the organisation of the information concerning the scheduled dissemination and training events with their outputs. A particular recommendation addresses the repurposing of legacy data and information (eg. CMIP3 and SRES) that are currently presented on the website and scientific guidance material, urging the need to explicitly mark such content as informative, but less relevant to pursue more recent and updated studies.

Generally reviewers encourage the editors and content managers to keep training pages and guidance up to date. This should also include more dynamism in the way the material is presented, thereby stimulating visitors to come back in the future to regularly check the content. Finally, there is the shared suggestion to use in the guidance material more references to relevant external resources, including popular peer-reviewed publications, as well as established public pages, where the more general topics are and will be curated. Several of these very useful recommendations have been addressed and presented. Some are more difficult to address but will be kept as good guidelines for future updates.

## References

- [1] Spinuso, A. et al. First external review report for ENES CDI services, Report [https://raw.githubusercontent.com/IS-ENES3/IS-ENES-Website/main/pdf\\_documents/IS-ENES3\\_D7.2.pdf](https://raw.githubusercontent.com/IS-ENES3/IS-ENES-Website/main/pdf_documents/IS-ENES3_D7.2.pdf)
- [2] Meehl, G. A., and Coauthors, 2009: Decadal Prediction. *Bull. Amer. Meteor. Soc.*, **90**, 1467–1486, <https://doi.org/10.1175/2009BAMS2778.1>.
- [3] Meehl, G. A., and Coauthors, 2014: Decadal Climate Prediction: An Update from the Trenches. *Bull. Amer. Meteor. Soc.*, **95**, 243–267, <https://doi.org/10.1175/BAMS-D-12-00241.1>.
- [4] Meehl, G.A., Richter, J.H., Teng, H. *et al.* Initialized Earth System prediction from subseasonal to decadal timescales. *Nat Rev Earth Environ* **2**, 340–357 (2021). <https://doi.org/10.1038/s43017-021-00155-x>