

Interactive comment on “OWFgraph: A graph database for the offshore wind farm domain” by Erik Quaeghebeur et al.

Anonymous Referee #1

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This paper describes a unique tool in wind energy, a Graph database, OWFgraph, a knowledge base for the Offshore Wind Farm domain;

As the authors write, "This is a tool that enables researchers in the offshore wind energy field - to keep the overview of what is needed for OWFs, - to make use of functionality in existing software that facilitates access to the content"

I agree that "The design of OWF graph balances the requirements of expressivity and simplicity, to enable a broad group of practitioners to both make use and contribute" and what I like most, the tool supports a system engineering approach.

This is a very interesting and timing paper addressing: - knowledge organization, which together with data science, is a disciplines needed to cope with the digital transforma-

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tion of wind energy sector; and - how to use knowledge organization to optimize the work of researchers.

However, to get the most out of the author's work, I advise to reconsider the paper after Major revisions.

In my opinion the paper is too long and the reader might miss the interest.

Comment 1. I suggest to split the paper in two papers or two clear parts.

- Paper/part 1. Here, the authors should introduce the concept of Graph database as a general tool for any Wind Farm regardless the environment. This would mean targeting a larger audience. The authors should clearly state that use of the graphic database is a general tool applicable to any wind farm project. The environment can be defined by a further property (metadata) listing possible terrain types, e.g. as done by Sempreviva et al 2017, property "external conditions" containg the attribute "offshore", Complex terrain, coastal etc .

- Paper/Part 2 would contain practical applications. In fact, in different places, the authors state that the tool is unfinished e.g. pag 16, line 19-22.

Specific comment 2. This second main comment is concerning the Conclusions. Expert elicitation is still a practice for professional taxonomists. To avoid biases, the group of experts must include the right choice of experts. However, I am not sure what the authors mean stating that OWPGraph is not biased. Is it not designed by experts?

Other comments on the language, poor sentences and request of clarification are in the attached PDF.

Figures: In my opinion, the colors of the circles in all figures are too dark, I suggest considering pastel colors with a black font

Please also note the supplement to this comment:

<https://www.wind-energy-sci-discuss.net/wes-2019-17/wes-2019-17-RC1->

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