

Interactive comment on “Combining operational models and data into a dynamic vessel risk assessment tool for coastal regions” by R. Fernandes et al.

R. Fernandes et al.

rodrigo.maretec@ist.utl.pt

Received and published: 4 December 2015

First of all, many thanks for the comments and the time dedicated to this manuscript. We are now submitting a new revised version of the manuscript. Answering to your general comments below:

“The results section is minimal with respect to the methodological one and any conclusions are not included.” Authors: A strong effort was done in the reviewing process to provide a more in-depth and complete results section. At this point, the methodological section is in fact 13 pages, and results + discussion is now 12 pages (without including any figures and tables).

C1271

“Before the publication I recommend to extent the results section with more details about the sensitivity of the numerical tool to different meteomarine forcings, traffic conditions and type of spilled oil.” Authors: New sensitivity analyses were performed to assess precisely meteomarine forcings, traffic conditions and type of spilled oil. These evaluations were performed not only to single shore locations, but to the whole domain as well.

“Most of the discussion is focused on future potential perspective and to the authors intentions. (...) the discussion should be improved and focused on identifying the thresholds and limits of the presented tool as being obtained from the suggested improvements in the sensitivity analysis.” Authors: We have taken advantage of the new results obtained to generate more discussion, and we have found some limitations in the risk model applied in the pilot area (e.g. risk doesn’t seem to reach the critical zone predefined in the risk matrix), also some thresholds were established, based on simulations with rough and calm metocean conditions, and different types of spilled oil. Among other things, it was found that vessel traffic conditions may dominate the risk model over the metocean conditions (this is not a limitation, but it is important to understand that in the implemented risk model, calm metocean conditions don’t necessarily mean low risk levels).

“I have found 14 tables in the manuscript. Even if supplementary materials, an effort should be devoted to reduce them or at least to better integrate all these informations in the manuscript context” Authors: We have reduced the number of tables in the appendices from 11 to 9.

Interactive comment on Ocean Sci. Discuss., 12, 1327, 2015.

C1272