

Interactive comment on “VISIR: Technological infrastructure of an operational service for safe and efficient navigation in the Mediterranean Sea” by G. Mannarini et al.

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The paper describes a decision support system (DSS) for on-demand computation of optimal routes ship routes in the Mediterranean sea. The focus of the paper is not on the modelling part but on the operational infrastructure and how the set of software components are brought together to realise the DSS. In this sense, the paper clearly describes the objective, role and scope of each software component and how this relates to each other. Such technical description is later accompanied by a couple of examples to demonstrate the operational functioning of the system.

Even though some of the client apps devised by the authors are in progress, it is quite clear that the core contribution of the paper is not these client application but the multi-

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layered architecture that supports asynchronous computation of optimal routes (the model itself). Developed web services adhere to well-known web standards and best practices. the heart of the system seems to be the message-based broker because, to this reviewer , it is intended to make the system more scalable (not mentioned by authors). As there are so many pieces connected acting asynchronously, I am wondering about performance issues of the system. These aspects are not presented or discussed in the paper, so I encourage then the authors to specify limitations or performance penalties the system has, either by creating a new section to this matter or by extending sect 4.1 and 4.2 accordingly.

Please also revise the citation style of Mannarini et al. (2015) in the body of the paper because I was not able to distinguish which one *(of two in the reference list) the authors actually referred to.

In summary I found the paper quite interesting and technically sound. The topic of the paper, and the design and architecture of the system, is acceptable. As the paper focuses on the overall functioning of the system, and how the distinct pieces are connected, more details on the assessment methods and performance evaluation are required to truly demonstrate the system.

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