Reviewer's report : General

The manuscript "Interoperability with Moby 1.0" deals in standardizing methodologies to facilitate information exchange and access to analytical resources. The manuscript provides the detailed development that has occurred in BioMoby. The authors present and discuss why BioMoby is a distinct from other semantic web services.

Major Compulsory Revisions (that author must respond to before decision on publication is reached)

To Authors:

To begin with the paper is well written in terms of technical and implementation aspects.

What I see is that author's do not clearly present difference between the earlier versions with the current version of BioMoby. It would be really helpful if the authors could explain this using a concrete example to understand the functioning of the BioMoby framework.

The paper looks more like a user manual with technical specification rather than any scientific implication to the readers. The authors could improve the paper by providing a strong biological input as motivation for developing such a framework.

As I read through the paper I see the author's speak about semantic web services. It would be interesting for the readers to know what the other semantic web services and how BioMoby is better. Is it possible for u to demonstrate it with an example?

In the results section the author's speak about Namespaces Ontology wherein there are 300 different Namespaces that includes prominent public data resources. It would be interesting to know weather BioMoby also supports PSI MI, MAGE standards that are also coming in from prominent databases. In the Object Ontology the author's specify BioMoby framework can receive any data-type and it does not re-define the legacy of the data type. Please provide a more concrete example for this point.

In BioMoby web services Second Paragraph the author's say:

"The providers do not need to be concerned about the exact structure of incoming data and do not need to query the ever- changing BioMoby ontology".

1. Justify this statement.

2. Summaries what are the BioMoby's ontology's that was present in the earlier and in the current version.

3. How can you compare it with the other semantic web services ontology's?

Justify how SOAP concept implemented in BioMoby is better than the others service providers that could improve the interoperability of the framework.

Through out the paper the author's have introduced various terms as ontology. It is quite misleading for me to associate these different ontology under one roof of BioMoby.

Finally, I feel that BioMoby is one of the most prominent approaches in the bioinformatics community. The paper contains less scientific inputs and more technical inputs. The paper does not contain strong examples to validate various arguments.

Hence the paper cannot be accepted in the current form. If the author's could answer some of the question raised, that could make the paper more interesting and more relevant to the PLoS ONE readers.