## Discussion with Oliver Hopt regarding existing PIM-> PSM Transform

There was no compelling argument for avoiding abstract classes in the RDF binding, except that it simplified the vocabulary.

Do we need the PSM? Now – if we keep the abstract classes, the PIM-PSM transformation does nothing.

There are two arguments for keeping abstracts in the XSD – there are those who would want this (development based on the XSD, not the model) and those who would consult the model during development. The key thing is how these object relations are expressed in the programming language being used (Java, C#, etc.)

## Using Other Vocabularies

Vocabularies to consider:

* RDFS/OWL
* PROV-O – would need to restrict PROV-O classes using OWL
* SKOS/XKOS – For which purposes should these be used/reused. DDI controlled vocabularies are a good match. For classifications, codelists SKOS/XKOS should be useful. Things in our collection patterns may require some new extension – need to look at this.
* DCAT – mapping for collection of data sets – we could extend or use DCAT classes. Look at ESTATs application profile.
* DataCube
* CSVW – mapping needs exploration; a little bit redundant against OWL/RDFS – may not be useful if the redundant features are the only ones we would need
* PAV – potential overlaps (see Version note below)
* ORG
* DC-O – would need to restrict DC classes using OWL

DISCO is not here because it will be deprecated when we publish a DIO 4 RDF binding.

Decision: Use DC properties in OWL restriction classes as a way of allowing DDI and DC to be used together. This approach could be used also with some other vocabularies. You could also use sub-classes and sub-properties. The OWL restriction approach is typically a better approach.

(If an external field is too loose, you could use restriction classes in OWL to narrow its use.)

PAV:Version could be used – in a restricted form – to capture the version number (as an example). PAV is one we want to map at a field level.

CSVW – tables (always), but not always dimensional tables (hypercubes). What is the interplay between DDI and CSVW and DDI DataCube? Probably we could map DDI Data Description aggregate data sets against DataCube.

We want to restrict an external class – we will have to maintain a record of where we ae using/restricting the external class. Is this a configuration within the build framework.