## Semantic integration of publications, digital data and information research: a proposal of enhanced publication interface for nuclear science area

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Considering the fast dynamics of the world of contemporary research, especially in the eScience environment, the relations established between the research products in an enhanced publication are not fixed and cannot be completely predefined. Therefore, researchers and managers of information systems for research should have friendly automated tools to increase in a controlled way and with some moderation, the semantic vocabularies associated with each type of relationship. This is an important issue that arises for the most advanced scientific information systems. Because of this condition, this work aimed to propose an interface for semantic integration of publications, digital data and information about research, since the relationships between these informational items are important requirement in the construction of a new publishing model that go beyond the limits of conventional text. The model has been proposed for a specific domain: The Nuclear Sciences. The work used as a methodological approach to identifying its main components of the Hjørland's [1], domain analysis specifically the structure approaches of scientific information systems in the field of Nuclear Sciences and the structure of scientific institution to which the work was done - in this case the Brazilian National Nuclear Energy Commission - CNEN and the Nuclear Engineering Institute -IEN. As a result, this paper shows a graph model of generic enhanced publication, that can serve any fields and another specific model for Nuclear Sciences area. To Know more about this research you can read the reference [2]

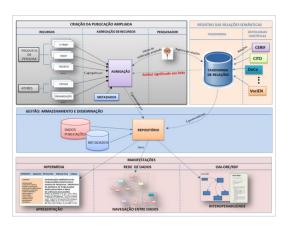


Figure 1. Graph model of generic enhanced publication

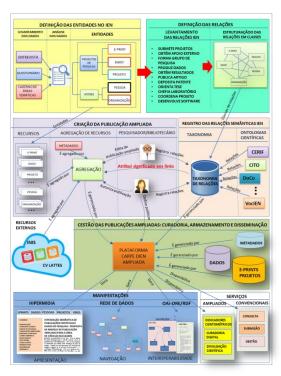


Figure 2. graph model of nuclear enhanced publication

## References

[1] HJØRLAND, B. Domain analysis in information science: eleven approaches: traditional as well as innovative. **Journal of Documentation**, Bingley, UK, v. 58, n. 4, p. 422-462, 2002. [2] SALES, L. F.; SOUZA, R. F.; SAYÃO, L. F. Integração semântica de publicações, dados digitais e informações sobre a pesquisa: uma proposta de interface de publicação ampliada para a área de ciências nucleares. In: ENCONTRO NACIONAL DE PESQUISA EM PÓS-GRADUAÇÃO EM CIÊNCIA DA INFORMAÇÃO, 16., 2015, João Pessoa. **Anais...** João Pessoa: ANCIB, 2015. Não paginado.

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