

On Legal Documents and Formal Methods

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Abstract

Standards allow legal knowledge to become exploitable and can lead to fruitful data mining from Legal Departments and individuals. For example, in the “Estrella” project: “using XML-standards ([1]), all the main elements of an LKIF document may allow them to be referenced in other legal documents, anywhere on the World Wide Web”.

Legal Documents can be defined as formal theories over a specific logic. Formal features of a Legal Document Management System (LDMS) should include versioning, metadata, security, as well as indexing and retrieval. Formal methodologies involve also stages such as formal specification and verification ([2]). We claim that the lifecycle of legal documents can be seen as a fruitful domain of applications for both the above stages.

In our paper, we will advance on the theoretical point why such an organization of legal documents will improve transparency, trust and will accelerate the award of justice. We propose that the enrichment of an LDMS with specification and verification techniques stimulates the ground for many applications of information law, including areas such as IP rights, Big Data and public procurement law.

References

1. Estrella Project Website <http://www.estrellaproject.org/>
 2. P. Stefaneas, On Formal Methodologies for Computer Supported Computer Ethics. In M. Botti ed. Proceedings Third International Seminar on Information Law 2010 - An Information Law for the 21st Century, pp. 485-489, Nomiki Vivliothiki, 2011.
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