Towards Standardisation of Online Dispute Resolution Tools

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Abstract. This contribution summarizes the main goals, objectives, and tasks done so far in the framework of the the CEN/ISSS Workshop on Standardization of Online Dispute Resolution Tools (WS/Stand-ODR), started on 17 December at the CEN Management Centre in Brussels (Belgium).

Keywords. Online Dispute Resolution, ODR, standards, interoperability, ontologies.

1. The CEN Workshop on ODR Standards

Many different Online Dispute Resolution (ODR) services have been developed all over Europe in order to allow consumers and businesses to exploit Alternative Dispute Resolution (ADR) resources.

We are developing a CEN Workshop Agreement (CWA) that specifies the guidelines to facilitate a clearer and easier use and exploitation of ADR resources to the potential users. The focus will be on Online Dispute Resolution (ODR). Whilst recognising that the technical requirements of ODR may necessitate the introduction of specific processes that vary from those applicable in ADR, it is an objective of this CWA to maintain the processes of ODR and ADR in as close a synergy as may be practicable and to encourage and facilitate their future evolution in parallel to the maximum practicable extent.

The project team started in February 2008, and will deliver the final results in early 2009. In our final project report we provide a survey of ODR models and providers, an analysis of ODR processes, background information on technical aspects of ODR as well on regulatory and legal aspects. The main aim of the project is to deliver a taxonomy of ODR processes that is used as the basis of an ontology. This ontology is implemented in Protégé, and used to automatically generate XML schemes. One of the underlying goals is to create interoperability within ODR.

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Many ODR providers exist today and ODR systems offer different user interfaces, adopt different languages and are unable to exchange information each other, preventing potential users from using their features within multi-language and cross-country business and legal environments. This diversity contributes to the lack of visibility of ODR systems and undermines the take off of this service in the market.

2. Interoperability

Interoperability is a property referring to the ability of diverse systems and organizations to work together (inter-operate). The term is often used in a technical systems engineering sense, or alternatively in a broad sense, taking into account social, political, and organizational factors that impact system to system performance.

With respect to software, the term interoperability is used to describe the capability of different programs to exchange data via a common set of exchange formats, to read and write the same file formats, and to use the same protocols. (The ability to execute the same binary code on different processor platforms is 'not' contemplated by the definition of interoperability.) The lack of interoperability can be a consequence of a lack of attention to standardization during the design of a program. Indeed, interoperability is not taken for granted in the non-standards-based portion of the computing world.

According to ISO/IEC 2382-01, Information Technology Vocabulary, Fundamental Terms, interoperability is defined as follows: "The capability to communicate, execute programs, or transfer data among various functional units in a manner that requires the user to have little or no knowledge of the unique characteristics of those units".

Lack of interoperability can have important economic consequences. If competitors' products are not interoperable (owing to causes such as patents, trade secrets or coordination failures), the result may well be monopoly or market failure. For this reason, it may be prudent for user communities or governments to take steps to encourage interoperability in various situations.

Our goals in ODR interoperability are:

- To define a clear and simple European level ODR framework, based on common taxonomy and resolution models
- To make this available in different European countries

These main objectives raise the following issues, amongst others:

Open Questions

• What if a dispute owner wishes to move his dispute resolution process from an ODR provider to another ODR provider (competitor) saving his position and all the documentation? It is apparent that as yet there is little demand for such transfer – is this to do with the nature of the processes or are there barriers (technological, semantic, legal or regulatory) preventing such transfer?

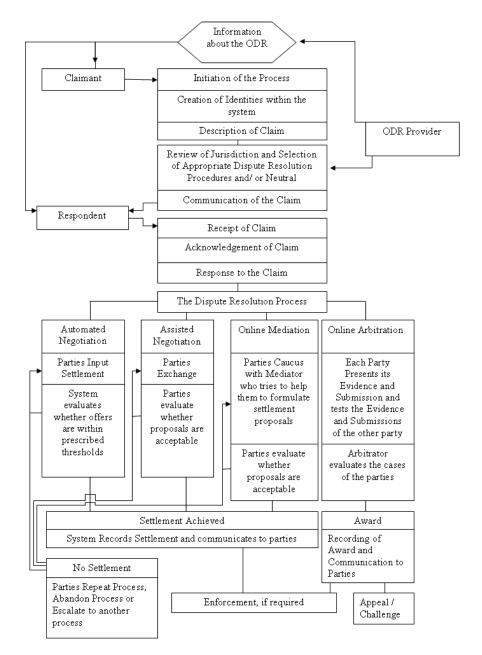
- What can be done to reduce time spent and costs in the processes?
- What scope is there for scalability (from automated negotiation to assisted negotiation, to mediation or arbitration); and should this be optional or mandatory?
- What is the state of interoperability between ODR and pre-dispute systems (customer complaints mechanisms, e-sales and e-contracting systems, etc) and post-dispute systems (enforcement and appeal mechanisms)?
- What is the state of interoperability between ODR and of line ADR procedures?

Interoperability is connected with process. The ODR process can be interoperable with external process, such as pre-dispute systems (typically provided by private companies), following defined best practices.

Also, as described in the "Typical Information Flow" above, the ODR process can provide internal progression between Automated Negotiation, Assisted Negotiation, Online Mediation, but not normally with Online Arbitration; if at the end of the single step there is no settlement between the parties, they can escalate to another process.

The ODR process can be interoperable with external processes, such as postdispute systems (enforcement and appeal mechanisms). All of these progressions between different steps of the process could be provided by different providers.

If the dispute owner moves to another ODR provider he should approve the integrity of information that he is migrating to the new system.



 $\textbf{Figure 1}. \ \textbf{ODR Typical Information Flow}$

3. Ontology

The main concepts of the ontology will be presented during the ODR workshop in Florence on December 13, 2008. The ontology defines the concepts, terminology and semantics of ODR in both business and technical terms, in order to:

- Create a foundation for further work in domain-specific areas,
- Enable communications between business and technical people,
- Enhance the understanding of ODR concepts in the business and technical communities,
- Provide a means to state problems and opportunities clearly and unambiguously, and
- To promote mutual understanding. And on the other hand it potentially contributes to model-driven ODR implementation.