

LEGAL SPECIFICATION PROTOCOL

A Project Summary

Oliver Goodenough, CodeX Affiliated Faculty; Director, Center for Legal Innovation and Professor of Law, Vermont Law School

September 3, 2017

The Need and Vision

In many domains of human activity, the application of electronic computing has made once-cumbersome tasks quicker and easier. The automation of portions of these legal and regulatory processes holds the similar promise of delivering faster and better service at lower cost. Existing public and private automation initiatives have made some progress in this, but they have been held back from delivering the full possible benefit by the lack of a widely shared protocol for expressing legal formulations in executable code.

The development of the Internet gives a useful comparison. In the early stages of linked digital interaction, there were a number of competing, siloed initiatives, AOL in the US and Mintel in France perhaps most prominent among them. These initiatives gave some service, but the full flowering of the Internet as a platform required establishing the Internet Protocol Suite, a set of shared conventions for representing and transmitting data that could be utilized and built upon by a number of different applications. We are at a similar crossroads in legal automation, where a number of competing, and often privately established, approaches exist for expressing and processing legal and regulatory formulas. Law, at its best, is grounded on shared, open access conventions, and to succeed fully, legal automation requires a similar foundation. Legal automation needs to get out of the AOL phase and on to the World Wide Web.

The time is right to make a concerted effort to develop an expressive Legal Specification Protocol (LSP), that will have the capacity (i) to capture the event space salient to legal formulations, (ii) to represent the computational and logical structure of legal specification and (iii) to allow the execution of the process and workflow imbedded in that structure to provide useful conclusions about contracting, compliance, and legal judgments.

In addition to the ability to accomplish these tasks, this protocol should enable relatively easy use by both legal professionals and the general public through accessible and well-designed user interfaces. It should also be designed, to the extent possible, with the possibility to interact with legacy systems and with the ability to grow to represent new formulations and to meet new needs. Interoperability and generativity are as important as expressivity for the protocol.

The LSP Development Project

Because of the public goods and coordination challenges inherent in this kind of general development project, the marketplace has been slow to create such an LSP. This is therefore a good target for

development through a collaborative process involving private sector actors, academic centers, philanthropy and governmental standard setters. The project can rely on steps already taken in projects such as Oasis' Legal XML, CALI's A2J Author, CodeX ComLaw initiative, and other public and private initiatives. We do not want to reinvent what can be usefully incorporated. That said, these initiatives have typically solved only portions of the problem, and haven't been designed with the full expressivity of broad-based legal specification in mind.

The project should be developed in stages. The key steps for this initiative involve:

- 1) a process of spec'ing out the needs of legal expression;
- 2) a survey of existing projects and approaches;
- 3) creating and convening a network of collaborating players, obtaining their input on 1 and 2, and seeking contributions of labour and of financial backing for the next steps;
- 4) building on 1, 2 and 3, the creation of the Legal Specification Protocol;
- 5) the creation of the user interface;
- 6) the creation of a platform on which 4 and 5 can operate; and
- 7) the dissemination of the language and platform to commercial, academic, governmental, and NGO users.

These steps cluster into three groups – stages 1-3 make an initial phase, 4-6 make a second phase, and 7 makes a final phase. We are kicking off the initial phase with a Working Meeting at Stanford Law School September 8 and 9, 2017, with a focus on computable contracting as a tractable opening case for the more general LSP effort. Contracts are relatively contained examples of legal specification, and offer the possibility of widespread adoption.

Nature of the Outcome

In addition to its technological capabilities, the LSP needs to meet social criteria to prove effective. To begin with, the LSP should be a public utility, not owned or controlled by any particular private or governmental entity. There is a long history of law operating best as an open-source system, where citizens, businesses, and governments can all access its rules and use its processes. That said, there should be room for private enterprise to make use of the LSP to create applications with commercial potential. Once again, the Internet provides a useful example. The basic architecture of the Internet is open to all for use; applications from Google to Facebook create proprietary layers on top of that architecture. This is an appropriate division of the differing public and private goods structures of protocols and applications.

Because of the public goods nature of the LSP itself, it cannot be expected to emerge from private, competitive businesses left only to their uncoordinated interest. A collaborative effort, with support

from academia, philanthropy and government as well as from industry, is the best option for achieving the goals of an LSP.

Support, Engagement, and Future Activities

The LSP project has benefitted from exactly this kind of mix. The support and engagement by the Ewing Marion Kauffman Foundation and the Legal Technology Laboratory program have permitted the September 2017 meeting to occur. These initial stages are also being hosted by Stanford University's CodeX Center for Legal Informatics, and have had the organizational participation of the Office of Financial Research of the U.S. Treasury, the University of Colorado Law School, and Vermont Law School.

Our goal is to broaden this base of support, both financially and at the organizational level. Conversations with such standard setting bodies as the National Institute of Standards and Technology have emphasized the importance of an iterative process, involving a wide range of stakeholders, that will require time, patience, and commitment to complete. In this initial phase, we are attending as much to building that process and the coalition that will participate in it as we are to the technical tasks of the specification itself. We are open to the possibility that the LSP could be taken on by one or more existing standard-setting bodies; some are already active in the field. We are also open to the possibility that it may continue as a separate initiative, involving a "coalition of the willing."

Next Steps

The immediate next step is the Working Meeting at Stanford. We anticipate in person attendance of approximately 50 people, and the remote attendance of another 30. The goals for this meeting are:

- The development of an initial working understanding of the "stack" of elements in the LSP, particularly as appropriate for computable contracting;
- The development of an initial working understanding of the elements in the data specification that will suit it for legal process automation;
- The development of targets for implementation in software applications;
- The organization of working groups that will tackle the elements of the stack and the targeted applications;
- The setting of next gathering(s) of the working process;
- The recruitment and commitment of additional leaders for work, funding, and convening.

Provided that we can meet most of these goals, we expect to emerge with a more developed plan for our next steps in the systematic achievement of the stages described above, as we modify them in light of insights gained as we go forward. At the very least, we anticipate setting a time and place for the next working convening in the process, along with some delegation of the preparatory steps for that convening among a broader group.

We will also be seeking greater clarity on the governance aspects of the process, which can vary from a government led model to a widely participatory privately led model, with many flavors possible in between. In the meantime, the current participants are seeing the process forward.