Title: Towards a Method for a Formal Analysis of Law

Academic team leader(s): Tom van Engers (University of Amsterdam)

Challenge:
Service providing organizations, either private or public, are increasingly working within a cross organizational setting. As a result they are confronted with more and more rules. These rules include external rules, coming from partner organizations. Much work has been done in recent years on agile ways of defining rules in IT-systems ('Rule-based or knowledge-based working', 'rule management', 'Knowledge as a Service' (KaaS)). However, no method exists as yet for guaranteed compliancy to the sources of law and other norm frameworks these rules are based on.

In 2012 IND and DTCA started their co-operation on the development of a method for a formal analysis of law, filling this gap. Our goal is to develop a method to support the 'translation' of legislation into specifications that can be traced back to the source of law from which they originate. Thus enabling the agile implementation of new legislation and policies. At the surface, the subject may seem a legal matter. However, a functional IT-system calls for thorough knowledge of the functions of the systems. In the case of public service providers this knowledge is stated in sources of law.

At present DTCA is experimenting with the development of software solutions for making sustainable annotations of sources of law and relating these to specifications for the services they implement. IND focuses on the fundamentals of legal analysis. At this point of our quest we would like to invite scientists from other disciplines to help us to broaden the scope of our activities and to propose new lines of research. Researchers from the disciplines of computational linguistics, ontologies and semantic web, IT design, legal informatics, agent role modeling, formal models of argumentation and evidential reasoning are especially invited to participate in this workshop.