

Senate Select Committee on Financial Technology and Regulatory Technology
ANSWERS TO QUESTIONS ON NOTICE
CSIRO
2021

QUESTION: Written question on notice

QUESTION.: 1

CSIRO has provided a range of information to the committee on 'Rules as Code' pilot projects and initiatives. Other submitters, namely QUT Law and LaTrobe LawTech, have called for the establishment of a Commonwealth government innovation hub for coding of legal rules and a regulatory sandbox to enable the implementation and assessment of results from trial projects.¹

Does CSIRO have any suggestions on the best structure for such an innovation hub and how it could operate?

ANSWER

The opportunity for Rules as Code is widespread across government agencies, jurisdictions, industry, and civil society. Federal government involvement in Rules as Code would be a key catalyst, because of the government's natural authority over legislation and regulation, in drafting, publishing, administering, and delivering services related to it.

A Rules as Code innovation lab would require sufficient resources to deliver more efficient and effective digitally-enabled operation of regulation across government and industry. Key stakeholders in the operation of an innovation lab might include CSIRO, OPC, DTA, and PM&C. These agencies, and other agencies and regulators such as Treasury and ASIC, should all be enabled and encouraged to actively participate in it. Prior to setting up an innovation lab, consultation would need to occur on its structure, activities, and priorities. This work should include relevant agencies, as well as the deregulation taskforce in PM&C, leaders of ASIC's regtech initiative, and previous leaders of the ad hoc inter-departmental Digital Legislation Working Group.

In addition to the key government participation, industry and a range of disciplines from academia should be involved in the activities of the Rules as Code innovation lab, potentially through a Rules as Code regulatory sandbox.

Policy experts, lawyers, legal drafters, researchers, software developers, and service providers all have perspectives that will be important to understand the space. Legal reasoning uses quite different theoretical principles to those underlying normal computing. Thus, expertise from University Law schools and from specialists in computational law (e.g CSIRO Data61) is important to support development and progress in accurate and scalable modelling of the law. Industry involvement will be important to integrate, apply, and benefit from the outcomes of Rules as Code work, as they can develop the systems and apps that can be used in government, industry, and society.

Activities of the innovation lab would include pilot projects to test the Rules as Code approach and development of frameworks to evaluate and monitor Rules as Code activities.

These activities would cover the definition of administrative approaches for the publication and maintenance of Rules as Code models by government, and support for agencies that begin to adopt Rules as Code as part of their “business as usual”. Pilot projects would explore and demonstrate Rules as Code approaches in government including:

- the drafting of new law, scaling the approach to larger bodies of law;
- ongoing improvements to the speed and accuracy of creating and validating models of the law; and
- technologies to deliver services and digital functionality using the Rules as Code models.

The above is necessary because whilst the creation of models of the law using a Rules as Code approach is clearly known to be feasible, there is currently less established knowledge about the ongoing governance and administration of Rules as Code in practice. The work would be important to knowledge development within an innovation hub.

A Rules as Code regulatory sandbox could be operated by the innovation lab. The role of a regulatory sandbox would be to control expectations and risk to both government agencies and other participants while carrying out innovation trials to demonstrate the practice and practical benefit of the Rules as Code approach.

QUESTION.: 2

Does CSIRO have any further comments on how the Commonwealth Government can progress the implementation of Rules as Code initiatives, in addition to the comments in CSIRO’s December 2020 submission?

ANSWER

In addition to our earlier comments, we note that the implementation of Rules as Code as “business as usual” in government would require the development of skills, administrative approaches, governance approaches, and policy approaches in the public service. These aspects of capability are not yet widely established in government nor in industry but could be developed through the activities of a Rules as Code innovation hub as set out in the previous question. CSIRO’s previous experience, along with others’ experiences internationally, indicate that this kind of capability development should be achievable.

In particular, the CSIRO belief is that the work of using the Rules as Code approach to creating and validating digitally enabled models of the law can, with training, be done by legal experts such as lawyers and regulatory experts. In practice, the use of multi-disciplinary teams combining legal experts and software experts is expected to be helpful, to balance views and benefit from the diverse expertise.

¹ See Responses to questions on notice, Numbers 53 and 54, at: [Additional Documents – Parliament of Australia \(aph.gov.au\)](https://aph.gov.au/Additional-Documents-Parliament-of-Australia)