CARR Seminar: 3 Feb 2015

Regulating fire safety building approval: expertise asymmetry and performance based design

Abstract

Regulation of fire safety is shifting from a prescriptive approach to one based on performance based design (PBD). Whereas prescriptive regulation only requires regulators to adjudicate on matters of rule compliance (e.g. whether stairway doors have a suitable fire resistance rating), PBD regulation depends on adjudication of techno-scientific knowledge claims (e.g. whether people have time to evacuate via stairways in case of a fire). However, because regulators typically have lower levels of this type of knowledge than those regulated, the resulting expertise asymmetry calls into question regulatory efficacy. This puts the onus on fire engineers to act as competent and ethical professionals, but there are doubts about whether the profession as a whole has yet achieved this status (and indeed whether it ever can).

Graham Spinardi is Ove Arup/Royal Academy of Engineering Senior Research Fellow in Integrating Technical and Social Aspects of Fire Safety, Science, Technology and Innovation Studies, University of Edinburgh. Most of his previous research has been on military and aerospace technology. Recent publications include "Up in the Air: Barriers to Greener Air Traffic Control and Infrastructure Lock-in in a Complex Socio-Technical System", *Energy Research & Social Science* (2015), "Technical Controversy and Ballistic Missile Defence: Disputing Epistemic Authority in the Development of Hit-to-Kill Technology", *Science as Culture* (2014) and "The Limits to 'Spin-off': UK Defence R&D and the Development of Gallium Arsenide Technology", *British Journal for the History of Science* (2012).