

IAF SYMPOSIUM ON COMMERCIAL SPACEFLIGHT SAFETY ISSUES (D6)  
Commercial Spaceflight Safety and Emerging Issues (1)

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UK REGULATORY REFORM – ENABLING COMMERCIAL SPACEFLIGHT FROM THE UK BY  
THE EARLY 2020'S

**Abstract**

Driven by UK Government's commitment to space growth described in its National Space Policy, the UK must be ready to license its first domestic commercial launches as early as 2020. The advent of the Space Industry Bill means the UK Government's regulatory powers over spaceflight activity have increased significantly. The UK Space Agency, together with its co-regulators, the Civil Aviation Authority and the Health Safety Executive, have been developing a new regulatory framework and licensing service to support the first commercial spaceflight operators.

There have been many challenges in the development of the framework for the UK, as well as the demanding timeframe set by UK ministers in the policy. This paper describes some of these challenges, how the UK has risen to them and the architectural and engineering techniques being used to create regulations that are proportionate, consistent, structured, responsive and enabling.

Specifically, the paper will cover how the framework is addressing:

- International obligations: The Space Industry Bill has been created to ensure that future UK operators meet their obligations under the international treaties, conventions and regimes associated with sub-orbital and orbital activity.
- What will be regulated: A critical element to enabling launch is the establishment of a UK regulator for spaceflight activity and an operating model for licensing, oversight, compliance and enforcement of the UK legislation.
- Partner organisations: The UK has a number of established regulators working across a number of domains and countries. A challenge of regulating spaceflight is that it touches many different regulatory domains, so establishing a streamlined interaction between these organisations will be critical.
- Innovation: To attract new space actors and maintain innovation, the UK government wants a responsive and pragmatic approach to the regulation of space activities in terms of interpretation and implementation of these obligations. Applying established risk management techniques together with new end-to-end safety management processes and providing a "single front door" for operators into regulation through digital services.

The paper will provide preliminary insight into the regulatory framework that is being established in the UK to oversee launch from the UK. This will include an overview of the process (application phases), license types, access by prospective operators/service providers and a provisional timeline for its implementation.