

# What drives change in international civil aviation and maritime regulation?

## - A historical perspective

*Foundation paper for the Regulation 2025 strategy project*

### Purpose of the foundation paper

This paper considers the key regulatory changes made by the International Maritime Organization (IMO) and International Civil Aviation Organization (ICAO). It analyses the key trends that have driven these regulatory changes, and outlines reasons for these trends. Starting with the formation of these two organisations, this paper follows their expanding scope and regulatory models.

### Context

- ▶ The international context of the aviation and maritime sectors necessitates globally consistent regulation. New Zealand relies on other countries to regulate their airlines and shipping lines effectively, and is responsible for maintaining an effectual management system of our own.
- ▶ The IMO and ICAO are the international technical regulators of the maritime and aviation sectors. The IMO develops international treaties that member states must comply with if they are a signatory. ICAO sets standards and recommended practices. ICAO standards are mandatory whereas recommended practices are guidelines.

### Key themes

- ▶ The IMO and ICAO establish technical regulations while leaving the responsibility for economic regulation to Member States.
- ▶ Due to the international nature of both organisations, adoption or amendment to international regulations operates at a slow pace, and is generally reactive rather than proactive. This will become even more of an issue as new and different technologies emerge.
- ▶ International regulatory change is predominantly caused by external shocks, such as terrorist attacks or environmentally damaging events that create public outcry, particularly in leading nations such as the United States.

### Emerging findings

The IMO and ICAO are similarly structured. Both organisations are empowered to establish technical requirements while Member States are responsible for implementing these into their national laws. Both organisations facilitate the cooperation between Member States. As these organisations do not have enforcement powers, implementation of international regulations can be difficult. Inconsistency between implementation occurs in each industry. International organisations have come up with unique ways for managing the pace of change and implementation issue, such as the tacit acceptance regime used by the IMO, whereby Member States must opt out of amendments to conventions, rather than actively agree to them.

Drivers of regulatory changes are often intertwined and thus difficult to separate. Historically, events causing loss of life or environmental damage that create public concern drive IMO and ICAO to reactively respond. This common reactive response could be due to the governance of these organisations and the international coordination required to create or amend new regulations. As neither of these restrictions is likely to change, international organisations are likely to continue reactively responding in a similar manner in the future.

Some adverse events have caused more regulatory response than others, which may be due to the nature of the event, society's appetite for change, or the power of the individual nation affected by the event.

Powerful countries, such as the United States and United Kingdom, drive regulatory change at an international level, as well as at a national level. The regulatory response to the September 11, 2001 terrorist attack was an immediate tightening of aviation security regulation by the United States, which all other nations flying to the United States were required to implement. Hindsight has identified that some of these changes may have been "knee-jerk" and heavy-handed. It also raises a question regarding the regulatory response if the tragedy had not have occurred in the United States, or another powerful nation, but a smaller developing country. Would nations automatically amend their national regulations if they were not impacted by the event?

Broadly, the three key players driving regulatory change are society (their response to external shocks), industry, and the regulator itself. Society creates expectations for regulatory change because of highly publicised adverse events causing death or environmental change (for example, the grounding of the *Exxon Valdez* or the recent aviation incidents). In turn, this affects the role of the regulator, who is pressured to amend and/or create new regulations in response. Regulators are also pressured by industry, whose costs are affected by proposed regulatory changes, such as the proposal to more closely track aircrafts in flight.

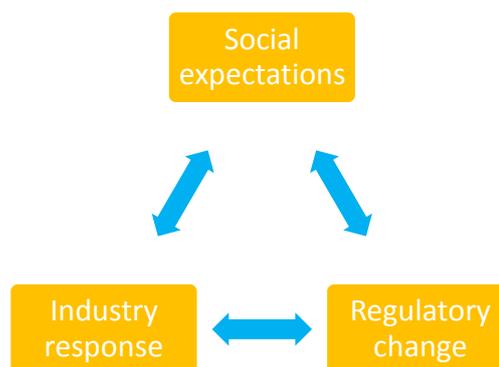


Diagram 1: the relationship between the three key players

The nature and pace of regulatory change may depend on the role and power of each of the three players. The international context of civil aviation and maritime industry exacerbates this relationship. Diagram 1 illustrates this relationship.

There is usually a delay between a new technology or an incident and a regulatory response. The sinking of the Titanic in 1912 helped spur the formation of the 'International Convention for the Safety of Life at Sea' (SOLAS), generally regarded as the most important maritime treaty on the safety of merchant ships. It took from 1914 until 1974 for SOLAS to gain its current form.

Similarly, Remotely Piloted Aircraft Systems (RPAS) have been on the market for several years but are not subject to international regulations. RPAS are an example of nations amending their regulations ahead of ICAO developing standards and recommended practices. There is currently no international uniformity of RPAS rules, due largely to the rapid evolution of technologies and variability of systems. The lack of proactive regulatory change by international organisations might play to the advantage of small nations such as New Zealand. There is a potential for New Zealand and other small nations to become test beds for innovative technology, and influence the development of international rules through their experience.

## Conclusions

IMO and ICAO play significant roles in the regulation of their respective industries. Regulatory responses are predominantly due to external shocks; however, shifts in societal expectations and technological innovations also drive regulatory change. While international coordination between Member States may hinder the pace of change to regulations, it also provides smaller countries, such as New Zealand, with an opportunity to create innovative national regulations or to showcase itself as a test bed for new technology, thereby influencing the development of international rules.

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