



| ICAO | UNITING AVIATION

Lithium batteries workshop

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Why are we here?



An overview

- RASG-APAC/4-WP/16
 - “Lithium batteries – the need for appropriate action”
- FAA research
- ICCAIA involvement
- Who needs to do what.....



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UNITING AVIATION

ICAO's role in the safe transport of lithium batteries by air



ICAO and dangerous goods

- Background on ICAO
- Dangerous goods defined
- Why are rules necessary
- International regulatory framework
- ICAO and Annex 18



ICAO and its Role

The **International Civil Aviation Organization (ICAO)** is a UN specialized agency, created in 1944 upon the signing of the *Convention on International Civil Aviation* (Chicago Convention).

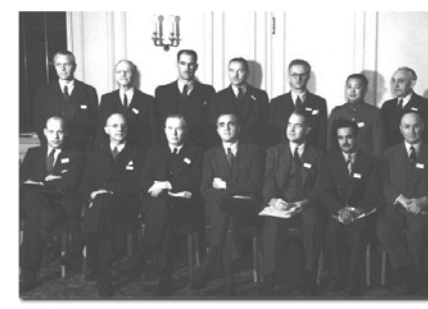
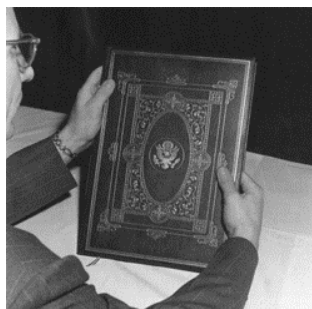




The **Chicago Convention** was signed on 7 December 1944

52 States
1944

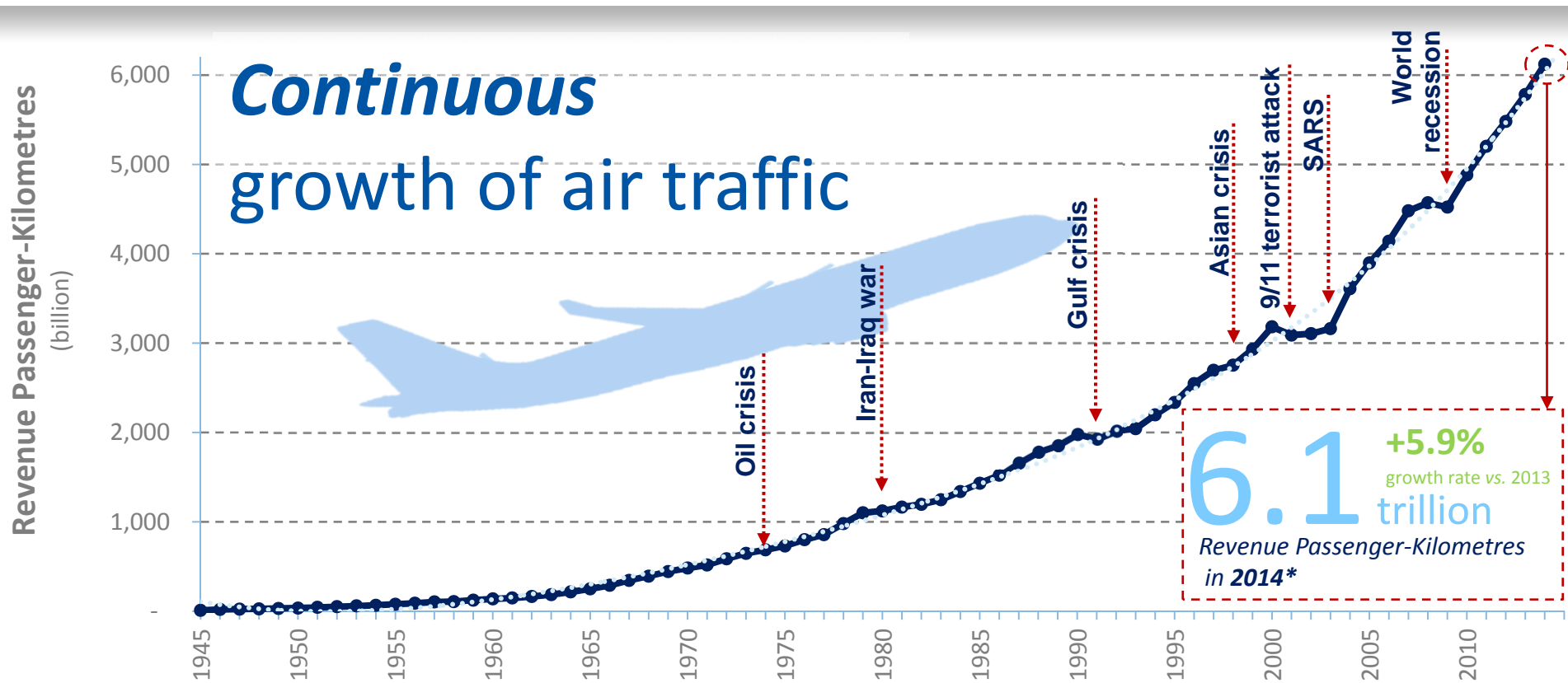
191 States
2015





ICAO — Raison D'être

- The safe and orderly development of international civil aviation
- States work through ICAO to form agreements on the minimum Standards that must be met for safe, secure, efficient and “green” international aviation
- Nineteen Annexes to Chicago Convention
- Annex 18 — *The Safe Transport of Dangerous Goods by Air*

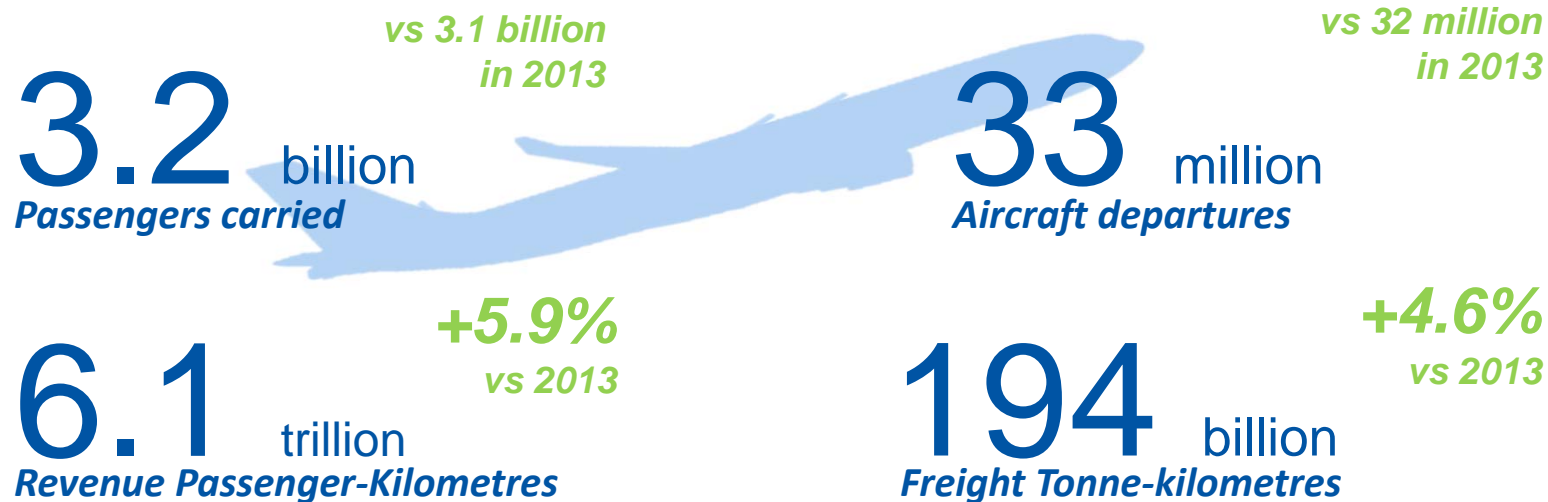


Note: world total scheduled services

*preliminary figures



Air Transport in 2014*



Note: world scheduled services

*preliminary figures



International Civil Aviation Organization



ICAO Member States (191)



ICAO Assembly



ICAO Council



Air Navigation Commission

Dangerous Goods

- Articles or substances capable of posing risk to:
 - Health
 - Safety
 - Property
 - Environment





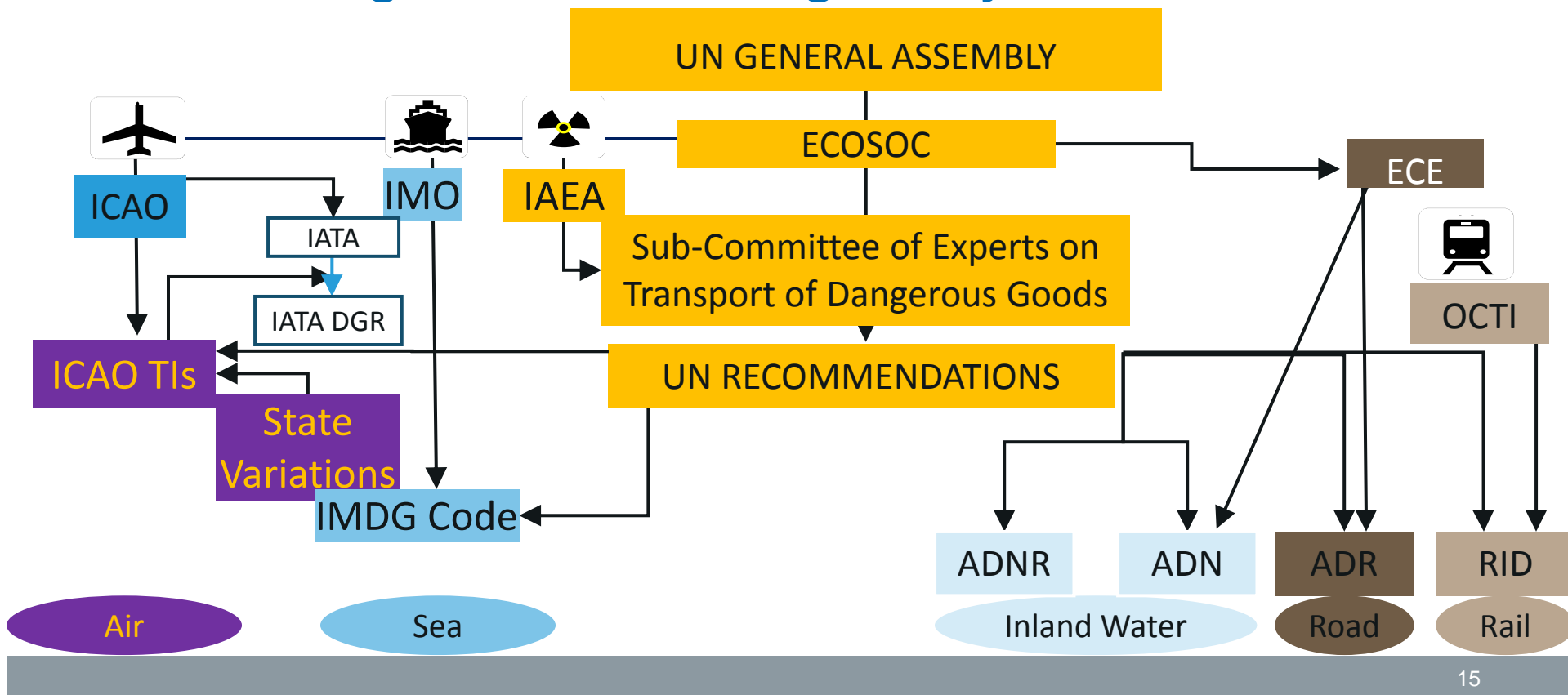
Why Rules are Necessary

- 11 May 1996
- Florida Everglades
- 110 fatalities
- Fire, loss of control
- Chemical oxygen generators improperly prepared, packaged and identified



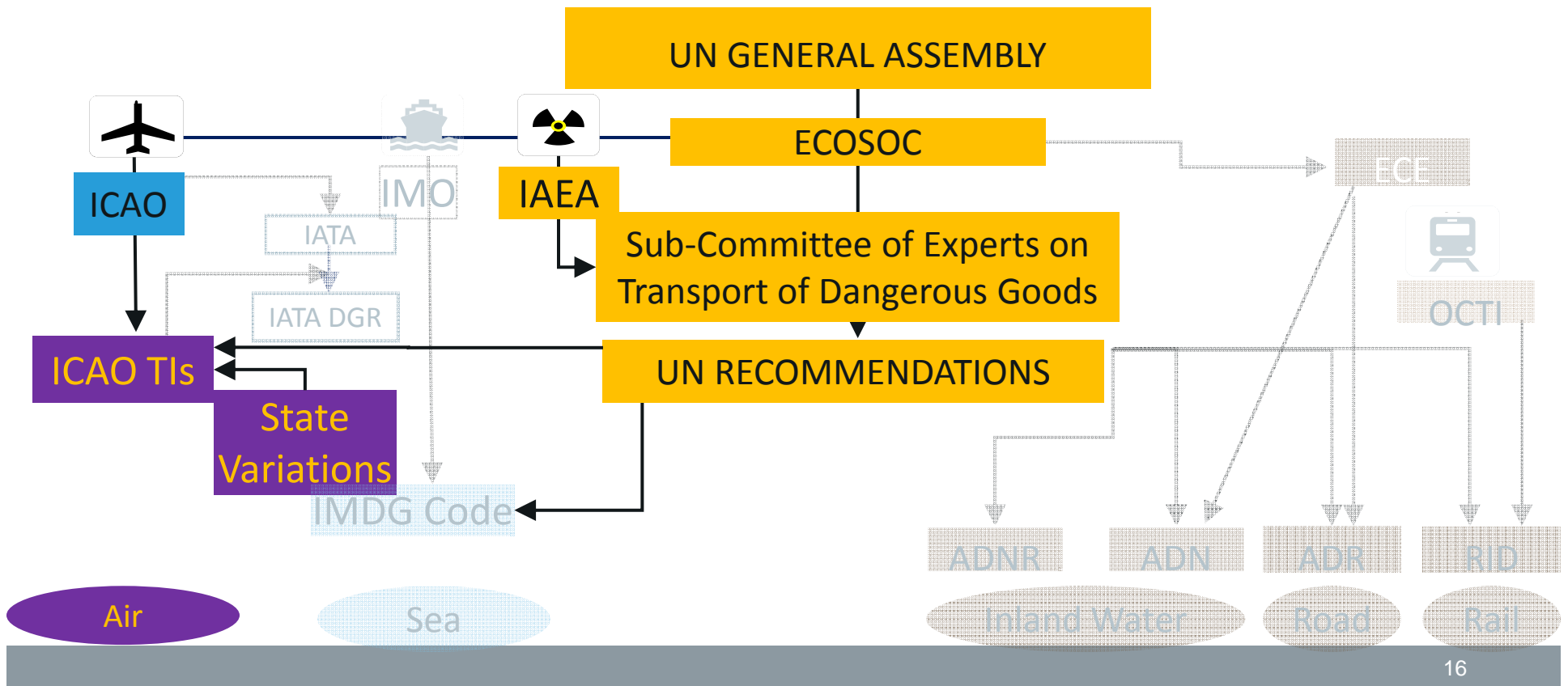


Dangerous Goods Regulatory Framework





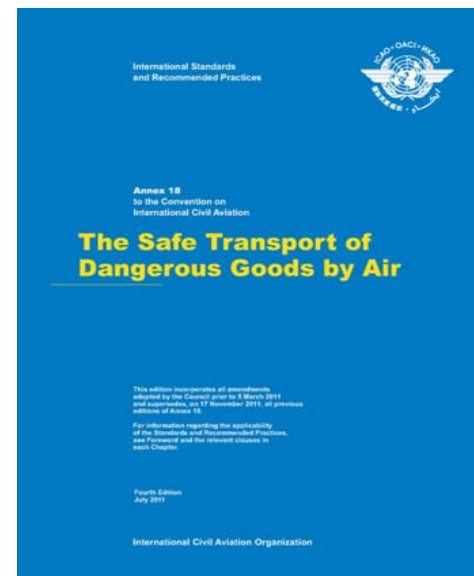
Dangerous Goods Regulatory Framework — Air Mode





Annex 18

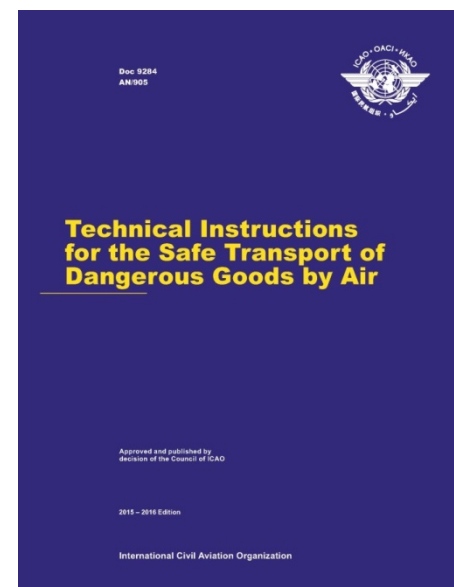
- The Safe Transport of Dangerous Goods by Air
 - “The Standards and Recommended Practices of this Annex shall be applicable to all international operations of civil aircraft.”
 - “Each Contracting State shall take the necessary measures to achieve compliance with the detailed provisions contained in the Technical Instructions.”





Technical Instructions

- Technical Instructions for the Safe Transport of Dangerous Goods by Air (Doc 9284)
- Issued every two years to reflect UN cycle
- Multimodal harmonization and facilitation aspects of transport





What's in the Instructions?

- Classification based on hazard
- Package = packaging plus contents
- Hazard communication
 - Labelling of package
 - Documentation
- Safety is at the package, not aircraft, level



WHAT'S SPECIAL ABOUT LITHIUM BATTERIES?