



# REGIONAL AND GLOBAL GNSS LEGAL ISSUES: AN ATM VIEW

**Roderick D. van Dam**  
**Head of Legal Service**  
**EUROCONTROL**

## Satellite Technology

- Multiple providers, extra territorial ownership and control, multi-purpose and multi-modal
- Complex legal and institutional issues
  - operating structure
  - liability
  - certification
  - etc.
- Need for a proper legal framework

## ICAO World-wide CNS/ATM Systems Implementation Conference

- Endorsed the central role of ICAO towards the implementation of a long-term global civil GNSS system by developing technical and operational SARPS
- Recognised the importance of regional solutions
- Expressed its support for the adoption of the draft Charter as an Assembly Resolution as an interim solution while advocating further consideration of the development of a draft international convention governing the long-term legal framework.

## ICAO 32nd Assembly

- Adoption of the Charter on the Rights and Obligations of States relating to GNSS Services. (Resolution 34/1)
- Adoption of Resolution 34/2, entitled Development and Elaboration of an Appropriate Long-term Legal Framework to Govern the Implementation of GNSS
  - recognises the importance of regional initiatives;
  - start of a Secretariat Study Group

# ICAO Charter

Principles to be followed for the implementation and operation of GNSS:

- Safety of international civil aviation;
- Access on a non-discriminatory basis to all States;
- Responsibility of States and sovereignty recognised;
- Continuity, availability, integrity, accuracy and reliability of GNSS services;
- Article 15 of the Chicago Convention;
- Joint services.

## ICAO 33rd Assembly

The report of the Legal Commission which was to be adopted by the Plenary contained the following conclusions:

- to carry further work on the legal aspects of CNS/ATM systems as to finalise the concept of a contractual framework for CNS/ATM as an interim framework and provide a path forward its implementation, including the consideration of an international convention, having regard to the following guidance to:
  - be mindful of States' reliance on others to provide all or part of their CNS/ATM services;

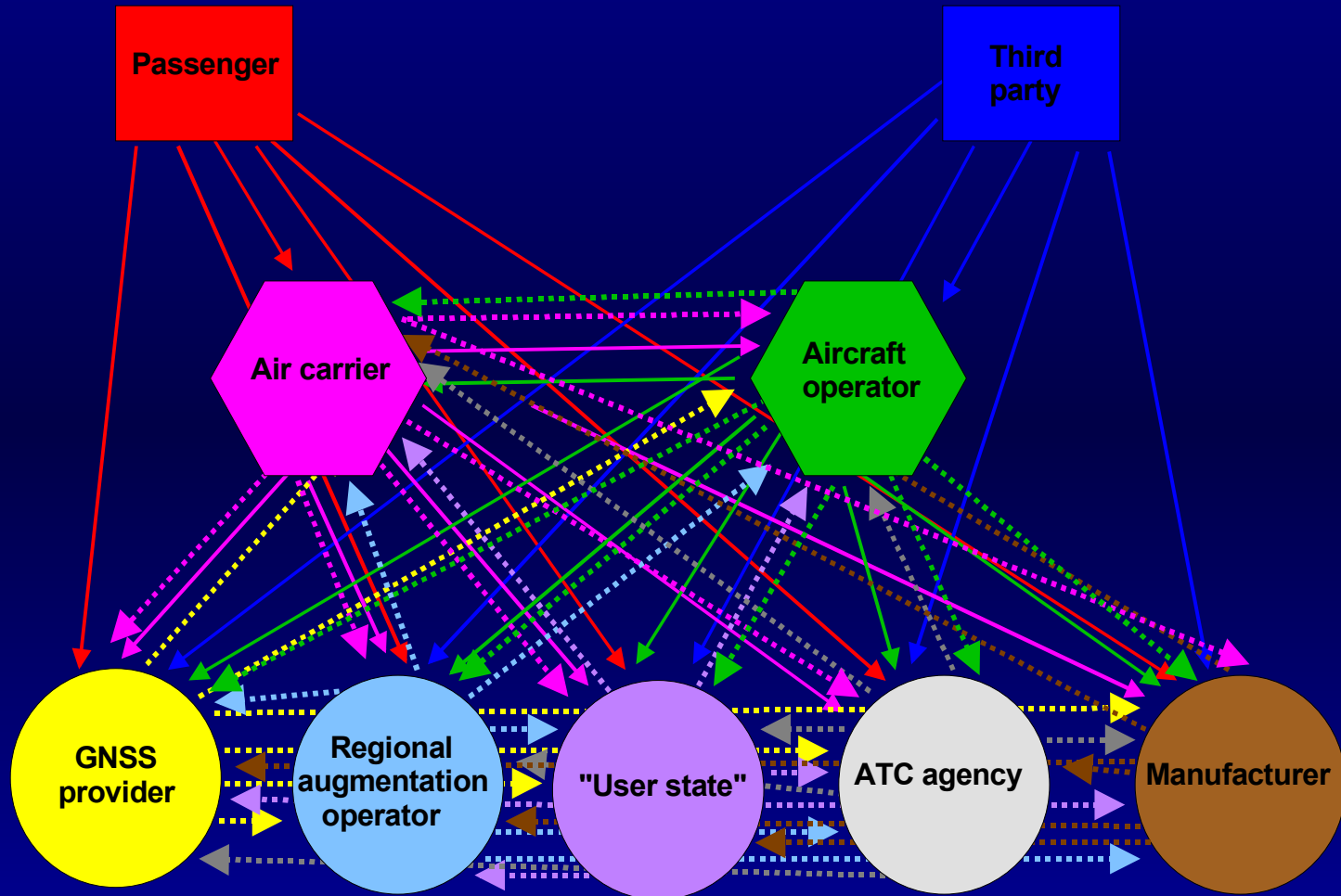
## ICAO 33rd Assembly

- Consider carefully the kinds of relationships States should have with providers of services and elements of services; and
  - Ensure that States retain full responsibility under the Chicago Convention for services provided on their behalf;
  - Include a review of the security aspects and prevention of unlawful interference with CNS/ATM;
  - Indicate that further work to be done, including the consideration of an international convention;
- No Assembly Resolution was adopted concerning the legal aspects of CNS/ATM.



## GNSS Interface Concept at Regional Level

- Need for an interface between the various actors
- Actors:
  - Global: Primary Signal Provider
  - Regional: Augmentation Signal Providers  
GNSS Service Providers  
User States
- Identified need, at regional level, for an “Entity”, a focal point to ensure the operation of the overall system via the necessary contracts



# Contractual Framework

- Contractual Framework: the link for the safe use of air navigation services to the operation of the overall system and its components by a series of contractual arrangements
- Ensure that the overall infrastructure guarantees the delivery of a signal-in-space which satisfies operational requirements (accuracy and reliability, including integrity, availability and continuity of service).

# ICAO Secretariat Study Group

- Established further to the 32nd Assembly
- Reported on the viability of a GNSS Institutional Framework
- Mandated to continue the development of the Contractual Framework and a long term Legal Framework for GNSS



# Long Term GNSS Developments in Europe

- GALILEO
- Scenario adopted will have to be in line with the ICAO Global Air Navigation Plan
- Development of a long-term legal framework *i.e.* an International Convention, continues

## The liability of States allowing the use of GNSS - Article 28 of the Chicago Convention

- Article 28 provides that States undertake to provide in their territory, airports and air navigation facilities in accordance with ICAO SARPs.
  - State may delegate this provision function to another entity. However, States continue to be responsible under Article 28 regardless of the delegation.
- With the advent of GNSS, part of the air navigation support will no longer be provided by domestic ANS providers; GNSS signal provider will be a foreign entity or an international organisation.

## The liability of States allowing the use of GNSS - Article 28 of the Chicago Convention

- On the basis of Article 28, what are the potential civil liabilities of a non-provider State which allows GNSS to be used for the purpose of providing air navigation services?
- Potential Liability of the aviation safety regulator
  - Ultimately liable?
  - Liable only when it has failed to exercise its regulatory and supervisory duties?
  - Not liable if it has formally forbidden the use of GNSS as means of navigation over its territory?

## Future CNS/ATM Convention

- Acceptance of:
  - ICAO CNS/ATM policy
  - GNSS Charter
  - SARPs
  - Relevant Conventions

# Future Convention

- Service availability e.g. guarantee of continuity, notice of unavailability
- Liability
  - No claim of sovereign immunity allowed
  - Fault based or strict liability?
  - Exemptions
- Compensation
- Compulsory Insurance or International Fund?
- Jurisdiction and recognition of judgements
- Applicable law
- Dispute settlement / arbitration