

The background features a large, semi-transparent watermark of the ICAO logo. The logo consists of a globe with latitude and longitude lines, flanked by two stylized wings. The globe is centered on the Atlantic Ocean. The text 'ICAO' is written in a large, light blue font across the top of the globe, and 'OACI' is written across the bottom. The Chinese characters '国际民航组织' are written in a light blue font along the bottom edge of the globe. The entire logo is set against a dark blue background.

Data Exchange Standards A Global Perspective

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Washington, DC, USA**

OVERVIEW


- ⇒ **About ICAO**
- ⇒ **ICAO AIS-AIM work programme**
- ⇒ **Making an ICAO Standard**
- ⇒ **Plan for a Global Aeronautical Information Exchange Standard**
- ⇒ **Conclusion**

ICAO

- ⇒ **Convention (Chicago, 1944) and Annexes**
- ⇒ **UN Specialized Agency**
- ⇒ **190 Contracting States**
- ⇒ **Assembly (ordinarily every 3 years)**
- ⇒ **Council – 36 States**
- ⇒ **Air Navigation Commission – 19 members**
- ⇒ **Air Navigation Bureau**
- ⇒ **Standards, Recommended Practices**

ICAO Regional Support



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ICAO AIS-AIM WORK PROGRAMME

OBJECTIVE

ISSUES

KEY ELEMENTS

OBJECTIVE

Provision in real-time of accredited and quality-assured information to any ATM user, anytime, anywhere, that will allow and support decision-making processes.

国际民航组织

ISSUES

- ⇒ **Data-dependant present and future navigation and ATM systems**
- ⇒ **Require access to global broad-based aeronautical information of higher quality and timeliness than now available.**
- ⇒ **Product centric AIS will not meet new requirements arising from the ICAO ATM Concept**
- ⇒ **Essential to transition to data centric AIM**

KEY ELEMENTS

- ⇒ 1) **Global Strategy/road map document**
- ⇒ 2) **Provide and promote standard aeronautical information conceptual and exchange models**
- ⇒ 3) **Other Annex amendments to support digital requirements**
 - **eAIP, electronic charts, use of GIS**

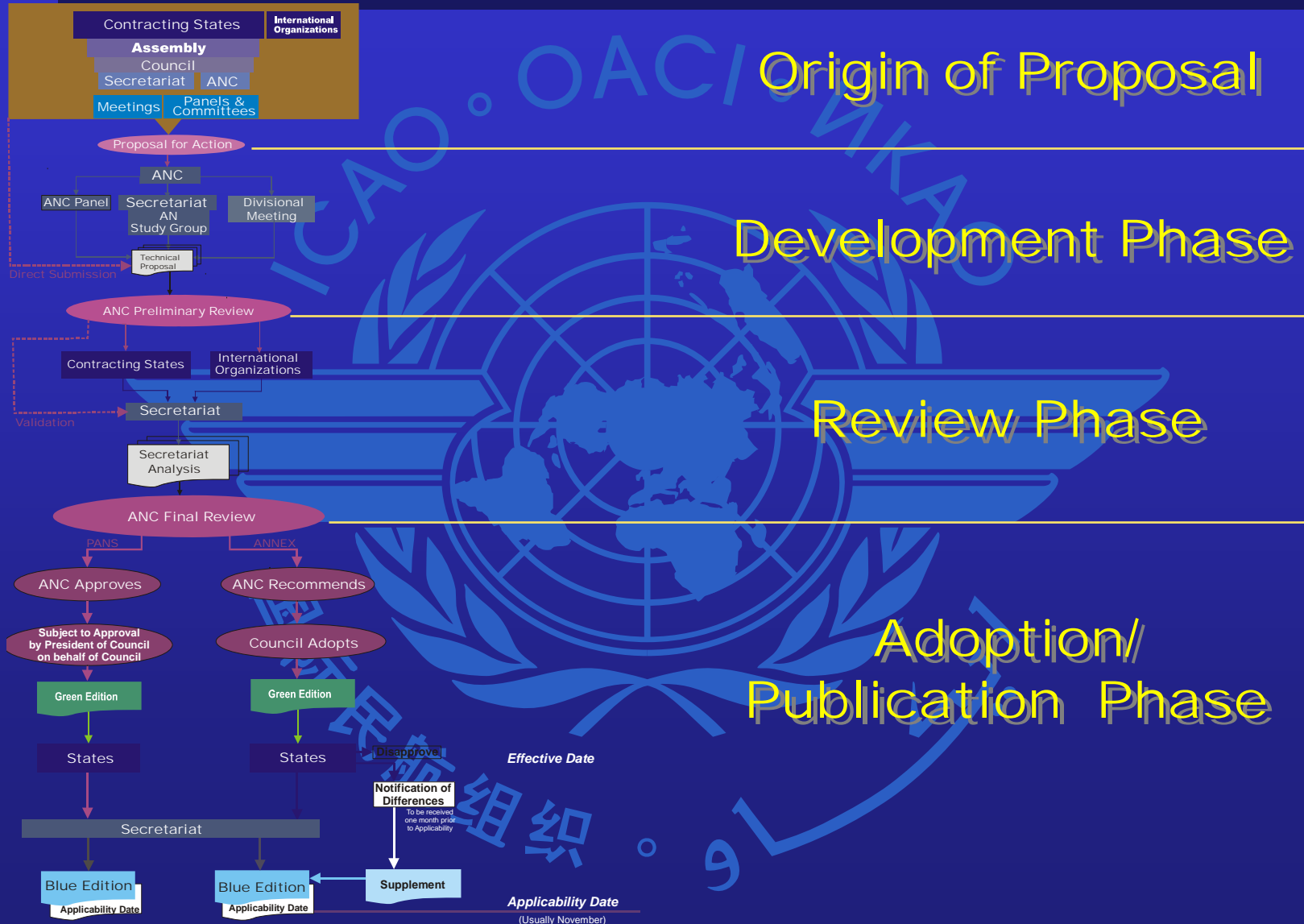
KEY ELEMENTS

- ⇒ 4) Implementation of existing Annex 15 provisions
 - quality management and automation
- ⇒ 5) Definition of human resource requirements
- ⇒ 6) Legal and institutional issues

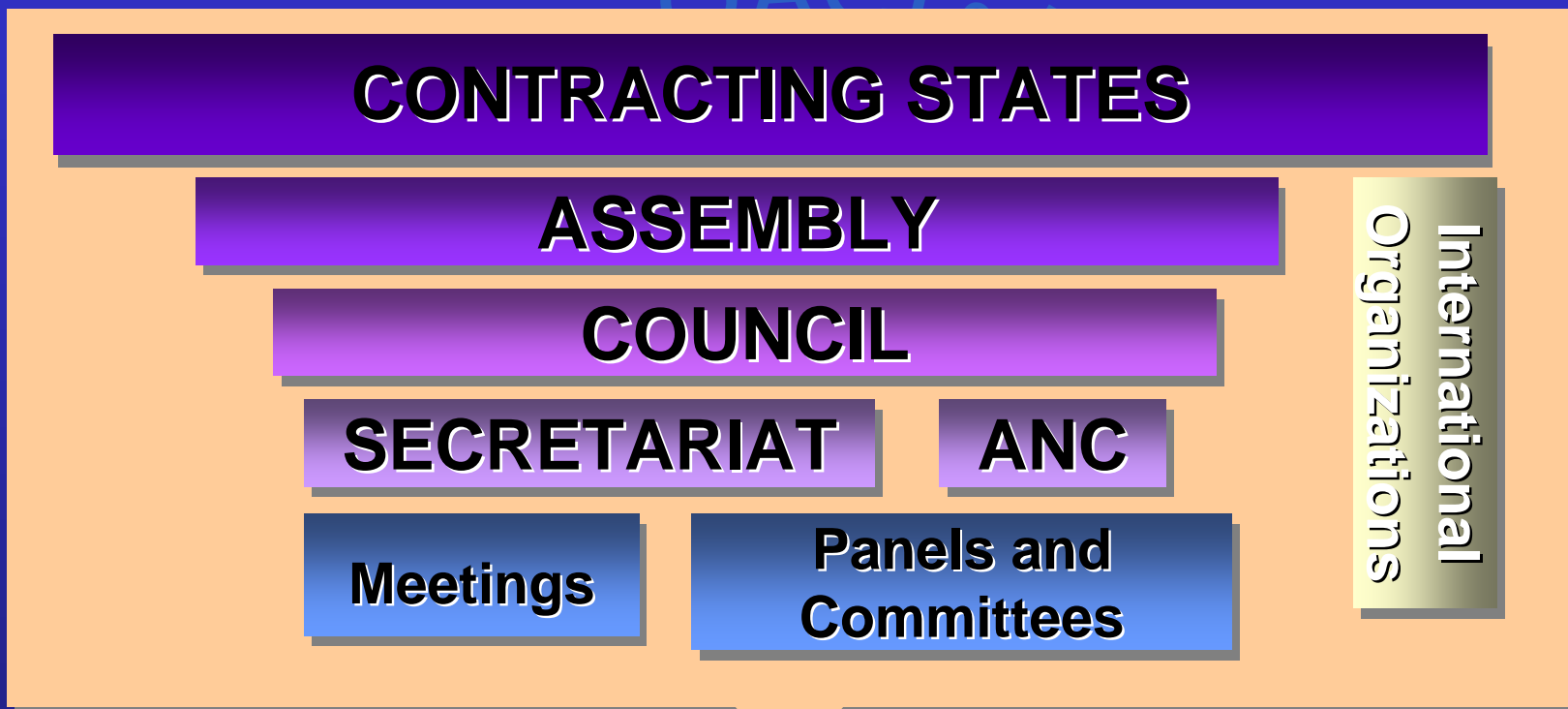
国际民航组织

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Making an ICAO Standard

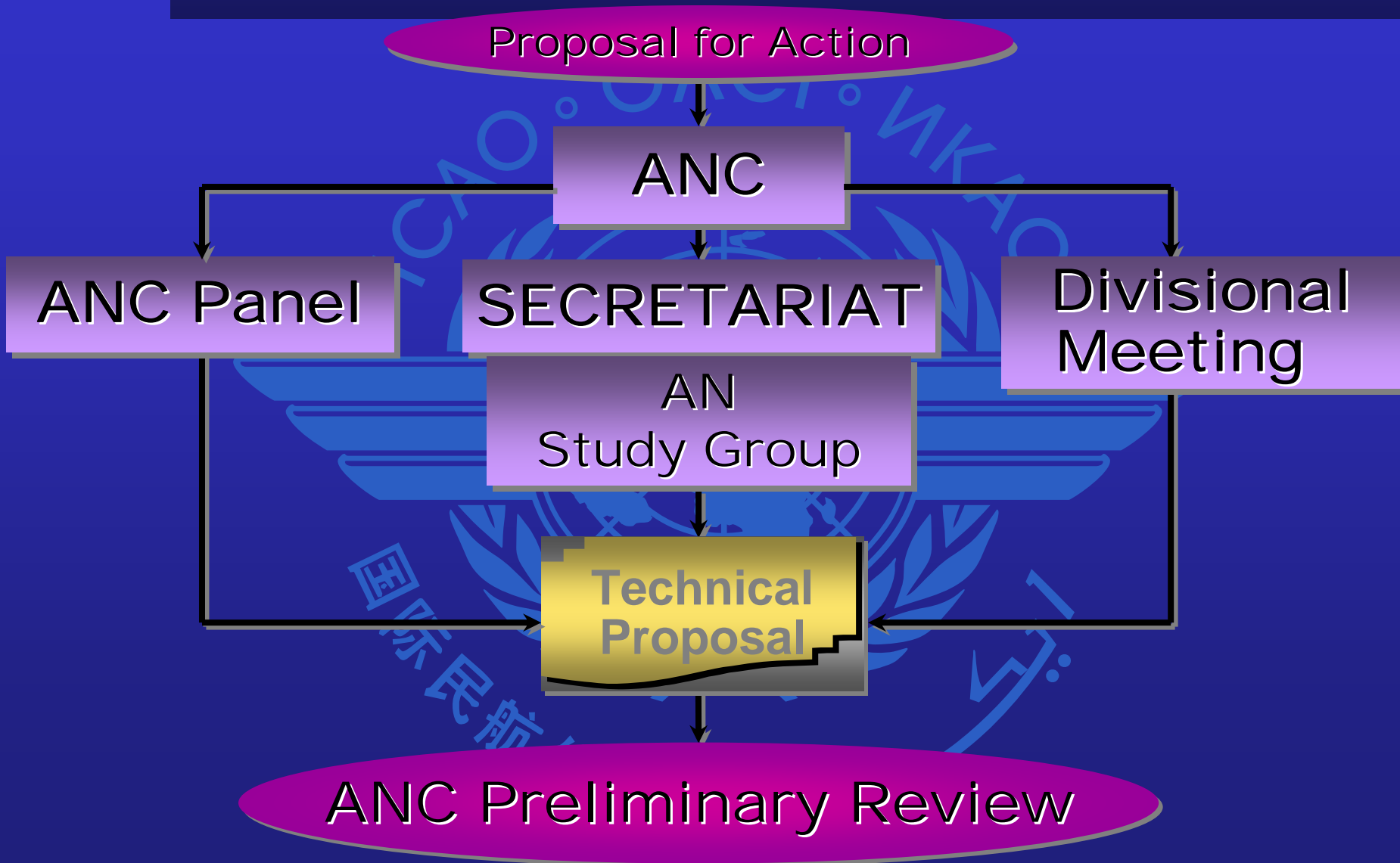


Origin of Proposal

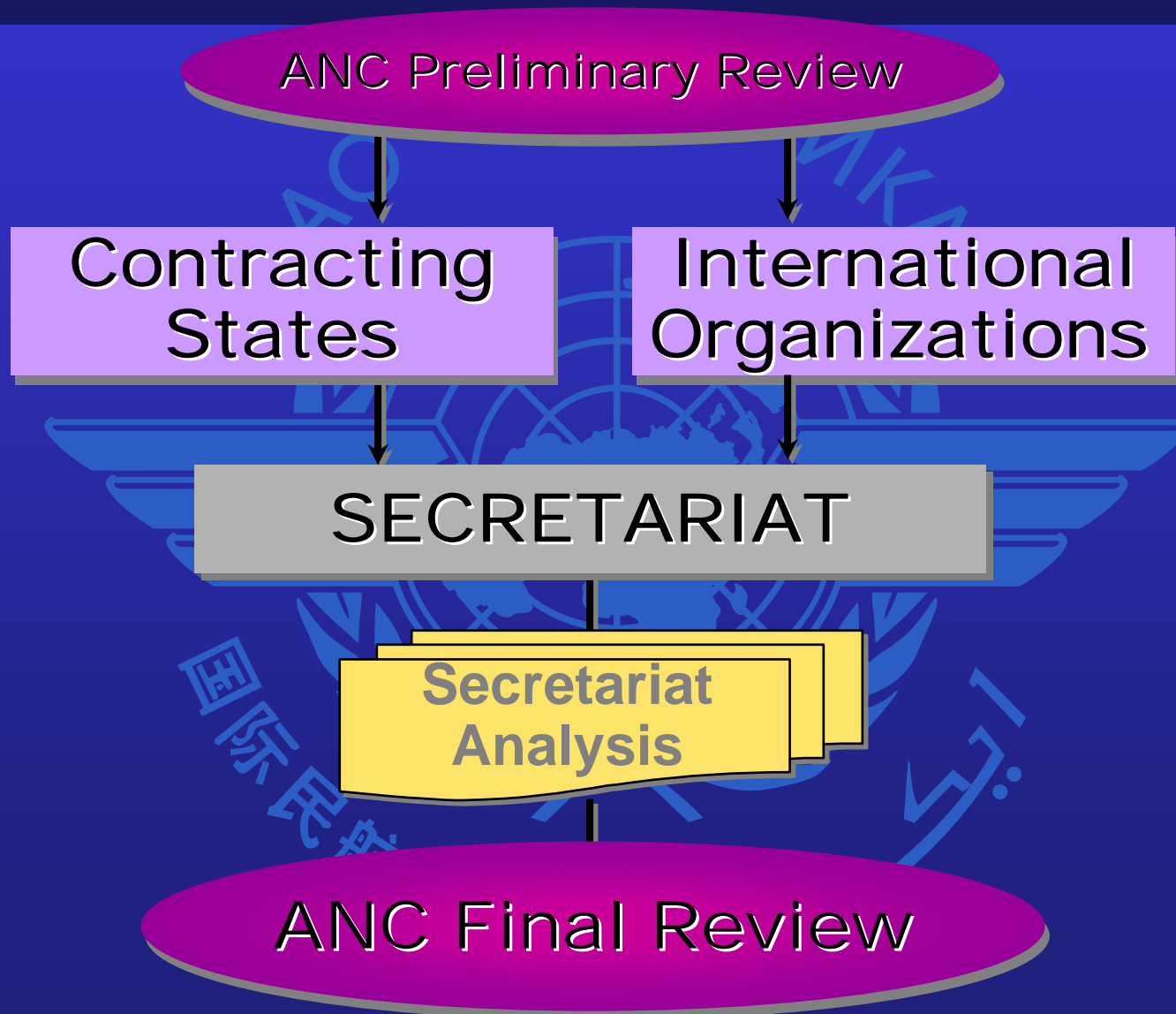


Proposal for Action

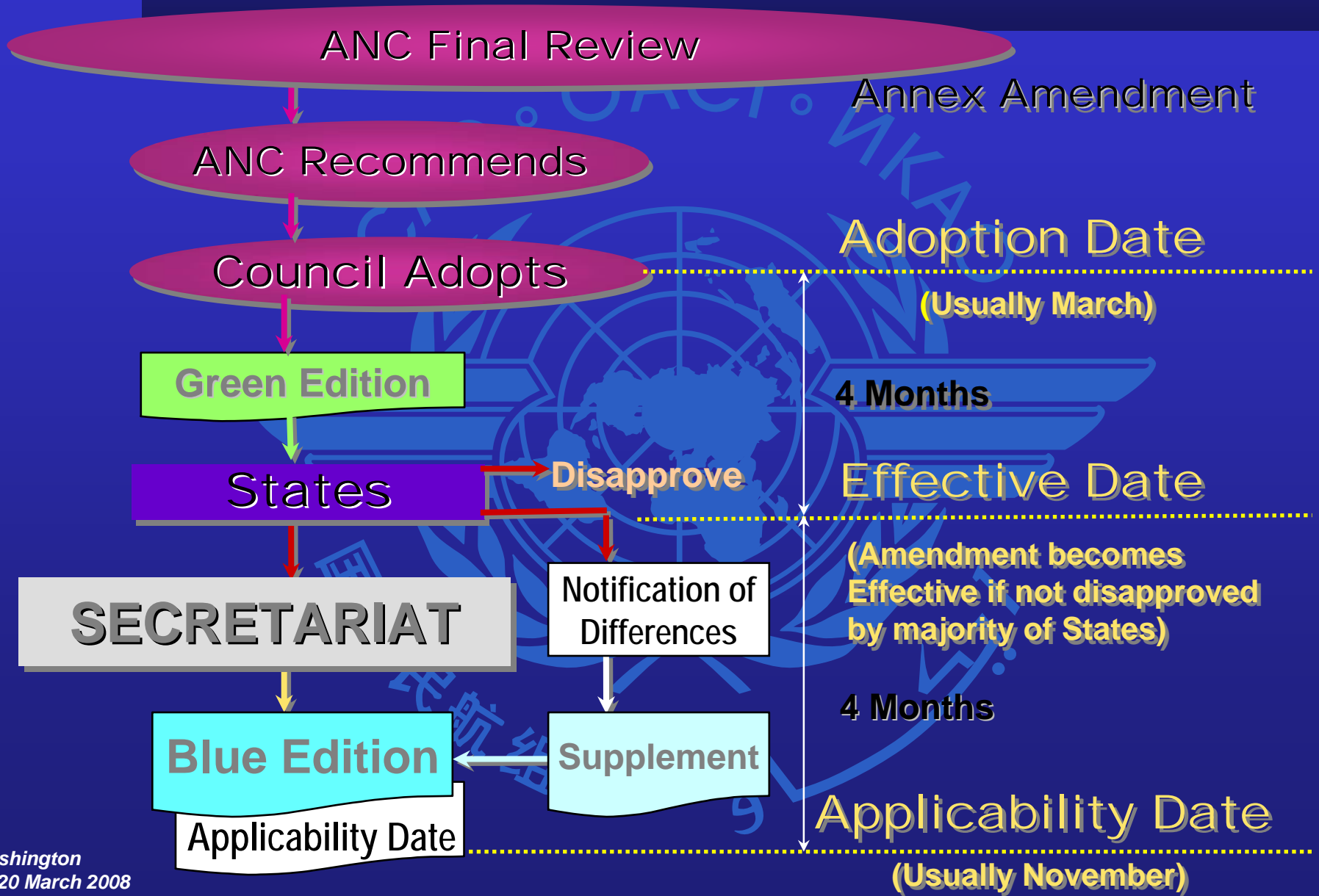
Development Phase



Review Phase



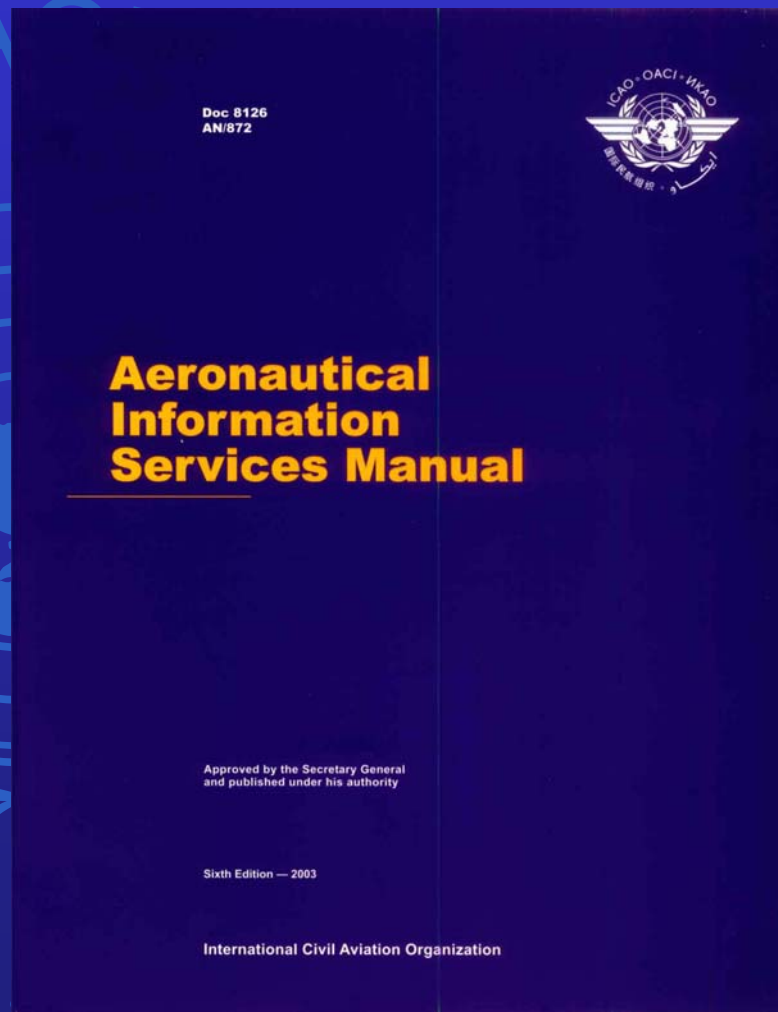
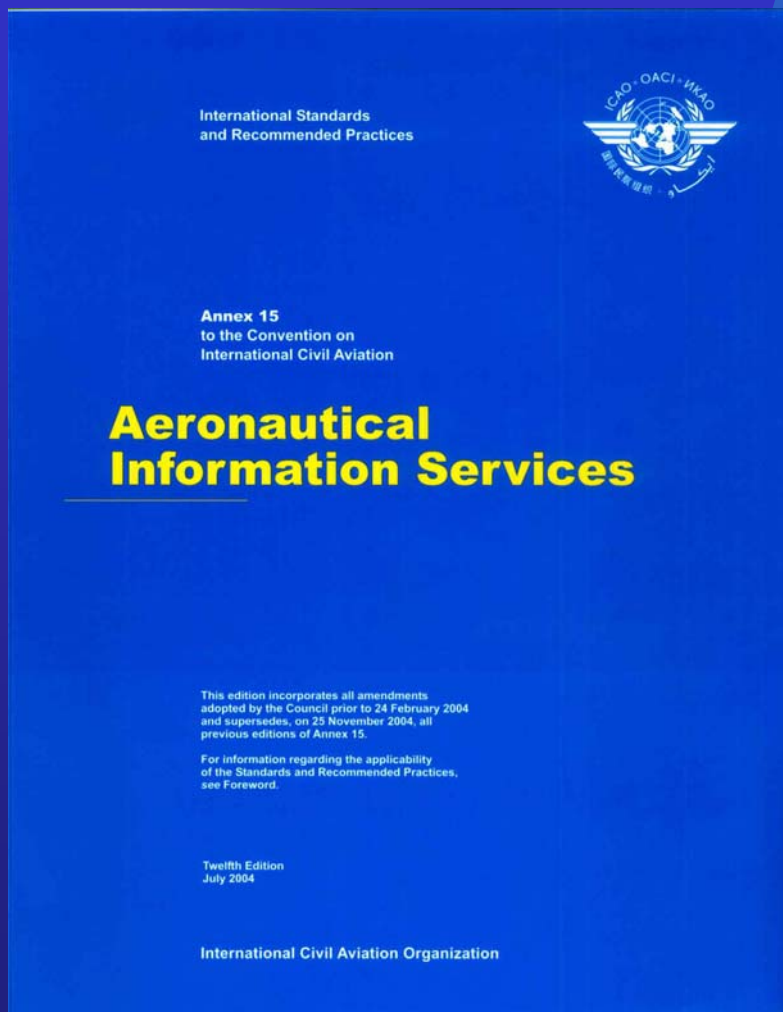
Adoption/Publication Phase



Adoption/Publication Phase



Annex 15 and AIS Manual



Challenges for a Global Standard

- ⇒ **Global and transparent process**
- ⇒ **Allow for regional needs**
- ⇒ **Ongoing and timely amendments**
- ⇒ **Supportive guidance material**
- ⇒ **A plan and follow-up assistance for implementation**

Plan for a Global Exchange Standard

- ⇒ Annex 15, 4 and guidance material will need to provide for standard aeronautical conceptual and exchange models
- ⇒ ICAO does not intend to develop a new exchange standard
- ⇒ Models to be largely based on AICM/AIXM
- ⇒ Over arching ICAO Annex Standards
- ⇒ Detailed technical specifications in another more easily amendable form

Plan for a Global Exchange Standard

- ⇒ **Harmonised definitions of data structures and elements required – AIHWG**
- ⇒ **Semantic Web**
- ⇒ **Interoperability, Enterprise Architecture and Net Centric environment**

Plan for a Global Exchange Standard

- ⇒ **ICAO AIS-AIM study group proposed**
- ⇒ **Study group to :**
 - **Review documentation on models to ensure global suitability**
 - **Develop modalities for acquisition of the models and implementation process**
 - **Advise on integration of AMXM, WXXM**
 - **Develop a global mechanism for further evolution of technical specifications**

Key Events

- ⇒ **AIS-AIM study group – Approval planned March 2008**
- ⇒ **ICAO Worldwide Symposium on Enabling the Net-Centric Information Environment**
 - **2 to 4 June 2008 at ICAO HQ**
 - **<http://www.icao.int/NetCentric>**
- ⇒ **AIM Congress 2008 – Quality AIM**
 - **17 to 19th June 2008 in Singapore**
 - **http://www.eurocontrol.int/aim/public/standard_page/globalaim2008_intro.html**

Key Events

- ⇒ **ICAO Forum on Integration and Harmonization of NextGen and SESAR into the Global ATM Framework**
 - 8 to 10 September 2008 at ICAO HQ
 - <http://www.icao.int/NexSes>
- ⇒ **Global Strategy/road map document**
 - Publication 2009
- ⇒ **AIM Annex 15 and 4 Standards**
 - Adoption planned 2010
 - Related guidance material 2010

Conclusion

⇒ What ICAO needs from AIXM:

- Documentation on AIXM/AICM for the AIS-AIM study group to review
- Documentation on the comparison of AIXM and AMXM
- Current thinking on how the AIXM would be updated in the future (control board?)

⇒ Consequences of an ICAO standard :

- Global acceptance
- Global acceptance involves global review and elements from this review can be expected to be integrated into the models
- Positioning of AIM as a core element of the ATM operational concept



Thank You