



# *Start with Standards*

**Prepared for  
2008 ICNS Conference  
5-7 May 2008**

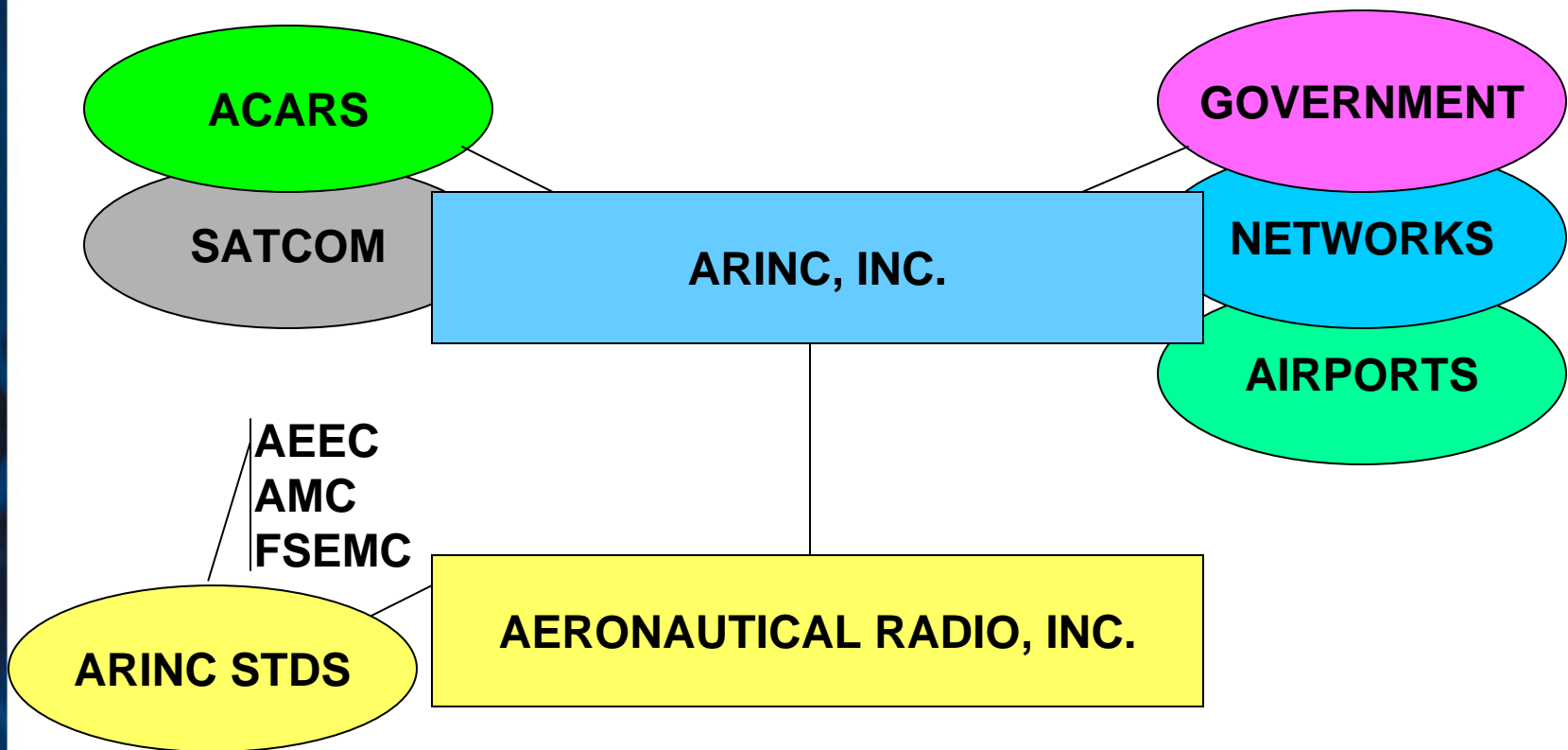
**Presented by Mike Russo, Aeronautical Radio, Inc.**

- **Urgency to act**
- **Role of Standards Bodies**
  - **Regulatory**
  - **Commercial**
- **Changing Relationships**
- **Key to Implementation**
  - **Direction**
  - **Detail**
  - **Schedules**

- **The driving forces placing pressure on the air transport industry to increase the capacity of the airspace are well known.**
- **The flying public will not accept capacity increase at the expense of perceived loss of safety.**
- **The essential concepts have been in place for several years**
- **There remains a body of work to finalize details for C, N, and S.**

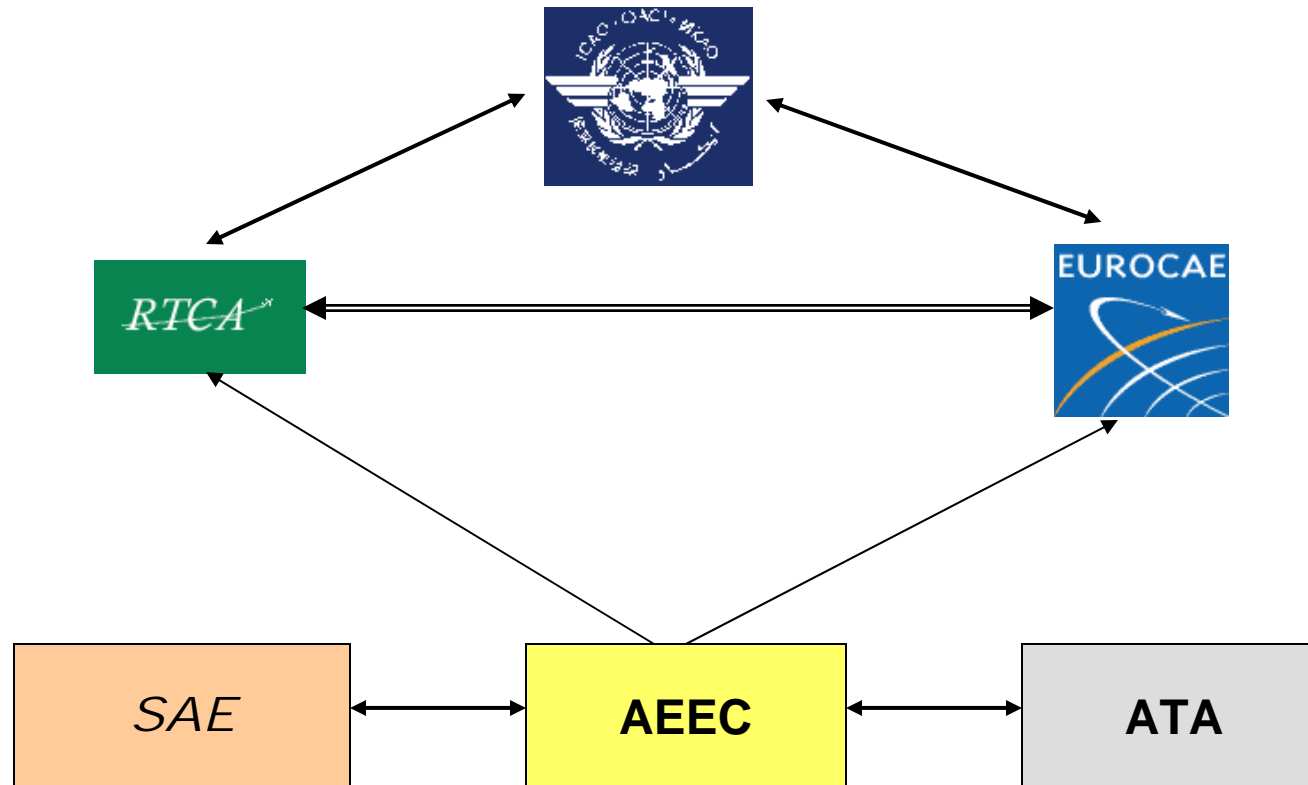
- **ICAO**
  - **World-wide Authority/Influence**
- **RTCA**
  - **USA and Americas**
  - **Authority by FAA Cert Reference**
- **Eurocae**
  - **Europe and Middle East Authority/Influence**
  - **Authority by EASA Cert Reference**

- **SAE**
  - Behavioral, Flight Deck, Systems Installation
- **ATA**
  - North America
  - Maintenance, Human Factors, reliability, Cockpit applications, and Security
- **AEEC**
  - Worldwide, Included and Referenced in MOPS
  - Systems, Interfaces/Protocols, Networks, Cabin



# Role of Standards Bodies

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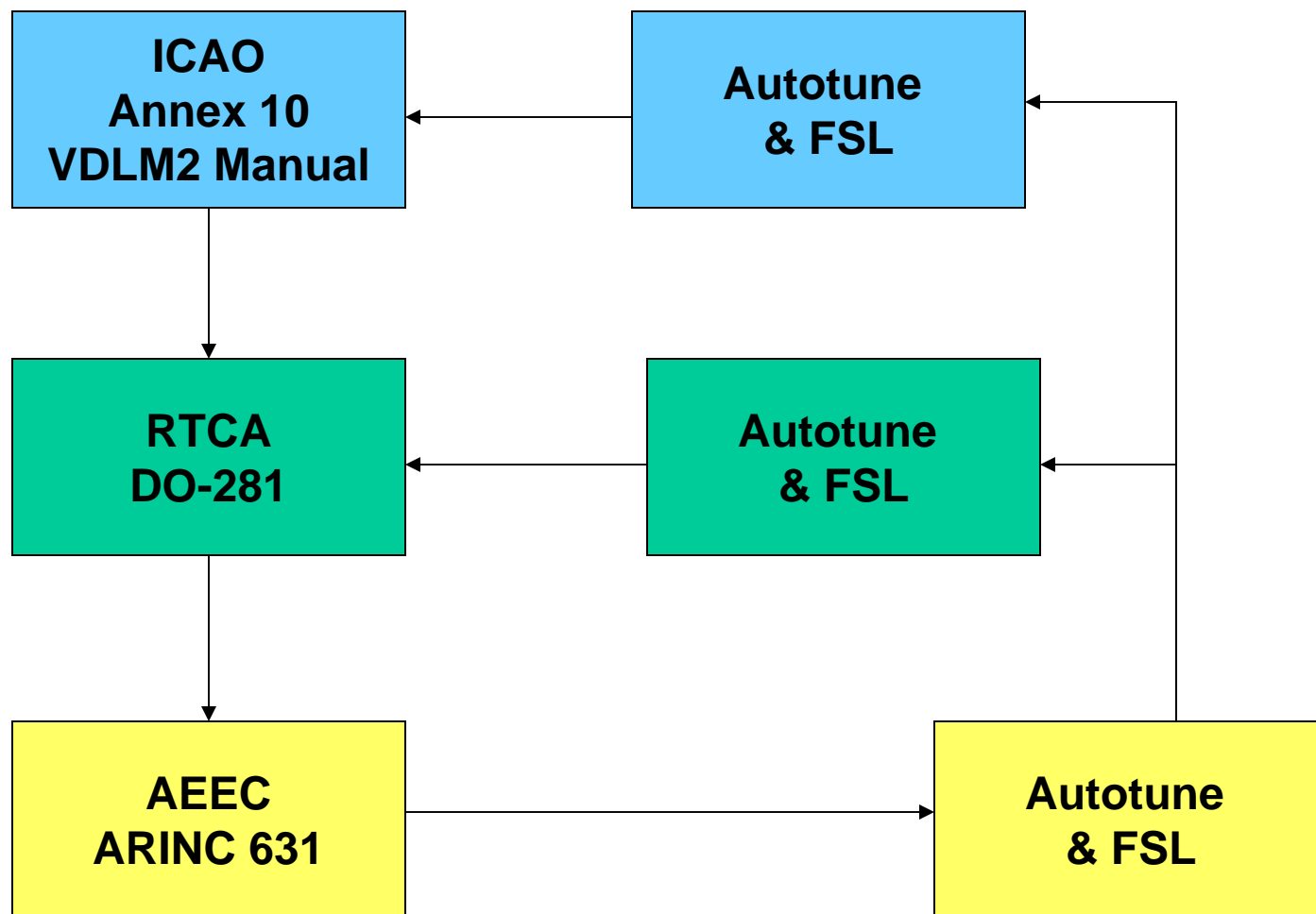
# Standards Integration Example

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<b>Org</b>	<b>Document Number</b>	<b>Document Title</b>
<b>ICAO</b>	<b>Annex 10</b>	<b>SARPs Aeronautical Communications</b>
<b>ICAO</b>	<b>9776</b>	<b>Manual of VHF Digital Link (VDL ) Mode 2</b>
<b>RTCA</b>	<b>DO-224B</b>	<b>MASPS for VHF Digital Communications</b>
<b>RTCA</b>	<b>DO-281A</b>	<b>MOPS for Aircraft VDLM2 Physical, Link, and Network Layer</b>
<b>Eurocae</b>	<b>ED-92A</b>	<b>MOPS for an Airborne VDLM2 System</b>
<b>RTCA</b>	<b>DO-280A</b>	<b>Interoperability Requirements for ATN Baseline 1</b>
<b>Eurocae</b>	<b>ED-110A</b>	
<b>RTCA</b>	<b>DO-290</b>	<b>System Performance Requirements (SPR) for Air Traffic Data Link Services in Continental Airspace</b>
<b>Eurocae</b>	<b>ED-120</b>	
<b>AEEC</b>	<b>ARINC 631</b>	<b>VHF Digital Link (VDL) Mode 2 Implementation Provisions</b>

# Standards Update Example

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## Key to Implementation – Direction

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- Identify the objective(s) in concrete terms
- Identify the scope of relevant specifications
- Ensure that, if multiple specs are involved, that the pieces fit together and that there are no omissions.

- **Use the specification definition process to:**
  - **vet the congruency of the provision with the requirement**
  - **answer basic questions as to the efficacy of the processed being defined**
  - **Assess the provision relative to competing alternatives**
- **Coordinate with other standards groups to ensure consistency**
- **Provide a reasonable update schedule**

- **Use available forums to facilitate discussion of technology, benefits, business case from multiple perspectives.**
  - **Include all stakeholders in early technology selection discussions.**
  - **Identify/Negotiate reasonable and viable development schedules**
  - **Identify/Negotiate reasonable and viable implementation schedules**
  - **Consider mandates and incentives**

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?Questions?