



**FAI Commission on Airspace and Navigation Systems (CANS)**  
**Report to the 106<sup>th</sup> FAI General Conference**  
**Antalya, 19-20 October 2012**

**Reported by :** *Ian Strachan, CANS Secretary*

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**1. Important activities, projects or events since last FAI General Conference:**

The annual CANS plenary meeting was held at FAI HQ in Lausanne 25-26 April 2012. Delegates were from Germany, Italy, UK and USA, plus the President from Sweden. Executive Board members Lagarhus and Neuenschwander also attended. Beat Neuenschwander presented on the concept of Expert Groups. The intention was to replace CANS by two Expert Groups, one for Airspace and the other for Navigation. Draft guidelines for EGs had been produced and were published as Annex A to the CANS minutes.

Airspace: More Transponder Mandatory Zones (TMZ) and Radio Mandatory Zones (RMZ) were being created, more large wind generators were being built and more Unmanned Air Vehicles were being operated. Also, Commercial Air Traffic (CAT) was starting to use smaller regional airfields and this resulted in more Controlled Airspace even if CAT traffic was small. In Europe, Single European Sky Rules of the Air (SERA) will apply and the Single European Sky Advanced Research programme (SESAR) is progressing. SESAR is the European equivalent of the U.S. NextGen programme and both involve a transition to satellite-based ADS-B equipment.

FAI Statistics: When negotiating with ATM Authorities over airspace, the high numbers of GA and Sport Aircraft gave us a good negotiating position because such numbers cannot be ignored. In some nations the numbers of GA/Sport Aircraft were over 95% of all aircraft licensed in that nation. However, the proportion of FAI NACs submitting annual statistics was low and efforts were needed to increase it. Overall, FAI pilot numbers may be between one and two million worldwide, but better statistics were needed from NACs

Navigation Equipment: An article in Aviation Week magazine gave January 2015 for European fit of ADS-B-Out to new Commercial (CAT) aircraft and December 2017 for retrofit to all European CAT aircraft. This was in advance of the US FAA timescale which is December 2020 for ADS-B-Out for CAT aircraft. The introduction of 8.33KHz spacing for radios needs monitoring because when it becomes mandatory there will be major expense in buying new radios. It was said that 8.33 KHz spacing was likely to become mandatory in Europe in 2018.

International: FAI is now an associate member of the International Committee on GNSS (ICG). This deals with GNSS systems such as GPS and with Satellite-Based Augmentation Systems (SBAS) such as EGNOS and WAAS.

Low cost future equipment: The UK CAA has proposed a Low Power ADS-B Transceiver (LPAT) for GA and sport aircraft. In the USA, a battery-powered ADS-B 978 MHz UAT device built by the Mitre company is being tested under a Memorandum of Understanding (MOU) between the FAA and the Soaring Society of America (SSA). There is also a FAA Technical Standard Order (TSO-C199) for Low Power Surveillance Equipment (LPSE) including ADS-B-In and ADS-B-Out.

ICAO: More liaison with and monitoring of ICAO was needed because ICAO recommendations to Authorities such as the FAA and EASA were crucial and often did not take GA and Sport aircraft into account.

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FAI Airspace and Mapping: Since the 1990s, ICAO and national Regulatory Authorities had used the WGS84 Ellipsoid for mapping including airspace boundaries. It has been proposed to CASI that the FAI Sphere should be deleted from the General Section because FAI had a legal obligation to obey local Air Law, which cannot be ensured with respect to airspace using a spherical earth model.

**2. Positive and negative results:**

N/A

**3. Main problem(s) encountered and solutions adopted :**

N/A

**4. Planned activities and projects for next year :**

CANS Future: It was said to be an Executive Board decision to convert the Technical Commission CANS into two Expert Groups. However, CANS continues to exist until the FAI constitution (Statutes and By-laws) is changed by vote at General Conference.

**5. Proposals (if any) to FAI Executive Board, FAI Head Office or for the next General Conference :**

N/A

**6. Free reporting:**

Conclusion: The above is a summary, more detail is in the CANS minutes and their Annexes.