

September 2006

## ENDORSED AIR TRAFFIC SERVICES OUTSIDE CONTROLLED AIRSPACE (ATSOCAS) STATEMENT OF USER REQUIREMENT

1. The three user categories (Commercial Air Transport (CAT), Military (Mil) and General Aviation (GA)) require a range of ATSOCAS that will allow their pilots and aircrew to operate **SAFELY**. The ATSOCAS must be suitable for use by pilots operating within Class F & G airspace below FL195, and Temporary Reserved Areas (TRAs)<sup>1</sup> above FL195 whilst allowing them to achieve the flight/mission/sortie objective and adhere to the rules of the air (recognising that this may also involve operations with no Air Traffic service at all). Safety and Deconfliction from other airspace users is of paramount importance and overrides all other factors affecting the selection of the type of ATSOCAS required. However, invariably a combination of factors will dictate the type of ATSOCAS required by a pilot; Safety and Deconfliction will be of primary importance along with the remaining factors detailed below:
  - a. **Safety.** *Safety is of paramount importance and therefore the factor considered first and foremost.*
  - b. **Deconfliction from Other Traffic.** *A fundamental safety consideration for all pilots is to deconflict themselves from other airspace users. As all ATC instructions outside of CAS are advisory in nature, they will only assist the captain of an aircraft to fulfil his/her responsibility to achieve deconfliction from other airspace users.*
  - c. **Application of Universal Rules & Procedures.** All aircrew and controllers, civilian and military, must operate to the same rules and procedures, to ensure that there is no potential for misunderstanding and confusion.
  - d. **Service Availability/ Communication Navigation Surveillance (CNS) Coverage.** ATSOCAS should be available in areas where suitable CNS coverage is provided. It is, however, recognised not only that there are areas where CNS does not extend but also areas where ATSOCAS is provided by Lower Airspace Radar Service (LARS) providers whose availability is limited to specific aerodrome operating hours.
  - e. **Full use of Technology.** ANSPs should facilitate the best use of appropriate Air Traffic Service (ATS) & Air Traffic Management (ATM) tools and technology to provide the optimum service.

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<sup>1</sup> As a result of the introduction of Class C airspace above FL 195 (planned March 2007), Temporary Reserved Areas (TRAs) will be introduced (EUROCONTROL definition). The existing terminology *Temporary Restricted Areas* (TRA) will be replaced with a new definition to reflect the restrictions of flying that are put in place under Article 96 of the ANO.

- f. **Weather.**
- (i) ATSOCAS should be available to aircraft operating in both Visual Meteorological Conditions (VMC) and Instrument Meteorological Conditions (IMC).
  - (ii) Provision of real-time weather information along an aircraft's route, which may result in weather avoidance and possible route deviation, may be required. Weather information at planned destination and/or diversion aerodrome should be available from ATSOCAS providers on request.
- g. **Choice of Service.** The type of ATSOCAS required should be the choice of the aircraft captain.
- h. **Flight Profile.** The type of service requested will depend on the complexity of the flight profile and sortie/flight type (e.g. instructional & exam flights, aerobatics or manoeuvring, formations) and whether operating under Instrument Flight Rules (IFR) or Visual Flight Rules (VFR).
- i. **Terrain & Ground Obstacle Clearance.** Terrain & Ground Obstacle Clearance is the responsibility of the pilot; however, it is recognised that during certain circumstances, such as flight within radar & instrument approach patterns or when receiving Service Type 4 (Advisory Deconfliction Service) at para 2d below, ATC instructions are to be safe in terms of Terrain & Ground Obstacle Clearance.
- j. **Pre-Flight Planning.** During pre-flight planning, pilots consider the service provision available within the airspace in which they plan to operate. Examples of such considerations are Danger Area Crossing Service (DACs), Danger Area Activity Information Service (DAAIS) or navigational assistance to help circumnavigate higher classification airspace such as CTRs. ANSPs that offer ATSOCAS may be requested to provide warnings of hazards or anomalies, including other airspace user activity including real time and accurate updates on relevant airspace activities and restrictions (e.g. Military Exercises).
- k. **Traffic Density<sup>2</sup>.** An aircraft operating within an area of known or notified intense aerial activity may require a greater reliance on ATSOCAS; therefore a pilot might require an increased level of service from the ANSP.
- l. **Cockpit Workload<sup>3</sup>.** A high cockpit workload may require a greater reliance on ATSOCAS; therefore a pilot might require an increased level of service from the ANSP.
- m. **Aircraft Type, Performance and Serviceability.** The type of service requested might be influenced by handling characteristics, such as aircraft weight, manoeuvrability, speed and physical design, technical or mechanical failures, or other factors, which may affect aircrew's ability to effectively apply 'see and avoid' principles.
- n. **Expeditious Routings.** When requested by a pilot, ANSPs should provide as expeditious a track as possible, where circumstances allow, from departure to destination,

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<sup>2</sup> Requirement from the User recognising the additional workload this may incur.

<sup>3</sup> Requirement from the User because additional cockpit workload may degrade lookout.



b. **Planned Deconfliction Distance.** When the aircraft is in receipt of Service Type 4 (Advisory Deconfliction Service), a controller will aim to provide the aircraft captain with advisory information, which will enable the captain to manoeuvre his aircraft to achieve a miss distance<sup>4</sup> of either:

- (i) 5 nm horizontally between his aircraft and other airspace users
- or
- (ii) 3000 ft vertically between his aircraft and other airspace users
- or
- (iii) 3nm horizontally and 1000ft vertically between his aircraft and other airspace users

unless ATC have effected coordination between the aircraft in question when lower criteria<sup>5</sup> could be applied. Conditions such as aircraft type, speed and closure rates will dictate what constitutes relevant TI and how soon it should be passed to achieve the criteria specified above. This will be determined on a case-by-case basis using controllers' professional judgement and expertise.

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<sup>4</sup> During the ATSOCAS User-Group Workshops, CAT requested a minimum miss distance of 5 nm horizontal or 3000ft vertical, although they accepted these figures could be reduced if a combination of both vertical and horizontal separation were applied; GA and MOD were content with 3 nm horizontal or 3000ft vertical miss distance.

<sup>5</sup> Reduced criteria would be 3nm horizontal or 1000ft vertical, which could be reduced to 500ft vertical with the agreement of the pilot.