

# European Aviation Safety Agency

## European Technical Standard Order (ETSO)

Subject: **GROUND BASED AUGMENTATION SYSTEM (GBAS)  
POSITIONING AND NAVIGATION EQUIPMENT**

### 1 - Applicability

This ETSO gives the requirements which "Ground Based Augmentation System (GBAS) Positioning and Navigation Equipment" manufactured on or after the effective date of this ETSO have to meet in order to be identified with the applicable ETSO marking.

### 2 - Procedures

#### 2.1 - General

Applicable procedures are detailed in CS-ETSO Subpart A.

#### 2.2 - Specific

None

### 3 - Technical Conditions

#### 3.1 - Basic

##### 3.1.1 - Minimum Performance Standard

Section 2 of RTCA/DO-253A, "*Minimum Operational Performance Standards for GPS Local Area Augmentation System Airborne Equipment*," dated November 28, 2001.

##### 3.1.2 - Environmental Standard

The equipment must be tested according to EUROCAE ED-14E (RTCA DO-160E) "*Environmental Conditions and Test Procedures for Airborne Equipment*" from March 2005.

##### 3.1.3 - Computer Software

If the article includes a digital computer, the software must be developed according to EUROCAE ED-12B (RTCA DO-178B) "*Software Considerations in Airborne Systems and Equipment Certification*" from 1992.

### **3.2 – Specific**

Regarding the installation procedures and limitations, adequate specification of the interface between the equipment and other systems are mandatory to ensure proper functioning of the integrated system.

## **4 - Marking**

### **4.1. - General**

Marking is detailed in CS-ETSO Subpart A paragraph 1.2.

### **4.2. – Specific**

None

## **5 - Availability of Referenced Document**

See CS-ETSO Subpart A paragraph 3