# Ground Based Augmentation System (GBAS)

Ground Based Augmentation System (GBAS) VHF ground-air Data Broadcast (VDB); Technical characteristics and methods of measurement for ground-based equipment; Harmonized Standard covering the essential requirements of article 3.2 of the R&TTE Directive

| EN 303 084 Ver. 1.1.1 | In draft |

## Satellite

Aircraft Earth Stations (AES) operating under the Aeronautical Mobile Satellite Service (AMSS)/Mobile Satellite Service (MSS) and/or the Aeronautical Mobile Satellite on Route Service (AMS(R)S)/Mobile Satellite Service (MSS)

| EN 301 473 Ver. 1.3.1 Ver. 1.4.1 | Published 2004 In draft |

Harmonized Standard for satellite mobile Aircraft Earth Stations (AESs) operating in the 11/12/14 GHz frequency bands covering essential requirements under article 3.2 of the R&TTE Directive

| EN 302 186 Ver. 1.1.1 | Published 2004 |

## Others

Classification of RF parameters of ground-based Air Traffic Management-related radio equipment as being governed by R&TTE Directive or SES Interoperability Regulation

| TR 103 065 Ver. 1.1.1 | Published 2010 |

ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 1: Common technical requirements

| EN 301 489-1 Ver. 1.9.2 | Published 2011 |

Part 22: Specific conditions for ground based VHF aeronautical mobile and fixed radio equipment

| EN 301 489-22 Ver. 1.3.1 | Published 2004 |

Technical characteristics for airborne in-flight entertainment systems operating in the frequency range 5 150 to 5 875 MHz

| TR 102 631 Ver. 1.1.1 | Published 2008 |

Harmonized Standard for the GSM onboard aircraft system covering the essential requirements of Article 3.2 of the R&TTE Directive

| EN 302 480 Ver. 1.1.2 | Published 2008 |

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**EN** = European Standard; **TS** = Technical Specification; **TR** = Technical Report  
**OAP** = One Step Approval Process; **TAP** = Two Step Approval Process  
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ETSI produces technical standards, specifications and reports covering a wide range of technologies. This leaflet lists ETSI’s publications that are of greatest relevance to the aeronautical community. ETSI has a dedicated and long standing aeronautical standards group, TC AERO, which is actively producing Community Specifications under the Single European Sky Interoperability Regulation (EC 552/2004), as well as a dedicated group, ERM JTFEA, dealing with Harmonized Standards for ground based ATM equipment. In addition, ETSI has many documents dealing with telecommunications and radiocommunications, and numerous related topics. Written by the industry for the industry, all of ETSI’s published documents may be downloaded free of charge from http://pda.etsi.org/pda

### VHF Digital Link Mode 2—Ground based equipment

- **VHF air-ground Digital Link (VDL) Mode 2; Technical characteristics and methods of measurement for ground-based equipment;**
  - **Part 1:** Physical layer and MAC sub-layer
  - **EN 301 841-1**
  - **Ver. 1.3.1**
  - **Published 2010**

- **Part 2: Upper layers**
  - **EN 301 841-2**
  - **Ver. 1.1.1**
  - **Published 2004**

- **Part 3: Harmonized EN covering the essential requirements of article 3.2. of the R&TTE Directive**
  - **EN 301 841-3**
  - **Ver. 1.1.1**
  - **Published 2011**

### VHF Digital Link Mode 4—Airborne equipment

- **VHF air-ground and air-air Digital Link (VDL) Mode 4 radio equipment; Technical characteristics and methods of measurement for aeronautical mobile (airborne) equipment;**
  - **Part 1:** Physical layer
  - **EN 302 842-1**
  - **Ver. 1.2.4**
  - **Published 2011**

- **Part 2: General description and data link layer**
  - **EN 302 842-2**
  - **Ver. 1.6.1**
  - **Published 2011**

- **Part 3: Additional broadcast aspects**
  - **EN 302 842-3**
  - **Ver. 1.3.1**
  - **Published 2011**

- **Part 4: Point-to-point functions**
  - **EN 302 842-4**
  - **Ver. 1.2.2**
  - **Published 2010**

### Advanced Surface Movement Guidance & Control System (A-SMGCS)

- **Part 1:** Community Specification for A-SMGCS Level 1 including external interfaces
  - **EN 303 213-1**
  - **Ver. 1.2.1**
  - **Published 2010**
  - **OAP (4/04/2012)**

- **Part 2:** Community Specification for A-SMGCS Level 2 including external interfaces
  - **EN 303 213-2**
  - **Ver. 1.1.1**
  - **Published 2010**
  - **OAP (4/04/2012)**

- **Part 3:** Community Specification for a deployed cooperative sensor including its interfaces
  - **EN 303 213-3**
  - **Ver. 1.1.1**
  - **Published 2010**

- **Part 4:** Community Specification for a deployed non-cooperative sensor including its interfaces;
  - **Sub-part 1:** Generic requirements for a non-cooperative sensor
    - **EN 303 213-4-1**
    - **Ver. 1.1.1**
    - **Published 2010**

  - **Sub-part 2:** Specific requirements for a deployed Surface Movement Radar sensor
    - **EN 303 213-4-2**
    - **Ver. 1.1.1**
    - **Published 2010**

- **Part 5:** Harmonized Standard covering the essential requirements of article 3.2 of the R&TTE Directive for multilateration equipment;
  - **Sub-part 1:** receivers and interrogators
    - **EN 303 213-5-1**
    - **Ver. 1.1.1**
    - **In draft**

  - **Sub-part 2:** reference and vehicle transmitters
    - **EN 303 213-5-2**
    - **Ver. 1.1.1**
    - **In draft**

- **Part 6:** Harmonized Standard covering the essential requirements of article 3.2 of the R&TTE Directive for deployed surface movement radar sensors;
  - **Sub-part 1:** X-band sensors using pulsed signals and transmitting power up to 100 kW
    - **EN 303 213-6-1**
    - **Ver. 1.1.1**
    - **Published 2011**

### Airport operations

- **Community Specification for Airport Collaborative Decision Making (A-CDM)**
  - **EN 303 212**
  - **Ver. 1.1.1**
  - **Published 2010**

### Data Links

- **Community Specification for Data Link Services (DLS) System; Requirements for ground constituents and system testing**
  - **EN 303 214**
  - **Ver. 1.1.1**
  - **Published 2011**
  - **OAP (10/04/2012)**