

ETSI EN 301 842-4 V1.2.2 (2010-12)

European Standard (Telecommunications series)

VHF air-ground Digital Link (VDL) Mode 4 radio equipment; Technical characteristics and methods of measurement for ground-based equipment; Part 4: Point-to-point functions

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ETSI

650 Route des Lucioles
F-06921 Sophia Antipolis Cedex - FRANCE

Tel.: +33 4 92 94 42 00 Fax: +33 4 93 65 47 16

Siret N° 348 623 562 00017 - NAF 742 C
Association à but non lucratif enregistrée à la
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Foreword

This European Standard (Telecommunications series) has been produced by ETSI Technical Committee Aeronautics (AERO).

The present document is part 4 of a multi-part deliverable covering the VHF air-ground Digital Link (VDL) Mode 4 radio equipment; Technical characteristics and methods of measurement for ground-based equipment, as identified below:

- Part 1: "EN for ground equipment";
- Part 2: "General description and data link layer";
- Part 3: "Additional broadcast aspects";
- Part 4: "Point-to-point functions";**
- Part 5: "Harmonized EN covering the essential requirements of article 3.2 of the R&TTE Directive".

The present document is accompanied by an equivalent airborne standard, EN 302 842 [7] Parts 1 to 4, covering the VHF air-ground Digital Link (VDL) Mode 4 radio equipment; Technical characteristics and methods of measurement for airborne equipment.

National transposition dates

Date of latest announcement of this EN (doa):	31 March 2011
Date of latest publication of new National Standard or endorsement of this EN (dop/e):	30 September 2011
Date of withdrawal of any conflicting National Standard (dow):	30 September 2011

Introduction

The present document is part of a multi-part deliverable developed by ETSI and is designed to fit in a modular structure to cover all radio and telecommunications terminal equipment within the scope of the R&TTE Directive [i.1]. The modular structure is shown in EG 201 399 [i.2].

The present document states the technical specifications for Very High Frequency (VHF) Digital Link (VDL) Mode 4 ground-based radio transmitters, transceivers and receivers for air-ground communications operating in the VHF band, using Gaussian-filtered Frequency Shift Keying (GFSK) Modulation with 25 kHz channel spacing and capable of tuning to any of the 25 kHz channels from 118,000 MHz to 136,975 MHz as defined in ICAO VHF Digital Link (VDL) Standards and Recommended Practices (SARPs) [8].

The present document may be used to produce tests for the assessment of the performance of the equipment. The performance of the equipment submitted for type testing should be representative of the performance of the corresponding production model.

The present document has been written on the assumption that:

- the type test measurements will be performed only once, in an accredited test laboratory and the measurements accepted by the various authorities in order to grant type approval;
- if equipment available on the market is required to be checked it will be tested in accordance with the methods of measurement specified in the present document or a documented alternative approved by the certifying authority;
- equipment comply with EN 301 489-22 [2], EN 301 842-1 [4] and EN 301 842-2 [5].

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