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English Version

Interoperability of Flight Data Processing (Air Traffic Control - Air Traffic Control) for application under the Single European Sky - Interoperability Regulation EC 552/2004

Interopérabilité des systèmes de traitement des données de vol (contrôle de la circulation aérienne) pour mise en oeuvre dans le cadre du règlement Ciel unique européen - Interopérabilité EC 552 2004

Interoperabilität der Flugdatenverarbeitung (Flugverkehrskontrolle - Flugverkehrskontrolle) zur Anwendung gemäß der Interoperabilitätsverordnung EG 552/2004 im Rahmen des Einheitlichen Europäischen Luftraums (SES)

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The period of validity of this CEN/TS is limited initially to three years. After two years the members of CEN will be requested to submit their comments, particularly on the question whether the CEN/TS can be converted into a European Standard.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

Management Centre: Avenue Marnix 17, B-1000 Brussels

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Foreword

This document (CEN/TS 16071:2010) has been prepared by Technical Committee CEN/TC 377 “Air Traffic Management”, the secretariat of which is held by DIN.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

This Technical Specification has been prepared under a mandate given to the CEN/CENELEC/ETSI by the European Commission and developed in cooperation with EUROCAE to support Essential Requirements of the Single European Sky Interoperability Regulation [2].

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to announce this Technical Specification: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

Introduction

The European Union launched the Legislation "Single European Sky" (SES) in 2002 which was adopted in 2004 and largely amended in 2009.

The SES legislation is based on a framework of four regulations, which include the Interoperability Regulation (EC 552/2004 as amended). The objective of the Interoperability Regulation is to ensure interoperability of the European Air Traffic Management Network (EATMN) consistent with air navigation services.

The technical detail for the provision of Flight Data Processing (ATC-ATC) Interoperability is not included in the body of this document.

1 Scope

This Technical Specification is for the production of conformity evidence for FDP-FDP ground-based system interoperability which has to be declared by the Air Navigation Service Provider (ANSP) before putting FDP-systems into service.

This Technical Specification defines the Technical, Operational and Maintenance requirements for Flight Data Processing (ATC-ATC) system interoperability.

Flight Data Processing (FDP) interoperability between ATC units is a key element to facilitate and harmonise Flight Data systems data exchanges and critical to the functioning of a harmonised European Air Traffic Management system.

FDP Interoperability can be achieved by the use of different techniques appropriate to the operational need, e.g. message exchange, replication mechanisms and data sharing.

The architectural framework in which the different actors have to inter-operate is of major importance to define the context in which the European Standards have to be developed.

For a systematic solution to certain flight data inconsistency problems currently existing in Europe, the definition of a Flight Object (FO) is required to become a conceptual single point of reference for flight data to be used by stakeholder systems.

Interoperability of FDP (ATC-ATC) includes coordination and transfer; correlation and surveillance, facilitation of optimum routes; MTCD and resolutions; recovery support; ground-ground situation awareness and traffic management.

Any software elements related to the software assurance level of a FDP System are outside of the scope of the present document.

Although a consensus can be reached on the present state of the art in FDP interoperability, this state of the art is not mature enough to be put into a European Standard (EN). The European Committee for Standardisation thus resolved to record the obtained technical consensus as the present Technical Specification, with informative status.

The present document thus does not give legal presumption of conformity to any piece of European legislation.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EUROCAE ED-133, *Flight Object Interoperability Specification*

3 Terms, definitions and abbreviations

ACC	Area Control Centre
AIM	Aeronautical Information Management
ANS	Air Navigation Service
ANSP	Air Navigation Service Provider