NSAI
Standards

Irish Standard
I.S. EN 17350:2020

SCM - Scheduling and Commanding Message - Standard

I.S. EN 17350:2020

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National Foreword

I.S. EN 17350:2020 is the adopted Irish version of the European Document EN 17350:2020, SCM - Scheduling and Commanding Message - Standard

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EUROPEAN STANDARD EN 17350

NORME EUROPÉENNE

EUROPÄISCHE NORM

August 2020

ICS 49.140

English version

SCM - Scheduling and Commanding Message - Standard

SCM - Message de planification et de commande - Norme

SCM - Planungs- und Befehlsnachricht - Standard

This European Standard was approved by CEN on 17 May 2020.

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Contents

Page

European foreword

This document (EN 17350:2020) has been prepared by Technical Committee CEN/CLC/JTC 5 “Space”, the secretariat of which is held by DIN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by February 2021, and conflicting national standards shall be withdrawn at the latest by February 2021.

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

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0 Introduction

0.1 Document structure

Clause 2 provides an overview of the SCM.

Clause 3 describes the scope and general nature of the SCM.

Clause 4 describes the general format of the SCM standard.

Clause 5 describes the detailed syntax of SCM communications.

Clause 6 provides additional information about headers.

Annex A (informative) provides SCM background.

Annex B (informative) provides SCM examples.

Annex C (informative) describes the survey strategy types and related parameter requirements.

Annex D (informative) informs about the handling of filter requests.

0.2 Verbal conventions

The following conventions apply:

a) 'shall' implies a requirement;

b) 'should' implies a recommendation;

c) 'may' implies a permission; and

d) 'is', 'are', and 'will' denote factual statements.

1 Scope

1.1 Purpose

The “Scheduling and Commanding Messages” (SCM) specifies a standard format for observing system commanding and scheduling. This document aims to ease the planning and operation processes and to reduce the efforts from researchers that use several different observing systems and/or simulation software products.

The SCM establishes a common language for exchanging information on planning, scheduling, and executing observations of celestial objects. In the end this will:

a) Facilitate interoperability and enable consistent warning between data originators who supply celestial observations and the entities or researchers who use it; and

b) Facilitate the automation of observation processes.

1.2 Applicability

The SCM is applicable to ground-based activities related to the planning, scheduling, and execution of the observations of celestial objects. It is used by planning software, scheduling software, telescope commanding software. It is applicable for optical telescopes.

2 Normative references

There are no normative references in this document.

3 Terms, definitions, symbols and abbreviations

3.1 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

• ISO Online browsing platform: available at https://www.iso.org/obp

• IEC Electropedia: available at http://www.electropedia.org/

3.1.1
Observing System Command File
“observation plan”
data file which is used to control an observing system (OS), which contains absolute information on actions the OS is due to perform, e.g. absolute times and sky coordinates for observations, and which is read by an OS control computer that still processes part of their content (e.g. conversion of equatorial coordinates to telescope hardware coordinates, execution of pre-defined standard routines for calibration processes that are called by a single entry in the command file, etc.) and sends commands to the hardware drivers