DIN EN 17350:2021-12 (E)

SCM - Scheduling and Commanding Message - Standard

Contents

Page

European foreword 4

0 Introduction 5
0.1 Document structure 5
0.2 Verbal conventions 5

1 Scope 6
1.1 Purpose 6
1.2 Applicability 6

2 Normative references 6

3 Terms, definitions, symbols and abbreviations 6
3.1 Terms and definitions 6
3.2 Symbols and abbreviations 9

4 Overview -- Context of the document 10

5 General nature of the standard -- Documentation within the format 11

6 SCM structure and content 11
6.1 General structure 11
6.2 Nested logical segments in the format 15
6.3 Auxiliary messages 15
6.4 General rules 15
6.5 OS Control Computer and OS Scheduler Inputs 17
6.6 Quantization of Commands/Requests 18
6.7 Parameter Types 18

7 Detailed SCM Syntax 19
7.1 Introduction: First-Level Structure 19
7.2 Definition of the segment 'header' 20
7.3 Definition of the segment 'metaData' 21
7.4 Definition of the segment 'commonData' 23
7.5 Definition of the segment 'command' 23
7.6 Definition of the segment 'scheduleRequest' 34
7.7 Macros 46

8 Sequence higher level structures 46
8.1 Higher Level logical structures ("sequence" segments) 46
8.2 Handling of FITS header keywords -- General expected behaviour in regard to writing to FITS headers 49

Annex A (informative) Commanding and Scheduling Message background 50

Annex B (informative) Examples 51

B.1 Commanding a Series of Observations 51
B.2 Requesting Follow-up observations two hours apart 54

Annex C (informative) Survey Strategy Types and Related Parameter Requirements -- Description of Survey Strategies 59

C.1 General 59
C.2 Parameter Requirements for Survey Strategy Type 1 (vertical strip) 61
C.3 Parameter Requirements for Survey Strategy Type 2 (horizontal strip) 61
C.4 Parameter Requirements for Survey Strategy Type 3 (free mosaic) 61

Annex D (informative) Handling of Filter Requests 62

D.1 Filter specification 62
D.2 Specifying narrowband filter types (wavelength value) 63

Bibliography 64