



**NSAI**  
Standards

Irish Standard  
I.S. EN 16601-10:2015

# Space project management - Project planning and implementation

**I.S. EN 16601-10:2015**

*Incorporating amendments/corrigenda/National Annexes issued since publication:*

The National Standards Authority of Ireland (NSAI) produces the following categories of formal documents:

I.S. xxx: Irish Standard — national specification based on the consensus of an expert panel and subject to public consultation.

S.R. xxx: Standard Recommendation — recommendation based on the consensus of an expert panel and subject to public consultation.

SWiFT xxx: A rapidly developed recommendatory document based on the consensus of the participants of an NSAI workshop.

*This document replaces/revises/consolidates the NSAI adoption of the document(s) indicated on the CEN/CENELEC cover/Foreword and the following National document(s):*

*NOTE: The date of any NSAI previous adoption may not match the date of its original CEN/CENELEC document.*

*This document is based on:*

EN 16601-10:2015

*Published:*

2015-01-28

*This document was published under the authority of the NSAI and comes into effect on:*

2015-02-19

ICS number:

49.140

NOTE: If blank see CEN/CENELEC cover page

NSAI  
1 Swift Square,  
Northwood, Santry  
Dublin 9

T +353 1 807 3800  
F +353 1 807 3838  
E standards@nsai.ie  
W NSAI.ie

Sales:  
T +353 1 857 6730  
F +353 1 857 6729  
W standards.ie

Údarás um Chaighdeáin Náisiúnta na hÉireann

EUROPEAN STANDARD

EN 16601-10

NORME EUROPÉENNE

EUROPÄISCHE NORM

January 2015

ICS 49.140

Supersedes EN 13290-2:2001, EN 13290-3:2001, EN 13290-4:2001

English version

## Space project management - Project planning and implementation

Management des projets spatiaux - Planification et mise en œuvre du projet

Raumfahrt-Projektmanagement - Projektplanung und Implementierung

This European Standard was approved by CEN on 14 December 2013.

CEN and CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN and CENELEC member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN and CENELEC member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CEN and CENELEC members are the national standards bodies and national electrotechnical committees of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



**CEN-CENELEC Management Centre:  
Avenue Marnix 17, B-1000 Brussels**

## Table of contents

---

<b>Foreword</b> .....	<b>5</b>
<b>Introduction</b> .....	<b>6</b>
<b>1 Scope</b> .....	<b>7</b>
<b>2 Normative references</b> .....	<b>8</b>
<b>3 Terms and definitions</b> .....	<b>9</b>
3.1 Terms defined in other standards .....	9
3.2 Terms specific to the present standard .....	9
3.3 Abbreviated terms.....	10
<b>4 Principles</b> .....	<b>11</b>
4.1 Project planning.....	11
4.1.1 Introduction .....	11
4.1.2 Purpose and objectives of the project.....	11
4.1.3 Availability of and need to develop new technologies.....	12
4.1.4 Availability of and need to reuse existing equipments/products.....	12
4.1.5 Availability of and need for human resources, skills and technical facilities .....	12
4.1.6 Risk assessment.....	12
4.1.7 Development approach .....	12
4.1.8 Project deliverables.....	12
4.1.9 Customer requirements and constraints.....	13
4.1.10 Project requirements documents (PRD).....	13
4.1.11 Project management plan .....	13
4.2 Project organization .....	14
4.2.1 Introduction .....	14
4.2.2 Organizational structure .....	14
4.2.3 Communication and reporting .....	14
4.2.4 Audits.....	14
4.3 Project breakdown structures .....	15
4.3.1 Introduction .....	15

4.3.2	Function tree .....	15
4.3.3	Specification tree .....	15
4.3.4	Product tree .....	15
4.3.5	Work breakdown structure (WBS) .....	16
4.3.6	Work package (WP) .....	17
4.3.7	Organization breakdown structure (OBS) .....	17
4.4	Project phasing .....	18
4.4.1	Introduction .....	18
4.4.2	Relationship between business agreements and project phases .....	20
4.4.3	Project phases .....	20
4.4.4	Project specific reviews .....	27
<b>5</b>	<b>Requirements .....</b>	<b>28</b>
5.1	Project planning .....	28
5.1.1	Overview .....	28
5.1.2	Requirements on customers .....	28
5.1.3	Requirements on suppliers .....	29
5.2	Project organization .....	29
5.2.1	Organizational structure .....	29
5.2.2	Communication and reporting .....	30
5.2.3	Audits .....	31
5.3	Project breakdown structures .....	32
5.4	Project phasing .....	33
<b>Annex A</b>	<b>(normative) Project management plan (PMP) – DRD .....</b>	<b>34</b>
<b>Annex B</b>	<b>(normative) Product tree – DRD .....</b>	<b>37</b>
<b>Annex C</b>	<b>(normative) Work breakdown structure (WBS) – DRD .....</b>	<b>39</b>
<b>Annex D</b>	<b>(normative) Work package (WP) description – DRD .....</b>	<b>41</b>
<b>Annex E</b>	<b>(normative) Progress report – DRD .....</b>	<b>43</b>
<b>Annex F</b>	<b>(informative) ECSS management branch documents delivery per review .....</b>	<b>44</b>
<b>Annex G</b>	<b>(informative) Management documents delivery (periodic or incident triggered) .....</b>	<b>46</b>
<b>Annex H</b>	<b>(informative) Determination of the appropriate WBS level of detail .....</b>	<b>47</b>
<b>Bibliography</b>	<b>.....</b>	<b>49</b>

**EN 16601-10:2015 (E)**

**Figures**

Figure 4-1: Product tree example ..... 16  
Figure 4-2: WBS example ..... 17  
Figure 4-3: Typical project life cycle..... 18  
Figure 4-4: Review life cycle.....20

**Tables**

Table F-1 :Management Documents Delivery per Review .....45  
Table G-1 : Management documents delivery (periodic or incident triggered) .....46

## Foreword

---

This document (EN 16601-10:2015) has been prepared by Technical Committee CEN/CLC/TC 5 "Space", the secretariat of which is held by DIN.

This standard (EN 16601-10:2015) originates from ECSS-M-ST-10C Rev. 1.

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 July 2015, and conflicting national standards shall be withdrawn at the latest by July 2015.

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 document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association.

This document supersedes EN 13290-2:2001; EN 13290-3:2001 and EN 13290-4:2001.

This document has been developed to cover specifically space systems and has therefore precedence over any EN covering the same scope but with a wider domain of applicability (e.g. : aerospace).

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

## **Introduction**

---

Project planning and implementation is the project function, encompassing a coherent set of processes for all aspects of project management and control.

This is done by:

- establishing the project requirements and constraints derived from the mission statement.
- defining phases and formal milestones enabling the progress of the project to be controlled with respect to cost, schedule and technical objectives (i.e. project control function).
- defining project breakdown structures, which constitute the common and unique reference system for the project management to:
  - identify the tasks and responsibilities of each actor;
  - facilitate the coherence between all activities of the whole project;
  - perform scheduling and costing activities.
- setting up a project organization to perform all necessary activities on the project.



# 1 Scope

---

The scope of this ECSS Standard is limited to describing the key elements of project planning and implementation and identifying the top level requirements and products that together provide a coherent and integrated project planning across the 3 ECSS branches.

Where other ECSS management, engineering, or product assurance standards contain more specific and detailed requirements related to project planning, references are provided to identify where these can be found within the ECSS system.

This standard may be tailored for the specific characteristic and constraints of a space project in conformance with ECSS-S-ST-00.

This is a free preview. Purchase the entire publication at the link below:

[Product Page](#)

- 
- [Looking for additional Standards? Visit Intertek Inform Infostore](#)
  - [Learn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation](#)
-