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| <b>TNI</b> | <b>Zabezpečovanie výrobkov kozmického programu<br/>Posudzovanie a zlepšovanie softvérových<br/>procesov<br/>Časť 2: Nástroje posudzovateľa</b> | <b>TNI<br/>CEN/CLC/TR<br/>17602-80-12</b><br><br>31 0539 |
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Space product assurance - Software process assessment and improvement - Part 2: Assessor instrument

Táto technická normalizačná informácia obsahuje anglickú verziu CEN/CLC/TR 17602-80-12:2021.  
This Technical standard information includes the English version of CEN/CLC/TR 17602-80-12:2021.

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**CEN/CLC/TR 17602-80-  
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English version

**Space product assurance - Software process assessment  
and improvement - Part 2: Assessor instrument**

Assurance produit des projets spatiaux - Evaluation et  
amélioration des processus logiciel - Partie 2: Élément  
d'évaluation

Raumfahrtproduktsicherung - Software -  
Prozessüberprüfung und -verbesserung - Teil 2:  
Gutachter

This Technical Report was approved by CEN on 13 September 2021. It has been drawn up by the Technical Committee CEN/CLC/JTC 5.

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# Table of contents

|   |           |
|---|-----------|
| <b>European Foreword</b> .....                          | <b>4</b>  |
| <b>Introduction</b> .....                               | <b>5</b>  |
| <b>1 Scope</b> .....                                    | <b>6</b>  |
| <b>2 References</b> .....                               | <b>7</b>  |
| <b>3 Terms, definitions and abbreviated terms</b> ..... | <b>9</b>  |
| 3.1 Terms and definitions .....                         | 9         |
| 3.2 Abbreviated terms.....                              | 9         |
| <b>4 Process Assessment Model</b> .....                 | <b>10</b> |
| 4.1 Process dimension .....                             | 10        |
| 4.1.1 Introduction .....                                | 10        |
| 4.1.2 Process definitions .....                         | 12        |
| 4.1.2.1 Acquisition process group (ACQ).....            | 13        |
| 4.1.2.1.1 ACQ.1 Acquisition Preparation .....           | 13        |
| 4.1.2.1.2 ACQ.2 Supplier Selection .....                | 14        |
| 4.1.2.1.3 ACQ.3 Contract Agreement.....                 | 15        |
| 4.1.2.1.4 ACQ.4 Supplier Monitoring .....               | 16        |
| 4.1.2.1.5 ACQ.5 Customer Acceptance.....                | 18        |
| 4.1.2.1.6 ACQ.6 Contract Maintenance .....              | 19        |
| 4.1.2.2 Supply process group (SPL) .....                | 20        |
| 4.1.2.2.1 SPL.1 Supplier Tendering.....                 | 20        |
| 4.1.2.2.2 SPL.2 Product Release .....                   | 22        |
| 4.1.2.2.3 SPL.3 Product Acceptance Support .....        | 24        |
| 4.1.2.3 Operation process group (OPE).....              | 25        |
| 4.1.2.3.1 OPE.1 Operational Use .....                   | 25        |
| 4.1.2.3.2 OPE.2 Customer Support.....                   | 26        |
| 4.1.2.4 Engineering process group (ENG) .....           | 28        |
| 4.1.2.4.1 ENG.1 Requirements Elicitation .....          | 28        |
| 4.1.2.4.2 ENG.2 System Requirements Analysis .....      | 29        |
| 4.1.2.4.3 ENG.3 System Architectural Design.....        | 30        |
| 4.1.2.4.4 ENG.4 Software Requirements Analysis .....    | 32        |
| 4.1.2.4.5 ENG.5 Software Design.....                    | 34        |
| 4.1.2.4.6 ENG.6 Software Construction.....              | 36        |
| 4.1.2.4.7 ENG.7 Software Integration.....               | 38        |
| 4.1.2.4.8 ENG.8 Software Testing .....                  | 40        |
| 4.1.2.4.9 ENG.9 System Integration .....                | 41        |
| 4.1.2.4.10 ENG.10 System Testing .....                  | 42        |
| 4.1.2.4.11 ENG.11 Software Installation.....            | 43        |
| 4.1.2.4.12 ENG.12 Software and System Maintenance ..... | 44        |

**CEN/CLC/TR 17602-80-12:2021 (E)**

|  |   |            |
|--|---|------------|
| 4.1.2.5  | Supporting process group (SUP) .....                          | 47         |
| 4.1.2.5.1  | SUP.1 Quality Assurance .....                                 | 47         |
| 4.1.2.5.2  | SUP.2 Verification.....                                       | 48         |
| 4.1.2.5.3  | SUP.3 Validation.....   | 51         |
| 4.1.2.5.4  | SUP.4 Joint Review .....                                      | 52         |
| 4.1.2.5.5  | SUP.5 Audit .....   | 54         |
| 4.1.2.5.6  | SUP.6 Product Evaluation .....                                | 55         |
| 4.1.2.5.7  | SUP.7 Documentation .....                                     | 57         |
| 4.1.2.5.8  | SUP.8 Configuration Management.....                           | 59         |
| 4.1.2.5.9  | SUP.9 Problem Resolution Management.....                      | 61         |
| 4.1.2.5.10   | SUP.10 Change Request Management .....                        | 63         |
| 4.1.2.5.11   | SUP.11 Safety and Dependability Assurance .....               | 64         |
| 4.1.2.5.12   | SUP.12 Independent Software Verification and Validation ..... | 66         |
| 4.1.2.6  | Management process group (MAN) .....                          | 67         |
| 4.1.2.6.1  | MAN.1 Organizational Alignment .....                          | 67         |
| 4.1.2.6.2  | MAN.2 Organization Management .....                           | 70         |
| 4.1.2.6.3  | MAN.3 Project Management.....                                 | 71         |
| 4.1.2.6.4  | MAN.4 Quality Management.....                                 | 73         |
| 4.1.2.6.5  | MAN.5 Risk Management.....                                    | 76         |
| 4.1.2.6.6  | MAN.6 Measurement.....  | 77         |
| 4.1.2.6.7  | MAN.7 Information Management.....                             | 79         |
| 4.1.2.7  | Process improvement process group (PIM).....                  | 81         |
| 4.1.2.7.1  | PIM.1 Process Establishment.....                              | 81         |
| 4.1.2.7.2  | PIM.2 Process Assessment.....                                 | 82         |
| 4.1.2.7.3  | PIM.3 Process Improvement .....                               | 83         |
| 4.1.2.8  | Resource and infrastructure process group (RIN) .....         | 84         |
| 4.1.2.8.1  | RIN.1 Human Resource Management .....                         | 84         |
| 4.1.2.8.2  | RIN.2 Training.....   | 87         |
| 4.1.2.8.3  | RIN.3 Knowledge Management.....                               | 88         |
| 4.1.2.8.4  | RIN.4 Infrastructure .....                                    | 89         |
| 4.1.2.9  | Reuse process group (REU) .....                               | 90         |
| 4.1.2.9.1  | REU.1 Asset Management .....                                  | 90         |
| 4.1.2.9.2  | REU.2 Reuse Program Management.....                           | 92         |
| 4.1.2.9.3  | REU.3 Domain Engineering.....                                 | 93         |
| 4.2  | Work product characteristics.....                             | 95         |
| 4.3  | Capability dimension.....                                     | 95         |
| 4.4  | Related processes for process attributes .....                | 96         |
| <b>Annex A Conformance with ISO/IEC 15504.....</b>             |   | <b>97</b>  |
| <b>Annex B Links between WP and ECSS expected outputs.....</b> |   | <b>98</b>  |
| <b>Annex C Traceability between BP and ECSS.....</b>           |   | <b>114</b> |
| <b>Tables</b>  |   |            |
| Table 4-1: ECSS-Q-HB-80-02 set of processes.....               |   | 10         |
| Table 4-2: Related processes for process attributes.....       |   | 96         |

## European Foreword

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This document (CEN/CLC/TR 17602-80-12:2021) has been prepared by Technical Committee CEN/CLC/JTC 5 "Space", the secretariat of which is held by DIN.

It is highlighted that this technical report does not contain any requirement but only collection of data or descriptions and guidelines about how to organize and perform the work in support of EN 16602-80.

This Technical report (CEN/CLC/TR 17602-80-12:2021) originates from ECSS-Q-HB-80-02 Part 2A.

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

## Introduction

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This Standard provides the instruments needed by competent assessors to perform assessments and to support improvement initiatives based on the framework described in TR 17603-80-11 (equivalent to ECSS-Q-HB-80-02 Part 1).

The ECSS-Q-HB-80-02 assessment method is a space specific instantiation of ISO/IEC 15504-5. In turn, ISO/IEC 15504 provides a common internationally recognized framework for the terminology and reference process assessment description.

The instruments provided in this handbook, when applied by competent assessors, support application of the methods described in Part 1 and allow claiming conformance to those methods and to requirements in ECSS-Q-ST-80. Specific instruments are also provided to enable claiming conformance to the requirements in ISO/IEC 15504 for process assessments as an additional advantage of the application of this Standard.

While the instruments provided in this handbook may provide useful information to participants in process assessment and improvement in general, their use is intended specifically for competent assessors. This handbook does not pose any requirements on the organisations being assessed or carrying out process improvement programmes whether using the methods described in Part 1 or not.

# 1

## Scope

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This handbook provides assessors with a number of instruments needed to perform software process capability assessments using the assessment method described in Part 1. It also provides instruments that help assessors to carry out their activities when performing assessments and supporting the implementation of software process improvement initiatives using the method for process improvement described in Part 1.

The instruments provided are:

- The Process Assessment Model (PAM) required to perform ECSS-Q-HB-80-02 assessments including process descriptions and process attribute indicators
- Conformance statement to the requirements in ISO/IEC 15504 Part 2
- A definition of the Process Reference Model (PRM) on which the ECSS-Q-HB-80-02 PAM is based (defined in ECSS-Q-HB-80-02 Part 1)
- Detailed traces from base practices in the ECSS-Q-HB-80-02 PAM to ECSS standards clauses and from ECSS-Q-HB-80-02 work products to ECSS expected outputs

## 2 References

| EN Reference   | EN in text               | Title   |
|----------------|--------------------------|---|
| EN 16601-00-01 | ECSS-S-ST-00-01          | ECSS System - Glossary of terms   |
| EN 16601-10    | ECSS-M-ST-10C rev.1      | Space project management - Project planning and implementation  |
| EN 16601-10-01 | ECSS-M-ST-10-01C         | Space project management - Organization and conduct of reviews  |
| EN 16601-40    | ECSS-M-ST-40C rev.1      | Space project management - Configuration and information management   |
| EN 16601-60    | ECSS-M-ST-60C            | Space project management - Cost and schedule management   |
| EN 16601-80    | ECSS-M-ST-80C            | Space project management - Risk management  |
| EN 16602-10    | ECSS-Q-ST-10C            | Space product assurance - Product assurance management  |
| EN 16602-10-04 | ECSS-Q-ST-10-04C         | Space product assurance - Critical-item control   |
| EN 16602-10-09 | ECSS-Q-ST-10-09C         | Space product assurance - Nonconformance control system   |
| EN 16602-20    | ECSS-Q-ST-20C            | Space product assurance - Quality assurance   |
| EN 16602-20-07 | ECSS-Q-20-07A            | Space product assurance - Quality assurance for test centres  |
| EN 16602-30    | ECSS-Q-ST-30C            | Space product assurance - Dependability   |
| EN 16602-40    | ECSS-Q-ST-40C            | Space product assurance - Safety  |
| EN 16602-80    | ECSS-Q-ST-80C            | Space product assurance – Software product assurance  |
| EN 16603-10    | ECSS-E-ST-10C            | System engineering general requirements   |
| EN 16603-10-02 | ECSS-E-ST-10-02C         | Space engineering - Verification  |
| EN 16603-10-03 | ECSS-E-10-03A            | Space engineering - Testing   |
| EN 16603-40    | ECSS-E-ST-40C            | Space engineering – Software  |
|                | ISO/IEC 15504: 2003-2006 | Information technology – Process assessment<br>Part 1: Concepts and vocabulary (normative)<br>Part 2: Performing an assessment (normative)<br>Part 3: Guidance on performing an assessment (informative)<br>Part 4: Guidance on use for process improvement and |



**CEN/CLC/TR 17602-80-12:2021 (E)**

|  |                                   |   |
|--|-----------------------------------|---|
|  |                                   | process capability determination (informative)<br>Part 5: An exemplar process assessment model<br>(informative) |
|  | ISO/IEC 12207:2004<br>Amd 1/Amd 2 | Information Technology – Software life cycle processes  |

**koniec náhľadu – text ďalej pokračuje v platenej verzii STN**