

# **Commissioning of electrical, instrumentation and control systems in the process industry – Specific phases and milestones**

Commissioning of electrical, instrumentation and  
control systems in the process industry – Specific  
phases and milestones

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 62337:2007 sisaldab Euroopa standardi EN 62337:2007 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 28.05.2007 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 62337:2007 consists of the English text of the European standard EN 62337:2007.</p> <p>This document is endorsed on 28.05.2007 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p><b>Käsitlusala:</b></p> <p>This International Standard defines specific phases and milestones (see Figure 1) in the commissioning of electrical, instrumentation and control systems in the process industry. By way of example, it describes activities following the “completion-of-erection” milestone of the project and prior to the “acceptance-of-the-plant” phase by the owner. Such activities need to be adapted for each type of process/plant concerned.</p>	<p><b>Scope:</b></p> <p>This International Standard defines specific phases and milestones (see Figure 1) in the commissioning of electrical, instrumentation and control systems in the process industry. By way of example, it describes activities following the “completion-of-erection” milestone of the project and prior to the “acceptance-of-the-plant” phase by the owner. Such activities need to be adapted for each type of process/plant concerned.</p>
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Võtmesõnad:

**Commissioning of electrical, instrumentation  
and control systems in the process industry -  
Specific phases and milestones  
(IEC 62337:2006)**

Mise en service des systèmes  
électriques de contrôle/commande  
et d'instrumentation dans les industries  
de processus -  
Phases spécifiques et étapes  
(CEI 62337:2006)

Inbetriebnahme elektrischer  
und leittechnischer Systeme  
in der Prozessindustrie -  
Phasen und Meilensteine  
(IEC 62337:2006)

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## Foreword

The text of document 65/384/FDIS, future edition 1 of IEC 62337, prepared by IEC TC 65, Industrial-process measurement and control, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 62337 on 2007-02-01.

The following dates were fixed:

- latest date by which the EN has to be implemented  
at national level by publication of an identical  
national standard or by endorsement (dop) 2007-11-01
- latest date by which the national standards conflicting  
with the EN have to be withdrawn (dow) 2010-02-01

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## Endorsement notice

The text of the International Standard IEC 62337:2006 was approved by CENELEC as a European Standard without any modification.

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# INTERNATIONAL STANDARD

**IEC**  
**62337**

First edition  
2006-11

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**Commissioning of electrical, instrumentation and  
control systems in the process industry – Specific  
phases and milestones**



Reference number  
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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

**COMMISSIONING OF ELECTRICAL, INSTRUMENTATION AND CONTROL  
SYSTEMS IN THE PROCESS INDUSTRY – SPECIFIC PHASES AND  
MILESTONES**

## FOREWORD

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International Standard IEC 62337 has been prepared by IEC technical committee 65: Industrial-process measurement and control.

This standard cancels and replaces IEC/PAS 62337 published in 2002. This first edition constitutes a technical revision.

The text of this standard is based on the following documents:

FDIS	Report on voting
65/384/FDIS	65/390/RVD

Full information on the voting for the approval of this standard can be found in the report on voting indicated in the above table.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

The committee has decided that the contents of this publication will remain unchanged until the maintenance result date indicated on the IEC web site under "<http://webstore.iec.ch>" in the data related to the specific publication. At this date, the publication will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

A bilingual version of this publication may be issued at a later date.

## INTRODUCTION

There is an increasing trend in the process industry to award the construction of whole plants to contractors on a lump-sum turnkey or similar commercial basis. Experience has shown that both the process industry (hereinafter called “the owner”) and the contractor have long and expensive discussions to lay down unambiguously the scope of activities to be taken by the contractor and the owner and their responsibilities to achieve the handover of the plant.

This standard should lead to an improvement and acceleration of the negotiation phase and to a mutual understanding about the scope of activities of each party.

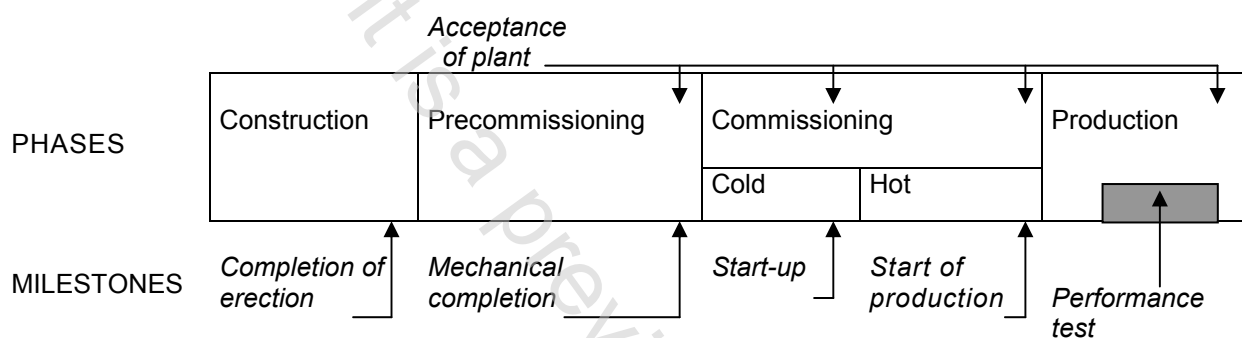
For application in the pharmaceutical or other highly specialized industries, additional guidelines (for example, Good Automated Manufacturing Practice (GAMP)), definitions and stipulations should apply in accordance with existing standards, for example, for GMP Compliance 21 CFR (FDA) and the Standard Operating Procedure of the European Medicines Agency (SOP/INSP/2003).

# COMMISSIONING OF ELECTRICAL, INSTRUMENTATION AND CONTROL SYSTEMS IN THE PROCESS INDUSTRY – SPECIFIC PHASES AND MILESTONES

## 1 Scope

This International Standard defines specific phases and milestones (see Figure 1) in the commissioning of electrical, instrumentation and control systems in the process industry. By way of example, it describes activities following the “completion-of-erection” milestone of the project and prior to the “acceptance-of-the-plant” phase by the owner. Such activities need to be adapted for each type of process/plant concerned.

NOTE This standard assumes that the “acceptance-of-the-plant” milestone will occur after the performance test. If there is a reduced scope, this document should be adapted accordingly.



IEC 1985/06

NOTE Construction and precommissioning activities could be overlapping.

**Figure 1 – Definition of phases and milestones**

## 2 Terms and definitions

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

### 2.1

#### **precommissioning**

phase during which the activities of non-operating adjustments, cold alignment checks, cleaning, and testing of machinery take place

NOTE Refer to Annex B for the detailed activities.

### 2.2

#### **mechanical completion**

milestone which is achieved when the plant, or any part thereof, has been erected and tested in accordance with drawings, specifications, instructions, and applicable codes and regulations to the extent necessary to permit cold commissioning

NOTE This includes completion of all necessary electrical and instrumentation work. This is a milestone marking the end of the precommissioning activities.

### 2.3

#### **cold commissioning**

phase during which the activities associated with the testing and operation of equipment or facilities using test media such as water or inert substances, prior to introducing any chemical in the system, take place