

# INTERNATIONAL STANDARD

## NORME INTERNATIONALE

**Industrial communication networks – Fieldbus specifications –  
Part 3-4: Data-link layer service definition – Type 4 elements**

**Réseaux de communication industriels – Spécifications des bus de terrain –  
Partie 3-4: Définition des services de couche liaison de données – Éléments  
de type 4**



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## CONTENTS

FOREWORD.....	4
INTRODUCTION.....	6
1 Scope.....	7
1.1 General.....	7
1.2 Specifications .....	7
1.3 Conformance .....	7
2 Normative references .....	8
3 Terms, definitions, symbols, abbreviations and conventions .....	8
3.1 Reference model terms and definitions .....	8
3.2 Service convention terms and definitions .....	10
3.3 Data-link service terms and definitions.....	10
3.4 Symbols and abbreviations .....	12
3.5 Conventions.....	13
4 Data-link service and concepts .....	14
4.1 Overview.....	14
4.1.1 General .....	14
4.1.2 Overview of DL-naming (addressing).....	14
4.2 Types and classes of data-link service.....	15
4.3 Functional classes .....	15
4.4 Facilities of the connectionless-mode data-link service .....	16
4.5 Model of the connectionless-mode data-link service.....	16
4.5.1 General .....	16
4.5.2 Unconfirmed request.....	16
4.5.3 Confirmed request .....	16
4.6 Sequence of primitives.....	17
4.6.1 Constraints on sequence of primitives .....	17
4.6.2 Relation of primitives at the end-points of connectionless service .....	17
4.6.3 Sequence of primitives at one DLSAP.....	18
4.7 Connectionless-mode data transfer functions.....	18
4.7.1 General .....	18
4.7.2 Types of primitives and parameters .....	18
5 DL-management service.....	21
5.1 Scope and inheritance .....	21
5.2 Facilities of the DL-management service.....	21
5.3 Model of the DL-management service .....	21
5.4 Constraints on sequence of primitives.....	21
5.5 Set.....	22
5.5.1 Function .....	22
5.5.2 Types of parameters .....	22
5.6 Get .....	23
5.6.1 Function .....	23
5.6.2 Types of parameters.....	23
5.7 Action .....	23
5.7.1 Function .....	23
5.7.2 Types of parameters.....	23
5.7.3 Sequence of primitives .....	24

5.8	Event .....	24
5.8.1	Function .....	24
5.8.2	Types of parameters .....	24
	Bibliography.....	26
	Figure 1 – Relationship of PhE, DLE and DLS-users .....	15
	Figure 2 – Confirmed and unconfirmed UNITDATA request time-sequence diagram .....	17
	Figure 3 – Repeated confirmed request time-sequence diagram .....	18
	Figure 4 – State transition diagram for sequences of primitives at one DLSAP .....	18
	Figure 5 – Sequence of primitives for the DLM action service .....	21
	Table 1 – Summary of DL-connectionless-mode primitives and parameters .....	17
	Table 2 – Unitdata transfer primitives and parameters .....	19
	Table 3 – Control-status error codes .....	20
	Table 4 – Summary of DL-management primitives and parameters .....	22
	Table 5 – DLM-Set primitive and parameters .....	22
	Table 6 – DLM-Get primitive and parameters .....	23
	Table 7 – DLM-Action primitive and parameters .....	24
	Table 8 – DLM-Event primitive and parameters .....	25

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**INDUSTRIAL COMMUNICATION NETWORKS –  
FIELDBUS SPECIFICATIONS –****Part 3-4: Data-link layer service definition –  
Type 4 elements**

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NOTE Combinations of protocol Types are specified in IEC 61784-1 and IEC 61784-2.

International Standard IEC 61158-3-4 has been prepared by subcommittee 65C: Industrial networks, of IEC technical committee 65: Industrial-process measurement, control and automation.

This third edition cancels and replaces the second edition published in 2014. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

- a) additional user parameters to services;
- b) additional services to support distributed objects;
- c) additional secure services;

The text of this International Standard is based on the following documents:

FDIS	Report on voting
65C/945/FDIS	65C/954/RVD

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

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

A list of all the parts of the IEC 61158 series, published under the general title *Industrial communication networks – Fieldbus specifications* can be found on the IEC website.

The committee has decided that the contents of this publication will remain unchanged until the stability 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.

## INTRODUCTION

This document is one of a series produced to facilitate the interconnection of automation system components. It is related to other standards in the set as defined by the “three-layer” fieldbus reference model described in IEC 61158-1.

Throughout the set of fieldbus standards, the term “service” refers to the abstract capability provided by one layer of the OSI Basic Reference Model to the layer immediately above. Thus, the data-link layer service defined in this document is a conceptual architectural service, independent of administrative and implementation divisions.

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