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Distribution automation using distribution line carrier systems –

Part 5-4: Lower layer profiles – Multi-carrier modulation (MCM) profile

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CONTENTS

FOREWORD 4

1 Scope and object 6
2 Normative references 6
3 Definitions and abbreviations 6
3.1 Definitions 6
3.2 Abbreviations 7
4 Lower layer profile structure 8
4.1 Physical layer 8
4.2 MAC sublayer 9
5 Physical layer specification 9
5.1 Modulation 9
5.1.1 Purpose 9
5.1.2 The multicarrier modulation (MCM) principle 9
5.2 Physical layer data format 10
5.2.1 Purpose 10
5.2.2 Transmission method, overview 10
5.2.3 Configuration parameters 11
5.2.4 PHY PDU format, CRC encoding and padding 12
5.2.5 Convolutional encoding 13
5.2.6 Segmentation and interleaving 14
5.2.7 Preamble 14
5.2.8 Modulation 14
5.3 PHY services 15
5.3.1 PHY to MAC interface 15
6 MAC sublayer protocol specification 17
6.1 Overview 17
6.1.1 MAC communication network architecture 17
6.1.2 Features of the MAC sublayer 17
6.2 Transmission procedures 17
6.3 MAC services 18
6.3.1 MAC to LLC interface 18
6.3.2 MAC layer management interface 20
6.4 MAC PDU format 22
6.4.1 MAC control field 22
6.4.2 Address field 23
6.4.3 LLC PDU 23
6.5 MAC addresses 24
6.6 Used MAC PDUs 25
6.6.1 Information PDU 25
6.6.2 Repetition control PDU 25
6.7 MAC invalid PDU 25
6.8 MAC procedures 25
6.8.1 MACphy procedures 26
6.8.2 MACrore procedures 26

6.9 MAC timer values 30
6.10 MAC state transition diagrams/tables 30
6.10.1 Startup 30
6.10.2 MAC sublayer 31
6.10.3 Non-initiator MAC sublayer 34

Figure 1 – Layered architecture of the DLC-M protocol stack 8
Figure 2 – Sample frequency representation of multicarrier modulation 9
Figure 3 – Transmitter data flow diagram (one telegram) 11
Figure 4 – Block diagram of encoder 13
Figure 5 – MAC transmission using MAC service class 0 (postponed confirmation) 18
Figure 6 – MAC transmission using MAC service class 1 or 2 (round-trip delayed confirmation) 18
Figure 7 – Example for transmission of a MAC PDU with 1 repetition using MAC service class 1 or 2 27
Figure 8 – Time-sequence chart for (error-free) routing repeater procedure 28
Figure 9 – MAC startup state diagram 30
Figure 10 – Initiator MAC state diagram 31
Figure 11 – Non-initiator MAC state diagram 34

Table 1 – MAC domain IDs 24
Table 2 – MAC node IDs 24
Table 3 – MAC predefined addresses 24
Table 4 – Mapping to IEC 61334-4-1 predefined MAC addresses 25
Table 5 – MAC startup state table 31
Table 6 – MAC startup state description 31
Table 7 – Initiator MAC state table 32
Table 8 – Initiator MAC state description 32
Table 9 – Initiator MAC procedures 33
Table 10 – Initiator MAC variables 33
Table 11 – Initiator MAC conditions 33
Table 12 – Non-initiator MAC state table 34
Table 13 – Non-initiator MAC state description 36
Table 14 – Non-initiator MAC procedures 36
Table 15 – Non-initiator MAC variables 37
Table 16 – Non-initiator MAC conditions 37

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Part 5-4: Lower layer profiles – Multi-carrier modulation (MCM) profile

FOREWORD

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- The subject is still under technical development or where, for any other reason, there is the future but no immediate possibility of an agreement on an International Standard.

IEC 61334-5-4, which is a technical specification, has been prepared by IEC technical committee 57: Power system control and associated communications.

The text of this technical specification is based on the following documents:

Enquiry draft	Report on voting
57/479/CDV	57/517/RVC

Full information on the voting for the approval of this technical specification 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 3.

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

The committee has decided that the contents of this publication will remain unchanged until 2004. At this date, the publication will be

- transformed into an International Standard;
- reconfirmed;
- withdrawn;
- replaced by a revised edition, or
- amended.

DISTRIBUTION AUTOMATION USING DISTRIBUTION LINE CARRIER SYSTEMS –

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1 Scope and object

This technical specification describes the requirements of the multicarrier modulation (MCM) approach which incorporates the services provided by the physical layer entity and the MAC sublayer with the purpose of building up a set of standards for effective communication on MV and LV network for distribution line carrier (DLC) systems, in the context of IEC 61334-1-1.

Different technical approaches in developing communication systems for DLC communication are in progress. As a consequence, at present, different lower layer profiles are feasible with acceptable results in terms of performance and cost-effectiveness. In many cases, the differences amongst solutions are minor and it is possible to find a common root.

2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this part of IEC 61334. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this part of IEC 61334 are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of IEC and ISO maintain registers of currently valid International Standards.

IEC 61334-1-1, *Distribution automation using distribution line carrier systems – Part 1: General considerations – Section 1: Distribution automation system architecture*

IEC 61334-3-1, *Distribution automation using distribution line carrier systems – Part 3-1: Mains signalling requirements – Frequency bands and output levels*

IEC 61334-4-1, *Distribution automation using distribution line carrier systems – Part 4: Data communication protocols – Section 1: Reference model of the communication system*