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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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FOREWORD

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- the required support cannot be obtained for the publication of an International Standard, despite repeated efforts, or
- 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- withdrawn;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 –

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

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*