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**Information technology —
Telecommunications and information
exchange between systems —
Magnetic field area network (MFAN) —
Part 2:
In-band Control Protocol for Wireless
Power Transfer**

*Technologies de l'information — Téléinformatique — Réseau de zone
de champ magnétique (MFAN) —*

*Partie 2: Protocole de contrôle dans la bande pour le transfert de
puissance sans fil*

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ISO copyright office
Ch. de Blandonnet 8 • CP 401
CH-1214 Vernier, Geneva, Switzerland
Tel. +41 22 749 01 11
Fax +41 22 749 09 47
copyright@iso.org
www.iso.org

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Contents

	Page
Foreword	v
Introduction	vi
1 Scope	1
2 Normative references	1
3 Terms and definitions	2
4 Symbols and abbreviated terms	2
5 Overview	4
6 Network elements	5
6.1 General.....	5
6.2 Time element.....	5
6.2.1 General.....	5
6.2.2 Time element for MPAN.....	6
6.3 Physical element.....	7
6.3.1 Coordinator.....	7
6.3.2 Node.....	7
6.4 Address element.....	8
6.4.1 MFAN ID.....	8
6.4.2 UID.....	8
6.4.3 Group ID.....	8
6.4.4 Node ID.....	8
6.4.5 WPT ID.....	8
7 Network status	9
7.1 General.....	9
7.2 Network status for MPAN.....	9
7.2.1 Stabilization.....	9
7.2.2 Invigoration.....	9
7.2.3 Revitalization.....	9
7.3 MPAN state.....	9
7.3.1 Coordinator state.....	10
7.3.2 Node state.....	11
8 Physical layer frame format	13
8.1 General.....	13
8.2 Preamble.....	14
8.3 Header.....	14
8.4 Payload.....	14
8.5 Frame check sequence.....	14
9 MAC layer frame format	14
9.1 General.....	14
9.2 Frame format for MPAN.....	14
9.2.1 Frame header.....	15
9.2.2 Frame body.....	15
9.2.3 Frame type.....	15
9.2.4 Payload format.....	16
9.3 Frame format for power status feedback.....	25
9.3.1 Frame header.....	25
9.3.2 Frame body.....	26
9.3.3 Frame type.....	26
9.3.4 Payload format.....	27
10 MAC layer function	28
10.1 General.....	28

This is a preview of "ISO/IEC 15149-2:2015". Click [here](#) to purchase the full version from the ANSI store.

10.2	Stabilization.....	28
10.3	Invigoration.....	29
10.4	Revitalization.....	30
11	Air interface.....	31
11.1	Frequency.....	31
11.2	Signal waveform for WPT.....	31

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Foreword

ISO (the International Organization for Standardization) and IEC (the International Electrotechnical Commission) form the specialized system for worldwide standardization. National bodies that are members of ISO or IEC participate in the development of International Standards through technical committees established by the respective organization to deal with particular fields of technical activity. ISO and IEC technical committees collaborate in fields of mutual interest. Other international organizations, governmental and non-governmental, in liaison with ISO and IEC, also take part in the work. In the field of information technology, ISO and IEC have established a joint technical committee, ISO/IEC JTC 1.

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The committee responsible for this document is ISO/IEC JTC 1, *Information technology*, Subcommittee SC 6, *Telecommunications and information exchange between systems*.

ISO/IEC 15149 consists of the following parts, under the general title *Information technology — Telecommunications and information exchange between systems — Magnetic field area network (MFAN)*:

- *Part 1: Air interface*
- *Part 2: In-band control protocol for wireless power transfer*
- *Part 3: Relay protocol for extended range*
- *Part 4: Security protocol for authorization*

Introduction

This International Standard provides protocols for magnetic field area network (MFAN). MFAN can support the service based on wireless communication and wireless power transfer in harsh environment. MFAN is composed of four protocols; air interface, in-band control protocol, relay protocol, and security protocol.

ISO/IEC 15149-1 specifies the physical layer and media access control layer protocols of wireless network over a magnetic field.

ISO/IEC 15149-2 specifies the control protocol for wireless power transfer based on magnetic field area network.

ISO/IEC 15149-3 specifies the relay protocol to extend effective network coverage of magnetic field area network.

ISO/IEC 15149-4 specifies the security protocol to authorize nodes to communicate in magnetic field area network.