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**Extended farm management** in (Et.) information systems data interface (EFDI) — Concept and guidelines



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#### **Foreword**

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see <a href="https://www.iso.org/directives">www.iso.org/directives</a>).

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For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see <a href="https://www.iso.org/iso/foreword.html">www.iso.org/iso/foreword.html</a>.

This document was prepared by Technical Committee ISO/TC 23, *Tractors and machinery for agriculture and forestry*, Subcommittee SC 19, *Agricultural electronics*.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at <a href="https://www.iso.org/members.html">www.iso.org/members.html</a>.

### Introduction

Participants in the agricultural environment are dealing with the necessity of exchanging data with various systems and interfaces. With increasing demand for process monitoring and control, and justin on a ss, the n. in-time information on task execution state, and at the same time integration of mobile devices into farm work processes, the need of a standardized way for data exchange arises.

# Extended farm management information systems data interface (EFDI) — Concept and guidelines

#### 1 Scope

This document specifies an extensible communication system concept and defines rules for adding new functionalities to cover specific use cases.

#### 2 Normative references

There are no normative references in this document.

#### 3 Terms and definitions

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

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <a href="https://www.iso.org/obp">https://www.iso.org/obp</a>
- IEC Electropedia: available at <a href="https://www.electropedia.org/">https://www.electropedia.org/</a>

#### 3.1

#### network

group of two or more participants connected to each other via a server

#### 3.2

#### endpoint

uniquely addressable instance within a network

Note 1 to entry: An endpoint can be a farm management information system (FMIS), a telemetry unit, a terminal or a complete machine.

Note 2 to entry: The server is also an endpoint.

#### 3.3

#### client

C

endpoint that communicates with the server

#### 3.4

#### server

S

central component for communication in a network

Note 1 to entry: All communication is done via the server.

#### 3.5

#### messaging component

MC

part of the server and network management

Note 1 to entry: The messaging component (MC) keeps track of logged-in endpoints and their capabilities and is also responsible for the delivery and forwarding of messages.