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**Information technology — Sensor
networks — Services and interfaces
supporting collaborative information
processing in intelligent sensor
networks**

*Technologies de l'information — Réseaux de capteurs — Services et
interfaces prenant en charge le traitement d'information collaboratif
dans les réseaux de capteurs intelligents*

Reference number
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Foreword

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The main task of the joint technical committee is to prepare International Standards. Draft International Standards adopted by the joint technical committee are circulated to national bodies for voting. Publication as an International Standard requires approval by at least 75 % of the national bodies casting a vote.

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Introduction

Sensor networks have been widely deployed in different application domains including environment monitoring, transportation, manufacturing, chemical process, healthcare, home and buildings, and many other domains. Wired/wireless sensor networks can be regarded as an extension of the Internet interfacing the physical world. Intelligent sensor networks are increasingly attractive in a wide range of applications to meet challenges from intrinsic environment complexity, large orders of magnitude network scaling and dynamic application requirements. Intelligent sensor networks are developed to provide new system capabilities such as environment self-adaptability, dynamic task supporting and autonomous system maintenance. Collaborative information processing (CIP), which closely integrates information processing algorithms with collaboration mechanisms, is an essential technology enabling the intelligent sensor networks to enhance efficiency and to improve quality and reliability of information processing and its outputs in real application scenarios. This standard specifies services and interfaces supporting CIP in the intelligent sensor networks.

Information technology — Sensor networks — Services and interfaces supporting collaborative information processing in intelligent sensor networks

1 Scope

This international standard specifies services and interfaces supporting collaborative information processing (CIP) in intelligent sensor networks which includes:

- CIP functionalities and CIP functional model
- Common services supporting CIP
- Common service interfaces to CIP

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO/IEC 7498-1:1994, *Information technology — Open Systems Interconnection — Basic Reference Model: The Basic Model*