

---

---

**Information technology —  
Telecommunications and information  
exchange between systems —  
Front-end configuration command for  
NFC-WI (NFC-FEC)**

*Technologies de l'information — Télécommunications et échange  
d'informations entre systèmes — Commande à configuration frontale  
pour NFC-WI (NFC-FEC)*



**COPYRIGHT PROTECTED DOCUMENT**

© ISO/IEC 2011

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office  
Case postale 56 • CH-1211 Geneva 20  
Tel. + 41 22 749 01 11  
Fax + 41 22 749 09 47  
E-mail [copyright@iso.org](mailto:copyright@iso.org)  
Web [www.iso.org](http://www.iso.org)

Published in Switzerland

# Contents

Page

Foreword .....	iv
Introduction.....	v
1 Scope .....	1
2 Conformance .....	1
3 Normative references.....	1
4 Terms and definitions .....	1
5 Conventions and notations .....	1
6 Acronyms .....	1
7 States .....	1
7.1 Escape state.....	2
7.2 Command Ready state.....	2
7.3 Command Busy state.....	2
7.4 Quit state .....	2
8 Commands and Responses .....	3
8.1 Command and response Format .....	3
8.2 Checksum .....	3
8.3 Commands .....	3
8.4 Responses .....	4
9 Information-Transfer .....	4
9.1 Transceiver Frames.....	4
9.2 Front-end Frames .....	4

## 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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

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.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO and IEC shall not be held responsible for identifying any or all such patent rights.

ISO/IEC 16353 was prepared by Ecma International (as ECMA-390) and was adopted, under a special “fast-track procedure”, by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, in parallel with its approval by national bodies of ISO and IEC.

## Introduction

ISO/IEC 28361 specifies a two-wire interface for which this International Standard defines commands, responses and their transmission, allowing the exchange of control and state information between the transceiver and the front-end as specified in ISO/IEC 28361. Such exchange may include indication of the presence of the RF field and control information to change data rates and communication modes of the front-end.

# Information technology — Telecommunications and information exchange between systems — Front-end configuration command for NFC-WI (NFC-FEC)

## 1 Scope

This International Standard specifies commands for the Near Field Communication Wired Interface (NFC-WI) specified in ISO/IEC 28361. The commands allow exchange of control and state information between the transceiver and the front-end.

## 2 Conformance

To conform to this International Standard, an NFC-FEC device shall conform to all mandatory parts specified herein and all mandatory parts of ISO/IEC 28361 (NFC-WI).

## 3 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 28361:2007, *Information technology — Telecommunications and information exchange between systems — Near Field Communication Wired Interface (NFC-WI)*