
**Identification cards — Transport layer
topologies — Configuration for HCI/
HCP interchange**

*Cartes d'identification — Topologies de la couche transport —
Configuration pour les échanges HCI/HCP*



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Contents

	Page
Foreword	iv
Introduction	v
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Symbols and abbreviated terms	2
5 Architecture	4
5.1 System architecture view	4
5.1.1 General	4
5.1.2 Hosts	5
5.1.3 Gates	5
5.1.4 Pipes	6
5.1.5 Host controller	7
5.1.6 General aspects on APDU gate	7
5.2 System architecture with legacy COS	8
6 Configuration requirements	9
6.1 General	9
6.2 Logical components of an APDU-enabled host	9
6.3 Gates registry	9
6.3.1 General	9
6.3.2 Administration gate registry	10
6.3.3 Link management gate	11
6.3.4 Identity management gate	12
6.3.5 Loop back gate	12
6.3.6 APDU gate	13
6.3.7 APDU application gate registry	13
6.4 Example of exchanging APDU via HCI/HCP	13
6.5 APDU transport versus HCP frames	14
6.5.1 General	14
6.5.2 Chaining of T=1 message blocks wrapping HCP packets	15
6.5.3 Handling of error recovery with T=1 features	15
6.6 APDU fragmentation	15
6.7 Supported set of commands and events	15
Annex A (informative) Examples of architecture variants	16
Annex B (informative) Background information	21
Bibliography	26

Foreword

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Introduction

This document is laid on the ground of ISO/IEC 7816 (all parts) specifying integrated circuit cards and the use of such cards for interchange, and on ETSI TS 102 622 defining the HCI core that is an application independent logical interface.

ETSI TS 102 622 is referenced in this document as a well-known HCI specification, however it should be noted ETSI TS 102 622 describes another host network with the host controller implemented by the CLF/NFC controller and with hosts residing on UICCs/SEs all connected to the host controller. ETSI TS 102 622 allows for other interfaces than SWP for data link layer of HCI, and does not mandate using the SWP but just describes the condition if the SWP is used.

Identification cards — Transport layer topologies — Configuration for HCI/HCP interchange

1 Scope

This document specifies the requirements for a protocol derived from HCI/HCP (see ETSI TS 102 622) enabling communication for devices regardless of data link and physical layers. This document covers the following:

- a) outline of a system comprised of one or more hosts and one controller;
- b) extension of connection topology between hosts and host controller (i.e. star topology and additional other topologies);
- c) segregation between existing system using ETSI TS 102 613 and new system compliant to this document (this document refers ETSI TS 102 613, but does not change its specification and does not use RFU).

For ETSI TS 102 622, data link layer and physical layer like SWP specified in ETSI TS 102 613 is out of the scope.

Albeit questioned in this document, the duplication of OSI transport layer by e.g. enforcing encapsulation of HCP into T=1 or the reverse, is out of the scope.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 7816-3, *Identification cards — Integrated circuit cards — Part 3: Cards with contacts — Electrical interface and transmission protocols*

ISO/IEC 7816-4, *Identification cards — Integrated circuit cards — Part 4: Organization, security and commands for interchange*