PD ISO/TS 12812-3:2017

BSI Standards Publication

Core banking — Mobile financial services

Part 3: Financial application lifecycle management

Documents
Document Sharing Hub

Full document details: PD ISO/TS 12812-3:2017

National foreword

This Published Document is the UK implementation of ISO/TS 12812-3:2017.

The UK participation in its preparation was entrusted to Technical Committee IST/12, Financial services.

A list of organizations represented on this committee can be obtained on request to its secretary.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

© The British Standards Institution 2017.
Published by BSI Standards Limited 2017

ISBN 978 0 580 82719 8
ICS 03.060

Compliance with a British Standard cannot confer immunity from legal obligations.

This Published Document was published under the authority of the Standards Policy and Strategy Committee on 30 April 2017.

Amendments/corrigenda issued since publication

Date	Text affected

Documents
Document Sharing Hub

Full document details: PD ISO/TS 12812-3:2017

TECHNICAL SPECIFICATION

ISO/TS 12812-3

First edition
2017-03

Core banking — Mobile financial services —

Part 3: Financial application lifecycle management

Opérations bancaires de base — Services financiers mobiles —

Partie 3: Gestion du cycle de vie des applications financières

Reference number
ISO/TS 12812-3:2017(E)

Documents
Document Sharing Hub

© ISO 2017

Full document details: PD ISO/TS 12812-3:2017

COPYRIGHT PROTECTED DOCUMENT

© ISO 2017, Published in Switzerland

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

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

© ISO 2017 – All rights reserved

Documents
Document Sharing Hub

Full document details: PD ISO/TS 12812-3:2017

Contents

Page

Foreword ... **iv**

Introduction ... **v**

1 Scope ... **1**

2 Normative references ... **1**

3 Terms and definitions ... **1**

4 Abbreviated terms ... **2**

5 Basic principles for application lifecycle management ... **2**
- 5.1 General ... 2
- 5.2 Portability of MFSs ... 2
- 5.3 Entities involved in the application lifecycle management ... 3
- 5.4 Security and privacy ... 3
- 5.5 Risk assessment ... 3
- 5.6 Support of multiple applications and multiple MFSPs ... 3
- 5.7 User Interface and branding ... 3
- 5.8 Customer relationship management ... 3
- 5.9 Common APIs ... 4
- 5.10 Terms of service ... 4

6 Location of the application ... **4**
- 6.1 General ... 4
- 6.2 Different types of secure environments ... 4
- 6.3 Scenarios for mobile proximate payments ... 4
- 6.4 Scenarios for mobile remote payments ... 5
  - 6.4.1 General ... 5
  - 6.4.2 Payment credentials ... 5
  - 6.4.3 Application ... 5
- 6.5 Scenarios for mobile banking ... 5

7 Service management roles ... **5**
- 7.1 General ... 5
- 7.2 MFSP domain roles ... 6
- 7.3 SE provider domain roles ... 7

8 Application lifecycle: functions and processes ... **7**
- 8.1 General ... 7
- 8.2 Functions ... 7
- 8.3 Processes ... 8

9 Scenarios for service models ... **9**
- 9.1 General ... 9
- 9.2 Scenario 1: UICC ... 9
- 9.3 Scenario 2: Embedded secure element ... 9
- 9.4 Scenario 3: Secure micro SD card ... 10
  - 9.4.1 General ... 10
  - 9.4.2 Secure micro SD card provided by the MFSP ... 10
  - 9.4.3 Secure micro SD card provided by a third party ... 10
  - 9.4.4 Secure micro SD card for contactless payment ... 10
- 9.5 Scenario 4: Trusted execution environment ... 10
- 9.6 Scenario 5: Mobile application located in the mobile device host ... 11
- 9.7 Scenario 6: Mobile application on a secured server ... 11

Bibliography ... **12**

© ISO 2017 – All rights reserved

Documents
Document Sharing Hub

Full document details: PD ISO/TS 12812-3:2017

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 www.iso.org/directives).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on 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 the following URL: www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 68, *Financial Services*, Subcommittee SC 7, *Core Banking*.

A list of all the parts in the ISO 12812 series can be found on the ISO website.

© ISO 2017 – All rights reserved

Documents
Document Sharing Hub

Full document details: PD ISO/TS 12812-3:2017

Introduction

The use of mobile devices to conduct financial services (i.e. payments and banking) is occurring following the steady rise of the number of customers using the Internet for these services. As an evolving market, mobile financial services are being developed and implemented on various bases throughout the different regions of the world and also among the various providers of such services. In these conditions, the purpose of the ISO 12812 series is to facilitate and promote interoperability, security and quality of mobile financial services while making sure that stakeholders in the services can benefit from the evolution, and service providers remain as commercially free and competitive as possible to design their own implementations in pursuing their own business strategies. This document addresses the interoperability only at the technical layer by considering the impact of new components and/or interfaces induced by the introduction of a mobile device in financial services. The intentions of the ISO 12812 series are:

a) to advance interoperability of mobile financial services globally by defining requirements based on a common terminology and basic principles for the design and operation of mobile financial services;

b) to define technical components and their interfaces, as well as roles that may be performed by different actors in addition to mobile financial service providers (e.g. mobile network operators, trusted service managers). These components and their interfaces, as well as roles, are defined according to identified use cases. Future use cases may be considered during the maintenance of the ISO 12812 series;

c) to identify existing standards on which mobile financial services should be based, as well as possible gaps.

Standardization effort in this area is beneficial for a sound development of the mobile financial services market because it will:

— facilitate and promote interoperability between the different components or functions building mobile financial services;

— build a safe environment so that consumers and merchants can trust the service and allow the mobile financial service providers to manage their risks;

— promote consumer protection mechanisms including fair contract terms, rules on transparency of charges, clarification of liability, complaints mechanisms and dispute resolution;

— enable the consumer to choose from different providers of devices or mobile financial services including the possibility to contract with several mobile financial service providers for services on the same device;

— enable the consumer to transfer a mobile financial service from one device to another one (portability);

— promote a consistent consumer experience among various mobile financial services and mobile financial service providers with easy-to-use interfaces.

To achieve these objectives, each part of the ISO 12812 series will specify the necessary technical mechanisms and, when relevant, refer to existing relevant standards as appropriate.

The ISO 12812 series provides a framework flexible enough to accommodate new mobile device technologies, as well as to allow various business models. At the same time, it enables compliance with applicable regulations including data privacy, protection of personally-identifiable data, consumer protection, anti-money laundering and prevention of financial crime.

It is not the intention of the ISO 12812 series to duplicate or to seek to replace any existing standard in the area of mobile financial services (e.g. communication protocols, mobile devices). It is also not the intention of the ISO 12812 series to drive technology to any specific application or to restrict

Documents
Document Sharing Hub

© ISO 2017 – All rights reserved

Full document details: PD ISO/TS 12812-3:2017