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Core banking — Mobile financial services

Part 3: Financial application lifecycle management



National foreword

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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 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).

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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.

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:
- 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

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the development of future technologies or solutions. Messages and data elements to be exchanged at the interfaces between the different components or actors of the system are already specified (e.g. ISO 20022, ISO 8583 (all parts)].

The ISO 12812 series recognizes the need for unbanked or under-banked consumers to access mobile financial services. It also recognizes that these services may be provided by diverse types of institutions in accordance with the applicable regulation(s).

Core banking — Mobile financial services —

Part 3:

Financial application lifecycle management

1 Scope

This document specifies the interoperable lifecycle management of applications used in mobile financial services. As defined in ISO 12812-1, an application is a set of software modules and/or data needed to provide functionality for a mobile financial service.

This document deals with different types of applications which is the term used to cover authentication, banking and payment applications, as well as credentials.

 $\underline{\text{Clause 5}}$ describes the basic principles required, or to be considered, for the application lifecycle management.

Because several implementations are possible with impacts on the lifecycle, this document describes the different architectures for the location of the application and the impacts of the different scenarios regarding the issuance of the secure element when present (see <u>Clause 6</u>), the different roles for the management of the application lifecycle and the domains of responsibilities (see <u>Clause 7</u>). It also specifies functions and processes in the application lifecycle management (see <u>Clause 8</u>) and describes scenarios of service models and roles of actors (see <u>Clause 9</u>).

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 12812-1, Core banking — Mobile financial services — Part 1: General framework

ISO/TS 12812–2, Core banking — Mobile financial services — Part 2: Security and data protection for mobile financial services

ISO/TS 12812-4, Core banking — Mobile financial services — Part 4: Mobile payments-to-person

ISO/TS 12812-5, Core banking — Mobile financial services — Part 1: Mobile payments to business

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 12812-1 and ISO/TS 12812-2 and the following apply.

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

- IEC Electropedia: available at http://www.electropedia.org/
- ISO Online browsing platform: available at http://www.iso.org/obp

3.1

service management roles

set of roles that enable the lifecycle management of the application