
**Core banking — Mobile financial
services —**

**Part 1:
General framework**

*Opérations bancaires de base — Services financiers mobiles —
Partie 1: Cadre général*



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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).

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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.

Introduction

The use of mobile devices to conduct financial services (i.e. payments and banking) is occurring following the steady rise in 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 (all parts) is to facilitate and promote interoperability, security and quality of mobile financial services. At the same time, it is important that stakeholders in the services can benefit from the evolution and service providers remain commercially free and competitive in order to pursue their own business strategies. ISO 12812 (all parts) 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 ISO 12812 (all parts) are as follows.

- 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 ISO 12812 (all parts).
- c) To identify existing standards on which mobile financial services should be based, as well as possible gaps.

Standardization in this area is beneficial for the 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 ISO 12812 (all parts) will specify the necessary technical mechanisms and, when relevant, refer to existing standards as appropriate.

ISO 12812 (all parts) 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 ISO 12812 (all parts) 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 to drive technology to any specific application or to restrict 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 may be those already specified [e.g. ISO 20022, ISO 8583 (all parts)].

ISO 12812 (all parts) 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).

The ISO 12812 series consists of the following parts:

- *Part 1: General framework* — The introduction of the standard with descriptions of some fundamental bases on which the other parts are built;
- *Part 2: Security and data protection for mobile financial services* — Definition of a general framework for the secure execution of mobile financial services;
- *Part 3: Financial application lifecycle management* — The lifecycle of the application including roles and infrastructure for secure provisioning;
- *Part 4: Mobile payments to persons* — Use cases and requirements for interoperability;
- *Part 5: Mobile payments to businesses* — Use cases and requirements for interoperability.

Core banking — Mobile financial services —

Part 1: General framework

1 Scope

This document defines the general framework of mobile financial services (payment and banking services involving a mobile device), with a focus on:

- a) a set of definitions commonly agreed by the international financial industry;
- b) the opportunities offered by mobile devices for the development of such services;
- c) the promotion of an environment that reduces or minimizes obstacles for mobile financial service providers who wish to provide a sustainable and reliable service to a wide range of customers (persons and businesses), while ensuring that customers' interests are protected;
- d) the different types of mobile financial services accessed through a mobile device including mobile proximate payments, mobile remote payments and mobile banking, which are detailed in other parts of ISO 12812;
- e) the mobile financial services supporting technologies;
- f) the stakeholders involved in the mobile payment ecosystems.

This document includes the following informative annexes:

- an overview of other standardization initiatives in mobile financial services ([Annex A](#));
- a description of possible mobile payment business models ([Annex B](#));
- a description of typical payment instruments which may be used ([Annex C](#)).

2 Normative references

There are no normative references in this document.

3 Terms and definitions

For the purposes of this document, the following terms and definitions 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

acquirer

institution ([3.17](#)) that has contracted with the *merchant* ([3.19](#))/*payee* ([3.38](#)) in order to process the *payment transaction* ([3.40](#)) data and transmit onwards in the *payment system* ([3.45](#))

Note 1 to entry: This role might or might not be performed by the merchant/payee institution.