

ISO 12812-1:2017-03 (E)

Core banking - Mobile financial services - Part 1: General framework

Contents		Page
Foreword		v
Introduction		vi
1	Scope	1
2	Normative references	1
3	Terms and definitions	1
4	Abbreviated terms	8
5	Concept of interoperability	9
5.1	General	9
5.2	Concept of interoperability for payments: the business layer	9
5.3	Concept of interoperability for payments: the technical layer	9
5.4	Interoperability objectives	9
6	Relationships between customers and MFSPs	10
6.1	General	10
6.2	Legal status of the customer	10
6.3	Role played by the customer	10
6.4	Contractual relationship between the customer and the institution	11
7.1	General	11
7.2	Environment description	11
7.2.1	General	11
7.2.2	Increased dematerialization of financial services	12
7.2.3	Increased use of financial services	12
7.2.4	Increased cross-border payments	12
7.2.5	Remote management of applications	12
7.2.6	Enhanced proximate functionalities	12
7.2.7	Enhanced multi-application environment	13
7.3	Standardization challenges	13
7.3.1	General	13
7.3.2	Adaptation of mobile financial services to a fast evolving technology	13
7.3.3	Complexity of ecosystems	13
7.3.4	Complexity of regulatory systems	13
7.3.5	Consumer expectation for accessing all services using the same device	13
7.3.6	Risk management in the mobile environment	14
7.3.7	Certification programs	14
7.3.8	Role of the mobile device	14
8	Mobile payments	14
8.1	General payment functions	14
8.1.1	General	14
8.1.2	Payment service issuance	14
8.1.3	Payment service activation	14
8.1.4	Payment service selection by the payer	15
8.1.5	Application selection by the POI or the payment gateway	15
8.1.6	Application data retrieval	15
8.1.7	Customer identification	15

8.1.8	Payer authentication	15
8.1.9	Application authentication	15
8.1.10	Payer authorization/confirmation	15
8.1.11	Transaction data authentication	15
8.1.12	MFSP authorization	15
8.1.13	Completion of the transaction	16
8.1.14	Clearing and settlement	16
8.1.15	End of service	16
8.2	Mobile proximate payment	16
8.2.1	General	16
8.2.2	Mobile contactless payment	16
8.2.3	Mobile proximate payment based on bar code	17
8.3	Mobile remote payment	17
8.3.1	General	17
8.3.2	Payment to businesses	17
8.3.3	Payment to persons	18
9	Mobile banking	19
9.1	General	19
9.2	General mobile banking functions	19
9.2.1	General	19
9.2.2	Enrolment	19
9.2.3	Customer profile management	20
9.2.4	Banking service issuance	20
9.2.5	Customer identification	20
9.2.6	Customer authentication	20
9.2.7	Customer authorization/confirmation	20
9.2.8	Transaction data authentication	20
9.2.9	Financial institution authorization	20
9.2.10	Completion of the banking operation	20
9.2.11	End of service	20
9.3	Channels for mobile banking	20
9.3.1	General	20
9.3.2	Mobile Internet browser	21
9.3.3	Mobile application	21
9.3.4	Short Messaging Service (SMS)	21
10	Mobile financial services supporting technologies	21
10.1	Mobile device	21
10.2	Mobile communication	22
10.3	Mobile device local interface	22
10.4	Applications	22
10.5	Mobile wallet	22
10.6	Secure element	23
10.7	User interface	24
10.8	Trusted execution environment	24
10.9	Secured server	24
10.10	Service management	25
11	Stakeholders involved in the mobile payment ecosystems	25
Annex A (informative) Organizations involved in mobile standardization and guidance		27
Annex B (informative) Mobile payment ecosystems and related business models for MFSPs		28
Annex C (informative) Payment instruments		30
Bibliography		33