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Financial services — Third-party payment service providers

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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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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 2, *Financial Services, security*.

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Introduction

This document was initiated 2 years ago with the aim of conducting research into the interface between third-party payment (TPP) and account servicing payment service providers.

As TPP is a fast-developing area, it was critical to provide guidance quickly.

This document gives an overview of the situation in different regions as it was at the end of 2015 and the beginning of 2016. There have been new developments in several of the regions since then.

For the purposes of this document, payment initiation service providers (PISP) and account information service providers (AISP) are commonly named as TPPs. Furthermore, while there could be other relevant documents to choose from in other markets with regard to terms, definitions and abbreviated terms, the choice has fallen on PSD2[2], as a key reference, as this document can be seen as a good place to start. It should also be noted that the verbal forms are used and interpreted as follows:

— “should” indicates a recommendation;

— “can” indicates a possibility or a capability;

— “must” indicates an external constraint.

NOTE External constraints are not requirements of the document. They are given for the information of the user. Examples of external constraints are laws of nature and legal requirements.

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Financial services — Third-party payment service providers

1 Scope

This document reports the findings of research into the interface between third-party payment service providers (TPPs) and account servicing payment service providers (ASPSPs).

2 Normative references

There are no normative references in this document.

3 Terms, definitions and abbreviated terms

3.1 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:

— ISO Online browsing platform: available at http://www.iso.org/obp

— IEC Electropedia: available at http://www.electropedia.org/

3.1.1
account information service
online service to provide consolidated information on one or more *payment accounts* (3.1.7) held by the *payment service user* (3.1.2) with either another payment service provider or with more than one payment service provider

[SOURCE: Directive (EU) 2015/2366, definition 16]

3.1.2
payment service user
natural or legal person making use of a payment service in the capacity of payer, payee, or both

[SOURCE: Directive (EU) 2015/2366, definition 10]

3.1.3
account servicing payment service provider
payment service provider providing and maintaining a *payment account* (3.1.7) for a payer

[SOURCE: Directive (EU) 2015/2366, definition 17]

3.1.4
authentication
procedure which allows the payment service provider to verify the identity of a *payment service user* (3.1.2) or the validity of the use of a specific *payment instrument* (3.1.9), including the use of the user's *personalized security credentials* (3.1.6)

[SOURCE: Directive (EU) 2015/2366, definition 29]

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3.1.5
strong customer authentication
authentication (3.1.4) based on the use of two or more elements categorized as knowledge (something only the user knows), possession (something only the user possesses) and inherence (something the user is) that are independent, in that the breach of one does not compromise the reliability of the others, and is designed in such a way as to protect the confidentiality of the authentication data

[SOURCE: Directive (EU) 2015/2366, definition 30]

3.1.6
personalized security credentials
personalized features provided by the payment service provider to a *payment service user* (3.1.2) for the purposes of *authentication* (3.1.4)

[SOURCE: Directive (EU) 2015/2366, definition 31]

3.1.7
payment account
account held in the name of one or more *payment service users* (3.1.2) which is used for the execution of payment transactions

[SOURCE: Directive (EU) 2015/2366, definition 12]

3.1.8
payment initiation service
service to initiate a payment order at the request of the *payment service user* (3.1.2) with respect to a *payment account* (3.1.7) held at another payment service provider

[SOURCE: Directive (EU) 2015/2366, definition 15]

3.1.9
payment instrument
personalized device(s) and/or set of procedures agreed between the *payment service user* (3.1.2) and the payment service provider and used in order to initiate a payment order

[SOURCE: Directive (EU) 2015/2366, definition 14]

3.1.10
sensitive payment data
data, including *personalized security credentials* (3.1.6) which can be used to carry out fraud

Note 1 to entry: For the activities of payment initiation service providers and account information service providers, the name of the account owner and the account number do not constitute sensitive payment data.

[SOURCE: Directive (EU) 2015/2366, definition 32, modified — Part of the definition has been formatted as Note 1 to entry.]

3.1.11
third-party payment service provider
payment service provider offering *payment initiation services* (3.1.8) or *account information services* (3.1.1) on accounts where they are not the account-servicing payment service provider themselves

3.1.12
interface
device or program for connecting two items of hardware or software so that they can be operated jointly or communicate with each other

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3.1.13
gatekeeper
function that ensures that admittance is limited to *third-party payment service providers* (3.1.11) who comply with regulatory and technical requirements

Note 1 to entry: This function can be provided by individual banks or a common actor within finance industry.

Note 2 to entry: The third-party payment service provider itself can provide the gatekeeper function if certified.

3.2 Abbreviated terms

ACH	automated clearing house
AISP	account information service provider
API	application program interface
ASPSP	account servicing payment service provider
ATM	automated teller machine
EFT	electronic funds transfer (or e-funds transfer)
OAuth	open authentication
PISP	payment initiation service provider
PSD2	Payment Services Directive II
PSP	payment service provider
PSU	payment service user
SAML	security assertion markup language
TPP	third-party payment service provider

4 Overview of the current TPP landscape

4.1 General

There are two main types of third-party payment service provider:

a) payment initiation service providers (PISPs);

b) account information service providers (AISPs).

Much taxonomy describing third-party services also consider payment instrument issuing providers, who are financial institutions other than those servicing the account of the customer, and who issue a payment card or a payment instrument.

The idea behind third-party providers is for customers (payment service users) to perceive them as added value to the service of their account servicing payment service provider. Added value could be new online payment services and more variety in payments instruments, better or simpler user experience, etc.

One of the main points of attention is related to security, especially strong customer authentication and secured communication, which is key to achieving the objective of enhancing consumer protection and promoting innovation. Ensuring the security of payments and the protection of sensitive payment data are a critical part of the infrastructure of robust payment systems knowing all actors should act on

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