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Provision of payment initiation services at pan-European level

At its June 2016 meeting, the ERPB had an initial discussion on the prerequisites for the development of an efficient and integrated market for PSD2-based payment initiation services (PIS). The PSD2 and the EBA RTS on authentication and communication will provide the harmonised legal framework. The ERPB agreed to assess whether further elements might be needed and, if so, which. A two-step approach was to be followed, in which the Eurosystem would first approach relevant market representatives to get a thorough understanding of the needs of the PIS market before the ERPB would review the matter in its November 2016 meeting and define the role that it may wish to play.

On 6 October 2016, the ECB organised a stakeholder meeting with the participation of standardisation initiatives, providers, as well as ERPB member organisations (see Annex 2 for the list of participants).

This note outlines the key elements that the stakeholders that participated at the meeting consider important for the development of a well-functioning, pan-European market for PIS.¹ It provides the background on the basis of which the ERPB will discuss how to further proceed on this matter.

Key elements for an efficient provision of PIS

There is consensus on the objective of the provision of PIS at pan-European level. It would allow the emergence of a well-functioning market in which multiple PIS providers would compete with each other and merchants could use any one of them to reach customers throughout the EU.

¹ There are close links between PIS and account information services (AIS) and the confirmation on the availability of funds for issuers of card-based payment instruments. Any further work on PIS will need to consider the benefits it may have also on the provision of these other services.

To achieve that objective, the stakeholder meeting identified a number of *technical*, *operational* and *business* elements for which the market would need to establish and implement common solutions. A market-led standardisation effort is needed to supplement the legal framework provided by the PSD2 and the EBA RTS. The remainder of this section lists areas of work. It does not prejudge what the common solutions may be. This will be the object of further work.

Questions arose on the kind of framework within which the various elements below (or some of them) could/should be defined (whether it would be a scheme, a rulebook, or any other kind of arrangement) and which degree of detail this should encompass. Moreover, communication on PIS was seen as needed to create awareness of and trust in the new payment service.

The list below does not pretend to be exhaustive, nor does it imply that all elements on the list need standardised solutions. At this stage, it is still a tentative indication of areas in which common or consistent solutions would be required.

Technical solutions

Following the draft EBA RTS, there is a need to develop a *standardised interface*² that account-servicing payment service providers (ASPSPs) will offer to PIS-providers (PISPs) for identification, authentication of the user, and secure communication.

The standardised interface should work properly, with a high level of availability, and arrangements or solutions should exist in cases it would not.

The development of a standardised interface would be a project on its own, not addressing the issue of the maintenance of the so-called “direct access” solution that exists today. Whether the maintenance of the latter solution is in line with PSD2 or not and, if so, under which conditions is an issue that still needs to be clarified by the relevant authorities.

² An interface is the point of connection between two computer systems, across which information can be exchanged.

A question emerged whether a standardised interface could cater for differences in the underlying IT-systems at banks.

A common approach towards the specification for the interface between ASPSPs and PISPs will be needed for the provision of PIS at pan-European level. The stakeholder meeting identified the following elements the common approach could cover:

- Technical communication messages to establish the connection between systems
- Communication messages to perform the PISP-identification
- Communication messages to prepare for the payment service, e.g. selection of payment account in case of multiple payment accounts held at the ASPSP, selection of SCA procedure in case of multiple procedures offered by ASPSP
- Data elements needed for the payment service (i.e. for payment initiation these are the data elements needed for the payment order and for the response messages)
- Definitions of these data elements (length, format, etc.)
- Message definitions
- Messaging format (XML, JSON)
- Choice of communication layer (TCP/IP, HTTPS)
- Communication messages to perform the customer authentication procedure of ASPSP
- Certification of the implementation of technical standards
- Testing facility (to test the connection through the interface)
- Technical support (helpdesk).

As to the scope of the specification of the interface, the question arose whether a “minimum” approach should be followed to ensure implementation of PSD2 and the future EBA RTS on time or whether

additional services³ going beyond what is required by the legal framework should be considered already now. The scope of both the minimum approach and the additional services would still need to be defined.

Any further work on technical solutions should take on board the several standardisation initiatives that are already under way.

Operational aspects

In addition to a technical interface, operational elements are considered essential to support PIS. This includes an up-to-date *directory* with information on PISPs. When contacted by a PISP, an ASPSP would need to verify the identity of the PISP and to check whether the PISP is authorised. While the EBA is mandated to create a register of payment institutions (including PISPs), it does not include credit institutions (which can also act as PISP), nor will it be able to fully address market needs in terms of technical accessibility, speed and 24/7 availability.⁴ While each ASPSP could possibly develop, maintain and keep up-to-date its own operational directory/directories, it might be more efficient if a common “directory service” is provided by an external service provider. Such directory could take the form of a central register or a limited number of hubs, aggregating the information of a subset of PISPs.

Similarly, PISPs may wish to have access to a directory of ASPSPs including their connection details.

The stakeholder meeting identified the following indicative list of the operational elements to consider:

- Operational directory of ASPSPs
- Operational directory of PISPs⁵

³ No specific examples were mentioned at the stakeholder meeting. It might relate to the user needs of business (corporate) users. Moreover, one could imagine that the interface could also enable -in addition to the initiation of a payment order for a (*single*) payment transaction- a payment order for a payment transaction with a scheduled execution at a later date, for a series of periodical payments, or for a batch of payments.

⁴ The PSD2 mandates the EBA to develop, operate and maintain an electronic, central register that contains information on authorised payment institutions and the payment services for which they are authorised.

⁵ The function of the directory could be combined with the function of issuing certificates to PISPs for identification to the ASPSP. It is unclear whether certificate providers will offer both functions, or would wish to rely on an external service provider for the directory.

- On-boarding, certification, go-live, monitoring, notification and exiting processes for the above
- Testing facility (to test the initiation of a payment order and the receipt of the response)
- Change management processes
- Security and release management⁶
- Processing of messages for error handling and/or post-transaction dispute handling (according to business practices yet to be established)
- Information gathering/sharing on availability in view of alerts and problem solving.

Indications were given that some companies are considering offering operational directory services.

Business practices

In addition to technical and operational aspects, there is a need for common business practices for ensuring a smooth provision of PIS. Common business practices would facilitate the interaction between PISPs and ASPSPs and they could include the definition of:

- reason codes in case of unexpected events or errors in the communication process;
- standardised processes for dealing with unexpected events or errors⁷ (incident handling);
- standardised processes for dispute handling.

Considerations for the role of the ERPB

The previous section provides a tentative list of elements for which a market-led standardisation effort may be required to achieve the agreed objective of provision of PIS at pan-European level. The most relevant elements include a properly-working standardised interface, operational elements, in particular a PISP-directory service, and common business practices. Some industry groups have already started

⁶ It was also suggested to implement a data services process to assist in fraud prevention.

⁷ For instance, the time to wait before resending the last message or before restarting the entire payment initiation.

standardisation work, ranging from conceptual to practical work (see Annex 1). Other market participants are working on delivering operational services. Such work should be considered in any further work the ERPB may decide to launch. Furthermore, a form of governance might be needed to maintain and further develop the key elements of the new payment service.

In practice, ASPSPs and PISPs will have to be compliant with the future EBA RTS by autumn 2018 (i.e. 18 months after their entry into force). This means that the specifications for the technical solutions required for the pan-European provision of PIS will need to be developed by autumn 2017. This will provide for the one year period that would be needed to implement the technical solutions and to adapt the underlying IT-systems of PISPs and ASPSPs. For the operational and business aspects, the implementation lead times may be slightly shorter.

This suggests that the ERPB might wish to focus its work and attention on the standardisation of the interface first, before addressing operational and business aspects more widely. The revised draft mandate for the ERPB Working Group on payment initiation services builds on the above reflections.

Annex 1 - Ongoing work by standardisation initiatives

During the 6 October 2016 stakeholder meeting on payment initiation services, the following three standardisation initiatives, which cover standardisation in the widest sense, i.e. from doing conceptual work to developing a technical specification, presented the main focus of their work in the field of payment initiation services:

The Berlin Group's implementation specification for a standardised interface

The Berlin Group⁸ is developing an implementation specification of an interface. It covers the following levels of the interface:

- application level (core and optional services definitions, data modelling),
- security level (PISP-identification, ASPSP's authentication procedures for the customer) and
- transport level (message definitions, messaging).

It will also cover an organisational framework for the future maintenance of the specification. The specification will be free-for-use.

The timing foresees a consultation on a draft specification around April-July 2017 and publication of the final specification by September 2017, in view of the obligation to offer an interface by ± October 2018 and counting with one year for implementation and internal testing. Due to the short deadline, the Berlin Group works with a small group predominantly from the "ASPSP-side", but expects to receive formal input from the "PISP-side" relatively early in the process in the public consultation.

⁸ The Berlin Group is a pan-European payments interoperability standards and harmonisation initiative with the primary objective of defining open and common scheme- and processor-independent standards in the interbank domain. It first met in 2004. The project comprises banking and payment associations, processors, as well as a few banks and card payment schemes.

The Berlin Group stressed that it is acting as a standardisation initiative, and does not have the intention to become a “scheme owner” that would monitor adherence or enforce the correct implementation of the standard. It would neither develop business practices for e.g. liability procedures, nor offer operational directories or processing services.

Convenient Access to PSD2 Services (CAPS)

According to the Convenient Access to PSD2 Services (CAPS) initiative⁹, the high numbers of ASPSPs and also of PIS/AIS providers call for an intermediary party to facilitate or concentrate the connections between these PSPs (“hubs” or “aggregators”). There will also be Account Information Services and Confirmation on the availability of funds which might have different, non-standardised interfaces. Moreover, CAPS identified three levels of service:

- PSD2-compliance (an ASPSP would do the minimal effort needed to comply),
- making PSD2 work in practice and at pan-European scale (aggregation of individual ASPSP interfaces, directory services, fraud detection, dispute resolution, inter-PSP authentication support),
- supporting new business models for ASPSPs and TPPs.

These latter services might imply further, non-standardised interfaces at ASPSPs, as well as different operations, and different business practices.

Thus, beyond the technical interfaces, the CAPS initiative sees a need for a broader framework covering among other things operational services such as directories (list of ASPSP for selection by customer when using a PIS/AIS provider, information on how to connect to the ASPSP) and the processing for dispute resolution (standardised messages, directories, APIs, and processes).

⁹ The CAPS initiative is an informal discussion platform between industry practitioners. It develops a “framework”: in the sense of an agreed set of rules, a common ecosystem, and choreography of how things are to be arranged to make PSD2 work in practice and to support new business models. It started in 2014. Current members are processors and providers as well as innovative new players in the third party and corporate space. See: <https://www.caps-services.com/>.

The CAPS community is currently developing the conceptual framework, and individual members are planning to pilot CAPS concepts to harden the framework. The framework, or elements thereof, can then be adopted by all those wishing to compete to provide the services.

Euro Banking Association’s “Open Forum for Open Banking”

The Euro Banking Association¹⁰ is organising an “Open Forum for Open Banking” which builds on earlier work on the Digital Customer Service Interface (DCSI) concept and on the business relevance of Open APIs and Open Banking for banks. It will be co-moderated by two professionals with a background in “banking” and “Fintech”.

The Open Forum will first try to come to a common understanding of what is needed for achieving interoperability and reach for the PSD2-regulated access to payment accounts. The aim is to foster a dialogue among practitioners on the broader concept of Open Banking and its challenges such as security, interoperability and fragmentation.¹¹

¹⁰ The Euro Banking Association (EBA) is a practitioners’ body for banks and other service providers supporting a pan-European vision for payments. The mission is to provide payment professionals with a country-neutral forum for driving and contributing to the delivery of pan-European co-operative payment initiatives and business practices. The membership includes over 180 institutions from across Europe and beyond.

¹¹ The concept of “Open Banking” revolves around how banks share their own data, but also how banks allow customers more choice and sharing of their data for use in third-party (Fintech) applications in a secure and resilient fashion.

Annex 2 – List of participants to the Stakeholder meeting on PIS

European Central Bank	Mr Pierre Petit	Chairperson
Standardisation initiatives		
Berlin Group (Payments UK)	Ms Lauren Jones	
Berlin Group (SRC)	Mr Ortwin Scheja	
Caps (Equens)	Mr Michael Salmony	
Caps (Nets A/S)	Mr Lars Lolk Hauge	
Euro Banking Association	Mr Thomas Egner and Mr Gilbert Lichter	
French Banking Federation	Ms Aline Mottet	
OTA (Innopay)	Mr Douwe Lycklama	
Providers		
Digicash Payments SA	Mr Raoul Mulheims	
Dutch Payments Association	Mr Max Geerling	
Isabel Group	Mr Chris Boogmans	
PayU	Mr Bartosz Chwiłkowski	
Preta	Mr John Broxis	
Sofort GmbH	Mr Jens Lütcke	
Stuzza GmbH	Mr Peter Heiling	
Trustly Group AB	Mr Oscar Berglund	
ERPB representatives		
EACB	Ms Marieke van Berkel	
EBF	Ms Pascale-Marie Brien	
Ecommerce Europe	Mr Paul Alfing	
Electronic Money Association	Mr Thaer Sabri	
EPIF	Ms Samantha Turner	
ESBG	Mr Norbert Bielefeld	
European Payments Council	Mr Etienne Goosse	
European Commission	Mr Krzysztof Zurek	
Eurosystem		
Deutsche Bundesbank	Ms Annett Pietrowiak and Mr Dirk Schrade	
Banco de España	Mr Gregorio Rubio	
Banque de France	Mr Antoine Lhuissier	

Banque centrale du Luxembourg	Ms Li-chun Yuan	
De Nederlandsche Bank	Mr Jakob Rotte	
Oesterreichische Nationalbank	Ms Christiane Dorfmeister	
Banco de Portugal	Mr Hugo Mira	
Národná banka Slovenska	Ms Anna Sedliaková	
Suomen Pankki	Mr Kari Kemppainen	
European Central Bank	Mr Helmut Wacket, Mr Francisco Tur Hartmann, Ms Ann Börestam, Ms Karine Themejian, and Ms Anca Paduraru	
European Central Bank	Mr Iddo de Jong	Rapporteur