



Payment Strategy Forum

End User Needs Group Solutions Description

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‘To improve the end user experience of UK payments’

Payment Strategy Forum

Contents

1. Background	3
2. Solutions concept assessment	5
3. Payments Transaction Data Sharing and Data Analytics	7
4. Enhanced Payment Transaction Data	10

1. Background

APPROACH TAKEN TO DATE

Initial meetings of the Working Group based on the final list of detriments allocated to it identified four areas where solutions are required and these are:

1. Putting the end user in control of payments.
 - To realise benefits to both payer and payee the focus here is on a **'Request to Pay'** capability, giving users control of whether, when, how much and how to pay.
2. Providing more assurance to the end-user that their intentions in making a payment have been successfully met and in particular, that the payment has been sent to the intended recipient.
 - We believe that benefits at both ends of transactions (so for the recipient as well as the sender) can be realised through there being a **'Confirmation of Payee'** capability
3. Enabling more data to flow with payments to enable the fulfilment of the tracking, reporting and reconciliation requirements of all parties in the payment transaction. This has been discussed within the industry for some time as **'Richer'** or **'Enhanced'** data.
 - We believe that the benefits of such a (properly implemented) data capability would not only directly benefit the transaction parties but would also extend to authorised 3rd party consumers of payment data.
4. (Re-) Establishing end-user engagement with, trust and use of the UK's regulated payments systems.
 - A separate report on this area, kindly led by Carl Pheasey and the Money Advice Service, is attached – it remains separate as the solution here is not strictly a "system" based one. However, its conclusions are of vital importance to this and other WGs' solutions. In line with the statutory remit of the PSR and the ToR of the Forum, all our solutions' success or otherwise should be measured against the extent to which they benefit the end user. That in turn requires that those end user actually use any new services, and their willingness and ability to do so are not just functions of the technology but their active recognition of the benefits that can accrue to them. This applies to the corporate as well as individual users.

On the first 3 areas, we held a workshop to review current solutions and identify gaps, and this led us to an interim conclusion that a single architectural solution may well deliver each of the priority requirements of this WG (and quite possibly those of the other WGs too).

It was clear from the workshop that a number of solutions had evolved – or are evolving - in the competitive space to meet these user detriments. For a number of users and in specific circumstances some of these solutions have been successful. None of them, however, yet seem to offer an end-to-end or ubiquitous solution for all payment types regardless of origination or method of settlement. That is not to say that any or all of them could not play a part in meeting the requirement, but the WG agreed that for them to do so some level of cross industry collaboration is required.

As such the group moved to describing how such an industry wide solution might look, largely synthesised from the good work already undertaken by forum members and wider industry.

Context of the Conceptual Solution

The PSR, in its recent Market Review of the ownership of the UK's payments infrastructure has suggested as a remedy to current problems "enhanced interoperability, including a common international standard for FPS, Bacs and LINK". Given that the PSR will clearly have economic analysis and evidence for such a conclusion, we thus take that as a strong reinforcement of our own conclusion that our suggested comprehensive solution requires a broad standardised data handling framework. This in turn would support a number of sub-solutions or specific functionality; including Request to Pay, enhanced data sharing, and tracking payments / payee confirmation. We believe this approach is consistent with that of other solutions emerging in the Access and Financial Crime WGs.

Request to Pay and Confirmation of Payee are both, essentially, additional data sets that the payments system would need to be able to manage (though not necessarily to force through existing "pipes" – see detailed outline below). So, our conceptual solution boils down to an interoperable, ubiquitous and standardised capacity to handle sufficiently more data to enable the additional requirements of payer and payee.

The group also acknowledged a number of wider industry movements that will need to be considered in conjunction with this work:

- PSD2
- Open Banking
- ISO 20022 message development

We have identified nothing in the following that suggests we are working against the strategic intent behind those extrinsic strands (although there remain some uncertainties about the timing and detail of their implementation).

Finally there was an area of detriment in control that potentially falls outside of the direct scope of this Solution: "poor flexibility or ease of use to control your push & pull payments". Although EUNWG discussion thus far have agreed that all push and pull payments must offer, this level of control, our latest analysis suggests that push payments already largely give control. We intend to finalise this conclusion with the EUNWG on 13 April 2016.

- It was felt this detriment didn't require co-operation across the industry as PSPs are already capable of improving functions for users.
- A large number of new propositions and products have emerged to increase customer control, apps, web, new product types and we expect that to increase come PSD2.
- PSD2 will also, we think, answer some of the questions and detriments on misdirected payments as PSPs will be compelled to support more effective resolution thereof.
- In those circumstances market forces will determine the ongoing usage of existing products such as Direct Debit (though there may be a case for PSR to encourage, for example, a best practice guide for use of consumer hubs to view and control their own Direct Debits).

This serves to exemplify an area where the WG has considered the collaborative/competitive divide and concluded that the solution is probably a healthy mix of both. Our collaborative Request to Pay proposition will encourage competitive propositions to support consumers in managing their payments here without there needing all of the consumer proposition to be directly a collaborative solution.

2. Solution concept assessment

SOLUTION NAME: STANDARDISED AND INTEROPERABLE FRAMEWORK FOR ENHANCED DATA ENABLEMENT ACROSS THE PAYMENTS INFRASTRUCTURE

EXECUTIVE SUMMARY:

Enabling the existing payments infrastructure to allow more of the data associated with making payments to be transported in a way that meets the needs and requirements of payers, payees and authorised third parties. This must, we believe, be done in an interoperable and standardised way without compromising the operational integrity of the system.

PROBLEM STATEMENT:

UK Payment systems have evolved over time, they are constantly being stretched to support ever more complex user needs. The current payment systems utilise different messaging standards and have limited capabilities to transfer data between PSP's creating an environment where these detriments have now become increasingly more visible and complex to address.

The End User Needs Working Group believes the cost and complexity of changing existing payment schemes and the channels by which those systems are accessed on a piecemeal basis to support this type of enhanced data carriage capability would be prohibitive. However, an opportunity exists to create a mechanism linked directly to payments that will run alongside existing payments rails, and could be easily extended to new payment rails if/when they evolve.

There are 3 broad considerations:

- Standards regarding the data transfer mechanism - PSR has posited a single such standard and the industry has for some time had a strategy to move to ISO20022, while the SAM WG has also identified a managed move to this standard as desirable.
- Standards regarding Interpretation of this data by PSPs into coherent 'products' to deliver against the stated detriments, referencing international (ISO) standards.
- Processes in place to bring about the creation of the mechanism and the products that deliver against these detriments in a timely and efficient way.

The EUNWG also believes this mechanism of data transport will address a number of detriments and support the objectives declared in other Working Groups. This also suggests that there may be merit in the restructure of the WG framework into a dedicated effort to deliver this capability.

The end user experience - examples

1. If I make an electronic payment, I, the end user, not only have to get the account number and sort code right, but if I do make a mistake and my money ends up in the wrong account my experience may not be a happy one! It would be much better if, just before the point of payment I get a confirmation not only that I am paying to the right account but that it relates to the real life person or entity that I am trying to pay.
2. The XYZ Power Co tries a DD on my account and because my washing machine broke down the day before and I had to replace it, the DD bounced due to lack of funds in my account. I then might incur a £40 bounced DD and unauthorised overdraft charges. Then the XYZ Power Co spends time and money in extra admin and trying to contact me to correct the situation. Surely it would be much better if (based on parameters agreed between us) I the bill payer

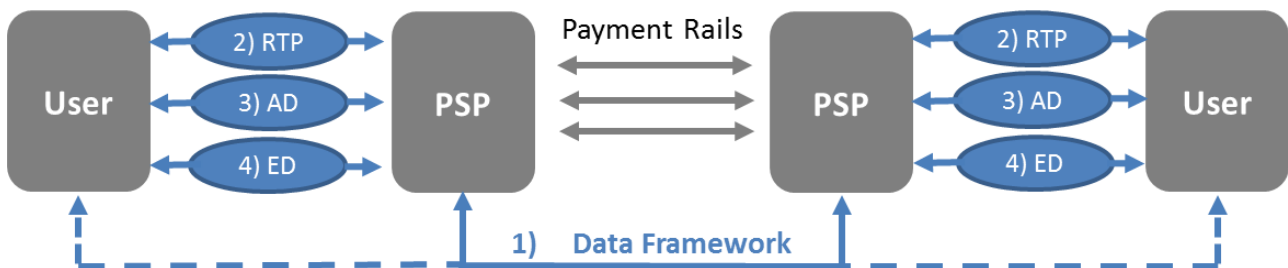
can, through a Request to Pay facility have a bit of flexibility on timing before I must pay my XYZ Power bill.

3. As a single working mum entitled to a government refund of my childcare costs, I have to pay Ladybirds, get a receipt and remember to send that receipt to government in time for my next payment or I will not be able to afford the next period's childcare costs and go to work. Ladybirds have to issue me with a receipt and also report that payment to government for VAT and direct tax purposes. It would be much better if a simple reference (that is useable by all three parties and is linked or embedded) in the original payment could fulfil my objectives, Ladybird's and the government's all at once.

SOLUTION DESCRIPTION STRATEGIC

The aim is to create a framework for the movement of data linked to payments between PSP's to enabling new solutions requiring enhanced data and delivering against the stated detriments. The key point about this framework is that there is a common reference (or link) that is used to directly associate the payments transaction and the associated data. So when I look at the payment I see the same reference (or link) as when I look at the data.

This framework will allow solutions to emerge with a minimum core customer proposition across the market leaving industry to compete on Value Added services and enhancing the end customer experience. However we have an overarching need to ensure that combination of collaborative and competitive services result in a simple and compelling end user experience.



1. Technical Standards for a data Framework that is associated with payments would need to include considerations of the following:
 - Use of Modern flexible systems (web services)
 - Transparent API based access between users/clients
 - Be based on ISO200022 and be compatible with other messaging formats
 - Be open to all PSPs to use, easily and simply
 - Be flexible to enable future use cases
 - Be fast and efficient (may limit use case if not real/near-real time)
 - Be secure
 - Be extendable
 - Guaranteed delivery
 - Ubiquitous and interoperable

2. To enable requests for payments to be sent between entities (RTP) the following features are necessary:
 - Payee PSPs must have the ability to create a payment request instruction that is sent to and understood by a Payer PSP for the Payer to accept, decline and respond to with reasons. The request to include: the amount, the timeframe for responding, the preferred method of payment, whether it is of a recurring nature, and a link to enhanced data about the request.
 - Rules and Standards for encoding this information, functionality and messaging between PSPs will need to be agreed.
 - Central storage of data requirements still to be determined, expected to be in competitive space. However the use of a common reference or link for both request and their associated payment must be agreed collaboratively.

3. 3) To enable assurance data (both on customer ID and status of payment) (AD):
 - Payee PSPs to provide messages to Payer PSP regarding receipt of payment, processing of payment and final settlement of payment.
 - Payer PSP able to request confirmation of Payee details to validate prior to executing payment.
 - Potential solutions include:
 - validating payee based on previous transaction history (links to work in the financial crime Working Group)
 - An industry wide proxy service (phone numbers and emails) (link to financial crime Working Group proposition on a central Know Your Customer database),
 - Challenge/response using and API (as per the Paym model, Gov ID etc)

4. 4) To Support multiple enhanced data solutions for consumers and corporates (ED):
 - Multiple opportunities that could include, Tax data, Personal data, Remittance data, Warranties, cat pictures, advertising materials etc.
 - Free form data (pictures, data files, remittance information etc) to be linked to payments so consumers can review through multiple channels of their choice in line with the associated payment.
 - Structured data for accountancy services, standard remittance formats, e-invoicing (build on ISO 200022 structures) etc.
 - Use for e-invoicing by different industries using their own existing standards.

PEOPLE INVOLVEMENT AND ACTION

PSR	<ul style="list-style-type: none"> • Engage with industry to finalise spec and development programme • Create a new payments data scheme for on-going management / development of the standards (possibly requires a standard setting body)
Schemes	<ul style="list-style-type: none"> • Integrate reference data in payment messages to align with Data

	messages <ul style="list-style-type: none"> • Impact of RtP and AD expected to be minimal
PSPs	<ul style="list-style-type: none"> • Build out capabilities to support new products, RTP, COP, Enhanced data delivery (this will require API development that could be co-ordinated with mandatory API development for PSD2) • Simplify consumer control for Pull payments, particularly DD

LEADERSHIP

Initially this can come from the WG and the Forum, backed by the clarity and compulsion of the economic analysis provided by the PSR. Ultimately, as with other WGs we suggest that there needs to be consideration by the Forum of the need for a standards authority or similar to see through implementation and maintain standards and compliance. It may be that the industry proposes a mechanism to do this.

COMMUNICATION

Consideration will need to be given by Forum, PSR and industry on how to best communicate these news capabilities to meet user needs.

PSP education programmes will be required – including trusted product marks representing core product features that are common to all PSPs.

End user education programmes may also be required.

SYSTEMS AND PROCESSES

We are building a data framework that sits alongside existing scheme payment rails, extensive impact analysis needs to be considered across all PSPs and all potential user groups when considering the collaborative and competitive solution options.

A standard for minimum product control features by PSPs:

- A clear description of the overall framework and service that will be provided to the users
- This to include rules and standards for participants
- Guidance on how to achieve interoperability in the competitive space

A data transfer broadcast mechanism

A standard for linking data to payments

A standard for messaging format

A clear process and plan to implement all of the above that has buy in from all relevant stakeholders (including the payments industry, regulators, user groups, service providers, tech companies)

DEPENDENCIES

There are a number of overlapping regulations / initiatives we are aware of:

- PSD2
- Open banking
- Data protection
- Gov ID and OIX

- Ability to execute the changes will depend upon the change capacity from industry; therefore an alignment with work on PSD2/Open banking work would improve the chances of successful implementation.
- Take up of the new services depends on appetite from providers; a compelling benefits case needs to be articulated.

COST BENEFIT ANALYSIS (HIGH-LEVEL)

	Data Framework	RTP	AD	ED
Cost	Medium; depending on final configuration	High; PSP to develop new Interoperable functionality	Potentially medium dependant on solution - API's may be required as part of wider PSD2 or Open Banking API work	High, but dependant on mechanism of linking payment to data package
Demand	High – required for effective creation of other 3 services, Should be built to expand into other user cases	High – could be an alternative to DDs, in some circumstances (100m plus trans per day)	High – multiple other user cases (100m plus trans pa)	High – multiple user cases recurring bills, payslips, gift aid, e-invoicing & DWP (100m plus trans pa)
Price/ Quality of Service	New service likely to be chargeable to business, low cost across industry			
Competition	Industry wide standard, competition for delivery	Could increase competition for PSPs, Fintechs	No change	Could increase competition for PSPs, Fintechs
Innovation	New functionality enabling new innovation in Payment and related products	Supports new services, alternative to DDs and increases customer control	Could support other proxy types and ID services	Opportunities for TPPs and other Fintech offerings in the area of external data storage & e-invoicing
Benefits	Enables improved customer experience with new class of interoperable payment products	Improved user control over payments & reduction in payment collection costs	Reduction in misdirected payments and fraud	Improved payment reconciliation. Core enabler for RtP

We understand that work is currently ongoing by Payments UK to size market use.

SECURITY / RESILIENCE

Services and products must work.

Not to impact existing solutions / operating integrity.

The messaging standard must be secure and protected from attack given security of information transmitted and ability to generate payment requests through the system (rules in place so not to be abused, spamming etc).

EXISTING OR IN-DEVELOPMENT SOLUTIONS

We reviewed a number of products have been developed – the main feature of which are summaries in a list attached

INTERNATIONAL INSIGHTS / BENCHMARKS / HORIZON SCANNING

		Solutions	Specify a due date?	Send ED	Confirm Recipient	Display requester to recipient	Reject	Schedule payments	Alter amount	Set up recurring	Display ED	Attach ED to response
UK	Existing	Apple Pay ^(RN)		✗		✓					✗	✗
		PingIt ^(H)	✗	✓	✗	✓	✗	✗	✗	✗	✓	✗
		ZAPP ^(RN)		✓		✓					✓	✗
		Paypal ^(H)	✗	✓	✗	✓	✗	✗	✗	✗	✓	✓
		Paym ^(H)	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
Global	Existing	ZoomIt ^(RL)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		Bpay ^(RL)	✓	✓	✓	✓	✗	✓	✓	✓	✓	✗
		eLasku ^(RL)	✓	✓	✓	✓	✗	✓	✓	✓	✓	✓

Illustrative of work from Payments UK showing some global comparisons of Request to Pay in other countries.

COLLABORATIVE OR COMPETITIVE

Overall rules and standards are necessarily collaborative to ensure interoperability and a consistent minimum end user experience. It will be important to ensure that the implementation of the capabilities we are putting forward reaches across all PSPs as rapidly as possible.

QUICK WIN VS SUBSTANTIAL PROJECTS

We have identified the following order of implementation. We consider a strategic approach from the start is the best mechanism to realise real end user benefits, but elements on an incremental basis.

1. Overall Data framework and communication standards to be agreed, followed by (in order)
2. Confirmation of payee
3. Enhanced data
4. Request to pay

IMPLEMENTATION APPROACH AND TIMEFRAME (OVERALL)

We understand this will be covered by the Forum-sponsored independent consultant.

IMPACT: SUCCESS METRICS

Adoption of services across industry

Substantial reduction in accidentally misdirected payments

Substantial reduction in fraudulently misdirected payments

Substantial increase in use of non-cash bill payments through the use of RtP to pay bills, improving financial inclusion

Substantial increase in straight through processing and reconciliation of payments

Happy users