

Executive Summary & Solution Descriptions

For discussion 14th April 2016 Approved 7th April 2016

'To examine whether and how payment systems can be developed in order to simplify access and participation in the markets for PSPs'



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Executive summary

Simplifying Access to Markets – Detailed Assessment Phase

1. Executive Summary

Approach since February Forum

The Working Group's emphasis in this phase was to:

- i. Move from multiple detriments to defined outline solutions;
- ii. Be clear on activity underway or planned by PSOs and to asses how far its delivery would address detriments and where gaps might remain;
- iii. Use the strength and diversity within working group to shape credible tactical and strategic solutions with a progressive time-line to deliver; and
- iv. Address as far as possible the topic of PSO Governance as formally requested by PSF in February

This was done as follows:

Detriment consolidation

One-day workshop held on 28 January with invited experts from the PSOs, PSPs, FinTech organisations and the PSR. The detriments were analysed and debated to consolidate from the original 22 to seven, by combining those with clear overlaps.

Solution refinement

PwC facilitated a refinement and prioritisation workshop of the seven solutions, which were agreed at the Simplifying Access to Markets (SAM) WG meeting on the 8th March.

Detailed assessment

The SAM working group has since undertaken more detailed assessment of the seven prioritised solution concepts. This was done principally via well-attended, facilitated workshops covering on PSO simplification (1 and 4-7 below), Standards (2) and Governance (3)

Ref	Detriment Description	Status
1.	Payment System Operators (PSOs) should have	Tactical improvements underway
	simplified and common participation models and	through ISOCC
	rules	
2.	Simplification of PSO Structures & Governance	Developing approach
3.	Develop a clear standards strategy for UK Payments	Way forward proposed for evaluation
4.	Collectively to ensure that a broader range of	Work already underway/ planned by
	connectivity options for indirect, and direct PSPs exist	PSOs; to consider whether emerging
	in the market, by encouraging the development of	commercial solutions will support
	commercial Aggregator solutions capable of	multi-scheme connectivity
	supporting both direct or indirect access to any	
	Payment scheme through a single gateway.	
5.	Make sort codes more readily available to provide	Solution in course of delivery by PSOs
	improved allocation, transfer and ownership	
6.	Bank of England blueprint for RTGS and the Bank's	BoE presented at WG 8th March. WG
	settlement infrastructure which may lead to wider	keen that BoE considers widening
	access to settlement accounts	settlement account provision to the
		wider participant community
7.	Liability models, sanctions risk, know your customer	Collaboration with Financial Crime
	and anti-money laundering responsibilities to be	working group required to progress
	clarified for indirect participants.	

Solution concept development

This now prioritises solutions into:

Strategic simplification of access covering:

1. **PSO Simplification** – to deliver a common approach to all key aspects of PSO engagement with participants, such as terminology, eligibility criteria and onboarding processes.

This spans all PSOs that are members of the Interbank System Operators' Co-ordination Committee, together with LINK. ISOCC is to lead development of a plan (estimated end June 2016) for the sequencing and prioritisation of activity, and will provide the cross-PSO governance to ensure delivery, quality control and reporting. Delivery will be phased over an expected 1-3 years, with larger workstreams requiring regulatory approval, plus the need to align with existing/emerging priority actions.

Forum's view on the priority of this co-operative individual PSO activity as compared to the governance will be welcomed. WG considered that the opportunity to make short term progress should be taken, alongside any work agreed on future PSO governance.

2. **PSO Governance** – to examine whether changes to the governance and management arrangements of the PSOs could improve access and drive competition in the payments market more effectively than incremental individual PSO developments

A strategic workstream, where considered evaluation assessment of the current and potential future governance of UK PSOs, should be undertaken objectively to deliver an outcome agreed by all necessary parties. How any change might be achieved would similarly require to be coordinated, managed and overseen, to ensure no impacts on payment system delivery.

Forum's views are welcomed and our WG is keen to build on the traction developed.

3. **Payment message standards** – to propose a combination of early tactical actions and an outline strategic direction for the UK to adopt ISO 20022 messaging

This would be a large programme of work impacting payment systems, PSPs and corporate service users over time. WG has outlined tactical and strategic stages, and believes that, as in other countries which are moving to adopt new messaging standards, formal consultation on whether to adopt ISO 20022 is needed and also on the plan to achieve delivery. We consider such work should be led by an agreed entity, potentially PSR.

Tactical simplification of access, which covers the work underway by PSOs individually and which will deliver progressive improvements in 2016 and beyond and is to a large extent covered by PSR's Access and Governance work and the General Directions:

- 4. **Aggregator Solutions** to encourage these as an access route to any PSO and to assess whether available/future solutions are capable of providing access to multiple PSOs continued evaluation of what exists and how effectively it supports participant needs
- 5. **Sort Code availability** to support the introduction of a tactical solution to grant qualifying participants their own sort code without the need to approach another PSP this is in delivery and the main activity will be to ensure that new participants are aware of the service and what being

responsible for a sort code requires. A review of governance and management of Bank Reference Data is also proposed.

Other solutions where outcomes are dependent on third parties or a wider stakeholder set:

- 6. **Bank of England RTGS policy review** to note the Bank's review and to consider whether SAM WG should input to this;
- 7. **Liability in Indirect Access Models** to encourage the development of clear guidance to all participants in conjunction with the Financial Crime, Data and Security WG.

Our combined solution description document orders them as outlined above.

Throughout the work we have shared relevant external documents to spread knowledge and understanding of the multi-faceted issues in scope of this work.

Document development, review and sign-off have been co-ordinated and we have benefitted from considerable WG member engagement and input at all stages, including the commitment to the final solutions descriptions. We are pleased deliver these to the Forum for consideration.

Next steps

We propose:

- To engage with and monitor the activity on PSO Simplification and related solutions where ISOCC (the Interbank Systems' Operators Co-ordination Committee) is acting as the co-ordinating group to engage PSOs in the development of a plan of work;
- To progress in conjunction with PSF/PSR discussions on PSO Governance and its relative prioritisation with the simplification activity;
- To engage further on message standards with PSF and the independent evaluators on what needs to be delivered ahead of any formal evaluation.

2. For discussion

We welcome comments on the solutions presented and our specific observations and requests for input above.



Common PSO Participation Model and Rules

Solution Concept Assessment

SOLUTION NAME: COMMON PSO PARTICIPATION MODELS AND RULES

PROBLEM STATEMENT:

The key detriments identified are that:

- Multiple PSOs (including card schemes) are expensive, complex and time-consuming to join for PSPs, to connect to by retailers and commercial companies and confusing for end users;
- There are no clear or transparent on-boarding processes or requirements for Participants to join a Scheme, and the process for joining can be lengthy and costly for participants; and
- PSO requirements and rules are too complex, therefore making them expensive to join and/or comply with.

The Working Group recognises that participants may want to join more than one PSO. However, at the moment:

- there are different applications processes;
- there is no common entry point into the PSOs;
- there are significant costs involved in replicating work across the PSOs;
- each PSO uses different terminology, which may describe the same activity.

The objective of all parties will be to minimise non-essential differences. There are areas of commonality, but over time different procedures and terminology have developed, going well beyond the different rule sets for individual payment instruments.

SOLUTION DESCRIPTION

This solution specifically excludes governance of PSOs, which is covered by a separate solution.

Ten areas for collaboration between PSOs have been identified to form the basis for the solution, which aims to deliver a common approach unless there is a justifiable reason to retain differences:

1. Common terminology

- Terminology should be the same across the PSOs unless there is good reason for variance to enhance user understanding, including technology and infrastructure terminology

2. Common eligibility criteria

- Eligibility criteria and baseline requirements for every PSO should be made common where possible (those with additional regulatory obligations may have different requirements)

3. Categorisation of Participants

- At present, each PSO categorises participants in a different way (e.g. by volume/ value, etc.). It is important to understand why there are differences between participants

4. Articulation of payment products common by PSO

- There is a need for commonality between the way products are referred to and the way their features and core characteristics are defined

5. Engagement with indirect participants prospective entrants and providers

- Improving awareness, involvement, communication and the PSPs and interested parties voice to PSOs

6. Rules, Procedures and Participant Agreements

- Consider how rules are different and if they should be different

7. Technical Accreditation process

- Some PSOs have technical requirements. Clarity is needed on the differences between PSOs' requirements and why they exist

8. Assurance process

- Managing the risk that a new or existing participant brings to the PSO (assurance models are currently managed by individual PSOs)

9. On-boarding process and migration to common connectivity models

- Common project plans, standard engagement models, sharing expertise between PSOs, providing budget and cost estimates for participants (will vary widely)
- At present each PSO has different connectivity model. Consider how a more common approach could reduce cost and complexity.

10. Access to information and documentation

- Information is currently tightly controlled e.g. access to essential documentation via PSO websites, making it difficult for PSPs and advisors to develop solutions or provide advice. There are currently a number of NDAs in place which may act as a barrier to communication and transparency, although it is acknowledged that a PSP and PSO may enter into an NDA for mutual protection.

Key steps in the solution:

- Each PSO's participation model to be reviewed to identify short term solutions to improve the ten areas for collaboration described above;
- From these, identify areas for alignment across the PSOs and consider how best to deliver a common model to improve access and increase competition. Where different, a justification for the difference will be provided;
- This work will be taken forward by the Interbank System Operators' Coordination Committee (ISOCC) supplemented by other key stakeholders. The group will summarise and augment the 10 areas to create a complete list and bring together commonalities across these issues;
- ISOCC will develop a plan supported by a dedicated representative industry stakeholder working group including existing and prospective participants, over the next 6 weeks for approval by this working group and to support the PSF solution evaluation and triage phase ahead of Forum's June meeting;
- Collaboration by PSOs could lead to each one having only essential differences in rules to reflect its own specific product set. The objective should be to seek to extend this across each of the retail-focused PSOs: Bacs, Faster Payments, C&CCC, LINK, Visa and MasterCard. The card based schemes (LINK, Visa and MasterCard) will have a range of competitive, systemic and operational differences, which make creating a fully common participation model difficult. There will however be elements of each of the identified work areas which can be harmonised with a collaborative approach. Dialogue with these PSOs will be needed to secure and agree their engagement and where they can support this common goal.

Other points to note:

- The ISOCC membership comprises FPS, Bacs, CHAPS, C&CCC (but not LINK). The proposal is that these PSOs should work together. ISOCC's role is to co-ordinate between the separate PSOs. Link has also offered to participate in this area of work;
- The working principle should be that PSOs will do things in a common way, unless there is a good reason to work differently. The rationale for doing this will be made clear to participants and service users. The aim is to have a declaration of intent towards this unified approach;
- Where it is not possible to standardise, reasons will be given. Simplification will be the sort term objective with a longer term plan to be put in place;

- Costs need to be clearly set out;
- This work needs to be have clear delivery dates, recognising that some activities such as changing the Assurance models will be a multi-year engagement;
- ISOCC and individual PSOs, in conjunction with their key stakeholders should work together to develop tactical solutions, which allow short-term changes to mitigate challenges encompassed and make user experience more straightforward;
- Developing a common engagement model needs the right stakeholders to address issues. Key stakeholders who have experienced the matters encountered should be identified to provide feedback, not just PSOs;
- There is a need to avoid raising the baseline standard unnecessarily, but with a commitment to implementing progressive tactical changes;
- There is scope for this work to be undertaken alongside activity to streamline and simplify connectivity for PSPs and aggregators. Those planning to provide aggregation services should have full access to the documentation e.g. scheme rules and paying bank guidelines for Direct Debit to be able to design and build;
- If progressed, a consolidated and simplified governance model for retail PSO's (Solution C) may help to deliver this initiative, with potential to make the cross scheme collaboration simpler. Both solutions can be progressed in parallel and are complementary;
- Settlement is currently a distinguishing feature of direct participants in some schemes. Some schemes require direct participants to settle, others do not;
- PSO Eligibility Criteria. Some analysis of these has already been performed by Payments UK and can be found on their Access to Payments web-page;
- Language and the need to use 'plain English' should be considered throughout as clarity in language is critical;
- The PSOs will still own responsibility for assessing what risks participants bring to their operations;
- Where the PSR has used terminology in its Market Review of Indirect Access (for example "Indirect Access Provider" in lieu of "sponsor", the PSOs should look to be consistent with the PSR documentation.

PEOPLE INVOLVEMENT AND ACTION

WHO	WHAT	
Interbank System	- Provide a collaborative structure to bring individual PSOs together to	
Operators	agree approach, Clarification/expansion of the 10 themes to a more	
Coordination	detailed structure and propose next steps;	
Committee (ISOCC)	- Share a list of current PSO participation documentation, including	
plus other	documents that are restricted access under NDA;	
stakeholders	- Identify stakeholders who need to participate in this (not just the PSOs);	
including user	- Processes need to be simplified with PSPs and aggregators in mind: to	
representatives.	make it less expensive, complex and time-consuming for both these	
LINK has also	parties. This work needs clear delivery deadlines and where it is not	
offered to	possible to complete it in these timescales, there needs to be an	
participate in this	explanation why;	
area of work.	- Develop a plan during the next 6 weeks to address agreed activities,	
	outlining resource plan, timescales for execution, deliverables and	
	governance;	

Trade associations and other representative bodies	- To be engaged by PSOs to communicate common approaches to payment scheme users once these are agreed through the collaborative work that ISOCC is leading.
Payment Systems Regulator	 Oversee progress towards improvements in individual PSOs under its Policy Statement PSR PS15/1 General Direction 2/3 Access and Public Disclosure Rules. This requires that Bacs, C&C, CHAPS and FPS have 'objective, risk-based and publicly-disclosed Access Requirements, which permit fair and open access in the delivery of the simplified and common terminology and document sets focusing on the 10 areas identified.
PSOs	- Identify and deliver changes

LEADERSHIP

- **PSOs (via ISOCC)** Identify short term solutions within their own schemes to improve onboarding, access, rules, costs and participation requirements for each PSO. Work collaboratively with other PSOs to identify a more common participation model and look for areas for alignment;
- PSOs Work collaboratively through ISOCC to identify solutions in the 10 areas identified to include a common minimum set of rules, security levels and compliance processes could apply across a range of PSO's with the objective that this common approach covers all 6 retail focused PSOs BACS, Faster Payments, C&CCC, LINK, Visa and MasterCard. LINK, Visa and MasterCard to be contacted separately to try to secure appropriate engagement. LINK has already offered to engage in this area of work;
- **ISOCC** To facilitate collaboration and seek to drive the process forward with the community of PSOs.
- **Payment Systems Regulator** Monitor progress (via GD2) and intervene if PSOs are unable to deliver change or where certain PSOs choose not to participate.

COMMUNICATION

- Each PSO to keep existing and prospective members appraised of progress in their reviews and communicate the main features of a simplified participation model and what it will mean to new entrants, non-bank PSPs and existing PSPs;
- Wider communication will be needed when a common participation model is delivered so that it can be made clear what has been changed and how the new approach will improve access. This communication can be managed to be complementary to the work required to enable aggregator connectivity in a simple and efficient way across multiple PSOs.

SYSTEMS AND PROCESSES

- All of the work to improve on boarding, access, rules, fees and participation requirements will fall to the PSOs, with limited impact expected on PSP's systems. For both new entrants and existing users if the approach is successful it should mean a reduction in complexity for on-boarding and internal processes;
- The work will naturally link to the assurance and certification processes used for all participants and this will be a core part of both the individual PSO's review and work to define a common participation model across PSOs;

- It will need to be clear to new entrants what the common set of rules, security levels and compliance processes are and to which PSOs these apply. This may mean that these will need to be published and available to potential new participants in payment schemes in a common way on PSO websites, or via a shared portal. Individual PSOs should make clear the variances that will apply to their scheme in addition to the common requirements;
- Systems and processes agreed should align with enhancements made to improve connectivity for aggregators and PSPs.

DEPENDENCIES

- Commitment of all inter-bank PSOs to deliver simpler access and a common participation model
- Individual PSOs will need to gain agreement from their Bank of England Financial Stability Supervisor, bearing in mind that the Bank of England response will largely be driven by statutory considerations and its approach is to "not object to" rather than "approve" proposals. Bank of England may need to 'agree' what can be 'common';
- Three of the seven HMT designated PSOs, Bacs, CHAPS and Faster Payments, are supervised by the Bank of England as systemically important Financial Market Infrastructures based on their volumes, values and risk to the economy. For these PSOs, the Bank of England applies the CPMI-IOSCO FMI principles overlaid with additional (but differing) requirements based on its view of the systemic risk of each PSO. These are embedded into the respective PSO rulebooks. This means there may be inherent inconsistency between these PSOs as a consequence;
- Effectiveness of collaboration to deliver a common participation model
- Capability to deliver system and process changes;
- Other regulatory and industry initiatives may impact ability of PSOs to deliver e.g. C&CCC delivery of the Image Clearing Service.

COST BENEFIT ANALYSIS

Cost	Benefit
Amendment to current processes and systems in PSO's will require resources and time to deliver across multiple schemes.	Clearer, simpler processes for participation in payment schemes will enable easier direct connection.
Collaborative effort will require commitment, resources and compromise to deliver.	Creation of a common minimum set of rules, security levels and a clear compliance process across schemes will speed up joining times when access to multiple schemes is required.
	Time, resource and cost in new entrants businesses will be saved rather than having to meet different requirements for multiple schemes.
	Similar savings in time, resource and cost will be made by existing PSP's in dealing with common requirements across multiple schemes e.g. dispute resolution, reporting, compliance requirements, etc.
	With a simpler and common approach to participation models, costs of entry should be reduced to reflect the new environment.
	Innovation will be stimulated as new entrants and non-bank PSP's can gain easier access and develop payment products to support new business models.
	Will be complementary to improved connectivity for aggregators and PSPs across multiple schemes and further simplify this connectivity option.

SECURITY / RESILIENCE

- Having a common participation model should ensure that best practices from the schemes are identified to develop the model. With careful management this should lead to enhanced security;
- Variances to protect critical and unique requirements for individual payment schemes will still be possible;
- Breaches of security requirements by PSP's may be easier to identify and therefore quicker to address and resolve; and
- Bringing rules in to a more common structure will make external oversight of scheme practices and compliance by participants more straightforward.

EXISTING OR IN-DEVELOPMENT SOLUTIONS

- PSR General Directive 2 already requires PSOs to have assessed their access requirements. Much work is underway in individual PSOs to identify ways in which access can be improved and participation models simplified. Some collaborative work between PSOs has already started (e.g. sortcode allocations, PKI solutions, FPS aggregator approach, BACS Access Strategy);
- Collaborative activity through ISOCC to define plan and actions to commence in April, 2016.

INTERNATIONAL INSIGHTS / BENCHMARKS / HORIZON SCANNING.

- Within Europe the SEPA model has enabled focus on a common approach for access and rules to direct credit and direct debit models. Whilst the UK payment systems are more diverse and offer real time payments which the EU solutions currently do not, the principles of clear and efficient access are worthy of note as access solutions are developed;
- Real time payments solutions in markets other than the UK are already deployed or in plan in markets such as Singapore, Australia, USA and India amongst others. This real time capability and the digital products that PSPs offer based on it, need rapid and efficient access models to deliver these products to market. We expect these markets to look closely at the access models they use to participate in their payment systems; and
- Looking forward payment systems, PSPs, regulators and fin tech companies in the wider market will be looking at the opportunities for payments created by distributed ledger models. Access requirements from various payment schemes should not restrict the future development and deployment of these solutions. A common approach to participation models and rules is likely to facilitate new innovative approaches to managing payments and make the changes that would be required simpler to deliver.
- The Lipis report on Payment System Ownership and Access Models, published by the PSR in February 2016 provides a useful fact based comparison of payment system ownership and access models between the UK and 12 other countries.

COLLABORATIVE OR COMPETITIVE

- The work required here is collaborative. Whilst individual PSOs will review and act in relation to their own practices, considerable collaborative working would be needed to deliver common participation models and rules across multiple PSOs;
- ISOCC will coordinate the work;
- Collaboration will be needed between BACS, Faster Payments, C&CCC through ISOCC and separate engagement with LINK, Visa and MasterCard. LINK has offered to participate with this area of ISOCC work.

QUICK WIN VS SUBSTANTIAL PROJECTS

- Quick wins can be achieved, and are already being delivered, where individual PSOs review
 participation models for their own scheme and identify areas where change can be made quickly
 to simplify and ease access;
- The bulk of the work will be more substantive. Changes to more complex rules and requirements arising from individual scheme reviews will require consultation with participants and proposals approved by the PSOs governance structure and Regulators.

IMPLEMENTATION APPROACH AND TIMEFRAME (OVERALL)

- PSOs reviews of participation models and rules to identify areas for improvement and streamlining can be undertaken relatively quickly, with any identified changes progressed through the payment schemes governance structures. Lead time 6-12 months;
- Collaborative work to develop common participation models and identifying areas of rules which can also be common across payment schemes will be a substantive work item. Lead time 12 24months.

IMPACT: SUCCESS METRICS

- Evidence of an effective set of more common rules across multiple PSOs, which simplify access and participation arrangements;
- Evidence of individual PSO requirements having been reviewed to identify changes, which can be made in the short term to improve participation models
- Number of PSPs joining PSOs, and their feedback on the process.



PSO Governance Review

Solution Concept Assessment

SOLUTION NAME: PSO GOVERNANCE - REVIEW

PROBLEM STATEMENT:

The key detriments identified are that:

- multiple PSOs (including card schemes) are expensive, complex and time-consuming to join for PSPs, to connect to by retailers and commercial companies, and confusing for end users;
- there are no clear or transparent on-boarding processes or requirements for Participants to join a Scheme, and the process for joining can be lengthy and costly for participants; and
- PSO procedures and rules are considered complex, adding both a time and compliance challenge.

In addition, some indirect participants, as non-PSO members, consider that change and governance by the PSOs are driven by the large banks. They also consider that PSO governance does not provide scope for them to have an effective voice or their views to be taken into consideration.

WG notes that PSOs are statutorily accountable to the PSR under several of its General Directions on access requirements, appropriate representation of the interests of service users in their governing body's decision-making processes and through publication of its governance body's minutes. The PSR has already reported on the level of compliance achieved by PSOs and specified any further actions that need to be taken by them.

SOLUTION DESCRIPTION

These detriments are largely common to those in Solution B (PSO Participation), which proposes cooperative work by PSOs to identify common processes and procedures with the aim of minimising non-essential differences, other than at payment instrument level.

The WG recognises that this co-operative work can make a valuable contribution to PSO simplification, but is mindful that as each activity will need to be undertaken by individual PSOs; this may lead to simplification taking longer given the need to take these through each PSO's governance.

In this solution, we consider whether other options might help address the PSO simplification measures in Solution B and support better future strategic change in UK payments.

The WG has also discussed the issue, expressed by banks, challenger banks, new entrants and some existing PSPs, that having multiple PSOs, with their individual governance and committee requirements of participants, impacts the effectiveness of PSOs to deliver across multiple regulatory, supervisory, engagement and innovation objectives.

The SAM WG Chair has held a meeting with the Chairs of the Bacs, C&CCC and Faster Payments PSOs to discuss the topic, recognising the challenge that such an option might mean for the PSOs (particularly those designated as Financial Markets Infrastructures) as currently structured, and to request that PSOs support the investigative stage of the work, in light of how this might help address the simplification detriments.

A sub-group of SAM WG met to discuss this subject, and this led firstly to agreement on the comprehensive range of activities now forming Solution B. The sub-group also considered the option

of potential PSO governance and organisational change, and agreed that further engagement and discussion is needed.

While there appears to be strong support from PSPs for change of this nature, the WG agreed to the Chair's proposal that we would seek participation in an independent senior stakeholders' group to consider the sensitive question around consolidation of PSOs at the governance level. It was acknowledged that any such consolidation would potentially require organisational changes and thus the need to ensure no impact on any PSO's ability to deliver its systemic and strategic remit.

It was also accepted that there should be no firm expectations of outcome at this early stage. Objections to a number of the input documents created without input from any of the PSOs have been noted. This document therefore sets out the potential stages to be considered in any future change of PSO governance and structures and how, if any change were to be agreed, a migration to this would be delivered.

Discussion to-date has focussed only on the core retail inter-bank payment systems, namely Bacs, Faster Payments and C&CCC, although there is no reason why CHAPS and LINK should be excluded as the alleged detriments equally apply to those PSOs and are planned to be fully involved in the solution B work. The international card schemes, Visa and MasterCard, are considered to be out of scope due to their global governance.

This phase will consider the following:

- Examine whether changes to the governance and management arrangements of the PSOs could improve access and drive competition in the payments market more effectively than by relying only on incremental individual PSO developments;
- Explore fully the pros and cons of simplification and consolidation of the inter-bank PSO structures;
- Develop a clear understanding of the work of three of the PSOs (Bacs, FPS and C&CCC) which have either conducted, or are undertaking, reviews of their governance arrangements independently, focussing on their own optimum future governance model, ownership and reflecting regulatory requirements. The independent work recently done for LINK will be included in considerations.
- Take input from these reviews and the Bank of England and PSR on their expectations for PSO governance and independence;
- Focus throughout will remain on whether a change to PSO governance model might better address the simplifying access and strategic detriment issues, alongside the work to look at common participation models and rules outlined in Solution B;
- Industry reports into potential alternative governance structures, including those commissioned by Payments UK from KPMG/ PA Consulting/London Economics will be considered fully in this assessment, along with other relevant documents and materials which interested parties have written or may provide.

The review will consider information on governance models and seek legal, regulatory and other relevant inputs before an approach is recommended.

PEOPLE INVOLVEMENT AND ACTION

WHO	WHAT	
SAM WG Chair	- Engage with the independent Chairs of PSOs on this topic and establish a forward group to consider PSO governance;	

PSOs	 Decide whether to participate in the new stakeholder group to evaluate future PSO governance and management options Independent of the above point, share information on individual governance reviews undertaken or in course by the PSOs;
Regulators and Oversight Authorities	- Agreement to any revised model will be required from the PSR, Bank of England and HM Treasury, who will be engaged as discussions progress; and
Implementation Body (to be identified)	- If any changes were to be agreed, responsibility for implementation would need to be agreed in advance of any agreed action plan and is expected to be managed under a formal programme of activity.

LEADERSHIP

- Simplifying Access to Markets Working Group Chair to convene a senior stakeholder group to consider the issues of PSO governance models and to agree a plan of work and its time table;
- Workstreams will be identified based on the direction agreed by this group, which will provide reports on progress and its recommendations to the PSR in time for PSF June meeting;
- Once formal agreement is reached on recommendations, these will be syndicated to all interested parties including regulators and HMT, to ensure that there is full consensus and agreement on the solution, any related changes and if appropriate, how and when these will be delivered;
- The WG will consider examples of organisational changes where independent review was conducted and I consider learnings for this review;
- The proposed approach will take account of work undertaken on this topic in recent years, rather than seeking to repeat or duplicate, but will assess this in the light of the current UK payment market needs and detriments. Its focus will be what, in the context of a changing payments market, is the best organisational structure for the domestic payment systems so that they can fully address the future competition, innovation and regulatory challenges.

COMMUNICATION

This will depend on the approach adopted but in generic terms:

- SAM WG Chair and senior stakeholder group to develop a plan of activity and engagement with all interested and impacted parties;
- WG to communicate its findings and emerging conclusions and to consider whether a formal consultation on these is needed. It will agree with PSF who may be best to undertake this.
- Whilst not pre-empting any outcome, there will need to be a commensurate communications plan of the recommended way forward.

SYSTEMS AND PROCESSES

- The stages as outlined above have no impact on systems or processes, as they do not as yet anticipate formal change;
- Were any change to be agreed, this would lead to organisational change, supervisory impacts, and a need for communication to all impacted stakeholders;
- Careful planning of the 'what' and 'when' of any change and the delivery of communications would be needed.

DEPENDENCIES

- Support from individual PSOs to participate positively in the next stage engagement;

- Reaching agreement on a future model for fit for purpose, simplified governance, acceptable to all key stakeholders;
- Identification of, and agreement to, the appropriate body to oversee and implement the changes agreed; and
- Agreement of the regulators and oversight bodies (PSR, Bank of England, HM Treasury) to any proposed simplified governance model.

COST BENEFIT ANALYSIS

The costs and benefits of any change will only become clear as any specific solutions and timelines are developed. However, the case for change might include some or all of these factors.

Cost	Benefit
Bringing commonality of governance to the PSOs will require committed resources and compromise to achieve	A more uniform approach between PSOs will bring a simpler, cost effective and more navigable experience to end-users
A period of transition will be necessary to achieve a simplified model and this change period will need to be managed carefully to avoid disruption to all stakeholders.	Can improve efficiency and generate cost savings for new and existing PSPs by only having to deal with one governance structure rather than multiple schemes.
	A simpler structure will more easily meet regulatory requirements for effective oversight
	More users of all types should be encouraged to participate in payment schemes as it becomes understood that the simplified structure and reduced costs make participation achievable.
	Individual PSP's can reduce management time devoted to each scheme with simplified committee and representative structures.
	Opportunities exist to improve resilience of PSOs by harmonising approaches across schemes.
	Reports delivered by London Economics indicate that positive competition impact may be delivered depending on how the simplification of governance and supporting access arrangements are delivered. At a minimum there are not expected to be adverse impacts.
	Improved decision making across payment types should encourage innovation and change.

SECURITY / RESILIENCE

- Delivering a new and simplified governance structure may offer opportunities to improve both resilience and security given that learnings may be more easily applied across payment types;
- Resilience must not be reduced by any consolidating of scheme governance and the PSOs responsibility to act in the interest of all their service users; and
- Transition impact would need to be managed to ensure security and resilience are not impacted in this period.

EXISTING OR IN-DEVELOPMENT SOLUTIONS

- Work is already underway by several PSOs on governance reviews, either in course or recently completed in the case of LINK;

- During 2015 Payments UK Board commissioned three studies to evaluate opportunities to deliver a simplified and consolidated governance structure. Work conducted by KPMG, PA Consulting and London Economics looked in detail at the rationale and drivers for change and also went on to propose what a single governance entity could look like for the UK retail payment PSOs;
- The work by economic consultants London Economics concluded that there would be no adverse competition impacts from simplification and opportunities might exist to enhance competition;
- Payments UK members (through the Board of Payments UK) strongly supported moving to a simplified governance model for the PSOs;
- Some PSOs have been clear that they disagree with the factual accuracy and conclusions of the Payments UK-commissioned report;
- Papers also supporting a change in the governance of PSOs have been published by VocaLink and by the Chairman of the Emerging Payments Association; and
- At such time as the WG's work leads to consensus on a proposed PSO governance solution, consideration should be given to independent and transparent analysis to validate this.

INTERNATIONAL INSIGHTS / BENCHMARKS / HORIZON SCANNING

- The Lipis Advisers report for the PSR into 'Payment system ownership and access models' considers that the UK payment system infrastructures exhibit rich features in comparison with the other payment systems considered by them and with high product diversity;
- Some of the Commonwealth nations also show a progressive and co-ordinated approach to how their payment systems are managed;
- In the case of Canada, this has led to the recent publication of a report to support modernisation of Canada's payment systems; https://www.cdnpay.ca/imis15/eng/About/eng/About.aspx?hkey=7bff6fcc-b35c-43f1-a803-5de43896d3e6
- PaymentsNZ, with currently a narrower sub-set of involved PSPs, reflects a similar approach; http://www.paymentsnz.co.nz/about-us/our-structure/overview
- In Europe, the delivery of SEPA payment structures across European countries and for multiple countries demonstrated the challenges in achieving complex changes, with for example extended timetables for implementation.

It remains for the UK to consider what the most appropriate PSO structure is to support its current and anticipated future phases of payments development and change.

COLLABORATIVE OR COMPETITIVE

- The work here will be collaborative.

QUICK WIN VS SUBSTANTIAL PROJECTS

- Any work to deliver governance change will be a substantial project;
- Consideration of the impact of change to governance will need to be considered alongside the need for continued effective capability to deliver other, potentially more pressing, projects to address detriments across payments and deliver benefits to service users; and
- There is however likely to be progressive change for example, as part of individual PSO simplification activity

IMPLEMENTATION APPROACH AND TIMEFRAME (OVERALL)

- There will be a number of distinct phases to this activity;
 - Evaluation phase work to be led by SAM WG sub-group plus appropriate members of the PSF – planned to complete for PSF June meeting;
 - Consultation phase work to be undertaken by an agreed consultation body on behalf of PSF;
 - Outcome phase discussion of findings, proposed way forward developed, formal communication, incorporating a proposed outline implementation plan if change is agreed; and
 - o Implementation phase led by agreed body to a set timetable to ensure removal of uncertainty and delivery of anticipated benefits;
- It is envisaged that the evaluation to outcome phases are capable of being completed no later than end 2016, with the timetable for any implementation to be agreed based on what might be agreed.

IMPACT: SUCCESS METRICS

- Delivery of a simplified governance model which makes interfacing with the UK payment schemes easier and complements the ongoing efforts to create common participation models and rules across the PSOs;
- Reaching agreement on what a simplified governance model looks like and agreement to this by PSO Boards, regulators and oversight bodies;
- Clear indications of support by the wider end-user community; and
- An outcome that delivers PSO(s) that continue to be able to operate in the interests of all service users and that are not perceived to be driven by the large banks



Moving the UK to Modern Payments Message Standards

Solution Concept Assessment

SOLUTION NAME: MOVING THE UK TO MODERN PAYMENTS MESSAGE STANDARDS

PROBLEM STATEMENT:

The following detriments have been identified:

- Too many standards and too much complexity reducing front end simplicity and stifles innovation, unlike the EU where SEPA has aligned rules for DC/DD;
- Different rules and standards within EU to the UK. SEPA has largely aligned EU standards/rules for DC/DD & should do for instant payments. Still in country variances;
- Range of standards could limit infrastructure competition. If Operators set the rules, there could be multiple infrastructure providers, provided they are all aligned to an ISO standard;
- No real substitutability between payment systems in the event of system failure.

This led the WG to conclude that the UK domestic payment market, comprised of multiple PSOs operating with different domestic payment message types is increasingly outmoded, with competitor countries and regions moving to messages based on the global ISO 20022 financial messaging standard.

SOLUTION DESCRIPTION

The solution comprises early tactical actions and a strategic direction for the UK to adopt ISO20022 messaging:

1. Provide information on standards mappings and encourage their adoption by technical aggregators and PSPs

Development

In the short term, the first two detriments can be partially addressed by mapping exercises between FPS ISO 8583 and Bacs Standard 18 to ISO 20022 being made available. These mappings need to be both from UK native and legacy formats to ISO 20022 and back into UK formats:

- FPS ISO 8583 mapping to and from ISO 20022 underway in collaboration with Payments UK;
- Bacs Standard 18 at a preliminary stage (and may take longer due to the technical architecture of the system and other in use standards use e.g. Standard 29);
- SWIFT MT to ISO 20022 mapping already exists but this will need to be refined for CHAPS use;
- ICS/FCM ISO 20022 format in place and to be openly accessible to stakeholders N.B. there are important similarities between the message flows in ICS and those used within Bacs. This may be helpful to consider when developing a consistent, harmonised set of mapping documents;
- LINK mapping excluded already closely aligned to Card Schemes' ISO 8583. Any move by LINK to adopt ISO 20022 would likely be predicated by a shift in the cards industry to ISO 20022.

It is anticipated that mapping of all UK legacy formats could be completed by latest end 2017, for adoption and use progressively as available for individual PSOs by latest mid-2018.

Information provision

ISO's principle of 'reasonable and non-discriminatory' in relation to requests for documentation should be applied and hence full functional mappings and message standards should be made available to the PSP and Aggregator communities, and in the case of Bacs to the direct corporate community. No adverse implications were identified for making the mapping information widely available from an IT security perspective.

PSOs should provide the necessary guidance on mapping to ensure that collaborative solutions are founded upon common, core PSO-approved translation rules. Typically these agreements will be critical when mapping from a richer ISO 20022 format into a more restrictive legacy format. It is important to note that data manipulation via translation services can always provide technical interoperability between legacy formats and ISO 20022.

Such mappings need to be harmonised as far as practical across the PSOs, with a central co-ordination function to facilitate this harmonisation. While any such mappings would be restricted to the current systems' architecture and thus, perhaps not able to capture all the rich functionalities offered by ISO 20022, technical architectural changes to infrastructure would need to be considered in the longer term or as part of re-procurement of infrastructure services (see 2 below). Experiences shared in relation to ISO 20022 implementation globally should also be leveraged.

Mapping documentation needs to be straight forwardly available, as do field definitions. It was agreed that translation software is already commercially available but awareness needs to be raised as to its existence e.g. in the same web-site location that mapping information is made available.

Promotion

Promote and engage on development of the mappings to encourage short-medium term aggregator solutions that provide access to all current PSOs for challenger banks and PSPs:

It is expected that multi-system aggregation services based on these new mappings could be made available by end 2017 for PSPs, and aggregators should be discouraged from pursuing tactical alternative approaches. By system mapping will occur progressively up to this date.

Commercial considerations including the longevity of propositions (if functionality is later moved to the core switch) should be considered when encouraging aggregator solutions, to enhance the willingness of aggregators to invest. The WG view is that any change to the core switch will between 3-10 years later, which will support the interim development and use of commercial mapping services.

The choice of translation services and the full extent and scope of the service to be used by PSPs should be left to the market to decide, as it is a competitive issue with specific technical requirements that vary per institution. However, the mapping should act as minimum functionality that an aggregator should provide.

2. (Strategic action): Adoption of a common payments standard based on ISO20022

Our end state vision for UK electronic payments is that they operate based on common ISO 20022 message standards, refined for usage in the context of UK electronic payments by UK specific Implementation Guides (IGs). ISO 20022 implementation for UK electronic payments will use IGs to codify the PSO rules and business processes in the form of business rules and technical/data restrictions.

The adoption of a common standard needs to be supported by a strong case for national adoption. The desire is for the whole UK payments eco-system to adopt ISO 20022 end-to-end.

ISO 20022 is proposed as the common standard solution as investment in implementing it has already taken place globally, PSOs are expected to move to ISO 20022 as part of their commercial re-

tendering processes and UK PSPs have already invested in ISO 20022 for SEPA, CASS, Cash ISA Transfer and ICS. Thus the PSP-to-PSP domain is seen as the priority for adoption and migration.

Customer-to-PSP requires different considerations, and the UK needs to be mindful of the adverse impacts on business users in the SEPA case of a mandated adoption. The WG considers that it is likely that business users will require mapping services for a period until market solutions emerge to support wider end-to end adoption. Larger Corporate users who may have invested for the SEPA are expected to wish to align their processing quickly to achieve efficiencies.

Moving to native ISO 20022 is strongly encouraged as it will enable more fields and functionality; including support for enhanced data requirements (like-for-like mapping and translation may not be the best solution in the longer term as it does not unlock the value of fuller adoption). Lipis Advisors report on best practice in the implementation of ISO 20022 suggests that all capabilities of the existing native systems should be migrated.

It should be noted that the PSR's Interim Infrastructure Report also advocates the move to ISO20022.

Benefits of ISO 20022 include the following:

- Competitiveness and ability of UK electronic payments businesses
- Improved payments integrity
- Reduced operational and compliance risk
- Efficiency and cost reduction of payment processing operations
- Standardised implementation reduces cost, time to change and improve overall performance
- Helps ensure re-use and longevity of the messages once developed
- Being based on XML, it leverages established patterns of object-oriented programming
- Reduced costs in development
- Phased migration feasible to mitigate the impacts and risk of a big-bang adoption
- Vendors have already created tools to produce ISO20022 compliant messages

Implementation in the payment systems after consultation, standard development and a national delivery plan are shaped and agreed is set out in the table below, showing the phasing stages. An end date for PSP- to-PSP migration implementation is however considered essential, although a big-bang migration is not proposed and therefore a period of co-existence will be required.

A gradual migration and no big-bang will reduce industry impact and risk so long as:

- i. The timescale for co-existence is relatively limited but must be finite for the PSP-to-PSP space;
- ii. Usage of ISO 20022 instead of legacy formats during co-existence is optional, not mandatory for all submitters.

Stage	Estimated delivery
Industry to agree and publish mappings of UK message standards	Progressively to end 2017
Aggregator implementation of commercial mapping solutions for Service Users, subject to their commercial appetite	Progressively as standard mappings are developed and expected to be fully commercially available by mid-2018

Infrastructure provision competitive tender process for individual payment systems to include the new standard	Based on timing of individual PSO contracts and currently expected 2019/2020. Infrastructure development may be needed by the selected supplier/s, if not developed in advance based on pre-agreed UK message standards. If not developed, an agreed development period to be contractually agreed.
Mandatory PSP migration during co- existence period (this may determine how long co-existence is needed) which may well be the slowest and most costly part)	Once the infrastructure provider is fully capable of supporting the new message standard, the UK's co-existence phase begins for PSPs. Given likely PSP cost /migration challenges, consensus on the length of the mandatory migration period will need to be established. This may vary by payment system, but a 5 year period is seen as the anticipated norm.
End user subsequent adoption will be based on the perceived commercial benefits, once PSPs and Aggregators have interfaces available.	End users supported by commercial solutions

During co-existence, technical interoperability is guaranteed as part of the services provided by the contracted supplier according to collaboratively agreed translation rules. We anticipate that the core payment system operators will initiate migration to ISO20022 as part of their competitive re-tendering, in line with the PSR's Interim Report of its Market Review into the ownership and competitiveness of infrastructure provision.

Consideration is also needed regarding settlement payment messages which exist based on SWIFT MT format even where payments have moved to ISO 20022 (close alignment will need to be kept with the outcome of the Bank of England RTGS review), the role of PSOs and the potential impact on corporates and customers.

Any adoption of ISO 20022 by the electronic payments systems should avoid:

- a. Detrimental impact to the integrity of the payments infrastructure
- b. Introducing uncontrolled risks
- c. Detrimental customer/end-user impact, whatever the segment of customer
- d. Increasing barriers to entry for new market entrants (challenger banks, indirect PSPs, and solution providers)
- e. Divergence as far as possible with Europe (SEPA) and other global adoptions of ISO 20022 pertinent to the customers of the UK payments infrastructure
- f. Divergence in the technical and operational documentation and to ensure as far as possible common implementation documentation that is available on a reasonable and non-discriminatory basis

3. Coordination

To interface with the international standards community and to interact with PSOs and wider stakeholders, we propose the nomination/creation of a UK standards coordination body, capable of supporting the development and continued maintenance of ISO 20022 adoption for the UK market, as well as other standards requirements the industry may need.

The standards body will also educate and publicise to end-users the existence of the appropriate UK standards and encourage continued engagement by all stakeholders. This body may provide accreditation of standards compliant solutions.

Open access, membership and participation would be encouraged. Payments UK currently fulfil this role.

Requirements and evaluation criteria for such a body will need to be developed. However models exist which can be assessed to ensure key responsibilities are covered; these could include:

- Developing common ISO 20022 message standards refined for usage in the UK by Implementation Guides (IGs);
- Ongoing maintenance of these IG's to cater for emerging requirements, that may be driven by regulation, innovation and technology among others;
- Provide a technical testing and validation capability to ensure that industry stakeholders can check for compliance with industry agreed standards and;
- Education and engagement with all users of standards to ensure that all UK standards meet the needs of end-users raising awareness of the benefits of the standards.

Consideration would need to be given to whether the body should also be responsible for carrying out accreditation to UK payments standards for technical aggregators. Such accreditation processes should be commercially beneficial to aggregators and give greater confidence to users. However, the industry cost of maintaining an accreditation process may outweigh the ultimate value.

PEOPLE INVOLVEMENT AND ACTION

WHO	WHAT	
SAM Working	Further consideration on:	
Group	- Formalisation of the organisation which will act as the UK payments standards co-ordination body;	
	- Provision of information on standards mapping and translation software;	
- Encourage short-term aggregator solutions providing access current PSOs; and		
	- Creation of new ISO 20022 based common standard.	
FPS and Bacs	Mapping of FPS ISO 8583 to ISO 20022	
	Mapping of Bacs Standard 18 to ISO 20022	
	with support from the standards function within Payments UK	
CHAPS and C&CCC Sharing of their respective standards (MT to ISO 20022 mapping)		
	standard formats) with the standards function within Payments UK	
SWIFT	To share findings on the implementation on ISO20022	
Payments UK	Provide its thinking on the future of UK standards coordination as	
_	Payments UK combines with other trade associations as part of FSTAR initiative	

LEADERSHIP

- SAM Working Group to provide direction on UK standards coordination body, informed by thinking from Payments UK which currently fulfils aspects of this role, and other expert stakeholders/ international examples. Decisions over who undertakes this role should not preclude related standards work from continuing;
- PSOs to take the lead in the development, sharing and communication of their particular mappings;
- SAM Working Group and PSOs to take forward the encouragement of aggregator solutions as part of SAM Solution A (Aggregator Solutions)

COMMUNICATION

- In building consensus for the adoption of ISO 200222 messaging standards for UK payment systems, considerable consultation, engagement and communication will be required. It might be expected that as with other countries which are seeking to adopt it, that there will be the need to develop a national plan. The lead for this will need to be agreed, with the PSR/PSF and HMT to provide a view;
- The significant industry change initiatives to deliver adoption and migration will also require timely, co-ordinated communication across the industry and relevant stakeholders; and
- Mappings and translation services already available need to be communicated via PSOs and solution providers

Systems and Processes

- PSP, aggregator and corporate system changes for adoption;
- Infrastructure changes will be necessary but not in the short term;
- Process change by any party that adopts and uses;
- Settlement processes also need to be considered these are currently based on SWIFT MT formats even where payments have moved to ISO20022.

DEPENDENCIES

- Agreement on the UK Standards coordination body;
- Development of aggregator solutions and commercial willingness for vendors to offer these;
- Final Report of the PSR's Market Review into the ownership and competitiveness of infrastructure provision;
- Details of requirements and associated expected benefits from other PSF workstreams e.g. enhanced data; and
- Outcome of Bank of England RTGS review as it relates to standards.

COST BENEFIT ANALYSIS

Cost	Benefit
Identification/setting up of Standards Setting body building on current work performed by Payments UK	Consistent payment standards in the medium to long term, driving efficiencies
Resources to work on development of standards mappings to ISO20022	Consistent off-the-shelf mappings will significantly facilitate the role of aggregators and other participants needing interoperability

Work to promote standard translation software via web-site(s) where mapping information is published	Challenger banks and PSPs will be more aware that translation software exists and can save them both time, money and risk during implementation
Implementation work to agree common ISO20022-based standard	Consistency across payment types and ease of interfacing and switching between types
Migration of current payment systems to the new ISO20022 based standard, most likely in parallel with supporting their current message standards	A more competitive payments market through more open standards
for a limited period	Reduced cost of future system innovation
Investment in central infrastructure changes, payments technology and wider systems. Sunk costs of legacy systems.	Reduced barriers to market entry by payment service suppliers and challenger banks/PSPs
IT maintenance costs, networks/communications costs, training costs, incremental technology replacement etc.	Long term opportunity to benefit from new functionality in ISO20022 and to decommission current standards
	Lower implementation and support costs by leveraging ISO20022 investments globally.
	Optimised data interoperability across payment channels.
	Potential to optimise data carrying to improve supply chain efficiency and additional commercial services.

SECURITY / RESILIENCE

Security and resilience will be key features during the implementation of all aspects of this solution. The detail of these will need to be analysed in due course.

EXISTING OR IN-DEVELOPMENT SOLUTIONS

In development is the mapping of current payment system formats to ISO 20022, which supports current needs of those with ISO based systems. This will benefit later work by providing a core platform of UK payments messages into ISO.

No other aspect of adoption of ISO20022 is formally in course of development.

INTERNATIONAL INSIGHTS / BENCHMARKS / HORIZON SCANNING

- **Report for ICPACE on ISO20022 Implementation Best Practices** by Lipis Advisors identified a number of common steps which SAM WG will consider in its next stage work:
 - Identify the need(s) that ISO 20022 addresses underway
 - Achieve consensus that change is needed key step in PSF strategic planning
 - Decide to use ISO 20022
 - Establish centralised governance and management structures
 - Determine the plan and timescale for implementation
 - Establish budget and obtain necessary financial commitments
 - Write technical standards and implementation guides underway
 - Establish migration plan with an end date
 - Migrate
 - Monitor compliance to plan

International example

Canada - ISO 20022 strategy and roadmap
 https://www.cdnpay.ca/imis15/pdf/pdfs news/ISO20022 consultation.pdf

Standards Bodies

- ISO Standards Body - an independent, non-governmental organization made up of members from the national standards bodies of 162 countries

http://www.iso.org/iso/home/about/about_governance.htm

- ISO20022 registration process/ management https://www.iso20022.org/fag.page
- SWIFT ISO200222 Registration Authority
 https://www.iso20022.org/registration authority.page?
- UK national standards body BSI

 http://www.bsigroup.com/en-GB/industries-and-sectors/Banking-and-

<u>financial-services/</u>

- US Standards Body https://x9.org/
- Norway Standards Body http://www.bsk.no/

COLLABORATIVE OR COMPETITIVE

Throughout this will be a collaborative development, with PSOs and aggregators initially taking the lead. The strategic solution will be deeply collaborative.

QUICK WIN VS SUBSTANTIAL PROJECTS

Interim measures can be adopted, particularly the development of standards mapping from ISO 20022 into domestic standards with a target aspirational date of end 2017.

However agreement to and implementation of a UK migration to ISO 20022 payments message standard/s is likely to be a 5-15 year project based on experience in other countries, with substantial impacts on infrastructure providers, vendors, PSPs, and potentially the corporate / business community. This would mirror developments elsewhere and can only be confirmed once industry agreement on adoption is achieved and the work programme defined.

IMPLEMENTATION APPROACH AND TIMEFRAME (OVERALL)

Overall, the new common standard will be complex to implement, given the need for sustained stakeholder commitment and action over a period of years, with impacted organisations requiring to make varying degrees of technical and process change plus investment in training and communication to affected employees and customers.

Supervisory buy-in from multiple regulators will be required as it is closely linked to critical infrastructure change and potential significant costs to be incurred by the industry (although driving subsequent benefits).

The development of a common standard itself is likely to take 1-2 years, with actual implementation taking several years longer than that, with a set period of migration added to that, assuming no big bang delivery.

IMPACT: SUCCESS METRICS

Success will be determined by having clearer and more consistent standards that maximise efficiency and re-use of existing work, rather than every PSO and payment type operating in significantly different ways and the withdrawal of legacy national standards.



Aggregator Solutions

Solution Concept Assessment

SOLUTION NAME: ENABLING AGGREGATOR MODELS AND CONNECTIVITY

PROBLEM STATEMENT:

Collectively to ensure that a broader range of connectivity options for direct and indirect PSPs exist in the market, by encouraging the development of commercial aggregator solutions, capable of supporting both direct and indirect access to any PSO through a single gateway.

SOLUTION DESCRIPTION

The proposed solution is a range of commercially developed, competitive access solutions, accredited for use by, or on behalf of the payment systems operators (PSOs) and forming an integral part of the future payment system community. Such solutions exist already or are in course of development to support the ambitions of a growing number and type of PSPs to participate directly in the payment systems.

Through the PSOs, the Working Group supports the development of commercial aggregator models, recognising that there is additional work to do to provide both aggregation and simplification across PSOs:

- Improved aggregator connectivity solutions are already being assessed and under development for Faster Payments and Bacs. This process will be supported by aggregator accreditation with the names of the participating providers published on the PSOs' websites;
- It should be noted that LINK already supports aggregators and currently has 8 providers connected to the scheme, offering services to prospective and member PSPs;
- Other PSOs will provide similar access to these aggregator services and to develop a framework model to support this. The proposed solution envisages that all retail focused PSOs will accept and encourage input and output from an aggregator, including the Card Schemes and LINK;
- The PSOs will work collaboratively to ensure a common approach to connectivity and requirements for aggregator services as far as possible and to ensure these services can be accessed in a simple, cost effective, efficient and speedy manner;
- The PSR has regulatory oversight of the PSOs to direct the co-ordinated approach needed to build on the models that FPS has created and that Bacs are investigating. LINK has operated a successful aggregator model for some time;
- Once enabled services can be further developed in the competitive marketplace and a variety of services such as format mapping and translation for new standards or other payment types could be offered through these portals in addition to the core technical connection capability;
- It should be emphasised that the solution proposed focuses on development of aggregator services in the competitive market space and creating the conditions to allow this competition to flourish. It does not envisage a single common aggregator or even a single aggregator provider for an individual scheme either of which would be unlikely to have positive competition effects;
- Given the unique and largely wholesale nature of CHAPS, it is not suggested that it is directly included in efforts to encourage aggregator services in the commercial space. This should not preclude CHAPS from examining its rules to ensure there are no barriers or onerous conditions on connections to its service and in particular for aggregator models. It is worth noting that

CHAPS utilises SWIFT messaging, so an aggregator offering SWIFT connectivity (which is generally a core competency) could form part of an access solution to CHAPS;

- The Working Group recognises that supporting commercial development of aggregators is a useful tactical solution but it is important that rules and requirements for Direct and Indirect participants are reviewed to ensure that barriers to entry and complexity are minimised and commensurate with the size and business model of prospective entrants. This is covered in a separate solution document;
- The Working Group also considers that this solution is complementary and supportive to the findings of the recently published PSR Interim Report: Market review in to the supply of indirect access to payment systems.

It is important to build on the experience of LINK and the progress being made with respect to FPS, BACS and C&CCC aggregator solutions and to engage and understand the approach of Visa and MasterCard in these areas.

It is important to point out that the term "aggregator solutions" used here refers to solutions for multiple PSPs to access one scheme **and** solutions for one PSP to access multiple schemes.

PEOPLE INVOLVEMENT AND ACTION

WHO	WHAT
Faster Payments Scheme	- Continue to develop the innovative simplified connection environment for aggregator solutions for Faster Payment Access and communicate availability to potential PSP users. Work with other PSOs to develop a collaborative approach to terminology and connection requirements across PSOs as part of work on Common Participation Models;
Other PSOs	 Ensure Aggregators can connect easily and quickly to their scheme. Work with other PSOs to agree common terminology and requirements and reduce differences in practice and approach; BACS – currently seeking input through a white paper; C&CCC - ICS will deliver direct connection including via aggregators; LINK – Existing aggregator service in place Card Schemes - Visa and MasterCard to be engaged;
Payment Systems Regulator	- Ensure PSOs engage collaboratively to make aggregator connection, direct and indirect access simpler, quicker and easier to understand for PSPs and other new entrants across all principal UK retail focused PSOs – Bacs, FPS, C&CCC, LINK, Visa and MasterCard.
Aggregators and Settlement Providers	- Develop solutions in the competitive market place and utilising the improvements in connectivity offered by each of the PSOs. These to provide technical connections (aggregator) and settlement provider where needed.
Trade associations and other representative bodies	- Help promote wider awareness of aggregator services amongst PSPs, new entrants and prospective aggregator providers.

LEADERSHIP

- **PSOs** will work both individually and collaboratively to improve connectivity for direct and indirect participants. **PSOs** will simplify and speed up connectivity for aggregators specifically, while reviewing indirect and direct access requirements. **PSOs** will actively encourage aggregator models and communicate their availability to PSPs;

- **PSR** to oversee progress and ensure that the above initiatives are implemented across all 6 retail focused PSOs - Bacs, FPS, C&CCC, LINK, Visa and MasterCard.

COMMUNICATION

- PSOs will communicate the improvements in connectivity to existing and potential PSPs, both direct and indirect participants. The expectation is that this would be done in a proactive way;
- Aggregators will communicate their commercial offerings to prospective PSPs;
- Sponsoring PSPs will provide an objective assessment of connection options to prospective indirect PSPs, outlining the availability of direct connection and aggregator solutions as alternatives.
- Trade associations and other representative bodies to communicate and promote awareness of these services amongst PSPs, new entrants and prospective aggregator providers.

SYSTEMS AND PROCESSES

- Designated PSOs and C&CCC are expected to follow an approach similar to the initiative taken by Faster Payments to ensure their rules, processes and systems interfaces enable simplified, efficient and speedy connection for aggregator providers;
- The 6 principal PSOs will work together (assuming Card PSO engagement) to ensure that their scheme is able to participate fully in aggregator services and to agree as a community, common requirements, terminology and processes which will encourage aggregator services and adoption by PSPs. The Working Group recognises the importance of this collaborative process not becoming protracted;
- Where barriers/challenges are identified, individual PSOs will address these and propose solutions to enable aggregator services in a timely manner;

DEPENDENCIES

- Individual PSOs making the necessary changes to allow cost effective, efficient and speedy connection for aggregators;
- Willingness and ability of individual PSOs to work collaboratively (recognising that the Card Systems and LINK operate in a competitive environment);
- Consider the difficulties in accessing the Card Schemes, which have distinctly different models to inter-bank PSOs. Aggregator requirements for Card Schemes may be different.
- Individual PSOs may choose not to participate;
- Resolution of differences of approach to aggregator access across different PSOs;
- Ability to deliver system and process changes by PSOs;
- Having adequate settlement capabilities alongside technical aggregator services to meet new entrants needs;
- Confirmation in the market that a sustainable business model exists to encourage aggregators to offer these services. Faster Payments research identified that a sustainable market is likely;
- Sufficient aggregators enter the market to make the service priced competitively;
- Ensuring liability positions for aggregators and their customers are clear and understood;
- The commercials/economics for aggregator solutions the aggregators need to be able to make money;

COST BENEFIT ANALYSIS

Cost	Benefit
Investment by PSOs to facilitate aggregator access	Broadening of connection options for PSPs and
	other new entrants
Promotion of the service by PSOs	Development of multiple payment scheme access
	through aggregators further simplifying connection
Collaborative effort to deliver change in all affected	Increased competition between aggregators and
PSOs	sponsors and as an alternative to indirect
	sponsorship models
	Reduced costs of access expected for lower volume
	challenger banks, innovative new providers and
	existing PSPs
	When combined with a settlement bank provider
	alongside a technical aggregator provides an
	integrated solution for connection needs
	Encourages innovation as resources and time can
	be focused on product development rather than on
	the need to satisfy multiple connection models
	Interoperability is encouraged as aggregators
	would be better placed to support revised future
	standards when compared to indirect sponsorship
	models
	Aggregators can broaden services to include
	translation capabilities and mapping
	Aggregators themselves can support innovation to
	develop products to compete and more directly
	meet the needs of PSPs and their end users

SECURITY / RESILIENCE

- PSOs will enable aggregators to connect effectively and efficiently but will maintain the level of assurance needed to protect the operation of the system and its participants;
- PSOs will need to focus on simplification and streamlining of processes, requirements, rules, costs, assurance/certification and approval mechanisms to enable the aggregator environment. In addressing these issues it remains critical that this does not impact the security and resilience of the scheme;
- Liability models for users of aggregator services and their providers will benefit from clarification of responsibilities for AML and KYC issues as identified for sponsoring banks and their indirect PSP customers. This may extend to requirements for validation and verification of beneficiary account details. This issue is covered in a separate solution document.

EXISTING OR IN-DEVELOPMENT SOLUTIONS

- LINK already provides an aggregator service with eight providers currently connected to the scheme.
- Faster Payments has been working on an effective aggregator model over the past 2 years and its proposed approach is set out in their report: Faster Payments New Access Model published in May 2015 and researched by Accenture;
- The Faster Payments model focuses on all the goals that this solution seeks to achieve with regard to broadening access options while specifically addressing the needs of a scheme offering real time payments, where indirect options often do not deliver this capability;
- Faster Payments has encouraged vendors to provide aggregator solutions;

- In February 2016 Bacs published a consultative white paper: Payment Service Provider Access, Widening Access and Choice. This sought views on Bacs desire to broaden access to its services and to improve access for aggregator and bureaux services. This includes a single connection for access to other Bacs services such as the current account switching and Cash ISA transfer services:
- The PSR Interim Report: Market review in to the supply of indirect access to payment systems, has now been published and will further strengthen the aims of this solution to broaden and simplify access to payment schemes;
- There are a range of FinTech businesses and aggregators in the market wanting to offer a range of propositions (e.g. fully managed service, SaaS etc.).

INTERNATIONAL INSIGHTS / BENCHMARKS / HORIZON SCANNING

- Within Europe the SEPA model has enabled focus on a common approach for access to direct credit and direct debit models. Whilst the UK payment systems are more diverse and offer real time payments, which the EU solutions currently do not, the principles of clear and efficient access are worthy of note as access solutions are developed;
- Real time payments solutions in markets other than the UK are already deployed or in planned in markets such as Singapore, Australia, USA and India amongst others. This real time capability and the digital products that PSPs offer based on it need rapid and efficient access models to deliver these products to market. We expect these markets to look closely at the access models they use to participate in their payment systems;
- Looking forward payment systems, PSPs, regulators and FinTech companies in the wider market will be looking at the opportunities for payments created by distributed ledger models. Access requirements from various schemes for aggregators should not restrict the future development and deployment of these solutions. As noted it is likely that aggregators will be better placed to respond to these new developments given likely economies of scale and access to multiple payment schemes.

COLLABORATIVE OR COMPETITIVE

- The delivery of an effective aggregator solution requires action both in the collaborative and the competitive space;
- In the collaborative space action is needed in each PSO to enable the environment to deliver effective and efficient connection for aggregators and PSPs;
- Collaboration is further needed between the PSOs to reduce differences between connection requirements for aggregators and seek to agree common terminology and approach;
- Once the connection capabilities for aggregators are enabled in all schemes then the solution enters the competitive space with various aggregators connecting efficiently to multiple schemes and then competing for business in the open market.

QUICK WIN VS SUBSTANTIAL PROJECTS

- With a desire to enable aggregator services and broaden access in general across all schemes then these changes could be delivered in a 6-24 month window. Individual PSO changes would be likely to be achieved more quickly than the collaborative effort needed to get common approaches and simplification.

IMPLEMENTATION APPROACH AND TIMEFRAME (OVERALL)

- LINK solution already in place;
- Initial focus on the effectiveness and the sustainability of the environment created by Faster Payments for aggregator services connecting to that PSO immediate;
- Other PSOs to identify actions they will take to allow simple, efficient and cost effective connection for aggregator services, while reviewing processes for direct and indirect access within 6 months;
- Overlap with PSO Participation Models solution (see separate document), which ought to support the implementation and adoption of aggregator solutions;
- Delivery of solutions to improve connectivity in individual PSOs, can be delivered alongside the collaborative effort required to harmonise terminology and approach within 12 months;
- Trade associations and other representative bodies will support the implementation process with appropriate awareness communication to their memberships;
- Levels of complexity of changes will vary by PSO. As noted earlier it is likely that the collaborative effort is likely to prove more challenging than the work done in individual PSOs.

IMPACT: SUCCESS METRICS

- Emergence of aggregator solutions accessing one or more PSOs in the competitive market place;
- Increased numbers of challenger banks, new entrants and non-bank PSPs accessing payment schemes either directly or through aggregator services;
- Evidence of reduced complexity for new PSPs accessing payment schemes; and
- Evidence of reduced costs of access to payment schemes for new entrants



Simplifying Access to Markets Working Group

Sort Code availability

Solution Concept Assessment

SOLUTION NAME: SORT CODE AVAILABILITY

PROBLEM STATEMENT:

New participants that wish to connect directly to a payment system currently have to arrange to use a sort code within the range of an existing Bacs direct participant. This means they have to approach an existing participant, who by definition may be a competitor. In addition, there are various restrictions to the use and transfer of sort codes that particularly constrain new participants.

Bacs is progressing this activity in its role as operator of the Bank Reference Data for the industry. Work underway will see the establishment of a 'utility bank' of sort codes which may be applied for by new participants.

Sort codes are a key routing mechanism for payments in the UK, whereas bank codes are a way of grouping sort codes together. Through the industry Sort Code Directory, a participant's status as direct or indirect in a payment scheme is recorded.

SOLUTION DESCRIPTION

Work relating to this solution is already underway to reduce current restrictions on sort codes, and significant progress has already been made. The following are the key elements of the solution:

- Bacs in its role as operator of the Bank Reference Data for the industry will make available a new range (04) sort codes. This will be done by setting up a utility (pseudo) bank to hold 04 sort codes, combined with the VocaLink technical release in April 2016 that will enable the changes to Bacs to support the changes to sort codes;
- New FPS/Bacs/CHAPS participants will be allocated one or more of these sort codes. The application process is being developed at present, with pilot usage planned April 2016. The solution also needs to accommodate participants who want a sort code (for example to be able to issue a UK IBAN) but don't want to participate in any schemes;
- C&CCC will continue to have some sort code constraints due to the use of the leading two digits of the sort code for cheque sorter configuration. This will be addressed in the planned 2017 launch of the Image Clearing Service (ICS). It would be expensive to reconfigure cheque sorters before that time;
- There will be potential transition risk for a new FPS participant with multiple indirect access sort codes, may short term require a new Bank Code for their direct access sort code;
- Bacs are leading a strategic review of the governance and operating model for the Bank Reference Database (BRD) which holds the master sort-codes, including developing the tactical solution described above on behalf of the industry (governance through the cross-Scheme Clearing Codes Management Group);
- The Working Group recognises that in the longer term (within 5 years) it should be considered whether sort code governance should be run and governed transparently/ independently from Bacs. We may need to develop a new technical solution to support this as volumes increase.

A challenge to this solution is whether the industry is taking a strategic view or just a tactical view. Sort codes will still be administered by Bacs which may not have sufficient degree of independence for some participants' liking. The PSR, however, commented that tactical solutions should be a priority with BACS well placed to deliver these on behalf of the industry, while more strategic solutions will follow when practical.

PEOPLE INVOLVEMENT AND ACTION

WHO	WHAT
PSOs	 Implemented solution based around the 04 sort code range; Making changes to the Bacs platform to support these changes via the VocaLink technical release expected in April 2016; Undertaking a strategy review relating to sort code oversight and management, focused on governance and processes; Dave Stockwell (BPSL) to share copy of Bacs strategy review relating to the sort code issue with the working group. Solution identified and being implemented - tactical solution now operational (first new direct FPS participant will use); technical (VocaLink) implementation planned for April 2016; To develop clear application process and procedures and eligibility criteria.
Infrastructures	- To assist the PSOs in the delivery of the technical solution to support the steady state solution.
Payments Systems Regulator	- Continue to oversee progress towards improvements in access to individual schemes.
PSPs	- Continue to engage the Industry via the Clearing Codes Operational Group and other PSO groups to keep them appraised and engaged.

LEADERSHIP

- BACS to fully engage and brief all PSOs and the wider stakeholder community as the review and proposals progress
- Schemes and industry bodies engaged with the Bank of England/PSR on participant options;
- Bacs has driven the availability of the 04 sort code range and associated technical changes;
- Monitor outputs of the Bacs sort code review to ensure it addresses access issues identified across a range of schemes;
- The related challenge of sort code issues specific to Cheque and Credit clearing, which constrict switching, will be removed by the 2017 implementation of ICS for cheques.

COMMUNICATION

- BACS to share short term progress and outputs of review with PSOs and wider stakeholder community
- In turn each payment scheme to keep existing and prospective members appraised of progress in this work;
- The co-ordinating Bacs scheme and each payment schemes to develop and publish clear and simple communications of the revised model and all relevant eligibility/technical/operational criteria:
- The delivery of the communication messages can be through the PSOs websites supported by relevant press releases.

SYSTEMS AND PROCESSES

- The systems and process changes (e.g. to Bacs and ICS in C&CCC) have already been planned and/or implemented, so no further work needs to be arranged.

DEPENDENCIES

- Capability of VocaLink to deliver technical change on time;
- Capability of Bacs to develop procedures/communications on a timely basis;
- Continue to track its application to C&CCC via delivery date for ICS;
- Building Societies and Credit Unions may wish to migrate to use sort code and account number for their accounts to allow acceptance of Direct Debits and to enable modulus checking, rather than using the reference field for their account number. The existing Bank Reference Data rules already allow for this facility for Building Societies and Credit Unions, but the view remains currently that such use should not be mandated;
- There is no shortage of sort codes; only 20,000 out of a theoretical 1 million are allocated. Once the leading pair issue is resolved, there should be no real constraint;
- Cheques will still be sort-code constrained until ICS is implemented, since the sorter machines that rely on the leading pair would be expensive to re-configure.

COST BENEFIT ANALYSIS

Cost	Benefit
Introduction of 04 sort code range has already been budgeted and funded	Additional sort code availability
Amendment to current sort code allocation processes will form part of PSO development budget	Clearer, simpler processes for participants in payment schemes to obtain sort codes
Collaborative effort will require commitment, resources and compromise to deliver	Early delivery of a simple improvement to payment systems access which will benefit new participants.
	Potential for changes to governance of the Bank Reference Database will offer a more independent approach to sort code allocation.

SECURITY / RESILIENCE

- No expected impacts on security or resilience. Availability of additional sort codes should reduce industry complexity and hence improve resilience.

EXISTING OR IN-DEVELOPMENT SOLUTIONS

- Existing solution with work largely completed.

INTERNATIONAL INSIGHTS / BENCHMARKS / HORIZON SCANNING

- No significant international insights, benchmarks or horizon scanning consequences.

COLLABORATIVE OR COMPETITIVE

- The work here is already collaborative and will remain so.

QUICK WIN VS SUBSTANTIAL PROJECTS

- This is an immediate Quick win for full delivery mid-2016 followed by ICS delivery in mid-2017.

- BACS review will identify any possible governance medium to longer term changes for oversight and management of the Bank Reference Database.

IMPLEMENTATION APPROACH AND TIMEFRAME (OVERALL)

- Implementation by mid-2016, to be followed by ICS implementation for cheques during 2017.

IMPACT: SUCCESS METRICS

- Availability of additional sort codes for new participants;
- Decoupling of sort codes from cheque sorting once ICS is implemented in mid-2017.



Simplifying Access to Markets Working Group

More accessible settlement account options

Solution Concept Assessment

SOLUTION NAME: MORE ACCESSIBLE SETTLEMENT ACCOUNT OPTIONS

PROBLEM STATEMENT:

Certain payment systems (e.g. Bacs, CHAPS, Cheque & Credit and FPS) require (as part of their CPMI-IOSCO compliance) their direct system participants to hold a settlement account at the Bank of England. Other systems (e.g. LINK and Visa Europe) have some direct participants who do not hold, nor are eligible to hold settlement accounts.

Current Bank of England eligibility for a settlement account is guided, for PSPs, by the following criterion: that the institution is a **bank or building society** that already holds a reserve account.

Currently, no PSP that is not a bank or building society can obtain a reserve account and hence a settlement account, and thus cannot be direct system participants.

SOLUTION DESCRIPTION

The solutions are reliant on the Bank of England, both as supervisor of the electronic payment systems and settlement agent to these and other payment systems, and also as operator of the RTGS (Real Time Gross Settlement) System which houses the Reserve/ Settlement Accounts.

The solution is dependent on the Bank's willingness to open up settlement account access to a wider range of participants. This is largely a policy issue, in that the Bank of England needs clarity over the implications of doing this in the context of its statutory obligations, for example the obligation to act as lender of last resort, what happens if things go wrong in terms of participants' liquidity management, and how it can gain comfort around managing AML risk.

Changes may be required to the Settlement Finality Directive to include a broader range of PSPs, e.g. Credit Unions, Electronic Money Institutions (EMIs) and Payment Institutions (PIs).

There are also potentially technical issues, in that it is believed the current RTGS system operated by the Bank of England would be unable to handle a significant increase in the number of accounts.

Faster Payments and Bacs have already made changes to facilitate wider participation, in that each PSO has introduced a prefunding model, whereby each participant is required to maintain a deposit in a Reserves Collateralisation Account that is equal to or greater than that participant's Net Sender Cap. This deposit would be used to complete settlement in the event that the participant was unable to settle out of its main settlement account; making both Schemes a 'defaulter pays' model.

Prior to the introduction of prefunding in September 2015, there was a loss-sharing agreement whereby the surviving participants were required to make up any shortfall that the defaulting participant was unable to fund.

The Bank launched a one year strategic review of its RTGS in January 2016 to develop a blueprint for the future RTGS service. It expects to consult on a proposal in September 2016, with any build to take 2-4 years, i.e. delivering by 2018-2020.

An assessment of the likely future growth in the types and numbers of participants wishing to self-settle is expected to be considered as part of the RTGS strategic review, as any new solution will need

to be capable of handling such growth. WG considers it essential that the Bank of England considers how whether it could support a wider range of PSPs from a policy perspective, since EMIs and PIs are not currently recognised or eligible to hold settlement accounts. If this was not to be considered appropriate, there will remain a need to ensure alternative access to settlement services via other providers.

PEOPLE INVOLVEMENT AND ACTION

WHO	WHAT
Bank of England	- RTGS review/consultation/decision by end 2016;
	- To be clear on how many credit institution/other PSP-type participants can be provided with settlement accounts ahead of the new RTGS.
PSOs	- Consider needs for more flexible as part of Access developments – FPS leading work with the Bank of England re EMIs.
SAM WG	- Feed discussion back to the Bank of England via PSF.
PSPs/Representative	- Feed into the Bank of England based on own / sector needs.
bodies	
Faster Payments	- Have put together a paper for the Bank of England on possible PSP
Scheme	settlement model, similar to the recently introduced pre-funding model
	for FPS – cannot distribute yet but have asked the Bank of England for permission.

LEADERSHIP

With the benefit of the Bank of England's presentation at the last WG and its solution workshops, SAM WG will provide the Bank of England with its perspective on how settlement account provision should become more flexible to accommodate different types of participant, including:

- Any necessary changes to the Settlement Finality Directive to include a broader range of PSPs, e.g. Credit Unions and Authorised Payment Institutions; and
- A request for the Bank of England to be clear on how many additional settlement participants and newer types of participant can be accommodated pending implementation of the RTGS replacement.

COMMUNICATION

- The Bank of England will need to engage and communicate policy, regulatory and technical changes;
- Payment Operators to engage and share with their members and communities; and
- SAM WG to engage and share with its members as appropriate.

SYSTEMS AND PROCESSES

- Bank of England to set out changes to processes and the RTGS platform in its proposals paper at end 2016.

DEPENDENCIES

- Legislation will need to be changed e.g. Settlement Finality Directive for participants not currently recognised as credit institutions;
- Consider other dependencies what needs to be in place before solutions can be considered feasible e.g. for a technical aggregator; and

- Bank of England would need to be designated as a Credit Institution to enable EMIs to leave client funds on deposit with it.

COST BENEFIT ANALYSIS

Cost	Benefit
Technical changes to RTGS platform to enable larger number of participants/accounts, and associated new processes	Wider range of participants able to have settlement accounts and hence participate directly in payment systems
Legal and regulatory changes needed to support wider access to Bank of England settlement accounts	Legal/regulatory framework that reflects the role of Authorised Payment Institutions and allows their direct participation in payment systems

SECURITY / RESILIENCE

- The Bank of England and the PSOs will work together to ensure that any future RTGS solution retains the appropriate level of security & resilience required.

EXISTING OR IN-DEVELOPMENT SOLUTIONS

- The only other options are the emergence of commercial settlement providers for new direct participants that are not currently eligible for a settlement account. At least one PSP that is intending to join FPS will be looking to offer settlement sponsorship to PSPs.

INTERNATIONAL INSIGHTS / BENCHMARKS / HORIZON SCANNING

- It would be informative to perform an international comparison of participants granted direct access to central bank RTGS platforms.

COLLABORATIVE OR COMPETITIVE

- Collaborative industry solution with development led by the Bank of England as supervisor regulator, settlement agent and RTGS provider.

QUICK WIN VS SUBSTANTIAL PROJECTS

- If the current RTGS is deemed capable of handling a significant increase in participant/account numbers, implementation of these changes could be relatively quick. However this may also be dependent on making changes to the supporting legal and regulatory framework which is likely to take longer.

IMPLEMENTATION APPROACH AND TIMEFRAME (OVERALL)

- Not yet known, however new technology solutions should take into account the continued market changes and consider whether an incremental interim solution is possible which can be built out progressively. Clearly security and resilience could not be compromised in such an approach; and
- The key question is whether the Bank of England should develop the new solution in-house or commission a commercial provider. There may be models/systems in use elsewhere which offer parameter-driven options.

IMPACT: SUCCESS METRICS

- Settlement access options being available to all potential direct participants no later than end 2020.



Simplifying Access to Markets Working Group

Liability in Indirect Access Models

Solution Concept Assessment

SOLUTION NAME: LIABILITY MODELS

PROBLEM STATEMENT:

PSPs seeking indirect access (IPSP) to the payment systems may be denied access because an indirect access provider (IAP) has in place risk-based criteria for Know Your Customer, Anti-Money Laundering, Sanctions risk and other liabilities, which the IPSP cannot fulfil. The small number of IAPs, and their similarity of type, has led to similar outcomes for various types of IPSP.

Although the IPSP is an authorised or regulated entity, IAPs remain concerned that they may be liable for an IPSP's shortcomings in meeting its AML/Sanctions checking responsibilities. IAPs with international activity, particularly in the USA, are concerned about the action by the US authorities. Money Remitters and small Payment Institutions are on record that they face particular barriers.

Clarity is therefore needed so that when an infraction of rules/procedures is caused by an IPSP, the risk and liabilities are not excessive for sponsors, so that more are encouraged to offer this service and to a wider range of new entrants.

There was a general acceptance of the principle that the 'polluter pays' for any infraction.

SAM WG will work closely with Financial Crime WG on this solution.

Extract from the PSR Indirect Access Market Review Interim report MR15/1.2

Finding 6

7.23 Financial crime regulation is a market characteristic that has an important influence on IAP behaviour. Some IAPs apply minimum revenue thresholds for new IPSP customers and have introduced de-risking policies for existing IPSPs – where they terminate access for customers perceived to be higher risk – in order to mitigate the perceived risks and costs associated with financial crime (chiefly money laundering and terrorist financing). This has particularly affected small non-agency IPSPs.

7.24 IAPs also have different commercial appetites for attracting new (and retaining existing) IPSP business. Some want to expand their IPSP activities, while others are more selective about which IPSPs they serve. Generally speaking, large agency IPSPs and medium (agency or non-agency) IPSPs are seen as most attractive, while many IAPs have only limited interest in smaller non-agency IPSPs.

SOLUTION DESCRIPTION

There are overlaps here with the Financial Crime, Data and Security WG and the need to ensure a healthy end to end payments infrastructure, with clear guidance to all participants and users. This becomes increasingly important as more new type participants enter the market.

The solution proposed is a series of actions with the objective of seeking clarity on who holds the responsibility for such obligations. With the benefit of this, we expect either simplification of access to occur or issues to be clarified where a solution still requires to be found.

1. Produce a clear mapping of parties in the payment chain and articulate regulatory and legal responsibilities for each player and where, if a party accesses a payment system via another party, where responsibility is considered to transfer and when this applies;

- 2. The definition of the liabilities remains broad and may have different meanings to different people sanctions, AML, US OFAC requirements etc. These will be split out and worked on to provide clarity. Expertise will be sought through the Financial Crime WG;
- 3. Based on the mapping, there will be a need to look at flows, the checks performed and what changes to liabilities etc. need to be made, depending on the services used or provided. There may also be a need to clarify, depending on the regulated party is, who can take action against it; and
- 4. From this analysis, syndication will be undertaken to interested organisations, including relevant regulators.

The PSR in its Indirect Access Market Review (Chapter 8/Para 8.5) states that it is 'aware of at least six reviews underway or recently concluded which may affect the way financial crime regulation applies in the UK and internationally. These reviews are aimed at improving the transparency, clarity and effectiveness of the UK's anti-money laundering and counter terrorist financing framework'.

It also states that the FCA which 'has responded to de-risking by clarifying the requirements for banks to manage financial crime and has commissioned research to gather evidence about the nature, scale and drivers of the issue, and plans to publish a report shortly'.

https://www.the-fca.org.uk/money-laundering-and-terrorist-financing/derisking-managing-money-laundering-risk

The WG will liaise with the FCA and industry contacts before beginning any formal activity as set out above.

Other considerations:

- Whether there may be commercial solutions, which might link with other solutions e.g. technical aggregators. There is precedent with CLS which performs OFAC scanning centrally for its participants. Could there be a collaborative/competitive solution developed for the payment systems? Further consideration and discussion to take place.
- On liability issues, a sponsor is responsible for its Direct Debit indirect participants and thus this may need to remain in scope although the outputs of the in course Bacs DD indemnity review will need to be evaluated:
- Clarity is needed on:
 - How the FCA supervises PSPs, and similarly how HMRC supervises Money Services Businesses;
 - o With the development of the PSD 2 AISP model to access account data if a payment is made in error based on that data, who is liable.

PEOPLE INVOLVEMENT AND ACTION

WHO	WHAT
FPS	- AML report has already been shared with Working Group
SAM Working	- Produce topography of payments participants and how affected;
Group	- Mapping of flows, liabilities, regulatory status and other requirements.
PSR / Bank of	- Support discussions and ultimately support changes to legal/regulatory
England	frameworks to clarify liabilities for payments infractions.

LEADERSHIP

The SAM Working Group will provide initial leadership in developing the mappings. However it will need to engage actively with expert stakeholders to bring clarity and to make any change required possible.

COMMUNICATION

A communications programme will need to be developed as part of the implementation programme, aligned with changes to the legal and regulatory framework affecting liabilities.

SYSTEMS AND PROCESSES

Little direct impact on systems and processes within participants – this is mainly around legal and regulatory changes. However once liabilities have been clarified, changes would result from the likely different operating models that would emerge for indirect participants.

DEPENDENCIES

- Potential regulatory willingness to engage /take action to take this subject forward and deal with the associated legal and regulatory framework changes that may be needed;
- Interaction may be required with regulators not only in the US but other international jurisdictions and a process will need to be agreed with UK regulators as to how this should be addressed.

COST BENEFIT ANALYSIS

Cost	Benefit
Cost of making legal and regulatory framework changes to clarify liabilities	Sponsors and indirect participants would have clarity over their respective responsibilities and liabilities.
	More sponsors are likely to consider offering services if liabilities and risks are clearly understood
	Financial models are clearer for challenger banks and new entrants using indirect access to payment systems via a sponsor which will assist business planning and risk management.

SECURITY / RESILIENCE

No direct impact expected on security and resilience. This change could encourage more indirect participants, with potential impact on these topics.

EXISTING OR IN-DEVELOPMENT SOLUTIONS

No solutions currently in-development – this would be a new initiative.

INTERNATIONAL INSIGHTS / BENCHMARKS / HORIZON SCANNING

As part of the proposed analysis, it will be important to look at international comparisons and how other countries manage the same/similar risk/liability issues for access to payment systems. This could give alternative approaches.

COLLABORATIVE OR COMPETITIVE

This solution is very much about collaboration to determine the true extent of the issues still and what is currently being considered to mitigate these. The issues are long-standing and known, with regulatory and industry engagement and discussion. However the access concerns remain and the 'solution' is to ensure that a clear understanding is developed of issues to be resolved.

QUICK WIN VS SUBSTANTIAL PROJECTS

The mapping and initial analysis ought to be capable of being completed within months – after which time planning will be required for longer term changes, e.g. changes to regulatory guidance / legislation.

IMPLEMENTATION APPROACH AND TIMEFRAME (OVERALL)

As noted above, the initial analysis could be completed within months. Changes to legislation and regulation are likely to take multiple years.

IMPACT: SUCCESS METRICS

Success would mean that sponsors and indirect participants have full clarity of the liabilities they are taking on, what being regulated (e.g. as an Authorised Payment Institution) actually means in liability terms, and ideally a clear understanding that the principle of 'polluter pays' applies when it comes to regulatory infractions.