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forum

HORIZON SCANNING WORKING GROUP

Presented by Carlos Sanchez and Otto Benz
Payments Community Roundtables III
Technology and Infrastructure Providers | PSPs

Wednesday, 25 May 2016

Objectives

PSR Statutory Objectives

- to ensure that payment systems are operated and developed in a way that considers and promotes the interests of all the businesses and consumers that use them

- to promote effective competition in the markets for payment systems and services - between operators, PSPs and infrastructure providers

- to promote the development of and innovation in payment systems, in particular the infrastructure used to operate those systems

PSF Objectives (Payments Strategy Forum Terms of Reference, para 6. – PSF15122015)

- The Forum will lead an ongoing process to identify, prioritize and develop strategic initiatives where industry can work together to deliver innovation for the benefit of those who use services provided by payment systems

Strategic objectives (Forum Strategy: Objectives, principles and structure - PSF15122015)

From the outset of any strategy setting process it is important that objectives are established that the strategy is aiming to achieve. In the context of our work we would recommend the strategy aims, at a minimum, to achieve the following objectives:

1. Secure and resilient
2. Versatile and responsive to user needs
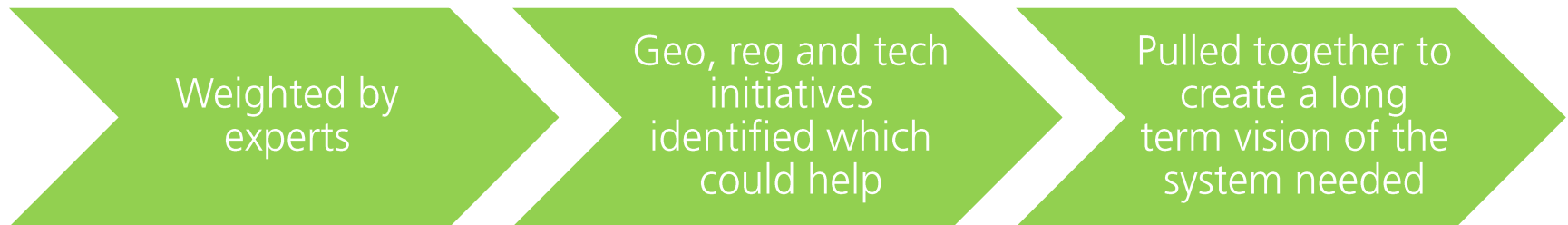3. Efficient

Strategy and Evaluation principles

Access evaluation principles

- Principle 1: Competition upstream and downstream from the schemes should be enhanced, not reduced.
- Principle 2: Potential for entry and expansion by companies providing new solutions and new operators should not be foreclosed
- Principle 3: There should be a focus on interoperability both in the UK and across the EU
- Principle 4: Service users should have an active role in advancing future innovations, including through the forum
- Principle 5: Direct access should be facilitated.

Strategy setting principles (Forum Strategy: Objectives, principles and structure - PSF15122015)

1. The Forum must ensure that user interests are at the heart of its strategy setting and achieve general support from the Payments Community
2. The work of the Forum should be open and transparent, and its strategy should be influenced by the views of the Community and taking into account relevant work undertaken by industry or others
3. Agreed strategic initiatives should be underpinned by a positive business case, including the impact on users; maintaining or enhancing security and resilience
4. The strategy should aim to be ambitious in its outlook but the emphasis should be on concrete deliverables, rather than a softer aspirational vision and / or goals
5. It should be more important to address a small group of fundamental root causes of detriments, rather than lots of individual detriments in isolation
6. The Forum should anticipate that further work may be required beyond Year 1 but it will be important that the strategy identifies the work required; a timeframe for completion and an owner (s) as part of its implementation plan
7. Full account should be taken of regulatory, technological and market developments in and outside of the UK

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What happened to the detriments?

Weighted by experts → Geo, reg and tech initiatives identified which could help → Pulled together to create a long term vision of the system needed
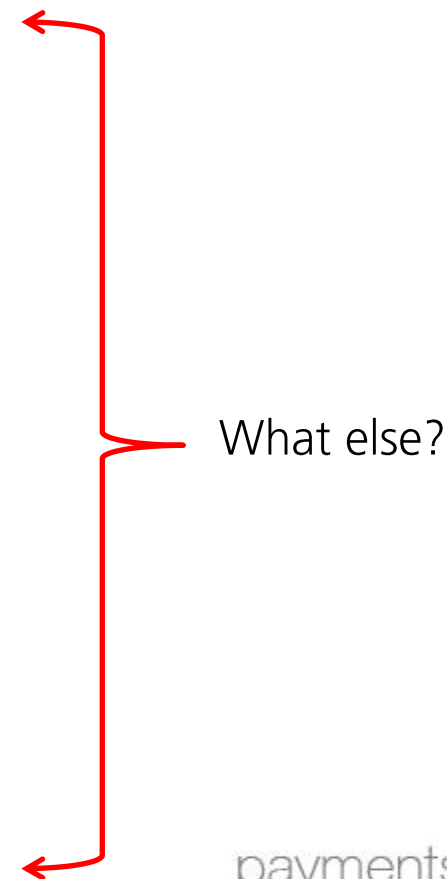
So what's the problem?

Which detriments in particular does the solution address?
Does the proposed solution really fix the detriments?
We're not starting with a blank piece of paper –
how does this fit with the existing PSOs?

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What's the story?

- **What are the key detriments that the solution answers?**

  - **What does the current system look like?**
    - Multiple PSOs offering different payment facilities reliably and safely

  - **What's wrong with that?**
    - In order to be competitive you need to sign up to all of them
    - they're not interoperable
    - access is complicated and expensive
    - it's not transparent
    - it's difficult to innovate and thus compete
    - end users aren't getting what they want (at the moment they want more data)
    - Change within existing structure has to be implemented at the pace of the slowest

  - **What's the answer?**
    - Simplify the system and reduce the complexity and cost
    - Make access simpler and direct
    - Allow interoperability
    - Enable innovation and thus competition now (in particular additional data) and in the future
    - Reduce the pain of change
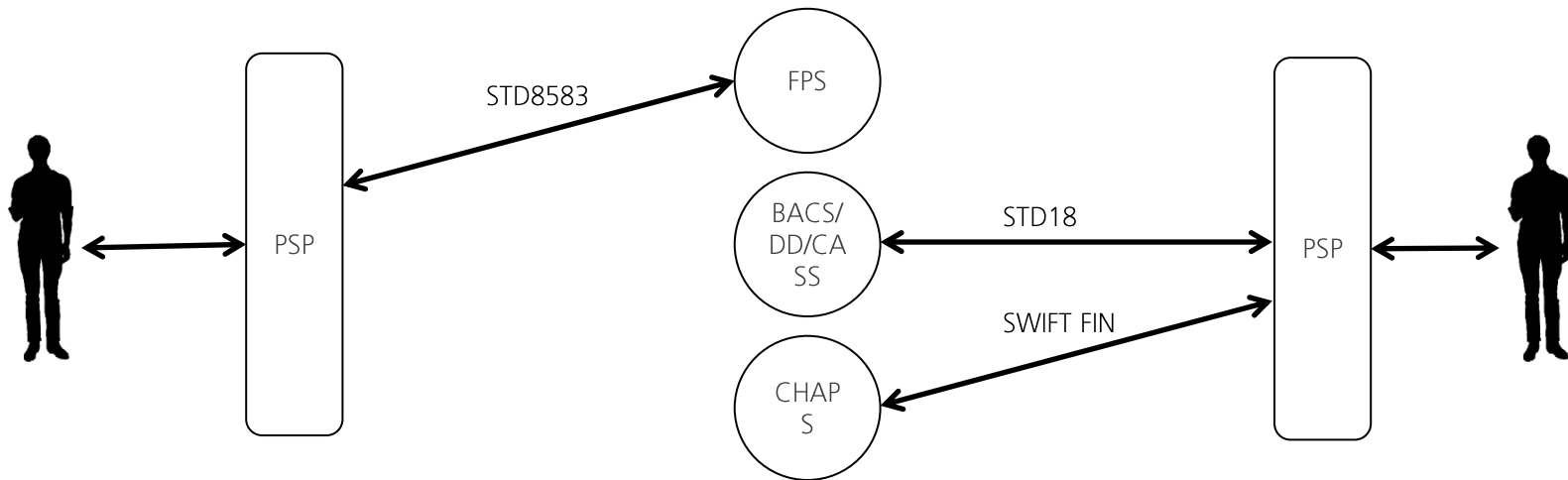   - Keep it safe and reliable

What else?

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Current access model (I/III)
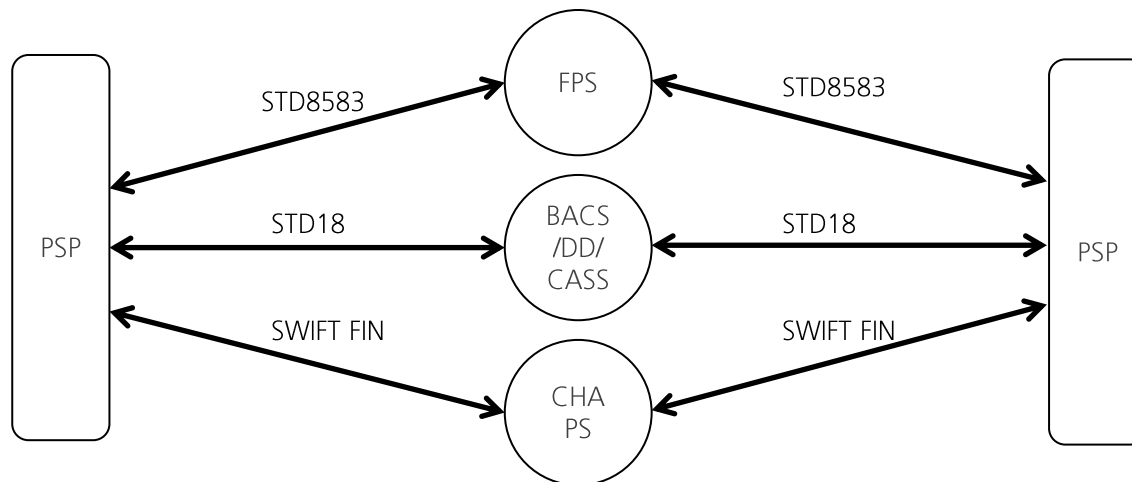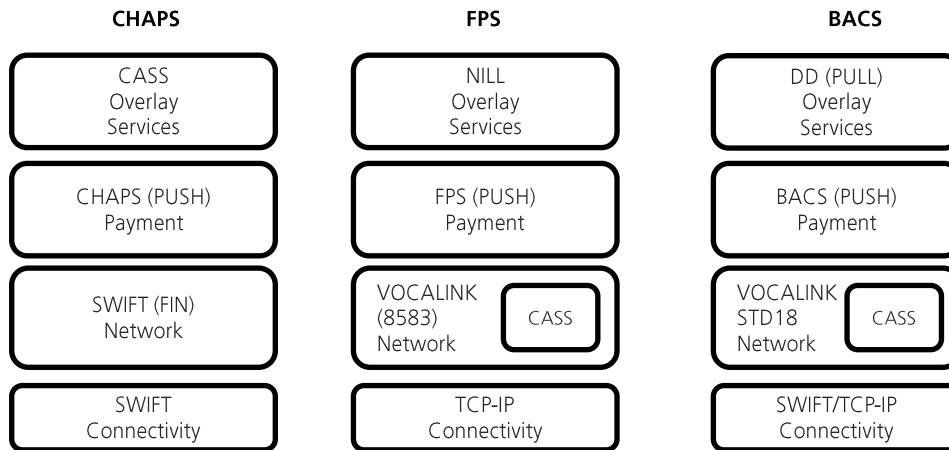
Current access model (II/III) issue: cannot reach

STD8583

FPS

BACS/ DD/CA SS

STD18

SWIFT FIN

CHAP S

PSP

PSP

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Current access model (III/III) issue: need full connectivity
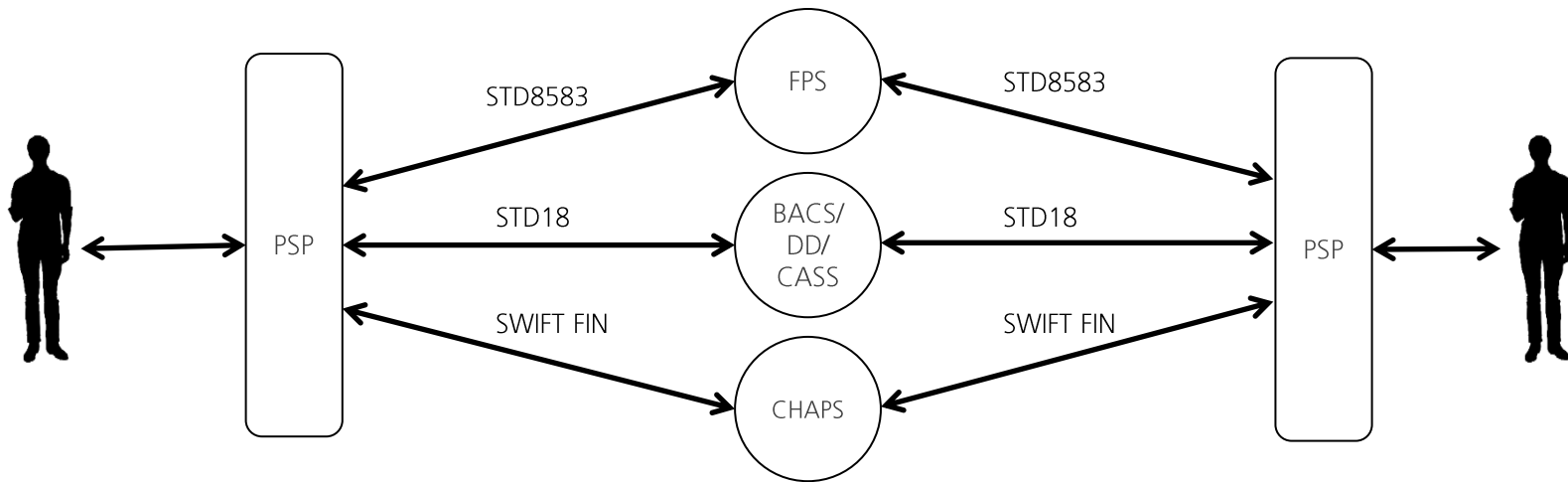
- PSPs need to connect to all to ensure reach
- Each access is a different standard, process, legal requirement, certification process, etc.

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Governance principles

- The simplified system will maintain or increase resilience, security and stability of the payments ecosystem
- The standard for the simplified payments platform will be 'utility' in style and provide the single specification upon all other innovation in payments depends
- The standard will be open and can be implemented and hosted by the PSP or a service bureau on its behalf.
- The implementation of the standard by PSPs will be competitive and allow for innovation
- Overlay Services can be in the competitive space.
- Existing PSO schemes will be defined as overlay services on the simplified platform, to enable compatibility. FPS-SIP instructions will be provided as a model. Schemes like the current BACS DD, which is a mandate, settled as per a set of rules, will require some specific standards in the Request2Pay API model to facilitate support and backwards compatibility.
- PSPs can define Overlay API services that meets the needs of a specific user group and allow for innovation.
- PSPs will have registered before being allowed to access other PSPs. It is expected that PSPs implementations will require testing against a reference implementation of a Beneficiary PSP core – this could be done by a sponsor PSPs or as a competitive service to PSPs.

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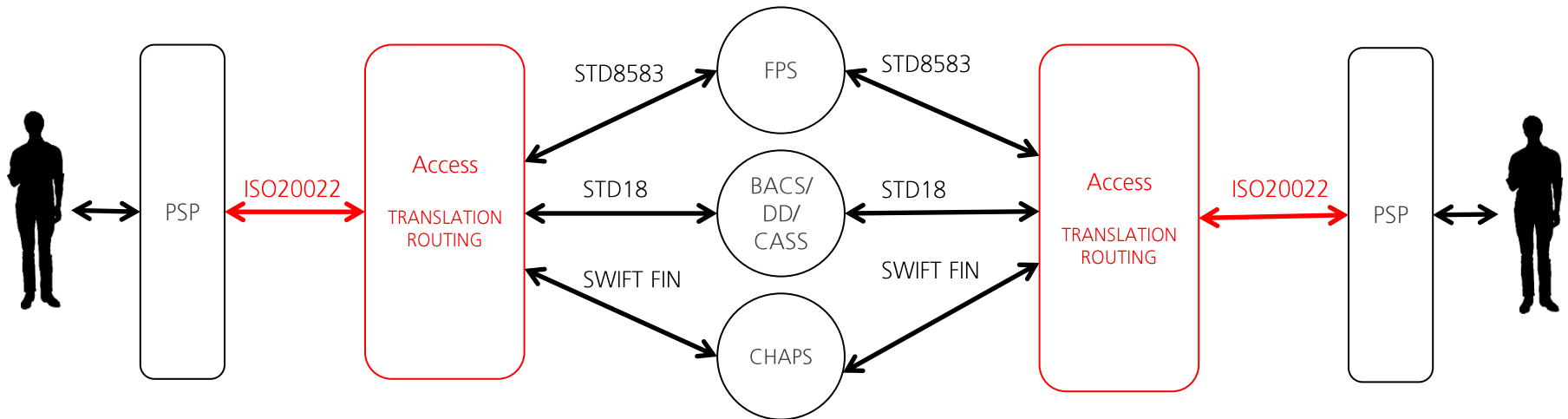forum

Operation principles

- (DISTRIBUTED) Connectivity between PSPs will be developed on a peer-to-peer basis so there is no 'central infrastructure'
- (DISTRIBUTED) Infrastructure will be procured by individual PSPs to meet their needs; the operational resources will depend on the volume of transactions sent or received by the PSP and thus costs will reflect the needs of the individual PSPs
- The simplified platform will have the capacity to process both retail and wholesale payments allowing for future versatility and flexibility
- The existing schemes can co-exist with the new and solution and PSPs can continue to use the messaging of the existing PSOs and for sending and receiving messages
- The existing schemes can co-exist with the new solution by implementing the standard for simplified platform to send to the payer's PSP. This will enable new PSPs to receive from the current schemes, while sending and receiving on the new simplified platform.
- The PSO will not send to a PSP the same message across the new simplified scheme and the existing scheme so that settlement risk is avoided
- Minimal systemic risk will be introduced: the simplified platform can operate in parallel to the current schemes, and receive clearing instructions that are independent The settlement risks are separated thus reducing the BoE PSP risk profile.
- PSPs will able to enhance the SLA and behaviour of the user experience via overlay services through innovation
- Clearing instructions will be irrevocable and credits can be applied. PSP risk will be managed in the scope of the settlement (see 1)
- No pending transactions will be allowed, the fate of all transaction will always be known
- The system will be operational 24/7/365
- Transactions will happen in real-time or near-real-time

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Systems principles

- (DISTRIBUTED) Only an individual PSP will be able to fail, as there is no central infrastructure, or Single Point of Failure (SPoF) in the network.

- There will be a push – credit transfer

- Settlement instructions are out of scope of the HSWG and the solution is expected to be addressed by the Bank of England RTGS review. This solution will operate in compliance to the BoE proposal.

- Minimise exception processes

- Very low latency transmission network

- Batch transactions will be supported

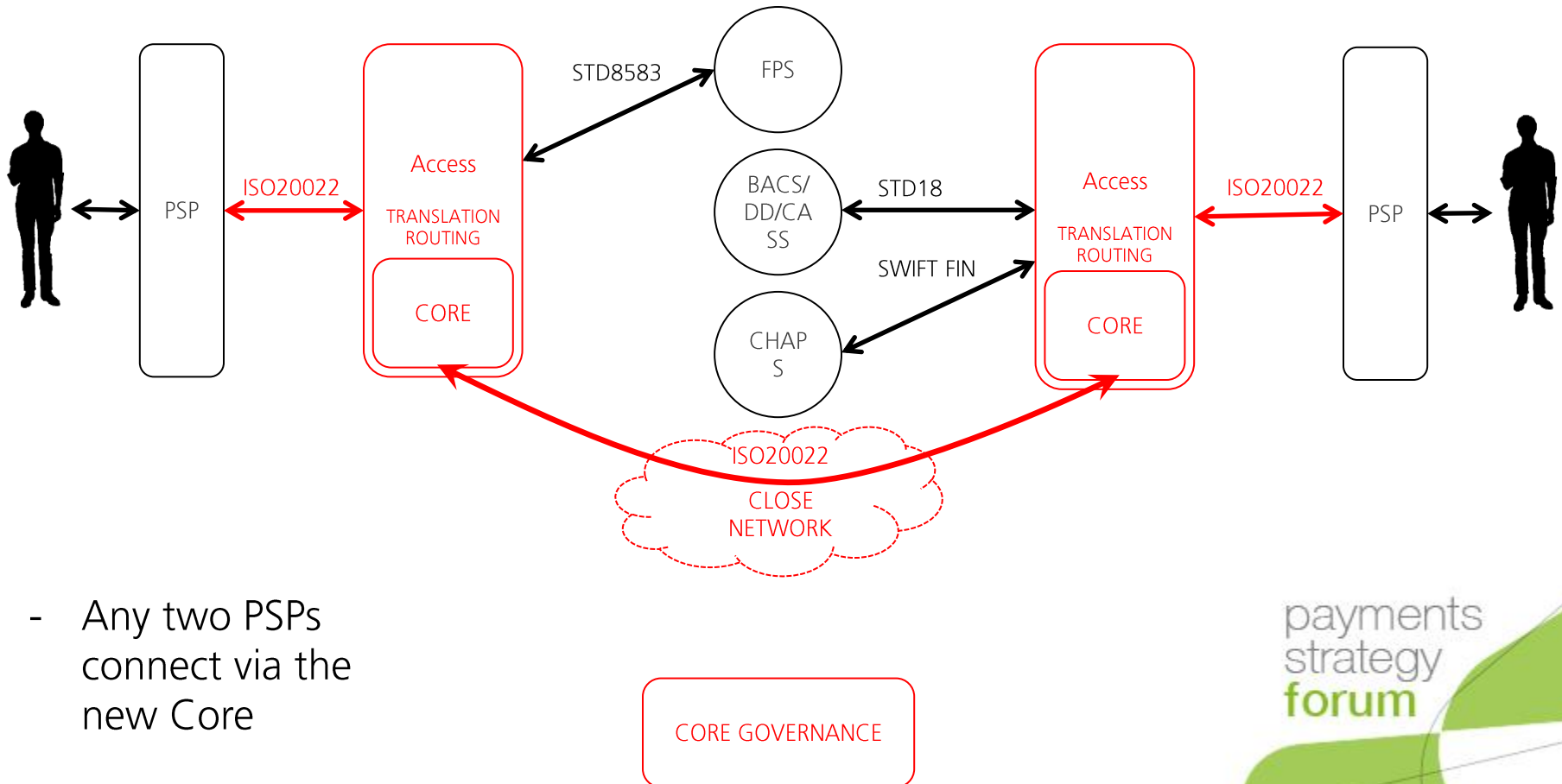- PSPs will be obliged to accept incoming messages by X date

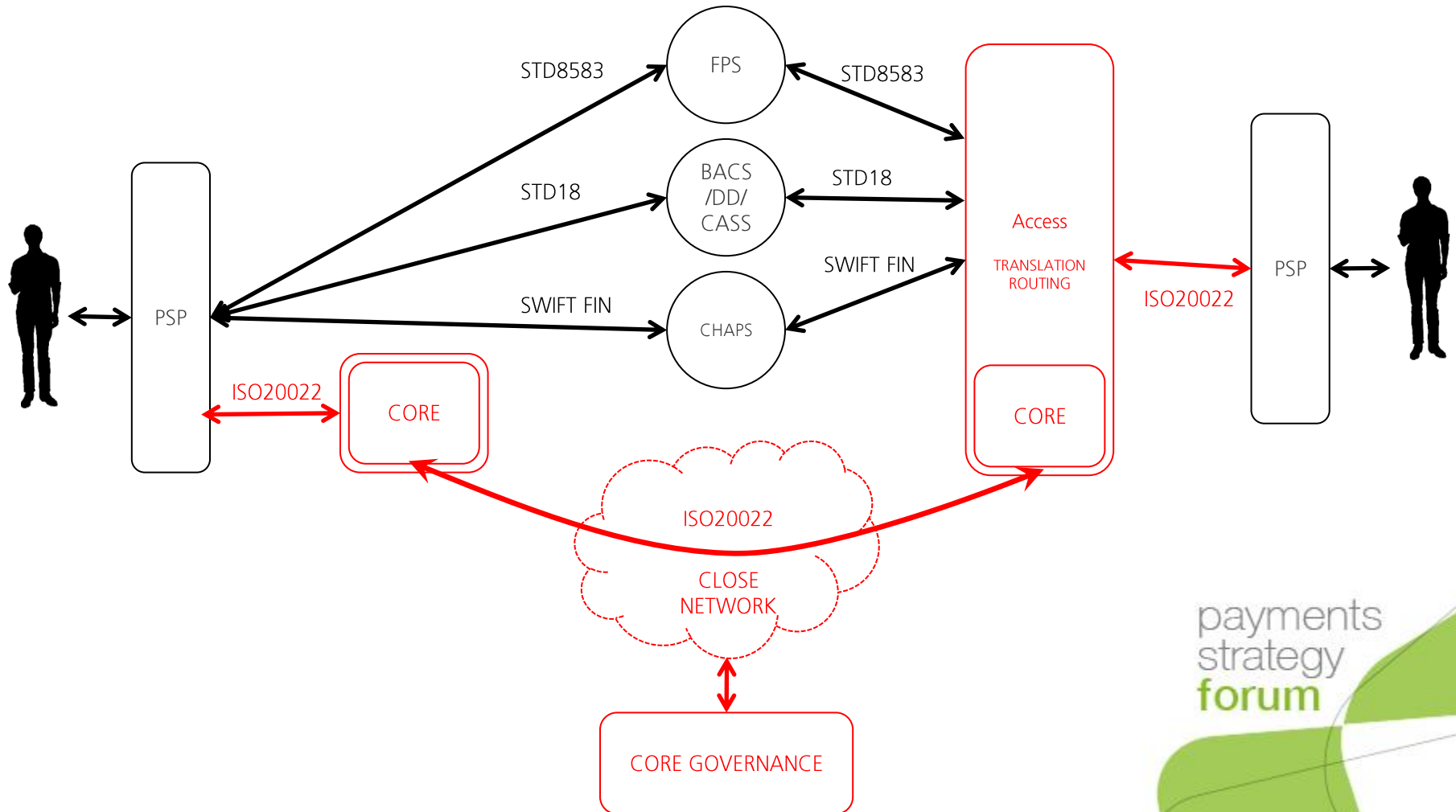# Transition Model (I/III)
Common API/Standard

Transition Model (II/III)
New Core

STD8583

FPS

BACS/ DD/CASS

STD18

CHAPS

SWIFT FIN

Access

TRANSLATION ROUTING

CORE

ISO20022

ISO20022

Access

TRANSLATION ROUTING

CORE

ISO20022

PSP

PSP

ISO20022
CLOSE NETWORK

- Any two PSPs connect via the new Core
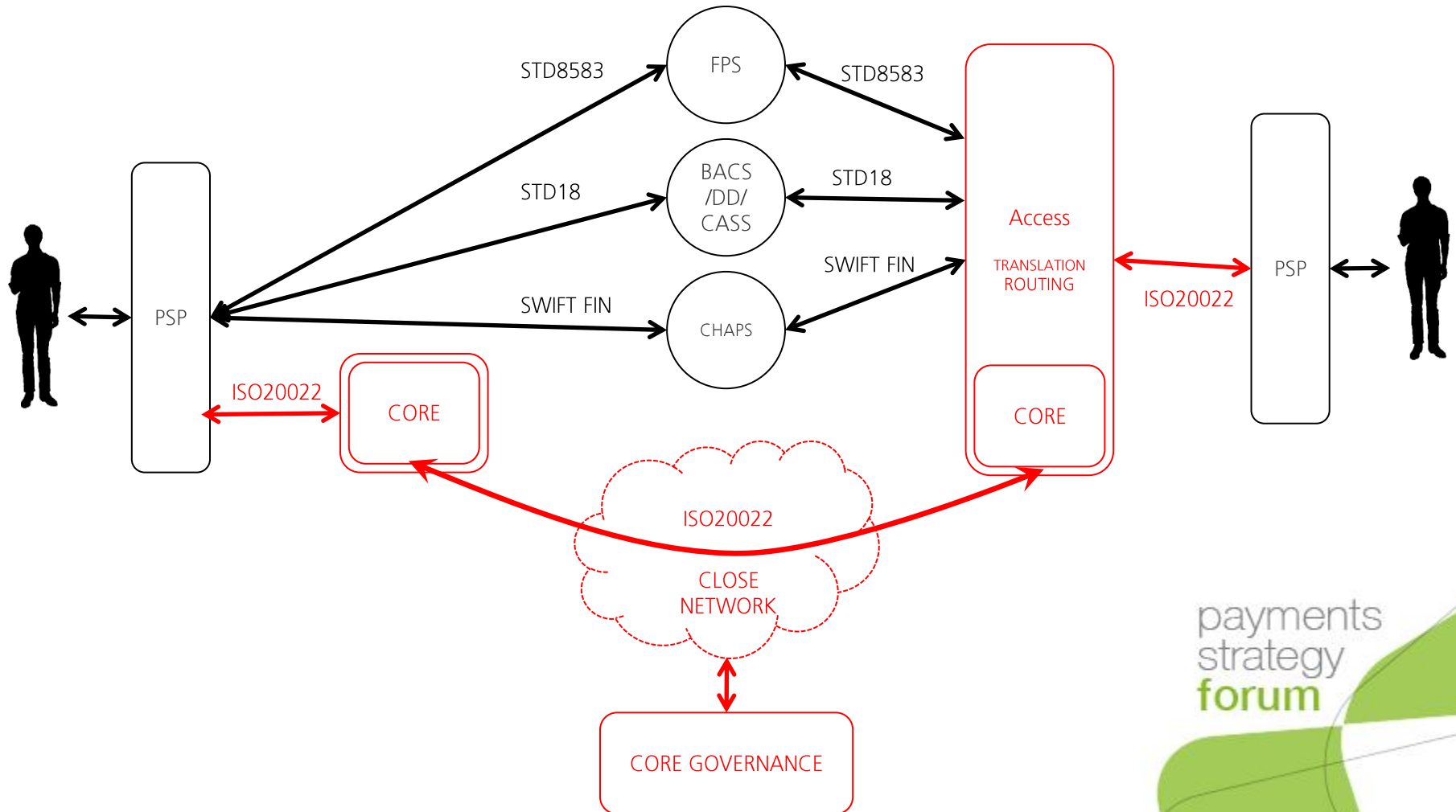
CORE GOVERNANCE

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Transition Model (III/III)
Legacy Compatibility

Transition Model (III/III)
Legacy Compatibility

Future Model

RICH DATA PROVIDER

RICH DATA

INTERNET

PSP

ISO20022

Access

ROUTING
PSP REGISTER

CORE

OVERLAY
MESSAGING

ISO20022

CLOSE NETWORK

1

2

Access

ROUTING
PSP REGISTER

CORE

ISO20022

PSP

CORE GOVERNANCE