

# The Future of UK Payments

Payments Strategy Forum | Second Payments Community Event



- “Present a succinct explanation of what the future model could look like”
  - How did we get here?
  - Future Model – The SPP and APIs
  - API Governance
  - Proposed Approach / Timeframe
  - Appendices – Transitional States

## How Did we Get Here? 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?

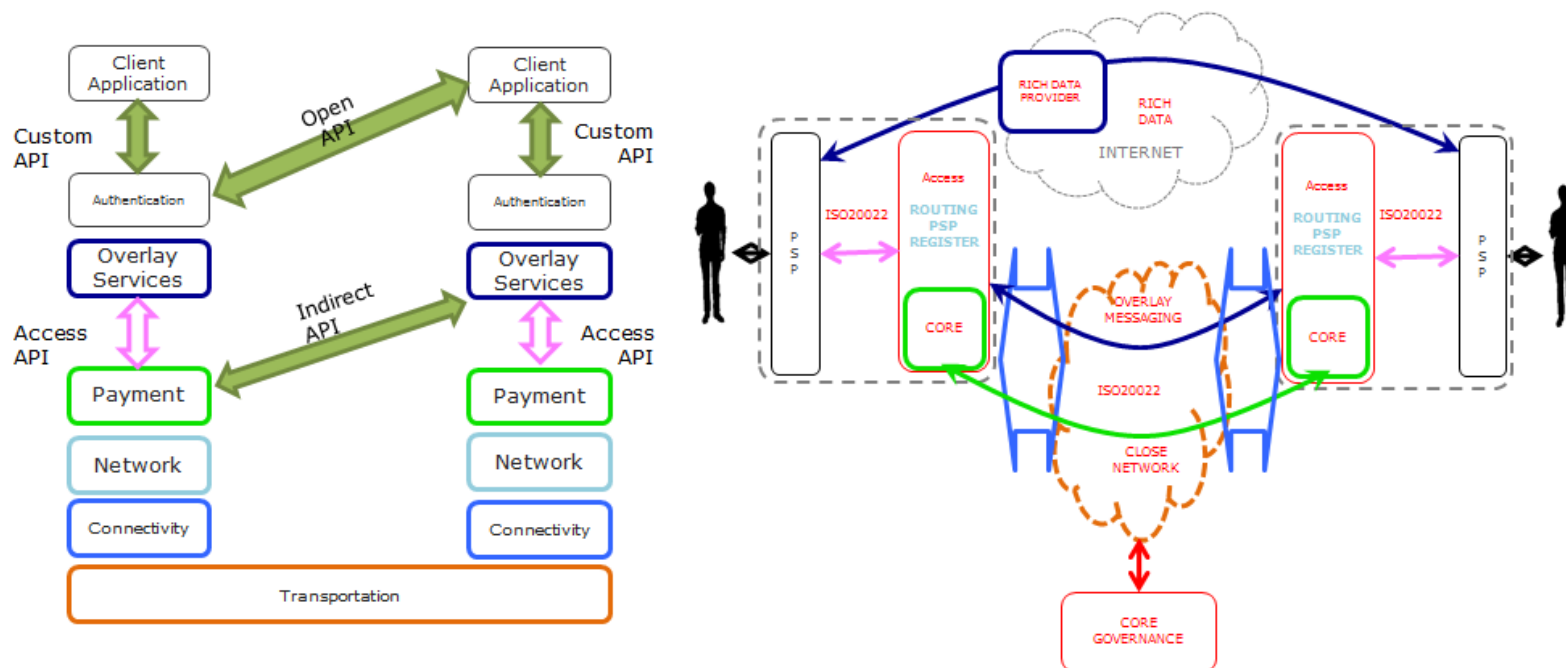
# How Did we Get Here? What's the story?

- **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



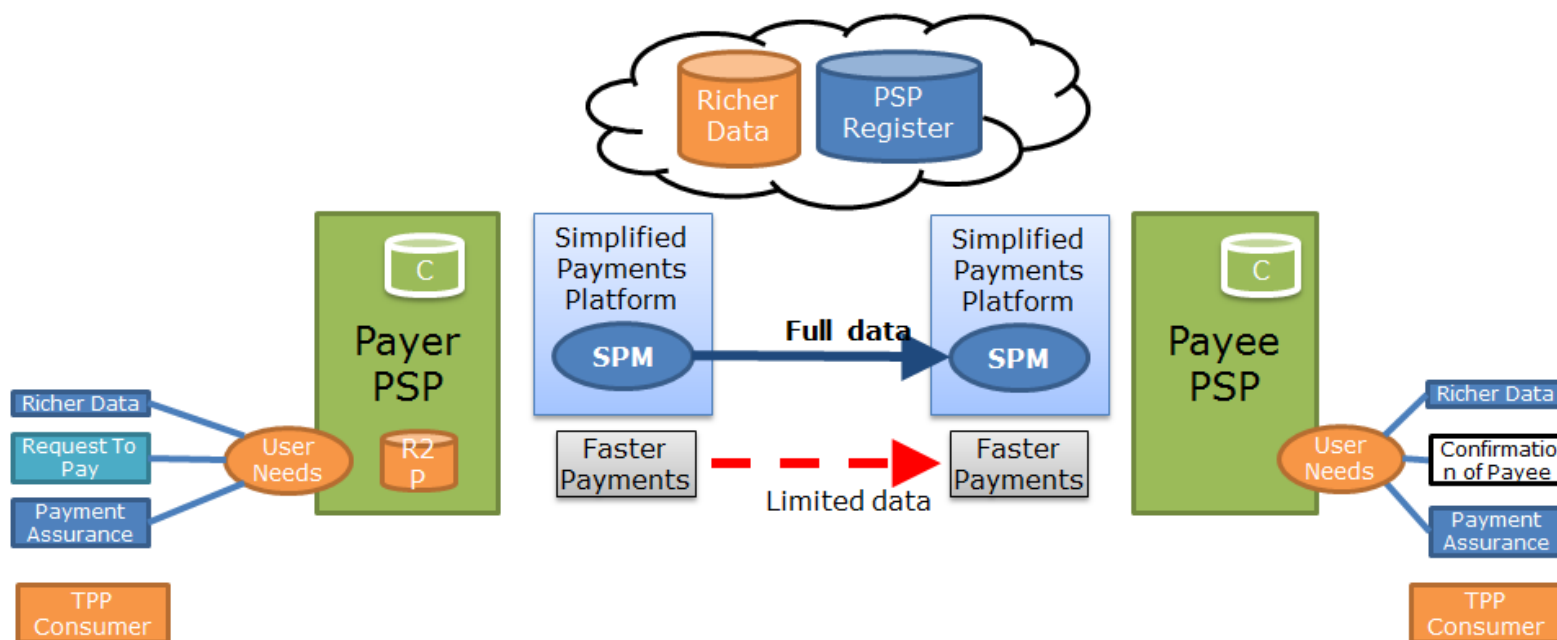
The Simplified  
Payments  
Platform

# Future Model - SPP and APIs



- Underlying – Simplified Delivery Mechanism (“push” payments mechanism)
- Scope – retail domestic schemes
- Existing schemes become “overlay services”
- Enhanced data built in
- Based on layers and APIs
- Standards – ISO20022
- Distributed or centralised clearing
- Supports settlement at Bank of England

# Future Model - End User Needs



- Participating PSP providers and API consumers are registered
  1. Confirmation of Payee API – is provided by the Payee PSP, no impact to payments
  2. Request to Pay, initiated by the Payee PSP or TPP Consumer. Limited reference data transmitted over FPS, SPP required for complete solution
  3. Richer Data associated with SPP payment instruction via reference to off-line storage
  4. Payment Assurance – SPP payment status and investigation, provided by Payee PSP

## 1. Governance Framework:

- Single harmonised framework and common set of standards
- Support **PSD2**, Open Banking and **Payments Strategy EUN API initiatives**

## 2. The Governance Framework should allow for **evolution over time**

- Covering open API standards, data specifications, operational measures and controls
  - Customer to PSP to fulfil requirements under PSD2
  - Commercial entities to PSP to meet the aims of the CMA and Open Banking Working Group
  - PSP to PSP APIs to fulfil the use cases for End Use Needs capabilities set out by the PSF.
- Allow for new use cases

## 3. Implementation Entity

- Created and funded to set up in line with CMA report
- Should create the overarching Governance Framework in first instance

## 4. The IE will **supervise the technical creation and operation of Open API Standards**

- Balancing the co-operative/ and competitive elements arising
- Whilst meeting the objectives set by the PSD2, Open Banking and End User Needs initiatives.

## 5. The IE will **set the timeline**

- for API standards adoption
- and registration of participants

## 6. Role of the Regulators

- The IE should look after its relationships with regulatory stakeholders – including FCA and Treasury
- The IE will need to make sure it meets the needs required by PSD2 and CMA
- CMA to mandate the existence of the IE and supervise
- PSR should play a role

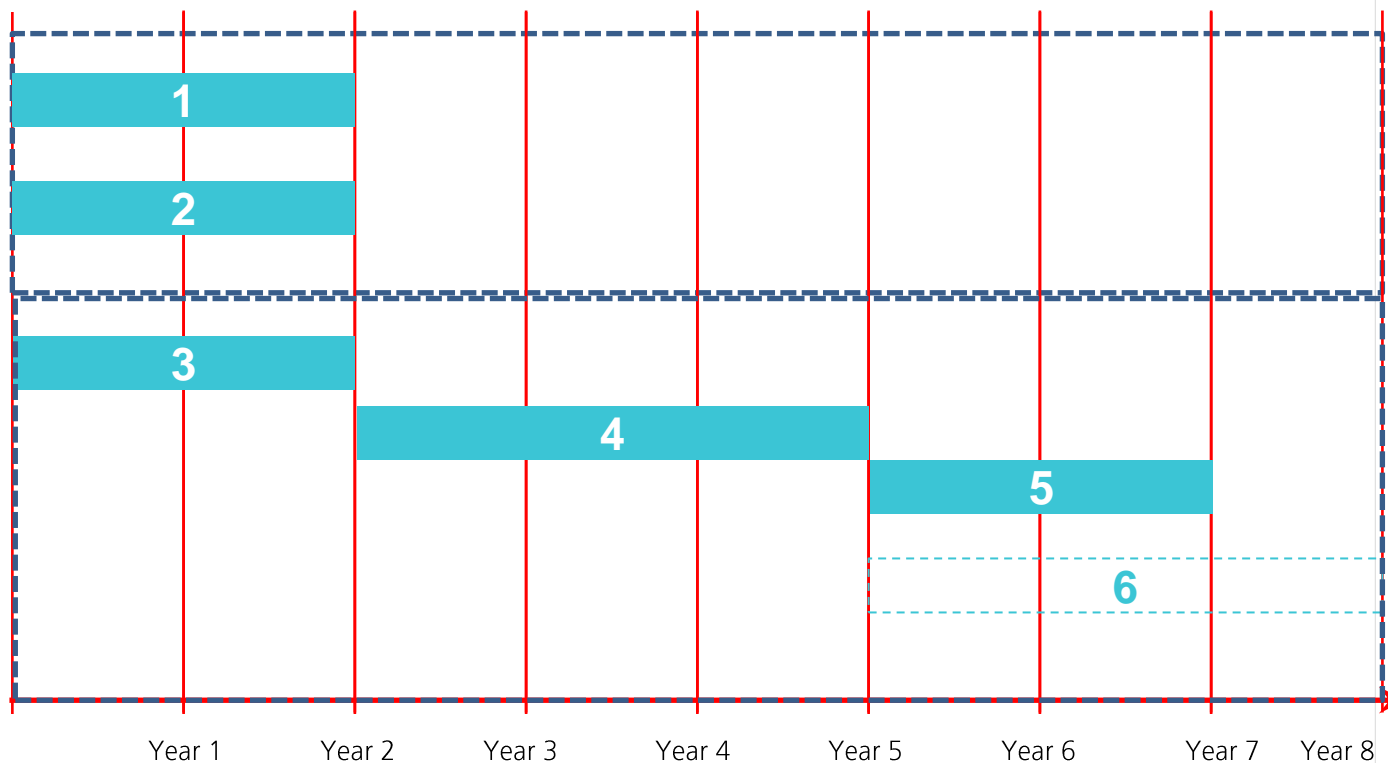
# Proposed Approach /Timeline

## Existing Scheme Workstream:

1. Data Governance Framework and Development of API standards, data standards, rules & governance
2. Potentially enable the development of overlay services through existing schemes

## New Platform Workstream:

3. Definition of Simplified Core Payments Platform (including pilot reference implementation)
4. Deliver Layered Architecture and Simplified Core Delivery Mechanism
5. Development of legacy overlays for new platform
6. Piloting of new scheme in parallel with existing schemes; new functionality e.g. Request to Pay, Assurance Data, etc.)



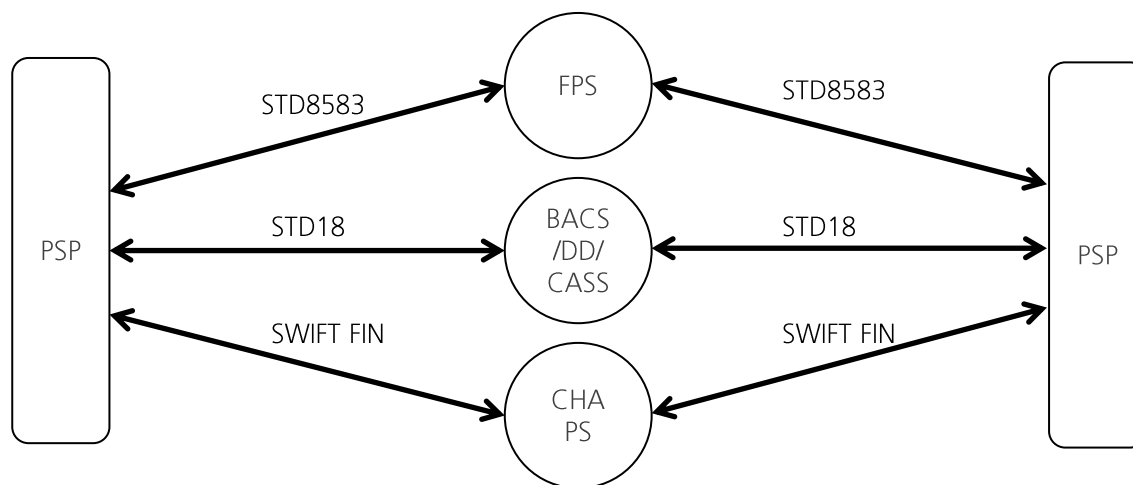
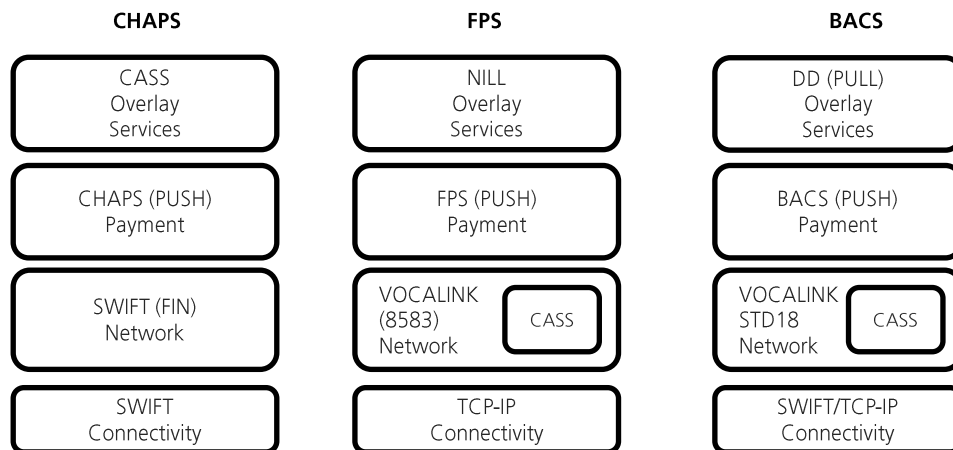
## Year 8 + Tasks (timeframe to be defined by industry)

3. Migrate existing traffic to the new scheme
4. Discontinue existing PSOs (mandatory end-point)



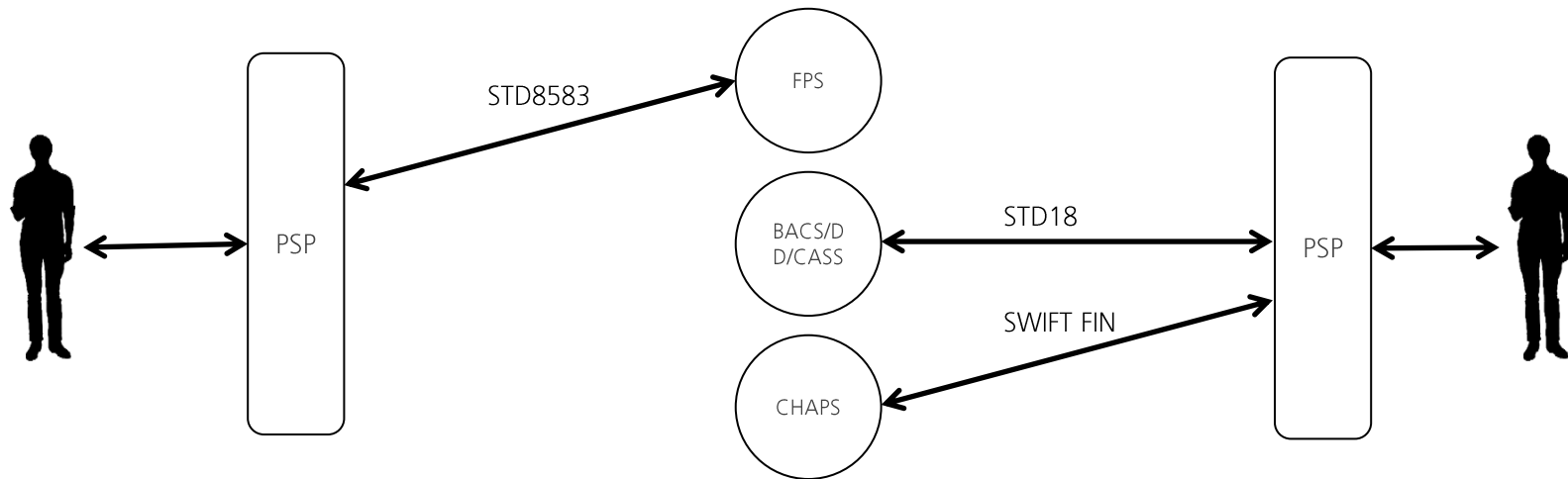
## Appendices

# Current access model (I/III)

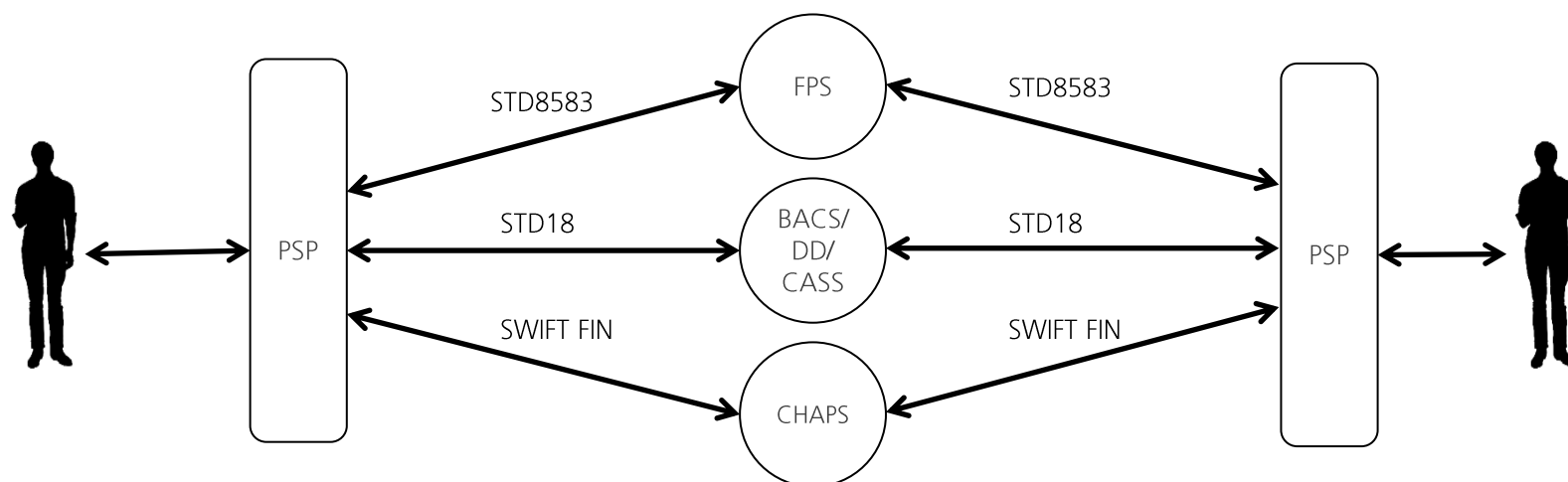


# Current access model (II/III)

issue: cannot reach



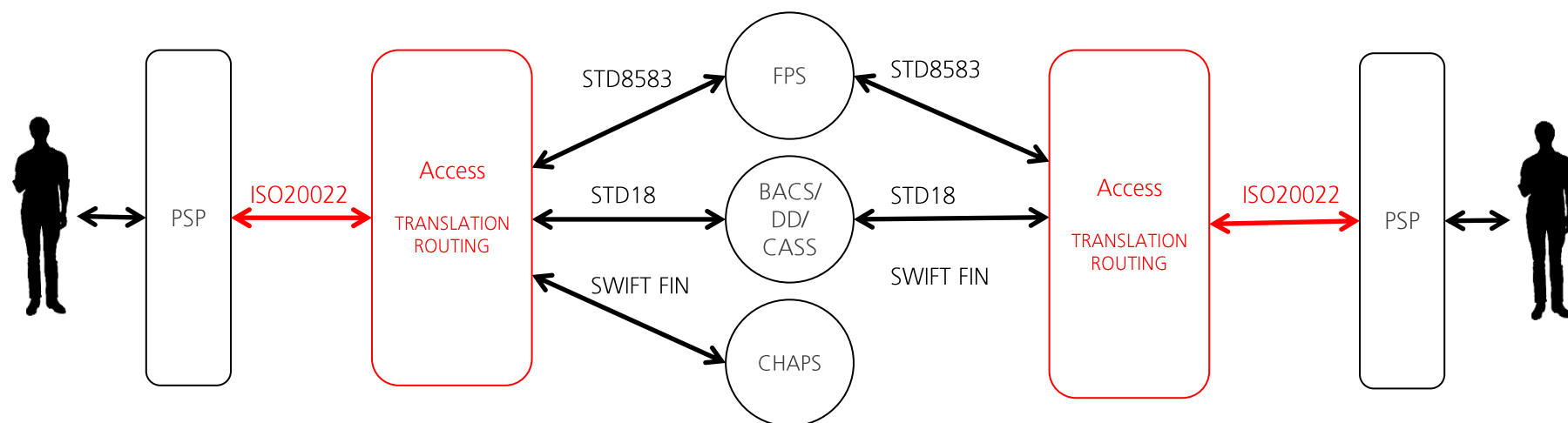
# Current access model (III/III) issue: need full connectivity



- PSPs need to connect to all to ensure reach
- Each access is a different standard, process, legal requirement, certification process, etc.

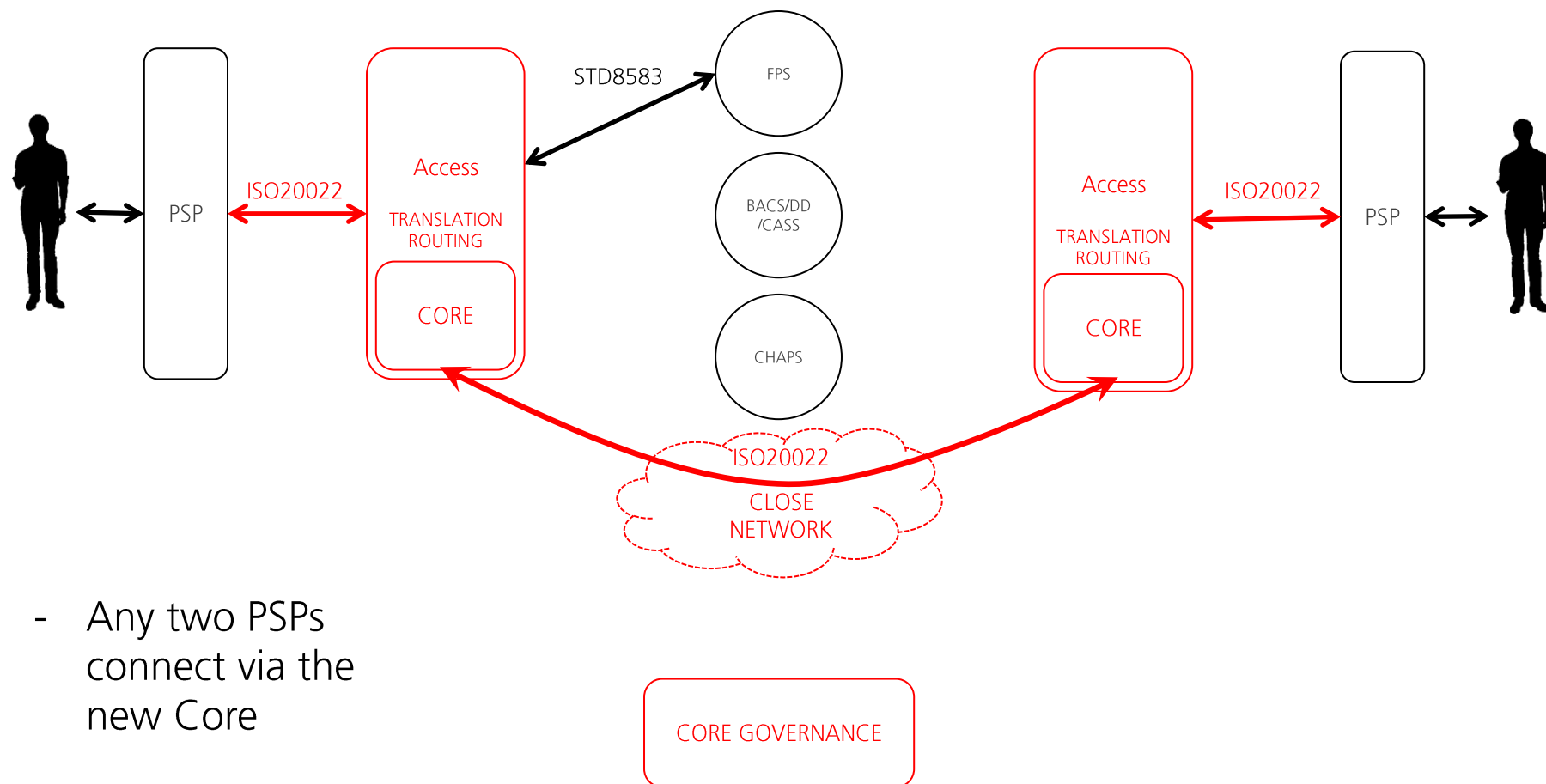
# Transition Model (I/III)

## Common API/Standard



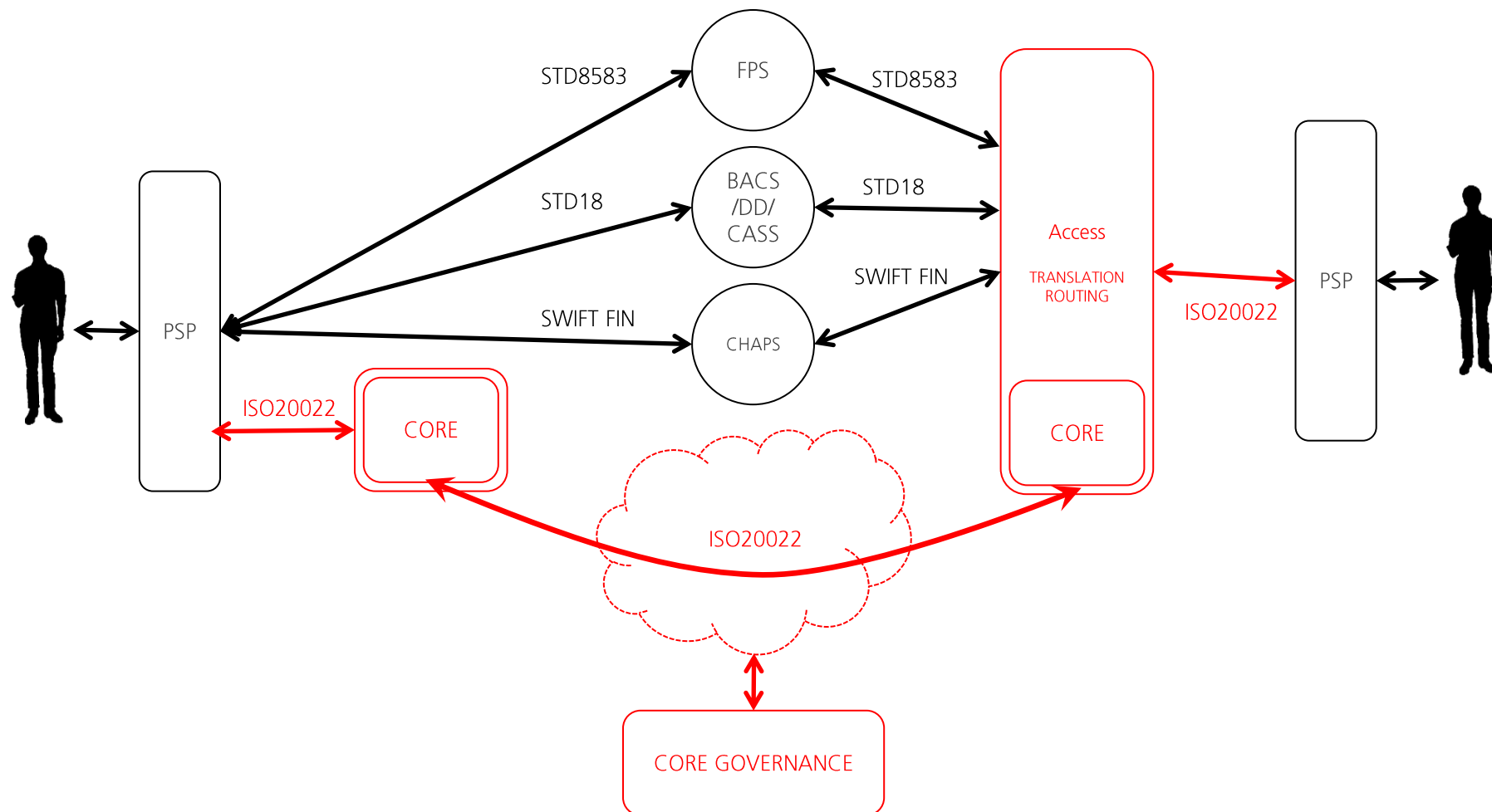
# Transition Model (II/III)

## New Core

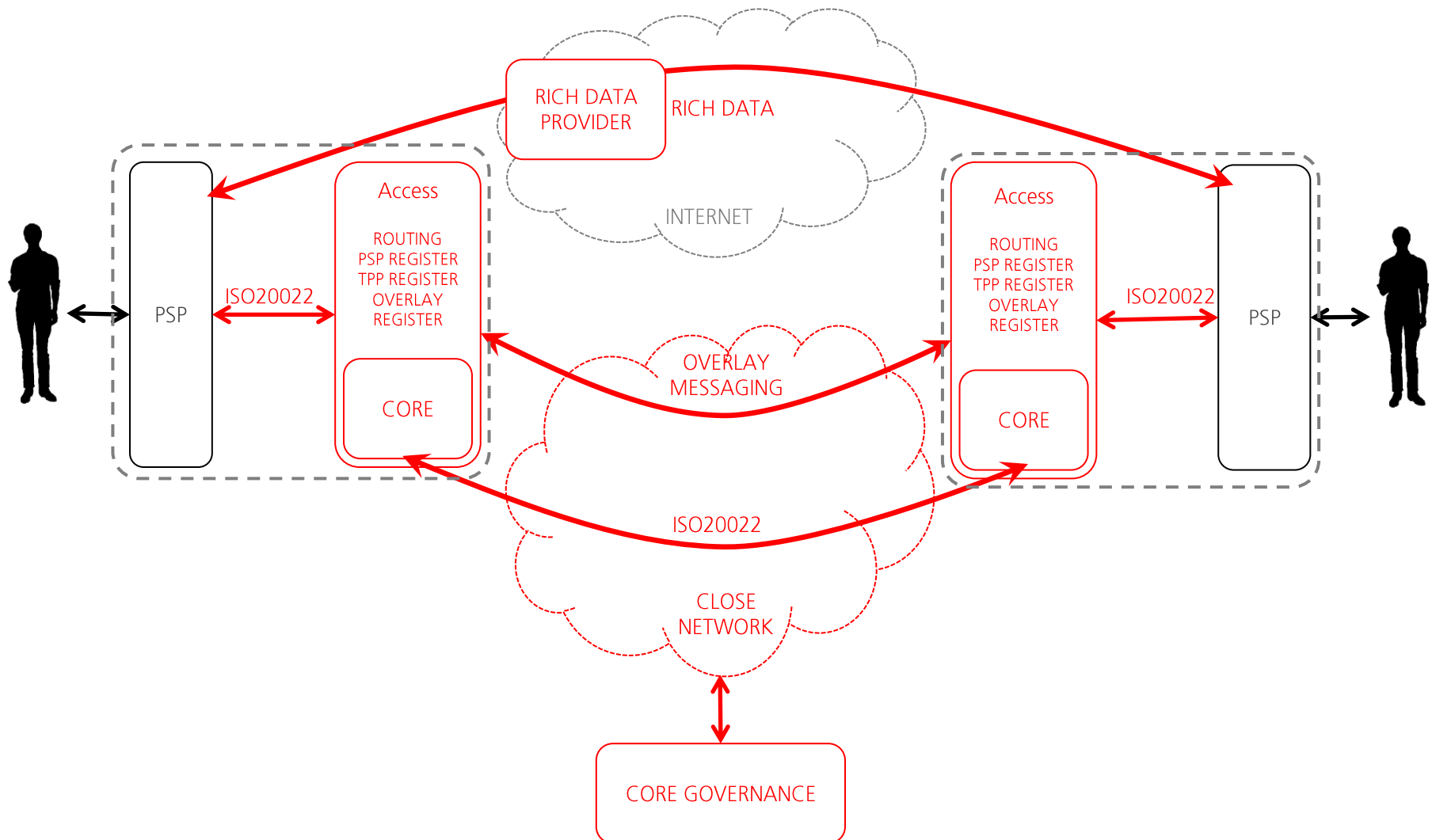


# Transition Model (III/III)

## Legacy Compatibility



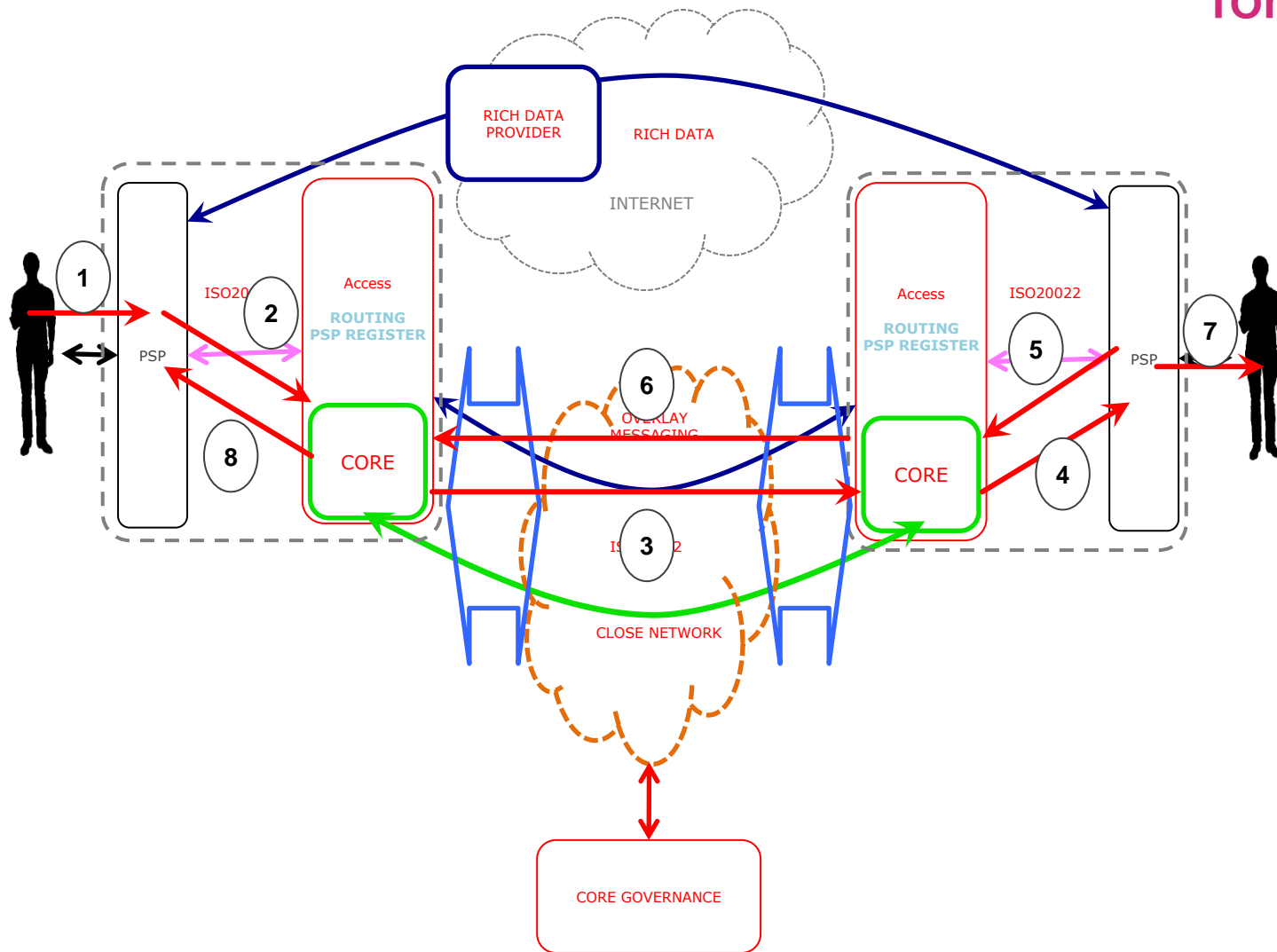
# Future Model





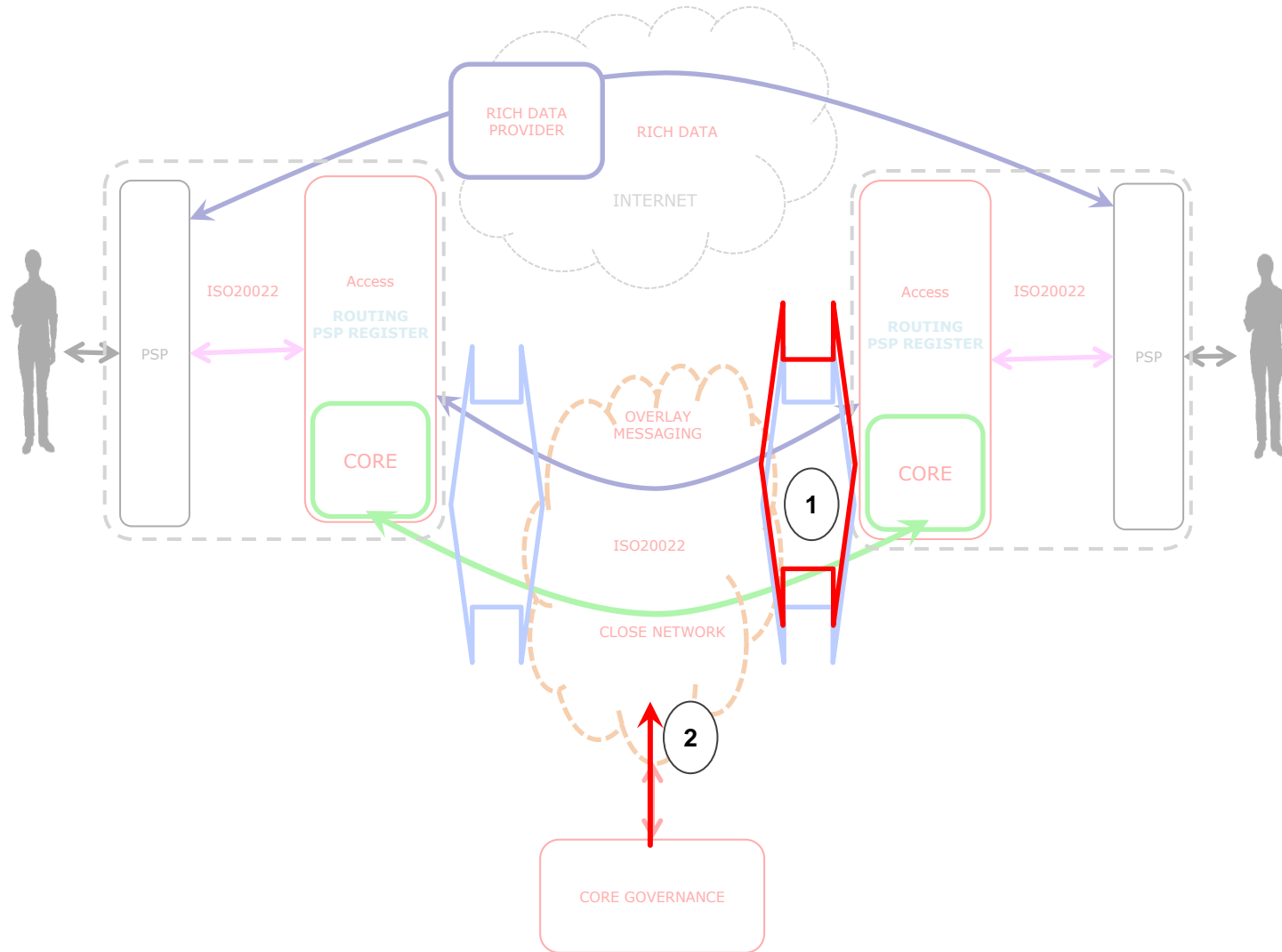
# Future Model

payments  
strategy  
forum



# The Future of UK Payments

payments  
strategy  
forum



- 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.

- (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 be 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

- (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