

# Meeting the challenges of the UK's New Payment Architecture



**FORM3**

# Contents

Introduction	03
The New Payment Architecture	04
What's changing	06
Considerations for NPA	12
Approach to migration	16
Form3 – the future of Payments	20
Benefits of Form3	24

*“..there is no better time to rethink your instant payments strategy than now.”*

## Introduction

Further to recent discussions with FPS Participants on the New Payment Architecture (NPA), Form3 have compiled this document which outlines various NPA options and considerations.

NPA represents a major undertaking for the entire UK banking industry, and Form3 are keen to partner with, and support your team to help deliver a timely, cost effective and resilient solution.

Resiliency has actually come up several times during the various meetings, and we would welcome the opportunity to discuss where we are in terms of multi-cloud deployment and security / resiliency more generally.

It is fair to conclude that we do not yet have all the answers to the challenges represented by NPA. However, we do feel that the considerable expertise in your team combined with Form3's cloud native multi-tenanted platform will help deliver a successful transition.

The NPA provides a catalyst for change and there is no better time to rethink your instant payments strategy than now.

As you think through your approach to the changes to UK Faster Payments and the rollout of the NPA, Form3 would love to be a part of that journey.





# The New Payment Architecture

**This payments industry change will deliver the next generation of the UK central infrastructure for immediate payments.**

Bringing the UK's payments architecture into the modern world is an undeniable necessity. Fortunately, the project to modernise and future-proof the UK's payments infrastructure is well underway. The New Payments Architecture, known simply as NPA, is intended to provide the country with a resilient, robust, and scalable payments platform. The core aim of NPA being to address current challenges and keep the UK at the forefront of payment innovation.

Key to these changes include the re-platforming of the current Faster Payments service and the future replacement of Bacs.

The implementation of NPA requires the operation of the legacy FPS and new NPA infrastructure concurrently, which along with the cost associated with implementing new technology and running two systems, could have substantial technical resource overheads. The recently issued migration dates suggest mid 2024. Banks need to act now to meet the most immediate deadlines and timelines that Pay.UK have put in place. With finalised dates around the wider programme due to be released later this year, a wait and see approach is not one that will see banks able to guarantee a successful migration.



# What's Changing

The following are potential changes which are likely to have an impact on all Participants.

As well as planning for these changes, additional complications are likely to arise during the transition phase as the new and legacy state run concurrently.

**For all Participants:**

- Pay.UK clearly signalling expectation of Participant involvement in end-to-end testing
- Content and format changes of existing scheme reports e.g. Journal
- Specific values in the scheme data will change (error codes, payment types)
- Potential update of reconciliation services – where Participant is matching items sent/received to scheme journal
- Operational use of 'NPA Portal' to replace existing scheme user interface
- Possible update of Participant customer facing channels and transaction reporting (including statements)
- Communicating changes to your customers.

**For Settling Participants only:**

- Changes to the BoE settlement process
- Pre-funding separate FPS and NPA settlement accounts
- Possible changes to current PKI Trust Service
- Update of operational processes related to scheme billing; update of scheme reference data
- Sponsor changes for Directly Connected Non-Settling Participants – the new model no longer requires the online real time authorisation by a Sponsor, which in turn potentially opens Sponsorship models up to other Participants.

## High-level view of changes and renaming of services within NPA

Functionality	Current	NPA
Central Infrastructure Messaging	ISO8583	ISO20022
Payment types	Single Immediate Payment (SIP)	"Instant Payment" or "Priority Payment"
Payment types	Standing Order (SOP), Forward Dated (FDP), Corporate Bulk (Direct Corporate Access (DCA) )	Consolidated into single payment "Priority Payment" (not DCA) or "Same Day Payment"
Bulk File Submission	Direct Corporate Access (DCA) and File Input Method (FIM)	"Bulk Payment"
Participant Models	Aggregator	Market Overlay Service Provider (i.e. Form3) OR Account Overlay Service Provider (Agency Bank Sponsor)
Participant Models	DCSP (previously 'Member')	Direct Clearing Participant
Participant Models	DCNSP (previously 'Direct Agency')	Direct Non Clearing Participant
Participant Models	Indirect (previously 'Agency')	Agency
Messaging	-	Status Enquiry using Pacs.028 message
Scheme simulator	Provided by Ascert	'NPA Message Simulator'

# Payment types and mapping to the existing flows

One of the fundamental changes is the change in payment types and migration from ISO8583 to ISO20022.

At this stage, it is not necessarily clear the extent to which Pay.UK will mandate support for the extended information contained in the new ISO20022 messaging.

The decisions on this could allow it to become a competitive matter, determined by each Participant depending on its relevance to its customer proposition and particular use cases and customer needs.

The changes to Payment types and migration to ISO20022 bring with them their own unique set of challenges.

The ISO20022 messages used in NPA include pacs.nnn, pain.nnn and camt.nnn for the various use cases.

There are many minor format changes in the mapping between current FPS and NPA payment fields. The following summarises high impact changes, requiring material change within the Participants and their suppliers.

NPA Product	Features
Priority Payment	<p>NPA Clearing Priority (Medium), processed ahead of SAME DAY</p> <ul style="list-style-type: none"> <li>- Outcomes: Supports Accept/Reject/Conditional Accept</li> <li>- Timings: Similar to current FPS SIP</li> <li>- Message Type: Message and File</li> </ul>
Instant Payment	<p>NPA Clearing Priority (High), processed before PRIORITY and SAME DAY.</p> <ul style="list-style-type: none"> <li>- Outcomes: Transactions are either accepted or rejected (non conditional accepts, recalls or cancellations)</li> <li>- Timings: TBC. Target is less than current FPS SIP processing</li> <li>- Message Type: Message</li> </ul>
Same Day	<p>NPA Clearing Priority (Low), processed after INSTANT &amp; PRIORITY</p> <ul style="list-style-type: none"> <li>- Outcomes: Supports Accept/Reject/Conditional Accept</li> <li>- Timings: Same day; end-to-end processing time will vary according to the demand for Instant and Priority payments</li> <li>- Message Type: Message &amp; File</li> </ul>
Multi-Day Bulk Payment	<p>NPA Clearing Priority (Multi-Day) no impact on the other payment Products</p> <ul style="list-style-type: none"> <li>- Outcomes: Supports Accept/Reject</li> <li>- Timing: Payments are processed over a three-day cycle and will be available to customers early in the morning on Day 3</li> <li>- Message Type: File</li> </ul>

# Key NPA Payment field changes

Field	FPS	NPA
Payment Type	FPS allows SIP, SOP, FDP, Return, Scheme Return and DCA payment types.	Within NPA, the pacs.008 will not allow for all the current payment types. Payments will be either Instant, Priority or Same Day. With return payments using the separate pacs.004 messaging schema.
Transaction ID	FPS uses the originator generated TRN along with Date, Payment Type, Sender ID and Currency, to form the FPID which is unique to each transaction.	TRN will become an optional field if the originator wishes to use it. NPA will use mandatory UETR and Message ID fields to uniquely identify payments.
Sort Code & Account	Separate fields for UK sort code and Account	Within NPA messaging the sort code and account will be a single string in the format SSSSSSAAAAAAA (S=Sort Code, A= Account Number)
Institution Identifiers	Submitting and receiving members are identified via an ISCD Bank Code	NPA will require the instructing and instructed agents to be identified using a Legal Entity Identifier (LEI), a 20 alpha-numeric code based on the ISO 17442 standard.
Address	Addresses are carried using a single free format field which can include line breaks	Where present NPA messages will require domestic addresses to be sent using structured address fields, country and town being mandatory. Overseas addresses can be sent using a different field that accepts unstructured address data.
Purpose code	Although the current message structure supports purpose codes, these are optional and seldom used.	Following industry consultation, 127 codes have been identified for use. NPA is expected to mandate the use of purpose codes in order to align with BofE RTGS2 standards. Payment category codes are also included within the NPA messaging schema.
Reference Info	A single field holds reference information input by the end user, including secondary account identifiers such as credit card and utility accounts	If carrying a free format customer reference (e.g. pocket money) this will be carried in the End-To-End reference field. Secondary account validation data such as Credit Cards and Building Society roll numbers will be mapped to a separate Creditor Reference Information Field. Consideration also given to use in conjunction with purpose code to determine the type of account being paid. This area still requires a full decision from the NPA programme.
Account Redirection	The response to an FPS message can contain detail of a redirected sort code and account. Populated if the CI redirects the payment due to the beneficiary account having been switched.	Whether these files are required in the pacs.002 is yet to be decided. There is a proposal that the instructing agent validates the transaction with the CASS service in order to apply the redirection at source, removing redirection from the NPA messaging scope.

# Gateway & Payments hub redevelopment

The implementation of NPA requires the operation of the legacy FPS and new NPA infrastructure concurrently.

The redevelopment of gateway instances and payment hubs are challenging enough, however the NPA migration also introduces process change, change control and management. Banks must also consider the operational and procedural changes required to ensure a successful transition during this period of migration.

There are considerations regarding full end to end attestation and assurance processes required by the scheme; if the whole technology programme is to be

implemented inhouse, the full ownership rests with the Participant. Scheme rules, not yet clearly defined, potentially require variable parameters against payment flows; initial transition phase payments under a certain value must go through the NPA, the remainder through FPS.

These transition parameters introduce a requirement for a further technology implementation to manage the switching/ rules to meet the scheme migration requirements, clearly adding cost and resource overheads.

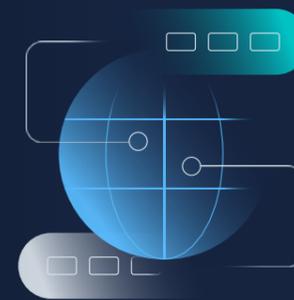
At a high level, and not an exhaustive list, in order for a current FPS service to be considered NPA compliant, the Participant will require the following:

1. Revised scheme connectivity
2. Revised scheme/message security (KEK replacement)
3. Change from ISO 8583 to ISO 20022 messaging with Central Infrastructure (Core)
4. Revised and new messages flows. Removal of redundant flows (i.e. reversals).
5. Addition of optional (ISO 20022) fields in data
6. Revised data validation and transaction due format different between ISO 20022 / ISO 8583
7. Payment Warehousing for "Multi-Day Bulk Payment"
8. Revised Access to scheme MI and Operational Reports
9. EISCD replacement and change to validation services
10. MIDEP replacement / revision
11. Revised Security Code Assurance Evidence and Answers
12. Updated ISO process attestations
13. Technical testing "accreditation" with Pay.UK
14. Migration tools and rehearsals



**Form3 will provision all the required gateway, security, payment capability and operational aspects required of a MOSP, thereby removing these factors from the overall programme for Form3 customers.**

The challenges presented by the NPA may drive non-Form3 Participants to re-evaluate their existing implementation / supplier. Drivers and key considerations around this are likely to include circumstances such as the existing Supplier exits the market, or they have too small a market share and could exit or sell out with little notice. Commercially, if not exiting the market, the supplier could pass on high costs of development which could be borne by the Participant.



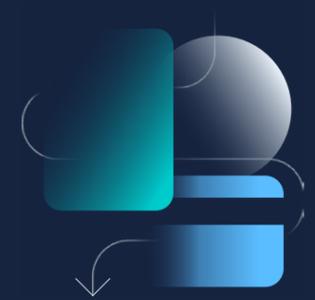
## Platform

Interconnected  
Harmonised data  
Value shared  
Single codebase



## Technology

Multi-cloud native  
Globally scalable  
Rapid, continuous delivery  
Reliable & secure



## Payments

Product centric  
Single API  
Tier 1 proven  
Global market  
SaaS commercials

**Form3 presently support more Participants under Faster Payments than any other provider. Through the use of our cloud-based platform, and are uniquely placed to support the Participant community under the new NPA programme.**

Building and running a resilient, scalable and secure cloud native platform is hard... Form3 have one.

Form3's detailed understanding of the challenges which the NPA programme may pose to the Participant is substantial. We have looked to demonstrate how our approach towards payment operations and use of our cloud-based, multi-tenanted technology platform mitigates the risks and also provides significant advantages to Participants adopting the Form3 service.

During discussions with Participants, some common concerns and considerations have been identified. It is not surprising that whilst the technical aspects naturally form a consideration for the delivery of NPA into a Bank's operation, many of the overarching concerns are not explicitly technical in nature; common themes include the problematic approach to operational change with the backdrop of a multitude of other concurrent initiatives.

Form3 address these concerns and will provide a comprehensive service meeting the needs of the Participants and bringing substantial benefits in the overall NPA programme.

# Considerations for NPA

## How to decouple the technical project from the migration programme

**With a migration as impactful and far reaching as the NPA, financial institutions need to look at their current payment systems and consider what the migration and transition to the NPA could really mean to them. The following aspects regarding the delivery of NPA into the bank demonstrate how the impact of the mandated change does not necessarily have to entail as much challenge, complication and effort.**

As laid out by Pay.UK in their Consolidated Design & Impact Document (issued Dec 2021), there are multiple phases in the end to end NPA delivery which each Participant is required to go through and provide requisite scheme approval to achieve defined readiness criteria.

1. technical project; the technical infrastructure level for gateway, message formatting, security protocols, process attestation, scheme connectivity, plus accreditation testing of the technical processes etc.
2. migration between Faster Payments and NPA schemes, driven through a phased approach controlled centrally by the scheme.

Using the Form3 platform simplifies the technical challenge and substantially reduces the scheme testing overhead for our clients. The Form3 platform operates as multi-tenant and pivotally is deployed using a single code base across all customers. Form3 provide integration with the customer via utilisation of an abstracted API.

The Form3 approach means that we are able to deploy and test the technical interface once, deploy for any number of our customers, plus due to the API layer, we are the 'end' of the inward flows (as the API would be the hook into the core banking system) which allows us to manage a substantial amount of the testing without need for customer Participant involvement, and the results for any of our customers are identical.

The ability to rapidly deploy the technical project not only simplifies the initial delivery activity, additionally it allows the Form3 customer to focus their time on other aspects of the migration programme, therefore we can offer the ability to decouple the technical project from the migration programme. Explained in the following section, the migration programme itself is another area whereby Form3 can provide substantial benefits.

*The Form3 platform simplifies the technical challenge and substantially reduces the scheme testing overhead for our clients*

## Assurance and Attestation

Within the NPA migration programme is the requirement for the Participant to undertake scheme assurance and attestation processes. It is possible a Participant may opt to deploy NPA capabilities in-house, either through acquisition of third party technology or in-house build. The approach, viewed by many as a legacy method, comes not only with the detrimental factors of high initial and continuing operational costs, but also will push the onus onto the Participant for the full end to end Attestation and Assurance process.

Form3's multi-tenant platform mitigates many of the detrimental factors, allowing our single code base to be reused by all customers, providing lower setup and run costs, and in the context of scheme sign off, greatly simplifies the Assurance and Attestation process as once the necessary cycles have been completed once, they are the same and fundamentally gives the "green light" for all Participants using the platform.

The specific attributes will be defined as the scheme's own governance and design principles are defined and released, however in summary, as part of a customer engagement, Form3 will

- Produce revised Security Code Assurance Evidence and Answers
- Update ISO operational process attestations
- Support Technical testing "accreditation" with Pay.UK
- Provide Migration tools and support rehearsals

Indeed, our customers benefit from the use of the service from the outset. Form3 customers are already being provided with supporting information for inclusion in response to the Pay.UK CDID questionnaire; significant swathes of the readiness for NPA is delivered by Form3.

## Total Cost of Ownership

All Participants are subject to similar challenges in terms of multiple work streams, industry mandated changes and compliance burdens. NPA is only one of activity in a long list including the migration to ISO20022, RTGS2 migration, Open Banking to name but a few.

Internal resource constraints for an in-house NPA build could require standing up a team of 10's or even 100's of people for NPA, which is a huge overhead. This is compounded when considering the elongated nature of the transition process following the initial implementation and development, which could span two or more years.

Aspects of an in-house development, or deployment of third-party technology within the Participants internal estate which drive up the TCO include:

- Recognition that existing 'thin' gateways require expensive in-house build.
- Desire to reduce Total Cost of Ownership (TCO).
- Existing vendor presents a high upgrade and/or incremental running cost
- Dissatisfaction with existing vendor's service.
- Internal resource costs associated to the programme.

Form3's service is a multi-tenanted, cloud-based platform, operating on a commercial SaaS basis. Form3 reduce the TCO for NPA by removing the burden of managing costly, evolving, critical payments infrastructure inhouse with our fully managed service provision. Our customers may also achieve additional cost reduction through early switch-off of legacy FPS infrastructure.

## Sponsoring Agency participation

Within FPS, the service offering to sponsor Directly Connected Non-Settling Participants (DCNSP) has always attracted a lot of attention and interest, however, there has been a technical challenge in terms of the real-time authorisation required of the Sponsor under the scheme rules.

NPA presents a new means of approaching sponsorship, in turn presenting a potentially lucrative new customer proposition for those Participants with the appetite to offer sponsorship.

As a technology provider, Form3 operate in the fast paced and rapidly evolving Fintech industry. Fintechs regularly contact Form3 seeking direct connectivity for FPS which can be provided, however, discover limited choice regarding settlement sponsorship. NPA can dramatically open this market.

DCNSP opportunities within NPA:

- Name changed to 'Direct Non-Clearing Participant' (DCNP)
- Flows no longer include online real time authorisation by Sponsor
- "Auths" are replaced by a Sponsor set limit on maximum net position.
- Removes risks of Sponsor non-availability and resulting reversals
- Potentially opens Sponsorship model up to other Participants
- Sponsor still does not have line of sight of transaction flows and therefore may be unwilling to sponsor Participants with Payments Originated Overseas.
- Assumes willingness of Sponsor to set limit.
- Pay.UK may change roles and responsibilities in scheme rules and procedures but this is not expected to be material.



*An in-house development, or deployment of third-party technology within the Participants internal estate will drive up the TCO*

# Approach to migration

## Form3's anticipated approach

The migration models look to provide a high-level view of the possible options which a Participant could employ to meet the challenges of NPA.

In addition to the NPA gateway, dynamic switching is required during the transition phase.

If a Participant looks to deploy an NPA capability in house, then the requirement to manage this dynamic switching (and the technology needed to achieve it) is also a requirement for the Participant. Form3's service can also include this aspect of the requirements, therefore insulating the Participant against this additional technical overhead.

Prior to the elongated transition between schemes, there is a process of testing required.

The industry test phases, and the elements which Form3 or the Participant would be engaged with are :-

- Self-Validation Testing - Enables Participants to validate their adherence to the NPA Message Standards. Form3 managed.
- Integration Testing (against the core) - Enables Participants to test their internal builds and processes against an integrated test environment. Form3 managed.
- Simulator - Form3 will update the scheme simulator to emulate NPA.
- Certification Testing - Provides assurance that Participants can send, receive and process NPA payment types. Form3 and Participant testing.
- Group Testing - Proves the end-to-end operability of the NPA across the payments ecosystem and all parties. Form3 and Participant testing.

Following the completion of the initial testing, the anticipated migration activities with Form3 would include the following :-

**Form3 will enable FPS and NPA gateways to run in parallel** — In other words the Participant can be logged on to both schemes concurrently.

**Listen Only Mode** — This is the first step in migration to prove Participant logon

**Low volume/Low Value** — The switching is a requirement of either the Participant to manage themselves or utilise Form3. Form3 have already built a "migration admissions" switch for a current industry migration. Form3 will deploy a similar switch for submission enabling the Participant to filter out a small number of transactions into NPA, based on value, reference or sort code. Alternatively, the Participant can simply tag payment submissions as "NPA" in the API.

**Migration Mode** — Payments switch is turned off. Payments submissions tagged as NPA always sent to NPA. Payments submission tagged as FPS – sent to NPA if they meet scheme migration rules (potentially driven by value/sort code directory enabled)

**Migration Complete** — All payment sent and received via NPA regardless how tagged.

**Returns** — Form3 will need to enable returns for payment received via FPS to be sent via NPA.

**Reporting** — There are a number of possible reporting options for the Participant to be provided details of all payments sent and received, and via which scheme, to aid reconciliation.

# Form3 migration models

Form3's service utilises an abstracted API as the interface between the customer and Form3.

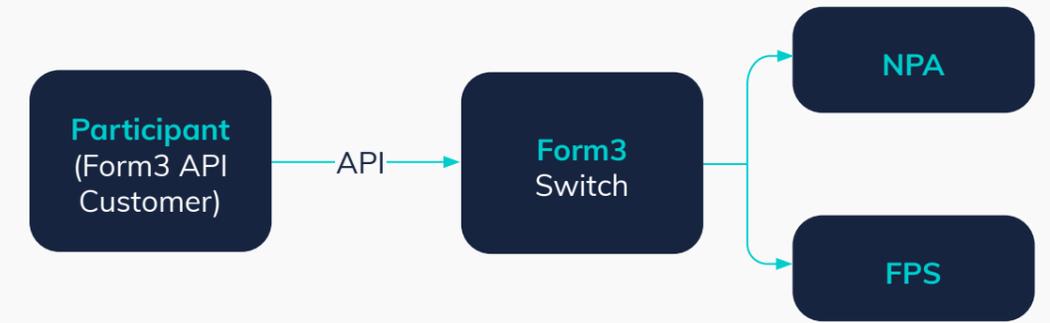
The potential Form3 approaches provide a Participant with the means of being prepared for, and insulated from, the technical NPA transition and therefore minimises the NPA Day 1 impact, whilst simultaneously providing the future capabilities for processing richer NPA based message types.

When considering the total cost of the programme, one clear aspect is the continuing use of the legacy FPS infrastructure and associated operation and possible licence costs. When a Participant migrates their existing FPS flows through Form3, the Participant's

existing FPS infrastructure can be retired earlier saving the operating costs associated to soon-to-be redundant infrastructure. In this regard, the use of Form3's abstracted API provides substantial benefits, not least by allowing a single integration to support both FPS and NPA based flows. Form3 customers are not directly impacted by the changes in the gateway interface with the Central Infrastructure, nor the change to ISO 20022 messaging. Addition of new data fields to the API interface is a non-breaking change and therefore additional optional fields can be supported.

Migration model	Pros	Cons
<b>Option 1:</b> Implement FPS & NPA with Form3 now and utilise this model in advance of NPA.	<ul style="list-style-type: none"> <li>- Simplified Delivery</li> <li>- Simplified Migration</li> <li>- Lower TCO</li> </ul>	<ul style="list-style-type: none"> <li>- Requires API development within the Bank</li> </ul>
<b>Option 2:</b> Default model for a non-Form3 customer. Manage two gateways & a switch.	<ul style="list-style-type: none"> <li>- In-house managed</li> </ul>	<ul style="list-style-type: none"> <li>- Capital outlay, maintenance and run costs</li> <li>- Technical complexity</li> <li>- Migration processes in-house</li> </ul>
<b>Option 3:</b> Legacy FPS unchanged, additionally using Form3's NPA services.	<ul style="list-style-type: none"> <li>- No change to FPS</li> <li>- Simplified NPA delivery</li> <li>- Simplified migration</li> </ul>	<ul style="list-style-type: none"> <li>- Run costs of legacy FPS</li> <li>- Internal and external processes</li> <li>- Cost &amp; Management of the switching during transition phase</li> </ul>
<b>Option 4:</b> Form3 emulate the FPS CI, utilising current FPS processes of Participant via Form3 service, Participant migration to API at later date.	<ul style="list-style-type: none"> <li>- Minimise day 1 change</li> <li>- Early switch-off of incumbent FPS gateway</li> <li>- Defer back-office redevelopment until later date</li> </ul>	<ul style="list-style-type: none"> <li>- Form 3 build required</li> </ul>

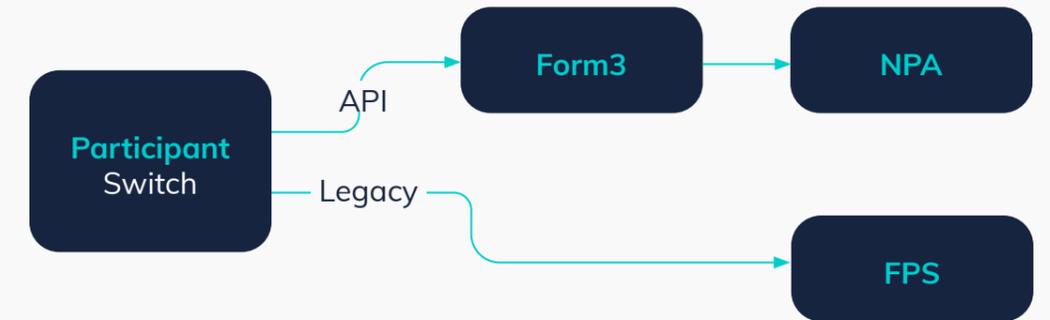
**Option 1**  
Form3 Customer Migration Model



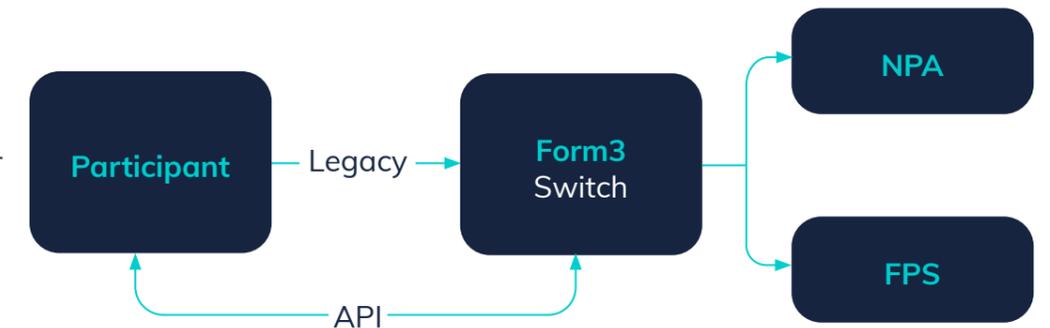
**Option 2**  
Default Non-Form3 Customer Migration Model



**Option 3**  
Retain legacy FPS. New with Form3 for NPA



**Option 4**  
ISO 8583 Customer Migration Model



# Form3 – the future of Payments

**Form3 design, build and run the technology that powers the future of payments.**

Founded in 2016, Form3 set out to revolutionise the world of payment processing and disrupt the traditional payment infrastructure model, with an always on, cloud-native, Payments-as-a-Service platform.

Today, Form3 is trusted by some of the largest Tier1 UK and European Banks and fastest-growing fintechs to handle their critical payments architecture.

Form3 has been awarded Best Cloud Payments Platform 2021 by Paytech and Fintech Finance, most influential fintech company in 2021 by The Financial Technologist and ranked in the Top European Fintechs to watch by Sifted 2020.

**In today's digital world, people should not have to wait for their money.**

Form3 combines market leading API technology with decades of payments expertise to provide a complete, real-time payment processing, clearing and settlement service across the universe of payment schemes through a single API. The platform handles everything so you can focus on serving your Customers' needs rather than on managing payments infrastructure.

Form3 understand that people as well technology are critical to our success. Our diversified team consists of 350+ colleagues with growth plans to double in size within 18 months. We hire the best available talent, and have colleagues located across 22 geographies.

  
**Best Cloud Payments Platform 2021**

  
**Most Influential Fintech Company 2021**

  
**Top European Fintechs to watch 2020**

# Where Form3 fit in the Payment ecosystem:

The award winning Form3 infrastructure offers a complete, enterprise-grade, api-based, cloud native payment technology platform, as a fully managed service.

Form3 represents a new model in payments technology & servicing. Built for the cloud, the Form3 platform is highly scalable, highly available, continuously monitored with the very latest security.

- We take your 'run the bank' challenges and identify change requirements
- We provide the technology to help you modernise your processes.
- We deploy our market leading, cloud agnostic platform connecting you to multiple payment schemes via a single robust API.
- We offer Value-Add Services layered on top:
  - Mandate Management
  - Confirmation of Payee
  - Intelligent Routing

- We deliver secure outcomes for your business whilst reducing costs associated with ongoing regulation & scheme changes.
- We deliver Enterprise level scale domestically and to global providers:
  - £10bn P/M
  - 200m Transactions P/M

Form3 already operates 'Active-Active-Active' data centre configurations in two availability zones on AWS but we are soon able to enhance resilience even further with a world-first multi-cloud deployment capability operating Active-Active across multiple public cloud infrastructures. Form3 continues to push the boundaries of what is possible with a pre-build cloud native payments platform.

## FORM3



### 1. Foundation Layer:

Best in class technology stack hosted on multi-cloud providers (AWS, GCP) and built to scale.

### 2. Security & Resilience:

Bulletproof platform with triple fail over protection and encryption of all data in transit and at rest.

### 3. Microservices Layer:

Rapidly deploy new services and rich functionality to the platform such as NPA, additional schemes, FX, fraud services & more.

### 4. Core Payments:

Our main tech layer and always-on fully managed service 24x7 with Processing & Messaging, Helpdesk, Alerts, Monitoring & more.

### 5. Payment Gateways:

Our solution provides seamless access to payment schemes in the UK, across Europe and globally.

### 6. Form3 API:

Seamlessly integrate with Form3 via a single API into a bank's core banking estate [1] (back office systems).

Helping customers meet the needs of real-time payments schemes is not where Form3's vision ends. We aim to provide indirect, agency and direct access to payments schemes in all domestic markets we enter.

We understand our customers need support across multiple payment schemes and multiple markets to fuel their business growth. Three key initiatives and our aspirational strategic vision:

#### F3 Intelligent Payments

**FUNCTIONAL SERVICES:** Processing services and orchestration to support complex payment journeys. eostiandis apitate in.

**DATA SERVICES:** Leverage our unique and scaling volumes to deliver real time payment intelligence.

#### F3 Global Transaction Management

**DOMESTIC MARKETS:** 2+ new markets per year.

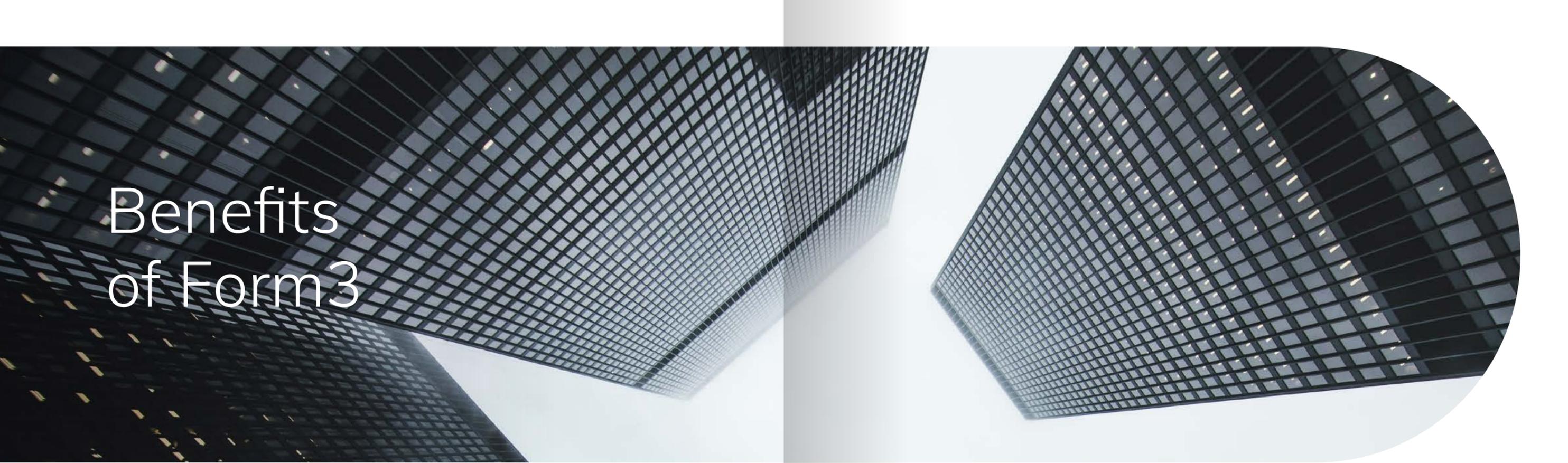
**GLOBAL MARKETS:** SWIFT and Debit Card Issuing Processing for VISA and MASTERCARD.

#### F3 Financial Cloud

**F3 REAL-TIME:** messaging between customers

**F3 PLATFORM:** the first financial services approved curated platform for:
 

- Form3 Products
- Customer Applications
- Partner Products



# Benefits of Form3

## NPA and beyond

Form3, building on existing market leading capabilities for the NPA programme, will provide Participants who adopt our services with numerous achievable benefits including:

**Reduction in TCO;** remove the burden of managing costly, evolving, critical payments infrastructure fully managed service provision, with additional cost reduction possible through early switch-off of legacy FPS infrastructure

**Simplified NPA programme;** ability to decouple the technical project from the migration programme, reduced overheads during attestation and assurance, dynamic routing between schemes during elongated transition phase can be managed by Form3

**Clear visibility and cost control;** futureproofed service with all upgrades, scheme mandated changes, maintenance, security protocols & operational support included

**Almost infinitely scalable service;** removing infrastructure sizing challenges, readily able to scale on demand to accommodate peak loads and future growth

**Insulates extent of overall change;** could enable the Participant to complete the NPA migration whilst deferring the need for substantial redevelopment of the core banking system until a later date

**Supporting diversified propositions;** exploiting cloud technology, Form3 enable customers to learn, adapt and deploy new products to market on demand without disruption or downtime. Due to our API driven approach bank proposition changes can be implemented with little, if any, impact on the NPA service

**Extensible service, integrate once use many;** in addition to what will be the de-facto industry NPA channel, connectivity via Form3's API is reusable, extensible to additional geographies, jurisdictions, payment types & services. The use of Form3's industry leading, cloud-based multi-tenant payments platform, allows customers to consolidate payments processing across multiple payment services, without the need for maintaining substantial levels of infrastructure.

Form3 offer a fully managed service with an operations team, incident management team, and a security team 24/7, with all the service attributes expected from an organisation supporting Tier1 and smaller Financial Institutions. We shield customers from any scheme required updates or new regulation.

The team behind Form3 comprises payments and technology experts – we have unrivalled competence and hold the belief our technology is market leading, and the drive to ensure we maintain our industry leading position.

# FORM3

We would love to hear about your business,  
and where you're headed



Stuart Poffley  
Specialist Sales | Head of NPA  
+44 (0)7436 365 788  
[stuart.poffley@form3.tech](mailto:stuart.poffley@form3.tech)  
[www.form3.tech](http://www.form3.tech)