DATE: 17/11/2017

OPEN BANKING

Open Banking

FAO CMA: Proposed amendments to the Agreed Arrangements

Adam Land Senior Director of Remedies, Business and Financial Analysis Competition and Markets Authority Victoria House 37 Southampton Row London WC1B 4AD

Dear Adam.

In my role as Implementation Trustee and in accordance with section 10.6 of the Retail Banking Market Investigation Order 2017 (the "Order", "CMA Order") I would like to propose to the CMA for its approval certain amendments (the "Proposed Amendments") to the Agreed Arrangements. Following extensive consultation I believe that the Proposed Amendments detailed in this document are necessary to fulfil the objectives and requirements of the Order.

Specifically I propose that page 6 of this document (the "Amended Order Timetable") is adopted as the revised Agreed Timetable and Project Plan with reference to this document for detailed definitions. For completeness and to assist with your deliberations this document also makes reference to additional items the OBIE intends to deliver in order to offer a fully compliant PSD2 solution based on API standards and the necessary modifications to OBIE governance and funding to deliver these items. I believe this activity is complementary to the objectives of the Order and will support adoption of the Order APIs but does not in my view fall within the legal mandate of the Order.

As the Implementation Trustee I have sought to achieve a broad consensus across all stakeholders represented at the Implementation Entity Steering Group ("IESG"). In forming these Proposed Amendments I have undertaken several rounds of discussion with stakeholders at extraordinary IESG meetings and have undertaken a short but comprehensive consultation on a draft of this document.

Please note this document does not seek to address the preparedness of the CMA9 for the 13th January 2018 deliverables and I would expect to discuss this with you in the coming days.

I look forward to discussing these Proposed Amendments with you and subject to your approval reverting back to the IESG with the revisions to the Agreed Arrangements.

Yours sincerely,

Imran Gulamhuseinwala Implementation Trustee

Context to the Proposed Amendments

It became apparent midway through 2017 that items would be required for delivery by the OBIE and CMA9 beyond that which had been planned for delivery on 13th January 2018 in order to fully comply with the CMA Order. Discussions were initiated with a view to amending the Agreed Arrangements to reflect these items to ensure a compliant route could be found through 2018/19. Given the many divergent views on item definition and timings across the IESG members and stakeholder groups it was deemed necessary to create a consultation process to build consensus and, if such a consensus could not be achieved, to enable the Implementation Trustee with the approval of the CMA to impose a decision. Over the course of September and October three extraordinary IESG meetings were held to debate and canvas opinion, over 40 bilateral meetings were held and over 20 written submissions received.

This document is organised into five sections.

- 1. Amended Order Timetable
- 2. PSD2 Items
- 3. Governance and Funding
- 4. Longer Term Items for Consideration
- 5. Appendix

Section 1 Amended Order Timetable

Introduction to the Amended Order Timetable (1 of 2)

This section details the items and activities the OBIE would commit to delivering and the CMA9 would implement to meet the objectives and requirements of the Order. It is proposed that this section is adopted as the amended Agreed Timetable and Project Plan in the Explanatory Notes of the Order. The schematic on page 6 outlines these items (P1-P18) which are then detailed in the subsequent pages. The following paragraphs describe the linkages to the CMA remedies and define the terms used on the schematic.

In forming the proposed Amended Order Timetable views from across the IESG stakeholders were sought and considered against both the objectives and requirements of the CMA's retail banking remedies. The objectives and requirements of the remedies are laid out in the Order and the Retail Banking Market Investigation report, 9th August 2016 ("RB Market Investigation"). The RB Market Investigation states that the remedies are an integrated package and specifically that the Open Banking remedy is a "foundation measure" that is integral to delivering the other measures.

A central objective of the RB Market Investigation is to increase competition by improving customer engagement and reducing friction (the report considered the experience of Midata which it recognised had real potential to improve competition but ultimately failed because it was not straightforward for customers to use). It is for this reason that the Amended Order Timetable prioritises items related to the customer journey including authentication steps (P3 and P4), consent dashboards (P15) and trusted beneficiaries (P8).

A central objective of the remedies is to enable convenient and reliable current account comparisons so as to facilitate switching to better value products. It is for this reason that an early cost/benefit assessment of current account trigger events (P14) is proposed.

A further objective of the RM Market Investigation is use Open Banking APIs to allow users to unbundle overdrafts and sweep balances (to help avoid overdraft charges or to benefit from higher interest payments) using innovative third party services. This requirement to move funds securely and seamlessly, together with the requirement under the Order to align the Open Banking APIs to PSD2 payment initiation services, informs the prioritisation of several items including trusted beneficiaries (P8), confirmation of funds (P6), reverse payments (P7) and status of payments (P9).

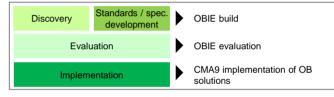
The schematic on page 6 allocates activities to each of the items which are defined as below:

- Evaluation: Evaluations are to be undertaken by the OBIE upon terms of reference to be agreed with the CMA and will provide an assessment of and recommendation on how the new specifications / standards and supporting infrastructure should be built by the OBIE and implemented by the CMA9. Evaluations are intended to determine whether an effective and proportionate solution is available to satisfy the objectives and requirements of the CMA remedies. If an effective and proportionate solution cannot be found it may be that the recommendation is not to proceed with the development of a specification or standard. Specific criteria will be selected on a case by case basis but be subject to minimum consistent criteria including: customer benefit, market impact, feasibility, PSD2 compliance, priority and cost/proportionality. Upon completion of an evaluation the evaluation will be submitted by the Implementation Trustee to the CMA for approval and where applicable timelines for Discovery, Specifications/Standards Development and Implementation will be agreed with the CMA and reflected in the Agreed Arrangements.
- Discovery: Discoveries are preliminary activities to be undertaken by the OBIE to support the future design and development of specifications / standards
- Specifications / Standards Development: These are activities to be undertaken by the OBIE, resulting in the release of extensions to existing (and/or) new standard and specifications
- Implementation: Implementations are to be undertaken by the CMA9, resulting in the release of Open APIs as per the relevant corresponding set of OBIE₄ standards or specifications

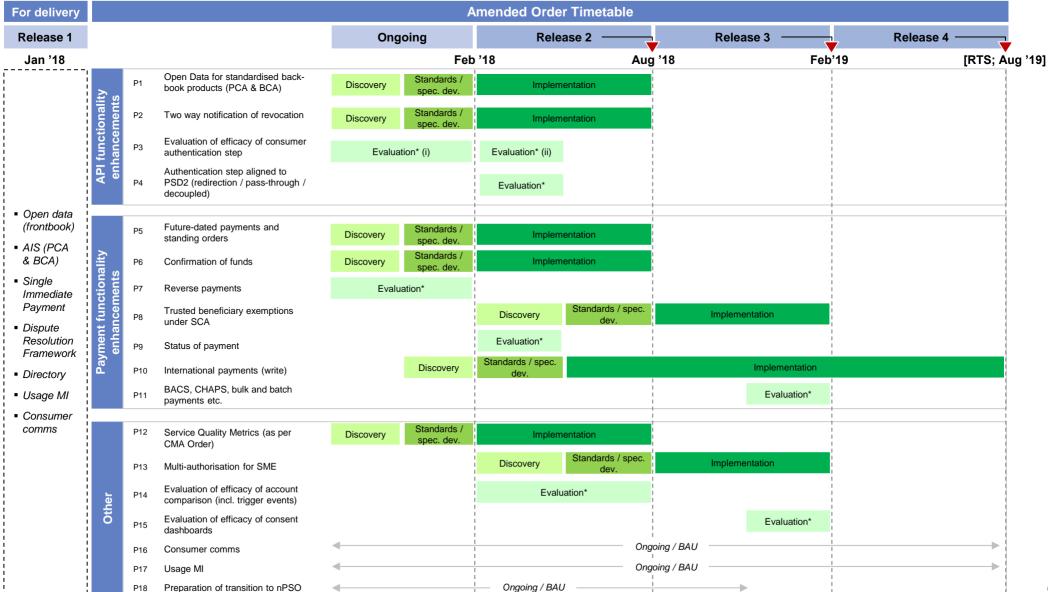
Introduction to the Amended Order Timetable (2 of 2)

With regard to the timings of Open Banking Roadmap deliverables, it should be noted:

- The items have been organised across a series of six-month releases spanning 2018 to August 2019 and coinciding with the regulatory application of RTS (which has not yet been confirmed)
- The Amended Order Timetable does not seek to address or redefine items for delivery on 13th January 2018. The OBIE will be required to commence work on some items earmarked for Release 2 in August 2018 prior to 13th January
- Upon agreement of this proposal the OBIE will undertake a confirmation exercise on OBIE timings and adjust the timelines appropriately
- Any eventual delays in the timing of OBIE deliverables will be reflected in the overall timeline with implementation deliverables due prior to the RTS deadline shifted commensurately



Amended Order Timetable



(*) Discovery, Standards / Specifications development and implementation steps to be taken pending the outcome of the evaluations

Detailed descriptions Amended Order Timetable (1/10)

Ref	Roadmap Scope Item	Description	Rationale	Aligns with
P1	Open Data for standardised back-book products (PCA & BCA)	 Scope Item description: Extension of OB API functionality to cover back-book product reference data for standardised PCA and BCA Key activities: A discovery phase by the OBIE to understand the variety of back book accounts, understand gaps in existing functionality and modifications required to the exiting standards The development of standards by the OBIE for the products and functionality referred to above The implementation of those standards by the CMA9 for Release 2 	 Regulatory alignment: Fulfils the requirements of the Order Open Banking adoption: Extends functionality of OB Standards product comparison use cases to a material proportion of the CMA9 account base Consumer / SME utility: Consumers would be able to benefit from current account product comparison 	CMA Order
P2	Release 2 Two way notification of revocation Scope Item description: Standards to allow an ASPSP or TPP to notify each other a consumer has revoked their consent. This ensures a consumer will see a consistent status of their consents on both ASPSP and TPP dashboards Key activities: A discovery phase by the OBIE to understand gaps in existing functionality and create the business requirements for the standards The development of standards by the OBIE for the product and functionality referred to above The implementation of those standards by the CMA9 for Release 2		 Consumer / SME utility: Under the current OB Standards the consumer risks seeing conflicting consents on their ASPSP and TPP dashboards. With two way notification of revocation consumers will be able to revoke at one party and confirm that the revocation has been recognised by the other party Open Banking adoption: Build confidence among consumers and TPPs/ASPSPs Security / Integrity: Consumers see consistent information on the consent dashboards 	CMA Order

Detailed descriptions Amended Order Timetable (2/10)

Ref	Roadmap Scope Item	Description	Rationale	Aligns with
Ρ3	Evaluation of efficacy of consumer authentication step	 Scope Item description: Assessment of whether the consumer authentication user journey is sufficiently friction free to enable adoption and is in compliance with article 4(c) of PSD2. App-to-app redirection will be reviewed as one potential solution in this context and recognising that appropriate remedial action may differ across the CMA9 reflecting differing user journeys and platform architectures. (App-to-app redirection enables TPPs to redirect consumers into their ASPSP device app environment to authenticate (rather than their online browser environment) in order to provide for a more familiar consumer journey and allow the ASPSP to authenticate in a more consumer friendly manner (using for example two factor biometrics) Key activities: Two evaluation phases conducted by the OBIE to assess whether consumers face poor user journeys that are impeding adoption. The first evaluation phase to be conducted as soon as possible and the second following finalisation of the RTS text and will take into account the functional requirements of RTS. Evaluation criteria are likely to include customer journey benchmarking, customer drop-out benchmarking, possible solutions and impact on consumer conversion, risk and cost of implementation. (pending the outcome of the evaluation) The development of standards or guidelines or specific recommendations by the OBIE for the products and functionality referred to above (pending the outcome of the evaluation) The implementation of those standards by the CMA9 as soon as practical and ahead of Release 3 	 Consumer / SME utility: Increases consumer utility and adoption Open Banking adoption: Increases consumer utility and customer experience from a TPP point of view Regulatory alignment: Referenced in PSD2 Security / Integrity: Improves authentication step by making two factor more convenient 	PSD2

Detailed descriptions Amended Order Timetable (3/10)

Ref	Roadmap Scope Item	Description	Rationale	Aligns with
Ρ4	Authentication step aligned to PSD2 (redirection / pass- through / decoupled)	 Scope Item description: Article 97(5) of PSD2 may require authentication steps other than redirection (including but not limited to pass-through and decoupled) in order to be compliant, (or may determine that redirection is in breach of PSD2). The OBIE would seek to evaluate PSD2 guidance when finalised in order to determine the optimal authentication step from a regulatory and consumer adoption point of view. Key activities: An evaluation phase by the OBIE to assess whether the functionality referred to above should be developed as a standard. Evaluation criteria are likely to include regulatory requirements, consumer utility, consumer uptake, consumer risk, technical complexity, cost to implement and prioritisation of other OB items. (pending the outcome of the evaluation) The development of standards by the OBIE for the products and functionality referred to above (pending the outcome of the evaluation) The implementation of those standards by the CMA9 for Release 3 	 Regulatory alignment: Fulfils the requirements of the Order by aligning and complying with PSD2 Open Banking adoption: Extends coverage of OB Standards to all providers seeking PSD2 solutions. Enables more convenient consumer experiences Consumer / SME utility: Increases consumer utility by reducing friction Security / Integrity: Consumers would be able to more conveniently access their data without credential sharing and access their payments without putting cards on file 	PSD2
P5	Future-dated payments and standing orders	 Scope Item description: Extension of write (PIS) functionality of the OB R/W APIs to payment types other than non-single immediate payments (including but not limited to future-dated payments, recurring payments and standing orders) for sterling denominated current accounts and in alignment with the payment initiation services that apply under PSD2 Key activities: A discovery phase by the OBIE to understand the variety of payment models, understand gaps in existing functionality and create the business requirements for the standards The development of standards by the OBIE for the products and functionality referred to above The implementation of those standards by the CMA9 for Release 2 	 Regulatory alignment: Fulfils the requirements of the Order by aligning with PSD2 Open Banking adoption: Extends functionality of OB Standards use cases beyond single-immediate payments including recurring, sweeping and subscription propositions Consumer / SME utility: Consumers would be able to benefit from innovative use cases Security / Integrity: Consumers would be able to execute recurring payments without putting cards on file 	PSD2

Detailed descriptions Amended Order Timetable (4/10)

Ref	Roadmap Scope Item	Description	Rationale	Aligns with	
P6	Confirmation of funds	 Scope Item description: Extension of write (PIS) functionality of the OB R/W APIs to enable ASPSPs to confirm availability of funds to TPPs Key activities: A discovery phase by the OBIE to understand gaps in existing functionality and create the business requirements for the standards The development of standards by the OBIE for the products and functionality referred to above The implementation of those standards by the CMA9 for Release 2 	 Regulatory alignment: Supports provision of 3rd party services envisaged in the Retail Banking Market Investigation Fulfils the requirements of the Order by aligning with PSD2 Open Banking adoption: Extends functionality of OB Standards for payments use cases and thereby delivers greater utility for TPPs Consumer / SME utility: Consumers would be able to execute payments with confidence Security / Integrity: Consumers would be able to execute payments conveniently without putting cards on file 	CMA Order	
Ρ7	Reverse payments	 Scope Item description: Extension of write (PIS) functionality to enable payees (or their PISP) to return payments in a frictionless and reconcilable manner to the payer where the payee may be a consumer or merchant Note the intention is not to create or replicate elements of a scheme, nor is it to support or offer payer guarantees or insurance, nor is it to create "pull" payment functionality Key activities: An evaluation phase by the OBIE to understand how to deliver the functionality referred above. Evaluation considerations should include the variety of reverse payment models used in practice, gaps in existing functionality, consumer uptake, consumer risk, technical complexity, cost to implement and prioritisation of other OB items. (pending the outcome of the evaluation) The development of standards by the OBIE for the products and functionality referred to above (pending the outcome of the evaluation) The implementation of those standards by the CMA9 for Release 2 	 Regulatory alignment: Fulfils the objectives of the Order Supports provision of 3rd party services envisaged in the Retail Banking Market Investigation Open Banking adoption: Extends functionality of OB Standards use cases to merchant payment refunds, improves the OB e-commerce proposition and improves adoption by PISPs and merchants Consumer / SME utility: Consumers would be able to benefit from convenient refund experience. Reduces pain point for SMEs in refunds. Security / Integrity: Consumers would be able to better track and monitor reverse payments 	CMA Order	

Detailed descriptions Amended Order Timetable (5/10)

Ref	Roadmap Scope Item	Description	Rationale	Aligns with
P8	Trusted beneficiaries exemptions under SCA	 Scope Item description: Alignment of functionality to Trusted beneficiaries and recurring payments SCA exemptions under finalised RTS (currently Article 13 of the draft RTS) Pending finalisation of the draft RTS functionality could include: Extension of write (PIS) functionality of the OB R/W APIs to enable TPPs to execute payments to payees on the PSU's trusted beneficiary list (held at the ASPSP) under SCA exemption (as applied under the security policy of the ASPSP's customer facing interface); and enablement of OB standards to allow TPPs to add, amend and remove payees on their trusted beneficiary list held at the ASPSP on behalf of the PSU. Key activities: A discovery phase by the OBIE to understand the variety of trusted beneficiary models used in practice, the requirements under RTS and an assessment of alternative methods for initiating payments) to create the business requirements for the standards The development of standards by the OBIE for the products and functionality referred to above The implementation of those standards by the CMA9 for Release 3 	 Regulatory alignment: Fulfils the requirements of the Order by aligning with PSD2 Open Banking adoption: Extends functionality of OB Standards use cases to SCA exempt payments and thereby greater utility for TPPs Consumer / SME utility: Consumers would be able to benefit from more convenient regular payment, e-commerce and account sweeping propositions Security / Integrity: Consumers would be able to execute payments conveniently without putting cards on file and better manage their trusted beneficiaries 	PSD2
Ρ9	Status of payment	 Scope Item description: Extension of write (PIS) functionality of the OB R/W APIs to enable ASPSPs to communicate payment statuses to TPPs Key activities: An evaluation phase by the OBIE to assess whether the functionality referred to above should be developed as a standard. Evaluation criteria are likely to include consumer utility, consumer uptake, consumer risk, technical complexity and cost to implement and prioritisation of other OB items. (pending the outcome of the evaluation) The development of standards by the OBIE for the products and functionality referred to above (pending the outcome of the evaluation) The implementation of those standards by the CMA9 for Release 3 	 Open Banking adoption: Extends functionality of OB Standards for payments use cases and thereby delivers greater utility for TPPs Consumer / SME utility: Consumers would be able to execute payments with confidence. This solution has the potential to support the multi-auth solution P13 Security / Integrity: Consumers would be able to execute payments conveniently without putting cards on file 	CMA Order

Detailed descriptions Amended Order Timetable (6/10)

Ref	Roadmap Scope Item	Description	Rationale	Aligns with
P10	 Extension of write (PIS) functionality of the OB R/W APIs to cover international payments (including but not limited to SEPA payments) from sterling current accounts in alignment with the requirements of PSD2 Key activities: A discovery phase by the OBIE to understand the variety of international payment types and models and create the business requirements for the standards The development of standards by the OBIE for the products 		 Regulatory alignment: Fulfils the requirements of the Order by aligning with PSD2 Open Banking adoption: Extends coverage of OB Standards to TPPs focussed on the FX market Consumer / SME utility: Consumers would be able to execute non-sterling payments through TPPs Security / Integrity: Consumers would be able to execute payments without putting cards on file 	PSD2
P11	BACS, CHAPS, bulk and batch payments etc.	 Scope Item description: Extension of write (PIS) functionality of the OB R/W APIs to cover payments other than faster payments (including but not limited to BACS, CHAPS, bulk and batch payments) Key activities: An evaluation phase by the OBIE to assess whether the payment types referred to above should be developed as a standard. Evaluation criteria are likely to include alternative online offerings, consumer utility, consumer uptake, consumer risk, technical complexity and cost to implement and prioritisation of other OB items. (pending the outcome of the evaluation) The development of standards by the OBIE for the products and functionality referred to above (pending the outcome of the evaluation) The implementation of those standards by the CMA9 for Release 4 	 Regulatory alignment: Fulfils the requirements of the Order by aligning with PSD2 Open Banking adoption: Extends functionality of OB Standards payment types Consumer / SME utility: Consumers would be able to benefit from high value payments and SME's in particular from bulk and batch payments 	PSD2

Detailed descriptions Amended Order Timetable (7/10)

Ref	Roadmap Scope Item	Description	Rationale	Aligns with
P12	Service Quality metrics (as per CMA Order)	 Scope Item description: Provision of key service quality metrics by the CMA9 (including for example net promoter score) via OB API and without charge according to part 3 of the Order Key activities: A discovery phase by the OBIE to understand modifications required to the exiting standards The development of standards by the OBIE for the products and functionality referred to above The implementation of those standards by the CMA9 for Release 2 	 Regulatory alignment: Fulfils the requirements of the Order (part 3) Consumer / SME utility: Consumers would be able to assess and benchmark the CMA9 according to objective metrics 	CMA Order
P13	Multi-authorisation for SME	 Scope Item description: Extension of the OB R/W APIs to enable SMEs that require multiple parties to authorise AIS and PIS to use OB functionality in a simple and convenient workflow. Note the intention is to develop a set of messaging standards to update the TPP on the status of the multi-authorisation workflow rather than to standardise multi-authorisation workflow and transfer it to the domain of the TPP Key activities: A discovery phase by the OBIE to understand the variety of multi-auth models used in practice, understand gaps in existing functionality and create the business requirements for the standards The development of standards by the OBIE for the products and functionality referred to above The implementation of those standards by the CMA9 for Release 3 	 Regulatory alignment: Fulfils the requirements of the Order Open Banking adoption: Extends coverage of OB Standards to a large SME population Consumer / SME utility: Extends coverage of OB Standards to a large SME population Security / Integrity: SMEs would be able to maintain multi-party processes rather than concentrate authority upon nominated individuals 	CMA Order

Detailed descriptions Amended Order Timetable (8/10)

Ref	Roadmap Scope Item	Description	Rationale	Aligns with
P14	Evaluation of efficacy of account comparison (incl. trigger events)	 Scope Item description: Assessment of whether the product reference data combined with the account transaction data provide sufficient insight to allow for safe and accurate PCA / BCA account comparison. Transaction data trigger events and personal data will be reviewed as potential solutions in this context. (Transaction data trigger events identify the underlying events that cause fees and interest to be charged on current accounts) Key activities: An evaluation phase by the OBIE to assess whether PCA / BCA account comparison is working as intended. Evaluation criteria are likely to include comparison accuracy and reliability, consumer utility, consumer uptake, consumer risk, technical complexity and cost to implement and prioritisation of other OB items. (pending the outcome of the evaluation) The development of standards by the OBIE for the products and functionality referred to above (pending the outcome of the evaluation) The implementation of those standards by the CMA9 for Release 4 	 Regulatory alignment: Fulfils the requirements of the Order Open Banking adoption: Improves the safety and accuracy of the account comparison data Consumer / SME utility: Consumers would be able to benefit from accurate and reliable account comparison analytics Security / Integrity: Consumers would be better able to avoid switching to accounts that may be worse off for them 	CMA Order
P15	Evaluation of efficacy of consent dashboards	 Scope Item description: Assessment of whether ASPSP authorisation and TPP consent dashboards are working to support consumers manage their consents in an informed manner and in a fair and transparent way as intended Key activities: An evaluation phase by the OBIE to assess whether the ASPSP authorisation and TPP consent dashboards are working as intended. Evaluation is likely to include quantitative and qualitative measures, and peer benchmarking; and assess factors such as consumer utility, consumer satisfaction and fair competition. Following evaluation the OBIE would make recommendations to participants and amend the OBIE guidelines 	 Consumer / SME utility: Consumer dashboards are an integral part of consumers managing their consents and should be meet minimum standards of practice Open Banking adoption: Well functioning consumer dashboards that inform the consumer and represent TPPs fairly are critical to building confidence and maintaining open and fair competition Security / Integrity: Improves consumer control over consents and revocations 	CMA Order

Detailed descriptions Amended Order Timetable (9/10)

Ref	Roadmap Scope Item	Description	Rationale	Aligns with
P16	Consumer comms	 Scope Item description: Make available artefacts for the purposes of introducing OB, providing reference and guidance, anticipating and addressing common queries and providing advice on issues relating to fraud and protection. Make available artefacts such as communications frameworks and protocols, and common / standardised language for use by CMA9 and participating ASPSPs and TPPs Key activities: Ongoing publication of reference and guidance materials and engagement with stakeholders to encourage use 	 Consumer/ SME utility: Supplements go-to-market activities, increasing the public's familiarity with Open Banking and encouraging informed consumer participation (where appropriate) Open Banking Adoption: Promotes industry co-ordination and collaboration to encourage simplicity in – and consistency of - user experiences across providers, thereby avoiding consumer confusion and reducing barriers to participation Security / Integrity: Raises awareness of fraud and consumer protection and vulnerability issues and encourages ongoing consumer vigilance 	CMA Order
P17	Usage MI	 Scope Item description: Management Information on the usage of the OB APIs provided by the CMA9 to the OBIE. MI to include performance and utilisation metrics tracking adoption of Open Banking solutions, conversion metrics along the user journey, ongoing availability of services and consistency of service quality. Provision of data and standardised metrics to allow robust and quantitative analysis in the Evaluation activities Completion of periodic reviews tracking progress of Open Banking against the objectives of the CMA Order and other related regulatory / policy initiatives Key activities: Ongoing collection, maintenance, assimilation of MI with periodic reviews and evolution as required 	 Regulatory alignment: Fulfils the requirement under the CMA Order to inform the CMA on the efficacy of the Order remedies Assists regulators and policy makers in evidencing the success or failure of Open Banking, monitoring individual firm performance and informs potential development of future complementary policy initiatives Security/ Integrity: Incentivises preservation / maintenance of service quality, thereby supporting Open Banking's establishment as a reliable, robust industry solution Open Banking adoption: Encourages identification of future refinements and enhancements to Open Banking solutions 	CMA Order

Detailed descriptions Amended Order Timetable (10/10)

Ref	Roadmap Scope Item	Description	Rationale	Aligns with
P18	Preparation for transition to nPSO	 Scope Item deliverables: To work towards a transition to the nPSO (target date of y/e 2018) Key activities: OBIE and nPSO to agree memorandum of understanding that will identify areas of overlap, a modus operandi for collaborating and working together and transitionary requirements and milestones Address any potential liability and level issues around the use of the OB Directory in particular through non-CMA9 usage 	 Open Banking Adoption Broadens funding and user representation to a diverse industry body 	CMA Order

Section 2 PSD2 Items

Introduction to the PSD2 Items

This section details the items and activities the OBIE is committing to in order to deliver a fully compliant PSD2 solution based on API standards (that would allow regulated firms to comply with all of their applicable obligations under PSD2 and the forthcoming RTS) and the CMA intend to implement. The schematic on the following page outlines these items (P19-P22) which are detailed in the subsequent pages. The following paragraphs describe the linkages to the CMA remedies and define the terms used on the schematic.

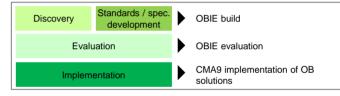
The RB Market Investigation identified that there may be "...benefits that might occur through including additional products in the standards-making process, for example a wider range of lending products or those payments accounts covered by PSD2 which fall outside our ToR." (RB Market Investigation, 13.39). The benefits of broadening out the Open Banking solution to PSD2 items (predominantly credit cards and e-wallets) is that it materially improves the likelihood of adoption by non-CMA9 ASPSPs (who would then be able to use Open Banking standards to comply with their PSD2 obligations) and by consumers and TPPs (who would then be able to access the majority of transaction data through standard APIs without resorting to sharing credentials/screen scraping). Greater consumer adoption has the benefit of increasing the impact of the CMA remedies and broader industry adoption will support the transition of the OBIE to the nPSO.

The schematic on the following page allocates activities to each of the items which are defined as below:

- Evaluation: Evaluations are to be undertaken by the OBIE and will provide an assessment and recommendation for the development of new specifications / standards and supporting infrastructure to be built by the OBIE.
- Discovery: Discoveries are preliminary activities to be undertaken by the OBIE to support the future design and development of specifications / standards
- Specifications / Standards Development: These are activities to be undertaken by the OBIE, resulting in the release of extensions to existing (and/or) new standard and specifications
- Implementation: Implementations are to be undertaken by the CMA9, resulting in the release of Open APIs as per the relevant corresponding set of OBIE standards or specifications

With regard to the timings of Open Banking Roadmap deliverables, it should be noted:

- The items have been organised across a series of six-month releases spanning 2018 to August 2019 and coinciding with the regulatory application of RTS
- The PSD2 Items do not seek to address or redefine items for delivery on 13th January 2018. The OBIE will be required to commence work on some items earmarked for Release 2 in August 2018 prior to 13th January
- Upon agreement of this proposal the OBIE will undertake a confirmation exercise on OBIE timings and adjust the timelines appropriately
- Any eventual delays in the timing of OBIE deliverables will be reflected in the overall timeline with implementation deliverables due prior to the RTS deadline shifted commensurately



PSD2 Items

For delivery						PSD2	ltems			
Release 1				Ongo	bing	Re	elease 2 —	Release	3 —	Release 4
Jan '18					Feb	'18	Au	g '18	Feb'19	[RTS; Au
 Open data (frontbook) 		P19	Review alignment to PSD2	Evaluation		Evaluation		Ongoing / BAU		
■ AIS (PCA & BCA)								1 1 1 1		
 Single Immediate Payment 	ems	P20	PSD2 in-scope accounts (sterling) ¹	Discovery	Standards / spec. dev				n n	
 Dispute Resolution 	PSD2 Items	P21	PSD2 in-scope accounts			D'	Standards / spec.			
Framework Directory 			(multi-currency)			Discovery	dev		Implementation	
 Usage MI 					1			 	 	
 Consumer comms 		P22	Corporate accts					Evaluation		

1. Products include credit cards, e-wallets, prepaid accounts, currency accounts and other accounts with external payment functionality incl. loans, mortgages and savings accounts as defined in PSD2

Detailed descriptions PSD2 Items (1/2)

Ref	Roadmap Scope Item	Description	Rationale	Aligns with
P19	Review alignment to PSD2	 Scope Item description: Review of OB solutions' alignment to, and compatibility with, PSD2 (including but not limited to ISO/FAPI standards, e- IDAS certification etc) and extension of the OB Dispute Resolution and Adjudication framework to cover PSD2 products and activities not currently addressed under the Order Key activities: Ongoing assessment with an early evaluation phase and a follow up evaluation phased once RTS is finalised. The OBIE to assess whether any amendments should be made to the OB standards, directory, dispute resolution and adjudication framework, or other facet of the OBIE. Evaluation criteria are likely to include PSD2/RTS/GDPR regulatory requirements, the desire for European harmonisation, consumer perspectives, technical complexity and cost to implement and prioritisation of other OB items. 	 Regulatory alignment: Fulfils the requirements of PSD2, RTS and GDPR and other European standards as appropriate Open Banking adoption: Ensures solutions provided by the OBIE are compatible with PSD2 and offer ASPSPs a method of complying with regulations 	PSD2
P20	PSD in-scope accounts (sterling)	 Scope Item description: Extension of OB R/W APIs to cover the full set of PSD2 sterling denominated products not covered under the Order (including but not limited to credit cards, currency accounts, charge cards, e-wallets, pre-paid accounts and payments enabled savings, deposit, Ioan and mortgage products) and comprehensively fulfilling the functional requirements of PSD2 Key activities: A discovery phase by the OBIE to understand the variety of payment accounts in scope and used in practice, understand gaps in existing functionality and modifications required to the exiting standards The development of standards by the OBIE for the products and functionality referred to above The implementation of those standards by the CMA9 as soon as is practical and no later than Release 4 	 Regulatory alignment: Fulfils the requirements of PSD2 through OB standards Open Banking adoption: Extends coverage of OB Standards to cards providers seeking PSD2 solutions Consumer / SME utility: Consumers would be able to access their full breadth of payments activity and benefit from comprehensive AIS and PIS services Security / Integrity: Consumers would be able to access their data without credential sharing and access their payments without putting cards on file 	PSD2

Detailed descriptions PSD2 Items (2/2)

Ref	Roadmap Scope Item	Description	Rationale	Aligns with
P21	PSD2 in-scope accounts (multi-currency)	 Scope Item description: Extension of OB R/W APIs to cover the full set of PSD2 multi-currency products not covered under the Order (including but not limited to currency cards, credit cards, currency accounts, charge cards, e-wallets, pre-paid accounts and payments enabled savings, deposit, Ioan and mortgage products) and comprehensively fulfilling the functional requirements of PSD2 Key activities: A discovery phase by the OBIE to understand the variety of payment accounts in scope and used in practice, understand gaps in existing functionality and modifications required to the exiting standards The development of standards by the OBIE for the products and functionality referred to above (and leveraging the learning from the development of international payments standards in item P10 of the Amended Order Timetable) The implementation of those standards by the CMA9 as soon as is practical and no later than Release 4 	 Regulatory alignment: Fulfils the requirements of PSD2 through OB standards Open Banking adoption: Extends coverage of OB Standards to cards providers seeking PSD2 solutions Consumer / SME utility: Consumers would be able to access their full breadth of foreign currency payments activity and benefit from comprehensive AIS and PIS services Security / Integrity: Consumers would be able to access their data without credential sharing and access their payments without putting cards on file 	PSD2
P22	Corporate accounts	 Scope Item description: Evaluation of OB standards to facilitate AIS and PIS for SME's with turnover in excess of £6.5m as required under PSD2 Key activities: An evaluation phase by the OBIE to assess whether the functionality referred to above should be developed as a standard. Evaluation criteria are likely to include demand for standards from SMEs/ASPSP/TPPs, availability of alternative solutions, alignment to PSD2 regulation, anticipated market impact, technical complexity and cost to implement and prioritisation of other OB items. (pending the outcome of the evaluation) The development of standards by the OBIE for the products and functionality referred to above (pending the outcome of the evaluation) The implementation of those standards by the CMA9 by Release 4 	 Regulatory alignment: Fulfils the requirements of PSD2 Consumer / SME utility: Extends coverage to larger businesses Open Banking adoption: Extends coverage to wider market Security / Integrity: Corporates would benefit from the OB security framework 	PSD2

Section 3 Governance and Funding

Governance will be shaped by principles consistent with IOSCO and nPSO standards

This section describes the approach to governance and funding the OBIE will adopt to ensure the OBIE can deliver against the commitments contained in the Amended Order Timetable and PSD2 Items. Governance will be shaped by the following principles, which are intended to be consistent with the governance standards developed by the nPSO and the Bank of England's requirements for the governance of systemically important financial market infrastructure operators.

Design principles	Description		
1. Transparent and fair	Governance must be easy to understand and represent the interests of all stakeholders		
2. Practical and workable	Governance must be responsive and thorough, and adapt to regulatory requirements		
3. Clear objectives	 Governance must reflect the core principles of the OBIE namely: to deliver the CMA Order and a comprehensive PSD2 solution (that can allow firms to comply with all of their obligations under PSD2 and the forthcoming RTS); to promote competition; to maximise the likelihood of adoption; to future-proof the OB Standards; and to promote good consumer outcomes 		
4. Independence	Governance must continue to reflect the principles of independence and control as currently laid out in the CMA Order		

Roadmap governance can be broken down into four components, which are presented in the following pages:

- Representation
- Decision making
- Ownership
- Funding

OPEN BANKING Representation: greater representation will be allowed for in the existing committee structure

	The following amendments will be made to the existing committee structure as is practical:
	 IESG will be increased by three stakeholder members representing e-wallets, credit cards and the nPSO although new participants will be limited to non-OE matters.
	 The PAG will be expanded to incorporate a broader cross-section of stakeholders and will consider all OB Roadmap matters to be in scope.
	 The PMG will be expanded to include a small number of representatives from non-CMA9 ASPSPs seeking to implement the standards and are seeking to contribute to ongoing program delivery. PMG will consider all Roadmap matters to be in scope.
Representation	 The TDA's membership will be increased to include representative and qualified members from the e-wallets and cards communities as agreed at IESG. Decision making for the TDA will be on a majority basis to account for the enlarged diverse attendance however a transparent escalation process will be created where disagreements can be escalated and decisions reviewed at the IESG for resolution. IESG decisions will be binding on the TDA.
	 The DR&A delivery working group will be reviewed in January 2018.
	 The existing working groups will be reviewed for effectiveness and may be rationalised or restructured.
	 The amendments proposed above will be subject to a 90 day review by the IESG and modifications potentially considered thereafter for approval by the CMA.

The structure of Decision Making and Ownership will continue in a similar manner

Decision making • The IESG will continue to operate in its current form. The responsibility to seek consensus among IESG members and ultimate decision making shall reside with the Implementation Trustee as per the principles of the Order and in alignment with the objectives of the Roadmap.

Ownership

 The OBIE will continue to operate as a member organisation. For clarification, the OBIE has been set up as a Company limited by guarantee. This is the same construct as a number of Schemes. The Implementation Trustee is its sole member.

Funding: the approach is consistent with the requirements of the Order and the transition of the OBIE to the nPSO

- The existing funding mechanism as determined under the Order will continue to fund the OBIE for as long as the OBIE remains an independent entity and at least until it becomes part of a wider industry funded body, subject to the following:
 - It is recognised that the PSD2 Items is a voluntary undertaking by the CMA9 and for the benefit of the wider financial services sector. It is also recognised that the intention of the OBIE is to transition to an industry funded organisation as soon as is practical in 2018/19. Subject to evaluation (including that the appropriate level of independence can be established and verified) and regulatory approval, it is envisaged this industry organisation will be the nPSO.
 - The costs associated with the PSD2 Items activity will be accurately and diligently measured by the OBIE. For the avoidance of doubt these costs are defined as those direct costs which are specifically attributable to the PSD2 Items, and wholly incremental to the standalone costs associated with the Order and free from apportioned and allocated indirect costs.
 - Upon the OBIE transitioning to the industry organisation the CMA9 will seek to offset those costs solely associated with the PSD2 Items against future dues payable to the industry organisation in a manner to be agreed at the time. It is recognised that the quantum of this rebate would be only a proportion of the costs solely associated with the PSD2 Items and where the proportion represents only that amount that would have been funded by non-CMA9 participants in accordance with their market share by relevant product.
 - The OBIE will explore on a best-efforts basis and provided those efforts do not jeopardise the delivery of the CMA Order, additional funding streams to offset those costs solely associated with the PSD2 Items
 - These additional funding streams may include voluntary contributions from non-CMA9 participants and commercialising OBIE owned assets, such as the Directory. It is recognised that monetising assets such as the Directory would likely facilitate a transition to the nPSO.

Funding

Section 4 Longer Term Items for Consideration

Introduction to the Longer Term Items for Consideration

This section lists items tabled by Open Banking stakeholders (including consumer representatives, regulators and TPPs) which were felt to overlap or be complementary to the Open Banking ecosystem and may become items for industry level and governmental consideration in due course. These items are not mandated by the CMA Order or PSD2 regulations and are therefore not delivery commitments. Nonetheless for the sake of completeness and to demonstrate open and collaborative representation across the Open Banking stakeholder groups they are included here as "Longer term items for consideration".

Longer term items for consideration by the OB ecosystem

Longer term items for consideration				
 Assessment of internationalisation and commercialisation of the OB Directory (to support transition to the nPSO) 				
 Provision of personal data (read only) as specified under GDPR data portability requirements (available through OB R/W v1.0) 				
 Provision of basic savings products and basic mortgage products standard APIs (read only) (leveraging OB R/W items P21, P22) 	By-products of PSD2 APIs			
 Provision of credit card product reference data (as referenced in the Credit Card market Study) 				
 Provision of FCA service metrics (as referenced in FCA CP17/24: "Information about current accounts services") 				
 Support for confirmation of payee (as referenced in the PSR's NPA) 				
 Thought-leadership for consumer related issues including vulnerable consumers, opportunities in debt advice / rehabilitation, fraud and security risks, data minimisation, consumer protections, debt advice use cases and opt-outs 	Adjacent industry initiatives			
 Identification and assessment of emerging fraud threats 				
 Data to support transaction risk analysis 				
 Overlap and convergence with pensions dashboard 				
 Provision of energy and utilities product reference data 				

Appendix

Glossary

AIS	Account Information Service		New Payment Service Operator
AISP	Account Information Service Provider		Open Banking
API	Application Programming Interface		Open Banking Implementation Entity
ASPSP	Account Service Payment Service Provider		Order Enhancement
BCA	Business Current Account		Order Enhancement Item
CA	Certificate Authorities		Personal Current Account
СМА	Competition and Markets Authority	PIS	Payment Initiation Service
DR&A	Dispute resolution and arbitration	PISP	Payment Initiation Service Provider
EBA	European Banking Authority	PMG	Programme Management Group
elDAS	EU regulation on electronic identification and trust services for electronic transactions in the internal market	PSD2	Payment Services Directive 2
FAPI	Financial API [Working Group]	PSU	Payment Services User
FCA	Financial Conduct Authority	R/W	Read / Write
GDPR	General Data Protection Regulation	RTS	Regulatory Technical Standards
HMT	HM Treasury	SME	Small-medium size enterprises
IESG	Implementation Entity Steering Group	TDA	Technical Design Authority
IOSCO	International Organization of Securities Commission	ТРР	Third Party Participant
МІ	Management information		