RESTRICTION OF PUBLICATION OF PART CLAIMED

Expert Economic Opinion

In relation to the Application to the Australian Competition and Consumer Commission for Authorisation of the Proposed Amalgamation of BPAY Group Pty Limited and BPAY Pty Ltd, eftpos Payments Australia Limited and NPP Australia Limited

NON-CONFIDENTIAL VERSION

Confidential to BPAY

Confidential to eftpos

Confidential to NPPA

Confidential – derived from confidential information of BPAY, eftpos and NPPA

Confidential to others

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Date: 2 April 2021

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TABLE OF CONTENTS

1. INTRODUCTION AND OVERVIEW

1. I have been engaged by King & Wood Mallesons, acting for Industry Committee Administration Pty Ltd (**ICA**), to provide an expert economic opinion on the application to the Australian Competition and Consumer Commission (**ACCC**) for authorisation of the amalgamation of BPAY Group Pty Ltd and BPAY Pty Ltd (together, **BPAY**), EFTPOS Payments Australia Limited (**eftpos**) and NPP Australia Limited (**NPPA**). Specifically, I have been asked to provide an expert economic opinion on:

   a. The boundaries of the affected markets;

   b. The likely effects of the proposed amalgamation on competition; and

   c. The likely synergies and other benefits to the public of Australia as well as the likely detriments to the public of Australia, using a counterfactual analysis, from the proposed amalgamation.

2. This report is based on my review of the Application, my communications with industry participants, my review of factual statements of industry participants and the Expert Industry Opinion of Mr Lance Blockley, as well as information available on the public record such as publications of the RBA.

1.1. Qualifications

3. I am a Vice President of Charles River Associates (CRA), a global consulting firm comprised of a range of experts in economics, finance and strategy, with offices in Australia and throughout Europe and North America. I live in Sydney and manage CRA's Sydney office.

4. I have been employed by CRA since October 2004. From then until January 2014 I was based in CRA's London office within CRA's European Competition Practice. I became a Vice President in 2011. Since January 2014 I have been based in Sydney.

5. Prior to joining CRA, I worked in 1997 and 1998 as an economist for the Australian Competition and Consumer Commission (the ACCC) and in 1999 and 2000 as a competition lawyer with Mallesons Stephen Jaques (now King & Wood Mallesons), before studying and earning a Masters degree in Economics and a PhD in Business Administration from the University of California, Berkeley. I also hold a Bachelor of Economics (with first class honours) and a Bachelor of Laws (with first class honours) from the Australian National University.

6. My roles with CRA have involved advising firms and authorities, preparing expert reports and giving expert testimony in the context of a wide variety of competition law matters (including market investigations, merger proposals and reviews, authorisation applications, allegations of anti-competitive behaviour and damages claims) across a range of jurisdictions including the European Union and European Member States as well as Australia. My experience has involved many sectors of the economy, including retail, manufacturing, mining, banking, transport, health, telecoms, broadcasting and post. I have also published numerous papers and presented at many forums on competition matters. My CV is included as Annex A to this report.

7. By reason of the above I have particular expertise in two sub-fields of economics: (i) industrial organisation; and (ii) competition economics (i.e. the economics of competition law).

1.2. Compliance with the Expert Evidence Practice Note and the Harmonised Expert Witness Code of Conduct

8. I have read, understood, complied with and agree to be bound by the Federal Court of Australia's Expert Evidence Practice Note (GPN-EXPT). I have also read, understood, complied with and agree to be bound by the Harmonised Expert Witness Code of Conduct (Annexure A to the GPN-EXPT). In particular, I understand that I am not an advocate for either party and that I have a paramount duty, overriding any duty to any party to the proceedings or other person, to assist the ACCC (and on appeal the Tribunal) impartially on matters relevant to my area of expertise.

9. All the opinions and views expressed in this report are my own and are based wholly or substantially on specialised knowledge arising from my training, study or experience.

10. I have made all inquiries that I believe to be desirable and appropriate (save for any matters identified explicitly in this report) and no matters of significance that I regard as relevant have, to my knowledge, been withheld from the ACCC.

1.3. Outline of this report

11. This report is structured as follows.

    a. In Section 2, I provide some background to the proposed amalgamation, including a couple of key features of the payment services industry for the ACCC's assessment of the proposed amalgamation – the existence of network externalities and coordination challenges for the adoption of new payment services and initiatives – and background on the amalgamating entities and the Australian low-value payments landscape.

    b. In Section 3, I present my views on relevant markets (i.e. useful frameworks for assessment of the proposed amalgamation).

    c. In Section 4, I discuss the likely counterfactuals to the proposed amalgamation that I use as comparators in my assessments of the likely effects of the proposed amalgamation on competition and the likely public benefits and detriments of the proposed amalgamation.

    d. In Sections 5 to 9, I provide my views on the likely effects on competition of the proposed amalgamation (or, more precisely, with reference to Section 90(7) of the Competition and Consumer Act (CCA), whether the proposed amalgamation would not have the effect, or would not be likely to have the effect, of substantially lessening competition);

    e. In Section 10 and 11, I consider in turn, the likely public benefits and detriments of the proposed amalgamation; and

    f. In Section 12, I provide my conclusion. In brief, I find that the proposed amalgamation is not likely to substantially lessen competition and that it is likely to deliver net public benefits.

2. BACKGROUND

2.1. Network externalities and coordination issues in payment services

12. In economics, a network effect arises when the value of a service to an individual or entity increases in the number of other individuals/entities that have access to the service. Phone networks are a classic example. A phone is only useful if other people have phones, and phones become more valuable the more that other people have phones and can be contacted over telephone networks.[1]

13. Same-side (direct) and cross-side (indirect) network effects are often distinguished. Phone networks and social media networks are examples of networks with same-side network effects: the more people that have phones or that use a particular social media service, the more valuable each network is to each of them. Many platforms, however, exhibit cross-side network effects, where the value to participants on one side of the platform (e.g. advertisers) increases with the number of participants on the other side of the platform (e.g. viewers of audio-visual content).

14. Cross-side network effects are a key feature of the payments landscape in any country, and indeed globally. Payment networks are two-sided networks, with payers/consumers and their financial institutions on one side and payees/merchants and their financial institutions on the other side. Payer/consumer choices among payment alternatives depend on what alternative payment services payees/merchants accept. Currently, paying a physical merchant with a card is almost always possible, whereas few merchants offer the option of paying directly into their account over the NPP using a PayID. Cards therefore currently enjoy strong cross-side network effects, while PayID does not. At the same time, merchant choices as to which payment alternatives to accept depend on the extent to which consumers have ready access to those alternatives. This is because there are costs to merchants of setting themselves up to accept a new payment method, and those costs will only be justified if a sufficient number of consumers will use the method.

15. A successful payment service will therefore, typically, be one that achieves a high degree of ubiquity – i.e. widespread adoption – among payers and payees. A payment service that fails to achieve widespread adoption, on one side or the other, is likely to struggle for volume and scale in competition with alternatives that do.

16. Payment service providers including Visa, Mastercard, eftpos, BPAY and the NPP supply their services mainly to financial institutions, not to payers/consumers or payees/merchants directly.[2] Those financial institutions then on-supply these payment services to their customers – payers/consumers and payees/merchants – as part of packages of financial

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1 The concept was clearly stated by Theodore Vail, President of the American Telephone & Telegraph Company (AT&T) in AT&T's Annual Report of 1908 (at page 21):

> *A telephone – without a connection at the other end of the line – is not even a toy or a scientific instrument. It is one of the most useless things in the world. Its value depends on the connection with the other telephone – and increases with the number of connections.*

See https://beatriceco.com/bti/porticus/bell/pdf/1908ATTar_Complete.pdf.

2 See ANZ statement, paragraph 7, Westpac statement, paragraphs 7(a), 9 and 12, BPAY statement, paragraph 22, Coles statement, paragraph 13 and the Expert Industry Opinion of Lance Sinclair Blockley, 18 March 2021, paragraphs 81-83 and 97.

services including bank accounts, lending and other services.[3] It is important for financial institutions, in order to serve their customers well and compete with other financial institutions, to provide their customers with convenient and efficient ways to make and receive payments. The demand from financial institutions for payment services is therefore a derived demand that reflects the demand of payers and payees – i.e. the customers of those financial institutions – for effective, efficient, reliable and secure payment services.[4]

17. The demand from financial institutions for payment services reflect the same network effects just described. If a payment service has limited adoption among financial institutions, it will lack a high degree of ubiquity among payers and payees. It will therefore be less attractive to each financial institution than an alternative payment service that enjoys greater ubiquity of adoption.[5]

18. To adopt a new payment service or initiative, a financial institution will typically have to commit scarce capital and IT and managerial resources to developing the capability of the financial institution to interface with the new service or initiative.[6] A payment scheme will therefore typically rely on financial institutions allocating scarce capital and staff to "roll out" its initiatives within the IT systems of those institutions.[7] When multiple new payment services or initiatives seek adoption by financial institutions, they often must "compete" for these scarce resources (including in situations where the payment services or initiatives are not substitutes and do not compete in any payment services market).[8] In this situation, network effects create multiple potential adoption outcomes (equilibria) and, therefore, coordination problems.[9]

19. As Farrell and Klemperer (2007) explain, "coordination is especially difficult – and the institutions to aid it work less well – when […] the incentive for coordination coexists with conflict over what to coordinate on".[10] Farrell and Klemperer go on to observe that "coordination 'breaks down' when adopters choose incompatible options but would all prefer to coordinate," and that this can happen due to uncertainty ("confusion") over what others are doing and even when there is certainty over what others plan to do (as long as there is sufficient differentiation between the services).[11] In each case, the outcome will

3 See NAB statement, paragraph 12.

4 See Westpac statement, paragraphs 7(a), 9 and 12.

5 These considerations are captured well in the ANZ statement, paragraphs 69-71. See also the NPPA statement, paragraph 46.

6 See, for example, CBA statement, paragraphs 69-71 and **[CONFIDENTIAL TO OTHERS]**. See also the NAB statement, paragraph 21.

7 See CBA statement, paragraphs 69-71.

8 See CBA statement, paragraph 13.

9 For a good overview of the coordination problem with network effects, see section 3.4.1 in Joseph Farrell and Paul Klemperer (2007), "Coordination and Lock-in: Competition with Switching Costs and Network Effects", Chapter 31 in the *Handbook of Industrial Organization, volume 3*, edited by Mark Armstrong and Robert H. Porter, Elsevier North-Holland.

10 Above note 9, page 2022.

11 Above note 9, page 2022.

by dysfunctional: an equilibrium with small and unsuccessful networks rather than large and successful networks.[12]

20. Farrell and Klemperer refer to the latter situation (where there is certainty, but differentiation in the services) as "splintering". Without coordination, and with scarce resources within financial institutions, different financial institutions will prioritise different initiatives.[13] Where the services are sufficiently differentiated for splintering to occur (including where the services are not substitutes in any market, but vie for scarce resources within each adopter), even certainty over the plans of each adopter is not sufficient to avoid the coordination problem. As Farrell and Klemperer put it: "[the] solution requires a leadership-like ability to focus on 'let's all do X instead'".[14]

21. Even where multiple initiatives from different payment service providers serve different needs and all may be expected to be adopted eventually, resource constraints within financial institutions may preclude their simultaneous adoption,[15] and differences in investment priorities and sequencing chosen by different financial institutions are likely to result in the "confusion" and "splintering" problems just described.[16] The consequence is likely to be delays in achieving the widespread adoption needed to generate significant network effects, for all initiatives.[17]

22. Coordination uncertainty also gives rise to a "wait and see" problem for new payment services and initiatives.[18] When there is uncertainty regarding whether a new payment services or initiative will achieve widespread adoption among other financial institutions, each financial institution will have incentives to "wait and see" until a sufficient number of financial institutions have adopted the service or initiative and greater certainty has

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12 Farrell and Klemperer refer to a number of products that either never made it to market or were significantly delayed due to coordination problems of this kind, including quadraphonic sound in the 1970s, a delay for over a century in the commercialisation of fax systems due to incompatibility between competing systems, and delays in the adoption of 56K modem technology, Unix operating systems and AM stereo: above note 9, pages 2023-2024. In the AM stereo case there appears to have been a concern among radio stations to avoid explicit coordination due to antitrust fears.

13 See, for example, CBA statement, paragraphs 13-15 and 85, **[CONFIDENTIAL TO OTHERS]**. The NAB statement also observes that resource capacity varies by financial institution: NAB statement, paragraph 29. See also the NPPA statement, paragraph 52, which refers to differing commercial strategies, investment cycles and available funding of different financial institutions.

14 Above note 9, page 2023.

15 **[CONFIDENTIAL TO OTHERS]**. More generally, **[CONFIDENTIAL TO OTHERS]**.

16 See NAB statement, paragraph 31 ("outcomes can vary significantly between participants across the ecosystem") and paragraph 29 ("[e]ach participant, scheme and regulator acts in its own customer, community and commercial interests. This has the practical effect of the industry lacking a coherent and aligned high level strategic roadmap designed to foster efficient innovation and implementation").

17 This is well captured in the ANZ statement: see paragraph 83. See also paragraph 84 of the NPPA statement, which describes delays in the development of the MPS associated with coordination issues among a fragmented industry.

18 Farrell and Klemperer briefly touch on this "wait and see" problem in their chapter, referring to it as a "fear of breakdowns" and observing that it "can inefficiently slow adoption through strategic uncertainty": above note 9, page 2024. An illustration of this kind of thinking in the payments industry is given in the CBA statement, **[CONFIDENTIAL TO OTHERS]** and paragraph 113(d).

developed.[19] The benefit of a "wait and see" approach in the context of uncertainty is that it avoids the chance of the financial institution making investments that ultimately become stranded if the initiative is ultimately not widely adopted by others.

23. The consequence of delayed investments by financial institutions is that, at best, new payment services and initiatives will be delayed in reaching the market, and at worst they may never make it to market and may need to be abandoned due to the failure to achieve the necessary investments and adoption by a critical mass of financial institutions.

24. In summary, network externalities can result in market failures in the payment services industry, whereby the inability to coordinate investments across autonomous financial institutions to achieve network effects in a timely fashion may lead to inefficiently delayed and/or low adoption of payment services and initiatives. The factual statements accompanying the Application suggest that this is more than a theoretical possibility (see Section 10.1 of this report).

25. Solving these coordination problems is therefore a key challenge facing many new payment services and initiatives. Payment schemes and regulators often resort to non-market solutions such as mandates that require the necessary investments by financial institutions by certain dates, with financial penalties for institutions that fail to invest and be ready to interface with the new services within the required timeframes.[20] These solutions are far from ideal. I understand that due to limited IT resources and many demands internally for those resources, financial institutions will often choose to pay (or face down) the penalties rather than make the investments within the mandated timeframes, and on the other side of the mandates, payment schemes would generally prefer not to be in the position of having to impose penalties on their customers and their threats to do so may not be credible.[21]

2.2. The Amalgamating Entities

2.2.1. EPAL

26. EPAL operates eftpos, Australia's domestic debit card payment system, which facilitates real-time electronic retail payments by accessing debit accounts. While the eftpos system has existed since the 1980s, eftpos was only incorporated in 2009 and – in recognition of the threat to eftpos from international card schemes (ICS), in particular Visa and Mastercard – significant developments in the eftpos system have taken place since then, including the development of a common set of scheme rules, a centralised processing hub, the rollout of chips and contactless cards, mobile and tokenisation functionality and eftpos digital/online capability.[22] eftpos also recently acquired BeemIt, a mobile payment app, from three of the major financial institutions, and is developing a Digital ID solution and plans for QR code orchestration.[23]

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19 See, for example, **[CONFIDENTIAL TO OTHERS]**.

20 See, for example, the NPPA statement, paragraph 47.

21 Expert Industry Opinion of Lance Sinclair Blockley, 18 March 2021, paragraph 464 and 505.

22 See eftpos statement, paragraph 139(b).

23 See eftpos statement, paragraphs 20(b)(v) and 20(e)(v). For more details on BeemIt, see eftpos statement, paragraph 21(b).

27. [CONFIDENTIAL TO EFTPOS].

Figure 1: eftpos payment volumes – actuals (FY17-FY20) and forecasts (FY21-FY25)

[CONFIDENTIAL TO EFTPOS]

Table 1: Shares of eftpos' payment volumes by payment type – actuals (FY17-FY20) and forecasts (FY21-FY25)

[CONFIDENTIAL TO EFTPOS]

28. [CONFIDENTIAL TO EFTPOS].[24] [CONFIDENTIAL TO EFTPOS]

29. [CONFIDENTIAL TO EFTPOS].

30. [CONFIDENTIAL TO EFTPOS].

2.2.2. BPAY

Overview

31. BPAY Group Holding Pty Ltd (BPAY HoldCo) owns 100% of BPAY Group Pty Ltd and BPAY Pty Ltd (together called "BPAY Opco") and 75% of sypht.[25] I understand that BPAY Group Pty Ltd and BPAY Pty Ltd (i.e. "BPAY Opco") is to be transferred to NewCo.[26] I also understand that BPAY Pty Ltd owns and operates the BPAY Scheme with employees and related centralised services provided by BPAY Group Pty Ltd,[27] and that there are essentially three services provided by BPAY Scheme: BPAY Payments, BPAY View[28] and Osko.[29]

BPAY Payments

32. BPAY Payments is an electronic payment service that exchanges data between financial institutions specifically dedicated to bill payments. The BPAY Payments service was established in 1997 and has grown with the growth of internet banking and as more and more billers have adopted it.

33. When paying a bill using BPAY Payments, customers typically log into their financial institution's online banking portal or mobile app, find the BPAY biller code and their customer reference number (CRN) on their bill, and enter these, together with the payment

24 [CONFIDENTIAL TO EFTPOS].

25 BPAY statement, paragraphs 2 and 11-12.

26 BPAY statement, paragraphs 2-3.

27 BPAY statement, paragraph 10.

28 For a description of BPAY View, see the BPAY statement, paragraph 17(c).

29 BPAY statement, paragraphs 12 and 17.

amount, into the corresponding fields in the portal or app, and then confirm that they wish to make the payment.[30]

34. The customer's financial institution then debits the customer's account and either credits the biller's account (if the biller is with the same financial institution) or settles with the biller's financial institution (which credits the biller's account). The transaction instructions are routed via a Central Interchange Processor (CIP) operated by BPAY, as explained below.[31]

    a. BPAY provides each member Payer Institution (PI), each day, with a file (the Biller Master File) that contains details of each biller enabled for BPAY payments. Amongst other data, this file contains the biller's name, relevant biller ID code, format and validation information for their Customer Reference Numbers and their Biller Institution (BI).[32]

    b. At least twice each business day,[33] the member PIs send a batch file detailing the transactions initiated that day by their customers to BPAY's CIP, which, at the end of each business day (if not more frequently),[34] sorts the data and sends a batch file to each BI including details of all transactions made to their billers (including Biller IDs, CRNs and payment amounts). The CIP also calculates the net amounts owing by each Participant member to each other Participant member.

    c. BPAY transactions are then settled once per business day using the DE system over BECS (with BPAY using one of Australia's largest financial institutions as its agent in BECS to facilitate this interbank settlement). If a payment is made during a business day, funds are available to the biller the next business day, but value dated as at the previous business day.

35. The BPAY Payments service can therefore be viewed as an overlay service over the DE infrastructure. However, at the same time, as just explained, BPAY operates its own payment processing infrastructure (essentially a clearing infrastructure) consisting of an addressing service (Biller IDs and CRNs), communication of payment details between financial institutions and the calculation of net settlement amounts by the CIP.

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30 See BPAY statement, paragraph 17(b). Payments using the BPAY service can also be initiated by the customer calling their financial institution's call centre and providing the BPAY biller code and CRN. BPAY View is an additional value-add service that delivers bills directly to the customer's online banking portal and the customer may receive an SMS, email or bank message reminder to pay the bill. For customers of some financial institutions, there is also the possibility of scanning a QR code on a bill, which will then populate the required fields in their financial institution's mobile banking app.

31 The following description of how transaction instructions are routed was developed based on discussions with BPAY.

32 The Biller Institution details are used by the Payer Institution to identify their own billers, payments for which are usually processed internally, and also to assist where they have a need to contact the Biller Institution (for example when there is a dispute or an unauthorised transaction).

33 Some PIs send files multiple times a day and on non-business days.

34 Some BIs receive multiple files a day and on weekends.

36. The BPAY Payments service offers billers advantages compared to receiving direct credits or direct debits over the Direct Entry (DE) system or debit/credit card payments.[35]

    a. First, compared to direct credits, BPAY Payments provides the added value of payment reconciliation information for billers (specifically, a customer reference number or CRN) which allows payments to be automatically matched to customer accounts.

    b. Second, compared to "pull" payment services such as direct debits and debit/credit card payments, customers of billers often prefer to remain in control of their payments (BPAY Payments affords them that control as it is a "push" payment service) and payments that arrive via BPAY Payments are pre-authorised, whereas with direct debit payments and debit/credit card payments there is the risk that the customer will not have sufficient funds and the payment may be dishonoured.

37. On the other hand, direct debits and "card on file" debit/credit card payments offer an advantage for billers of being "pull" payment services that automatically deduct funds from the customer's bank account and do not rely on the customer remembering and actioning to "push" a payment to the biller every month (i.e. direct debits and "card on file" debit/credit card payments promise fewer overdue payments).

Osko services

38. BPAY's Osko Service 1 is an overlay service over the core SCT service provided by the NPP. I understand that Osko Service 1 differs from using just the core SCT service in that Osko Service 1 adds service level parameters for financial institutions to follow, including regarding the timeliness of payments.[36] BPAY's planned Osko Service 2 and Osko Service 3 are also overlay services over the NPP.

    a. Osko Service 2 ("pay with document") is a service that allows for additional information relating to a payment to be received by the payee at the same time as receiving the payment (e.g. the receipt of a payslip together with a salary payment).[37] I understand that BPAY proposes to launch Osko 2 later this year, although the timing is not clear from the BPAY statement,[38] and **[Confidential to BPAY]**.[39]

    b. Osko Service 3 ("request to pay") is a service that would allow a payee to initiate a request for payment that would be sent to a payer's online banking portal or mobile banking app, where the payer would then have the ability to choose when and how much of the request to pay.[40] This would therefore be a "push" payment overlay service where the payer would remain in control of the payment. Like the BPAY Payments service:

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35 See BPAY statement, paragraph 24. See also the NPPA statement, paragraph 31, regarding the differences between BPAY Payments and direct debits. See also the Expert Industry Opinion of Lance Sinclair Blockley, 18 March 2021, paragraphs 473-474.

36 See BPAY statement, paragraph 17(d), and NPPA statement, paragraphs 43-44.

37 BPAY statement, paragraph 19(b).

38 See BPAY statement, paragraph 19(b).

39 See note 90 for details.

40 See BPAY statement, paragraph 19(c).

i. Osko Service 3 would offer an advantage for billers over direct credits, as while the customer remains in control of the timing and amount of the payment (as is the case with direct credits), Osko Service 3 would allow for automatic reconciliation of payments to invoices; and

ii. Osko Service 3 is a "push" payment service, which distinguishes it from direct debit type services and "card on file" debit/credit card services where the payee is in control of the payment.

c. I understand that Osko Service 3 **[Confidential to BPAY]**.[41]

Other services

39. **[CONFIDENTIAL TO BPAY]**.[42]

2.2.3. NPPA

40. NPPA manages and operates the New Payments Platform (NPP).[43] The NPP was launched in February 2018, and is an open access infrastructure for fast payments, enabling near real-time funds settlement, 24/7 and with payment messages capable of carrying much richer information that the legacy Direct Entry (DE) system it has been designed to supersede.[44] The NPPA statement summarises the differences between the NPP and the DE system, including near real-time settlement, 24/7 operation, rich data and the PayID addressing system.[45]

41. At the moment the only service offered by the NPP is the Single Credit Transfer (SCT) service.[46] This is a direct credit service, and while it offers faster settlement, greater availability and richer data that direct credits over the DE system, its basic nature is the same: both are "push" payment services initiated by the payer. It is therefore best suited for the payment types where direct credits over the DE system currently dominate: P2P and P2B direct credit payments and bulk file credit payments such as B2P and G2P disbursements (e.g. payroll and superannuation payments). All NPP participants are obliged by the NPP regulations to receive SCT messages, but they are not obliged to send them.[47]

42. While it was originally anticipated that there would be a number of "overlay" services accessing the NPP infrastructure,[48] the only overlay service that currently does so is

41 See note 91 for details.

42 **[CONFIDENTIAL TO BPAY]**.

43 NPPA statement, paragraph 12.

44 See https://www.rba.gov.au/payments-and-infrastructure/new-payments-platform/ and see also NPPA statement, paragraphs 18 and 23-25.

45 NPPA statement, paragraphs 23-25.

46 NPPA statement, paragraph 39.

47 NPPA statement, paragraph 40.

48 See NPPA statement, paragraphs 48-49.

BPAY's Osko Service 1, which adds service level parameters to the core SCT service.[49] For NPP participants to make use of Osko Service 1 they must enter a separate commercial agreement with BPAY from their agreement with the NPP.[50] NPP participants that have not opted to subscribe to Osko Service 1 can only make use of the NPP by sending or receiving SCT messages.[51]

43. NPPA has started to develop its own services over the NPP infrastructure in addition to the core SCT service. In particular, the following are part of the NPPA's roadmap as of October 2020.

a. **Category purpose code business services (CATSCT).** These services are designed to support specific payment types, specifically payroll, tax, superannuation and e-invoicing payments. Category purpose codes essentially add additional data elements for the specific payment types to the core SCT message. All NPP participating institutions are obliged to receive (but not to send) NPP payment messages formatted with additional defined data elements for payroll, tax, superannuation and e-invoicing by April 2021.[52] I understand that NPPA hopes that these category purpose codes will assist the NPP to migrate the large volume of B2P and G2P "unattended bulk payments" currently processed over the DE system.[53]

b. **The mandated payments service (MPS).** The MPS was originally developed as a way to migrate direct debit bill payments from the DE system.[54] Direct debits are "pull" payments by nature. The core SCT message service of the NPP, by contrast, is a "push" service. In order for the NPP to develop a real-time "pull" functionality to migrate direct debit volumes, NPPA has developed the concept of "mandates" (customer authorised payment arrangements) to be created and stored centrally, with payment initiations by payees that reference those mandates.[55] While the MPS

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49 NPPA statement, paragraphs 42-43. See also paragraph 66, which explains that "[t]he SCT service forms the basis of Osko by BPAY".

50 NPPA statement, paragraph 44.

51 NPPA statement, paragraph 45.

52 NPPA statement, paragraph 67.

53 See paragraph 105 of the NPPA statement.

54 NPPA statement, paragraphs 72 and 74.

55 See NPPA statement, paragraphs 72-73. The MPS offers a number of advantages for consumers and merchants compared to DE direct debits (NPPA statement, paragraphs 73 and 77):

a. MPS is more digital and less manual than DE direct debits;

b. MPS mandates are to be held centrally by the NPP and if set up using PayIDs can continue in effect even when the payer changes financial institution (or just the account for the payments to be withdrawn from). In this sense, they have an advantage over DE direct debit authorities that are held by merchants and associated with a particular BSB and account number of the payee, which means they must be re-established if a payee changes financial institution (or wants to use a different account for the payments);

c. The centralisation of the MPS mandates also means that MPS will enable account holders to have greater visibility over all of their direct debit arrangements and greater ability to suspend or cancel the arrangements; and

d. For merchants, benefits compared to DE direct debits include real-time settlement and real-time notification of suspensions and cancellations.

was originally developed to support direct debit migration, it has the capability of being used for retail payments (in particular, merchant-initiated online retail payments including in-app payments, similar to "card on file" payments).[56] All NPP participants are required to implement important elements of the MPS by December 2021.[57]

44. The NPPA statement makes clear that among the NPPA's strategic imperatives and central to its focus is to develop the category purpose code business services and the MPS, in order to grow the NPP's volumes.[58]

2.3. The Australian Low-Value Payments Landscape

45. The main low-value payment infrastructures[59] in Australia are the card-based payment infrastructures of the ICS (Visa, Mastercard, American Express and Diners Club) and eftpos – used mainly for retail payments and bill payments – and the direct account-to-account "Direct Entry" (DE) system of bilateral links between financial institutions – used mainly for non-retail payments (P2P payments, bill payments, and B2P / G2P disbursements). BPAY plays a relatively small and niche role mainly in the bill payment space. While the NPP is a relatively small player today, it is anticipated that over time the majority of the payment volumes currently processed by the DE system will migrate to the NPP.

46. The following two figures present shares of low-value payment infrastructures in Australia, in volume and transaction value terms, respectively, from FY11 to FY20, with forecasts for FY21-FY25. The data on which these figures are based differ from the data in Appendix V of the Expert Industry Opinion as **[CONFIDENTIAL TO EFTPOS]**.[60] **[CONFIDENTIAL TO EFTPOS]**.

Figure 2: Low-value payment infrastructures – shares by volume

[CONFIDENTIAL TO EFTPOS]

56 See NPPA statement, paragraph 74. See also NPPA's October 2020 Roadmap.

57 NPPA statement, paragraph 78.

58 NPPA statement, paragraphs 94(b) and (c) and 104-108.

59 Other payment infrastructures in Australia include the High Value Clearing System (HVCS) as well as specialist infrastructures such as Austraclear for debt securities, CHESS for equity securities and PEXA for property transfers. The focus of this report is on non-specialist infrastructures for low value payments, because this is the nature of each of the amalgamating entities, and I do not discuss HVCS, Austraclear, CHESS or PEXA further in this report.

60 **[CONFIDENTIAL TO EFTPOS]**.

Figure 3: Low-value payment infrastructures – shares by value

[CONFIDENTIAL TO EFTPOS]

47. As can be seen in the figures above, card schemes represent the majority of low-value payments in Australia by volume, however in value terms the DE system dominates, and this "value" dominance is forecast to gradually transfer to the NPP. A number of other features of these figures are worth highlighting:

    a. The decline in the use of cash for payments over the past decade that is forecast to continue;

    b. The corresponding growth in card payments, and in particular Visa/Mastercard debit card payments, which is also forecast to continue;

    c. **[CONFIDENTIAL TO OTHERS]**;

    d. **[CONFIDENTIAL TO EFTPOS]**;

    e. The small but steady nature of BPAY's share, historically and as forecast to 2025;

    f. The growth of the NPP at the expense of the DE system; and

    g. Even by 2025, when the NPP is forecast to have migrated more than half of the DE system volumes, the three amalgamating entities together will represent only around **[CONFIDENTIAL – DERIVED FROM CONFIDENTIAL INFORMATION OF BPAY, EFTPOS AND NPPA]** of low-value payment volumes.

48. Card-based payment schemes have dominated non-cash retail payments for many years, reflecting that card-based systems have been specifically designed for the retail payment environment, offering the near instant authorisation messaging that is generally required for retail contexts. At the same time, direct account-to-account systems have dominated non-retail payments.[61] However, there is a degree of convergence, particularly in bill payments, and in the future there is the potential for further convergence with direct account-to-account systems (in particular the near real-time NPP) developing better retail payment capability and card-based systems developing non-retail payment capability.

49. A number of payment services are provided over the low-value payment infrastructures discussed above, including payment services from the infrastructure providers themselves, and also overlay services (Osko) over the NPP, and "veneers" such as PayPal and BNPL schemes that make used of the ICS card-based infrastructures. Some of these "veneers" have developed significant payment processing infrastructures of their own. For example, PayPal and BNPL schemes have developed real-time payment communications infrastructures to communicate payment details to their merchant networks, while accessing the card-based infrastructures of the ICS as an intermediary "merchant".

50. In addition, stored value payment schemes such as AliPay and WeChat Pay and closed loop store cards (e.g. Myer Card and fuel cards) are present in Australia. I understand that

61 The distinction between the payments typically processed by card-based schemes and payments typically processed by direct account-to-account systems can be seen in the table below paragraph 442 of the Expert Industry Opinion of Lance Sinclair Blockley, 18 March 2021, which shows average transaction values (ATVs) for card-based payments ($46 for debit card payments and $109 for credit card payments) are an order of magnitude lower than ATVs for direct account-to-account systems (DE, BPAY and the NPP).

AliPay and WeChat Pay make use of the DE system to pay merchants on behalf of their users.

51. The table in Annex B presents the various existing and potential future services of the amalgamating entities and other payment services by payment type

3. FRAMEWORKS FOR ASSESSMENT

3.1. Approach to Market Definition

3.1.1. Useful frameworks

52. I view the market definition task in a competition law matter as to identify a *useful framework or useful frameworks* for assessing the issues in question.[62] The issues in question in the context of an application for authorisation of a proposed amalgamation are:

a. whether the proposed amalgamation would not have the effect or be likely to have the effect of substantially lessening competition; and

b. whether the proposed amalgamation would result, or be likely to result, in a benefit to the public, and that benefit would outweigh the detriment to the public that would result, or be likely to result, from the proposed acquisition.[63]

53. Market definition is typically not a precise science, and there may be a number of useful frameworks for assessing the issues in question. Moreover, it follows from its nature as an economic concept in the social (rather than physical) sciences that market boundaries are often blurred rather than sharp. Brunt has explained that it is therefore important when attempting to define relevant markets not to lose sight of the wood for the trees: market definition is not an end in itself – it is only a tool for the analysis of other questions.[64]

> *It must constantly be borne in mind that market definition is but a tool to facilitate a proper orientation for the analysis of market power and competitive processes – and should be taken only a sufficient distance to achieve a legal decision. The elaborateness of the exercise should be tailored to the conduct at issue and the statutory terms governing breach (or authorisation).*

54. Indeed, it will often be possible to conclude on whether an amalgamation would not have the effect or be likely to have the effect of substantially lessen competition (and on the likely

62 This follows the "purposive" approach to market definition: markets that are defined as "relevant" competition law markets should provide *useful frameworks* for the assessment of the particular questions being asked by the legal provision. Relevant markets for competition law purposes may therefore differ from markets defined by economists or business people for other purposes, such as when referring more generally to an industry as a whole (e.g. "the insurance market") or specifically to a location where sellers and buyers interact (e.g. "farmers' markets" or "spice markets"). As Norman and Williams explained, the question is: "what definition of market will best assist in analysing the processes of competition relevant to the case?": Neville R. Norman and Philip L. Williams (1983), "Analysis of Market and Competition under the Trade Practices Act: Towards the Resolution of Some Hitherto Unresolved Issues," 11 *Australian Business Law Review* 396 at 400.

63 Section 90(7) of the *Competition and Consumer Act* (CCA).

64 Maureen Brunt (1990), "Market Definition Issues in Australian and New Zealand Trade Practices Litigation," 18 *Australian Business Law Review* 86 at pages 126-127.

net direction of public benefits/detriments of an amalgamation) without settling on a single precise relevant market.

55. Therefore, in this section I propose a number of relevant markets that I consider to be useful frameworks for assessment of the issues in question, without suggesting that these are the only possible useful frameworks, nor that their boundaries are sharp.

56. I consider that this approach is consistent with the approach laid out in the ACCC's Merger Authorisation Guidelines (paras 6.12-6.13), which state:

> *Market definition is a tool to assist in assessing an authorisation application. Defining the relevant areas of competition identifies the range of buyers and sellers that could be affected by the proposed acquisition, and the nature of the competitive environment in which the proposed acquisition will occur. It assists in identifying the likely competition effects, benefits and detriments, and the extent to which other factors might constrain such effects.*
>
> *However, it is rarely possible to draw a clear line around the market, and it is often sufficient to identify the relevant areas of competition in which the proposed acquisition or its effects will occur, without precisely defining the boundaries of the relevant market.*

57. The ACCC's Merger Guidelines similarly state (para 4.4):

> *It is rarely possible to draw a clear line around fields of rivalry. Indeed, it is often possible to determine a merger's likely impact on competition without precisely defining the boundaries of the relevant market. For example, if the consolidation of the merger parties' activities is unlikely to substantially lessen competition in a narrow product and geographic area, then it is also unlikely to do so in a more broadly defined product and geographic area and, therefore, a conclusive view on the relevant market may not be necessary. Similarly, when a merger is likely to substantially lessen competition in any number of potential markets, it may be unnecessary to define the precise market boundaries.*

3.1.2. Starting points and close substitutes

58. The starting points for a market definition assessment in the context of an application for authorisation of a proposed amalgamation are the products or services supplied by the entities in question or that the entities in question plan to provide in the future. These are the "focal" products and services that we identify as our initial "candidate" markets.

59. After identifying these starting points, the key consideration when defining relevant markets is an assessment of close substitutes (i.e. good alternatives) to the focal products that act or will act as effective constraints on the prices and quality of the focal products. Close substitutes should be included within the relevant market together with the focal product.

3.1.3. Market definition dimensions

60. Market definition analyses typically consider at least two dimensions: the product dimension and the geographic dimension.

a. The product dimension is the set of products that represent close substitutes and constraints on the focal product for the analysis.

b. The geographic dimension is the geographic area over which products supplied in or from different geographic locations represent close substitutes and constraints on the focal product supplied in or from its location.

61. Sometimes other dimensions are also considered, including functional and time dimensions.

    a. The functional dimension refers to the level or levels of the supply chain that are relevant to the analysis. For example, in some cases it may be appropriate to distinguish "final" retail markets from "intermediary" wholesale markets, while in other cases it may be appropriate to define a single market that includes sales at both the retail level and the wholesale level. Different functional market dimensions are likely to be relevant when a proposed amalgamation involves one or more vertically integrated firms or where the proposed amalgamation brings together firms that operate at different levels of a supply chain.

    b. The time dimension may be important when the assessment of a proposed amalgamation needs to be forward looking and where the close constraints on a focal product may change over time. Market boundaries may evolve over time as the closeness of substitutes – i.e. the strength of constraint from alternative products – evolves.

3.2. Useful frameworks for assessing the Application for Authorisation

62. The three amalgamating entities each supply low value payment services to financial institutions (and in some cases directly to merchants and consumers) and also operate low value payment infrastructures, that are or could be, at least in principle, supplied to third-party payment service providers.[65] Therefore, there appear to be at least two functional levels of relevance for assessment of the likely effects and likely benefits and detriments of the proposed amalgamation:

    a. Low value payment infrastructures; and

    b. Low value payment services.

63. In the remainder of my analysis I take the geographic dimension of useful frameworks for assessing the Application to be national (i.e. Australia-wide). There seems no reason to differentiate on a more regional basis and the payment services in question principally supply services to Australian financial institutions only for on-supply to Australian payers and payees.

3.2.1. Low-value payment infrastructures

64. The main low-value payment infrastructures in Australia are the card-based infrastructures of Visa, Mastercard and eftpos (as well as American Express and Diners Club), the Direct Entry (DE) direct account-to-account infrastructure (a system of bilateral arrangements between financial institutions that follow the rules of the Bulk Electronic Clearing System or BECS), the BPAY Payments infrastructure for bill payments and the New Payments Platform (NPP) infrastructure for real-time account to account payments.

65. These infrastructures all facilitate the "clearing" of payments, by which I mean the communication of payment information between financial institutions so that one account is debited and another is credited the same amount. Some infrastructures, such as the

65 The distinction between the infrastructure or "rails" and services provided over those rails is apparent in the Expert Industry Opinion of Mr Blockley and also a number of the factual statements (e.g. see Westpac statement, paragraph 6).

card-based infrastructures, also include procedures for the "authorisation" of payments, meaning the processes by which funds are authorised to leave accounts (which requires sufficient funds to be in those accounts) and the communication of that authorisation to the payee's financial institution. Authorisation procedures are required for debit (i.e. "pull") payments initiated by a payee that is seeking to have a payer's account debited.[66]

66. Settlement is a separate (though related) process where money is moved between financial institutions, either in real-time for each payment or in the form of net settlement at the end of the day or at specific times during the day. The main infrastructure that is used to settle payments is owned by the RBA and is therefore distinct from the authorisation and clearing infrastructures of the amalgamating entities.[67]

67. Each of the amalgamating entities and the ICS is vertically integrated downstream, providing payment services that make use of their own clearing infrastructures (to financial institutions in most cases). Some of these infrastructure operators also make their infrastructure available to third-party payment services that operate over the infrastructure (like train carriages over "rails"). The following are some examples.

    a. PayPal and a number of BNPL services have established themselves as intermediary merchants in the ICS systems, interposing themselves between the card schemes and final merchants.

    b. Any fintech or BigTech player could, similarly, at least in principle, access eftpos rails by becoming a merchant.[68]

    c. BeemIt (when independent of eftpos) initially accessed both the ICS rails (for withdrawals) and eftpos rails (for deposits).

    d. BeemIt, owned by eftpos, now provides a BPAY Payments service to BeemIt users, making use of the eftpos card network for one leg of the transaction (the "funding" transaction from the account of the customer initiating the BPAY payment to a BeemIt holding account) with the other leg provided in the normal way by BPAY.

    e. The NPP's open access arrangements allow overlay services to be provided over the NPP infrastructure, the first of which is BPAY's Osko Service 1. In the future there may be other overlay services over the NPP, such as Osko Services 2 and 3 and, potentially, a BPAY bill payment service. In principle, any entity may access the NPP to provide an overlay service, including Visa, Mastercard or BigTech players.

    f. Any fintech or Big Tech player can access the NPP rails via a directly connected ADI or via an Identified Institution sponsored into the NPP via an ADI. Examples are Monoova, Assembly Payments, AzuPay and Split Payments.[69] Moreover, according

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66 The NPP is adding an authorisation infrastructure with its mandated payment service that will facilitate debit ("pull") payments from payer accounts.

67 Regarding the distinction between clearing and settlement, see, for example: https://www.rba.gov.au/payments-and-infrastructure/payments-system.html. Also see Coles statement, paragraphs 17-18, and the CBA statement, paragraph 67.

68 Indeed, **[CONFIDENTIAL TO EFTPOS]**.

69 NPPA statement, paragraph 98.

to NPPA, **[CONFIDENTIAL TO NPPA]**.[70] And with the commencement of the MPS, payment initiation requests can either be submitted via an ADI or directly as a Connected Institution.[71]

68. My assessment of and conclusions on the likely effects on competition and of public benefits and detriments do not turn on how broadly or narrowly this market is defined. I therefore have not formed a view on the boundaries of this upstream infrastructure market. In particular, I have not formed a view on whether there is a single market that includes all the low value payment infrastructures listed above, or separate relevant markets for card-based infrastructures on the one hand and for direct account-to-account infrastructures on the other. It seems possible that for some third-party payment services, such as PayPal and BNPL schemes, there may be no close substitute for card-based infrastructures, while for other third parties, which may seek to differentiate themselves by offering real-time settlement and rich data messages, there may be no close substitute for the NPP infrastructure. There may also be other third parties that view card-based infrastructures and direct account to account infrastructures such as the NPP as substitutable to some extent, and this may be more likely to be the case over time, as the NPP grows its volume and its average costs fall, reducing its per transaction price, and as retail payments trend from in-store to online (including online payments for in-store purchases such as Woolworth's "Scan and Go" service).

3.2.2. Low-value payment services

69. In addition to operating clearing infrastructure for low value payments, each of the three amalgamating entities provide payment services in the context of low value payments, meaning that they facilitate the exchange of payment information between financial institutions that allow accounts to be debited and credited according to the intentions of payers and payees. These payment services are supplied, principally, to financial institutions rather than direct to payers and payees, with financial institutions making use of these payment services to facilitate the making and receiving of payments by their customers (payers and payees).[72]

70. I understand that in its 2017 determination in relation to NPPA's applications for authorisation for NPP regulations concerning eligibility requirements and settlement provisions, and suspension and termination of NPP participants,[73] the ACCC identified an area of competition for assessment as "the clearing and settlement of low value payments". This was a broad framework for assessment, without further segmentation by type of payment.

71. I consider that a broad market for "low value payment services" or for "clearing of low value payments" – without further segmentation – may provide a useful framework for the

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70 **[CONFIDENTIAL TO NPPA]**.

71 NPPA statement, paragraph 99.

72 See ANZ statement, paragraph 7, Westpac statement, paragraphs 7(a), 9 and 12, BPAY statement, paragraph 22, **[CONFIDENTIAL TO OTHERS]** and the Expert Industry Opinion of Lance Sinclair Blockley, 18 March 2021, paragraphs 81-83 and 97.

73 ACCC, *Determination, Applications for Authorisation lodged by NPP Australia Limited in respect of certain provisions of the New Payments Platform Regulations*, Authorisation numbers A91560 – A91562, 5 April 2017: see https://www.accc.gov.au/system/files/public-registers/documents/D17%2B43242.pdf.

assessment of the issues in question for the current Application. A broad market of this kind would reflect that ultimately all three of the amalgamating entities, and all of their main competitors (including the ICS and the DE system) provide ways in which payment information can be exchanged between financial institutions, and ultimately they all facilitate payments by connecting accounts to accounts, whether directly or indirectly, albeit with different technologies, equipment, speed and richness of data. It would also reflect that, although degrees of closeness of substitution differ, all three of the amalgamating entities (and their main competitors) either already do or could potentially supply payment services across the range of payment use cases.

72. Having said this, the conditions of competition and the strengths and weaknesses of different payment services differ in different payment contexts.[74] For example, card-based payment services have dominated retail payments for many years, both in-store and online, whereas direct A2A payment services such as the Direct Entry system have historically dominated bill payments, P2P payments (other than by cash), and B2P and G2P disbursements. And while all three of the amalgamating entities (and their main competitors) already do or could potentially supply payment services across the range of payment use cases, this comes with varying degrees of difficulty and expense for themselves and financial institutions, and with varying degrees of appeal to payers and payees in each use case. Pricing also differs between segments,[75] which likely reflects differences in cost conditions, differences in the value of the services to customers and differences in competitive conditions. For example, the ICS tend to set higher fees for online retail payments than for in-store retail payments,[76] and BPAY's pricing for BPAY Payments (for bill payments) is very different from the pricing of its Osko overlay services over the NPP (for "pay anyone" direct credits).[77]

73. For these reasons, narrower frameworks around different segments of payments may also provide useful frameworks for assessment of the issues in question for the current Application. Industry participants and analysts frequently refer to the following segments of payments (although not always using the exact same terminology):

a. In-store (also sometimes called point of sale or "POS") retail payments;

b. Online (also sometimes called "remote") retail payments (which includes irregular recurring payments such as Uber fares and Apple App Store purchases as well as online payments for purchases made in-store);

c. Bill/invoice payments (which includes all regular recurring payments including subscriptions to online and in-app services such as Netflx);

d. P2P payments; and

e. B2P/G2P payments.

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74 See, for example, the eftpos statement, paragraph 22.

75 See the eftpos statement, paragraph 28, **[CONFIDENTIAL TO OTHERS]** and the NAB statement, paragraph 14.

76 See eftpos statement, paragraphs 28 and 153(d)(ii) **[CONFIDENTIAL TO OTHERS]**. See also the Expert Industry Opinion of Lance Sinclair Blockley, 18 March 2021, paragraph 244, which provides a number of cost-based reasons for higher online fees.

77 **[CONFIDENTIAL TO OTHERS]**.

74. In its (earlier) decision not to grant an interim authorisation to the Australia Payments Clearing Association (APCA) in relation to an agreement to coordinate the implementation of 3D Secure as a security measure for online purchases,[78] the ACCC referred on a number of occasions in a general sense to a "payments market", but also to an "online payment market" and included as an area of competition for assessment "the supply of payments systems in Australia that can be used to make online purchases (i.e. payment schemes)". This is an example of a narrower focus, although of course the context of the APCA application for authorisation was also narrower, being limited to an agreement to coordinate over implementation of a technology for online payments.

75. Similarly, the UK Competition and Markets Authority, in its assessment of Visa's proposed acquisition of Plaid,[79] assessed the impact of that merger in a market for "the supply of services enabling C2B payments (including card-based payments and PIS-enabled payments but excluding cash and cheques) in the UK". This is much like an "online payment market". The CMA found some demand-side substitution between card-based payments and payment initiation service (PIS) enabled payments (i.e. real-time account to account payments without a user having to leave the third-party application or website interface) and that this was likely to increase in the future, as well as a segmentation within the supply of services enabling C2B payments.[80] Again, however, the CMA was dealing with a narrower issue, which was a merger that concerned a player – Plaid – with a business focus on services enabling C2B payments.

76. As can be seen in the table below, each of the amalgamating entities provides a range of services, and each is currently or may potentially in the future offer payment services in each of these five segments. Therefore, payment services that facilitate payments in each of these segments may represent candidate relevant markets in the sense of useful frameworks for assessment.[81]

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78 ACCC, *Draft Determination and Decision on Interim Authorisation, Applications for Authorisation A91525 & A91526, lodged by the Australian Payments Clearing Association Limited, in respect of an agreement to coordinate the implementation of 3D Secure as a security measure for online purchases*, 20 May 2016: see https://www.accc.gov.au/system/files/public-registers/documents/D16%2B63944.pdf.

79 Competition and Markets Authority, *Anticipated Acquisition by Visa International Service Association of Plaid Inc., Decision on relevant merger situation and substantial lessening of competition*, ME/6886/20, 24 August 2020.

80 Above note 79, paragraph 9.

81 Note that B2B payments are, essentially, of three kinds: first, bill/invoice payments, which are included within the bill/invoice payment segment together with P2B bill/invoice payments, second, commercial card payments and third, superannuation payments between businesses. Commercial card payments have not been identified as a separate candidate relevant market because none of the amalgamating entities have any meaningful presence in that segment of payments: commercial card payments are predominantly made using ICS payment services. See Expert Industry Opinion of Lance Sinclair Blockley, 18 March 2021, footnote 40. It is also my understanding that the amalgamating entities do not overlap to any material extent in superannuation payments between businesses.

Table 2: Existing and potential future overlapping services of the amalgamating entities (existing services shown in bold; *potential future services shown in italics;* services with significant presence (>5%) in a segment shown with shading)

SEGMENT	BPAY	eftpos	NPPA
Retail in-store	**Osko 1 (via bank app)** *Osko 3 (request to pay)*	**Debit card present (insert and tap)** **Mobile card tokens** *BeemIt (using QR codes)*	**SCT (via bank app)** *MPS (using QR codes)*
Retail online	**BPAY (e.g. airline bookings)** **Osko 1 (e.g. Azupay; Monoova)** *Osko 3 (request to pay)* *BPAY (over NPP)*	**Debit card on file** *Key in card number* *Mobile in-app (using card tokens)* *BeemIt (using QR codes)*	**SCT (e.g. Azupay; Monoova)** *MPS*
Bill/invoice	**BPAY (via bank app or desktop portal)** **Osko 1 (via bank app or desktop portal)** *Osko 3 (request to pay)* *BPAY (over NPP)*	**Debit card on file** *BeemIt (BPAY Payments on BeemIt)*	**SCT (via bank app or desktop portal)** *MPS* *CATSCT (einvoicing)*
P2P	**Osko 1 (via bank app or desktop portal)** *Osko 3 (request to pay)*	**BeemIt (using Deposits and Withdrawals)**	**SCT (via bank app or desktop portal)**
B2P/G2P (disbursements)	**Osko 1** *Osko 2 (pay with document)*	*Deposits and Withdrawals*	**SCT** *CATSCT (e.g. payroll; superannuation)*

77. There is unlikely to be any substitution on the demand side between payment services that facilitate payments in some of these segments. For example, retail payment services in general are unlikely to be seen by businesses or governments as close substitutes for B2P and G2P payment services, and vice versa.

78. There may be degrees of substitution between payment services in other pairs of segments, at least from the perspective of payers (e.g. consumers) and payees (e.g. merchants). For example, in the retail sector there has been a trend from in-store to online purchases, and no doubt for some transactions consumers (payers in the retail context) make a choice between shopping in-store or online. In addition to this, a trend that might accelerate in the future is for payments for purchases made in physical stores to be made using online payment services, an example of this being Woolworths' "Scan and Go" shopping service (where payments are made in-app rather than the customer engaging with an in-store payment terminal).

79. However, it is not clear that the degree of substitution is currently or likely in the foreseeable future to warrant a broadening of relevant markets beyond the candidate segments listed above. Regarding the trend in retail payments from in-store to online, there appears to have been a stabilisation in the share of consumer payments conducted online in recent years (at least prior to the extraordinary circumstances of Covid19).[82] It also seems unlikely there would be significant substitution from in-store to online payments, or in the

82 See RBA, *Consumer Payment Behaviour in Australia: Evidence from the 2019 Consumer Payments Survey, Research Discussion Paper*, RDP 2020-06, Table 6, which reports the online share of consumer payments as 13% in each of the last three surveys (2013, 2016 and 2019), although online payments using mobiles as a share of online payments has grown from 6% in 2013 to 40% in 2019. See https://www.rba.gov.au/publications/rdp/2020/pdf/rdp2020-06.pdf.

other direction, in response to a small increase in payment costs for one type of payment, given that even if financial institutions and merchants were to try to incentivise consumers to change their behaviours to avoid the higher cost service, payment service costs are usually a small percentage of the value of transactions and consumer behaviours take a long time to change.[83] This may, of course, change over time, particularly if the trend to online payments for in-store purchases accelerates.

80. From the perspective of financial institutions, which are the direct customers of payment services in most cases, there is in general limited scope for substitution in response to an increase in the costs of payment services in any of these segments. To offer attractive payment services to their customers (payers and payees), financial institutions need to provide their customers with convenient ways to make and receive payments, whether their customers wish to engage in a retail transaction in-store or online, to pay or be paid a bill, or make a P2P transaction.[84] While there may be the ability to incentivise payees and payers to change their behaviours – e.g. to shift from in-store payments to online payments, should the former become relatively more expensive – this sort of change is likely to take place glacially rather than rapidly, again as consumer and merchant habits take time to change.[85]

81. Within some of the payment segments listed above, there may be narrower segments between which there may be limited substitutability, and where, consequently, an even narrower frame of reference may be useful. For example, within the online retail segment there are distinct use cases for one-off "guest checkout" payments and "seamless" online payments using stored payment details (e.g. Uber payments). Competitive conditions differ between these use cases. For example, eftpos has recently launched its "card on file" service for "seamless" payments, but it is likely to take at least another **[CONFIDENTIAL TO EFTPOS]** before eftpos "key in card number" is ready for launch and to be an alternative for "guest checkout" payments.[86] There may also be limited substitutability between these narrower segments, for users and financial institutions. For example, "guest checkout" services are unlikely to be a good substitute for seamless payments from the perspective of Uber, Uber drivers or Uber passengers, since one of the attractive features of Uber's business model is the seamless nature of recurring payments based on stored payment details. Equally, "guest checkout" services are unlikely to be a good substitute for seamless payments from the perspective of financial institutions: a financial institution that wants to facilitate its account holders using Uber needs to provide those account holders with ways they can pay Uber seamlessly, and a financial institution that wishes to acquire Uber

83 Expert Industry Opinion of Lance Sinclair Blockley, 18 March 2021, paragraphs 113-114.

84 See CBA statement, paragraph 3 ("CBA is committed to providing customers with choice and flexibility when it comes to how they are paid and want to pay") and NAB statement, paragraph 20 ("[b]ecause of the variety of schemes and payment methods available, the diversity of its customer base and its role as a full service bank in Australia, NAB generally prefers to invest in and maintain all mainstream payment types").

85 Expert Industry Opinion of Lance Sinclair Blockley, 18 March 2021, paragraphs 113-115 and 306.

86 eftpos refers to its "key in card number" service for guest checkout online payments as "pay-as-you-go (PAYG)": eftpos statement, paragraph 22(a). There is also a variant of this for third-party online wallets like PayPal (which eftpos refers to as "Guest Checkout providers"): see eftpos statement, paragraph 22(c) and paragraph 23. According to the eftpos statement it will be nine months before eftpos will have the capabilities to process these "key in card number" transactions: eftpos statement, paragraph 23. However, in the same paragraph eftpos refers to April 2022 as the date when it will be full ready to support riskier transactions, **[CONFIDENTIAL TO OTHERS]**.

transactions will need to offer Uber a payment service that allows for payment details to be stored on file.

82. It is therefore possible that narrower sub-segments within some of the segments listed above may also be useful frameworks for assessment. However, the precise boundaries of relevant markets do not matter for my assessment of the proposed amalgamation because I consider that the proposed amalgamation is not likely to result in a substantial lessening of competition and is likely to deliver net public benefits on any market definition. To arrive at this view, I have examined the likely effects on competition within each of the segments listed above, giving close consideration also to narrower sub-segments (e.g. seamless online payments using stored payment details) where appropriate.

4. LIKELY COUNTERFACTUALS TO THE PROPOSED AMALGAMATION

83. In order to assess the likely effects on competition of the proposed amalgamation and the likely public benefits and detriments, it is necessary to compare a future situation in which the proposed amalgamation proceeds with one or more likely counterfactuals in which the proposed amalgamation does not proceed.

84. As the future is inherently difficult to predict, I focus in this section on identifying what I consider to be likely counterfactuals, in the sense of counterfactuals with a real chance of occurring, rather than mere possibilities.

4.1. Likely counterfactual for BPAY

85. The future of the BPAY Payments service seems reasonably secure. According to the Expert Industry Opinion, while competition from the ICS may increasingly constrain the BPAY Payments service as billers move to more frequent billing cycles making the percentage of transaction value fees charged by the ICS more competitive, the BPAY Payments service is likely to remain a significant part of the bill payment segment of payments in Australia.[87] This report therefore proceeds on the basis of a likely counterfactual for the BPAY Payments service of more or less the status quo, which is also reflected in the forecast volumes of BPAY included in the share tables in the Expert Industry Opinion.

86. The future of BPAY's Osko overlay services over the NPP may be less promising. I understand that originally there was an expectation that the NPP's core SCT service (without an Osko Service 1 overlay) would only be used in exceptional circumstances. However, even today a number of financial institutions have not set themselves up to make or receive Osko Service 1 payments, meaning that payments initiated or received by them over the NPP will be SCT payments without the Osko Service 1 overlay.[88] Moreover, according to BPAY there is the potential for the Osko Service 1 assets to become stranded as financial institutions may prefer to use the NPP's SCT services for direct credits, without the Osko 1 overlay.[89]

87 See more generally the Expert Industry Opinion of Lance Sinclair Blockley, 18 March 2021, paragraphs 472-480.

88 See NPPA statement, paragraph 45.

89 BPAY statement, paragraph 54(f).

87. Osko Service 2 ("pay with document") is not a mandated service, and although it appears to have some support from the RBA, there appears to be some uncertainty whether it will be fully developed and achieve significant scale.[90] Osko Service 3 ("request to pay") has been put on hold until the NPP's MPS has been rolled out by financial institutions, with no current implementation date, and BPAY has written down the assets as a result.[91]

88. I consider it likely that in the counterfactual future BPAY initiatives in the payments space will face similar challenges in achieving widespread adoption by financial institutions as Osko Service 2 and Osko Service 3 have, including the challenges of coordinating investments across the various financial institutions with multiple non-sequenced investment demands. Reflecting these challenges, **[Confidential to BPAY]**.[92]

89. I understand that there has been a suggestion that, instead of the proposed amalgamation, BPAY and NPPA might be amalgamated, leaving eftpos independent.[93] It is not clear to me whether this is a likely counterfactual and the remainder of this report proceeds on the basis of a likely counterfactual without such a transaction. Should the ACCC consider such a transaction to be likely in the counterfactual, then the ACCC may still make use of this report by disregarding those parts of it that deal with overlaps between BPAY services and NPP services and reading my analysis of benefits and detriments in the context of a proposed amalgamation of eftpos with a merged BPAY/NPPA.

4.2. Likely counterfactual for NPPA

90. I consider the likely counterfactual for the NPP to include the continued development of the category code SCT services and the MPS service and the migration of bulk credit (mainly B2P and G2P payments) and direct debit volumes from the DE system, although the pace of these migrations is not likely to be rapid for a number of reasons.

91. First, the NPP is likely to continue to encounter delays in the necessary investments by financial institutions for these services to achieve widespread deployment (including the NPP's MPS), due to the large scale of investments required and coordination challenges.[94]

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90 According to the BPAY statement (paragraphs 42 and 58), Osko Service 2 is in "proof of concept" stage and "BPAY Group has impaired some of its Osko assets **[CONFIDENTIAL TO BPAY]**. **[CONFIDENTIAL TO OTHERS]**.

91 BPAY statement, paragraphs 43 and 58. Westpac has expressed doubts over whether Osko Service 3 will become a live service and explained that it has no plans to support implementation of Osko Service 3: Westpac statement, paragraph 45.

92 See **[CONFIDENTIAL TO BPAY]**.

93 See Application, Section 14.3. A number of the factual statements refer to an alternative to the proposed amalgamation of this nature.

94 Although NPPA has mandated that financial institutions implement MPS and other NPP services, timeframes for mandated services are often unrealistic and financial institutions will often fail to meet those timeframes: see the Expert Industry Opinion of Lance Sinclair Blockley, 18 March 2021, at paragraphs 464 and 505. For example, the **[CONFIDENTIAL TO OTHERS]**. **[CONFIDENTIAL TO NPPA]**.

92. Second, while the vast majority of "pay anyone" direct credit payments have already migrated to the NPP,[95] migrating a large proportion of bulk credit B2P/G2P payments and direct debit volumes will take some time as businesses, governments and billers will need to be persuaded to switch from their existing services (over the DE system) and this will likely require some investment in their own systems.[96] Until this occurs, the NPP's average transaction costs will remain high, which will limit its ability to gain significant volumes in other segments such as retail payment segments.

93. The NPP will also face a number of other barriers to entry and expansion in retail payment segments, which I discuss in Sections 6.2.1, 6.4 and 6.5 of this report.

4.3. Likely counterfactuals for eftpos

94. The likely counterfactual for eftpos is less clear than the likely counterfactuals for BPAY and the NPP. I consider that there are at least two likely counterfactuals, in the sense of having a real chance of occurring. This report proceeds by considering each of these as likely counterfactuals, which has consequences for the likely effects and likely benefits and detriments of the proposed amalgamation, but does not alter my overall conclusions.

4.3.1. First likely counterfactual

95. The first counterfactual that I consider to be likely, in the sense of having a real chance of occurring, is that eftpos remains a viable payment service in the long-term, meaning for at least the next ten years, and continues to act as an important constraint on the pricing and other terms of the ICS.

96. There certainly seems to be scope for eftpos to increase its volumes of card-based payments in the future and remain viable for at least the next ten years, with debit card-based payment volumes significant today[97] and forecast to continue to grow both in absolute terms and in terms of shares of both in-store and online retail payments for at least the next five years.[98] As eftpos has stated: "'[c]ard' use is not declining" and "[t]he fundamental attributes of the card […] remain a crucial part of the payments landscape.[99]

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95 AusPayNet (2020), *Future State of Payments Action Plan: Conclusion from AusPayNet's Consultation*, August 2020, page 6: see https://www.auspaynet.com.au/sites/default/files/2020-08/APN_Future_State_Conclusions_Consultation_Paper_Aug20_0.pdf.

96 See Expert Industry Opinion of Lance Sinclair Blockley, 18 March 2021, paragraph 476.

97 As can be seen in the segment share tables prepared by Mr Blockley, debit card payments represented around **[CONFIDENTIAL TO OTHERS]** of in-store and online retail payment volumes, respectively, in FY2020. The card dominance in retail payments is also evident from the Coles statement. All of the payment methods currently supported by Coles, apart from cash, are card-based (including PayPal, which runs mainly on the ICS card rails): Coles statement, paragraph 25. **[CONFIDENTIAL TO OTHERS]**.

98 See the Expert Industry Opinion of Lance Sinclair Blockley, 18 March 2021, paragraph 517, which explains that card-based payments (in their various formats) "will be around for many, many years to come". Consistent with this, the share tables included in Appendix V to the Expert Industry Opinion forecast that debit card payments will represent **[CONFIDENTIAL TO OTHERS]** of in-store and online retail payment volumes, respectively, in FY2025. See also the Westpac statement, paragraph 31, which states that "card-based payments are very likely to continue to grow and remain a very large proportion of retail point-of-sale (POS) payments for at least the next 10 years".

99 eftpos statement, paragraph 37(b). See also paragraph 79(a)(ii), which refers to a trend of "material sustained growth in cards volume" and paragraph 128.

97. It also appears that eftpos has – at least for the moment – arrested the decline in its volumes and share of in-store card-based payments through increased merchant use of merchant choice routing and consumer adoption of eftpos mobile card tokens.[100] This can be seen in eftpos' market shares in the in-store retail segment: **[CONFIDENTIAL TO EFTPOS]**[101] **[CONFIDENTIAL TO EFTPOS]**[102] **[CONFIDENTIAL TO EFTPOS]**.

98. Moreover, financial institution investments in eftpos' digital services ("card on file" for recurring online payments and "key in card number" for "guest checkout" one-off online payments) were mandated by the eftpos board in December 2020. With these mandates in place, while the speed of roll-out will vary across financial institutions, and some may not meet the deadlines, it seems likely that these services will ultimately become sufficiently widely deployed across financial institutions for eftpos to be positioned to compete with the ICS for at least some online volumes. This will give eftpos the potential to address its exposure to the trend in payments from in-store to online, including online payments for in-store purchases, an example of which is Woolworths' "Scan and Go" service. While in-store payments will remain a significant share of total retail payments for some time, it is likely to be important for eftpos to offer equivalent services to the ICS for online retail payments – both for eftpos' long-term viability, and for eftpos to play a role effectively constraining the ICS.

99. However, without amalgamation I anticipate a continuation of the ambivalence and limited commitment from financial institutions to eftpos initiatives described in the Expert Industry Opinion.[103] This ambivalence likely arises from a tension between two considerations.

    a. On the one hand, eftpos initiatives tend to simply match ("catch up" to) the range of services the ICS already provide financial institutions and their customers (consumers and merchants) and may add little value.[104] At the same time, the ICS offer broader functionality than eftpos (including international and online acceptance) and significant incentives.[105]

100 See eftpos statement, paragraph 43.

101 **[CONFIDENTIAL TO EFTPOS]**.

102 **[CONFIDENTIAL TO EFTPOS]**.

103 Expert Industry Opinion of Lance Sinclair Blockley, 18 March 2021, paragraphs 457 and 518.

104 Expert Industry Opinion of Lance Sinclair Blockley, 18 March 2021, paragraphs 444-457. Also see the NAB statement, paragraph 25.

105 Expert Industry Opinion of Lance Sinclair Blockley, 18 March 2021, at paragraphs 444-457 and 518. The eftpos statement acknowledges these issues, including observing that while eftpos made the specifications for contactless technology available in 2012, its implementation by members took a long time: see eftpos statement, paragraph 44. See also the CBA statement, paragraph 83, which explains that "the international cards schemes are able to put forward strong business cases for investment, having tested and proven their innovations in other markets globally. In contrast, investment requests from the domestic schemes often do not have the same supporting track record and are disadvantaged because of the uncertainties associated with their proposals."

b. On the other hand, some financial institutions consider that a viable and effective eftpos as an alternative to the ICS is important for them when they renegotiate their multi-year agreements with the ICS.[106]

100. This ambivalence means that financial institutions are likely to continue to exhibit some reluctance to investing in eftpos' payment service initiatives. The speed at which financial institutions undertake the investments required to roll out eftpos' digital services is therefore likely to be slower than eftpos has mandated as financial institutions balance eftpos' demands with other priorities. More generally, looking into the future, time to market for eftpos' payment initiatives is likely to continue to significantly lag the ICS, not only due to inherent ICS advantages,[107] but also due to financial institution ambivalence.

101. The challenges of coordinating investments among a large number of financial institutions that have differing investment priorities, in order to achieve timely network effects for payment services and initiatives, are also likely to persist for eftpos in the counterfactual, as for BPAY and the NPP. Contributing to this appears to be the lack of an appropriate forum for the industry to discuss and agree on the best solution to an industry problem, which is likely to limit eftpos' ability to successfully "pitch" solutions based on its card-based infrastructure in this counterfactual.[108]

4.3.2. Second likely counterfactual

102. The second counterfactual I consider to be likely, in the sense of having a real chance of occurring, is one in which the eftpos card-based payment system will cease to operate within ten years unless there is proactive intervention by the RBA to maintain a domestic card-based payment infrastructure.

103. In this counterfactual, eftpos may encounter renewed competition from the ICS for in-store volumes and fail to successfully transition to online payments or find ways to differentiate its offerings sufficiently from the offerings of the ICS.[109] With volumes then declining rapidly – as they did from 2016 to 2019 – eftpos may find financial institutions and the RBA unwilling or unable to justify continuing to support it.[110] The Expert Industry Opinion of Mr Blockley is that eftpos is likely to continue to lose market share to the ICS and that within ten years the eftpos system will no longer exist unless there is some "highly proactive

106 See, for example, the Westpac statement, paragraph 31, and the CBA statement, paragraph 119. Coles' perspective as an acquirer is also relevant here: see Coles statement, paragraph 28, which refers to eftpos as "critical in the short to medium term", and see also paragraphs 68, 110 and 38-41, where again eftpos is referred to as "critical" for a number of reasons including **[CONFIDENTIAL TO EFTPOS]**.

107 See eftpos statement, paragraph 144(d).

108 **[CONFIDENTIAL TO OTHERS]**.

109 **[CONFIDENTIAL TO OTHERS]**. See also the CBA statement, paragraph 83.

110 See, for example, Westpac statement, paragraph 56. The eftpos statement also refers to "low and slow member support", at least historically (paragraph 81), although eftpos claims that this has changed following the introduction of eftpos' higher fees with rebates pricing structure (see paragraph 90). **[CONFIDENTIAL TO OTHERS]**.

intervention" by the RBA.[111] There is also the potential for BigTech firms to disintermediate the card rails (including eftpos' rails) to an extent.[112]

104. In reaching his opinion, Mr Blockley emphasises the strengths of the global ICS, including their large scale R&D efforts and track record of leading card-based payment innovations, their superior offerings to the card-based offerings of eftpos (including cross-border payments, online payments, fraud management and marketing spends), and their aggressiveness in competing for volume, using price and non-price means.[113]

105. I understand that, like BPAY, **[CONFIDENTIAL TO EFTPOS]**.[114] eftpos may well follow that strategy and find a viable path outside of payments. However, in this second likely counterfactual the eftpos' card-based payment infrastructure and services would still cease to exist within ten years.

106. As Mr Blockley acknowledges, should eftpos' volumes decline, and should support for eftpos from financial institutions not be forthcoming, the RBA would need to actively intervene in order to maintain the domestic card-based payment system. It may do so with a view to maintaining the constraint that eftpos has provided on the pricing and other terms of the ICS, or it may do so from a domestic security perspective. The RBA has acted in recent years, on a number of occasions, in support of eftpos in its competition with the ICS.

a. The RBA has for some time actively encouraged financial institutions to offer merchants the choice of how in-store contactless payments will be routed, allowing merchants and consumers to benefit from lower eftpos fees.[115] This has addressed the historical disadvantage eftpos has experienced of the ICS being the default rails for contactless payments in-store. This became a more and more acute issue for eftpos as the contactless share of in-store payments increased to more than 80% of card payments in-store in 2019, with eftpos volumes experiencing a steep decline from 2016 to 2019. In June 2020 the RBA reiterated its expectation that all acquirers offer least cost routing to all their merchants, noting that mandating that they do so remains an option that the RBA will consider.[116]

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111 See the Expert Industry Opinion of Lance Sinclair Blockley, 18 March 2021, at paragraphs 444-471 and 495.

112 See paragraph 143.c and note 152 below for details of BigTech threats for eftpos in P2P and retail payment segments. I also note that, while the eftpos statement observes the risk for Australian financial institutions of being disintermediated by the BigTech firms (eftpos statement, paragraph 76), there is presumably, at the same time, a risk of disintermediation for eftpos if the BigTech firms divert payment volumes to other infrastructures (e.g. their own stored value systems).

113 See, for example, the discussion of ICS pricing and ICS tokenisation in the Expert Industry Opinion of Lance Sinclair Blockley, 18 March 2021, at paragraphs 458-461. **[CONFIDENTIAL TO OTHERS]**.

114 See eftpos statement, paragraphs **[CONFIDENTIAL TO EFTPOS]** 82(b)-(e), 91 and **[CONFIDENTIAL TO EFTPOS]** and 153(b). **[CONFIDENTIAL TO EFTPOS]**.

115 See, for example: https://www.rba.gov.au/payments-and-infrastructure/debit-cards/least-cost-routing.html. See also Expert Industry Opinion of Lance Sinclair Blockley, 18 March 2021, paragraph 152.

116 Michele Bullock (2020), *Panic, Pandemic and Payment Preferences*, Keynote Address at the Morgan Stanley Disruption Evolved Webcast, 3 June 2020, accessed at https://www.rba.gov.au/speeches/2020/sp-ag-2020-06-03.html.

b. In 2017, the RBA gained commitments from financial institutions not to take any steps that would prevent the use of the eftpos network in mobile wallets,[117] and this has resulted in consumers being able to choose for payments made using mobile wallets like Apple Pay to be routed via the eftpos network rather than the ICS networks.

c. In March 2019, the RBA emailed all major schemes and issuers in the context of ICS tokenisation of cards-on-file in terms that made clear the RBA's support for DNDCs and for merchant choice routing (MCR) in card not present contexts, expressed a concern that ICS tokenisation of cards-on-file may marginalise eftpos and encouraged issuers to ensure that merchants will not be limited in their ability to adopt MCR for card not present transactions. The main part of the RBA's email reads as follows.[118]

> *The Reserve Bank understands that there are discussions in the industry regarding the tokenisation of cards-on-file as part of the initiative to reduce card-not-present fraud. The Bank supports this broad initiative.*
>
> *The Bank has been made aware of potential issues regarding the process of tokenisation of dual-network debit cards. Accordingly, I am sending this email to all major schemes and issuers to note the Bank's support for the long-standing practice of issuing such cards in Australia, because they are convenient for cardholders and allow stronger competition between networks at the point of sale. For example, the Payments System Board has previously welcomed some undertakings in relation to contactless technology and other matters (August 2013) and mobile wallets (May 2017).*
>
> *Accordingly, the Bank would be concerned if, as plastic cards are supplemented by a variety of other means of accessing a customer's account, any actions were taken by schemes or scheme participants that had the purpose or effect of diluting or preventing competition between networks, by removing choices previously available to cardholders and merchants. Specifically, the Bank would be concerned if scheme rules or policies on tokenisation limited the ability of merchants to choose to route card-not-present transactions through their preferred network.*

d. In late 2020, in an address to AusPayNet, the RBA Governor, Philip Lowe, reiterated the RBA's support for DNDCs and merchant choice routing.[119]

107. I understand Mr Blockley's view to be that the challenges eftpos is likely to face will require more significant intervention by the RBA than these sorts of measures. If the RBA is not willing to intervene to that extent, an alternative may be that the Government may intervene under the *Security of Critical Infrastructure Act* 2018.[120]

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117 See https://www.rba.gov.au/publications/annual-reports/psb/2017/pdf/retail-payments-regulation-and-policy-issues.pdf. See also the eftpos statement, paragraph 144(f).

118 eftpos, *Effect of RBA email dated 5 March 2019: Information for Issuers & Acquirers*, Advice Number 004-19, 7 March 2019.

119 Philip Lowe, *Innovation and Regulation in the Australian Payments System*, Address to the Australian Payments Network, 7 December 2020. See: https://www.rba.gov.au/speeches/2020/pdf/sp-gov-2020-12-07.pdf.

120 See https://www.legislation.gov.au/Details/C2018A00029.

5. OVERVIEW AND SUMMARY OF ASSESSMENT OF THE LIKELY EFFECTS OF THE PROPOSED AMALGAMATION ON COMPETITION

108. I understand that under Section 90(7) of the Competition and Consumer Act (CCA), the ACCC must not grant authorisation of the proposed amalgamation unless it is satisfied that either:

a. the proposed amalgamation would not have the effect, or would not be likely to have the effect, of substantially lessening competition; or

b. the proposed amalgamation would result, or be likely to result, in a benefit to the public, and that benefit would outweigh the detriment to the public that would result, or be likely to result, from the proposed acquisition.

109. I also understand that the applicants are applying for authorisation of the proposed amalgamation under both of these limbs.

110. In this Section and in Sections 6-9, I consider the likely effects on competition of the proposed amalgamation with a view to reaching an opinion on the first limb of the Application: whether the proposed amalgamation would not have the effect or would not be likely to have the effect of substantially lessening competition. In sub-section 5.1, I present the principles I have applied in my assessment of whether the proposed amalgamation would not have the effect, or would not be likely to have the effect, of substantially lessening competition. In sub-section 5.2, I provide a summary of the findings of my assessment. In sub-section 5.3, I outline the structure of the remainder of this report.

5.1. Principles for assessment of likely effects on competition

111. In this Section and in Sections 6-9, I compare the likely future with the proposed amalgamation with the likely future without the proposed amalgamation (i.e. the likely counterfactual described in Section 4 above).

112. I interpret the terms “likely”, “substantially” and “competition” as follows.

a. I take “likely” to mean that there is a real chance or possibility of an effect that is commercially relevant or meaningful. That does not encompass a mere possibility or require that the effect be more likely than not.

b. I take “substantial” to mean “real or of substance, as distinct from nominal, insubstantial or ephemeral” and a substantial lessening of competition to represent a significant and sustainable worsening of the competitive process.[121]

c. I interpret “competition” as a process of rivalry between firms whether in terms of price, service, technology and/or quality. A “lessening” of competition is therefore a reduction in the extent of rivalry between firms in these dimensions.

113. Rivalry is a process that can be expected to lead to better outcomes for customers and consumers, whether in terms of lower prices, higher quality or more innovation and better technology. In my view it is important to assess whether there is a likelihood of a substantial lessening of competition in the sense of a substantial *lessening of rivalry*, rather than focus

121 See *Rural Press Limited v Australian Competition and Consumer Commission* [2003] HCA 75 [41] where the word “substantial” was used “in the sense of being meaningful or relevant to the competitive process”.

solely on structural matters such as the number of competitors. A transaction may result in fewer competitors in some area of commerce, but at the same time it may enhance rivalry among the competitors that remain in that area, and be likely to enhance customer and consumer welfare, rather than damage it. In such a case I would *not* consider there to be a substantial *lessening of competition*.

5.2. Summary of my views on the likely effects on competition

114. I consider that the proposed amalgamation would not be likely to have the effect of substantially lessening competition for the following reasons.

115. First, standard unilateral merger effects on prices and quality are not likely to be substantial, even if we ignore the fact that there will be a high degree of common ownership even in the counterfactual. This is for the following reasons:

a. The services offered by the amalgamating entities are largely complementary rather than close substitutes and merger increments are small or otherwise immaterial in each segment of payments;

b. The closest competitors of the amalgamating entities are not each other, but much larger players with significant competitive advantages;

c. The payment services landscape is dynamic, particularly in retail payment segments with payment methods evolving continually driven by a stream of ICS innovations. These challenges for the amalgamated entity maintaining its share of retail payments will continue as the globally resourced ICS continue to innovate. New entry is also possible, including from BigTech players, with the potential for disruptive payment services that leverage their large installed user bases and may eventually disintermediate card rails; and

d. The largest customers of the amalgamating entity will be its shareholders and thereby enjoy significant countervailing power and influence regarding prices, quality and innovation decisions of NewCo.

116. While there are today a number of overlaps in segments between the services offered by the three entities, and there are likely to be more overlaps in the future, careful consideration of these overlaps and of competition in each segment reveals that any loss of competition would be marginal at worst, and a *substantial* lessening of competition is not likely.

117. The high degree of common ownership in the likely counterfactual should not be ignored. In the likely counterfactual the four major financial institutions will hold significant shares of both eftpos and NPPA and 100% of BPAY. It follows that, to the extent there may be some (less than substantial) unilateral incentives to increase prices or reduce quality of overlapping services compared to a “no common ownership” counterfactual, the incremental effect of the amalgamation will be even smaller when common ownership in the counterfactual is taken into account. Indeed, the shareholdings of the four major financial institutions will all be diluted by the amalgamation, rather than concentrated.

118. Second, I do not consider any of the existing services of the three entities or any of the main services in the current roadmaps of the three entities to be more likely to be withdrawn, abandoned or significantly degraded in their quality under amalgamation compared to the likely counterfactuals.

119. Third, for future initiatives of the amalgamating entities (beyond the current roadmaps) that may compete closely in the counterfactual, financial institution support would be needed for successful widespread deployment. That support is not likely to exist for more than one such initiative in the counterfactual. Since competition between future initiatives of the domestic schemes (beyond the current roadmaps) is unlikely in the counterfactual, a lessening of competition if the proposed amalgamation proceeds is also unlikely. The proposed amalgamation is also not likely to result in weaker future initiatives beyond the current roadmaps, including because one of the likely benefits of the proposed amalgamation is an improvement to domestic innovations from combining R&D teams and payment scheme specific knowledge.

120. Fourth, harmful exclusionary vertical effects (i.e. input foreclosure) are not likely. NewCo will lack the ability to foreclose third-party payment providers due to the NPP's open access regime as well as the availability for third parties of alternative infrastructures outside of NewCo. It is also unlikely that foreclosure incentives will arise given the limited extent of overlaps between the amalgamating entities in payment service segments.

121. Finally, NewCo will not be a profit maximining entity[122] and will be owned and operated and overseen by its main customers (including many financial institutions and the two largest retailers). Given this, a substantial lessening of competition seems unlikely.[123]

122. The above reasoning is the basis for my view that the proposed amalgamation is not likely to result in a substantial lessening of competition in the Australian payments sector overall or for any particular payment segment or sub-segment. Moreover, as I explain in more detail in Section 10 (Benefits) below, rather than lessen competition, the proposed amalgamation is likely to *enhance* competition in an overall sense compared to the likely counterfactual, including by:

a. Enhancing coordination of adoption of domestic payment initiatives and thereby providing the foundations for more dynamic and effective developments in domestic payment systems in competition with the ICS and potential entrants such as the global technology firms; and

b. Increasing and improving domestic payments innovation as a result of combining R&D teams and payment scheme specific knowledge.

5.3. Outline of the remainder of this report

123. In this Section I have summarised the findings of my assessment of the likely effects of the proposed amalgamation on competition and whether the proposed amalgamation is likely to substantially lessen competition. In Sections 6 to 9, I provide further details of that assessment, including:

a. Why unilateral effects on prices and quality are not likely to be substantial (Section 6);

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122 I understand the purpose of NewCo is not to maximise profits but "to provide globally competitive payment services which are resilient, safe, efficient, fair, accessible and cost effective and which meet the present and future requirements of the users of the Australian payments system, including financial institutions, payment services providers, while facilitating the provision of low cost solutions for retailers, other businesses and their customers": Memorandum on NewCo's potential governance and operating model, 16 October 2020, page 3.

123 Consistent with this, see NAB statement, paragraph 49.

b. Why the existing services of the three entities and the main services in their current roadmaps are likely to be preserved as long as they are of value to their customers (Section 7);

c. Why future domestic initiatives beyond the current roadmaps are not likely to be fewer or weaker (Section 8); and

d. Why the amalgamation is not likely to produce harmful vertical effects in the form of input foreclosure (Section 9).

124. Following this, in Sections 10 to 12, I turn to my assessment of the second limb of the Application, which is an assessment of the public benefits and public detriments of the proposed amalgamation and whether there are likely to be net public benefits or net public detriments.

6. UNILATERAL EFFECTS ON PRICES AND QUALITY ARE NOT LIKELY TO BE SUBSTANTIAL

6.1. Principles and relevant matters for analysis of unilateral effects

125. As the ACCC's Merger Guidelines explain, one of the ways in which an amalgamation may lessen competition is by removing or weakening competitive constraints with the result that the amalgamated entity finds it profitable unilaterally (i.e. without coordinating with other firms) to "raise prices, reduce output or otherwise exercise market power it has gained" (ACCC, Merger Guidelines, paragraph 5.1).[124]

126. The Merger Guidelines contemplate three ways in which unilateral effects may arise in differentiated product markets. The first is an amalgamation to monopoly where no rivals remain post-amalgamation, and the second is where an amalgamation creates a single firm with market power competing to only a limited extent with smaller firms that can only supply a small portion of total market demand. The proposed amalgamation does not fit either of these circumstances.

127. The third way the Merger Guidelines contemplate that unilateral effects may arise is where an amalgamation brings together firms that supply close substitutes. Pre-amalgamation, if one of the firms were to increase price or reduce quality, it would lose some sales to the other firm and all of the margins on those sales. Post-amalgamation, by contrast, the amalgamated entity will retain sales that divert to the second firm and the margins on those sales. This "internalisation" (i.e. recovery) of the margins on sales diverted to the second

124 Another way in which an amalgamation may lessen competition is if, following the amalgamation, the conditions of competition in the industry become more conducive to the remaining firms coordinating on prices, output or other dimensions of competition (e.g. service quality or innovation). These are called "coordinated effects", in distinction from "unilateral effects". I do not consider there to be any likelihood that the proposed amalgamation would give rise to coordinated effects in this case. The remaining major players in the industry (NewCo, the ICS and the DE system) would be very different in their market shares and cost structures, and the amalgamated entity itself, as a relatively small player in both retail and non-retail payments and with an imperative to increase volumes on the NPP to cover costs at competitive price levels, is likely to be an aggressive competitor to the ICS and the DE system. The potential for entry from significant well-resourced players such as Google, Apple, Facebook and PayPal, among others, is also likely to constrain any attempt by the existing players in the industry to coordinate.

firm produces incentives for the amalgamated entity to increase prices or lower quality compared to the pre-merger situation.

6.1.1. Closeness of competition between the services of the amalgamating entities

128. Whether or not incentives to raise price or lower quality are sufficient to represent a substantial lessening of competition will depend on the extent of diversion of sales between the services of the amalgamating entities. In general, the greater the diversion of sales between the amalgamating entities the greater the concern. The extent of diversion will depend on how closely substitutable the services of the amalgamating entities are relative to how substitutable the services of other players are to the services of the amalgamating entities. Closeness of competition is therefore a key consideration in a unilateral effects assessment. This is captured in paragraphs 5.9 and 5.13 of the Merger Guidelines:

> *5.9 … in markets where competition between firms selling differentiated products is based on price, unilateral effects may arise where a merger between firms previously supplying close substitutes is able to increase the price of either or both of the close substitutes. In this case, consideration will be given to the proportion of substitution that would occur.*
>
> *…*
>
> *5.13 … Merger parties are likely to have an incentive to increase the price of one or both products if the sales lost due to the price increase would be recaptured by an increase in sales of the other product. That is, the greater the number of customers that regard the merger parties as particularly close competitors (for example their first and second choices), the greater the potential for the merger parties to impose a unilateral increase in price post-merger.*

129. Paragraph 5.13 continues by clarifying that "[u]nilateral effects may arise even where the merger parties are not one another's 'closest' competitor pre-merger or would not be the dominant firm post-merger based on market shares". While this is true – and economic theory predicts that in any differentiated products merger there will be upward pricing pressure as long as there are positive margins and positive diversions between the products – what matters is whether the unilateral effects will be sufficiently large to represent a *substantial* lessening of competition, which will depend, in large part, on the closeness of competition between the merging parties and the proportions of their sales that would divert to each other and the proportions that would divert to other players. The Merger Guidelines reflect this in paragraphs 7.41 and 7.43:

> *7.41 … unilateral effects in differentiated product markets are more likely if the merger parties are relatively close competitors pre-merger and other market participants, while providing alternatives to consumers, are relatively more distant competitors for the products of the merged firm.*
>
> *…*
>
> *7.43 … if the merger parties are relatively distant competitors in the relevant market pre-merger, and several of the merged firm's remaining rivals would be close competitors to the merged firm, the merger is less likely to result in a substantial lessening of competition in that market.*

6.1.2. Significance of the amalgamating entities and the extent of remaining constraints

130. Whether or not unilateral incentives to raise price or lower quality are sufficient to represent a substantial lessening of competition will also depend on other factors, such as the significance of the amalgamating entities for customers in the market[125] and whether constraints from other services are sufficient to constrain the amalgamated entity from substantially raising prices or lowering service quality relative to the counterfactual.

131. The importance of an assessment of the remaining constraints on the amalgamating entity is reflected in paragraphs 7.4 and 7.38 of the Merger Guidelines:

> *7.4 The likely presence of effective competitive constraints post-merger is a key indicator that a merger is unlikely to result in a substantial lessening of competition.*
>
> *…*
>
> *7.38 In assessing the competitive implications of a merger, the ACCC considers both the range of available or potentially available substitutes in each relevant market and the relative intensity of rivalry between different products within those markets. The existence of comparable alternatives to the merged firm that are available in plentiful supply to the entire market can, in the absence of coordinated effects, indicate that a merger is unlikely to substantially lessen competition.*

6.1.3. Dynamic market characteristics

132. The ACCC's Merger Guidelines (para 7.54) recognise that "[i]n general, a merger is less likely to substantially lessen competition in a market that is rapidly evolving". The guidelines (para 7.55) also explain that the ACCC will place more weight on "robust evidence about likely future developments" and significantly less weight on "predictions about the future state of competition that are speculative or have little chance of developing for some considerable time in the future".

6.1.4. Countervailing power of customers

133. The ACCC's Merger Guidelines (para 7.48) explain that in addition to considering constraints from competitors, the ACCC "also considers whether one or more buyers would have sufficient countervailing power to constrain any attempted increase in market power".

134. The guidelines explain (para 7.48) that countervailing power exists "when buyers have special characteristics that enable them to credibly threaten to bypass the merged firm, such as by vertically integrating into the upstream market, establishing importing operations or sponsoring new entry". The guidelines also explain that countervailing power exists "when the specific characteristics of a buyer – such as its size, its commercial significance to suppliers or the manner in which it purchases from suppliers – provide the buyer with additional negotiating leverage".

135. The guidelines further explain that important considerations for assessing whether countervailing power is likely to prevent a substantial lessening of competition include (i) the credibility of a threat to bypass the merged entity, which will depend on whether the size of the buyer's demand is sufficient to support entry at an efficient scale of production,

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125 For example, a 5% increase in price by a firm that has a 1% share of a market is arguably much less of a competition concern than a 5% increase in price by a firm that supplies 50% of the market.

and (ii) whether the buyer is likely to bypass the supplier, which will be informed by previous instances in which the buyer or other buyers have sponsored entry or vertically integrated.

6.2. High-level assessment

136. The amalgamating entities each offer or plan to offer in the future a range of payment services that overlap to varying degrees. Moreover, the Australian payments landscape is complex and the conditions of competition vary from use case to use case.

137. In this sub-section I provide a high-level consideration of the main factors that are relevant for assessing the likelihood of substantial unilateral effects and my conclusion based on that high-level consideration. A detailed examination of the extent and significance of the most significant overlaps between these services and of the likely effects of the proposed amalgamation on competition in each segment and sub-segment of payments is provided in sub-sections 6.3 to 6.8.

6.2.1. The amalgamating entities offer largely complementary services and merger increments are small or otherwise immaterial in each segment

138. The first thing I observe in my high-level assessment is that the amalgamating entities have been established with very different purposes, their services are largely complementary and their primary attention in terms of competition is not each other.[126] The amalgamating entities are therefore, in a general sense, far from being each other's closest competitors.

a. eftpos operates a card-based payments infrastructure similar to the card-based infrastructures of Visa and Mastercard, with almost all of its volumes coming from the retail in-store payment segment, and with a primary focus on competing with the ICS for in-store retail payments and in the future also for online retail payments.[127] This is evidenced by eftpos' main initiatives over past years and in its current roadmap being initiatives that seek to match the capabilities of the ICS in retail payments.[128]

b. The NPP was established for the main purpose of transitioning Australia's direct account to account payment system to modern real-time infrastructure and with a primary focus on migrating direct credit (P2P, P2B, B2P and G2P) and direct debit volumes from the DE system to the NPP's real-time, 24/7, rich data platform. The NPP's primary competition is therefore with the DE system. While NPP's MPS, which is currently in development, will have retail payment capability, its main purpose is to attract direct debit volumes from the DE system. Moreover, while the MPS may ultimately compete to an extent for retail payment volumes, it will face considerable challenges entering and expanding in retail payment segments, and its

126 This is a theme appears often throughout the factual statements and in the Expert Industry Opinion of Mr Blockley. To give one example, see Westpac statement, paragraph 11.

127 eftpos statement, paragraph 40, which explains that "[f]or EPAL, Mastercard and Visa are the most significant current competitors" and paragraph 153(b)(ii), which expresses eftpos' future focus as being to compete with Visa and Mastercard. See also paragraphs 153(c) and (d).

128 Including chip and PIN, contactless, merchant choice routing, mobile tokenisation and eftpos digital (card on file and key in card number). See also the eftpos statement, paragraph 24, which explains that eftpos' pricing is aligned with Visa and Mastercard.

main competitors and the main constraints on its ability to grow in retail payments will be the ICS.[129]

c. The BPAY Payments service has a relatively specific role with a focus on a service that allows billers to efficiently reconcile bill payments when customers "push" payments to them (i.e. for credit payments). While the main alternatives to the BPAY Payments service for billers and payers include direct credits and direct debits (which are migrating to the NPP) as well as the ICS, the unique characteristic of the BPAY Payments service – providing efficient reconciliation for billers of "push" credit payments – sets it apart from both direct credits (which do not provide similar reconciliation efficiency) and direct debits (which are less attractive for customers that wish to remain in control of their payments and also come with the risk for billers of dishonoured payments) as well as from card-based payment services.[130] Consequently, from the perspective of financial institutions that wish to offer customers (billers and payers) a range of payment options with different features and functionality, the BPAY Payments service, direct credits and direct debits as well as card-based payment services are more in the nature of complements than close substitutes. Further considerations are that the majority of BPAY billers have no particular need for real time processing and settlement or the rich data feature of the NPP, many prefer the batch nature of BPAY payments, and a number would need to undertake significant system changes in order to be able to receive NPP payments.[131]

139. In recent years there has been some convergence of the offerings of card-based and direct account-to-account payment service providers, and the three entities are starting to or are planning to offer services that may be used to achieve similar functionality for payers and payees. However, these are at the edges of their offerings rather than at their cores, and competition between them is and will remain limited. This will be explained in more detail in sub-sections 6.3 to 6.8. For the purposes of this high-level assessment I make the following observations.

140. For in-store retail payments:[132]

a. eftpos has a significant share of in-store retail payments today, but this share has declined substantially over the past decade and eftpos will continue to face intense competition from the ICS,[133] as well as, potentially, from BigTech players in the longer-term.[134]

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129 See Westpac statement, paragraph 25, in which Westpac explains its view that MPS does not offer any material new functionality compared to the card on file services already provided by the ICS (as well as eftpos).

130 See BPAY statement, paragraphs 24 and 48. See also the NPPA statement, paragraph 31, regarding the differences between BPAY Payments and direct debits. See also the Expert Industry Opinion of Lance Sinclair Blockley, 18 March 2021, paragraphs 472-476.

131 See Expert Industry Opinion of Lance Sinclair Blockley, 18 March 2021, paragraph 476.

132 References to "in-store payments" in this report exclude online payments for purchases in-store, such as payments made in-app such as Woolworths' "Scan and Go" service.

133 See, for example, **[CONFIDENTIAL TO OTHERS]**. See also the Expert Industry Opinion of Lance Sinclair Blockley, 18 March 2021, paragraphs 444-471.

134 See paragraphs 151-152 of this report.

b. Meanwhile, the NPP and BPAY are currently small players with services based on consumers entering BSB and account numbers or PayIDs into apps. These services are more cumbersome, differentiated from and not close substitutes to and constraints on eftpos' card-based services.

c. In the medium to long-term future, there is the potential for somewhat greater competition in this segment from and between eftpos (via its BeemIt mobile app), BPAY (via Osko Service 1) and the NPP (via the NPP's SCT service and potentially also its MPS). However, this is likely to require widespread adoption by consumers and merchants of QR code technology for in-store payments. QR code-based payments will be differentiated from card-based payments, and for a number of reasons I do not expect QR code-based payments to significantly constrain or displace card-based payments.[135] Even if QR code-based payments become common, there are likely to be other players making use of this technology for retail in-store payments, including PayPal and potentially other BigTech players, all acting as constraints on services of the amalgamated entity.[136]

d. The amalgamation is therefore not likely to create an entity with a significantly larger share in this segment than in the counterfactual or a likelihood of substantially higher prices or lower quality. Any worsening of terms of eftpos' services would predominantly result in diversion to the ICS rather than to the NPP. Equally, given the dominance of the ICS, any worsening of the terms of BPAY and/or NPP services in this segment would predominantly result in diversion to the ICS, rather than to eftpos. Substantial unilateral effects are therefore not likely.

141. For online retail payments:[137]

a. The BPAY Payments service is barely present and unlikely to grow in this segment, services over the NPP (Osko Service 1 and the SCT service) are only present to a limited extent, and eftpos is only a recent entrant with a very small presence via its "card on file" service, and no presence at all today in "guest checkout" services.

b. In the short to medium-term future, eftpos is likely to gain some volume in this segment, both through its "card on file" service for recurring online payments, and through a "key in card number" service for guest checkouts, although the latter seems likely to be at least 12 months away from launch.[138] However, eftpos' growth in online retail payments is likely to be constrained by the offerings and strategies of the ICS, which offer services with equivalent, if not considerably superior

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135 For a similar view, **[CONFIDENTIAL TO EFTPOS]**. **[CONFIDENTIAL TO OTHERS]**. See also the Expert Industry Opinion of Lance Sinclair Blockley, 18 March 2021, paragraphs 214-227, 321 (observing the more cumbersome interface of QR codes compared to NFC), 437, 470 and 523.

136 See eftpos statement, paragraphs 38-39 and the accompanying table. Also see paragraph 143.c of this report and note 152 below, which apply equally here.

137 References to "online payments" in this report include payments made online (using internet portals or in-app interfaces) for purchases in-store.

138 See note 86 above.

functionality,[139] enjoy incumbency and multi-service advantages,[140] and benefit from being the preferred rails of a number of significant intermediary online "merchants" (e.g. PayPal and BNPL providers).[141]

c. In the medium to long-term future, the NPP's MPS may enter this segment, however this is likely to take some time (as considerable work remains to be done by financial institutions to support MPS payments) and even then the MPS is likely to face significant barriers to expansion in this segment, including the need for merchants to do considerable work to their own systems, and the challenges of persuading consumers and merchants to adopt new processes and migrate from services that are already serving them well.[142] Added to this, the MPS appears to be at a disadvantage compared to "card on file" services in the context of recurring online retail payments in a number of important respects, including cost, speed and other functionalities of importance for consumers and merchants.[143] Intense competition from the incumbent offerings of the ICS will also be a primary constraint on the MPS in this segment, as it will in relation to eftpos' "card on file" service.

d. Therefore, considerable speculation and optimism would be required to predict that NewCo will bring together two entities that would both have significant future shares in this segment in the counterfactual. It follows that while a relaxation of eftpos' pricing or quality may result in some diversion to the MPS, and vice versa, this is likely to be small and swamped by diversion to the ICS. Substantial upward pressure due to the proposed amalgamation on the pricing of eftpos' "card on file" services and the MPS is therefore not likely.

142. For bill/invoice payments:

a. For bills paid using direct credits, the NPP's SCT service on its own is an alternative to BPAY's Osko Service 1. However, Osko Service 1 is an NPP overlay service, which means that it is a technical complement to the SCT service (i.e. to purchase a unit of an Osko Service 1 a financial institution must also purchase a unit of the NPP's SCT service).[144] This means that the proposed amalgamation is likely, if anything,

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139 See Expert Industry Opinion of Lance Sinclair Blockley, 18 March 2021, paragraph 444 and, more generally, paragraphs 444-471. Also see CBA statement, paragraph 83.

140 See the Expert Industry Opinion of Lance Sinclair Blockley, 18 March 2021, paragraphs 458-462 and 535, including the discussion of ICS tokenisation of online debit card payments. See also **[CONFIDENTIAL TO OTHERS]**.

141 **[CONFIDENTIAL TO OTHERS]**.

142 See, for example, Westpac statement, paragraph 29. See also Expert Industry Opinion of Lance Sinclair Blockley, 18 March 2021, paragraphs 476 and 523.

143 See note 129 above. Also see the Expert Industry Opinion of Lance Sinclair Blockley, 18 March 2021, paragraph 486. And see the eftpos statement, **[CONFIDENTIAL TO EFTPOS]** and also 147(f), 149 and 162. Also see paragraph 79(b)(iv), where eftpos observes that real time account to account platforms "have not as yet been successful, other than in a few instances, in taking share from cards but are taking share from traditional non real time payments globally" and paragraph 150, which observes that even in Sweden, where Swish is one of the world's leading examples of a successful direct account to account based app for retail payments, Swish's volumes are still relatively small. **[CONFIDENTIAL TO OTHERS]**.

144 See NPPA statement, paragraphs 66 and 88-90.

to produce incentives to *lower* prices for both Osko Service 1 and the SCT service, due to a Cournot complements effect.

b. While eftpos' "card on file" service and the NPP's MPS service might be alternatives for regular recurring bill payments, the comments above in relation to retail online payments apply equally here, including that both services are likely to be constrained by competition from the ICS, and considerable speculation and optimism would be required to predict that both of these services would become significant services in this segment in the counterfactual.

c. The BPAY Payments service has distinct characteristics that set it apart from the current direct credit and future direct debit services of the NPP (the SCT service and the MPS, respectively)[145] as well as from card-based payment services (including the existing card-based payment services of the ICS and, in the future, eftpos' "card on file" service).[146]

d. There is doubt over whether Osko Service 3 ("request to pay") will become a live service in the counterfactual,[147] but in any event, although it was originally contemplated as a way to migrate direct debits from the DE system,[148] it is functionally distinct from and not a close substitute for either the NPP's MPS service or eftpos' "card on file" service: Osko Service 3 is a "push" payment overlay, whereas the MPS and eftpos' "card on file" service are "pull" payment services that will function very similarly to direct debts over the DE system.[149]

e. While the BPAY Payments service and the NPP's future SCT einvoicing service will both offer automated payment reconciliation functionality, the latter will be focused on B2B and G2B bill payments, whereas the former will be focused on P2B bill payments. Their direct overlap is therefore limited.

143. For P2P payments:

a. The NPP's MPS service is not expected to play a role here.

b. BPAY's Osko services (Osko Service 1 and Osko Service 3 if the latter is developed) are overlay services that are technical complements to the NPP's SCT service.

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145 The NAB statement suggests that the BPAY Payments service is at risk from reduced demand due to the move to PEPPOL einvoicing: NAB statement, paragraph 53. See sub-paragraph 142.e and sub-section 6.6.4 below for consideration of the potential future overlap of the BPAY Payments service and the NPP's planned einvoicing message set.

146 As also explained above, for the majority of BPAY billers the real-time and rich data features of the NPP are not important, and significant system changes would be needed in order for them to be able to receive NPP payments.

147 Osko Service 3 ("request to pay") has been put on hold until the NPP's MPS has been rolled out by financial institutions, with no current implementation date, and BPAY has written down the assets as a result: BPAY statement, paragraphs 43 and 58. Westpac has expressed doubts over whether Osko Service 3 will become a live service and explained that it has no plans to support implementation of Osko Service 3: Westpac statement, paragraph 45.

148 See ANZ statement, paragraph 34.

149 Push payment services give control over the payment to the payer (including the timing as well as the amount of the payment), and there is no risk of dishonoured payments for the payee, whereas pull payment services give control of the payment to the payee, but come with a risk for the payee of dishonoured payments: see BPAY statement, paragraphs 24 and 56.

Again, their nature as complements means that if anything the amalgamation is likely to produce incentives to *lower* prices for the Osko services and the SCT service.

c. eftpos' BeemIt app has not managed so far to realise a significant share of P2P payments, despite being launched in 2018.[150] Growth in the counterfactual may be constrained both by incentives that some financial institutions may have to keep account holders conducting their finances through the financial institutions' own apps and portals,[151] and competition from other P2P payment apps, which in the future may include apps from BigTech players (including Apple, Google, Facebook / Whatsapp and PayPal).[152] The Expert Industry Opinion also suggests that payment apps will need to do more than just P2P payments in order to realise scale in the P2P segment,[153] so whether BeemIt is ultimately a significant competitor in P2P seems likely to depend on it becoming widely used for retail payments.

144. Finally, for B2P/G2P payments, there is currently only very limited presence of the NPP (via the SCT service) and BPAY (via Osko Service 1), and the potential future overlap is limited to these services and a potential eftpos "Deposits and Withdrawals" service.[154] Again, as Osko services are technical complements for the SCT service, there should be no concern that the amalgamation might produce upward pricing pressure in relation to these services. The eftpos "Deposits and Withdrawals" service faces a number of barriers to growth in this space, including competition from the ICS, as I will explain in sub-section 6.8. In any event, the main competition that the NPP, BPAY and eftpos will face in this space for a long time will be the low-cost incumbent DE system.

145. In summary, the three entities primarily offer services that are complementary to each other, rather than competing with each other, and merger increments in each segment are and will remain either minor or otherwise immaterial (e.g. because the services are complements).

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150 See Expert Industry Opinion of Lance Sinclair Blockley, 18 March 2021, paragraph 319 and Appendix V, where BeemIt's share in FY20 in the P2P segment is estimated to be 2%. I note that **[CONFIDENTIAL TO EFTPOS]**.

151 See Expert Industry Opinion of Lance Sinclair Blockley, 18 March 2021, paragraph 323.

152 See eftpos statement, paragraphs 38-39 and the accompanying table. Also see the table below paragraph 52, which lists a number of P2P competitors in Australia now (Splitr, Splitwise, Groupee and Visa Direct) and in the future (PayPal.ME and Venmo, ApplePay, GooglePay, FacebookPay, and MastercardSend), and paragraph 72, which details innovations in P2P payments driven by BigTech companies including PayPay and Apple. Also see paragraphs 60-61, where eftpos explains that it is seeing competition either already or becoming significant in the future from the likes of PayPal, Apple Pay, Google Pay and others, and "competition from these organisations is likely to be significant as: (a) there are low barriers to entry as they sit above the rails utilising the existing two-side markets; (b) they can often leverage large existing customer bases (Apple, PayPal) with embedded relationships beyond the payment; (c) they have global scale of investments and learnings and deep pockets; and (d) they are the experts at recognising core millennial need (and merchant) shifts and delivering compelling seamless experiences". According to **[CONFIDENTIAL TO EFTPOS]**.

153 Expert Industry Opinion of Lance Sinclair Blockley, 18 March 2021, paragraph 319.

154 See eftpos statement, paragraph 20(e)(iv).

6.2.2. The closest competitors of the amalgamating entities are much larger players with significant competitive advantages

146. The second thing I observe is that the closest competitors of each of the amalgamating entities are much larger incumbent players in each segment with significant competitive advantages. Therefore, not only will there be limited competition between the amalgamating entities in the counterfactual, but there will be far more significant competition with and between other players. These other players will continue to act as significant constraints on the amalgamating entities, both if amalgamation proceeds and in the likely counterfactual.

a. eftpos' closest competitors are the incumbent, better-resourced, globally-connected ICS, which supply essentially the same services as eftpos and more, with eftpos continually playing "catch up" to match the range and quality of their offerings to financial institutions and merchants.[155]

b. The NPP's closest competitor is the DE system, which offers comparable direct credit and direct debit services to the current and planned future services of the NPP (SCT and MPS, respectively) at close to zero marginal cost for financial institutions. To the extent that the MPS will compete with card-based services for bill/invoice payments and online retail payments, its closest competitors in that respect will again be the ICS, which will continue to enjoy incumbency advantages and other advantages from their global scale and relationships.

c. The unique characteristics of the BPAY Payments service means that it does not have a particularly close competitor. To the extent that there are alternatives to the BPAY Payments service for bill payments, the most significant of these at the moment are the ICS and the DE system, not eftpos nor the NPP.[156]

147. To paraphrase paragraphs 7.4 and 7.38 of the ACCC's Merger Guidelines, post-amalgamation there will be effective competitive constraints on the amalgamated entity in

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155 See eftpos statement, paragraph 40, which explains that "[f]or EPAL, Mastercard and Visa are the most significant current competitors", and paragraph 144(d), which explains that the ICS have inherent timing advantages regarding new payment services and initiatives. See also paragraph 138.a of this report and note 128 above.

156 In time, the NPP's MPS is likely to enter and start to attract some direct debit volumes, however I expect it to win those volumes mainly from the DE system, which is its most direct competitor in respect of "pull" payments, rather than from the BPAY Payments service, which is a "push" service. Even then, doubts have been raised over the attractiveness of the MPS to billers and the speed and extent to which direct debits will migrate to the MPS: see Westpac statement, paragraph 29, and **[CONFIDENTIAL TO OTHERS]**. The DE system will likely be lower cost for financial institutions and merchants than the NPP, migration to the NPP is likely to be expensive for a number of billers, and direct debits do not typically need to be "pulled" in real-time. For these reasons, migration to the NPP is unlikely to be rapid and the DE system is likely to retain a significant presence in direct debits for some time: see the Expert Industry Opinion of Lance Sinclair Blockley, 18 March 2021, paragraphs 476 and 482. In relation to the NPP's planned CATSCT einvoicing service, see note 145 above.

BPAY's Osko services are direct credit overlay services over the NPP's SCT service and the NPP's SCT service on its own (without an Osko overlay) may be a close substitute. However, for some time the DE system will remain a far more significant (and lower cost) alternative. Moreover, the complementary nature of Osko services and the SCT service (i.e. the fact that the SCT service must be used in order to use an Osko overlay service) means that the proposed amalgamation is likely to provide incentives to *lower* the prices of each service, rather than result in upward pricing pressure.

the form of significant comparable alternative services that will remain "available in plentiful supply to the entire market".

6.2.3. Dynamic market and significant constraints from new technologies and potential entrants

148. Retail payment segments, in particular, are highly dynamic,[157] characterised by continual evolution as new technologies are developed that enhance the ease, convenience and functionality of payments for consumers and merchants. The ICS have tended to lead this innovation, taking advantage of their global scale to fund significant R&D efforts.[158] Innovations in retail card-based payments have included (among others):[159]

a. Centralised hubs versus bilateral links;

b. Cross-border functionality with foreign exchange capability;

c. Integrated circuit (chip) technology for security, replacing magnetic stripe;

d. Network fraud monitoring;

e. Online payments capability;

f. 3D Secure for two-factor authentication in online guest checkout payments;

g. Contactless (NFC) card payments;

h. Mobile card tokenisation for mobile wallets;

i. Online card tokenisation for increased security in recurring payments and linkage of tokenisations to overcome expired and lost/stolen card issues; and

j. Online "wallets" such as "Click to Pay", enabling consumers to sign in and check out with stored payment credentials.

149. The pace of this innovation and ICS leadership is likely to continue,[160] with initiatives increasingly focused toward online payments, including online payments for in-store purchases as well as seamless in-app payment services.[161]

150. Against this backdrop, domestic Australian payment systems will face significant challenges maintaining their relevance for financial institutions, merchants and

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157 See eftpos statement, paragraphs 37(a) and (c).

158 Expert Industry Opinion of Lance Sinclair Blockley, 18 March 2021, paragraphs 444-447.

159 See Expert Industry Opinion of Lance Sinclair Blockley, 18 March 2021, paragraph 445.

160 See Westpac statement, paragraphs 48-49. See also eftpos statement, paragraph 144(d), which explains that:

> *"[d]omestic schemes have been slower than Visa and Mastercard to implement EMV based changes and this has been partly because Visa and Mastercard have a head start given they are equity owners of and second staff as developers to EMV Co, with each development giving the BIN owner (ie ICS) primacy. As such, domestic schemes (as "business associates" but not owners of EMVCo) get delayed access to every new standard/specification and typically there has been no thought given to how a multi-network debit card or form factor would function within a specification. Nonetheless the ability to quickly follow Visa and Mastercard, at a relatively low cost is becoming increasingly more possible as global suppliers support card-based platforms".*

161 The ICS are also developing their own offerings in adjacent services to payments such as Digital ID.

consumers.[162] Since its formation in 2009, eftpos has found itself in "catch up" mode, trying to imitate the range of services offered to financial institutions by the ICS.[163] This is likely to continue both in the counterfactual and if the proposed amalgamation proceeds, constraining the ability of the amalgamated entity to establish itself in online retail payments.[164] For domestic payment services to remain relevant they are likely to need to bring similar initiatives to market in a timely fashion or develop services that differentiate themselves from the ICS (e.g. services tailored to local market needs or hybrid services that make use of a number of domestic payment infrastructures to provide services that the ICS are not able to provide).

151. Adding to this is the possibility of disruptive entry and competition from BigTech players such as Facebook/Whatsapp, Google, Apple, PayPal and Samsung, leveraging their large installed user bases and deep relationships with consumers.[165] Apple, Google and Samsung already offer mobile wallet services in Australia, with Apple maintaining exclusivity over the NFC chips in its iOS devices, which has inserted Apple as a revenue earner in the Australian payments ecosystem. While these mobile wallets currently make use of card rails for payments, there is the future potential for them to offer stored value services, which would disintermediate those rails. I understand that Apple already operates a stored value service overseas (Apple Cash),[166] FacebookPay is already available in Australia based on card rails,[167] and Google and Facebook are developing their payment service capabilities beyond mobile wallets linked to card rails and are engaging in a number of activities overseas that if applied in Australia would disintermediate those rails.[168] The introduction of Open Banking (i.e. the Consumer Data Right (CDR)) is likely to further reduce barriers to entry for BigTech and fintech players and further enhance the dynamism of the payment segments in Australia.[169]

152. While it is difficult to predict how and the extent to which these players will compete in and disrupt the Australian payments landscape in the future, there is considerable potential for major disruption, particularly as mobile devices become more prevalent as form factors for

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162 See Expert Industry Opinion of Lance Sinclair Blockley, 18 March 2021, paragraphs 448-451.

163 Expert Industry Opinion of Lance Sinclair Blockley, 18 March 2021, paragraphs 451-456. This is also clear from the eftpos statement.

164 See, for example, CBA statement, paragraph 83.

165 The eftpos statement anticipates entry and competition in P2P payments from these BigTech players and also from fintechs before 2023, and also in the longer term (beyond 2023) in retail payment segments (in-store and online), with PayPal to enter in-store retail payments before 2023: eftpos statement, paragraphs 38-39 and the accompanying table. See also eftpos statement, paragraphs 58-61.

166 See https://support.apple.com/en-us/HT207883. According to the eftpos statement, paragraph 72(b), Apple Cash is expected to be a vigorous competitor to eftpos' Beem It app, easily leveraging its capabilities and embedded user base.

167 See https://pay.facebook.com/au/ and https://pay.facebook.com/au/how-it-works/.

168 According to the NPPA statement, Facebook (WhatsApp) recently launched an account to account P2P payment solution in Brazil, and Google Pay in India has been built entirely on India's Immediate Payment Service: see NPPA statement, paragraph 100 and also paragraphs 101-102, which discuss the potential for similar developments in Australia. See also the Expert Industry Opinion of Lance Sinclair Blockley, 18 March 2021, paragraphs 228 and 310.

169 See eftpos statement, paragraph 37(c).

payments and the share of retail payments that occur online (using mobile devices) increases.

6.2.4. The largest customers of NewCo will enjoy significant countervailing power

153. In addition to the constraints on NewCo from the current services of the ICS and the DE system, and dynamic constraints from further developments by the ICS and also potential entrants such as the BigTech firms, NewCo is likely to be constrained by its largest customers following amalgamation.

154. As can be seen in the following table, the four largest financial institutions and the two largest retailers in Australia (Coles and Woolworths) together represent around **[CONFIDENTIAL – DERIVED FROM CONFIDENTIAL INFORMATION OF BPAY, EFTPOS AND NPPA]** of the transaction volumes and around **[CONFIDENTIAL – DERIVED FROM CONFIDENTIAL INFORMATION OF BPAY, EFTPOS AND NPPA]** of the revenues of each of the amalgamating entities. The commercial significance of these players is, if anything, understated by these shares of volume / revenue figures. No payment service or initiative in Australia has become successful without the support of the largest financial institutions, and retail payment services in particular tend to rely on adoption by Coles and Woolworths in order to habitualise the payment service and kickstart widespread adoption by consumers and merchants (contactless card payments being an example of this).

Table 3: Customer Shares of Transaction Volumes and Revenues (FY20)

	Transaction Volumes (%)				Revenues (%)			
	eftpos	**BPAY**	**Osko**	**NPP**	**eftpos**	**BPAY**	**Osko**	**NPP**
CBA	X	X	X	X	X	X	X	X
Westpac	X	X	X	X	X	X	X	X
NAB	X	X	X	X	X	X	X	X
ANZ	X	X	X	X	X	X	X	X
Coles	X	X	X	X	X	X	X	X
Woolworths	X	X	X	X	X	X	X	X
Sum of Big Six	X	X	X	X	X	X	X	X
Others	X	X	X	X	X	X	X	X
Total	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**

Sources: EPAL, BPAY and NPPA

155. While vertical integration by these customers into the supply of payment services is more than a theoretical possibility (it is how eftpos, Bankcard and BPAY were all founded, and also, more recently, BeemIt),[170] it is unlikely that these customers would contemplate "bypassing" NewCo by sponsoring an entirely new set of low-value payment rails at this point in time.

156. However, the major customers of NewCo (the largest four financial institutions, the two largest retailers in Australia, and a number of other financial institutions and payment service providers such as Tyro and FirstData) will enjoy countervailing power of a more

170 BeemIt was founded in 2018 by CBA, NAB and Westpac.

fundamental and direct nature. A feature of the proposed amalgamation is that these customers together will own NewCo and therefore have influence over pricing, quality and innovation decisions by NewCo and its constituent payment schemes. Any attempt by the management of NewCo or a particular amalgamated scheme to "give less or charge more" is therefore likely to be directly constrained within NewCo by its own shareholder customers.

6.2.5. Summary

157. My high-level assessment of the main factors that are relevant for assessing the likelihood of substantial unilateral effects has produced the following observations:

a. The amalgamating entities offer largely complementary services and merger increments are small or otherwise immaterial in each segment;

b. The closest competitors of the amalgamating entities are not each other, but much larger players with significant competitive advantages;

c. The Australian payments landscape is dynamic with significant constraints on domestic payment infrastructures and services from innovations of the ICS and potential entry of BigTech players; and

d. The largest customers of the amalgamated entity will enjoy significant countervailing power in the fundamental and direct sense that they will be its shareholders with influence regarding prices, quality and innovation decisions and with both the incentives and ability to prevent any attempt by NewCo to "give less or charge more".

158. For these reasons, in my opinion the proposed amalgamation is not likely to result in substantial unilateral effects on prices or quality. It should also be borne in mind that there will be a degree of common ownership of the three entities even in the counterfactual. It follows that, to the extent there may be some (less than substantial) unilateral incentives to increase prices or reduce quality of overlapping services compared to a "no common ownership" counterfactual, the incremental effect of the amalgamation will be even smaller when common ownership in the counterfactual is taken into account. Indeed, the shareholdings of the four major financial institutions will all be diluted by the amalgamation, rather than concentrated.

159. The following sub-sections provide further explanation in support of this opinion, including a more detailed explanation of the nature of the overlap between BPAY's overlay services over the NPP and the NPP's SCT, and more detailed consideration of the effects on competition in relation to each segment of payments.[171]

6.3. Overlaps between BPAY's current and potential future overlay services over the NPP and the NPP's SCT service

160. There is a current overlap between the NPP's SCT service and BPAY's Osko Service 1. There are also potential future overlaps between the SCT service (including future category

171 The overlaps between eftpos' in-store and online payments services and the NPP's MPS are considered in detail in sub-sections 6.4 ("in-store retail") and 6.5 ("online retail).

purpose code variants)[172] and Osko Services 2 and 3 and a BPAY Payments service overlaid over the NPP should that be developed by BPAY.

161. However, the complementary nature of the relationship between overlay services over the NPP and the NPP's own SCT service[173] means that I expect, if anything, *lower prices* for both the SCT service and any BPAY overlay service under amalgamation, due to a Cournot complementarity effect. This effect is equivalent to the "elimination of double marginalisation" effect in a vertical merger context.[174]

6.3.1. Overview of the NPP's SCT service and BPAY's current and potential future overlay services

162. BPAY currently offers Osko Service 1 over the NPP and may in the future offer further Osko services (Osko Services 2 and 3) and even potentially a BPAY service over the NPP. Each of these services is overlaid over the NPP's SCT service, and the SCT service (without an overlay) is an alternative for financial institutions.

a. Osko Service 1 is an overlay over the NPP's SCT service for "pay anyone" payments, where the SCT service without an overlay is an alternative for financial institutions.

b. Osko Service 2 ("pay with document"), which is in development, is also an overlay over the SCT service, designed for "bulk credit" B2P/G2P payments such as businesses paying employees or governments disbursing welfare payments, and allowing payers to send payments with accompanying documents (e.g. payslips). The SCT service without an overlay will again be an alternative here.

c. Osko Service 3 ("request to pay"), which is currently on hold, is also an overlay over the SCT service, designed for bill payments and P2P payments, where again the SCT service without an overlay would be an alternative (with reliance on the payee to request payments indirectly, such as by using text or internet messaging services).

d. Finally, if BPAY were to develop a BPAY Payments service over the NPP, it would again be an overlay over the SCT service. Again, the SCT service would be an alternative, in the same way as "pay anyone" direct credits are an alternative to BPAY payments today.[175]

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172 As explained in paragraph 67 of the NPPA statement, NPPA is developing "category purpose code" business services to support specific payment types: payroll, tax, superannuation and einvoicing. These category purpose codes will identify the different payment types and specify certain data elements that should be included in the payment message. I understand that these business services are variants of the NPP's SCT service with specific defined data elements for these payment types. In some documents I have reviewed these have been referred to as "CATSCT" services. I also understand that overlay services (including Osko Services 1, 2 and 3) may be overlaid over the these CATSCT variants as well as over the basic SCT. See, further, page 9 of the NPPA's October 2020 Roadmap: https://nppa.com.au/wp-content/uploads/2020/11/NPP-Roadmap-October-2020.pdf.

173 For simplicity of terminology, references in the remainder of this section to the NPP's "SCT service" are references that include all of the SCT service's future "category purpose code" variants.

174 See note 176 below.

175 The potential future overlap between the existing BPAY Payments service and the einvoicing category purpose code SCT variant is discussed separately in sub-section 6.6.4. Should a BPAY Payments service overlaid over the NPP be developed, the same considerations would apply to its overlap with the einvoicing category purpose code SCT variant as those discussed in sub-section 6.6.4.

6.3.2. The complementary nature of overlay services and the SCT service

163. A financial institution that makes use of Osko overlay services must also make use of and pay for the underlying SCT service from the NPP. This means that Osko overlay services are, technically, "perfect" complements for the SCT service: use of a unit of an Osko overlay service requires the use of a unit of the SCT service. This means that an increase in demand for Osko overlay services implies a one-for-one increase in demand for the SCT service. This reflects what is, essentially, a vertical relationship between the SCT service and Osko overlay services.[176]

164. The reverse is not the same: the SCT service can be used without using an Osko overlay service and indeed some financial institutions have decided not to develop the capability to initiate Osko payments, making use of the NPP using only the SCT service.[177]

165. Financial institutions therefore have the choice to use and pay for the SCT service on its own or use and pay for both the SCT service and an Osko overlay service. They do not have an option of using and paying for an Osko overlay service on its own.[178]

6.3.3. Pricing structures for the SCT service and Osko overlay services

166. Currently NPPA charges financial institutions annual license fees – i.e. lump sum amounts each year – with no variable charges for the SCT service.[179] **[CONFIDENTIAL TO BPAY]**.[180] **[CONFIDENTIAL TO BPAY]**.

167. However, I understand that NPPA plans for the SCT service to be priced on a per transaction basis in the future, when the NPP has attracted more volume from the DE system and its average costs are lower.[181] **[CONFIDENTIAL TO BPAY]**.

168. In the remainder of my analysis of the overlaps between the SCT service and Osko overlay services, **[CONFIDENTIAL TO BPAY]**.

6.3.4. The proposed amalgamation will not produce incentives to increase prices for the SCT service or BPAY's overlay services

169. The availability of BPAY's overlay services will not constrain the pricing of SCT services in the counterfactual. This is because overlay services are laid over the top of an SCT, and any financial institution that wishes to use an overlay service must also pay for an SCT (the

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176 In many vertical relationships the "downstream" firm (here, BPAY, supplying Osko overlay services) will pay the "upstream" input supplier (here, NPPA) for the input (here, the SCT service) needed to supply the downstream service (here, Osko overlay services). The downstream firm will then charge final customers a price that reflects the price of the input, the costs of the downstream service and a margin for the downstream firm. In the case of the SCT service and Osko overlay services, however, final customers (i.e. financial institutions) pay NPPA and BPAY separately. From an economic perspective, while these payment flows differ from a typical vertical supply relationship this does not matter: whether considered as vertically related or as horizontal complements, the economic assessment is the same.

177 See NPPA statement, paragraph 45.

178 To adapt the words of Tom Stoppard, "I can't do you Osko without SCT. SCT is compulsory. They're all SCT, you see" (Tom Stoppard, *Rosencrantz and Guildenstern are Dead*, 1966).

179 NPPA statement, paragraph 89.

180 **[CONFIDENTIAL TO BPAY]**.

181 NPPA statement, paragraph 90.

underlying core service). Overlay services are therefore not substitutes for an SCT: an SCT must always be paid for whether or not an overlay service is used. It follows that if the price of the SCT service were to increase, there would be no diversion to overlay services, as the total cost for financial institutions of overlay services would increase by the same absolute amount.[182] Indeed, an increase in the price of the SCT service would be likely to *reduce* demand for both the SCT service *and* for overlay services (as I discuss further in the following sub-section). It further follows that, since there would be no diversion between the services, the amalgamation would not result in upward pricing pressure on the SCT service.

170. While the SCT service is likely to impose some constraint on the pricing of overlay services in the counterfactual (because a financial institution considering using overlay services has the alternative of sending an SCT without an overlay service), the amalgamation will not result in upward pressure on overlay service prices because such price increases would reduce demand for overlay services without increasing demand for the SCT service. Recall that an SCT must always be paid for, whether or not an overlay service is used, and so a customer that switches from an overlay service to the core SCT service on its own will consume the same volume of the core SCT service. The standard economic theory of unilateral effects is that a merger will provide incentives to increase the price on each of the merging products because some sales that would be lost by the merging parties pre-merger will be internalised within the merged entity post-merger. This depends on there being a positive effect (i.e. a positive externality) on sales of one of the merging services when the price of the other increases. Since there can be no increase in demand for SCT services from higher prices for overlay services – demand for SCT services can at best remain the same, if all diversion from the overlay service is to SCT on its own, and otherwise will decrease, if some sales divert to third parties – the proposed amalgamation cannot result in unilateral effects (i.e. upward pressure) on the prices of overlay services.

6.3.5. The proposed amalgamation is likely to produce incentives to *lower* prices for the SCT service and BPAY overlay services through Cournot complementarity effects

171. Indeed, the amalgamation is likely to result in *lower prices* for the SCT service and BPAY overlay services, rather than higher prices, due to Cournot complementarity effects.

172. For the sake of clear exposition, I will for the moment assume no common ownership of the amalgamating entities in the counterfactual. When SCT and overlay services are in separately held entities, there is no benefit to either entity of sales made by the other entity – in technical terms, externalities caused by the pricing of one service on the volumes of the other service (whether due to substitution or complementarity) remain external and do not factor into the pricing decisions of each entity.

173. Compared to this "no common ownership" counterfactual, amalgamation would offer the amalgamated entity incentives to *lower* the prices of each service (the SCT service and

182 Consider a financial institution that has to choose between standalone SCT, a bundle of SCT and Osko, or a third option (either another service or the "outside good", i.e. not buying at all). Each option will benefit the financial institution by some amounts $v_{SCT}, v_{SCT+Osko}, v_3$ and will cost p_{SCT}, $p_{SCT} + p_{Osko}$, p_3 respectively. The choice will fall on the SCT+Osko combination when the net value of that combination is higher than the net value of the other ones, i.e., when $v_{SCT+Osko} - p_{SCT} - p_{Osko} > v_{SCT} - p_{SCT}$ and $v_{SCT+Osko} - p_{SCT} - p_{Osko} > v_3 - p_3$. An increase in the price of SCT would leave the first inequality unchanged and can only make the second one less likely to be satisfied. Therefore, an increase in the price of SCT will not lead to any increase in the sales of Osko.

overlay services) in order to boost sales of the other service (overlay services and the SCT service, respectively). This is a result of the nature of these services as technical complements, which generates positive externalities from price reductions that can be internalised within the amalgamated entity.

a. Because one unit of the SCT service must always be purchased with each unit of an overlay service, lower prices for overlay services will increase demand not just for the overlay services, but also for the SCT service.

b. Similarly, a lower price for the SCT service will lower the total cost for financial institutions of purchasing overlay services, and will consequently increase demand not just for the SCT service, but also for the overlay services.

174. Of course, the likely counterfactual is one in which there will be substantial common ownership of the amalgamating entities. The implication of this is that there may already be a (weaker) Cournot complementarity effect and downward pressure on prices of SCT services and overlay services in the likely counterfactual, and so the incremental effect caused by the amalgamation may be muted.

175. What is important to take away, however, is that the nature of the relationship between the SCT service and overlay services is such that, if anything, the amalgamation is likely to put *downward* pressure on their prices, rather than upward pressure.

6.4. In-store retail segment

6.4.1. Overview of the in-store retail segment

176. Payments in this segment are for in-store purchases made using physical in-store payment methods (e.g. cash handed over the counter, cards inserted into or tapped on a terminal, etc.). This segment does not include online payments for in-store purchases, such as payments made in-app such as Woolworths' "Scan and Go" service.

177. Payments in this segment range from payments at mobile coffee carts to payments for groceries at supermarkets and for appliances at electronics stores. In-store payment methods have developed over time from predominantly cash and cheques to various card-based form factors (swipe cards, chip and pin cards, contactless NFC-chip cards and, more recently, NFC-chips in mobile devices using mobile card tokens). QR codes are also in use for payments using mobile devices in-store, but this is currently limited to international travellers using AliPay or WeChatPay at merchants that accept these payment services.

178. In-store retail segment shares of each payment service by volume, the combined shares of the amalgamated entity and the amalgamation-specific increment are presented in Figure 4 below. **[CONFIDENTIAL TO EFTPOS]**.

Figure 4: In-store retail payments – shares by volume (FY11-FY25)

[CONFIDENTIAL TO EFTPOS]

179. As can be seen in Figure 4, the main payment services in this segment are the card-based payment services provided by the ICS (Visa, Mastercard, Amex and Diners Club) and eftpos. Together, card-based payment schemes (including debit and credit cards) represented more than **[CONFIDENTIAL TO OTHERS]** of in-store retail payment volumes excluding cash and cheques in FY20, and while this share will likely decline, it is still

forecast to be greater than [CONFIDENTIAL TO OTHERS] by FY25.[183] The primary competition in this segment is therefore – and for at least the next five years (and longer) will continue to be – between the card-based services of the ICS and eftpos.

180. [CONFIDENTIAL TO EFTPOS]. eftpos' core payment service is a "card present" service for in-store payments, where a physical card (either an eftpos proprietary card or a DNDC) is either inserted into or "tapped" on a card reading POS terminal in-store. In the case of a DNDC, when it is inserted the consumer may choose for the eftpos rails to be used for the payment (by selecting "savings" or "cheque") and when it is "tapped", the merchant may have the option for the payment to be routed via the eftpos rails (i.e. MCR). eftpos also offers mobile card tokenisation that, if facilitated by the card issuer, allows a consumer to choose that eftpos' rails be used when the consumer makes an in-store contactless payment with a mobile device via one of the "pays" (e.g. Apple Pay).

181. [CONFIDENTIAL TO EFTPOS].[184] [CONFIDENTIAL TO EFTPOS].

182. Apart from cash, all other services for in-store retail payments are mobile-device based. These, however, are marginal services with very small volumes: together they represent [CONFIDENTIAL TO OTHERS] of payments in the segment.[185] They essentially take two forms: (a) QR code-based payment services; and (b) payment services based on entering payment credentials (BSB and account numbers or Pay-IDs) into mobile banking apps.

a. **QR code-based payment services.** AliPay and WeChat Pay are mobile payment apps that are based on QR code technology. AliPay and WeChat Pay are largely limited to international travellers and QR code technology for instore payments is currently only available at merchants that tend to have high exposure to international travellers. The AliPay and WeChat Pay payment models involve stored funds within AliPay and WeChat Pay accounts, which can be attractive particularly for people who are unbanked, but in Australia, where the proportion of the population with a bank account is very high, the scope for growth of these payment services is likely to be limited, even once QR code technology becomes more widespread. In the future, further entry of QR code-based payment services may occur. However, these face significant barriers to realising a significant share of in-store retail payments, for reasons that are provided in sub-section 6.4.3.

b. **Services based on entering payment credentials into mobile banking apps.** BPAY's Osko Service 1 and the NPP's SCT are sometimes used for in-store retail payments, however my understanding is that only a small number of small (micro) merchants accept this form of payment. For a customer to pay using these payment services the customer must enter the merchant's BSB and account number or PayID into their mobile banking app and then make the payment in much the same way as paying a bill using their mobile banking app.

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183 These figures include "mobile payments" using card tokens: i.e. payments using a card token in a mobile wallet app together with the mobile phone's embedded NFC chip.

184 [CONFIDENTIAL TO EFTPOS].

185 The vast majority of payments in-store using mobile phones make use of card tokens in mobile wallet apps (e.g. Apple Pay) and embedded NFC chips in the mobile phones. These payments have been included in my discussion of card schemes and their shares above.

183. Currently Osko Service 1 and the SCT service represent just **[CONFIDENTIAL TO BPAY] [CONFIDENTIAL TO NPPA]** of in-store retail payments in volume terms and are forecast to represent only **[CONFIDENTIAL TO BPAY] [CONFIDENTIAL TO NPPA]** by FY25. The amalgamation-specific increment in this segment is therefore currently close to zero and is only forecast to be around **[CONFIDENTIAL TO BPAY] [CONFIDENTIAL TO NPPA]** by FY25. Substantial unilateral effects on prices and quality are not likely given such limited overlaps between the services of the amalgamating entities and that NewCo will have and is forecast to have a combined share of **[CONFIDENTIAL TO EFTPOS]** in this segment even in FY25.

184. Nonetheless, the following sub-section provides further consideration of the overlaps between eftpos' in-store payment services and the (current and potential future) in-store payment services of BPAY and the NPP.

6.4.2. Overlaps between the services of the amalgamating entities in the in-store retail segment are not likely to be material

185. eftpos' card-based services enjoy a share of this segment of **[CONFIDENTIAL TO EFTPOS]**.

186. The services in this segment that BPAY and the NPP currently offer and will offer in the future are differentiated from the card-based services of the ICS and eftpos. The card-based services of the ICS and eftpos are physical card acceptance (insert/swipe and contactless using NFC chips) and mobile card token acceptance (using NFC chips). The services offered in this segment by BPAY and the NPP (Osko Service 1 and the SCT service) currently require bank app engagement by the customer (to make a "pay anyone" P2B transaction), and in the future these services, as well as the NPP's planed MPS (in development), are likely to make use of QR codes as their form-factor for in-store payments.[186] These form factors are all differentiated from and more "cumbersome" at in-store point of sale than card-based services,[187] and suffer a number of other disadvantages compared to card-based services.[188]

187. Moreover (and consistent with what has just been said), BPAY and the NPP are barely present in this segment today, and as noted above, they are forecast to achieve no more than around **[CONFIDENTIAL TO BPAY] [CONFIDENTIAL TO NPPA]** of in-store retail payment volumes by FY25. Their future potential to grow in this segment and represent a significant constraint on card-based services (including eftpos) is limited by the form factors available to them.

    a. **Entering payment credentials into mobile banking apps.** Only a very small number of small merchants accept payments via PayIDs or via BSB and account numbers through bank apps. I do not expect PayIDs or BSB and account numbers to become common in-store payment methods in the future, due to the relative inconvenience of this payment method compared to contactless card payments and even QR code payments. Rather, I expect the acceptance of these form factors by

186 **[CONFIDENTIAL TO OTHERS]**.

187 In relation to QR codes, see the Expert Industry Opinion of Lance Sinclair Blockley, 18 March 2021, paragraphs 223-227 and 321, and sub-section 188 below.

188 **[CONFIDENTIAL TO EFTPOS]**.

merchants, and the use of them by retail customers, to remain limited to payments to a small number of small merchants.

b. **QR codes.** In the future, there is the potential for somewhat greater competition in this segment from and between eftpos (via its BeemIt mobile app), BPAY (via Osko Service 1) and the NPP (via the NPP's SCT service and potentially also its MPS). The extent of this competition will depend on how widespread QR codes become in merchant payment systems and the extent to which bank and retailer apps and the NPP's MPS take advantage of QR code technology.[189] As explained in the following sub-section, for a number of reasons there are limits to the extent of competition and constraint that QR code-based payment services can exert on the card-based services of eftpos and the ICS. For these reasons, I consider that QR code-based payment services are likely to represent at best fringe competition in this segment for at least the next five to ten years.[190] Even if QR code-based payments become common, there are likely to be other players making use of this technology for retail in-store payments, including PayPal and potentially other BigTech players, all acting as constraints on services of the amalgamating entities.[191]

188. Evidence from overseas and in Australia supports this view. Even in Sweden, where the Swish A2A retail payment app has gained some traction, Swish's volumes of retail transactions are still relatively small.[192] Similarly, eftpos' own forecasts imply **[CONFIDENTIAL TO EFTPOS]**.[193]

6.4.3. Reasons why QR code-based payment services are unlikely to act as significant constraints on card-based in-store payment services

189. Some payments for goods or services purchased in-store are already made in-app or otherwise online (e.g. Woolworths' "Scan and Go" service), and the proportion of purchases in-store made in this way is likely to increase in future years. However, despite relating to purchases in-store, I consider these payments to be "online" retail payments (as their form factors are online form factors), rather than "in-store" retail payments, and I deal with these services in sub-section 6.5 below when I consider the online retail segment.

190. Future services offered by BPAY and the NPP in the in-store retail segment (as defined in this report) are likely to require QR codes (this includes the MPS as well as Osko Service

189 QR codes may enable BeemIt and proprietary apps of financial institutions to be used much like AliPay and WeChat Pay are today, although with transactions authorised and cleared over eftpos rails or over the NPP using either Osko Service 1 or the SCT service. QR codes may also be used to initiate payments via the MPS where the customer has provided a standing authorisation for the merchant to "pull" funds from the customer's account.

190 For a similar view, **[CONFIDENTIAL TO EFTPOS]**. **[CONFIDENTIAL TO OTHERS]**. See also the Expert Industry Opinion of Lance Sinclair Blockley, 18 March 2021, paragraphs 214-227, 321 (observing the more cumbersome interface of QR codes compared to NFC), 437, 470 and 523.

191 See eftpos statement, paragraphs 38-39 and the accompanying table. Also see paragraph 143.c of this report and note 152, which apply equally here.

192 eftpos statement, paragraph 150. See also the Expert Industry Opinion of Lance Sinclair Blockley, 18 March 2021, paragraph 309.

193 **[CONFIDENTIAL TO EFTPOS]**.

1 and the SCT service).[194] For a number of reasons there are limits to the extent of competition and constraint that QR code-based payment services are likely to exert on card-based in-store payment services such as eftpos' card present and mobile card tokenisation services (and the corresponding services of the ICS). These limits are likely to preclude services of BPAY and the NPP from acting as significant constraints on card-based in-store payments in the counterfactual.[195]

191. First, an industry-wide standard will need to be developed for widespread adoption by merchants and consumers of in-store QR code payments. While a broad EMV standard exists for QR code-based payments, and there exist a number of proprietary QR code systems that have established a degree of in-store penetration (in particular among merchants seeking to facilitate payments by international travellers using AliPay and WeChat Pay), it is likely that a single non-proprietary QR code standard for in-store payments will need to be developed in order for QR code-based in-store payments to become widely adopted by merchants.[196] This is likely to require considerable industry-wide coordination that will take some time, with or without the proposed amalgamation. My understanding is that this is progressing under a process that is being overseen by AusPayNet, but at the moment even fundamental matters such as whether QR codes should be merchant initiated or consumer initiated are not settled.

192. Second, merchants and consumers would be likely to take some time to adopt QR code-based payments even if they were as convenient as card-based payments.

a. Widespread adoption by merchants of QR code systems that generate or read QR codes will be required. While deployment of new physical infrastructure may not be required (merchants may be able to make use of existing payment screens or smartphones or tablets) widespread adoption is still likely to take some time as merchant habits and systems can be slow to change.[197]

b. Consumer habits are perhaps even slower to change.[198] Even in 2020, more than four years after in-store payments using Apple Pay and Samsung Pay were launched, only 6% of in-store payments using ICS debit cards were made using the NFC chips in mobile devices.[199] Based on this, I consider that the vast majority of consumers in the vast majority of in-store payment situations are likely to continue for many years with their existing payment habits rather than switch to an alternative,

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194 See Coles statement, paragraph 142. And see the presentation by NPPA to the Industry Committee, dated 24 August 2020 (included within Annexure C to the Industry Committee Resolution), page 18. As noted earlier, references to "in-store payments" in this report excludes online payments made for purchases in-store (e.g. payments made in-app such as Woolworths' Scan and Go and payments for food or entertainment (e.g. movies) made using internet portals or apps).

195 See note 190.

196 **[CONFIDENTIAL TO OTHERS]**.

197 Expert Industry Opinion of Lance Sinclair Blockley, 18 March 2021, paragraph 306.

198 Expert Industry Opinion of Lance Sinclair Blockley, 18 March 2021, paragraphs 113-115.

199 See RFi Research, *Australian Payments Diary October 2020*, presentation to eftpos, undated, at page 65. Similarly, Mr Blockley estimates that contactless in-store payments using mobile devices are now "over 10%" of contactless in-store transactions, but were less than 5% pre-COVID: see the Expert Industry Opinion of Lance Sinclair Blockley, 18 March 2021, paragraph 218.

unless that alternative is considerably superior in its convenience or value proposition.

193. Third, and related to the previous observation, card-based payment services have been designed and enhanced over many years to optimise the in-store payment experience for consumers and merchants. This leaves little room for new payment services to become established, particularly when something significantly superior tends to be needed to overcome entrenched habits, and when the incumbent services are continuing to innovate and will compete aggressively to maintain their share of payments.[200] Moreover, rather than being significantly superior, QR code-based payments are inferior to card-based payments in a number of respects.

a. Speed and convenience. Evolution over many years has reached a point where card-based payments are close to instant and effortless. QR code-based payments are slower and relatively "cumbersome";[201]

b. Ubiquity of consumer and merchant adoption. Card-based systems have a clear advantage at the moment in terms of consumer usage and merchant acceptance and this is likely to continue to be the case for a long time (as explained above); and

c. Other important features for retail payments. Card-based systems offer other important features for consumers and merchants in retail payment settings, including fraud detection and management and dispute handling (including chargebacks), that QR code-based services over the NPP (including Osko Service 1, the SCT and the MPS) will not.[202]

194. While some merchants may see an opportunity to use QR codes to better integrate payments with other services such as loyalty points, and may even offer incentives such as loyalty points to try to break old habits, this seems unlikely to significantly shift the dial.[203]

6.4.4. Summary of my views on the likelihood of substantial unilateral effects in this segment

195. In-store retail payments are currently dominated by card-based systems and this is likely to remain the case for the foreseeable future due to high degrees of consumer and merchant inertia together with global investments and innovations and aggressive competition by the ICS to maintain the relevance and shares of their in-store payment services.

196. In this context, competition between the amalgamating entities in the counterfactual will be marginal at most, and substantial unilateral effects due to the proposed amalgamation on prices or quality of in-store retail payment services are not likely for the following reasons.

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200 Related to this, see the Expert Industry Opinion of Lance Sinclair Blockley, 18 March 2021, paragraph 192, which observes that Australian consumers do not have significant problems with existing (card-based) payment services, and as a result mobile app payment services are unlikely to achieve a similar level of ubiquity in Australia as they have in other countries such as China.

201 Expert Industry Opinion of Lance Sinclair Blockley, 18 March 2021, paragraphs 223-227 and 321.

202 **[CONFIDENTIAL TO EFTPOS]**.

203 A similar view appears in paragraph 104 of the Coles statement.

a. eftpos has a significant share of in-store retail payments today, but this share has declined substantially over the past decade and eftpos will continue to face intense competition from the ICS,[204] as well as, potentially, from BigTech players in the longer-term.[205]

b. Meanwhile, the NPP and BPAY are currently small players with services based on consumers entering BSB and account numbers or PayIDs into apps. These services are more cumbersome, differentiated from and not close substitutes to and constraints on eftpos' card-based services.

c. In the medium to long-term future, there is the potential for somewhat greater competition in this segment from and between eftpos (via its BeemIt mobile app), BPAY (via Osko Service 1) and the NPP (via the NPP's SCT service and potentially also its MPS). However, this is likely to require widespread adoption by consumers and merchants of QR code technology for in-store payments. QR code-based payments will be differentiated from card-based payments, and for a number of reasons I do not expect QR code-based payments to significantly constrain or displace card-based payments. Even if QR code-based payments become common, there are likely to be other players making use of this technology for retail in-store payments, including PayPal and potentially other BigTech players, all acting as constraints on services of the amalgamating entities.

d. The amalgamation is therefore not likely to create an entity with a significantly larger share in this segment than in the counterfactual or a likelihood of substantially higher prices or lower quality. Any worsening of terms of eftpos' services would predominantly result in diversion to the ICS rather than to the NPP. Equally, given the dominance of the ICS, any worsening of the terms of BPAY and/or NPP services in this segment would predominantly result in diversion to the ICS, rather than to eftpos. Substantial unilateral effects are therefore not likely.

6.5. Online retail segment

6.5.1. Overview of the online retail segment

197. Payments in this segment are made using online form factors, including internet portals and mobile apps (where the payment is made online rather than interacting physically in-store such as with the NFC chip in a mobile device). This segment therefore includes online payments for in-store purchases (e.g. Woolworths' "Scan and Go" in-app service).[206]

198. It is useful to distinguish two sub-segments of online retail payments:

a. "Guest checkout" payments where the consumer needs to be actively involved in entering their payment credentials (e.g. a one-off purchase from an online retailer); and

204 See, for example, [CONFIDENTIAL TO OTHERS]. See also the Expert Industry Opinion of Lance Sinclair Blockley, 18 March 2021, paragraphs 444-471.

205 See paragraphs 151-152 of this report.

206 For other examples, see Expert Industry Opinion of Lance Sinclair Blockley, 18 March 2021, paragraphs 157-177 and 183-189.

b. Irregular recurring payments where payment credentials are stored on file and the payment is consequently more "seamless" (examples here are Uber payments and Apple App Store payments where payments require no or minimal interaction from the consumer, as well as the "Scan and Go" service mentioned above).[207]

199. Visa and Mastercard offer (and eftpos is developing) distinct services for these sub-segments (i.e. both "key in card number" guest checkout services and "card on file" services for recurring payments), which have different security requirements.

200. Online retail segment shares of each payment service by volume, the combined shares of the amalgamated entity and the amalgamation-specific increment are presented in Figure 5 below. **[CONFIDENTIAL TO EFTPOS]**.

Figure 5: Online retail payments – shares by volume (FY11-FY25)

[CONFIDENTIAL TO EFTPOS]

201. Online retail payments are dominated by the ICS, which together had an **[CONFIDENTIAL TO OTHERS]** share by volume (including credit and debit cards) in FY20. Visa and Mastercard, in particular, are well-established incumbent players in online retail payment services, offering a suite of online payments services including "key in card number" guest checkout services with 3D Secure fraud management, "card on file" services for irregular recurring payments and online wallets.[208]

202. Another significant player in online retail payments is PayPal. PayPal offers both a "key in card number" guest checkout service using ICS cards and their rails, and an online wallet service similar to Visa Checkout in which customers can provision ICS card details into a PayPal portal and then choose to pay using that portal and the already provisioned cards in a low friction way. PayPal also offers payments using stored value (topped up by periodic card-based transactions), and therefore acting like an online bank, however I understand that while this is popular in other countries including the US, it is not widely used in Australia.[209]

203. The amalgamating entities are barely present in this segment of payments today. In FY20, only BPAY had any volumes, estimated to be just 5 million transactions and representing less than **[CONFIDENTIAL TO BPAY]** of the segment. While all three now have some volumes in the segment, and are likely to grow to some extent, their presence is likely to remain limited.

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207 This segment includes only *irregular* recurring payments using stored payment details. It does not include *regular* recurring payments using stored payment details such as monthly/quarterly utility bills and subscription services such as Netflix. These are included in the bill payments segment and in the segment shares presented in sub-section 6.6 below.

208 Visa offers "Visa Checkout" (which is designed for one-off "guest checkout" payments and is similar to PayPal, allowing cardholders to register Visa, Mastercard and Amex cards into a Visa operated portal and then at checkout the customer can choose "Visa Checkout" as a low friction payment option), while Mastercard offers Mastercard Masterpass (which is similar but issuer-centric, allowing only the cards of a single issuer to be provisioned). **[CONFIDENTIAL TO EFTPOS]**. Visa and Mastercard have also recently combined with American Express and Discover to offer the "Click to Pay" online wallet: see https://www.creditcards.com/credit-card-news/secure-remote-commerce-one-click-payment/.

209 See Application, Schedule 6, Section 4, page 173.

a. The BPAY Payments service is present in this segment only to a very limited extent. For example, I understand that Qantas allows customers to pay using BPAY Payments, with flights not confirmed until payment is received. The BPAY Payments service is unlikely to become a significant competitor in online retail payments in the future counterfactual because its communications between financial institutions and confirmation of payment to the merchant are considerably delayed.

b. eftpos has only recently entered part of this segment with a "card on file" service for recurring online payments. In the future, eftpos is likely to grow in this segment, both through "card on file", and through a "key in card number" service for guest checkouts, although the latter seems likely to be at least 12 months away from launch (as work is required to develop the security features of that service).[210] However, eftpos' growth in this segment will be constrained by the "card on file" and "key in card number" offerings of the dominant ICS, which are equivalent if not superior in functionality and enjoy an incumbency bias.[211] Further consideration of the challenges for eftpos' services in this segment of payments is provided in the following sub-section.

c. The NPP via its SCT service and BPAY's Osko Service 1 are also now present in this segment, but only in isolated cases and with small volumes (e.g. Azupay payments for liquor and gambling licenses in NSW).[212] The NPP's MPS, which is still in development, has the potential to facilitate payments in this segment, particularly for recurring payments where the payee and the payer have an ongoing relationship. However, as explained in the following sub-section, the MPS faces significant challenges to become a widely used retail payment service even for recurring online payments, and this is unlikely to occur for at least five years.

204. In summary, the amalgamating entities barely overlap in this segment (their combined share is estimated to be **[CONFIDENTIAL – DERIVED FROM CONFIDENTIAL INFORMATION OF BPAY, EFTPOS AND NPPA]** in FY21) and considerable speculation and optimism would be required to predict that NewCo will bring together two entities that would both have significant future shares in this segment in the counterfactual. It follows that while a relaxation of eftpos' pricing or quality may result in some diversion to the MPS, and vice versa, this is likely to be small and swamped by diversion to the ICS. Substantial upward pressure due to the proposed amalgamation on the pricing of eftpos' "card on file" services and the MPS is therefore not likely.

205. The following sub-section elaborates on the challenges facing both eftpos' "card on file" service and the NPP's MPS in this segment and why the overlap between these services is not likely to be material.

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210 See note 86 above.

211 The forecast shares by volume for eftpos in Figure 5 (**[CONFIDENTIAL TO EFTPOS]**. Forecasts of FY25 volumes and shares are necessarily rather speculative whatever the source. I note that the forecasts of eftpos' volumes in this segment in FY25 by the industry expert, Mr Blockley, **[CONFIDENTIAL TO EFTPOS]**: Mr Blockley forecasts eftpos volumes of **[CONFIDENTIAL TO EFTPOS]** transactions in this segment and a share of **[CONFIDENTIAL TO EFTPOS]** in FY25.

212 See https://www.itnews.com.au/news/nsw-govt-pilots-npp-for-liquor-gambling-transactions-548803.

6.5.2. The potential future overlap between eftpos' "card on file" service and the NPP's MPS is not likely to be material

206. The NPP's MPS will involve a "mandate" (i.e. an ongoing authorisation) being given by the payer to the payee that authorises the payee to initiate withdrawals from the payer's account up to a specified maximum amount (e.g. up to a maximum of $200 for each withdrawal).

207. The original driver for the NPP's development of the MPS was to develop an alternative to direct debit bill payments over the DE system that would offer a number of advantages compared to DE direct debits and thereby motivate billers and financial institutions to migrate direct debits from the DE system to the NPP.[213]

208. However, NPPA now sees the MPS as a way in which the NPP can also attract some online retail payment volumes.[214] Since the MPS requires a pre-authorisation mandate to be provided by the payer, the MPS is not likely to be well-suited to one-off "guest checkout" online payments.[215] However, this pre-authorisation requirement does not preclude its use where the payer and the payee have an ongoing relationship, including for irregular recurring online retail payments such as in-app payments (e.g. Uber and the Apple App Store) and payments in online retail stores that store payment credentials (e.g. Amazon).

209. Use of the MPS for recurring online retail payments would create an overlap with eftpos' "card on file" digital service for the same types of payments. However, for a number of reasons, combining eftpos' "card on file" service and the NPP's MPS within NewCo is not likely to create a material overlap or lead to substantial unilateral effects, as both will face significant independent constraints on their growth.

Constraints on eftpos' "card on file" service

210. The eftpos "card on file" service is a very recent entrant in the online retail payments segment and the service is still in development by a number of financial institutions.[216] It is therefore likely to have a very small share of recurring online retail payments today.

211. As it attempts to grow, it is likely to encounter intense competition and constraints mainly from the dominant well-established incumbent "card on file" services of the ICS, rather than the MPS, and is likely to struggle to gain share in this segment for a number of reasons unrelated to the MPS.

212. First, I understand that the eftpos "card on file" service is very similar to and does not offer additional functionality over and above what is offered by the "card on file" services that have been provided by the ICS for many years. Indeed, I understand the ICS generally offer considerably superior functionality and incentives that are attractive to financial

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213 NPPA statement, paragraphs 72 and 74. See also paragraph 43.b and note 55 above.

214 NPPA statement, paragraph 74. Also see the NPPA's October 2020 Roadmap.

215 In addition to the need to create a pre-authorisation (i.e. a "mandate") from the payer, there are a number of other features of the MPS that are likely to limit its utility and competitiveness in one-off "guest checkout" situations. In particular, due to security features, the NPP offers a slower (less "real-time") authorisation and clearing service than the card-based services, and the MPS will also not offer fraud monitoring and management or dispute handling capabilities: see the eftpos statement, paragraphs 53(c)-(e).

216 **[CONFIDENTIAL TO OTHERS]**.

institutions.[217] With little value to add, it is likely to be difficult for eftpos to attract significant volume away from the ICS.[218] While there may be competition on price, the ICS are likely to compete on price as well as functionality to maintain their share.[219]

213. Second, the ICS will enjoy incumbency and multi-service advantages and are likely to make use of these advantages to employ price and non-price strategies that will compromise eftpos' ability to grow in this segment.

a. The Expert Industry Opinion discusses the use by the ICS of tokenisation for recurring payments across their installed base of merchants to reduce the scope for eftpos to compete for recurring online payments.[220] As ICS tokenisation increases, the scope for eftpos' "card on file" to compete for recurring payments will be reduced due to the developing "backbook" of ICS tokenisations of DNDCs.

b. **[CONFIDENTIAL TO OTHERS]**.[221]

214. Third, the ICS will also benefit from being the preferred rails of a number of significant intermediary online "merchants" (e.g. PayPal and BNPL providers).

Constraints on the MPS

215. The MPS is still in development and faces significant challenges to become a widely used service for recurring online retail payments. While this may happen, it is unlikely to occur for some time and the MPS is unlikely to gain a large share of recurring payments even in the longer term, for a number of reasons.

216. First, considerable work remains to be done by financial institutions to support MPS payments, which I understand requires significant spend on a complex build.[222] Work by financial institutions to receive MPS payments and enable MPS payment initiation is mandated for completion by the end of 2021, and the NPPA anticipates financial institutions rolling out payment initiation services in early 2022.[223] However, I understand there has been considerable delay in the development of NPP functionality by financial institutions since work commenced on the NPP, and **[CONFIDENTIAL TO NPPA]**.[224]

217. Second, even once the MPS becomes widely available across financial institutions, it is likely to face significant barriers to expansion in this segment.

a. Even once the work by financial institutions is completed, merchants will likely need to do considerable work to their own systems to be in a position to generate MPS pre-authorisations and initiate MPS payments. It is therefore likely that, for some

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217 See Expert Industry Opinion of Lance Sinclair Blockley, 18 March 2021, paragraphs 444 and 518, and more generally, paragraphs 444-471. Also see CBA statement, paragraph 83.

218 See the NAB statement, paragraph 25.

219 See the Expert Industry Opinion of Lance Sinclair Blockley, 18 March 2021, paragraphs 458-459.

220 Expert Industry Opinion of Lance Sinclair Blockley, 18 March 2021, paragraphs 460-461.

221 **[CONFIDENTIAL TO OTHERS]**.

222 See, for example, Westpac statement, paragraph 29.

223 NPPA (2020), New Payments Platform Roadmap October 2020: Enhancing the platform's capabilities, 30 October 2020, page 14.

224 **[CONFIDENTIAL TO OTHERS]**. **[CONFIDENTIAL TO NPPA]**.

time, only the largest online merchants with the greatest scale of payments will contemplate the investments required in their own IT systems to adopt MPS payments.[225]

b. The MPS will be based on direct account to account communications rather than card numbers and tokens and will require different establishment processes for merchants and consumers. The MPS will therefore face a challenge of converting the large "backbook" of "card on file" credentials over to BSB and account numbers or PayIDs. Even for new recurring payment authorisations, until consumers are as comfortable entering BSB and account numbers or PayIDs when setting up recurring online payments as they are entering card numbers, a merchant is likely to be reluctant to substitute the MPS for "card on file" services for fear of losing sales. The MPS will therefore likely be viewed by online merchants more as a complement (i.e. an alternative means of storing payment credentials to offer to consumers) rather than as a substitute for "card on file" services, which will limit its growth.

c. The MPS will also have the challenge of persuading customers to migrate from services that are already serving them well: the MPS will not offer material new functionality compared to what the ICS already offer online merchants[226] and will be at a disadvantage in a number of respects. In particular, the card-based retail payment services offered by the ICS are already well-tailored to the online payment needs of consumers and merchants: they are low cost (relative to the NPP's average transaction cost) and real-time in terms of payment clearance (with settlement same day for most merchants) and they offer a number of other important features for retail payments, including fraud monitoring and management, dispute handling and chargebacks. The MPS will:

   i. Be higher cost for some time (until the NPP migrates most of the volume from the DE system);[227]

   ii. Be less "real-time" in terms of authorisation and clearing and providing confirmation of payment to the merchant (due to the NPP's security features, these things will take seconds longer);[228] and

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225 See the Expert Industry Opinion of Lance Sinclair Blockley, 18 March 2021, paragraphs 476 and 486.

226 See note 129 above.

227 See the Expert Industry Opinion of Lance Sinclair Blockley, 18 March 2021, paragraph 485-486 and 523, which observes that the NPP will be high cost for some time. See also **[CONFIDENTIAL TO EFTPOS]**. This assumes that the NPP introduces per transaction pricing of NPP services such as the MPS. According to the NPPA statement, per transaction pricing is likely to be adopted from 2022/23 onwards or once the MPS has been launched: NPPA statement, paragraph 90. Even if annual license fees continue after launch of the MPS, merchants are unlikely to want to invest in their own systems to adopt MPS unless they are confident that per transaction prices for the MPS, when they are introduced, will be close to prices for card-based services.

228 The NPPA statement observes that funds are transferred over the NPP in "less than 10 seconds" although it is not clear from this how long authorisation would take under the MPS: NPPA statement, paragraph 25(d). **[CONFIDENTIAL TO EFTPOS]**.

iii. Not offer the same level of fraud monitoring and management or dispute handling processes.[229]

218. There is therefore a significant question mark over whether the MPS would represent sufficient distinct value for financial institutions, merchants and customers to become widely adopted as a retail payment service, given the well-functioning card-based services that are already available. The ICS are also likely to aggressively defend their share of online retail payments and take advantage of their incumbency and multi-service advantages in doing so, as described above in relation to eftpos' "card on file" service.

219. Drawing on overseas experience, eftpos observes that real time account to account platforms "have not as yet been successful, other than in a few instances, in taking share from cards but are taking share from traditional non real time payments globally"[230] and even in Sweden, where Swish is one of the world's leading examples of a successful direct account to account based app for retail payments, Swish's volumes are still relatively small.[231]

220. **[CONFIDENTIAL TO OTHERS]**.[232]

221. All of this is reflected in the following passage from the eftpos statement:

> *We do not see that the growth in digital or our POS volumes will be at risk through NPPA activities as eftpos is already low cost, fast and real time (for consumer and same day for most merchants as a matter of practice) and continues to shift to value beyond price, therefore the business case for merchants and the impetus for consumers to change behaviours at scale in the medium term is unlikely. In addition, to play in retail the investments for the market to move to NPPA are high and the business case for banks to invest may not exist. eftpos also accesses the existing network effect of cardholders and merchants accepting eftpos cards whereas NPP needs to spend time and money [to] create this network effect in addition to materially and sustainably differentiating its propositions to make this shift possible.*[233]

6.5.3. Summary of my views on the likelihood of substantial unilateral effects in this segment

222. Online retail payments are currently dominated by the ICS. While all three of the amalgamating entities have some volumes in this segment today, they are only barely present, and while they are all likely to grow to some extent, their presence is likely to remain limited. Competition between them is therefore likely to be limited in the

229 See eftpos statement, **[CONFIDENTIAL TO EFTPOS]** and also paragraphs 147(f), 149 and 162. **[CONFIDENTIAL TO EFTPOS]**.

230 eftpos statement, paragraph 79(b)(iv).

231 eftpos statement, paragraph 150. See also the Expert Industry Opinion of Lance Sinclair Blockley, 18 March 2021, paragraph 309.

232 **[CONFIDENTIAL TO OTHERS]**.

233 eftpos statement, paragraph 162.

counterfactual, and substantial unilateral effects due to the proposed amalgamation on prices or quality of online retail payment services are not likely.

223. In relation specifically to the overlap between eftpos' "card on file" service and the NPP's MPS, substantial unilateral effects are not likely for the following reasons.

a. eftpos' growth in online retail payments is likely to be constrained by the offerings and strategies of the ICS, which offer services with equivalent, if not considerably superior functionality, enjoy incumbency and multi-service advantages, and benefit from being the preferred rails of a number of significant intermediary online "merchants" (e.g. PayPal and BNPL providers).

b. In the medium to long-term future, the NPP's MPS may enter this segment, however this is likely to take some time (as considerable work remains to be done by financial institutions to support MPS payments) and even then the MPS is likely to face significant barriers to expansion in this segment, including the need for merchants to do considerable work to their own systems, and the challenges of persuading consumers and merchants to adopt new processes and migrate from services that are already serving them well. Added to this, the MPS appears to be at a disadvantage compared to "card on file" services in the context of recurring online retail payments in a number of important respects, including cost, speed and other functionalities of importance for consumers and merchants. Intense competition from the incumbent offerings of the ICS will also be a primary constraint on the MPS in this segment, as it will in relation to eftpos' "card on file" service.

c. Therefore, considerable speculation and optimism would be required to predict that NewCo will bring together two entities that would both have significant future shares in this segment in the counterfactual. It follows that while a relaxation of eftpos' pricing or quality may result in some diversion to the MPS, and vice versa, this is likely to be small and swamped by diversion to the ICS. Substantial upward pressure due to the proposed amalgamation on the pricing of eftpos' "card on file" services and the MPS is therefore not likely.

6.6. Bill payments segment

6.6.1. Overview of the bill payments segment

224. Payments in this segment include payments of irregular non-retail invoices (e.g. from tradespeople) and regular recurring payments using stored payment credentials, including monthly or quarterly utility bills and subscription payments (e.g. Netflix subscriptions), whether paid in-person, by mail, over the phone, online or in-app. Irregular recurring retail payments using stored payment credentials (e.g. Uber payments; Apple App Store payments) are not included here (they are included in the online retail payment segment discussed above).

225. Segment shares of each payment service by volume, the combined shares of the amalgamated entity and the amalgamation-specific increment are presented in Figure 6 below.

Figure 6: Bill payments – shares by volume (FY13-FY25)

[CONFIDENTIAL – DERIVED FROM CONFIDENTIAL INFORMATION OF BPAY, EFTPOS AND NPPA]

[CONFIDENTIAL TO OTHERS]

226. The major payment services in this segment are direct credits and direct debits over the DE system and the ICS card-based payment services. Direct credits and direct debits over the DE system represented a combined **[CONFIDENTIAL – DERIVED FROM CONFIDENTIAL INFORMATION OF BPAY, EFTPOS AND NPPA] [CONFIDENTIAL TO OTHERS]** of volumes in this segment in FY20 (roughly evenly split between direct credits and direct debits), while the ICS represented **[CONFIDENTIAL TO OTHERS]** (including credit and debit cards).

227. The amalgamating entities had a combined share of **[CONFIDENTIAL – DERIVED FROM CONFIDENTIAL INFORMATION OF BPAY, EFTPOS AND NPPA]** in FY20, predominantly through the BPAY Payments service **[CONFIDENTIAL TO BPAY]** and BPAY's Osko Service 1 **[CONFIDENTIAL TO BPAY]**. The amalgamation-specific increment (eftpos and the NPP's SCT) was just **[CONFIDENTIAL TO NPPA]** in FY20.

228. Despite a number of current and potential future overlaps between services of the amalgamating entities in this segment, substantial unilateral effects are not likely in this segment. The following sub-sections consider the following overlaps:

a. Current and potential future overlaps between the BPAY Payments service and the NPP's direct credit and (future) direct debit services (the SCT service and the MPS, respectively);

b. The potential future overlap between BPAY's Osko Service 3 and stored payment credential services (the NPP's MPS and eftpos' "card on file" service); and

c. The potential future overlap between the BPAY Payments service and the NPP's SCT einvoicing service.

229. In relation to other current and potential future overlaps in this segment, I offer the following observations.

a. **Current and potential future overlaps between BPAY's Osko Service 1 and the NPP's SCT service and MPS.** BPAY's Osko Service 1 is differentiated from the NPP's MPS (the former is a "push" credit service whereas the latter is a "pull" debit service) and complementary in nature to the NPP's SCT service,[234] meaning that the amalgamation is likely to produce incentives to *lower* the prices of both Osko Service 1 and the SCT service (as explained in sub-section 6.3).

b. **Potential future overlap between eftpos' "card on file" service and the NPP's MPS.** eftpos' "card on file" service, which has only recently been launched, may in the future compete with NPP's MPS for some regular recurring payments. However, the comments in sub-section 6.5.2 above apply equally here, including that both services are likely to be constrained by competition from the ICS (taking the form of aggressive pricing as well as other strategies) and that considerable speculation and optimism would be required to predict that both of these services would become significant services in this segment in the counterfactual.

234 Osko Service 1 is an NPP overlay service, which means that it is a technical complement to the SCT service (i.e. to purchase a unit of an Osko Service 1 a financial institution must also purchase a unit of the NPP's SCT service): see NPPA statement, paragraphs 66 and 88-90.

6.6.2. Overlaps between the BPAY Payments service and the NPP's direct credit (SCT) and direct debit (MPS) services are not likely to be material

230. In the future, services over the NPP provided by BPAY and the NPP are likely to develop significant shares of bill payments based on both "push" direct credit payments (via Osko Service 1 and the SCT service) and, longer-term, "pull" direct debit payments (via the MPS).[235] In each case, rather than diverting volumes from the BPAY Payments service, these NPP-based services will largely be migrating volumes from the DE system.[236] This is reflected in the forecast volumes and shares for the bill payment segment in the Expert Industry Opinion presented in Figure 6 above: volumes and shares for the BPAY Payments service are forecast to **[CONFIDENTIAL TO BPAY]** until at least FY25 even as the NPP's share increases from **[CONFIDENTIAL TO NPPA]**.

231. The BPAY Payments service has a relatively specific role with a focus on a service that allows billers to efficiently reconcile bill payments when customers "push" payments to them (i.e. for credit payments). While direct credits and direct debits (which are both migrating to the NPP) are alternatives to the BPAY Payments service for billers and payers (along with card-based payment services), the unique characteristic of the BPAY Payments service – providing efficient reconciliation for billers of "push" credit payments – sets it apart from both direct credits (which do not provide similar reconciliation efficiency) and direct debits and card-based payment services (which are less attractive for customers that wish to remain in control of their payments and also come with the risk for billers of dishonoured payments).[237]

232. Consequently, from the perspective of financial institutions that wish to offer customers (billers and payers) a range of payment options with different features and functionality, the BPAY Payments service, direct credits and direct debits as well as card-based payment services are more in the nature of complements than close substitutes. Further considerations are that most BPAY billers do not need real time processing and settlement or the rich data feature of the NPP, many prefer the batch nature of BPAY payments, and a number would need to undertake significant system changes in order to be able to receive NPP payments.[238] The higher average cost of the NPP (and, therefore, services like the MPS) may also limit the constraint that the NPP will impose on the BPAY Payments service.[239] More generally, all of the constraints on the MPS discussed in relation to online retail payments (see paragraphs 216 – 218 above) apply equally here.

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235 While migration of *direct credits* to the NPP may be reasonably quick, migration of *direct debits* to the NPP (via the MPS) is likely to take considerable time, as financial institutions will need to invest in their systems to accommodate the MPS and billers will also need time and opportunities to upgrade their own IT systems. The higher average cost of the NPP (and, therefore, services like the MPS) will also limit the extent and speed of migration of bill payments from the DE system to the NPP unless NPPA decides to continue to charge fixed fees for NPP transactions rather than per transaction fees. See the Expert Industry Opinion of Lance Sinclair Blockley, 18 March 2021, paragraph 482.

236 See the Expert Industry Opinion of Lance Sinclair Blockley, 18 March 2021, paragraph 482.

237 See BPAY statement, paragraphs 24 and 48. See also the NPPA statement, paragraph 31, regarding the differences between BPAY Payments and direct debits. See also the Expert Industry Opinion of Lance Sinclair Blockley, 18 March 2021, paragraphs 472-476.

238 See the Expert Industry Opinion of Lance Sinclair Blockley, 18 March 2021, paragraphs 476 and 482.

239 See the Expert Industry Opinion of Lance Sinclair Blockley, 18 March 2021, paragraph 482

233. The BPAY Payments service is therefore differentiated from and not likely to be closely constrained by current and future NPP-based direct credit services (the SCT and Osko Service 1) and direct debit services (the MPS). At the same time, due to the same differentiation, the BPAY Payments service is not likely to be a close substitute for nor a strong constraint on the SCT service or the MPS. Substantial unilateral effects are therefore not likely from the combination of the BPAY Payments service and NPP's services in the bill payments segment.

6.6.3. The potential future overlap between BPAY's Osko Service 3 and stored payment credential services (the NPP's MPS and eftpos' "card on file" service) is not likely to be material

234. The first thing to observe here is that there is considerable doubt over whether Osko Service 3 ("request to pay") will become a live service in the counterfactual. Osko Service 3 ("request to pay") has been put on hold until the NPP's MPS has been rolled out by financial institutions, with no current implementation date, and BPAY has written down the assets as a result.[240] Westpac has expressed doubts over whether Osko Service 3 will become a live service and explained that it has no plans to support implementation of Osko Service 3.[241] There cannot be any scope for the proposed amalgamation to result in a loss of competition between the NPP's MPS (or eftpos' "card on file" service) and Osko Service 3 if there would be no competition between them in the counterfactual.

235. Second, even if Osko Service 3 were to become a live service, its functionalities are distinct from stored payment credential services such as the NPP's MPS and eftpos' "card on file" service,[242] and they are not likely to be close substitutes or constraints on each other.

a. Osko Service 3 is a service designed to *add value* beyond Osko Service 1 (i.e. it adds a "request to pay" feature for the payee to request payment from the payer, as well as automated payment reconciliation for the payee, similar to the BPAY Payments service, though not using BPAY Biller IDs or CRNs).[243] Like Osko Service 1 payments, a payment made using Osko Service 3 is an asynchronous "push" (i.e. "credit") payment where the payer is in control of the timing and amount of the payment, much like the BPAY Payments service. With a "push" service there is also no risk for the payee of dishonoured payments.[244] A typical use case for Osko Service 3 would be a small business or tradesperson requesting payment for services rendered. As a "push" payment service, it would not offer a payee the ability to "pull" funds from the payer's account (i.e. draw from the payer's account without interacting with the payer).

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240 BPAY statement, paragraphs 43 and 58.

241 Westpac statement, paragraph 45.

242 See BPAY statement, paragraph 48, which recognises that different services in the bill payment space may be distinct in focus, and paragraph 56, which explains that Osko Service 3 and the MPS are distinct in functionality and user bases. Osko Service 3 was at one point in time considered as a potential solution to the challenge of migrating direct debit volumes from the DE system, and the MPS is the service ultimately chosen for direct debit migration: **[CONFIDENTIAL TO OTHERS]**. However, despite having origins in solving the same problem, their functionalities are actually quite distinct, as explained in the BPAY statement and in the main text of this report.

243 See BPAY statement, paragraph 19(c).

244 See BPAY statement, paragraphs 24 and 56.

b. The MPS, as explained earlier, will be a synchronous "pull" (i.e. debit) payment service, designed principally to *migrate* existing direct debit payments to large businesses from the DE system to the NPP. The eftpos "card on file" service is, likewise, a "pull" payment service. Neither will allow a payer to "push" a payment to the payee at the time of the payer's choosing, so they are not services that keep the payer in control of the payment. And neither includes "request to pay" functionality and therefore neither will be of use in a situation where a payee wishes to send a message to prompt a payer to make a payment. As "pull" services, they offer payees the advantage of being in control of the timing and amount of each payment (which avoids the need to spend time and effort chasing overdue invoices), but come with the risk of dishonoured payments.[245]

236. Therefore, while Osko Service 3 and stored payment credential services are, in principle, alternative means of payment for the same bills, their functionalities are very different, and they will tend to suit different bill payment situations. Osko Service 3 is more likely to be favoured by sole traders and small businesses that issue one-off or irregular invoices (as well as for P2P payments), whereas the MPS and eftpos "card on file" are more likely to be favoured by businesses that need to facilitate large volumes of regular payments (e.g. subscription payments and in-app payments) and wish to prioritise the timeliness of those payments (by assuming control of the timing of payment initiation) over the risk of some dishonoured payments.

6.6.4. The potential future overlap between BPAY Payments and the NPP's SCT einvoicing service is not likely to be material

237. The NPP's planned category purpose code business service for einvoicing will not overlap in any material way with the BPAY Payments service or any potential future BPAY Payments service overlaid over the NPP.

238. The NPP's SCT einvoicing service is primarily a B2B / G2B payment service designed to carry PEPPOL einvoice data to enable automated reconciliation of payments of PEPPOL einvoices.[246] It is essentially a messaging standard for payments of PEPPOL einvoices to standardise the carrying of PEPPOL einvoicing data within the payment messages. PEPPOL einvoicing is being backed by the Commonwealth Government and the Australian Tax Office for all B2B and B2G invoices.

239. Although the BPAY Payments service and the NPP's SCT einvoicing service are both "push" payment services and both offer billers automated payment reconciliation functionality, a significant difference between them is that the SCT einvoicing service is focused on payments of B2B and B2G invoices, whereas the BPAY Payments service is focused on payments of B2P invoices. While there will be some overlap to the extent that the BPAY Payments service can also be used for B2B payments, including payments of einvoices, I understand that the overlap will not be significant.[247] I also understand that

245 See BPAY statement, paragraphs 24 and 56.

246 See https://nppa.com.au/wp-content/uploads/2020/11/Einvoicing-and-NPP-whitepaper_final.pdf.

247 I also understand that the SCT einvoicing service and the BPAY Payments service will not be the only ways for einvoices to be paid. I understand that direct credits and direct debits over the DE system as well as Post BillPay are also payment methods that have been approved by the ATO for payments of einvoices.

einvoicing is still in development, with no agreed industry-wide standard as yet and timeframes unclear.

6.6.5. Summary of my views on the likelihood of substantial unilateral effects in this segment

240. Bill payments are currently dominated by the DE system and the ICS card-based systems, which together represented **[CONFIDENTIAL TO OTHERS]** of volumes in FY20. The amalgamating entities had a combined share of **[CONFIDENTIAL – DERIVED FROM CONFIDENTIAL INFORMATION OF BPAY, EFTPOS AND NPPA]** in FY20 with an amalgamation-specific increment of just **[CONFIDENTIAL – DERIVED FROM CONFIDENTIAL INFORMATION OF BPAY, EFTPOS AND NPPA]**.

241. Over time, direct credit and direct debit volumes are expected to migrate to the NPP (via Osko Service 1, the SCT service and the MPS service) and there are many overlaps between services of the amalgamating entities in this segment. However, competition between these services will be marginal and substantial unilateral effects are not likely for the following reasons.

a. For bills paid using direct credits, the NPP's SCT service on its own is an alternative to BPAY's Osko Service 1. However, Osko Service 1 is an NPP overlay service, which means that it is a technical complement to the SCT service (i.e. to purchase a unit of an Osko Service 1 a financial institution must also purchase a unit of the NPP's SCT service). This means that the proposed amalgamation is likely, if anything, to produce incentives to *lower* prices for both Osko Service 1 and the SCT service, due to a Cournot complements effect.

b. While eftpos' "card on file" service and the NPP's MPS service might be alternatives for regular recurring bill payments, the comments above in relation to retail online payments apply equally here, including that both services are likely to be constrained by competition from the ICS, and considerable speculation and optimism would be required to predict that both of these services would become significant services in this segment in the counterfactual.

c. The BPAY Payments service has distinct characteristics that set it apart from the current direct credit and future direct debit services of the NPP (the SCT service and the MPS, respectively) as well as from card-based payment services (including the existing card-based payment services of the ICS and, in the future, eftpos' "card on file" service).

d. There is doubt over whether Osko Service 3 ("request to pay") will become a live service in the counterfactual, but in any event, although it was originally contemplated as a way to migrate direct debits from the DE system, it is functionally distinct from and not a close substitute for either the NPP's MPS service or eftpos' "card on file" service: Osko Service 3 is a "push" payment overlay, whereas the MPS and eftpos' "card on file" service are "pull" payment services that will function very similarly to direct debts over the DE system.

e. While the BPAY Payments service and the NPP's future SCT einvoicing service will both offer automated payment reconciliation functionality, the latter will be focused on B2B and G2B bill payments, whereas the former will be focused on P2B bill payments. Their direct overlap is therefore limited.

6.7. P2P segment

242. This segment is "person to person" (P2P) payments. P2P payments can be made through various methods including cash and cheques, as well as by direct credits via bank apps and online portals. According to the RBA, P2P payments to family and friends accounted for about 2% of consumer payments by number and 6% by value in 2016.[248]

243. P2P segment shares by volume for FY20 are presented in Figure 7 below. **[CONFIDENTIAL TO EFTPOS]**.[249] **[CONFIDENTIAL TO EFTPOS]**. The shares in Figure 7 differ from the shares in the Expert Industry Opinion because I have assumed some volume for the SCT service without increasing the total segment volume (the Expert Industry Opinion assumed that all P2P volumes over the NPP were Osko volumes).[250]

Figure 7: P2P payments – shares by volume (FY20)

[CONFIDENTIAL – DERIVED FROM CONFIDENTIAL INFORMATION OF BPAY, EFTPOS AND NPPA]

244. In P2P payments, cash (35% share) and direct credits via direct account-to-account infrastructures including the DE system and the NPP (**[CONFIDENTIAL TO NPPA]** share in total) dominate today and are likely to continue to dominate for some time.

245. P2P direct credits have historically been processed by the DE system, but have now largely migrated to the NPP,[251] using either the NPP's SCT service on its own or the SCT service with BPAY's Osko Service 1 overlay.[252] As a result, the combined share of BPAY and the NPP in this segment is estimated to be close to **[CONFIDENTIAL TO BPAY] [CONFIDENTIAL TO NPPA]**. However, as explained earlier, the complementary nature of Osko overlay services and the SCT service means that, if anything, the amalgamation is likely to produce incentives to *lower* the prices of each of these services, rather than increase their prices. The NPP's planned MPS service is not expected to play a role in this segment.

246. Osko Service 3 ("request to pay"), if it is ultimately developed, may grow BPAY's share in this segment. However, again, this overlay service will be a technical complement to the SCT service and, if anything, the amalgamated entity will have stronger incentives to develop Osko Service 3 and grow its volumes than if BPAY and the NPP remained in separate entities (because additional Osko Service 3 volumes will generate additional SCT volumes for the NPP, and this positive externality will be internalised within the amalgamated entity).

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248 Reserve Bank of Australia, *How Australians Pay: Evidence from the 2016 Consumer Payments Survey*, page 32 (RBA Consumer Payments Survey 2016).

249 eftpos has reported that in the 2020 calendar year BeemIt conducted 18.7 million transactions: eftpos statement, paragraph 32.

250 To estimate SCT volumes I assumed that the share of SCT volumes that was P2P payments in FY20 was the same as the share of Osko Service 1 volumes that was P2P payments (i.e. **[CONFIDENTIAL TO BPAY]**).

251 See NPPA statement, Exhibit 1 below paragraph 105, which describes "single attended credit payments" as "largely migrated".

252 RBA data suggests that 82% of NPP transactions in FY20 were Osko Service 1 transactions with the remaining 18% SCT transactions without the Osko Service 1 overlay.

247. eftpos' only service in this segment is the BeemIt app, a branded bank-agnostic mobile payment app. According to the Expert Industry Opinion, BeemIt currently has only a small presence in P2P payments, estimated to be **[CONFIDENTIAL TO EFTPOS]** of the segment by volume in FY20,[253] despite being launched in 2018. The Expert Industry Opinion suggests that P2P apps like BeemIt have seen limited uptake so far in part because they do not solve a significant problem for consumers.[254]

248. BeemIt is differentiated from the Osko Service 1 and SCT services, as the latter are used without obvious branding within online banking portals and proprietary bank apps. Online banking portals and proprietary bank apps enjoy greater ubiquity and familiarity for payers as ways to make P2P payments and some financial institutions may have incentives to promote their own apps and portals over bank-agnostic apps in order to keep customers engaged in their own eco-systems.[255] BeemIt is therefore likely to compete more closely with other branded bank-agnostic mobile payment apps, rather than with Osko Service 1 and the SCT.

249. Moreover, BeemIt's growth within the sub-segment of P2P payments that are made via branded bank-agnostic mobile payment apps is likely to be constrained by competition from many current and potential future alternatives in this sub-segment from fintechs, the ICS and BigTech firms.[256] These alternative P2P payment apps include:[257]

    a. P2P payment apps already in Australia, including Splitr, Splitwise, groupee and Visa's "Visa Direct"; and

    b. Potential future P2P payment apps in Australia, including PayPal's PayPal.ME and/or Venmo, Apple Pay, Google Pay, Facebook Pay and Mastercard's "MastercardSend".[258]

250. According to eftpos, competition is already or in the future will become significant from the likes of PayPal, Apple Pay, Google Pay and others, because:

> *(a) there are low barriers to entry as they sit above the rails utilising the existing two-side markets; (b) they can often leverage large existing customer bases (Apple, PayPal) with embedded relationships beyond the payment; (c) they have global scale of investments and learnings and deep pockets; and (d) they are the*

253 This is based on an assumed 10 million BeemIt P2P transactions in FY20. eftpos has reported that in the 2020 calendar year BeemIt conducted 18.7 million transactions: eftpos statement, paragraph 32. If this figure were assumed for FY20, the BeemIt share would have been **[CONFIDENTIAL TO EFTPOS]** in FY20. eftpos has also estimated 17 million P2P transactions in FY21, growing to 25 million in FY24: eftpos statement, paragraph 34.

254 Expert Industry Opinion of Lance Sinclair Blockley, 18 March 2021, paragraph 192 (and see also paragraph 319 for a similar comment).

255 Expert Industry Opinion of Lance Sinclair Blockley, 18 March 2021, paragraph 323.

256 See eftpos statement, paragraphs 38-39 and the accompanying table and the table below paragraph 52, which lists a number of P2P competitors in Australia now and in the future. See also paragraphs 60-61 and 72.

257 See the table below paragraph 52 of the eftpos statement for details, paragraphs 60-61 and also paragraph 72, which details innovations in P2P payments and plans for entry into Australia by BigTech companies including PayPay and Apple.

258 See paragraph 151 and note 168 of this report for further details on these potential P2P app entrants.

> *experts at recognising core millennial need (and merchant) shifts and delivering compelling seamless experiences.*[259]

251. The Expert Industry Opinion also suggests that payment apps like BeemIt will need to do more than just P2P payments in order to realise scale in the P2P segment.[260] Therefore, whether BeemIt is ultimately a significant competitor in P2P is likely to depend on it becoming widely used for retail payments.

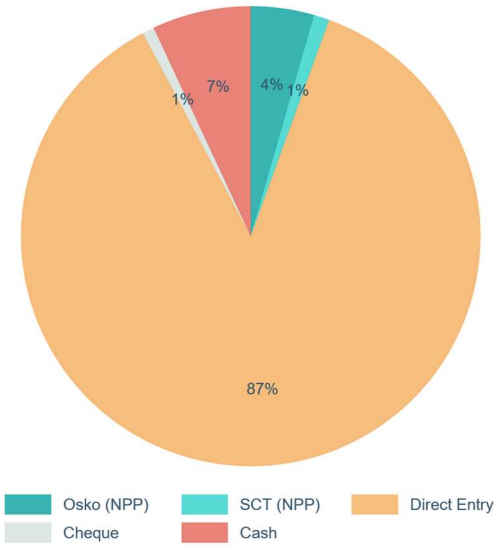
252. It follows that there is little scope for a substantial lessening of competition in P2P payments due to the proposed amalgamation because the likely counterfactual is one in which there would be only limited competition between eftpos' BeemIt app on the one hand and BPAY's Osko Service 1 and the NPP's SCT service on the other.

6.8. G2P / B2P segment

6.8.1. Overview of the B2P/G2P segment

253. The B2P/G2P segment (including bulk credit transfers such as government payments, payroll and superannuation payments) is currently dominated by direct credits in the DE system and this will likely remain the case for some time. This can be seen in Figure 8 below.

Figure 8: B2P / G2P payments – shares by volume (FY20)



Source: Expert Industry Opinion

254. Of the three amalgamating entities, only BPAY (via Osko Service 1) and the NPP (via the SCT service) are currently present, however their combined share is very small – the amalgamating entity would have a combined share of 5% with an amalgamation-specific increment of just 1% – and these services are technical complements, as explained earlier (see sub-section 6.3). The amalgamation of these services within a single entity is

259 eftpos statement, paragraphs 60-61. **[CONFIDENTIAL TO EFTPOS]**.

260 Expert Industry Opinion of Lance Sinclair Blockley, 18 March 2021, paragraph 319.

therefore not likely to produce substantial unilateral effects and indeed, if anything, is likely to produce incentives to *lower* prices and *improve* the quality of these services.

255. Looking to the future, migrating more of the DE volume to the NPP is a focus of NPPA[261] and although it is likely to take some time, it is likely that the NPP (via the SCT service including its category purpose code variants) and perhaps BPAY (via Osko Service 1)[262] will eventually gain a significant share of payments in this segment.

256. At the same time, BPAY is developing an overlay service for this segment: Osko Service 2 ("pay with document"). Again, rather than a substitute for NPP's SCT service (including the category purpose code variants of the SCT service), Osko Service 2 will be in the nature of a complement to those services, providing the ability for documents to be sent with the payments. Osko Service 2 will therefore not constrain the SCT service in the counterfactual, and its nature as a complement means that again, if anything, the amalgamated entity will have incentives to lower prices and improve the quality of both services.

257. I do not consider it likely that eftpos will realise a significant share of B2P/G2P payments or act as a significant constraint on the NPP in the counterfactual, for the reasons explained in the following sub-section.

6.8.2. The potential future overlap between services over the NPP and eftpos' Deposits and Withdrawals service is not likely to be material

258. The eftpos statement discusses a potential "Deposits and Withdrawals" service for "business or government disbursements",[263] and **[CONFIDENTIAL TO EFTPOS]**.[264] **[CONFIDENTIAL TO EFTPOS]**.

259. While omissions may have been inadvertent, the eftpos statement does not list eftpos as a competitor today or in the future in "unattended bulk transfers", which I understand to be a reference to bulk G2P and B2P payments,[265] and it does not list B2P or G2P payments as an area of direct competitive overlap.[266] Consistent with this, despite stating that the "Deposits and Withdrawals" services is already "live", the eftpos statement explains that the initial use case for Deposits and Withdrawals is BeemIt for P2P payments.[267]

260. Moreover, should financial institutions, businesses and governments start to consider card-based solutions as good alternatives to the DE system or the NPP for B2P and G2P payments, it seems likely that equivalent deposit and withdrawal services from the ICS would be explored. For example, according to the eftpos statement, Mastercard Send "is an interoperable global platform for disbursements (by governments, businesses and not-

261 NPPA statement, paragraph 104(a).

262 **[CONFIDENTIAL TO BPAY]**.

263 See eftpos statement, paragraph 20(e)(iv).

264 **[CONFIDENTIAL TO EFTPOS]**.

265 See eftpos statement, table under paragraph 38.

266 See eftpos statement, paragraph 105.

267 See eftpos statement, paragraph 20(e)(iv).

for-profits to consumers).[268] And according to the NAB statement, Visa and Mastercard have implemented an Original Credit Transactions (OCT) service that enables push payments and this service would compete directly with the real time capabilities of the NPP and eftpos.[269] The NAB statement suggests that the OCT service of Visa and Mastercard will present a challenge for a similar eftpos service.[270] As eftpos has explained, the decision to enable Visa and Mastercard deposit and withdrawal message sets is in the control of the financial institutions.[271]

6.8.3. Summary of my views on the likelihood of substantial unilateral effects in this segment

261. For B2P/G2P payments there is currently only very limited presence of the NPP (via the SCT service) and BPAY (via Osko Service 1), and the potential future overlap is limited to these services and a potential eftpos "Deposits and Withdrawals" service. Again, as Osko services are technical complements for the SCT service, there should be no concern that the amalgamation might produce upward pricing pressure in relation to these services, and the eftpos "Deposits and Withdrawals" service faces a number of barriers to growth in this space including competition from the ICS. In any event, the main competition that the NPP, BPAY and eftpos will face in this space for a long time will be the low cost incumbent DE system.

6.9. Access to low-value payment infrastructures

262. As explained in Section 3.2.1, each of the amalgamating entities operates a low-value payment infrastructure, and eftpos and the NPP also make their infrastructure available to third-party payment services that operate over their infrastructures (like train carriages over "rails"). The payment infrastructures of the ICS are also accessed by third parties providing payment services. For example, PayPal, BNPL schemes and Uber all currently operate as intermediary merchants in the ICS systems, and make use of the ICS card "rails" as components of end to end payment services that they provide to consumers and final merchants.[272] In principle, the eftpos card rails and even the NPP direct account to account rails could be used in a similar way.

263. There is therefore, at least in principle, the possibility that the proposed amalgamation may result in unilateral horizontal effects at the infrastructure level – i.e. higher prices or lower quality in the provision of access to one or more of these payment infrastructures, due to the internalisation of diversion to others that would be held commonly within NewCo.

264. However, for a number of reasons I do not consider there to be a likelihood of substantial unilateral effects on prices or quality at the infrastructure level. First, there is unlikely to be much interest from third-party payment service developers in accessing the BPAY infrastructure in the counterfactual.

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268 eftpos statement, table below paragraph 52.

269 NAB statement, paragraph 26.

270 NAB statement, paragraphs 25-26.

271 eftpos statement, paragraph 50.

272 In the case of Uber, the "final merchants" in the Uber payment system are Uber drivers.

a. The BPAY infrastructure is not well-suited to retail payments. Although BPAY has some retail payment volumes (particularly where payments are large in value, such as online payments for airline tickets), the BPAY infrastructure is not in general suitable for retail payment services because communication to the merchant is substantially delayed after payment initiation. Evidence corroborating this is that the BPAY Payments service does not have any presence in the in-store retail segment and its share of the online retail segment is less than **[CONFIDENTIAL TO BPAY]** in volume terms.[273]

b. The BPAY infrastructure is also unlikely to be considered by third parties looking to provide non-retail payment services. The BPAY infrastructure is specifically designed for the narrow purpose of conveying proprietary BPAY reference information (BPAY Biller IDs and Customer Reference Numbers) to enable automated reconciliation for billers between bills and payments. Its use for third parties would therefore be limited to third parties seeking to provide more or less the same service as BPAY already provides.[274] At the same time, the NPP infrastructure has significant advantages over the BPAY infrastructure, being near real-time, 24/7 and allowing for rich data to be communicated (the BPAY infrastructure is not real-time, available only on weekdays and limited in its data fields). A third-party contemplating providing an automated bill payment reconciliation service (in competition with the BPAY service) is therefore only likely to consider accessing the NPP, which would allow it to differentiate itself from the BPAY service.

c. Consistent with the above observations, I understand that in more than 23 years since BPAY has been established there have been no requests for access to the BPAY infrastructure to provide a new payment service.[275]

265. Second, there also seems to be little interest from third parties in developing overlay services over the NPP.[276] The main reason for this appears to be the challenges of achieving the coordination necessary for sufficiently ubiquitous development of an overlay service by financial institutions.[277] The NPP is now filling the vacuum with its category purpose code business services and the MPS.[278] I expect this situation to continue in the counterfactual, "crowding out" third-party overlay service of a similar nature.

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273 This is based on the tables in Appendix V of the Expert Industry Opinion of Lance Sinclair Blockley, 18 March 2021.

274 As the BPAY statement observes, "BPAY's technology was designed and built for BPAY's specific use": BPAY statement, paragraph 32.

275 BPAY statement, paragraph 32. BPAY has established APIs for third parties to connect to the BPAY system to provide value added services to billers to assist billers with payment management, however this is distinct from access to the BPAY infrastructure to provide a new payment service.

276 See NPPA statement, paragraphs 42 and 55, which explain that Osko Service 1 is currently the only overlay service over the NPP, and that there are no other overlay services that are operational or even in the pipeline.

277 See NPPA statement, paragraphs 46-54. As explained earlier, a successful payment service will generally require a high degree of adoption by payers and payees and so future successful overlay services will need to fill an unmet payment service need and be provided by entities that can bring enough of the industry along with them.

278 See NPPA statement, paragraphs 56-57, 67 and 72-74.

266. Third, there are significant differences between the eftpos and NPP infrastructures that mean that they are unlikely to be close substitutes from the perspective of most third-party payment service developers, at least for some time.

a. eftpos' card-based infrastructure has considerable advantages compared to the NPP for retail payments. The eftpos infrastructure was designed for and is particularly well-suited to retail payments, offering a third-party access seeker real-time clearing, widespread deployment of card readers at merchants and high penetration of eftpos proprietary and DNDC cards among the Australian population (i.e. network effects on each side of retail payments) and other important features for retail payments (e.g. dispute handling and chargebacks). The NPP infrastructure is a "push" (credit) infrastructure that was not originally designed for retail payments and that for some time in the future will lack the coverage among merchants and consumers that the eftpos infrastructure offers as well as other features such as dispute handling and chargebacks.[279]

b. The eftpos and NPP infrastructures are also differentiated from the perspective of third parties seeking to offer non-retail payment services. The NPP infrastructure might be favoured by a third-party seeking to offer a service with real-time settlement and funds availability for payees and/or rich data. However, the eftpos infrastructure would likely be favoured by a third-party seeking a low cost and quick speed to market.[280]

267. Finally, the ICS infrastructures are likely to be closer substitutes to the infrastructures of both eftpos and the NPP and are likely to act as significant constraints on any attempt by the amalgamated entity to "give less or charge more" to third-party payment service providers seeking infrastructure access. The ICS infrastructures are already used by many third-party payment service providers in retail segments (e.g. PayPal and BNPL services). Even for third-party payment service providers seeking to develop non-retail payment services, if the eftpos infrastructure were considered a good alternative to the NPP infrastructure, then the ICS infrastructures would likely be considered similar if not better alternatives.[281]

7. THE EXISTING SERVICES OF THE THREE ENTITIES AND THE MAIN SERVICES IN THEIR CURRENT ROADMAPS ARE JUST AS LIKELY TO BE PRESERVED

268. I do not consider any of the existing services of the three entities or any of the main services in the current roadmaps of the three entities to be more likely to be withdrawn, abandoned

279 While the NPP is developing "pull" technology (the MPS) and this might be accessed by third parties to provide their own retail payment services, the MPS faces a number of challenges in retail payments, which have been discussed already in sub-sections 6.4 and 6.5 above.

280 Any third-party seeking to use the eftpos infrastructure to develop a non-retail payment service may also encounter the same challenges that have faced eftpos when attempting to develop such services: see the eftpos statement, paragraph 55 (regarding a proposal from eftpos to migrate direct credit volumes from the DE system), the ANZ statement, paragraphs 37-38 **[CONFIDENTIAL TO OTHERS]**.

281 See above, paragraphs 141.b and 146.a.

or significantly degraded in their quality under amalgamation compared to the likely counterfactuals.[282]

269. First, even large coalitions of shareholders of NewCo are unlikely to have the *ability* to withdraw, abandon or significantly degrade these services and initiatives, as NewCo governance arrangements are likely to protect them. These protections are detailed in the Application and include a procedure that provides that if any NewCo Board decision in respect of a payment service attempts to make a fundamental change in the nature, scale or operation of the payment service, the manner of funding the operating costs of providing the payment service, or the roadmaps agreed for the development of the payment services as at the date of the implementation agreement up to June 2022, then any two directors can call for the decision to be ratified by an extraordinary resolution (75%) of shareholders classified as participants in that payment service at that time.[283]

270. In addition to this, the most significant future payment services in the eftpos and NPP roadmaps (including the eftpos digital services and the MPS) are services that have been mandated by the eftpos and NPPA boards.[284]

271. Second, incentives to withdraw, abandon or significantly degrade these services are also likely to be lacking. In particular, I have given consideration to a potential concern that eftpos' digital services may be under-invested in and/or degraded specifically in order to drive retail volumes from eftpos to the NPP (e.g. via the MPS, which has the potential to become a service for some types of retail payments as well as for direct debit bill payments).[285] In addition to the constraints on ability set out above, there are unlikely to be incentives to engage in such conduct.

    a. First, the major retailers, other non-ADI shareholders and at least some financial institutions are likely to have incentives to ensure that eftpos is able to provide an

282 **[CONFIDENTIAL TO EFTPOS]**.

283 See Section 7.4 of the Application. I understand that this would require at least 15 out of the 19 NewCo shareholders that are users of eftpos services to vote in favour of such change, meaning that a counter-coalition of just five would be required to defeat the proposed change. **[CONFIDENTIAL TO OTHERS]**.

284 There may be penalties for members of these schemes that fail to implement mandated these services in the required timeframes. These services and a number of other services, including BPAY's Osko Service 2 (pay with document), are also included as Prescribed Services in the Transition Plan of the Implementation Agreement. Prescribed Services are services set out in the "Transition Plan" (Schedule 3 of the Implementation Agreement). These may or may not be mandated services. They have been determined by the Industry Committee, not by the boards of BPAY, eftpos or NPPA. Industry Committee members are required to use "reasonable endeavours" to implement Prescribed Services in the required timeframes and no penalties or further incentives apply. As explained in the BPAY statement at paragraph 73, the Implementation Agreement does not require BPAY's shareholder financial institutions to implement any Prescribed Service or govern how the Prescribed Services will be implemented. **[CONFIDENTIAL TO OTHERS]**.

285 **[CONFIDENTIAL TO EFTPOS]**.

effective alternative to and constraint on the ICS in relation to in-store and online retail payments.[286]

b. Second, a degrading of eftpos' retail services would be likely, overwhelmingly, to benefit the ICS rather than the NPP, given that the ICS are eftpos' closest competitors and the dominant players in the segment, and the challenges facing the NPP in entering and growing in retail payments for many years at least.[287]

272. For these reasons I consider a strategy of materially favouring the MPS over eftpos for retail payments is unlikely to be adopted (even if there were the ability to engage in such a strategy).

8. THE AMALGAMATION IS NOT LIKELY TO RESULT IN FEWER COMPETING INITIATIVES OR WEAKER INITIATIVES BEYOND THE ROADMAPS

8.1. The amalgamation is not likely to result in fewer competing initiatives beyond the roadmaps

273. It is possible that, in the counterfactual, the amalgamating domestic entities may develop initiatives beyond their current roadmaps that would compete closely if both were widely adopted by financial institutions.

274. However, any such future initiatives would require widespread support from financial institutions for successful deployment. The factual statements that I have reviewed reveal a reluctance of financial institutions to support two or more domestic initiatives that will deliver more or less the same functionality.[288] The likelihood is therefore that the best outcome that can be expected in the counterfactual is one in which ultimately only one of the domestic initiatives is widely supported.[289]

275. Since competition between future initiatives of the domestic schemes (beyond the current roadmaps) is unlikely in the counterfactual, a lessening of competition if the proposed

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286 The importance for Coles and Woolworths of maintaining an effective eftpos as a constraint on the ICS is apparent in their statements: see Woolworths statement, paragraphs 16-19 and 31, and Coles statement, paragraphs 28 and 86. **[CONFIDENTIAL TO OTHERS]**. It is also apparent from the statements of financial institutions that a number of them regard eftpos as important to maintain as a constraint on the ICS: see the CBA statement, paragraph 119 and the Westpac statement, paragraph 31.

287 See sub-section 6.5.

288 See for example the "direct debit" case study in the ANZ statement: ANZ statement, paragraphs 32-68. Similarly, the eftpos statement refers to a proposal by EPAL for a "quick to market low investment cost real-time direct credit solution for bulk credits over eftpos' rails, which would have competed with the NPP", which was not chosen because the NPPA proposal was preferred: eftpos statement, paragraph 55.

289 This "best outcome" is an outcome in which the network effects realised by the "winning" initiative are likely to be considerably delayed compared to an initiative that has been "pre-coordinated" within the proposed amalgamated entity and one in which one of the entities, and potentially also some financial institutions, may find themselves with stranded assets. Another possible outcome is one in which neither of the initiatives manages to realise sizeable network effects and initiatives of other players such as the ICS or BigTech firms are successful instead. But the important observation here is that there is only likely to be, at best, one successful initiative in the counterfactual.

amalgamation proceeds taking the form of fewer competing domestic initiatives is also unlikely.

8.2. The amalgamation is not likely to result in weaker future initiatives beyond the roadmaps

276. Although in the counterfactual there may only be – at best – one domestic initiative widely adopted by the industry to address a need, in principle there might be value in the "rivalry" between the three entities to have their alternative adopted in preference to the others. The argument would be that when the three separate entities vie among each other to win the support of the industry, they may "sharpen their pencils" and enhance the functionality of their proposed solutions.

277. This argument is worth consideration. However, for two reasons I consider that it is not likely that initiatives developed within NewCo will be significantly weaker due to a loss of this form of rivalry.

a. First, even if one or more alternatives were enhanced by this form of rivalry in the counterfactual, it is not obvious that there would be materially less rivalry or development of alternatives if the three entities were amalgamated within NewCo, nor that the service ultimately favoured by NewCo would be of lower quality or offer less functionality. It may be that the same "competition for ideas" and alternatives would occur in deliberations within NewCo, with proponents of each possible alternative equally keen to have their alternative preferred by the NewCo board.

b. Second, there is the likelihood that, within NewCo, a management level that benefits from deep knowledge and expertise in relation to the capabilities, strengths and weaknesses of all three infrastructures, and an innovation centre that can draw on experts with an understanding of the infrastructures and capabilities of all three entities, as well as enhanced understanding of customer needs, will produce solutions that will be superior to the solutions that would be proposed by each separate entity in the counterfactual. For further discussion of the benefits of amalgamation from combining R&D teams and payment scheme specific knowledge, see Section 10.2 below.

9. NO LIKELIHOOD OF VERTICAL EFFECTS (INPUT FORECLOSURE)

278. In this Section I consider whether there the proposed amalgamation is likely to increase the ability or incentives of the amalgamating entities to foreclose access to low-value payment infrastructure.

279. In principle, amalgamations can give rise to foreclosure concerns when they involve one or more firms that are vertically integrated, operating at more than one level of a supply chain, or two firms that operate at different levels of the supply chain. In these situations, input foreclosure concerns may arise because the amalgamated entity may have increased incentives to foreclose access at one level of the supply chain – for example, at an "upstream" infrastructure level – in order to realise a greater increase in its sales at the

other level – for example, at the "downstream" services level.[290] In order for the amalgamated entity to have incentives to foreclose access to its infrastructure, the gains the amalgamated entity would make from foreclosing third parties at the service level would need to outweigh the losses it would incur from not supplying infrastructure services to those third parties.

280. The potential for input foreclosure needs to be considered in this case because, as explained in Section 3.2, all three of the amalgamating entities are vertically integrated, operating low-value payment infrastructures and providing low-value payment services. However, I limit my attention in this Section to the infrastructures of eftpos and the NPP, because I do not consider it likely that any third-party would be interested in accessing the BPAY clearing infrastructure.[291]

281. It is standard when assessing the likelihood of vertical effects to consider both ability and incentives. Starting with ability, in my opinion the amalgamated entity would lack the ability to foreclose third parties seeking to provide competitive payment services from access to infrastructure, for a number of reasons.

a. With respect to the eftpos infrastructure, NewCo would lack the ability to foreclose third parties because of the alternative card-based infrastructures provided by the ICS that third parties may use instead. Indeed, the ICS infrastructures are likely in general to be more attractive to third parties than the eftpos infrastructure, as they have greater reach,[292] offer greater functionality (including international and online acceptance) and enjoy global scale, which may be an advantage for the ICS in negotiations over access with global third-party access seekers. I understand that many third parties already make use of the ICS infrastructures to provide payment services, including PayPal and BNPL schemes.

b. With respect to the NPP infrastructure, the ICS may again be an alternative for some third parties. In addition, there is the further significant consideration that the NPP was conceived as an open access infrastructure and I understand that it will continue to be subject to an open and non-discriminatory access regime.

c. Even if these matters were not determinative, NewCo's ability to foreclose third-party access to its infrastructure is likely to be further limited by its fragmented governance structure in which there will be 13 directors, four of which will be independent with the other nine representing various types of participants. Reaching agreement

290 I do not consider that any customer foreclosure concerns arise in this matter as suppliers to the amalgamating entities (e.g. Swift) tend to be global players with many other customers.

291 See BPAY statement, paragraph 32, which observes that BPAY's infrastructure was designed and built for BPAY's specific use and there is no known instance of a third-party seeking access to the BPAY infrastructure to provide a new payment service.

292 I understand that some financial institutions only issue single network debit cards and that this may become more common in the future. See Expert Industry Opinion of Lance Sinclair Blockley, 18 March 2021, paragraphs 455-456.

among a fragmented group to engage in a foreclosure strategy is likely to be challenging.[293]

282. Turning to incentives, recall that both eftpos and the NPP are already vertically integrated and would be in the counterfactual. Let us assume they would not have incentives to foreclose in the counterfactual.[294] In order for the proposed amalgamation to be likely to give rise to incentives to foreclose, there would need to be a downstream segment of payment services in which the amalgamation would result in a significant increase in downstream share compared to the counterfactual, so as to "shift the dial" sufficiently for the (downstream) gains from foreclosure to outweigh the (upstream) losses. However, as explained in Section 6.2.1, the amalgamating entities offer largely complementary payment services and will overlap only to a limited extent in most segments.

283. In any event, if at some future point there is a concern that lack of access is stifling competition, the RBA has explained that it has the power to designate and establish an access regime.[295]

284. For all of these reasons in my view there should be no concern that the proposed amalgamation may result in foreclosure of third parties from access to infrastructure.

10. PUBLIC BENEFITS OF THE PROPOSED AMALGAMATION

285. I consider that the proposed amalgamation is likely to give rise to the following public benefits compared to the likely counterfactuals.

a. Improved coordination of adoption of domestic scheme initiatives by financial institutions;

b. Increased and improved domestic innovation from combining R&D teams and payment scheme specific knowledge;

c. Enhanced competition with and constraints on international payment schemes;

d. Reduced domestic security risks and increased government policy influence;

e. Reduced barriers to entry for financial institutions and fintechs; and

f. A number of amalgamation-specific synergies.

286. The remainder of this Section elaborates.

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293 Those directors should also have in mind NewCo's purpose "to provide globally competitive payment services which are resilient, safe, efficient, fair, accessible and cost effective and which meet the present and future requirements of the users of the Australian payments system, including financial institutions, payment services providers, while facilitating the provision of low cost solutions for retailers, other businesses and their customers": Memorandum on NewCo's potential governance and operating model, 16 October 2020, page 3.

294 It is of course possible that they may have incentives to foreclose in the counterfactual. NPPA is developing its own services over the NPP (category purpose code business services and the MPS) so would already have something to lose from providing access. In that event, there should be no concern that the proposed amalgamation might generate incentives to foreclose. Given that the NPP is subject to open access arrangements, it is difficult to say whether the NPP already has incentives to foreclose.

295 Michele Bullock (2018), *Fast payments in Australia*, Address to Seamless Payments 2018, Sydney, 13 March 2018: accessed at https://www.rba.gov.au/speeches/2018/sp-ag-2018-03-13.html.

10.1. Improved coordination of adoption of domestic scheme initiatives by financial institutions

10.1.1. Introduction

287. The importance of network effects for payment services – i.e. widespread adoption by financial institutions – was explained in Section 2. The challenges for operators of payment services of coordinating the necessary investments by financial institutions to realise those network effects were also explained there. To recap, even when two or more initiatives from different payment service providers serve different needs, and financial institutions may wish to adopt all if they were not capital or capacity constrained, those constraints exist and tend to preclude simultaneous adoption, and differences in investment priorities and sequencing is then likely to result in confusion and splintering, as well as "wait and see" strategies. Some financial institutions will favour prioritising one initiative while others will favour prioritising another, and others again will sit on the fence until it is clear which initiative will prevail, so as to avoid stranded investments.

288. The results are likely to be inefficient levels of adoption of each service, precluding each from realising timely widespread deployment. At best, new services will be delayed in reaching the market and at worst they may never make it to market and may have to be abandoned due to the failure to realise adoption by a critical mass of institutions.

289. The issue was highlighted by the Governor of the RBA, Philip Lowe, in an address to AusPayNet in late 2019:

> *The layered architecture of the system was designed to promote competition and innovation in the development of new overlay services. Notwithstanding this, one of the consequences of the slower than-promised rollout of the NPP by some of the major banks is that there has been less effort than expected on developing innovative functionality. Payment systems are networks, and participants need to know that others will be ready to receive payments and use the network. Some banks have been reluctant to commit time and funding to support the development of new functionality given that others have been slow to roll out their 'day 1' functionality. The slow rollout has also reduced the incentive for fintechs and others to develop new ideas. So we have not yet benefited from the full network effects.*[296]

296 Philip Lowe, *A Payments System for the Digital Economy*, Address to the 2019 Australian Payments Network Summit, 10 December 2019. See https://www.rba.gov.au/speeches/2019/pdf/sp-gov-2019-12-10.pdf.

290. The issue is also a recurring theme in the factual statements of industry participants that accompany the Application.[297]

10.1.2. Examples of coordination failures in the factual statements

291. It appears from the factual statements that the industry has already experienced a considerable degree of conflict and coordination problems regarding adoption of initiatives of the three domestic entities by financial institutions. This sub-section briefly reviews the industry's experience coordinating over a solution for real-time direct debits and the "splintering" that has occurred between BPAY's Osko Service 1 and the NPP's SCT service.

Real-time direct debits

292. A number of the factual statements – in particular, the statements of **[CONFIDENTIAL TO OTHERS]** – refer in parts to coordination issues concerning the development by the industry of a solution for migrating direct debits from the DE system to a real-time platform.[298] I understand from these statements that proposals from each of the three amalgamating entities were considered: BPAY's Osko Service 3 (request to pay), the NPPA's MPS (originally referred to as a consent management service) and an eftpos **[CONFIDENTIAL TO EFTPOS]** solution.[299] My understanding from these statements is that initially, in 2017, a Debit Alternatives Working Group comprising NPP participants agreed that, rather than build a debit (i.e. "pull") service over the NPP, Osko Service 3 (request to pay) would be a better solution, notwithstanding that Osko Service 3 would be a "push" credit service rather than a "pull" debit service.[300] Subsequently, the MPS was proposed (initially it was called a "consent management service" (CMS)) and came to be favoured.[301] **[CONFIDENTIAL TO OTHERS]**.[302] According to ANZ, the BPAY and eftpos

297 See, for example, the BPAY statement, paragraphs 37-38 in which BPAY explains the importance for the Osko services of achieving a "critical mass" of NPP participants (including ANZ, CBA, NAB and Westpac) implementing all three Osko services. Many other statements explain the importance for payment services of coordination to achieve widespread deployment among financial institutions and realise sufficient network effects, in the context of scarce resources within financial institutions: see for example, the ANZ statement **[CONFIDENTIAL TO OTHERS]** and paragraphs 69-71, the CBA statement, paragraphs 13-15 and 70 and the NAB statement, paragraphs 29-33. And a number of the statements emphasise the need for the domestic Australian payment entities to develop a single coordinated roadmap and sequencing of activity in order to achieve widespread deployment of each initiative: see, for example, the Westpac statement, paragraphs 17 and 43-44, the ANZ statement **[CONFIDENTIAL TO OTHERS]** and paragraphs 79-84, the CBA statement, paragraph 15 and the NAB statement, paragraphs 29-33 and 46. The ANZ statement explains that, not only is coordination of the actions of the various financial institutions challenging, but even internally within financial institutions there are barriers to reaching a coordinated position due to confidentiality obligations imposed by BPAY, eftpos and NPPA: ANZ statement, paragraph 31.

298 **[CONFIDENTIAL TO OTHERS]** and the BPAY statement, paragraph 57.

299 Details of the eftpos solution can be found in **[CONFIDENTIAL TO EFTPOS]**.

300 ANZ statement, paragraph 34.

301 ANZ statement, paragraphs 35 and 39 **[CONFIDENTIAL TO OTHERS]**.

302 **[CONFIDENTIAL TO OTHERS]**.

proposals were considered to varying degrees, but ultimately the NPPA board mandated the MPS and the RBA supported this decision.[303]

293. On my reading of these statements, there appear to have been at least three consequences of ineffective coordination among industry participants over these proposals.

a. First, the lack of an appropriate forum for industry consideration of the full range of possible alternative solutions, across all available infrastructures, resulted in a possibly sub-optimal outcome being imposed on the industry through a mandate.[304]

b. Second, delays in arriving at a decision for the industry due to the need for financial institutions to engage separately with each of the entities proposing solutions and/or a lack of consensus.[305]

c. Third, work was undertaken on Osko Service 3 within BPAY, but subsequently the Osko Service 3 assets have had to be impaired due to prioritisation of investment in the MPS.[306]

Osko Service 1 and the SCT service

294. The NPPA statement explains that while the majority of NPP participants have subscribed to BPAY's Osko Service 1, some have not. Those that have not can only make use of the NPP by sending and receiving SCT messages without the Osko Service 1 overlay. Since some NPP participants do not send SCT messages without the Osko Service 1 overlay, they cannot use the NPP to communicate with the NPP participants that have not subscribed to Osko Service 1. A result of this splintering between alternatives is that communications between some NPP participants must still occur over the DE system.[307]

295. According to BPAY, the further development of the SCT service by NPPA in the form of category purpose code business services (e.g. for payroll, tax and superannuation) may have implications for Osko Service 1, which may become a stranded asset.[308] I interpret this to mean that, as the SCT service is enhanced, a greater amount of splintering may occur, with implications for the business case of maintaining Osko Service 1.

10.1.3. The likely coordination benefit of the proposed amalgamation

296. The proposed amalgamation is likely to overcome these coordination issues by removing these conflicts. Rather than uncoordinated decisions being made across financial institutions with differing priorities, NewCo will be able to deliberate internally and then provide financial institutions with a single roadmap for future developments, with a sequenced plan to navigate their resource constraints. *Conflict* between initiatives of three

303 ANZ statement, paragraph 39.

304 This appears to be a key lesson that ANZ has taken from the experience: see ANZ statement, paragraphs 38-39 and more generally **[CONFIDENTIAL TO OTHERS]**.

305 **[CONFIDENTIAL TO OTHERS]**, and NPPA statement, paragraphs 84 (e)-(h).

306 BPAY statement, paragraphs 57-58.

307 See NPPA statement, paragraph 45. NPPA gives the example of communications between Westpac on the one side and Macquarie Bank and HSBC on the other, since Westpac does not send SCT messages without the Osko Service 1 overlay, while Macquarie Bank and HSBC have not subscribed to Osko Service 1.

308 BPAY statement, paragraph 54(f).

entities each seeking to be favoured in the allocation of scarce resources within financial institutions will likely be replaced by *coordination* over a sequenced roadmap of initiatives to be developed synchronously by all financial institutions.

297. By improving coordination, amalgamation is likely to deliver the following benefits for the Australian public.

a. Enhanced speed to market of domestic payment initiatives,[309] enhancing the competitiveness of the domestic payment schemes with international competitors that tend to be first to market due to their global scale and significantly greater resources.

b. More and more successful (i.e. more widespread) rollouts by financial institutions of domestic payment initiatives, further enhancing the competitiveness of the domestic payment schemes with international competitors.[310]

c. More and more successful (i.e. more widespread) rollouts by financial institutions of payment initiatives tailored to the local demands of Australian financial institutions and payers and payees, which international competitors are unlikely to develop due to their global focus and relationships.[311]

d. Better solutions for industry problems, by providing an appropriate forum for consideration of alternative solutions that make use of the various assets of the three entities.[312]

e. Fewer instances of wasted investments and stranded assets.[313]

298. According to some of the factual statements, one future field in which the amalgamated entity might deliver a better, more locally tailored, more widely adopted service, all in a quicker time to market compared to the counterfactual, is QR codes.[314] Other initiatives that may progress more quickly and effectively under amalgamation with a coordinated, sequenced roadmap, are Osko Service 3 and a real-time BPAY Payments service over the NPP.[315]

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309 See CBA statement, paragraph 113(c), and Expert Industry Opinion of Lance Sinclair Blockley, 18 March 2021, paragraphs 503-506.

310 See CBA statement, paragraph 113(d).

311 See CBA statement, paragraph 112.

312 The ANZ statement ([CONFIDENTIAL TO OTHERS] and in particular paragraphs 38-39 and [CONFIDENTIAL TO OTHERS]) explains the challenges and inefficiencies that arise from the lack of an appropriate forum for all potential solutions to be discussed and the optimal solution chosen.

313 BPAY has suggested that amalgamation may reduce the risk of stranded investments or false starts: BPAY statement, paragraph 76(a). Looking back to the experience with Osko Service 3 and the MPS, if the entities had been amalgamated, a clearer path for the industry may have been developed that may either have avoided these investments or provided a sequenced roadmap to allow both Osko Service 3 and the MPS to be developed without stranding.

314 [CONFIDENTIAL TO OTHERS] and the Woolworths statement, paragraph 30(c). See also the BPAY statement, paragraph 76(a).

315 A real-time BPAY service over the NPP was one of three potential overlay services that BPAY proposed in 2013, but has not proceeded: BPAY statement, paragraph 35. BPAY considers that the amalgamation may assist the potential migration of BPAY Payments to real time on the NPP: BPAY statement, paragraph 76(a).

299. The benefit anticipated in this sub-section is not inconsistent with my earlier assessment that the services and initiatives of the three entities are largely complementary and that competition between them is and is likely to remain limited. It is important to distinguish between two forms of "competition". First, there is the contest between initiatives to be favoured in the allocation of scarce resources within financial institutions. Second, there is the potential for competition between those initiatives in payment service markets. Importantly, the first contest will occur in the counterfactual regardless of whether the initiatives would ultimately compete in payment service markets. My expectation is that under amalgamation better coordination and planning (including coordinated sequencing of investments by financial institutions) is less likely to result in situations where initiatives have to be abandoned following investment in them by one of the entities, and is likely to result in more successful deployments of domestic payment initiatives and faster speed to market of those initiatives.

300. I understand that the challenges and difficulties of coordinating investments among many financial institutions have led both BPAY and eftpos to explore a number of initiatives that do not require the same extent of coordination of significant investments by financial institutions such as **[CONFIDENTIAL TO BPAY]** and eftpos' planned QR orchestration role, as well as the **[CONFIDENTIAL TO BPAY]**. These initiatives are, by choice of BPAY and eftpos, initiatives that are perhaps not likely to benefit as much from the greater ability of the amalgamated entity to coordinate investments by financial institutions in their own systems. This, however, does not diminish the "coordination of financial institution investment" benefit of the proposed amalgamation: while BPAY and eftpos are seeking to diversify into services that do not require the same amount of coordination of widespread investments by financial institutions, the amalgamation offers the potential for payment service initiatives involving BPAY and eftpos that *do* require that amount of coordination.

10.2. Increased and improved domestic innovation from combining R&D teams and payment scheme specific knowledge

301. It is well-understood that intra-organisational boundaries tend to be more permeable for information flows than market boundaries, in particular because secrecy – stemming from the desire to preserve the value of firm-specific knowledge – raises a barrier to the sharing of information across market boundaries.[316] Firm-specific terminologies and understanding of user needs can also raise barriers to R&D coordination between different firms.

302. As Teece has observed, one of the fundamental characteristics of technological development is the role of uncertainty.[317] Drawing on earlier literature, Teece identifies three categories of uncertainty. Primary uncertainty refers to random acts of nature beyond the knowledge or control of any firm. Secondary uncertainty arises due to the limits of communication between firms just discussed. A third kind of uncertainty is behavioural uncertainty: i.e. the potential for opportunistic behaviour by other firms, which can lead to ex post surprises.

316 See, for example, David J. Teece (1988), "Technological Change and the Nature of the Firm," in *Technical Change and Economic Theory*, G. Dosi, C. Freeman, R. Nelson, G. Silverberg and L. Soete (eds), Pinter, 256-281 at 263.

317 David J. Teece (1996), "Firm organization, industrial structure, and technological innovation," 31 *Journal of Economic Behaviour and Organisation* 193-224 at 194-195.

303. Amalgamation can address both the second and third kinds of uncertainty and thereby lower barriers to innovation. By combining the R&D divisions of the three entities, as well as their marketing divisions, information barriers will be lowered and the result is likely to be both additional innovations compared to the likely counterfactual (e.g. hybrids that make use of two or more of the infrastructures of the different entities) and innovations that are better targeted to local Australian user needs and that differentiate better domestic payment services from the services of the ICS.[318]

304. For example, a single entity with no barriers to communication between NPP staff and eftpos staff should enable NPP staff, who are specialists in the capabilities of the NPP, to better understand the capabilities of the eftpos infrastructure and how it might be used in conjunction with the NPP infrastructure. It will also enable NPP staff to better understand the needs of merchants and consumers in the retail payments space as well as the competitive dynamics and regulatory requirements in that space (eftpos' area of specialisation).[319] This is likely to result in retail payment initiatives under amalgamation that are better tailored to the needs of retail payment customers.[320] Related to this, the eftpos statement includes as an "uncertain potential benefit" of the amalgamation that "Newco recognizes eftpos capability and upweights its role".[321]

305. There is a further reason that hybrid services are more likely to develop under amalgamation. When separate firms contemplate combining their assets to develop hybrid products, contractual challenges arise, including the problem of how to contract to share the proceeds of the hybrid products when the benefits and costs may initially fall unevenly on the hybrid partners, and the need for one or both firms to invest in specialised assets, which brings with it the risk of subsequent hold up by the hybrid partner.[322] A big part of the problem here is that all relevant contingencies cannot be known at the time a contract

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318 As the ANZ statement observes, "[t]he ability to look across the systems enables the entity to determine the right solution for the customer problem": ANZ statement, paragraph 93. See also the Coles statement, paragraph 122, in relation to selecting the "right vehicle" for solving a need. See also CBA statement, paragraphs 4, 9, 110 (which explains that CBA sees one of the key benefits of the proposed amalgamation to be "the combination of the three schemes' expertise to enable product differentiation from the international card schemes"), 111 ("[i]nstead of replicating existing solutions, CBA anticipates that the combination of the resources of the three schemes will enable new and enhanced payment options for both merchants and consumers across card and non-card rails"), 112 ("niche local solutions that are tailored to the needs of consumers and stakeholders of the Australian payments system") and 113.

319 Coles and Woolworths have also both observed as a benefit the ability following amalgamation for them – retailers who will become shareholders of an entity that owns the NPP and BPAY) – to input into solutions of relevance for retailers that may make use of the NPP and BPAY infrastructures: Coles statement, paragraph 124; Woolworths statement, paragraphs 30(a)-(c).

320 As Teece observed, "[t]he available evidence indicates that successful attempts at innovation are distinguished frequently from failures by greater attention to the understanding of user needs": David J. Teece (1988), "Technological Change and the Nature of the Firm," in *Technical Change and Economic Theory*, G. Dosi, C. Freeman, R. Nelson, G. Silverberg and L. Soete (eds), Pinter, 256-281 at 263. See, in this respect, the Coles statement, paragraphs 122-124, which emphasise the benefit of having Coles' perspective and input, as a retailer, in the development of BPAY and NPPA's services.

321 eftpos statement, paragraph 113(e).

322 See, David J. Teece (1988), "Technological Change and the Nature of the Firm," in *Technical Change and Economic Theory*, G. Dosi, C. Freeman, R. Nelson, G. Silverberg and L. Soete (eds), Pinter, 256-281 at 269.

needs to be written, and contracts must inevitably be "incomplete".[323] By internalising the hybrid development within a single entity, common ownership removes these contractual complications and is likely to open and/or speed up paths to the development of hybrid products.

306. As I am an economic rather than industry expert, it is not within my expertise to predict future "hybrid" innovations that may emerge, or enhancements to new initiatives of the three entities that may occur under amalgamation compared to the likely counterfactual. All I can say is that the economic theory of the firm suggests that amalgamation can be expected to bring improvements to the process of innovation by the domestic payment schemes, and that this is likely to result in hybrid products and domestic payments initiatives better targeted to user needs.

307. The Expert Industry Opinion contains a number of examples of hybrid domestic payment services that Mr Blockley considers to be more likely under amalgamation than without amalgamation, including the following:[324]

a. Coordination of the eftpos and NPP infrastructures could produce an in-store retail payment service that combined the speed and convenience of card-based payment initiation with the real-time settlement feature of the NPP so that a merchant can receive funds in real-time. This may be of value to many (particularly small) merchants; and

b. A set of BPAY services over the NPP infrastructure, such as an overnight batch file service similar to the BPAY Payments service today, but over the NPP, and suitable for large utility-type billers who prefer batch processing, and an instant bill by bill services for small billers that can manage individual payment processing and would like real-time access to funds while still enjoying the benefits of BPAY's customer reference numbers for straight through processing.[325]

308. In addition to these hybrid payment service possibilities, it has been suggested in several factual statements that effective QR code orchestration is more likely to be realised within the amalgamated entity than in the counterfactual of a more fragmented domestic industry.[326]

309. It has also been suggested that the amalgamated entity would be more effective in assisting the industry deal with resilience issues in connections between financial institutions and their customers and that it might be well-placed to develop a centrally coordinated resilience capability for the Australian payments system.[327]

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323 See, for example, Oliver Hart (2017), "Incomplete Contracts and Control", *American Economic Review* 107(7): 1731–1752.

324 See Expert Industry Opinion of Lance Sinclair Blockley, 18 March 2021, paragraphs 499-502 and specifically 500.

325 See also the BPAY statement, paragraph 76(a). Another possible hybrid might be a combination of MPS and Osko Service 3, which may allow for payment initiation by the payee for amounts under a certain threshold (e.g. $500) and requests to pay and payment initiation by the payer for amounts over the threshold.

326 **[CONFIDENTIAL TO OTHERS]** the Woolworths statement, paragraph 30(c) and the Cuscal statement, paragraph 50. See also the CBA statement, paragraph 97.

327 **[CONFIDENTIAL TO NPPA]**. See also NAB statement, paragraph 40.

10.3. Enhanced competition with and constraints on international payment schemes

310. The proposed amalgamation is likely to enhance the competitiveness of the domestic payment system with international payment schemes such as the ICS, particularly compared to the second counterfactual.

311. In both likely counterfactuals, in the short, medium and long-term, eftpos initiatives to keep up with and differentiate its offerings from the ICS are likely to continue to struggle for support from financial institutions. At least in the first counterfactual, financial institutions are likely to make the necessary investments eventually, but there are likely to be delays as they juggle various priorities.[328] If eftpos does not manage to develop a strong online payment service offering as a counter to the ICS, higher retail payment costs are likely.[329]

312. There are suggestions in the factual statements that, under amalgamation, there would be greater appreciation of and support among financial institutions for eftpos' infrastructure and initiatives including the digital services in its roadmap.[330] Whether or not this is likely, I do not see any reason for financial institutions to support eftpos less under amalgamation.

313. I do consider it likely that, particularly in the medium and longer term, there will be more successful and more timely deployment of domestic payment initiatives and a more innovative domestic payments entity with a greater ability to develop hybrid and localised services that differentiate eftpos' services from the services that the ICS offer and that more firmly intertwine the eftpos infrastructure in the payments landscape (see Sections 10.1 and 10.2 above). Overall, this is likely to produce a domestic payments system that is more dynamic and capable of providing stronger competition to the ICS and other global players, particularly compared to the second counterfactual.[331]

10.4. Reduced domestic security risks and increased government policy influence

314. A stronger domestic payments system – which the proposed amalgamation is likely to deliver, particularly compared to the second counterfactual – will reduce Australia's exposure to cyber-attacks and foreign government interference. By enhancing the competitiveness and long-term viability of the domestic payment system in competition with international payment schemes, the amalgamation is likely to enhance Australia's ability to navigate a potential future scenario in which international payment schemes experience down-times due to cyber-attacks or are barred by other governments from delivering

328 See the Coles statement, paragraphs **[CONFIDENTIAL TO OTHERS]** and 165-168. Similarly, see the Woolworths statement, paragraphs 32 and 39. As the eftpos statement explains, while eftpos made contactless technology available in 2012, its implementation by financial institutions took a long time: see eftpos statement, paragraph 44. eftpos has also had to mandate development by financial institutions of its digital initiatives.

329 See Coles statement, paragraph 87, and **[CONFIDENTIAL TO OTHERS]**. Also see the eftpos statement, paragraph 106.

330 See, for example, **[CONFIDENTIAL TO OTHERS]**. The eftpos statement also lists as a "potential certain benefit" of the proposed amalgamation "retention of member support in the short term through mandates albeit that the heavy lifting on digital has been done in the absence of mandates to date": eftpos statement, paragraph 112(c).

331 See **[CONFIDENTIAL TO OTHERS]**, the Woolworths statement, paragraph 33 and the CBA statement, paragraph 119. A similar view is expressed in the Expert Industry Opinion of Lance Sinclair Blockley, 18 March 2021, paragraphs 512-513 and 515.

services in Australia. While this may sound alarmist and unlikely, specific organisations and even other countries have experienced shut downs of the ICS networks in recent years due to US government intervention,[332] and it is prudent for governments to plan for such events in an ever-unpredictable world.[333]

315. A stronger domestic payments system is also likely to provide the Australian government with greater payments policy influence. As the government has recently experienced in its negotiations with Google and Facebook over legislation relating to the news media bargaining code, foreign corporations can be motivated by concerns of setting global precedents and can be difficult to influence. There is therefore a benefit from a payments policy perspective of a strong and sustainable domestic payment service provider.

10.5. Reduced barriers to entry for financial institutions and fintechs

316. The proposed amalgamation has the potential, over time, to reduce barriers to entry for both financial institutions and fintechs, by streamlining the number of contact points and APIs that entrants needs to engage with to deliver payment services to their customers.[334]

10.6. Synergies

10.6.1. Operational efficiencies

317. A number of the factual statements and the Expert Industry Opinion suggest that operational efficiencies are likely to be realised through the proposed amalgamation, both across the entities (e.g. rationalisation of managerial oversight)[335] and within the various financial institutions.[336] For example, **[CONFIDENTIAL TO OTHERS]**.[337] Similarly, Cuscal has observed the many boards, committees and working groups that Cuscal sits on and suggests an operational benefit from streamlining this in respect of eftpos, NPPA and BPAY.[338] Section 27.12 of the Application also sets out anticipated synergies in labour, marketing and other operating expenses from rationalising common functions.

10.6.2. De-duplication of spending on R&D

318. There is the potential for the proposed amalgamation to reduce duplication of efforts and spending on certain initiatives, while still getting the benefit of drawing on the expertise of each R&D team and the knowledge and capabilities of each entity with respect to each

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332 Expert Industry Opinion of Lance Sinclair Blockley, 18 March 2021, paragraph 469.

333 I note the view of Coles that the ICS are "not necessarily solely focussed on (or regulated by) the Australian jurisdiction" and that "Coles would be very concerned there was a sovereignty risk to Australian Acquirers, merchants and customers if the Australian payments industry was solely reliant on these foreign companies": Coles statement, paragraph 41.

334 See also the Cuscal statement, paragraphs 51-52, and the NPPA statement, paragraphs 122(iii) and (iv).

335 See NAB statement, paragraph 38.

336 See the Expert Industry Opinion of Lance Sinclair Blockley, 18 March 2021, paragraphs 507-508.

337 CBA statement, **[CONFIDENTIAL TO OTHERS]**, paragraph 78 and also paragraph 113(c).

338 Cuscal statement, paragraph 43.

infrastructure and payment segment.[339] Possible examples here include **[CONFIDENTIAL TO BPAY]** and QR code initiatives.

10.6.3. Long-term rails rationalisation

319. A number of the factual statements suggest a long-term benefit of the proposed amalgamation taking the form of greater industry coordination over and a greater likelihood of long-term rails rationalisation.[340] It does seem more likely that long-term rails rationalisation would be realised sooner under amalgamation, should it be in the interests of the industry and have the support of more than 75% of the users of any infrastructure to be rationalised. The BPAY statement observes that "the amalgamation may assist in the potential migration of BPAY payments to real time on the NPP".[341] This may allow the financial institutions to retire the BPAY clearing system sooner. This would represent an amalgamation-specific benefit.

11. PUBLIC DETRIMENTS OF THE PROPOSED AMALGAMATION

320. In this Section I consider a number of potential detriments of the proposed amalgamation, compared to the likely counterfactuals, specifically:

a. Loss of competition and choice;

b. Loss of focus on roadmaps and other initiatives of individual entities; and

c. Reduction in competitive pressure on the international card schemes.

11.1. Loss of competition and choice?

321. The amalgamating entities overlap to some extent in a number of segments and are likely to overlap to a greater extent in the future (particularly once the MPS is launched and if it starts to be adopted for retail payments). A potential public detriment to consider is therefore a loss of competition between the amalgamating entities. There is also the potential that the amalgamation might result in the side-lining of future initiatives of the amalgamating entities that would address similar needs, and that might potentially compete closely in the counterfactual. There is further the potential that the proposed amalgamation may eliminate a productive degree of rivalry between initiatives of the three amalgamating entities to be favoured for adoption by financial institutions, resulting in initiatives that are weaker due to the use of "blunter" pencils.

322. I have given consideration to all of these potential public detriments in Sections 5 to 9 above. For the reasons I provide there, I consider that, while there may be some loss of competition, a *substantial* lessening of competition is not likely (see Section 5.2 for a summary). In particular, substantial unilateral effects on prices and quality are not likely (see Section 6), the existing services of the three entities and the main services in their respective current roadmaps are just as likely to be preserved (see Section 6.3), there is no basis for a concern of future side-lining of closely competing initiatives (see Section 8.1),

339 See CBA statement, paragraphs 13(a) and 113(a).

340 See, for example, the NAB statement, paragraph 45.

341 BPAY statement, paragraph 76(a).

on balance the proposed amalgamation is likely to enhance the quality of future domestic payment initiatives rather than weaken them (see Section 8.2) and foreclosure of access to infrastructure for third parties is not likely (see Section 9).

323. I also note **[CONFIDENTIAL TO OTHERS]**.[342]

11.2. Loss of focus on roadmaps and other initiatives of individual entities?

324. I understand concerns have been raised that within a single larger entity, some initiatives of the three schemes may be de-prioritised and not developed due to limited management attention.[343]

325. There is certainly the potential for the proposed amalgamation to reduce the focus on some initiatives of the three entities compared to the counterfactual. A larger organisation with more initiatives to consider resourcing may rationalise or overlook some, and the act of amalgamation itself may divert management attention for a period of time.[344]

326. However, at the same time, a larger organisation brings the potential for initiatives to be improved through combining R&D teams and entity-specific knowledge and the likelihood that initiatives will benefit from certain and quicker paths to market via coordinated industry adoption (see Sections 10.1 and 10.2 above). The concern that some initiatives of each entity may be side-lined within the amalgamated entity must therefore be weighed with the promise that other initiatives of the same entity are likely to be of higher quality and are more likely to realise timely widespread industry adoption under amalgamation.

327. Specifically in relation to existing services and the main services in the current roadmaps of the three entities, as explained in Section 6.3, there is limited ability for these to be de-prioritised within NewCo (due to protections in NewCo's governance arrangements and the mandated nature of the main services of eftpos and the NPP) and incentives to deprioritise eftpos are not likely to exist.

328. In relation to other initiatives, such as **[CONFIDENTIAL TO BPAY]** and eftpos' planned QR orchestration role, as well as **[CONFIDENTIAL TO BPAY]**, there is the potential that within amalgamation there may be less focus on some of these. However:

a. I understand **[CONFIDENTIAL TO BPAY]**.[345] **[CONFIDENTIAL TO BPAY]**

b. In relation to eftpos' Digital ID initiative, I understand that this is relatively advanced **[CONFIDENTIAL TO BPAY]**, and if it is of compelling quality, there seems a good chance that it would be an initiative that NewCo would pursue.

342 **[CONFIDENTIAL TO OTHERS]** and the Woolworths statement, paragraphs 34, **[CONFIDENTIAL TO OTHERS]**.

343 See, for example, BPAY statement, paragraph 76(b), **[CONFIDENTIAL TO EFTPOS]**.

344 The NPPA statement refers to execution risk as a potential detriment of the proposed amalgamation: NPPA statement, paragraphs 129-130.

345 **[CONFIDENTIAL TO BPAY]**.

c. In relation to eftpos' QR code orchestration role, while there is a possibility that this may be de-prioritised, there is also the possibility that QR code orchestration will be achieved more quickly and effectively within NewCo than in the counterfactual.[346]

11.3. Reduction in competitive pressure on the international card schemes?

329. I understand that there may be a concern expressed by some industry participants that the proposed amalgamation may compromise eftpos as a competitor to the ICS. In particular, this may be a fear held by some merchants that value the role eftpos has historically played in constraining the fees of the ICS.

330. For the reasons that I have provided in Sections 6.3 and 10.1-10.3 above, in my view this is not likely and in fact the very opposite is likely. I consider that the proposed amalgamation is likely to *strengthen* eftpos and the domestic payment system generally, in competition with the ICS. I also note that **[CONFIDENTIAL TO OTHERS]**.[347] **[CONFIDENTIAL TO OTHERS]**. The support for the amalgamation of Cuscal is also significant, as Cuscal is the largest independent provider of payments solutions for the Australian financial services sector.[348] The Expert Industry Opinion also observes that diluting the influence of the four major Australian banks will be important "due to the potential ambivalence of the banks regarding the maintenance of a domestic card scheme".[349]

12. CONCLUSION

331. As explained in Sections 5-9, in my view the proposed amalgamation is not likely to result in a substantial lessening of competition. Moreover, and largely for related reasons, I consider that the proposed amalgamation is likely to result in net public benefits.

332. The main public benefits I anticipate from the proposed amalgamation, compared to the likely counterfactuals are the following:

a. Improved coordination of adoption of domestic scheme initiatives by financial institutions;

b. Increased and improved domestic innovation from combining R&D teams and payment scheme specific knowledge;

c. Enhanced competition with and constraints on international payment schemes;

d. Reduced domestic security risks and increased government policy influence;

e. Reduced barriers to entry for financial institutions and fintechs; and

f. A number of amalgamation-specific synergies.

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346 I understand that **[CONFIDENTIAL TO OTHERS]**.

347 See the Coles statement in general and in particular, paragraphs 110-172, and the Woolworths statement, paragraphs 30-42.

348 See Cuscal statement in general and in particular, paragraphs 5, 12-17 and 36-58.

349 Expert Industry Opinion of Lance Sinclair Blockley, 18 March 2021, paragraph 518.

333. I consider these benefits to be significant collectively and that they are likely to significantly outweigh the potential detriments. I also expect these benefits to accrue not only to the shareholders of NewCo, as NewCo's largest customers, but also to payers and payees broadly, including consumers and small, medium and large merchants.[350]

334. While there may be some loss of competition between the amalgamating entities, I do not consider this likely to be substantial: overlaps between them are and are likely to remain limited and following amalgamation they will continue to be constrained by more significant competitors that will remain outside of the amalgamation. Moreover, I consider that any loss of competition between the amalgamating entities is likely to be outweighed by the creation of a stronger domestic payments system that is likely to compete more effectively with the ICS and with other global payment service providers in the future and enhance the domestic security of Australia's payment system.

335. And while there may be some loss of focus on specific initiatives currently in development within each of the amalgamating entities, I consider this potential detriment to be outweighed by the likely benefits of improved coordination of adoption of domestic initiatives and increased and improved domestic innovations from combining R&D teams and payment scheme specific knowledge.

336. The **[CONFIDENTIAL TO OTHERS]** reflect their expectations that the amalgamation is not likely to substantially lessen competition in payment services, and that the amalgamation is, rather, likely to enhance competition and bring net public benefits. My general impression from their factual statements is that they do not want to continue to navigate multiple uncoordinated roadmaps from three independent domestic schemes and would prefer a single coordinated roadmap of domestic payment initiatives, to improve certainty, ubiquity and speed to market of domestic initiatives. They also do not anticipate a substantial loss of competition, but rather a likely enhancement of the ability of the domestic payment schemes to compete with and constrain the dominant international card schemes of Visa and Mastercard and react effectively to future payment initiatives of global technology firms like Apple, Google and Facebook.

350 See in this respect the Cuscal statement, paragraphs 12-17 and 44.

ANNEX A: CURRICULUM VITAE OF DR GEOFF EDWARDS

Dr Geoff Edwards

Dr Geoff Edwards is a Vice-President in the European and Asia-Pacific Competition Practices of Charles River Associates (CRA), a global economic consulting firm with offices in Sydney and throughout Europe and North America.

Dr Edwards has extensive experience providing economic advice and opinions in competition and regulatory proceedings, including in the context of market investigations, merger proposals and reviews, authorisation applications, allegations of anti-competitive behaviour (unilateral and coordinated) and damages claims. Dr Edwards has advised firms and authorities on competition matters in relation to a wide range of sectors including retail, manufacturing, mining, banking, transport and health, and has extensive experience in telecoms, broadcasting and post.

Prior to joining CRA in 2004, Dr Edwards worked as an economist in the mergers and telecommunications branches of the ACCC and as a competition lawyer at Mallesons Stephen Jaques (now King and Wood Mallesons), before earning a Masters in Economics and a PhD from the University of California, Berkeley.

Experience Summary

2011 – present *Vice President*, CRA International, London and Sydney

2007 – 2010 *Principal*, CRA International, London

2005 – 2006 *Associate Principal*, CRA International, London

2004 – 2005 *Senior Consultant*, Lexecon Ltd, London (acquired by CRA in 2005)

2001 – 2004 *MEc and PhD*, Haas School of Business, University of California, Berkeley

1999 – 2000 *Lawyer*, Mallesons Stephen Jaques Solicitors, Sydney

1997 – 1998 *Economist*, ACCC, Canberra and Melbourne

Competition and Regulatory Consulting Experience (2013 – 2021)

- Advice and support including expert reports for Liberty Global in the context of the proposed joint venture between Liberty Global's Virgin Media and Telefonica's O2 in the United Kingdom (2020 – ongoing).
- Advice to a mobile network operator (MNO) in relation to an investigation of alleged abuse of collective dominance concerning wholesale mobile access services (2017 – ongoing).
- Advice to an African broadcaster in the context of an inquiry into the broadcasting sector (2017 – ongoing).
- Advice to an MNO in relation to an investigation concerning the effects of the pricing of a national roaming agreement on the network roll out of another MNO (2016 – ongoing).
- Advice to an MNO in relation to allegations that it has abused a dominant position by engaging in customer lock-in practices (2015 – ongoing).
- Advice to an MNO in the context of an investigation into alleged margin squeeze between its retail prices and its wholesale charges for national roaming and for mobile virtual network operator (MVNO) access (2013 – ongoing).

- Two expert reports submitted to the ACCC on behalf of NewsCorp Australia in the context of consultation over the ACCC's proposed News Media Bargaining Code. The CRA reports recommended bilateral negotiations over collective negotiations and proposed final offer arbitration (FOA) as a way to resolve negotiation breakdowns. Both bilateral negotiations and FOA were recommended to Parliament by the ACCC and included in legislation passed by Parliament in 2021 (2020).
- Advice to two MNOs in the context of a proposed merger in Denmark (2020).
- Support to Telenor and the Nordic Entertainment Group (NENT) in the context of the European Commission's investigation of their proposed joint venture bringing together their direct-to-home (DTH) satellite television distribution assets. CRA's work has included GUPPI and vertical arithmetic modelling submitted to the Commission (2019 – 2020).
- Analysis and advice on the prospects for merger clearance of a proposed transaction in the pathology sector (2019).
- Advice to a private equity group in relation to a contemplated merger of software providers (2019).
- Support to an integrated fuel supplier in the context of the NZCC's market investigation of retail fuel in New Zealand (2019).
- Advice to a shipping company in relation to the competition risks of a contemplated acquisition of another shipping company (2019).
- Advice and support to an online hotel booking platform operator in the context of an ACCC investigation of narrow MFN clauses in agreements with hotels (2018 – 2019).
- Expert reports and testimony in the context of proceedings before the Federal Court of Australia in *ACCC v Ramsay*. This matter concerned an alleged refusal by Ramsay to provide surgeons access to one of its private hospitals if the surgeons utilised, were involved in or had an interest in a rival private day surgery in Coffs Harbour (2018 – 2019).
- Advice to an African broadcaster in relation to its defence of a number of complaints concerning wholesale access to premium sports channels and exclusive agreements for sports rights (2012 – 2019).
- Expert reports prepared for Transurban and submitted to the ACCC in the context of the ACCC's investigation of Transurban's proposed acquisition of a majority interest in the WestConnex project (three significant toll road concessions in the Sydney region) (2018).
- Advice to a major malt producer on the competition law risks of a contemplated acquisition of another major malt producer (2018).
- Advice to the NZCC in relation to its investigation of a contemplated merger of quarries producing road and concrete aggregate products. The advice concerned relevant markets and whether harmful horizontal or vertical effects were likely (2018). The merger was abandoned once the NZCC's opposition was expressed.
- Advice to a major coal producer in relation to a proposed acquisition of a share of a further coal mine and marketing agreements for the output of that mine (2018).
- Advice to an online travel agent (OTA) on various competition issues (2018).
- Advice in relation to a contemplated merger in the marine engineering sector (2017 – 2018).

- Advice to a major integrated fuel supplier in the context of a proposed acquisition of a large number of retail fuel sites and authorisation of other commercial arrangements (2017–2018).
- Advice and reports on the treatment of certain costs in the context of a legislative requirement to price certain services at cost, and modelling of the costs of those services (2017-2018).
- Advice in relation to a gas joint marketing agreement (2017).
- Preparation of a report and testimony in the context of arbitration proceedings concerning an IP licensing agreement between Migrata and HemoCue in relation to technology for the testing of substances in fluids such as hemoglobin, and royalties claimed under that agreement (2017).
- Advice to a major coal producer in relation to contemplated acquisitions of further coal mines and interests in the coal supply chain (2016 – 2017).
- Advice to PMP (a major catalogue and magazine printer in Australia) in relation to its acquisition of IPMG (a rival printer) in the context of the ACCC's informal merger clearance process (2016 – 2017).
- Advice to MTN (an MNO in South Africa) in the context of an allegation of margin squeeze and other exclusionary abuses relating to on-net / off-net price differentials (2013 – 2017).
- Advice to an integrated coal producer and rail haulage supplier in relation to the competition law risks of a sale of its rail haulage business (2016)
- Advice to a number of financial institutions in relation to a proposal to collectively negotiate with mobile wallet providers, including two reports in support of an application to the ACCC for authorisation of collective negotiations (2016).
- Advice on rebate structures and alternatives in the manufacturing industry (2016).
- Advice to an Australian purchasing authority in relation to a Freedom of Information Act request that raised the issue of whether release of the information might adversely affect future competition by facilitating information exchange between competitors (2016).
- Advice to a company that had inadvertently acquired sole control of a vertically related entity, raising potential vertical concerns in relation to a planned divestment of part of its shareholding (2016).
- Advice to Telstra on international approaches to national roaming in the context of the ACCC's Consultation on National Roaming (2016).
- Advice to Sky UK in relation to Ofcom's consultation on "making (cross-platform) switching easier", including the preparation of a report that examined in detail Ofcom's estimates of the consumer benefits of the proposal (2016).
- Advice to a vertically integrated European pay TV channel producer and DTH platform operator/distributor on a contemplated merger with a cable operator (2016).
- Advice to a vertically integrated European pay TV channel producer and DTH platform operator/distributor on a contemplated acquisition of a DTT platform distributor (2016).
- Advice to a vertically integrated European pay TV channel producer and DTH platform operator/distributor on a contemplated acquisition by a major telecommunications supplier and IPTV platform operator/distributor (2016).

- Advice to a European sports channel producer in relation to wholesale channel pricing to comply with European competition law (2016).
- BT/EE and Three/O2: assistance to an interested third-party in the context of the investigations of these significant mergers of UK telecoms operators by the CMA and the European Commission respectively (2015 – 2016).
- Tullet Prebon/ICAP: advice to the merging parties in a friendly merger of inter-dealer brokers (2015 – 2016).
- Assistance to a competition authority in the context of an investigation of a merger in the healthcare industry – the merger was abandoned (2015).
- Preparation of a report for the Australian Retail Credit Association (ARCA) in support of ARCA's application for authorisation by the ACCC of the Principles of Reciprocity and Data Exchange (PRDE), a multilateral framework agreement to govern the voluntary contribution of personal credit information by credit providers to credit reporting bureaus (2015).
- Advice to a payment card scheme concerning the implementation of the European Commission's Interchange Fee (ICF) Regulation, including issues surrounding non-circumvention of the ICF cap and separation of scheme and processing activities (2015).
- Research and advice for a confidential client on structural separation in various industries including telecommunications, energy, rail and airports (2015).
- MNO sale: Advising the owner of an African MNO on the prospects for merger clearance of a sale of the MNO to a number of alternative potential buyers and potential remedies (2015).
- Report for MTN (South Africa) in the context of review proceedings brought by Cell C in relation to ICASA's September 2014 Call Termination Regulations (2015).
- Report for ETNO on *Economic Replicability Testing for NGA Services*, published in March 2015, coinciding with ETNO's Let's get the Fibre Rolling event in Brussels. The report recommended a consistent and proportionate approach across Europe to the parameters and procedures of economic replicability tests with the aim of promoting investment in next generation access (NGA) services while safeguarding competition (2015).
- Advice to Channel Ten in the context of Foxtel's acquisition of 15% of Channel Ten, including the preparation of a report on the effects of the transaction (2015).
- Advice to an African pay TV operator in relation to an allegation of excessive pricing of channel bouquets (2015).
- Preparation of a report for a European channel supplier in the context of the defence of a damages claim concerning the pricing of sports channels (2015).
- Advice to a pay TV operator in relation to a contemplated acquisition of a Free-to-Air (FTA) channel (2015).
- Preparation of a report for Digita (Finland) commenting on a draft SMP Decision and remedies proposed by the national regulator (FICORA) concerning access to antenna locations and antenna capacity (2015).
- Reports for MTN (South Africa) concerning the level of mobile termination rates and asymmetric rates for small players (2014).

- Advice to a UK water utility on competition law compliance of its non-household retail and wholesale prices in the context of the UK *Water Act* and associated regulations (2014).
- Advice to BT in relation to a number of margin squeeze complaints concerning retail broadband offers before Ofcom (2012 – 2014).
- Advice over many years to a major European incumbent telecoms company on how to avoid margin squeeze complaints with regard to various services, including the building of detailed margin squeeze models for internal regulatory governance processes (2010 – 2014).
- Advice on a contemplated merger of two large full service banks in two European member states (2013).
- Advice to a major European incumbent telecoms company on: (i) alternative methods of regulating wholesale local access (WLA) services in a next generation access (NGA) environment to prevent margin squeeze, considerations; (ii) economically sensible approaches to conceptual and modelling issues in assessments of margin squeezes in the context of NGA services; and (iii) important considerations in addition to the technical margin squeeze test that may allay concerns of anti-competitive behaviour (2013).
- Benchmarking analysis for an African broadcaster to understand the relative performance of its various operations in different countries (2013).
- Advice to a vertically integrated European pay TV channel producer and DTH platform operator/distributor on a contemplated acquisition of a rival premium pay TV channel packager (2013).
- Advice to a cable operator and a premium sports channel packager on a proposed sale by the cable operator of 25% of the channel packager to a competitor of the cable operator (a fixed telecoms incumbent). The transaction would have left the cable operator with a 25% share, and a third-party with 50%. The transaction raised potential vertical foreclosure concerns (input foreclosure and customer foreclosure) and our advice included consideration of non-compete clauses (2013).
- Advice to a European ferry operator on the potential to bring a complaint under Article 102 or under the State Aid laws against a competitor (2012 – 2013).
- Advice to Thomson Reuters in the context of a European Commission investigation concerning Reuters Instrument Codes (RICs) (2010 – 2013).
- Advice to BT in its defence of Ofcom's investigation of complaints by THUS plc and Gamma regarding BT's pricing of its Wholesale Calls product and its control of upstream call origination and call termination services (2009 – 2013).
- Advice to an African broadcaster in relation to investigations by the national broadcasting regulator concerning whether to establish an ex ante regulatory regime, including preparation of an international study of economic regulation of broadcasting and advice on arguments against regulatory intervention (2008 – 2013).

Publications

- "The Relevance of Economics in US, EU and Australian Competition Law," with Jennifer Fish, in D. Healy, M. Jacobs and R. Smith (eds.), *Research Handbook on Methods and Models of Competition Law*, Edward Elgar, Chapter 4 (2020).

- "Veering Left in Retail Merger Enforcement", *Competition & Antitrust Law 2020: Expert Guide*, CorporateLiveWire, pages 8-10 (2020).
- "The Market for Legislative Influence over Regulatory Policy," with Rui J P de Figueiredo, Jr. 34 *Advances in Strategic Management* (Strategy Beyond Markets), 193 – 232 (2016).
- "When is a Margin Squeeze not an Abuse?" with Mike Walker, 34(10) *European Competition Law Review*, 509-511 (2013).
- "Dominance and Market Power in EU Competition Law Enforcement," with Andrea Coscelli, in Geradin D. and I Lianos (eds.), *Research Handbook in European Competition Law,* Cheltenham, UK and Northampton, MA, US, Edward Elgar, Chapter 6 (2013).
- "Margin Squeezes and the Inefficient 'Equally Efficient' Operator," 32(8) *European Competition Law Review*, 402-405 (2011).
- "Parallel Trade in Pharmaceuticals: More Harm than Good?" with Andrea Coscelli and Alan Overd, 29(8) *European Competition Law Review* 490-492 (2008).
- "Does Private Money Buy Public Policy? Campaign Contributions and Regulatory Outcomes in Telecommunications," with Rui J P de Figueiredo, Jr. 16(3) *Journal of Economics and Management Strategy* 547-576 (2007).
- "Efficiency and Anti-Competitive Effects of Tying," with Andrea Coscelli, in C.D. Ehlermann and M. Marquis (eds.), *European Competition Law Annual 2007: A Reformed Approach to Article 82 EC,* Hart Publishing, Oxford (2007).
- "Small Business Reforms to Section 46: Panacea, Placebo or Poison?" 34(4) *Australian Business Law Review* 255 (2006).
- "The Effects of Public Ownership and Regulatory Independence on Regulatory Outcomes: A Study of Interconnect Rates in EU Telecommunications," 29(1) *Journal of Regulatory Economics* 23 (2006).
- "The Hole in the Section 46 Net: The *Boral* Case, Recoupment Analysis, the Problem of Predation and What to do About it," 31(3) *Australian Business Law Review* 151 (2003).
- "The Perennial Problem of Predatory Pricing," 30(3) *Australian Business Law Review* 170 (2002).
- "Melway – a TCE Perspective," 10(2) *Trade Practices Law Journal* 77 (2002).

Presentations

- "SLC Assessments in the Context of Disruptive Technologies", Law Council of Australia's Competition and Consumer Committee Workshop, Melbourne, Australia (August 2017).
- "Use and Misuse of Section 46", Comments on Luke Woodward and Matt Rubinstein's presentation to the 2016 Competition Law Conference, Sydney, Australia, (May 2016).
- "The Use of Economic Expert Evidence in Europe", ACCC/UNISA 13th Annual Competition Law and Economics Workshop, Adelaide, Australia (October 2015).
- "Developments in Europe: The End of Economics?", ACCC/UNISA 13th Annual Competition Law and Economics Workshop, Adelaide, Australia (October 2015).
- "The Economics of Online Geographic Price Discrimination", International Competition Network (ICN) Annual Conference, Sydney, Australia, (May 2015).

- "Economic Replicability testing for NGA Services", ETNO's *Let's get the Fibre Rolling* Event, Brussels, Belgium, (March 2015).
- "Margin Squeeze Developments and Bundling of Telephony and Pay TV", IBC Conference on Competition Law and Regulation in the Telecoms, Internet and Broadcasting Sectors, Brussels, Belgium (November 2013).
- "Access to Content in the Context of Bundled Offers: When to Worry and What to Do", 4th Workshop on the Economics of ICTs, Evora, Portugal (April 2013).
- "Competition Law versus Sector Regulation: Pay TV Broadcasting in the UK", UCL Global Competition Law and Economics Series Conference, Competition Law and the State: International and Comparative Perspectives, Hong Kong (March 2011).
- "Australian Competition Law from 10,000 Miles Away", CRA International Asia-Pacific Annual Summit, Canberra, Australia (December 2005).
- "Predatory Pricing and Margin Squeezes", Ofcom Workshop Series in Intermediate and Advanced Competition Economics, London, UK (February 2005).
- "Does Regulatory Independence Matter?", London Business School Global Communications Consortium, London, UK (October 2004).
- "Predatory pricing and the interpretation of the unilateral anti-competitive conduct provision in Australian law", 2003 Trade Practices Workshop of the Business Law Section of the Law Council of Australia, Melbourne, Australia (August 2003).

ANNEX B: TABLE OF OVERLAPS AND COMPETITORS

Table 4: Existing and potential future payment services by segment (existing services shown in bold; *potential future services shown in italics;* services with significant presence in a use case (>5% by volume) shown with shading)

	Retail in-store	Retail online	Bill/invoice	P2P	B2P/G2P (disbursements)
BPAY	**Osko 1 (via bank app)** *Osko 3 (request to pay)*	**BPAY (e.g. airline bookings)** **Osko 1 (e.g. Azupay; Monoova)** *Osko 3 (request to pay)* *BPAY (over NPP)*	**BPAY (via bank app or desktop portal)** **Osko 1 (via bank app or desktop portal)** *Osko 3 (request to pay)* *BPAY (over NPP)*	**Osko 1 (via bank app or desktop portal)** *Osko 3 (request to pay)*	**Osko 1** *Osko 2 (pay with document)*
eftpos	**Debit card present (insert and tap)** **Mobile card tokens** *BeemIt (using QR codes)*	**Debit card on file** *Key in card number* *Mobile in-app (using card tokens)* *BeemIt (using QR codes)*	**Debit card on file** *BeemIt (BPAY Payments on BeemIt)*	**BeemIt (using Deposits and Withdrawals)**	*Deposits and Withdrawals*
NPPA	**SCT (via bank app)** *MPS (using QR codes)*	**SCT (e.g. Azupay; Monoova)** *MPS*	**SCT (via bank app or desktop portal)** *MPS* *CATSCT (einvoicing)*	**SCT (via bank app or desktop portal)**	**SCT** *CATSCT (e.g. payroll)*
Other payment services	**ICS – credit and debit cards** **Cash / Cheques** **BNPL (using card rails today)** **P2B apps (e.g. AliPay; WeChat Pay)**	**ICS – credit and debit cards** **PayPal (mainly using card rails)** **BNPL (using card rails today)** **AliPay / WeChat Pay**	**ICS – credit and debit cards** **Direct credits (DE system)** **Direct debits (DE system)** **Cash / Cheques** **PayPal / Australia Post**	**Direct credits (DE system)** **Cash / Cheques** **PayPal** **P2P apps (e.g. Splitr; DiviPay, Split Payments)**	**Direct credits (DE system)** **Cash / Cheques**
Other potential entrants	*PayPal (with a P2B app)* *BigTech Stored Value (e.g. Google, Facebook; Apple; Samsung)* *Fintechs*	*BigTech Stored Value (e.g. Google, Facebook; Apple; Samsung)* *Fintechs*	*BigTech Stored Value (e.g. Google, Facebook; Apple; Samsung)* *AliPay / WeChat Pay* *Fintechs*	*ICS (e.g. Visa Direct)* *BigTech Stored Value (e.g. Google, Facebook; Apple; Samsung)* *Fintechs*	*ICS (e.g. Mastercard Send)*