

REGULATORY IMPACT STATEMENT

AN ENHANCED OVERSIGHT FRAMEWORK FOR FINANCIAL MARKET INFRASTRUCTURES

Agency disclosure statement

1. This Regulatory Impact Statement (RIS) has been prepared by the Reserve Bank. It provides an analysis of options for a regulatory framework for financial market infrastructures (FMIs) in New Zealand.
2. The analysis builds on a review undertaken by the Reserve Bank on the existing payment and settlement system oversight powers, in light of its experience with the industry and recent international regulatory developments. Development of the proposals stated in the RIS has included three rounds of formal public consultation with stakeholders and extensive follow-up discussions. Other Government agencies and departments have been consulted throughout the policy development process. The RIS has also been subject to internal quality assurance at the Reserve Bank. It has been presented to one of the Reserve Bank's internal decision-making committees and subject to two peer reviews.
3. The analysis in the RIS has also attempted to be based on first principles. Market failures have been identified and served as the basis for developing the objectives and options to ensure net social benefits. The "Principles for Financial Market Infrastructures" (PFMIs), a set of twenty-four principles for strengthening the reliance of systemically important FMIs, has also informed the development of objectives and options. The PFMIs have been widely adopted internationally.
4. The costs to existing (and potential future) FMIs arising from the proposals in this paper are generally minor. This is because the proposals are based on the PFMIs and therefore are often similar to overseas regulation and also represent best business practices. The proposals are also generally outcomes based and therefore offer flexibility in how affected FMIs comply. The costs to Payments NZ from the proposals may be more material but are still relatively small.
5. How the proposals in this paper can be applied in practice depends in part on whether the FMI is domiciled in New Zealand and its legal form. When the FMI is based off-shore, the Reserve Bank and FMA will have less ability to directly regulate. However, many foreign-based FMIs will already be adhering to equivalent regimes. In addition, the Reserve Bank and FMA will be able to encourage foreign-based FMIs compliance in New Zealand through engagement with international supervisory colleges. A power to direct FMI participants could also be used by the Reserve Bank and FMA. Additionally, some of the proposals in this paper will be less relevant to FMIs which are not separate legal entities but rather sets of agreed rules between participants.
6. There are two main limitations of this RIS.
 - The nature of the analysis is largely qualitative. The Reserve Bank requested cost estimates from industry during the consultations but only one organisation has provided such figures. These are stated in the RIS. A full cost-benefit analysis would normally provide more certainty that the proposals will have a net benefit for New Zealand. However, given the lack of cost estimates, alongside the low probability high impact nature of FMI failure and the heterogeneity of the sector a full cost-benefit analysis is unlikely to be robust enough to provide meaningful additional information and could be misleading.

- This RIS is for the overall framework of a regulatory regime for FMIs in New Zealand and therefore often the individual policy proposals are still at a high level, with more detail to be added once the new framework is put in place. Where applicable, and subject to Cabinet approval of the proposed framework, more detailed impact analysis and consultation on exposure drafts will be carried out in the future.

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Executive Summary

7. FMIs are the channels through which vast amounts of financial transactions are cleared, settled and recorded.¹ FMIs include payment and settlement systems, central securities depositories (CSDs), central counterparties (CCPs) and trade repositories (TRs).²
8. Some FMIs are systemically important and are referred to as SIFMIs (systemically important financial market infrastructures). SIFMIs are FMIs where disruption in one has the potential to lead to significant wider disruption that endangers the smooth functioning of the financial system.
9. The soundness and efficiency of SIFMIs are prerequisites for a stable financial system. However, there are potential market failures that could lead to FMIs not being as sound, efficient, innovative and transparent as socially optimal, which may then also decrease market confidence. These market failures include the following.
 - Negative network externalities.
 - Coordination difficulties.
 - High concentration of market power and quasi-monopoly.
 - Imperfect information.
10. These potential market failures have been identified at the international level and are also likely to be present in New Zealand. The market failures, in particular the negative network externalities and coordination difficulties, are also likely to be most acutely felt when an FMI is in a crisis situation. This is due to the FMIs being an important and interconnected part of the financial system, similar to registered banks.
11. Intervention to correct market failures is justified when the specific intervention in mind can be expected to mitigate the market failure and produce higher social net benefits than any other feasible intervention including none at all. In the case of FMIs, the only feasible form of intervention is regulation. Education or self-regulation, for example are not effective in cases when market failures arise from a misalignment of private incentives with social incentives. Taxes or subsidies would be too complicated to use effectively given the heterogeneous nature of FMIs and could lead to perverse incentives.
12. Part 5B of the Reserve Bank of New Zealand Act 1989 (the Act) gives the Reserve Bank the power to require information relating to payment system be provided from an operator or participant of that system. The exercise of this power must be for promoting the maintenance of a sound and efficient financial system.
13. Part 5C of the Act gives the Reserve Bank and FMA joint administration of the Designation Regime. The Regime provides statutory backing for the finality of settlement, netting arrangements and transfer of collateral for a designated settlement system. It also

¹ An example of an FMI processing significant transaction flows is the Exchange Settlement Account System (ESAS), operated by the Reserve Bank, is a real time large value inter-bank payment system. It processes around 30 billion New Zealand dollars of transactions per day. A second system is SBI which is operated by Payments NZ and used by banks to exchange retail payments processing on average 4 billion New Zealand dollars a day. The net inter-bank positions are settled in ESAS.

² A glossary of definitions is included at the end of this document.

provides the Reserve Bank and FMA (joint regulators³) stronger powers for the oversight of these systems, including the ability to induce changes by imposing conditions and disallowing rule changes. Designation is, however, entirely voluntary.

14. The regulatory powers within Parts 5B and 5C of the Act are thus limited to the collection of information, except for FMIs that voluntarily opt in to the designation regime which provides for slightly stronger regulatory powers. This is unusual by international standards and may be insufficient to mitigate the identified market failures and achieve the identified objectives. The shortcomings are:
 - there is a limited ability to induce changes in FMIs which are not voluntarily designated;
 - there is an absence of formal crisis management powers.
 - the current Designation Regime is not suitable for general oversight; and
 - the current legislative regime is limited in scope, only covering a small subset of FMIs (i.e. payments systems).

15. The Reserve Bank and FMA have a set of objectives that are used in evaluating whether or not an enhanced oversight regime for FMI oversight is necessary, and if so, what the preferred set of options for such a regime would be. The primary objectives for the Reserve Bank are to:
 - promote the maintenance of a sound and efficient financial system; and
 - avoid significant damage to the financial system that could result from the failure of an FMI or the participant of an FMI.

16. The primary objectives of the FMA are to:
 - promote the confident and informed participation of businesses, investors, and consumers in the financial market; and
 - promote and facilitate the development of fair, efficient, and transparent financial markets.

17. In line with the PFMI's by the Committee on Payments and Market Infrastructures (CPMI) and Technical Committee of the International Organisation of Securities Commission (IOSCO), these objectives are achieved by making sure FMIs have clear and transparent governance, sound risk management frameworks, that there is continuity of service when an FMI is in distress and there is fair and open market access.⁴ Another important consideration is the impact any regulatory framework has on entities' compliance costs.

18. The Reserve Bank considered alternative options as to how its objectives could be met, including maintaining the regulatory status quo. The options were considered in stages, with the first stage being about the broad powers required to meet the policy objectives. The second stage assessed what FMIs should be included. The third stage focused on the

³ For simplicity, in the remainder of this paper references to joint regulators should be taken to include the Reserve Bank acting alone in respect of payment systems. Likewise joint Ministers refers to both the Finance Minister and the Minister of Commerce, except in respect of payment systems where joint Ministers refers to the Minister of Finance only.

⁴ http://www.bis.org/cpmi/info_pfmi.htm

concrete design of the powers and how they could be tailored to the FMIs captured by the framework.

19. The broad powers required to meet the policy objectives were: information gathering powers for all FMIs to monitor the sector; business-as-usual (BAU) powers for captured FMIs to help achieve the objectives; and crisis management powers for relevant FMIs.
20. The Reserve Bank's preferred scope option is to have information gathering powers for all FMIs but reserve other regulatory powers for SIFMIs only. This is in line with the Reserve Bank's risk-based approach to regulation and reduces overall compliance costs. SIFMIs would be required to be designated and therefore be subject to further BAU and crisis management requirements. Non-systemically important payment and settlement systems could still voluntarily opt in the enhanced oversight regime to obtain legal protection for the finality of settlement, netting arrangements and transfer of collateral. This reduces settlement risk. There is flexibility within the designation regime to tailor requirements to individual groups of FMIs to prevent unnecessary compliance costs.
21. In regards to an enhanced oversight regime, the Reserve Bank also considered the following in detail:
 - The process for how an FMI would be determined to be systemically important or not, and therefore placed under or removed from the enhanced oversight regime;
 - How to regulate rule changes for FMIs subject to enhanced oversight powers;
 - How to impose regulatory requirements on FMIs subject to enhanced oversight powers;
 - The establishment of a register of all FMIs;
 - Information and investigative powers (which would apply to all FMIs); and
 - Crisis management powers for FMIs subject to enhanced oversight powers.
22. The preferred set of options would include new legislation being introduced to modify the existing oversight regime. There are other key features of this proposal.
 - The Reserve Bank and FMA would have information gathering power for all FMIs (not just payment systems) to identify potential threats.
 - An FMI that is identified as being systemically important would be required to be designated under a revised Designation Regime.
 - The Reserve Bank and FMA would have enhanced oversight powers for designated FMIs, including powers related to setting regulatory requirements, overseeing FMIs' rules, investigative and enforcement powers and crisis management powers.
 - The proposed powers under the revised Designation Regime would be applied differently for different FMIs, depending on their level of systemic importance, level of New Zealand presence and their legal forms.

23. Currently designated payment and settlement systems could continue to seek legal protection for netting and settlement under the revised Designation regime. Other new non-systemically important payment and settlement systems would also be able to opt-in for designation.
24. The new framework is likely to be more efficient and less intrusive than in some other jurisdictions. The joint regulators will also take a risk based approach which is consistent with their other regimes. The new regime is also likely to reduce the regulatory uncertainty arising from an environment where regulators in other jurisdictions are changing rules for FMIs. Restricting the revised regime to SIFMIs is also unlikely to impact on market behaviour such as participant preference as most of these SIFMIs are quasi-monopolies with no real substitutes.
25. We also note that our proposals around crisis risk management limit the potential for fiscal risks to arise. Where applicable designated FMIs would be required to have loss-allocation mechanisms in their rules to allocate the losses from the default of a participant among other participants. Where there are losses arising from other business activities, or in the extreme case that the loss mechanisms for a participant's default are inadequate, we would expect required recovery and wind-down plans to set out private arrangements for restoring solvency, or facilitating the orderly wind-down the business without the need for public intervention.
26. Additionally, designated FMIs are likely to be monopolies or quasi-monopolies and therefore in an extreme case that there are costs incurred by the government in recovering a designated FMI, these could be recouped by increasing fees to participants in the future or selling the FMI to a third party.
27. We finally note that FMIs tend to have far smaller balance sheets than commercial banks. This means any residual scope for the Crown to suffer losses is minimal.
28. On a preliminary assessment, the Reserve Bank has identified the following FMIs possibly systemically important and therefore potentially subject to the enhanced oversight regime:
 1. ESAS
 2. NZCLEAR
 3. NZCDC settlement system
 4. High Value Clearing System (HVCS)
 5. SBI
 6. CLS system
 7. LCH. Clearnet Ltd
 8. ASX Clear (Futures)
 9. DTCC Singapore
29. The Reserve Bank has undertaken extensive consultation including the publishing of three public consultation papers. The Reserve Bank has also engaged with various other government agencies including the Treasury, Financial Markets Authority, and Ministry of Business, Innovation and Employment.
30. The FMI framework was also part of the IMF's recent Financial Sector Assessment Program (FSAP) of New Zealand. The IMF is expected to confirm the Reserve Bank's assessment that the current regulatory regime leaves room for systemic risks to build up within FMIs and exposes society to negative externalities in case of an FMI failure. The IMF is also expected to express its support for the legislative framework proposed in this

paper, and suggest that it should be implemented with some minor technical changes. These changes are discussed in the Cabinet paper.

31. The joint regulators anticipate the proposed framework would be reviewed within five years of fully coming into force.

Status quo and problem definition

32. The soundness and efficiency of SIFMIs are prerequisites for a stable financial system given their interconnectedness with the rest of the financial system and the extremely large volume of transactions they process. However, there are potential market failures that could lead to FMIs not being as sound, efficient, innovative and transparent as socially optimal, which may then also decrease market confidence. Furthermore, the current regulatory regime may be inadequate to deal with these problems.

Potential Market failures

33. Our baseline assumption is that in general regulatory intervention into a market is only justified when, left to its own devices, the market does not produce a socially optimal outcome, and the specific intervention is expected to lead to a better outcome than all other feasible interventions. This includes no intervention at all and incorporates the risk of regulatory failure.
34. FMIs can exhibit a range of market failures. In particular, FMIs are networks that may:
 - produce negative network externalities given their pervasive role in the economy;
 - produce negative coordination externalities; and
 - display high levels of market concentration and be owned and therefore heavily influenced by the financial institutions that are also their largest participants; and
 - be affected by imperfect information.
35. We describe each of these in turn.
 - *Negative network externalities:* operators or participants in an FMI may not have sufficient regard to the risk of an FMI failure as they themselves would not bear all the costs of a failure thereby increasing systemic risk. This arises due to the network effect of an FMI, meaning an isolated problem could transmit quickly to other participants and related FMIs, causing wider impacts and costs.
 - *Coordination difficulties:* FMIs are networks that benefit from coordinated planning and management to achieve optimal network size, efficiency and quality. Individual participants may, however, be incentivised to only focus on their own private costs and benefits and neglect the wider systemic implications of their individual actions. An example of a lack of coordination amongst FMI participants is provided by the response to the 2012 ANZAC Day outage of the SBI system. [REDACTED]
 (Withheld under section 9(2)(ba)(i) of the Official Information Act 1982) [REDACTED]
 [REDACTED] As a result, payments were delayed for an extended period and bank customers did not have

funds available when they expected to. A more long-term cost from a lack of coordination could be a loss of innovation opportunities.

- *High concentration of market power and quasi-monopoly:* FMIs typically exhibit economies of scale with large up-front costs and small marginal costs. This can lead to a small number of systems managing the financial infrastructure underlying most of the market’s financial transactions. Potential low-levels of competition may increase systemic risk by reducing the incentives for investment and innovation in FMIs.⁵ FMIs are also often owned by their largest participants possibly allowing for the owners to demonstrate quasi-monopoly or “club behaviour” by restricting their competitors and new entrants from participating in the FMI or its governance.
 - *Imperfect information:* FMIs are typically complex and highly interconnected in a way that is not visible to many participants directly through their performance. Therefore participants in an FMI are often not able to be aware of, and to monitor and manage all of the risks they are exposed to through an FMI. Likewise, an FMI’s operator(s) may not be aware or even able to be aware of all their participants’ risks and exposures. The New Zealand domestic landscape for FMIs is heavily interconnected with many FMIs having the same members. The IMF notes that the financial or operational failure of a given FMI or participant could quickly transmit systemic risks through the financial system if proper safeguards are not in place.
36. These potential market failures exist with the FMIs in New Zealand. As financial markets become increasingly integrated, the volume of financial transactions such as payments, securities, and derivatives contracts have grown significantly in recent years. This leads to certain FMIs becoming systemically important, where disruptions within one has the potential to trigger or transmit further disruptions among participants, or to disrupt the financial system more widely. For example, each day in New Zealand there are on average \$30 billion of payments processed through ESAS (the real time large value interbank payment system) and \$4 billion of payments processed through *Settlement Before Interchange* (SBI, the retail payment system). The net value of batches of SBI transactions are also settled in ESAS. It is clear that a major disruption to a SIFMI, be it from a prolonged breakdown, fraud, or failure to settle by one of its participant, could subject the entire financial system to serious credit and liquidity risks, as it could become a channel through which risks are transferred amongst market participants.

Current regulatory arrangements

37. Currently, the Reserve Bank has the power to require from an operator or participant of a payment system any information related to that system under Part 5B of the Act. If the Reserve Bank has reasonable grounds to believe such information is inaccurate or inadequate it can require an audit by a third party. The exercise of powers in Part 5B must be for promoting the maintenance of a sound and efficient financial system.
38. Part 5C of the Act jointly gives the FMA and the Reserve Bank responsibility for administering a regime for designated settlement systems referred to as the Designation Regime.

⁵Although high levels of competition can also lead to systemic risk by creating incentives for excessive risk taking.

39. The Designation Regime provides statutory backing for settlement finality, netting arrangements, and the transfer of collateral in a designated settlement system. While it also provides the joint regulators with some powers to oversee these systems, including some ability to induce changes by imposing conditions of designation and disallowing proposed rule changes, it tends to be narrowly focused on final and irrevocable settlement of payments, it is not in line with either the Reserve Banks or FMA's broader objectives, especially in light of the fact the current regime does not include crisis management powers.

Concerns with current regime

40. The current regime is relatively well-understood by industry, imposes relatively low compliance costs and may have been fit for purposes when introduced over ten years ago; however, the current regulatory regime may be inadequate for several reasons.

- *Limited ability to induce changes in systems that are not designated*

Apart from the power to require information to be provided from the operator of a payment system, the existing oversight framework only applies to systems that opt-in. Where a system has not opted-in, the approach to date has been to make progress through cooperation and consultation with the industry, and by relying on moral suasion to induce changes in cases where deficiencies or gaps have been identified.

Such an approach was appropriate when Parts 5B and 5C of the Act came into force, especially given the Reserve Bank's ownership and operation of ESAS and NZClear, two SIFMIs in New Zealand. However, as the payments landscape become more dynamic in the last decade, more SIFMIs have emerged, and moral suasion has not been sufficient to achieve prudential objectives in a timely manner.⁶ If the non-designated payment system is of systemic importance, the inability to induce changes effectively, could compromise the Reserve Bank's ability to meet its objectives in promoting the soundness and efficiency of the financial system. An example would be where an SIFMI's governance structure does not allow all stakeholders' interests to be represented, and if the owner or operator either does not see the need to change that or cannot be induced to do so, it could disadvantage smaller players, creating inefficiency by setting up unwarranted barriers to entry. In extreme cases this could ultimately impact on the soundness and efficiency of the financial system.

A second example is around coordination. When an SIFMI is not designated the Reserve Bank would be unable to address inefficiency that could be created in situations where participants or owners of an SIFMI are acting ways that promote their own self-interests rather than maximise social welfare. This inefficiency could for example be innovation opportunities forgone, or delays in responding to technical faults or disruptions in the FMI. Such delays are costly to the FMI owners, operators or participants but could also adversely impact the soundness of the financial system.

More generally, the Reserve Bank is unable to require non-designated systems to comply with industry best practice. An example is the most current risk

⁶ One example was that the Reserve Bank raised concerns with the payments industry about the settlement risks in New Zealand retail payment systems and New Zealand Bankers Association formally commenced a project called *Failure to Settle* in 2001. This project resulted in the implementation of *Settlement Before Interchange* in 2012, which largely removed inter-bank settlement risk; however, the settlement risk between customers remained until recently.

management guidelines by CPMI-IOSCO –the PFMI– which has been widely adopted globally. The Reserve Bank adopted the PFMI in 2015 as the basis for its oversight⁷, after assessing that they are relevant for the FMI that are considered to be of systemic importance to New Zealand. However, it does not have the power to require compliance of PFMI from systems that do not opt in to the designation regime. In the Reserve Bank’s self-assessment of the responsibilities for authorities as specified by the PFMI, this has been identified as a material gap (which shows that it does not fully observe those responsibilities)⁸.

If all SIFMI were subject to the powers available to the joint regulators for designated FMI, the joint regulators could intervene to address the market failures. However, SIFMI may choose to not opt in to the Designation Regime for the same reason giving rise to the market failures – a misalignment of private and social costs and benefits.

- *Lack of crisis management provisions*

Neither the Reserve Bank nor the FMA have crisis management powers or a role in dealing with situations that may impact on the soundness of the financial system. A failure of a SIFMI, albeit a low probability event, could lead to its critical services no longer being available. Because of the volume of transactions such SIFMI typically handle, and their interconnections with the rest of the financial system, their inability to continue to provide critical services would have spillover effects across the financial system as a whole. For example, by exposing market participants to solvency or liquidity issues, and resulting in a breakdown of day to day transactions that could impose significant costs across the economy and threaten financial stability (as well as potentially creating a risk of some affected entities requiring taxpayer support).

The scale of such impacts makes it important that there be an established crisis management framework in place to deal with these events, to minimise the costs and disruption to the financial system and broader economy. Robust resolution and recovery mechanisms for FMI have been an area of focus for international bodies such as the CPMI, IOSCO and the Financial Stability Board (FSB), who have developed guidance such as Key Attributes of Effective Resolution Regimes for Financial Institutions⁹, which includes the resolution of FMI and FMI participants. Many overseas regulators are in the process of implementing a resolution regime for FMI, including Australia, where consultation on a resolution regime for FMI has been concluded¹⁰ in November 2015 and draft legislation is currently being developed.

Therefore, a lack of formal crisis management powers may make the status quo the most expensive of the regulatory options detailed below. If a large FMI gets into difficulty and the crisis is not managed, this could result in contagion that threatens financial stability. For example, failure of a system such as NZCDC would severely disrupt the functioning of the New Zealand Stock Exchange. This could have serious real economic consequences by preventing transfers of shares and also

⁷<http://rbnz.govt.nz/-/media/ReserveBank/Files/regulation-and-supervision/financial-market-infrastructure-oversight/oversight-of-financial-market-infrastructures-in-new-zealand.pdf?la=en>

⁸ For example, the Reserve Bank is unlikely to fully observe Responsibility A where “FMI should be subject to appropriate and effective regulation, supervision, and oversight by a central bank, market regulator, or other relevant authority”.

⁹ http://www.fsb.org/2014/10/r_141015/

¹⁰<http://www.cfr.gov.au/publications/cfr-publications/2015/resolution-regime-financial-market/pdf/report.pdf>

severely undermining investor confidence. Falls in investor confidence could have spill-over effects to GDP, unemployment and the value of the New Zealand dollar.

- *Designation Regime not suitable for general oversight*

While the Reserve Bank and FMA have stronger powers in respect of designated settlement systems, designation is focused on ensuring that the system operates in sufficiently rigorous manner to justify it having the benefit of settlement finality protections. Because this is a tighter focus than general oversight, it does not deal directly with significant matters like access, governance and business continuity.

The Designation Regime also lacks an appropriate set of graduated tools to induce changes. Non-compliance with conditions of designation is not an offence, so the regulators have to rely on system operators to voluntarily comply with the conditions. Once aware of any non-compliance, the only effective statutory option is to review and potentially revoke a designation, which is a very strong response that should only be reserved for very serious breaches. Also, while the regulators can disallow a rule change, they currently have no other measures to initiate rules changes except through moral suasion.

Moreover, graduation in regulatory powers allows for intervention to be proportionate to the situation meaning the expected costs can be minimised relative to the expected benefits. In regards to ensuring compliance, the current regime does not provide for this. When the only effective penalty is to revoke designation it may either reduce confidence that enforcement action will be taken or create fears of excessive enforcement. There is a suboptimal incentive structure for compliance.

- *Limited scope of the current legislative regime*

Both general oversight and the Designation Regime only cover payment and settlement systems. Strictly speaking, a number of other types of FMIs that have emerged or become increasingly important in recent years, such as central counterparties (CCPs), central securities depositories (CSDs) and trade repositories (TRs), are likely to be outside of the existing legislative regime and therefore not subject to oversight (or able to opt-in to the regime). Internationally, there has been a strong drive to increase the use of CCPs and TRs to ensure that they are subject to robust oversight.

The Reserve Bank has also identified some of these FMIs as potentially of systemic importance to New Zealand. For example, LCH which processes around 80% of the NZD Interest Rate Swap market, and ASX Clear (Futures), which clears NZD interest rate futures. The current regime does not explicitly include these FMIs in New Zealand and the New Zealand regulators do not have any powers for these potentially systemically important FMIs. This may expose New Zealand to avoidable systemic risks and reductions in efficiency.

International regulatory response

41. The current regulatory framework is also out of line with international norms. In recent years Central Banks and Market Conduct Authorities globally have been strengthening their oversight of FMIs in response to the market failures identified above and experience with the wider disruption that FMI outages or failures can produce. The current lack of formal powers could be perceived as a major weakness in New Zealand's oversight framework.

42. An example is the global adoption of the international best risk management guidelines the PFMI. ¹¹ The Reserve Bank and FMA are currently unable to fully comply with the five responsibilities set out in the PFMI. ¹² As an example, the Reserve Bank believes that it and the FMA only partly comply with Responsibility A: “FMIs should be subject to appropriate and effective regulatory supervision and oversight by a central bank, market regulator, or other relevant authority” This is because current legislation does not provide oversight powers for all FMIs, only payment and settlement systems.
43. The Reserve Bank also believes that the joint regulators do not fully comply with Responsibility B: “central banks, market regulators and other relevant authorities should have the powers and resources to carry out effectively their responsibilities in regulating, supervising, and overseeing FMIs”. This is because for some FMIs that are likely to be systemically important the joint regulators cannot formally impose requirements or standards upon them. The joint regulators can only induce changes through moral suasion.
44. A number of other jurisdictions have been consulting on or introducing new crisis management powers for FMIs in recent years. Australian authorities completed a consultation last year and now aim to introduce draft legislation for the establishment of an Australian FMI resolution regime. ¹³ The Australian government would like such a regime to comply with the Financial Stability Board’s Key Attributes of Effective Resolution Regimes for Financial Institutions (the Key Attributes) as applicable to FMIs. ¹⁴ Authorities in the United Kingdom consulted on crisis management powers in 2012 and changes implemented there include a requirement for all FMIs supervised by the Bank of England to have recovery plans in place. These recovery plans are to ensure the ongoing provision of critical services should an FMI or their operators suffer financial distress. The recovery plans are also made in accordance with the Key Attributes. Other jurisdictions consulting on or introducing changes include: Hong Kong, the European Union and Singapore.
45. Being outside of international regulatory norms could potentially incur costs on New Zealand. International persons and firms may be restricted by their home regulators from participating in New Zealand based FMIs due to a lack of regulatory equivalence. This could increase capital costs to New Zealand. Although, it is possible that some New Zealand FMIs may be able to be accredited by overseas regulators this may be less efficient than overseas regulators recognising New Zealand’s FMI regulatory regime as broadly equivalent.
46. International developments may have also created uncertainty within the New Zealand FMI sector as FMI owners, operators and participants may expect New Zealand regulations will also change at some point in the near future but are unsure how. Regulatory uncertainty may reduce confidence, and innovation in FMIs as, for example, owners and operators may withhold from investing in new systems due to perceived risk of such changes being disallowed in the future. This may have secondary effects on soundness and efficiency. Introducing a revised regulatory framework for FMIs in New Zealand or credibly re-affirming the status quo could reduce this uncertainty thereby accommodating productive investment.

¹¹ http://www.bis.org/cpmi/info_mios.htm?m=3%7C16%7C599

¹² The five responsibilities are detailed in pages 126-133 here <http://www.bis.org/cpmi/publ/d101a.pdf>

¹³ <http://www.cfr.gov.au/publications/cfr-publications/2015/resolution-regime-financial-market/pdf/report.pdf>

¹⁴ http://www.fsb.org/2014/10/r_141015/

Objectives

47. The primary objectives for the Reserve Bank are to:
- promote the maintenance of a sound and efficient financial system; and
 - avoid significant damage to the financial system that could result from the failure of an FMI or the participant of an FMI.
48. The primary objectives for the FMA are to:
- promote the confident and informed participation of businesses, investors, and consumers in the financial market; and
 - promote and facilitate the development of fair, efficient, and transparent financial markets.¹⁵
49. These objectives reflect the prudential and market conduct mandates of the Reserve Bank and FMA respectively. They also align with the objectives of other key regulatory regimes administered by each agency.
50. In deciding what options would achieve the objectives the Reserve Bank's focus is ensuring that expected benefits outweigh expected costs. This includes ensuring the risks to achieving the objects are mitigated in ways that do not unduly stifle innovation, and keeping any regulatory costs as low as possible.
51. As the primary objectives of the regime cannot be directly measured the Reserve Bank and FMA will have a secondary set of objectives. They are essentially a more granular exposition of the primary objectives and can be more easily measured. This second set of objectives is also based on the PFMI¹⁶. The second order objectives are:
- clear and transparent governance;
 - a sound risk management framework;
 - continuity of service when in distress; and
 - fair and open market access.
52. We discuss how achieving these secondary objectives outcomes will mitigate the problems discussed above and therefore promote the primary objectives.

Clear and transparent governance

- While the responsibility for managing an FMI lies with its management, clear and transparent governance arrangements improve risk management practices, business continuity arrangements and crisis management arrangements. These factors support confidence and participation in financial markets more widely. Furthermore, given

¹⁵ The primary objectives of the FMA for a revised regime for the oversight of FMIs differ to their objectives for the current regime. The objectives have been revised as it was deemed that in designing a new regime for FMIs it was most appropriate to begin with both regulatory agencies' overarching objectives. For the FMA these objectives are found in the Financial Market Conduct Act 2013.

¹⁶ An overview of the principles and responsibilities of the PFMI can be found on pages 1 to 4 of the document here <http://www.bis.org/cpmi/publ/d101a.pdf>

the linkages between FMIs and the financial system more generally and the resulting potential for negative externalities, good governance arrangements can contribute to a reduction in idiosyncratic as well as systemic risk.

A sound risk management framework

- FMIs generally have incentives to manage key risks such as legal, credit, operational or liquidity risks in the absence of any regulatory requirements. However, as explained above these incentives may not be sufficiently well aligned. FMI behaviour may still be too risky when the potential costs to all of society from risk spillovers are considered. Regulatory requirements around a risk management framework can enhance risk management practices by taking into account potential social costs, thus reducing systemic risk. This, however, has to be balanced against the additional compliance costs that regulatory requirements may produce and the efficiency and efficiency impacts. Compliance costs may be viewed as the difference in cost between complying with the regulatory requirements and the risk management an entity would ordinarily choose.

Continuity of service when in distress

- As mentioned above, one of the objectives of the Reserve Bank is to avoid significant damage to the financial system from the failure of an FMI or the failure of a participant in the FMI. Continuity of service in a failure event is crucial for containing the impacts and avoiding widespread damage. For example, the failure of a participant or system would not cause other participants to be unable to meet their obligations when due because of insufficient liquidity, or result in forced sales to make up for liquidity shortfalls. This limits any real economic impact such a failure could have. Regulatory intervention to increase the likelihood of an FMI continuing to provide essential services while in distress may also significantly improve the confidence of participants in the FMI and therefore the financial market more widely.

Fair and open market access

- FMIs should have reasonable risk-based and publicly disclosed criteria for participation. Given that there is usually a limited number of FMIs for a particular market, participation in an FMI may significantly affect the competitive balance among participants and disadvantage those that can not access the FMI.
- Fair and open access to FMI services generally facilitates competition among market participants and promotes innovation, which in turn supports efficiency. Open access may also reduce the concentration risk that may otherwise result from highly tiered arrangements that only allow a small number of direct participants.

Consultation

53. In view of the concerns raised in the problem definition and status quo section and in light of the objectives, the Reserve Bank has undertaken three rounds of consultation on proposals to strengthen its statutory powers for oversight of FMIs. Information gathered from submissions to each consultation paper and follow-up discussions has informed the options and impact analysis presented in the following section. The Reserve Bank has also obtained limited cost estimates for its preferred proposals as part of the consultations.
54. The first consultation round undertaken by the Reserve Bank was in 2013. Within a public document, the Reserve Bank sought views on its assessment of the existing statutory

oversight framework and a proposal to enhance the framework by establishing a parallel oversight regime. This would have included:

- formally identifying systems that are systemically important;
- giving the Reserve Bank formal powers to oversee SIFMIs, such as powers to impose conditions and to direct; and
- setting up a tailored statutory management regime for SIFMIs.

55. The Reserve Bank received sixteen submissions to the public consultation paper. Most submitters agreed with the Reserve Bank that current oversight powers were light and there was a case for stronger powers. There was also strong support for most of the proposed powers, especially crisis management powers. This first consultation was followed up by continuing engagement between the Reserve Bank and a wide range of interested parties.
56. In April to December 2015, the Reserve Bank held a second round of consultation on revised proposals to strengthen its statutory powers for the oversight of FMIs. By this stage, the Reserve Bank considered that an alternative option of modifying the existing Designation Regime was preferable to also introducing a separate regime only for oversight. This change in view was in part a response to the Reserve Bank's initial consultation with interested parties. The other reason for a change in view was to avoid the complexity of running two regimes. Nineteen submissions were received to the second public consultation document.
57. The proposals consulted on were very similar to the preferred options stated in this second paper. This reflects broad support for these proposals from submitters and the Reserve Bank taking past feedback it received into consideration. However, there were some changes and clarifications. Some of these changes include the following.
- The preliminary list of FMIs that may be SIFMIs for New Zealand was updated.
 - The definition of an operator was amended to recognise that an operator does not necessarily manage the services of the FMI and maintain the rules.
 - The fit and proper requirements for directors and senior management were clarified.
58. In March 2016, the Reserve Bank undertook a further public consultation on the detailed design of the crisis management framework for designated FMIs. This was due to the Reserve Bank acknowledging that there was merit in this part of the proposal being further developed before the proposed regime was advanced further.
59. The Reserve Bank received two submissions from FMI participants, three from domestic FMI operators and three international FMI operators on the third consultation. Seven out of the eight submitters were strongly supportive of the proposed crisis management framework, and only minor changes and clarifications were subsequently made to the proposals.
60. Throughout the entire review of FMI oversight powers, the Reserve Bank has also closely engaged with the Treasury, MBIE, and the FMA. The Commerce Commission has also been consulted. After analysing the proposals, as part of their recent FSAP of New Zealand, the IMF expressed its general support for the implementation of the new proposed regime into the legislative oversight framework.

Options and Impact Analysis

61. For the reasons set out above, the Reserve Bank does not consider the current regulatory framework an adequate option to address the market failures associated with FMIs.
62. Instead, the Reserve Bank identified a range of options on how to best achieve the primary objectives of the joint regulators. We present these options at three levels.
 - Firstly, we identified what broad regulatory powers may be required for the joint regulators to meet the secondary objectives. That is, what powers are needed to address the potential market failures.
 - Secondly, the Reserve Bank identified three options for the scope of the regime, or in other words what FMIs any additional powers would be applied to. This recognises that while a specific regulatory intervention in an FMI may be the best way for the joint regulators to meet the objectives, the subsequent benefits to the system (in terms of soundness and efficiency, or transparency and fairness) may be small. It is therefore possible, that the expected compliance costs of the regulation (something the joint regulators should also have regard to) outweigh any benefits of the powers when they are applied to particular FMIs.
 - Thirdly, once the preferred “scope” of a new regime was chosen the Reserve Bank considered a range of options over how the regime would work in practice. This includes what specific forms regulatory powers would take, and the specific form of other supporting aspects of the regime. The particular focus here is on further minimising any compliance costs.
63. In the fourth subsection, we present how the preferred proposals would apply to the existing FMIs. This includes presenting cost estimates (produced by Payments NZ) that we have for the set of preferred proposals as a whole. In the final section, costs to the joint regulators are discussed.
64. The Reserve Bank recognises that it would be preferable for us to present the quantitative costs and benefits of each individual option alone. However, given the nature of the options presented, in particular the interdependencies of their costs and benefits, and other factors quantitative estimates are not feasible. Instead in the earlier three parts of this section we present costs and benefits qualitatively before providing some discussion of the quantitative costs of the proposals as a whole in the final two sections.

Broad Powers

65. The Reserve Bank identified three broad types of regulatory intervention that would better allow the joint regulators to meet their secondary objectives. They are:
 1. information gathering powers;
 2. business-as-usual (BAU) powers; and
 3. crisis management powers;
66. A lack of crisis management powers for FMIs is perhaps the most significant deficiency of the current regime given their importance in the New Zealand financial system. Crisis situations (such as the breakdown of a SIFM) are very rare. However, it is in a crisis situation that the negative network and coordination externalities potentially afflicting FMIs would be most felt. In particular, the failure of an FMI could expose a large number

of market participants to solvency or liquidity issues, and result in a breakdown of day to day transactions possibly imposing significant costs across the economy.

67. Crisis management powers for FMIs could be similar to those for banks and insurers, particularly because FMIs are of similar importance to the financial system. Therefore, crisis management powers could include powers for the joint regulators to give directions; appoint, remove or replace directors of an FMI operator; and power to place an FMI (or one or more of its operator(s)) under statutory management.
68. Crisis management powers can be justified as they would directly support the joint regulator's second-order objective of 'continuity of service in distress' and therefore support the Reserve Bank's second and the FMA's first primary objectives. Intervention by the joint regulators to keep an FMI operating during a crisis situation could significantly reduce the spill overs to the rest of the economy that might otherwise occur. Furthermore, the ability for the joint regulators to use crisis management powers where necessary may promote the confidence of participants within the FMI and therefore the financial system more widely. These proposed powers for the joint regulators received broad support from submitters in the consultation on a crisis management framework for FMIs.
69. BAU powers would allow the joint regulators to better promote the objectives. BAU powers refer to the ability of the joint regulators to influence the actions of an FMI and its operator(s) outside of a crisis situation. Therefore, practically BAU powers could include regulation of an FMI's rules or applying minimum regulatory requirements to an FMI or its operator(s) possibly by standards. As an example, FMI operators may be required to have policies in place for assessing the suitability of the FMI's directors and senior management.
70. A second example of why new BAU powers over FMIs are required is to promote fair and open market access. The largest participants of an FMI could benefit from restricting competitors or new entrants from participating in the FMI. This could increase systemic risk, incur efficiency costs, reduce market transparency and reduce confidence. If the joint regulators are able to ensure an FMI's rules do not promote restrictions on competition they can prevent these risks.
71. Another possible example of a BAU power we could require is, where applicable, designated FMIs having loss-allocation mechanisms written into their rules. Loss-allocation mechanisms for mutualising the losses from a default of one participant among remaining non-defaulting participants would reduce the counterparty credit risk an FMI carries and therefore the probability of a crisis situation. It would therefore also reduce the risk of the Crown being exposed to losses from an FMI.
72. BAU powers for FMIs would also allow the objective of 'a sound risk management framework' to be achieved. The incentives for FMIs to manage key, credit, operational or liquidity risks may not be large enough when the potential costs of these risks to all of society are considered. Requirements for FMIs could be made to cover each of these areas, changing FMI behaviour so that private and social incentives align. This could result in an FMI investing more in back-up systems thereby reducing the expected costs to society from a technical failure, and could be an action they would otherwise not undertake.
73. BAU powers would also support any crisis management powers leading to further reductions in potential negative externalities. BAU powers could include FMIs being required to have business-continuity plans via a minimum requirement. This could reduce both probability of FMIs entering a crisis and the probability that an FMI that has entered a crisis requires external intervention. This potentially reduces the negative externalities and spillovers arising from FMIs. This could be through imposing regulatory requirements that

ensure that service providers to an FMI would be obliged to continue providing those services in the case of a statutory manager taking over or ownership of the FMI changing. FMI operators may currently have no incentive to ensure such arrangements are in place.

74. There are some BAU powers for the joint regulators currently but they are limited compared to what is suggested above and therefore unable to properly promote the four secondary objectives. No BAU powers can be applied to any FMI that has not voluntarily chosen to be designated (and even then designation is currently only for settlement and payment systems). BAU powers that can be applied to designated systems are limited. Rule changes can be disallowed by the joint regulators but changes to existing rules or new rules cannot be required. Requirements for designated FMIs could be imposed via conditions of designation. However, the ability for the joint regulators to ensure compliance (which is necessary for the powers to have their desired effect on FMI behaviour) is limited. The joint regulators could issue a public warning or revoke designation of the FMI but there is an absence of a complete graduated set of offences and penalties to ensure optimal levels of compliance. Therefore the Reserve Bank is proposing a wider set of offences and penalties to accompany expanded BAU powers.
75. Information gathering powers are the third broad regulatory intervention that has been identified by the Reserve Bank as necessary to meet the secondary objectives. Currently, the joint regulators have information gathering powers for settlement and payment systems only. The joint regulators are currently unable to require the provision of information from other FMIs. Information on the structure and activities of individual FMIs, and the FMI landscape as a whole is necessary for the joint regulators to identify where the objectives are not being met, and for them to evaluate the performance of any regulatory intervention and identify any emerging or potential risks. Well-informed regulators are not just a precondition for successful regulation but would also promote confidence within the financial system. Information gathering powers would put the joint regulators in the position where they are able to understand how different risks arise from FMIs and how those risks are transmitted throughout the financial system. Therefore, the joint regulators would be better placed to reduce those risks than say an FMI operator who would have less complete information.

Scope options

76. There are three scope options considered. Each represents a different degree of regulatory intervention. Because information gathering powers are necessary to underpin the entire regime they would apply to all FMIs. This is largely the same rationale as to why information gathering powers currently apply to all settlement and payment systems. An enhanced oversight power therefore refers to the possibility of applying BAU or crisis management powers to an FMI. The three options are:
1. enhanced oversight powers for SIFMIs only;
 2. enhanced oversight powers for SIFMIs, system-wide important FMIs and Critical Service Providers (CSPs)¹⁷; and
 3. enhanced oversight powers for all FMIs and CSPs.

Option one: enhanced oversight powers for SIFMIs (preferred option)

¹⁷ “Critical service provider (CSP)” means a provider of services to the FMI that are necessary to its ability to provide essential services.

77. Beyond information gathering powers for all FMIs, this option would include the following modifications to the existing regulatory regime.

- Identifying and designating all SIFMIs.
- The joint regulators having a graduated set of BAU oversight powers for SIFMIs, including setting regulatory requirements and overseeing rules, and powers for investigation and enforcement.
- The joint regulators having crisis management powers for SIFMIs (set out in further detail in the *design options* section).
- Other payment and settlement systems could opt-in voluntarily for the purposes of statutory protections of settlement finality, netting arrangements and transfer of collateral. These FMIs could also be subjected to the additional powers that would be applied to SIFMIs.

Option two: enhanced oversight powers for SIFMIs and FMIs of system wide importance and CSPs

78. This option would include the following modifications to the existing regulatory regime.

- Mandatory oversight of SIFMIs, system-wide important FMIs and CSPs.
- The regulator(s) having a graduated set of BAU oversight powers, including enforcement and investigation powers for recognised FMIs.
- The regulator(s) having crisis management powers for recognised FMIs and CSPs. These powers would differ for the two classes of FMI and CSPs.
- Other payment and settlement systems could opt-in voluntarily for the purposes of statutory protections of settlement finality, netting arrangements and transfer of collateral. These FMIs could also be subjected to the additional powers that would be applied SIFMIs and system-wide important FMIs.

Option three: enhanced oversight powers for all FMIs and CSPs

79. This option would include the following modifications to the existing regulatory regime.

- The regulator(s) having a graduated set of BAU oversight powers, including enforcement and investigation powers for all FMIs and CSPs. The powers applied to a particular FMI or CSP would be based on a graduated scale.
- The regulator(s) having crisis management powers for all FMIs and CSPs. The powers applied to a particular FMI or CSP would be based on a graduated scale.

Options	Costs	Benefits
Option one: enhanced oversight powers for SIFMIs.	<p>There would be costs for the joint regulators to provide such oversight.</p> <p>At least two non-designated domestic FMIs may be considered systemically important.¹⁸ The costs to these systems are likely to increase but the increases are likely to be small</p> <p>The costs to foreign SIFMIs that become subject to an enhanced oversight framework are likely to be minor.</p>	<p>Regulating SIFMIs has the potential to reduce the identified market failures significantly.</p> <p>The marginal benefits of subjecting SIFMIs to a given set of regulatory powers are likely to be highest among all FMIs.</p>
Option two: enhanced oversight powers for all SIFMIs, FMIs of system-wide importance and CSPs	<p>There would be additional costs to the joint regulators over and above Option one.</p> <p>There would be the costs to SIFMIs as Option one and at least two currently non-designated domestic FMIs would likely be considered to be not of systemic importance but of system-wide importance.¹⁹</p> <p>There is the potential for minor costs increases to domestic service providers considered to be CSPs.</p> <p>Costs to foreign FMIs considered to be of system-wide importance and foreign CSPs would be minor.</p> <p>Potential boundary problems.</p>	<p>Regulating FMIs of system-wide importance and CSPs may further reduce the identified market failures. However, the marginal benefits may be significantly less. For example, retail card systems (Visa, MasterCard etc.) are likely to be substitutable in the event of one of these systems failing. Therefore, the benefits of intervention to reduce the probability of these systems failing are likely to be smaller than in the case of systems with no readily available substitutes are available such as SBI or NZCDC.</p>
Option three: enhanced oversight powers for all FMIs	<p>There would be additional costs to the joint regulators over and above option two.</p> <p>The costs to SIFMIs, FMIs of system-wide importance and CSPs would be the same as Option two.</p> <p>There is the potential for other FMIs to be subject to regulation beyond proposed information and investigative powers.</p> <p>This option may introduce barriers to entry reducing innovation.</p>	<p>Regulating all FMIs may further reduce the identified market failures by more than regulation of only SIFMIs. However, the marginal benefits may be significantly less. For example, the benefit of extending the oversight powers to the Payments NZ's Paper Clearing System (PCS) would be negligible given the small and declining use of cheques in New Zealand. Delays or a collapse of this system would not cause systemic damage²⁰</p> <p>Would provide a level playing field.</p>

80. Option one represents the Reserve Bank's preferred option for the scope of enhanced oversight powers. This is for several reasons.

81. In terms of compliance costs and costs to the regulators Option one is the least expensive.

¹⁸ These are SBI and HVCS.

¹⁹ They are Bulk Electronic Clearing System (BECS) and Consumer Electronic Clearing System (CECS).

²⁰ PCS covers all paper-based payment instruments and this is primarily made up of cheques. A 2012 Payments NZ report found that over 95% of payments in New Zealand were made by non-cheque means. Additionally, 93% of persons still using cheques are using them as a second or third alternative form of payment meaning overall a negligible number of customers are wholly reliant on cheques. Cheque use continues to decline by around ten percent per year. A summary of this report can be found here: http://www.paymentsnz.co.nz/cms_show_download.php?id=77

82. After consultation, the Reserve Bank concluded system-wide important FMIs do not need to be captured by an enhanced regulatory framework. This is because of the diversity of the retail payment systems in New Zealand. It was determined for the two systems that may have been classified as of system-wide importance given that substitutes are readily available. Furthermore, the Reserve Bank is proposing information gathering powers for all FMIs. These powers would allow the joint regulators to monitor any FMI that may have been classed as of system wide importance. If these FMIs grow to be of systemic importance, the extent of their oversight can be reconsidered.
83. The marginal gains (in terms of increased soundness, efficiency, confidence, fairness and transparency) from regulating non-systemically important FMIs are likely to be significantly smaller than from the regulation of SIFMIs for a given set of regulatory powers. For example, a disruption in a non-systemically important FMI is unlikely to lead to further disruption within the financial system and have significant real economic costs. Therefore, the presence of network externalities and coordination difficulties does not provide the same justification for intervention as was the case with SIFMIs.
84. Likewise, the problems of market concentration and quasi-monopoly are likely strongest for SIFMIs as they are less likely to have readily available substitutes. Therefore, there is less of a case for regulatory intervention into non-systemically important FMIs for the purposes of promoting fair and open market access or clear and transparent governance. Additionally, some regulations can act as barriers-to-entry. This may especially be the case when regulations are applied to all FMIs as in Option three. Barriers-to-entry may be introduced to a lesser extent in Option two also. Introducing barriers to entry could make the existing problems of high concentration of market power and quasi-monopoly worse (especially the effects on innovation), which is out of line with the joint regulators' objectives. Option one is least likely to introduce substantial barriers-to-entry as the marginal costs of being designated for foreign FMIs which enter New Zealand and are immediately classified as systemically important are unlikely to be significant given they will likely be complying with similar regulation from their home regulators already. For new entrant FMIs, they are unlikely to be considered systemically important until the point they grow to have significant scale.
85. However, the Reserve Bank does acknowledge that smaller levels of market failure may mean proportionately less regulatory intervention is justified rather than none at all. Options two and three allow for a graduated approach. But so does Option one. Under Option one it is intended that information and investigative powers would apply to all FMIs. Different degrees of intervention would also be applied to the SIFMIs subject to enhanced oversight framework. This recognises that even among SIFMIs some systems are more systemically important than others.
86. There are two theoretical problems that could arise from demarking SIFMIs from other FMIs in Option one. However, the Reserve Bank does not envisage a risk of such boundary problems arising in practice because by their very nature SIFMIs usually have no substitutes. Furthermore, none of the FMIs identified by the joint regulators as likely to be systemically important to New Zealand are considered to have substitutes. However, even if this were not true, two design features of the regime would reduce the potential for boundary problems. The first boundary problem is the potential for FMIs which are designated to gain a competitive advantage because they are deemed to be safer by market participants. The ability for other payment and settlement systems to voluntarily opt-in to the regime counteracts this risk.²¹

²¹ There is almost no theoretical possibility for boundary problems between designated and non-designated TRs, CSDs and CCPs as they are almost always the only such system for the particular market they service (e.g. a stock exchange).

87. The second theoretical problem arising from demarking SIFMIs from other FMIs is that market participants switch to using non-FMIs to avoid any additional costs from designation that would otherwise be passed on to these participants. However, the compliance costs of the regime (to be discussed) are small. Also, if enough market participants switched to a non-designated FMI, such an FMI could become systemically important and would therefore be designated. Therefore, there is limited scope for regulatory avoidance.
88. Option two potentially introduces the same two boundary problems and here they would be of a more practical concern because system-wide FMIs are more likely to have substitutes. However, the other mitigating factors discussed would reduce the size of any market distortions introduced.
89. Enhanced oversight powers for all FMIs potentially creates a larger boundary problem than those arising from distinguishing between designated FMIs and non-designated FMIs. A need for a more precise definition of an FMI may arise to stop regulatory avoidance or overzealous regulation. This problem is largely avoided when the regulatory focus is on SIFMIs. A system on the boundary whether it should be considered an FMI is unlikely to be systemically important.
90. Another possible distortion in option one is that designating an FMI could mean it becomes seen as “too big to fail” thereby introducing moral hazard. While this is a possibility, the BAU oversight powers the joint regulators would have over SIFMIs would counteract such moral hazard (e.g. if designation would otherwise cause the quality of governance in an FMI to fall regulatory requirements on governance could prevent this). Furthermore, where applicable regulatory requirements on loss-allocation, or wind-down and recovery plans (discussed below) could be used to ensure SIFMI owners and operators have proper incentives not to let their system fail. While the SIFMI may be recovered by the joint regulators in a failure event the original owners and operators could still be made to bear costs (through loss of equity for example). The risk of introducing moral hazard is potentially as high as or higher under Option two than Option one.
91. Finally, a focus on systemically important only is consistent with the regulatory developments within many other jurisdictions. In particular, the focus of the PFMIs is on SIFMIs (although all FMIs are encouraged to adopt them).²² Therefore, an enhanced legislative framework where only SIFMIs are in scope would likely be sufficient to ensure the joint regulators are compliant with the five principles for regulators within the PFMIs.
92. Overall, the Reserve Bank believes an enhanced oversight framework for FMIs with the scope of Option one (SIFMIs only) is best placed to reduce the identified market failures conditional on expected benefits exceeding expected additional costs. A focus on SIFMIs is also consistent with the Reserve Bank and the FMA’s risk-based regulatory approaches for other parts of the financial system.
93. The Reserve Bank’s preliminary analysis suggests that five domestic systems and four foreign systems may meet the criteria of being of systemic importance and therefore fall under the scope of the powers of the regime (beyond information gathering powers only). These FMIs are (with the domestic systems first):

1. ESAS
2. NZCLEAR

²² Pressure on non-systemic FMIs to adopt the PFMIs might be provided by the joint regulators through moral suasion or from industry via competitive pressures. Participants may view adoption of the PFMIs as a sign of quality. Therefore in an environment where some FMIs have adopted the PFMIs other FMIs may voluntarily do so to avoid losing market share.

3. NZCDC settlement system
4. HVCS
5. SBI
6. CLS system
7. LCH. Clearnet
8. ASX Clear (Futures)
9. DTCC Singapore

94. Of the systems identified as possibly meeting the criteria of systemic importance ESAS, NZClear, NZCDC CLS are already designated under the current regime. ESAS and NZClear are owned and operated by the Reserve Bank. SBI and HVCS are Payments NZ operated systems. The other systems are foreign-based.

Design options and discussion

95. In this section, we present the design options, or sub-options, for the Reserve Bank's preferred scope option (Option one). These design options are for the specific types of regulatory intervention (and their designs) the Reserve Bank is proposing. Excluding information gathering powers, under scope option one it is intended that the proposed powers for the joint regulators would only apply to FMIs in the Designation Regime. SIFMIs would be designated as would non-systemically important payment and settlement systems that opt in to the Regime voluntarily.
96. For regulatory requirement setting powers; requirements for business continuity plans (BCPs), and recovery and orderly wind down plans; and information gathering powers we do not present alternative options giving the discussion in the broad powers subsection. Instead we further explain how these powers would work in practice.

Design options for the Structure of the oversight regime

97. The Reserve Bank considered two options for the structure of the oversight regime. Option one is to keep the existing Designation Regime for the sole purpose of providing statutory backing of settlement finality, netting arrangements, and the transfer of collateral. A second "Recognition" Regime would be established to include SIFMIs being subjected to oversight. Option two is to have a single regime by modifying the existing Designation Regime.

Options	Costs	Benefits
Option one: The Designation Regime would remain unchanged. A parallel "Recognition" Regime would be established alongside.	There may be complexity in running two regimes and additional administrative costs (as some FMIs would be in both regimes).	Clear separation of Payment and Settlement systems that would have legal backing of netting, settlement finality, and collateral transfer from other FMIs.
Option two: The existing Designation Regime would be modified.	There is the possibility of confusion around the meaning of "designation" changing.	Avoids the complexity of running two regimes and some FMIs being in both regimes. Less administrative costs.

98. The Reserve Bank is of the view that Option two is preferable. Modifying the existing Designation Regime would avoid the complexity of running two systems. Option two would also not hinder the effectiveness of the proposed regime and is well aligned with many other overseas jurisdictions' FMI frameworks.

Design options for the process of granting and revoking designation

99. The Reserve Bank has identified two options for the process of granting and revoking an FMI's designation.

Options	Costs	Benefits
Option one: designation of an FMI, or revoking designation of an FMI, to be the decision of the joint regulators.	There would be more third party oversight of the designation process under Option two.	The processes of granting designation and revoking designation would likely be faster than Option two.
Option two: designation of an FMI or revoking of an FMI's designation to be made by an Order in Council.	The process of designating an FMI or revoking designation of an FMI would likely be slower than Option one.	There would be more third-party oversight to the designation process. Likewise, the joint regulators would have to go through a similar process before recommending to the joint Ministers whether an FMI should have its designation revoked.

100. The Reserve Bank proposes that Option two be implemented. Although, Option two would take considerable time from start to finish we do not believe the process would be too slow given that the joint regulators would continue to monitor emerging risks in non-designated FMIs. Furthermore, designating an SIFMI is significant undertaking that, in our view warrants a robust process that incorporates appropriate checks and balances, as well as providing sufficient scope for stakeholder consultation.

Design options for the oversight of FMI rule changes

101. The Reserve Bank considered four options for the types of powers for the oversight of FMI rules. It is intended that these powers would apply only to rules of an FMI deemed to be under the scope of oversight of the joint regulators at designation

Options	Costs	Benefits
Option one: the joint regulators would have the power to disallow rule changes within twenty working days, and also the power to require changes to existing rules.	There is a limited potential for moral hazard. ²³	The power to disallow rule changes reduces the chance that changes to a designated FMI would have negative effects on the FMI. The benefit of the joint regulators being able to require rule changes is that it allows the joint regulators to require a rule change or establishment of a new rule if any gaps or deficiencies are identified in the existing rules for an FMI. This potentially reduces the risk of an FMI failure or crisis and therefore also the need for the joint regulators to use crisis powers.
Option two: changes to a designated FMI's rules would require approval from the joint regulators, and the joint regulators would have the power to require rule changes.	Similar to Option one, however, there would be more potential for moral hazard with explicit approval of rule changes.	Same as Option one.
Option three: the joint regulators would have the power to disallow rule changes within twenty working days, but no power to require rules changes.	Similar to Option one. However, the efficiency and compliance costs are potentially lower if the joint regulators cannot require rule changes.	This option reduces the chance that changes to a designated FMI would have negative effects.

²³ Moral hazard in this instance refers to persons perceiving any non-objection to a rule change of an FMI as the joint regulators taking implicit responsibility for any failure of the FMI. This may encourage stakeholders to the FMI to scrutinise the risks of the FMI less.

	On the other hand, without a power to require rule changes there would be less ability for the joint regulators to have FMI correct rules for identified gaps or deficiencies.	
Option four: changes to a designated FMI's rules would require approval from the joint regulators, but the joint regulators would have no power to require rule changes.	Similar to Option three. However, there would be more potential for moral hazard with explicit approval of rule changes.	Same as Option three.

102. The Reserve Bank's preferred option is Option one. This would reduce the possibility that changes to the rules of a designated FMI would conflict with the soundness and efficiency objectives by, for example undermining clear and transparent governance. The preferred option also provides the ability for the regulators to resolve identified gaps and deficiencies in a designated FMI's set of rules. Option two would achieve a similar result. However, approval of rule changes may be more likely to be interpreted as an implicit regulatory guarantee than non-objection to rule changes. Also, Option two may have higher efficiency costs than Option one. This is because Option two may unnecessarily hold up changes to an FMI that have no negative effect on the FMI's soundness or efficiency for more than twenty working days. Option one is preferred to Option three because the Reserve Bank is of the view that the marginal efficiency costs of the power to require rule changes is outweighed by the benefit that the joint regulator's would be able to more easily able to correct gaps in rules.

103. One example of a rule change we might require of particular designated FMIs is that they ensure their rules contain loss-allocation mechanisms in the case of the default of a participant. This would reduce risk to the FMI and therefore also any potential for Crown exposure to losses from a failed FMI.

Design options for offences, penalties, and ensuring compliance

104. To ensure that FMIs, FMI operators or FMIs participants are incentivised to comply with the proposed enhanced regulatory regime (and therefore give the regime effect) the Reserve Bank considered three options for offences, penalties and ensuring compliance.

Options	Costs	Benefits
Option one : Criminal penalties only	Under this option it will often be difficult to take action which is proportionate to the magnitude of the breach. This creates a suboptimal incentive structure by either reducing the confidence that enforcement action will be undertaken (thereby reducing deterrence), or creating fears that excessive enforcement action will be taken (thereby resulting in an economically inefficient allocation of resources towards compliance). Additionally, there are the costs of legal proceedings for both the joint regulators and regulated entities.	The benefit of this regime is that it would be consistent with the enforcement regime in the prudential regime for banks. High levels of penalties for breaches of the legislation may be appropriate given the overall level of systemic risk posed by the sector.
Option two: Full range of criminal, civil and administrative penalties.	There are potentially fewer costs related to legal proceedings when civil pecuniary and administrative penalties are available. They are easier to impose on entities involved in a breach. This is either because of a lower standard of proof is required, or	By having civil, criminal and administrative penalties available the regulators would have a graduated range of enforcement options, thereby increasing the ability of the regulators to take proportionate enforcement actions. This in turn creates a better

	because they can be imposed directly by the regulator (without recourse to courts).	incentive structure, and encourages entities to invest the optimal level of resource in compliance.
Option three: Full range of criminal, civil and administrative penalties; and additionally the power to issue directions and carry out enforceable undertakings.	<p>Similar to Option two.</p> <p>Additionally, issuing directions is a fairly intrusive power. Therefore, the trigger for issuing directions will be high with checks and balances imposed.</p> <p>There are no apparent costs arising from possible use of enforceable undertakings as they are a voluntary agreement between a regulator and regulated entity.</p>	<p>As for Option two and:</p> <ul style="list-style-type: none"> the benefit of enforceable undertakings is that they allow for breaches to be resolved through some kind of remedial action without the costs and uncertainties associated with legal proceedings; and the benefit of issuing directions is that they allow the joint regulator's to directly correct the actions of an SIFMI or operator when they have been involved in serious or repeated breaches of obligations imposed by, or under, the legislation.

105. The Reserve Bank's preferred option is Option three. We believe that this option will result in the ability to take more efficient and proportionate enforcement action in the event of breaches and in doing so creates better calibrated incentives for FMIs to invest in compliance.

106. Under Option three, for an operator of an SIFMI involved in serious or repeated breaches of obligations imposed by, or under, the legislation (therefore including regulatory requirements and non-compliance with the information gathering powers) the joint regulators may issue directions to the operator (with the consent of the joint Ministers). This would be an alternative mechanism for the joint regulators to ensure compliance with the regime.

Design options for a register of FMIs

107. It was suggested by some submitters to one of the Reserve Bank's 2015 consultation that a public register of all FMIs operating in New Zealand be established. The Reserve Bank considered two options in this regard.

Options	Costs	Benefits
Option one: the joint regulators establish a public register of all FMIs operating in New Zealand.	<p>There is the possibility that requiring all FMIs to be registered would introduce moral hazard. Some observers may see this as implying that non-designated FMIs are subject to more regulation than they actually are.</p> <p>There would be a small cost to the joint regulators of maintaining a public list of all FMIs.</p>	<p>Added transparency.</p> <p>Improved efficiency as one could see competitors/alternatives. Agents may be able to more easily decide what FMIs they could go to as an alternative. This may increase market discipline.</p>
Option two: the joint regulators establish a private register of all FMIs operating in New Zealand for their own use.	There would be no single publically available list of all entities the joint regulators consider to be FMIs.	A private register would serve as a useful tool for the joint regulators to monitor the FMI sector.

108. The Reserve Bank's preferred option is Option two. A public list where all entities considered to be FMIs, not just those that are designated, are required to be registered may introduce moral hazard. Some market participants may interpret the registration of non-designated FMIs as an extension of oversight powers, beyond information gathering, applying to such FMIs and therefore reduce their own scrutiny of such FMIs. Instead, maintaining a private list of all FMIs would provide the joint regulators a useful tool to monitor the FMI sector.

Design options for crisis management powers

109. The market failures identified earlier in this RIS often have their largest effects in a crisis situation. A crisis situation or disorderly failure of an FMI is when the risk of systemic damage to the financial system is highest therefore there is a strong case for powers.
110. It is particularly useful in the case of crisis management powers to make distinctions between the costs of having crisis management powers available, the costs and benefits of their actual use, and therefore the expected costs and benefits of crisis management powers overall. In regards to the costs of having these powers available, there would be administrative costs for the joint regulators. These costs are included in the extra resourcing the joint regulators would require to implement the new regime (discussed below). Additionally, any crisis powers (and particularly statutory management powers) could create moral hazard. Regulatory requirements including those for loss-allocation could mitigate any moral hazard introduced.
111. In the rare event that a crisis management power is exercised, there is the cost that the power would be fairly intrusive. Additionally, for statutory management, any expense beyond what would have occurred in a crisis situation regardless (e.g. liquidation) is a marginal cost. We cannot envisage crisis management powers having any effect on efficiency in any other way. Effects on innovation, for example, are not a concern at the point of possible failure. However, the benefits from using a crisis management power could be immense. Such powers may be able to prevent the failure of an SIFMI and also prevent a crisis involving an SIFMI becoming a full financial crisis. An additional benefit from an SIFMI not failing is that otherwise remaining SIFMIs could become more systemically important. Therefore, overall the Reserve Bank believes that the expected net benefits of having crisis management powers will exceed the expected costs because even though an FMI failure is a rare event the costs of having crisis management powers available are relatively minor. If a crisis occurs the benefits of using the power could be large and again the costs relatively minor. This is without any consideration of society having risk averse preferences which would further boost the case for crisis management powers.
112. The Reserve Bank considered four options for crisis management.

Options	Costs	Benefits
Option one: joint regulators to be able to place an FMI or its operators in statutory management.	<p>Statutory management is both very intrusive and more intrusive than giving directions; or removing, replacing, or appointing directors. This is because FMI failures are expected to be rare events (and even rarer with the new BAU powers in place) and an FMI's BCP and/or recovery and wind-down plan would have been inadequate in resolving the situation.</p> <p>The costs of this power (when used) would include any losses or expenses beyond what would occur in a crisis situation where this</p>	<p>Allows the joint regulators an option for intervention in a crisis situation when private recovery options have been exhausted.</p> <p>Statutory management could reduce the financial exposure of the Crown in a bail-out scenario.</p> <p>Statutory management may</p>

	<p>power was not used, i.e. liquidation. The costs of this power would be heavily situation dependent. Therefore the costs cannot currently be quantified.</p> <p>Additionally, even in a crisis situation where intervention is warranted statutory management may be inefficient. Less intrusive powers such as giving direction or replacing directors may be sufficient in remedying the situation.</p> <p>Statutory management in particular has the additional “moral hazard” cost relating to the FMI not being allowed to fail. However, there are ways (such as loss-allocation requirements) to mitigate this as previously discussed.</p>	<p>prevent further deterioration of the FMI or its financial position.</p>
<p>Option two: joint regulators to have the powers to issue directions to an FMI; and appoint, replace or dismiss directors of an FMI operator.</p>	<p>These powers are fairly intrusive but as in Option one would be rarely used.</p> <p>May not be sufficient for all circumstances.</p>	<p>Less intrusive than statutory management.</p> <p>Allows the joint regulators options for intervention in a crisis situation where private recovery options have been exhausted.</p>
<p>Option three: powers for the joint regulators to issue directions; appoint, dismiss or replace directors; place an FMI or one of its operators in statutory management; and a power to direct participants (i.e. a full suite of crisis management powers).</p>	<p>Similar to Options one and two, however; regulators would have a graduated set of crisis management powers available allowing them to intervene in a graduated and tailored way.</p> <p>The power to direct a participant is highly intrusive and will therefore be tightly constrained as not to impinge on the ability of participants to make commercial decisions in a crisis.</p>	<p>Similar to the above options.</p> <p>The power to direct participants would be useful when the action of a participant is preventing the resolution of an FMI. It would also allow the joint regulator options in resolving the New Zealand operations of a foreign-domiciled FMI.</p>

113. The Reserve Bank’s preference is Option three. Taken together these powers also give the regulators the ability to form a graduated and tailored approach to intervene in crisis situations. The availability of a full suite of crisis management powers would complemented by requirements on SIFMIs to have BCPs, and recovery and wind-down plans (as part of BAU requirements). These plans would reduce the likelihood of these powers needing to be used but also potentially increase their effectiveness. For example, a BCP (even if inadequate for the particular situation) may still be useful in informing a statutory manager.
114. The proposed crisis management framework (including statutory management) is mostly compliant with the Key Attributes.

Regulatory Requirements

115. The Reserve Bank considered what mechanism should be used for setting binding regulatory requirements for designated FMIs. These requirements would be a tailored tool being applied to individual designated FMIs, classes of designated FMIs or all designated FMIs. However, the joint regulators would seek to treat all designated FMIs alike unless there are good reasons not to. The types of requirements that the joint regulators would prescribe are likely to be those they consider relevant for the soundness and efficiency of a designated FMI, and would primarily be based on the relevant principles in the PFMIs customised for the New Zealand context. It further envisaged that requirements could be

applied to certain matters prescribed in legislation. These matters could include the following:

- The governance of the FMI and its operator(s).
 - The risk management in relation to the FMI, including management of:
 - general business;
 - operational risk;
 - credit risk;
 - liquidity risk;
 - custody risk;
 - legal risk; and
 - risks arising out of linkages with other FMIs.
 - Access to the services provided by the FMI and arrangements for parties to participate in those services.
 - Public disclosure of information relating to the FMI and its operator (or operators).
 - Business continuity, recovery, and resolution arrangements for the FMI.
 - The relationship between the FMI and its operator (or operators), and any provider of critical services to the FMI.
 - The default of one or more participants of the FMI.
 - Any other matter prescribed by regulators.
116. The requirements would likely be outcomes based. This acknowledges that the highly sophisticated and technical nature of FMIs means more prescriptive alternatives could unduly prevent innovation in an FMI as well as its flexibility to meet the desired outcomes in the least costly way possible.
117. Whether these requirements would be set through conditions, standards or some other form of legal instrument is a matter that would be considered further during the drafting of legislation. However, whatever legal instrument is chosen, the requirements would be set directly by joint regulators, through a process that would be subject to appropriate natural justice and constitutional protections, such as requirements to consult with affected parties on proposed requirements.

BCPs and recovery and wind down plans

118. Using the regulatory requirements power discussed above, joint regulators would require the operators of all designated FMIs to have these plans in place for those FMIs. The requirement would be likely to also set out high-level objectives the plans must achieve and matters they must address. In this context, the basic purpose of:
- a BCP would be to achieve rapid recovery and timely resumption of essential services or to facilitate the replacement of the designated FMI's operator(s); and
 - a recovery and orderly wind-down plans would be to respond to final threats to the continued provision of essential services.

119. The requirement to have these plans in place will help to make it more likely that the failure of a designated FMI could be dealt with without the need for public intervention. This approach also has the merit of leveraging off the existing rules and plans that will already be in place for many FMIs, and allowing for certain matters (such as loss allocation²⁴) to be agreed in advance between participants and operators. This will minimise additional compliance costs for FMIs of such plans.
120. The benefits of these requirements are that they firstly reduce the probability of more intrusive crisis management powers being required. Furthermore, adequate BCPs and the like would reduce the change of a crisis even occurring thereby alleviating some of the negative externalities associated with FMIs and promoting soundness. The existence of adequate BCPs, and recovery and wind down plans also increase ex ante predictability of what might happen during a crisis situation. This would possibly improve investor or participant confidence that their funds could be recovered. Requiring BCPs, and recovery and wind-down plans would also mean the joint regulators work with regulated entities to identify and remove barriers to orderly recovery or wind down.
121. We may also require a designated FMI's recovery and wind-down plans to set out how solvency will be resorted or the business will be wound down in an orderly manner if either existing loss-allocation mechanisms are insufficient in dealing with a participants' default (an extreme case) or there are losses to the FMI arising from other areas of its business. Generally we think the arrangements for restoring solvency will include raising additional capital from a parent or third party or cutting costs. Having such requirements further reduces the already limited scope for Crown exposure to a designated FMIs losses. Where solvency cannot be restored, orderly wind down would involve transferring the FMIs critical functions to an alternative provider.

Information gathering and investigative powers

122. There are four types of powers the Reserve Bank is proposing that relate to information gathering and investigation.
123. The first is an extension of the information gathering power currently provided for by Part 5B of the Act. That is, the Reserve Bank may require an operator or participant of a payment system to provide information relating to that system. We propose that this power be available to the joint regulators for all FMIs. While this would impose minor resourcing costs on FMI operators and participants this power would underpin the entire regime. Information on FMIs would enable the joint regulators to assess whether their objectives are being met and if not know what the problems are. The ability to collect information on all FMIs, not just those that are designated, would allow the joint regulators to carry out oversight of the broader FMI sector, including being able to determine when non-designated FMIs become systemically important.
124. Furthermore, such a power would give the joint regulators the unique position to oversee the complex interconnections and interdependencies in FMIs. Information gathering powers would enable the joint regulators to properly assess how risks might arise and be propagated. It would enhance oversight of the system as a whole.
125. An information gathering power also encourages FMI participants and operators to have information on hand, for example to have a central depository of third party supplier contract information; this will assist in any recovery or resolution process. Furthermore, by

²⁴ Loss-allocation refers to measures designed to allocate any losses suffered by an FMI to its owners and/or participants. It is primarily an issue for FMIs that may take on credit risk (for example, central counterparties).

requiring data in a timely way this power would generally be encouraging of good processes at FMIs.

126. The Reserve Bank proposes that the information gathering power described above would be accompanied by a power for the joint regulators to require information provided by an FMI participant or operator is audited. This is already in place for payment systems under Part 5B of the Act.
127. The Reserve Bank proposes that the joint regulators should also have the power to enter premises for supervisory or investigative purposes, subject to appropriate procedural safeguards. For example, if joint regulators were to enter into premises to investigate a potential offence, they would have to apply to a court for a warrant and have reasonable grounds to believe both the following.
 - It is reasonably necessary to identify whether joint regulators should exercise any of their powers under the proposed regime, or the FMI or its operator has failed to provide information that it has been required to provide, or there are reasonable grounds to believe that the FMI or its operator has provided incorrect or misleading information.
 - The premises will contain the relevant information.
128. We further anticipate the relevant parts of the Search and Surveillance Act 2012 would also be applied in respect of this power. The power would, however, allow the regulators to collect evidence in relation to an actual or potential offense under the regime, and to collect information to determine whether to exercise powers under the regime.
129. The fourth power is the joint regulators could require an operator of a designated FMI to provide an independent report on matters relating to the FMI. Given the more technical nature of certain FMIs, having the ability to seek information from an independent specialist would provide a higher level of flexibility for joint regulators. Using a third party to produce reports may also ensure the reports are more impartial and allows an alternative avenue for checking information beyond audits. The Reserve Bank further proposes that an operator of a designated FMI required to obtain a report should have that report produced by a person approved by the joint regulators.

Effects on existing FMIs and associated costs

130. Overall, the Reserve Bank expects the costs to FMIs of complying with the new regime will be negligible for most FMIs. This is firstly because four of the nine FMIs likely to be considered systemically important are already designated under the current regime. Additional compliance costs for FMIs that are already designated are expected to be minor. Secondly, additional costs to foreign FMIs are also expected to be minor. This is because the new regime proposed in this paper is relatively flexible and like many other jurisdictions is based on the PFMI. However, the Reserve Bank's proposals are less onerous than the regimes of many foreign jurisdictions. Taking these points together, we expect that for many foreign FMIs already complying with the regulation of their home regulator very little will be required on their part to comply with the proposed regime for New Zealand. Thirdly, as the Reserve Bank's proposals are based on the PFMI they represent best business practices and so we expect some FMIs will not need to make anymore than minor changes once designated.
131. As discussed the Reserve Bank consulted extensively with industry and other share holders on proposals very similar to what is presented in this paper. The Reserve Bank received quantitative cost estimates from only one stakeholder – Payments NZ. Their estimates are

at a high level and may be subject to change once more detail on the Reserve Bank's proposals becomes available at the exposure draft stage. The lack of feedback on cost estimates, especially from any foreign FMI participants or operators, may be evidence that the proposals will result in negligible costs for a large part of the industry. This is consistent with the high level of support the Reserve Bank proposals received in the consultations, especially from foreign FMIs who often noted that they were already adhering to similar regulations from their home regulators.

132. We discuss the effects of the proposals on existing FMIs and associated costs by breaking them up into four groups: These are: Reserve Bank owned and operated systems (ESAS and NZClear); domestic payment systems where the operators key role is administering the rules (Payments NZ systems—HVCS and SBI); domestic systems with a central operator (NZCDC); and foreign based FMIs (CLS system, LCH Clearnet, ASX Clear (Futures) and DTCC Singapore).

Reserve Bank operated systems

133. The Reserve Bank is in a unique position as both the owner and operator, and supervisor of ESAS and NZClear (these functions are kept apart from each other and have separate reporting lines to management). However, the majority of the proposals in this paper would still be relevant including most of the regulatory requirements. One notable exception would be any requirement to prepare BCPs, or recovery and wind-down plans. It is unlikely that making ESAS and NZClear compliant with the new regime will incur significant costs.

Payments NZ systems

134. SBI and HVCS are likely to be considered systemically important and required to be designated under the new regime. Payments NZ plays a key role in SBI and HVCS by administering the rules of the two systems. The participants carry out the functions of netting and settling themselves according to the rules. In theory, settlement may be able to continue in the short-term with out Payments NZ. However, if a participant failed to settle during such a period action from Payments NZ would be required. Therefore, the majority of the proposals presented in this paper including an ability to place Payments NZ in statutory management would be relevant. Statutory management may also be useful in preventing the sale of the rules to an entity deemed unfit by the joint regulators.

135. (Withheld under section 9(2)(b)(ii) of the Official Information Act 1982)

[Redacted content]

²⁵ These participants are: ANZ Bank New Zealand Limited, ASB Bank limited, Bank of New Zealand Limited, Citibank N. A., Industrial and Commercial Bank of (New Zealand) Limited, Kiwibank Limited, The Hong Kong and Shanghai Banking Corporation limited (HSBC), TSB Bank Limited and Westpac New Zealand Limited .

136. (Withheld under section 9(2)(b)(ii) of the Official Information Act 1982)

NZCDC

- 137. The NZCDC settlement system is owned and operated by the New Zealand Clearing and Depository Corporation. As a separate legal entity located in New Zealand, all the proposals outlined in the paper could be applied to the system. Additionally, NZDC may be subject to regulatory requirements specifically designed for CCPs. These could include: holding sufficient financial resources to cover the largest credit exposures to participant(s) (PFMI 4) and liquid resources to cover the default of participants(s) that generates the largest liquidity obligation (PMI 7).
- 138. NZDC is a designated FMI under the current regime and therefore less likely to face any significant new costs under the proposed regime.

Foreign-based FMIs

- 139. CLS system, LCH Clearnet, and ASX Clear (Futures) are all likely to be considered SIFMIs and are all foreign-based. These FMIs and their operators have no New Zealand presence. Where an FMI is based in a jurisdiction assessed to be equivalent to New Zealand and where the joint regulators participate in a co-operative oversight arrangement, the applicable regulatory requirements could be limited to:
 - comply with the requirements of the home regulators; and
 - to notify New Zealand regulators of material changes to the rules.
- 140. The joint regulators would still have the ability to require BCPs and recovery/wind down plans and there would be a possible power to direct New Zealand participants to support the resolution of the FMI by the home regulator. The joint regulators would also have the power to share information with the home country regulator. If a foreign-based FMI is not complying with the proposed regime the joint regulators, via supervisory colleges, could rely on the home regulator to correct the situation.
- 141. As previously discussed, the regime proposed in this paper is based on the PFMI's and is therefore relatively flexible. It is also generally less onerous than other regimes. Taking these points together we expect that many foreign FMIs already complying with the regulation of their home regulator. Very little will be required on their part to comply with the proposed regime for New Zealand. Finally, as the Reserve Bank's proposals are based on the PFMI's, they represent best business practices and so we expect some FMIs will not need to make anymore than minor changes once designated.

Costs for the joint regulators

142. (Withheld under section (9)(2)(ba)(i) of the Official Information Act 1982)

143. (Withheld under section (9)(2)(ba)(i) of the Official Information Act 1982)
144. MBIE and the FMA are currently consulting on the FMA's funding. The review of the FMA's funding is expected to be completed in October and adjustments to the FMA's appropriation and levies to come into effect in 2017.
145. The implementation of the new oversight regime will contribute to an increase in forecast deficits, and may impact on the FMA's funding request. There are three funding proposals which will shortly be consulted on, the enhanced case (the FMA's preferred option), the base case and the lowest case. The FMA has incorporated the estimated financial implications of the proposals in this paper in the enhanced funding case but not the base case or lowest case. If its request for the enhanced case is not successful, and the FMA does not receive additional funding for these proposals (outside its funding review) the FMA will need to review its other priorities and demands on its resources at the time. This may mean it cannot dedicate the optimum resource level to implementation of the recognition regime which may result in taking longer to consider designations and less active supervision of designated entities. Its ability to react in a crisis may also be affected.

Conclusion and recommendations

146. The Reserve Bank has identified several market failures affecting FMIs that may exist in New Zealand. These market failures may mean that systemic risk in New Zealand is higher than society would otherwise prefer. These failures may also mean access to FMIs is being unnecessarily restricted and that innovation opportunities are being forgone. Additionally, New Zealand's existing regulatory framework for FMIs is out of line with other jurisdictions which by itself may be costly to New Zealand. International persons or firms may be prevented (or face additional barriers) to participating in New Zealand FMIs due to a lack of regulatory equivalence. Taking these points together, the Reserve Bank and FMA are currently unable to meet their objectives in regards to FMIs.
147. Intervention into a market can be justified when the specific proposals in mind will mitigate present market failures and also produce higher net benefits than any feasible alternative could (including the status quo itself). Although the Reserve Bank is unable to fully describe the costs and benefits of the preferred options in this paper quantitatively, we believe the proposals are justified. In short, the costs for FMIs (and in particular SIFMIs) to comply with the proposals are relatively low both overall and when compared to overseas regulators.
148. The proposals are also based on the PFMIs and are therefore fairly flexible and represent current best business practices. This means they are unlikely to negatively impact on innovation.
149. We also believe the potential for regulatory avoidance and market distortions, such as introducing barriers-to-entry or moral hazard, is low. In cases where such distortions may arise, the Reserve Bank has put counteracting measures into its proposals. These include regulatory requirements on loss allocation and voluntary opt-in for designation for payments and settlement systems. Finally, where possible the Reserve Bank has designed its proposals in ways that eliminate unnecessary compliance costs and ensures the

interventions will have net benefits. An example of this is only extending the majority of the proposed powers to where they would most likely have net benefits—SIFMIs.

150. The benefits of the proposals are reductions in the probability of SIFMI failures and disruptions and possible reductions in the size and impact of any crisis that may still occur. Given the size and interconnectedness of SIFMIs with the rest of the financial system the costs of an SIFMI failure could otherwise be immense. The proposals would also have the benefits of facilitating more access to SIFMIs, more transparency, and promote innovation. Reductions in systemic risk and improvements in efficiency support market confidence which can have positive spill overs throughout the financial system. Restricting the revised regime to SIFMIs only is also unlikely to impact on market behaviour such as participant preference as most of these SIFMIs are quasi-monopolies with no real substitutes.
151. The analysis of the options outlined above has resulted in the conclusion that an enhanced oversight framework, should be established to ensure that there is a robust and effective regulatory framework for FMI oversight in New Zealand. The revised Designation Regime would be designed to include all SIFMIs and other FMIs that voluntarily opt in. FMIs in the Designation Regime would be subject to BAU and crisis management powers and all FMIs would be subject to information gathering the powers. The extent to which specific BAU and crisis management powers would be applied to a Designated FMI would depend on the specific circumstances of the FMI and its level of systemic importance. Often before a specific power would be applied to a designated FMI further consultation with stakeholders and regulatory analysis would be undertaken.
152. To implement the enhanced regulatory regime for FMIs several legislative changes would be required.
 - The joint regulators would have be able to require information relating to an FMI be provided by a participant or and operator of that FMI. The joint regulators could also require be able to require such information to be audited.
 - The Reserve Bank and the FMA would be able to jointly recommend that an FMI be designated whether it operates in New Zealand or has direct or indirect participants in New Zealand and is considered to be of systemic importance. The process of designation would be able to be initiated by the regulator(s) or the operator(s) of the FMI. Other non-systemically important payment and settlement systems would be able to opt-in to the Designation Regime also for the purposes of obtaining legal protections.
 - That the joint regulators would have the powers to set minimum regulatory requirements for designated FMIs to enhance their soundness and efficiency. The requirements could apply to all FMIs, classes of FMIs or individual FMIs.
 - That the joint regulators would have the powers to disallow or require changes to rules of the FMI deemed to be within the scope of oversight.
 - That the joint regulators would have reserved powers for requesting reports prepared by a person approved by the joint regulators to investigate any actual or potential breaches of requirements.
 - That the joint regulators would have enforcement powers beyond the current ability to issue public warnings. This would be supplemented by the ability to enter into enforceable undertakings with parties who have failed to comply, or may have failed to comply, with their obligations under the regime.

- That the joint regulators would have crisis management powers for all designated FMIs including the power to direct, remove and appoint directors, and recommend the appoint of a statutory manager.
153. The Reserve Bank is of the view that these proposals represent best way to achieve the joint regulators' objectives and have the higher net benefits than feasible alternatives, including the status quo. Besides achieving the agencies' objectives this proposal will likely reduce regulatory uncertainty and better place New Zealand to be seen as having "regulatory equivalence" with foreign regulators of FMIs. Both of these produce benefits to industry and New Zealand as a whole. However, at the same time, the Reserve Bank is of the view that the proposals minimise compliance costs where possible and do not unduly infringe on innovation and efficiency.
154. We also re-iterate that that there is minimal scope for the Crown to suffer losses in resolving a failed designated FMI. Requirements to have loss-allocation mechanisms in the rules will limit the risk of participant failure for a designated FMI. The recovery and wind-down plans will set out how viability of the designated FMI can be restored, or else orderly wind-down achieved, in the extreme case that the loss-allocation mechanisms are insufficient or there are losses arising from an FMI's other business. We also note that because designated FMIs are likely to be monopolistic in nature any losses incurred by the government could be recovered via increased fees to participants if the FMI is restored to a going concern or sale of the FMI. Finally, many FMIs have relatively small balance sheets and this further limits any potential Crown exposure. To address any small residual fiscal risk that may remain it is possible that joint regulators will also have to take into account any fiscal risk to the Crown in exercising their crisis management powers.
155. We further intend to include minimising any financial risk to the Crown as a principal to be taken into account by the joint regulators when carrying out functions and exercising powers under the proposed framework.

Implementation

156. The design of the transitional arrangements will be considered further when the legislation is being drafted. However, at this stage we expect that they will operate as follows.
157. Once the new legislation receives the Royal ascent the different parts of the new legislation will come into force in stages. Part 5B of the Act would be immediately revoked and the information gathering and investigative powers of the new legislation would be brought into force.
158. The new legislation would then allow for a transition period where Part 5C of the Act, and all current designation orders made under Part 5C, would remain in force.
159. During the transition period the joint regulators would use the new information gathering and investigative powers to decide which FMIs should be designated under the new legislation, and to decide what regulatory requirements prescribed under new legislation should be apply to each of these FMIs at the point they are designated under the new legislation (this process will include consultation with affected parties). The transitional period would then end on a date set by order in council. On that date simultaneously:
- Part 5C of the Act would be revoked alongside all Orders in Council designating FMIs made under it;

- the Orders in Council designating FMIs made under the new legislation would come into force;
 - settlement, netting and collateral transfer protections for relevant FMIs designated by Orders in Council made under the new legislation would come into force; and
 - new regulatory requirements applying to FMIs would come into force (note: that such requirements could be made so that FMI operators have an additional time period before they are expected to be fully compliant).
160. The Reserve Bank does not envisage any major risks regarding stakeholders being aware of what is expected of them under the new regime. The joint regulators have extensive interactions with FMIs, FMI operators, FMI participants, and other interested parties already and this will continue under the new regime. Furthermore, joint regulators will further consult with industry at the exposure draft stage and when work is being done on what FMIs should be initially designated. Finally, the proposed information gathering power will help the joint regulators ensure stakeholders know what is expected of them (and if not remedying actions can be taken).
161. Likewise, the Reserve Bank does not envisage any major risks around non-compliance with the proposed regime. The responses to the consultation undertaken by the Reserve Bank appear to indicate that most FMIs and related entities are prepared to cooperate with the proposals. The proposals include a set of penalties and offenses and the Reserve Bank believes these to be sufficiently graduated to ensure individuals and firms devote economically efficient levels of resources towards compliance.
162. (Withheld under section (9)(2)(ba)(i) of the Official Information Act 1982)
163. Given the Reserve Bank and FMA's existing expertise in the area, and the Reserve Bank's experience in operating prudential regimes for banks, insurance companies and non-bank deposit takers we do not envisage any issues of regulator capability arising (assuming both agencies can fund the additional personnel being requested).

Monitoring, evaluation and review

164. The new regime would be monitored by seeking informal feedback from industry in our regular engagements. Both the Reserve Bank and FMA regularly review the legislative regimes they operate. Reserve Bank examples of such reviews include the 2013 review of the Non-bank Deposit Takers legislation (introduced originally as an amendment to the Act) and the review currently being undertaken of the Insurance (Prudential Supervision) Act 2010 (IPSA). We anticipate the regime proposed here will be reviewed within five years of it fully coming into force.
165. Like the IPSA review, a review of the proposed FMI regime would be run in an open and transparent manner and will actively seek input from industry, stakeholders and interested government departments and agencies. This input will be solicited when the scope of the review is determined, when options for any changes are being considered, and when before any proposed amendments are finalised. The review would set out to identify whether the regime is meeting its objectives as envisaged and what changes (if any) may be required to ensure it remains fit for purpose. To aid the review the Reserve Bank is likely to keep an internal register of any problems with the new regime that are identified after the

legislation first takes effect. Because it is envisaged that supervisors from the Reserve Bank and FMA will have extensive interaction with industry under the regime (as they do so currently) it is highly likely that most if not all potential problems are picked up.

Glossary

- “Central counterparties” (CCPs) are entities that interpose between counterparties to contracts traded in one or more financial markets, becoming the buyer to every seller and the seller to every buyer therefore minimising the credit risk to both parties of the transaction.
- “Central securities depositories” (CSDs) are entities that provide securities accounts, central safekeeping services and asset services, which may include the administration of corporate actions and redemptions, and plays an important role in helping to ensure the integrity of securities issues (that is, ensure securities are not accidentally or fraudulently created or destroyed or their details changed).
- “Critical service provider (CSP)” means a provider of services to the FMI that are necessary to its ability to provide essential services.
- “Designated FMI” means an FMI that is placed within the Designation Regime.
- “FMI” means a multilateral system among participating institutions, including the operator of the system, used for the purposes of clearing, settling, or recording payments, securities, derivatives or other financial transactions. An FMI includes a payment system, securities settlement system, central securities depository, central counterparty, and trade repository. A multilateral system could be organised as a set of arrangements between participating institutions (as in the case of some payment systems) or as a legal entity (or group of related entities) that participants interact with (as in the case of central counterparties and trade repositories).
- “FMI’s rules” refer to “bylaws, agreements, procedures, contracts or other documents that provide the basis for how clearing, settling, or recording payments, securities, derivatives or other financial transactions are effected, and include the FMI’s system design, operations, rights and obligations of participants, risks of participation and how risks are addressed and mitigated”.
- “Essential services” in relation to an FMI means any services provided by the FMI which if they ceased being provided, would have adverse impacts on the financial system as a whole. Essential services generally relate to the clearing, processing, settlement and reporting of payments, securities and derivatives. They are often described as the plumbing, or wiring of the financial system. These services are essential because if they did not take place, or took place inefficiently, transactions between buyers and sellers may not take place. At worst transactions could freeze or stall before being completed, or become unable to be completed. These failures may have major downstream effect on other financial system participants (for example leading to a chain of defaulted transactions) and become a cause of transaction defaults, unnecessary losses and contagion across the financial system and economy.
- “Joint regulators” means the Reserve Bank and the FMA (except in relation to pure payment systems where it means the Reserve Bank alone).
- “Joint Ministers” means the Ministers of Finance and Commerce (except in relation to pure payment systems where it means the Minister of Finance alone).
- “Netting” refers to the offsetting of obligations between or among participants in the netting arrangement, thereby reducing the number and value of payments or deliveries needed to settle a set of transactions.

- “Operator” means any person who is legally responsible for carrying out or managing the services provided by the FMI, or maintaining and administering the rules of the FMI. An FMI may have more than one operator. Powers that may be exercised in respect of operators may be exercised against all or some of the operators when there are more than one. References to an “operator” in this consultation document should be taken to include all of the operators of an FMI if there are more than one;
- “Payment systems” are sets of instruments, procedures, and rules for the transfer of funds among participants; the system includes the participants and the entity operating the arrangement.
- “Settlement systems” are systems or arrangements for effecting settlements or processing settlement instructions, they include payment systems.
- “Systemically important FMI (SIFMI)” means an FMI whose disruption within could have the potential to trigger or transmit further disruptions among participants, or the New Zealand financial system more widely. There are four main factors the Reserve Bank and FMA would consider in deciding whether or not an FMI meets the definition of systemically important.
 1. The size and concentration of financial risks within the FMI.
 2. The role of the FMI and nature of transactions processed.
 3. The availability of substitutes and the degree of substitutability.
 4. The degree of independencies with other FMIs or markets.
- “System-wide important FMI” means an FMI whose disruption or failure could have serious consequences for businesses in New Zealand, and may affect many users. Inefficient operation of a system-wide important FMI may distort financial activity. There are four main factors the Reserve Bank and FMA would consider in deciding whether or not an FMI meets the definition of system-wide importance.
 1. The size and concentration of financial risks within the FMI.
 2. The degree of market penetration of the FMI.
 3. The extent of possible disruption or distortion to the real economy.
 4. The availability of appropriate substitutes.
- “Trade Repositories” (TRs) are entities that maintain centralised electronic records (database) of transaction data.