



16 June 2020

Submissions  
Electricity Authority

By email: [Hme.feedback@ea.govt.nz](mailto:Hme.feedback@ea.govt.nz)

**Hedge Market Enhancements:  
Ensuring market making arrangements are fit-for-purpose over time**

Meridian appreciates the opportunity to comment on the Electricity Authority's consultation paper *Hedge Market Enhancements: Ensuring market making arrangements are fit-for-purpose over time*.

Meridian has also engaged in a series of industry forum discussions aimed at developing a consolidated view on an incentive-based market making scheme that we consider would be consistent with the Authority's statutory objective. This Meridian submission should be read alongside the industry forum letter sent to the Authority on 27 May 2020.

Meridian considers current market making arrangements to be performing well. However, if the Authority is determined to reform or replace then Meridian considers it critical that the beneficiaries pay principle be at the heart of any market making scheme. If it is not, the scheme will suffer from free-rider issues whereby beneficiaries of the scheme will forever demand increased market making services because they are not exposed to the additional costs of providing those service improvements.

As per the consolidated view from the industry forum, Meridian supports a commercial approach that includes an incentive-based market making scheme with a fall-back mandatory scheme that will only apply if the main scheme fails. This approach is different to the mandatory-commercial approach described at a high level in the consultation paper. The recommended approach is summarised in the text box below and a full description is included in the industry forum letter sent to the Authority.

## Industry forum preferred approach

Meridian agrees with the approach proposed by the industry forum. That approach has the following attributes:

- An optimal balance of market making service specification relative to the costs, to be identified through a competitive tender process revealing the prices of alternatives.
- A two-stage tender process run by the Authority:
  - Stage one would involve broad consultation and indicative (non-binding) expressions of interest from prospective market makers, including canvassing pricing sensitivity and participation rates for a range of service level scenarios.
  - Stage two would narrow to a few specified options through a formal request for proposals from potential market makers, who would identify the incentive required to make each specification.
- The Authority would assess the offers tendered and come to a preferred service level and incentive pool combination after having regard to feedback from consultation.
- Market makers would be rewarded for providing the service specification during each market making session.
- Failure to meet the terms of a market making agreement should entail both forfeiture of the market making incentive and penalties that increase over time, up to the price to procure a new market maker in the event one is persistently non-compliant.
- To keep costs down, provisions would be made for both:
  - permitted circumstances such as for force majeure events or other matters outside of a market makers reasonable control; and
  - some flexibility to enable costs of market making to be managed in times of market stress.
- Beneficiaries of the futures market should pay for market making services. Beneficiaries of the futures market are a broad group and the Authority will need to identify who the beneficiaries are and to what extent they should contribute to costs through a combination of a broad-based levy and a mechanism based on ASX fees (to capture non-participant beneficiaries).
- The key features of a “fall-back” mandatory scheme should also be made transparent prior to the tender process for an incentive scheme. The fall-back mandatory scheme would also need to be funded by beneficiaries and the Authority would need to publish the identity and number of market makers, who would pay, and how much under a fall-back mandatory approach. The fall-back mandatory scheme would only apply in the event there were not enough tenders to make an incentivised scheme viable. However, pre-emptive publication of the fall-back model will encourage market makers to participate in the tender process as well as address free rider issues and promote broad and enduring support for an incentivised approach that appropriately balances the costs and benefits of different service offerings.

The remainder of this submission is set out below under the following headings:

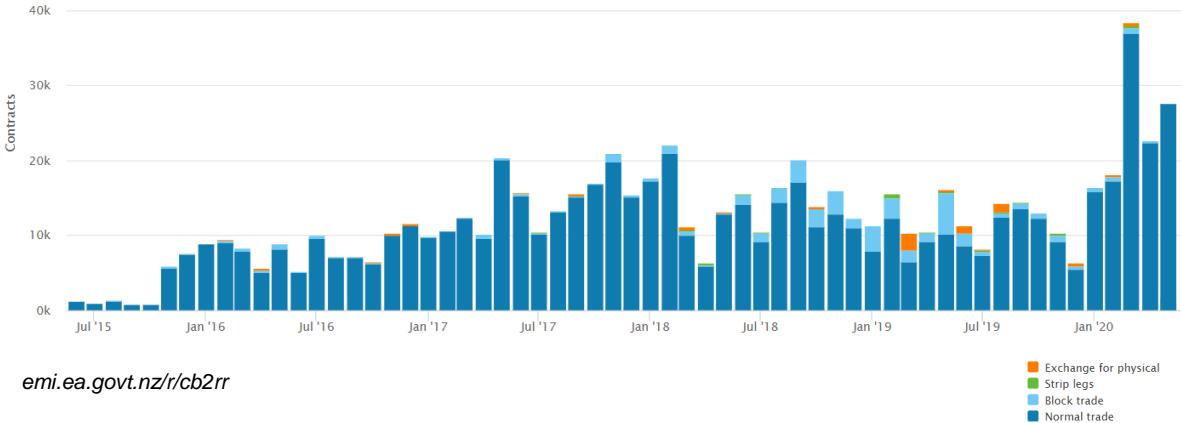
- Performance of the existing voluntary scheme
- Enduring market making requires beneficiaries to bear the costs
- The high-level approaches described in the consultation paper
- The trade-offs used to assess different approaches
- The Authority’s assessment of each approach
- Assessment of the industry forum approach.

The Authority’s consultation questions are addressed in Appendix A of this submission.

**Performance of the existing voluntary scheme**

The current voluntary arrangements are functioning well. The current arrangements have been in place since January 2020 and mean that market makers provide two-way quotes for each market-made product with a maximum spread of 3 percent or NZ\$2.00. For quarterly base load products, the minimum quantity is 30 contracts in all quarters, per side. For monthly base load products, the minimum quantity is 30 contracts per side in the front six months. Since the changes to market making arrangements in January 2020, there has been no ability for market makers to widen spreads at times of “portfolio stress” (which led to wider spreads in Spring 2018 during the Pohokura outage). Instead market makers can opt to not meet the specified criteria in up to five market making sessions each month. These arrangements have provided increased stability in the provision of market making services and been proven by riding through the lockdown period of the Covid-19 crisis with spreads maintained and record volumes traded as shown in Figure 1.

**Figure 1: Traded volumes for all products and maturities by month (June 2015 - June 2020)**



In addition, the Authority's findings in the November 2019 discussion paper indicate that there are sufficient volumes of futures contracts available to trade. "Even during market stress events, such as in 2018 and 2019, the Authority has not seen direct evidence there was insufficient volume of contracts available in the futures market."<sup>1</sup> The [ASX] data ... is difficult to reconcile with the anecdotal concerns expressed by some participants relating to insufficient volume of contracts available for trade."<sup>2</sup>

Aside from spreads and volumes, which do not appear to be an issue, any remaining complaints about market making are usually in substance about the price of futures contracts. In our experience futures prices accurately reflect the market's view of underlying spot market prices in future. This is consistent with the Authority's finding in the November 2019 discussion paper that futures prices are high when expected spot prices are high.

Meridian's view is therefore that the current market making specifications are a good starting point under any approach. The key to delivering deliver market making services that are fit-for-purpose and sustainable over time is less about these specifications and more about developing an approach that:

- adequately incentivises market making to continue in the long term; and
- fairly and efficiently funds the delivery of market making services from parties that benefit.

### **Enduring market making requires beneficiaries to bear the costs**

Currently the four existing market makers bear the full costs of market making despite there being a far wider group that benefits from the service. In the financial year to 30 June 2019 the private costs to Meridian of voluntary market-making under the current scheme were over \$6.7 million. This was unusual. Normally market-making costs Meridian \$1-2 million per year.

Any market-making scheme that imposes costs like this without recompense distorts the market and effectively provides other ASX participants with access to the Meridian balance sheet (and the balance sheets of other market makers) to support their own ASX trading – whether in the form of electricity derivative speculation by some ASX participants (e.g. investment banks and financial intermediaries) or straightforward hedging of spot market exposure by independent retailers and other electricity market participants.

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<sup>1</sup> Electricity Authority *Hedge Market Enhancements Discussion Paper* November 2019, para 4.15.

<sup>2</sup> *Ibid*, para 4.21.

Not only will market makers continue to consider it unfair that they alone fund market making, the fact that beneficiaries of the ASX market do not contribute to the costs of market making means that free-rider issues will continue. The beneficiaries pay principle must be at the heart of any market making scheme. If it is not, the scheme will suffer from free-rider issues whereby beneficiaries of the scheme will forever demand increased market making services because they are not exposed to the additional costs of providing those service improvements. Meridian considers it likely that, in the absence of a beneficiaries pay approach, the lobbying and allegations of ASX “market failure” will continue regardless of the level of market making service provided.

Meridian has consistently supported steps to make market-making activity more sustainable and is not opposed to increasing the level of market making service, as long as the costs of the increased service are collectively borne by the beneficiaries of market making and the benefits of increased market making outweigh the costs.

### **The high-level approaches described in the consultation paper**

The consultation paper contains a reasonable description of the range of approaches that could be adopted. In this section Meridian suggests some variations to the descriptions provided.

Most importantly, we consider there to be many ways to design a mandatory-commercial hybrid approach, including the approach developed by the industry forum and noted in this submission.

#### *Voluntary approach*

The description of this approach seems largely reasonable. Meridian agrees that under this approach the Authority would not be able to influence the number or composition of market makers and that this approach precludes beneficiaries (other than the existing market makers) bearing the cost of market making services. This is a form of market distortion that itself will lead to costs, i.e. in terms of competition between market makers and non-market makers.

Meridian also agrees that the costs of market making are internalised by the market makers under this approach, and not visible to the Authority, which may lead to over or under

provision of market making services. Because of this potential for over procurement of market making services, we disagree with the statement that “this approach is likely to be the least cost approach to market making.”<sup>3</sup> Meridian has seen no evidence to support this conclusion, not least because the costs of alternative approaches are unknown.

#### *Voluntary approach with a mandatory backstop*

Meridian is comfortable with the description of this approach.

#### *Commercial approach*

Meridian is comfortable with the description of this approach. We agree that a “commercial approach or commercial-hybrid approach is likely the most flexible of the approaches and best suited to evolve with the changing needs of the market.”<sup>4</sup>

#### *Mandatory-commercial approach*

Meridian disagrees with the description of the mandatory-commercial approach in the consultation paper. There are many variations on this approach and the consultation paper describes only one – essentially a mandatory approach where the mandated providers must meet their own costs but with a “top-up” tender to select additional market makers on a commercial basis, with those additional market makers rewarded by an incentive payment. Both commercial and mandated market makers would be required to provide an equivalent level of service but only the commercial market makers would benefit from incentive payments (necessarily in excess of their costs as a commercial approach) while mandated providers would be fully exposed to their own market making costs. The difference in approach between mandatory and commercial market makers could not be justified on any basis and Meridian believes this approach would exacerbate the inequity and market distortions of the current voluntary approach, where a subset of beneficiaries carry all the costs of market making. This approach would therefore not be sustainable as the mandatory market makers will advocate strongly for a more level playing field and distribution of costs.

The Authority seems to indicate that a positive feature of the approach as described is a lower socialised cost than a purely commercial scheme. However, this ignores the totality of costs, i.e. it assumes costs are only those recovered via a levy and ignores the costs

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<sup>3</sup> Electricity Authority *Hedge Market Enhancements Consultation Paper* April 2020, Para 4.6.

<sup>4</sup> *Ibid*, Para 4.10.

borne by mandatory market makers and also the costs created by market distortions as a result of different treatment of participants and imposition of costs without justification.

Meridian does however agree that, as described, the mandatory-commercial approach would only be as flexible as a mandatory approach making adaption to market changes over time slow and challenging.

Better hybrids of commercial and mandatory approaches are conceivable, for example the approach could be as is described in the consultation paper but with one change to provide that incentive payments be made to both mandated and commercial providers of market making services. In this variation on the approach, the efficient level of incentive payments would be discovered through the commercial portion of the scheme but applied to all market makers. The consultation paper notes elsewhere that mandated approaches could also include an incentive payment<sup>5</sup>, and Meridian considers a beneficiaries-pay approach an essential feature if market making is to be sustainable.

Alternatively, Meridian's preferred variation on a hybrid commercial and mandatory approach is that developed by the market making industry forum and described in the text box at the start of this submission and in the letter to the Authority dated 27 May 2020, i.e. a commercial approach but with a mandatory backup to incentivise a minimum level of participation in a commercial tender process. Under this approach both the commercial approach and mandatory backup would be funded through a beneficiaries-pay mechanism such as a levy and allocation of ASX fees.

#### *Mandatory approach with transferable providers*

Meridian is comfortable with the description provided. However, we do not consider this an approach in its own right but a design feature that should be a part of all approaches. There is no downside to enabling contracting out of market making services provided ultimate responsibility for any default rests with the market maker itself.

#### *Mandatory approach*

Meridian is comfortable with the description of this approach. However, as noted elsewhere, there is no conceivable reason to not allow the contracting out of services to another provider

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<sup>5</sup> Ibid, Para 4.15.

nor is there any reason to preclude the possibility of a beneficiaries pay approach and incentive payment to mandatory market makers. Discovery of an efficient level of incentive payment would likely be more challenging under a purely mandatory approach but the Authority could use its information gathering powers to understand the marginal or average costs of market making for those mandated to provide the service under this approach.

### **The trade-offs used to assess each approach**

Meridian agrees with the five key trade-offs used by the Authority to distinguish the different potential approaches. These trade-offs capture at a high-level the important considerations.

- *The ability to increase the number of market makers* – Meridian agrees that increasing the number of market makers may reduce the cost for each individual market maker. Performance would also likely be stronger during periods of volatility and increased market making costs. Finally, with more market makers there will be more diversity of opinion about future prices and therefore greater confidence in the resulting forward price curve.
- *The ability to increase the diversity of market makers* – Meridian agrees that a wider pool of market makers will introduce more information to the forward price curve, as well as potentially introducing more efficient providers of market making services, contributing to greater reliability and greater confidence in the forward price curve.
- *The ability to involve markets in the design of services* – Meridian agrees that involving markets (i.e. a competitive tender process) in the design of market making services would enable identification of the most efficient market makers and the optimal balance of market making service specification relative to the costs. The Authority will need to identify the point at which the marginal benefits of additional market making services (any parameter) are not justified by the additional costs. This will be much easier if markets are involved in the design of services.
- *The ability to allocate costs* – Meridian agrees that the allocation of the costs of market making to its beneficiaries is important to determine the efficient level of market making. In fact, Meridian considers a beneficiaries-pay approach to be the most important aspect of any market making scheme, regardless of which approach is followed. We agree with the Authority's text box on "Who benefits from market making?" and consider there to be many beneficiaries of market making including physical buyers and sellers on the spot market and firms that trade ASX New



Zealand electricity contracts (this being the only way to allocate costs to non-physical beneficiaries that speculate on the ASX future market). The Authority is best placed to identify beneficiaries and will need to consider the fact that some physical participants benefit less from the ASX future market because they have very long-term supply or hedge agreements that extend beyond the forward price curve of the ASX and are renewed infrequently.

- *The consequence for non-performance* – Meridian agrees this is an important trade-off but that the language used in the current description is too narrow. This trade-off seems to be about the ability to reliably and sustainably deliver market making services. There are many ways that the reliability and sustainability of market making might be assured under each approach including financial incentives and/or penalties, regulatory penalties, awards of compensation, compliance orders to compel activities, and reputational incentives or consequences.

The Authority may like to consider a sixth trade-off, namely the ability of the approach to flexibly adapt over time to changing market conditions. This is noted in places as a strength of non-mandatory approaches but is not considered consistently in the consultation paper and in the assessment tables.

It is understandable that the Authority wants to use these trade-offs to narrow the scope of options and reduce the work required on the detailed design of options. However, we encourage the Authority to keep the door open to more than one approach rather than narrow the field of enquiry too early. Ultimately the Authority is required by section 39 of the Electricity Industry Act to prepare an evaluation of the costs and benefits of a proposed Code amendment as well as an evaluation of alternative means of achieving the objectives of the proposed amendment.

### **The Authority's assessment of each approach**

The Authority's assessment of approaches against the key trade-offs (as summarised in Table 1) is necessarily high-level using a system of ticks, crosses, and dashes. Meridian disagrees with the assessment of some options and has identified inconsistencies in the assessment. These points of difference are noted below. However, broadly speaking, Meridian agrees with the assessment that some form of commercial and mandatory hybrid approach is likely to deliver the best outcome.

The voluntary approach has been assessed overly severely in the consultation paper. For example:

- The ability to contract out market making services is inherent in any voluntary approach. Therefore, logically there should be no difference between the assessment of the two voluntary approaches (with and without backstop) and the mandatory approach with transferrable providers in terms of the ability to increase the diversity of market makers under each approach. However, the voluntary approaches have been scored “very weak”, whereas the mandatory approach with transferability has been assessed as “strong” on the same measure. These differences are not justified.
- The voluntary approach is assessed to be “very weak” in terms of consequences for non-compliance, in part because of “very weak regulatory consequences”. Meridian does not consider this to be accurate as the threat of regulation (by central government or the Authority) to impose mandatory market making or some other arrangement is ever present. It is for this reason that the current market makers undertake market making at each company’s individual expense. To date the threat has proven effective and the voluntary arrangements have been in place in one form or another for almost a decade, weathering a range of market conditions. The consultation paper acknowledges that “the status quo voluntary approach has always been backed by possible regulatory intervention”.<sup>6</sup>

The commercial approach has been undervalued in the consultation paper. For example:

- In terms of the ability to adjust the number of market makers, it is unclear why a commercial approach has been assessed as neutral when the competitive tender process to identify the most efficient providers would necessarily be scoped to a certain number of market makers, i.e. the Authority could choose to request tenders for a scheme with five market makers and a scheme with six market makers (or any other number) and those firms that tender to provide the service will factor in, for each option, the change in the level of risk and cost associated with being one of a specifically sized group of market makers. If the Authority wanted a certain number of market makers it could request only tenders scoped accordingly. The commercial

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<sup>6</sup> Ibid, Para 4.5.

approach should therefore be assessed in a similar way to the mandatory options where more market makers can be compelled.

- In terms of the consequences for non-performance the commercial approach is assessed as neutral, despite acknowledgment of strong financial consequences for non-performance. Meridian contends that a commercial approach or a commercial-mandatory hybrid will arguably have stronger consequences for non-compliance than a mandatory approach. The financial penalties for non-compliance under a commercial approach are potentially uncapped (unlike penalties under section 54 of the Electricity Industry Act 2010 for breaches of the Code which are capped at \$200,000). The industry forum on market making has recommended escalating financial penalties for non-compliance, up to the cost of contracting a new market maker in cases of persistent non-compliance. The financial penalties could be in the millions of dollars and bonds, letters of credit, or other guarantees used to ensure recovery of those financial penalties.

Conversely, the mandatory approach has also been assessed relatively generously in terms of the “very strong” consequences for non-performance.

It is also not clear why the mandatory approach with transferrable providers is only considered to have “strong” consequences for non-performance, despite all the same regulatory consequences applying for non-performance as in the purely mandatory approach.

While we do not agree with how the mandatory-commercial hybrid approach has been described in the consultation paper, Meridian agrees that a combination of commercial and mandatory approaches is likely to most benefit consumers in the long term. The mandatory-commercial approach, as described by the Authority would be assessed more highly if it were adjusted as suggested above by providing incentive payments to all market makers rather than excluding mandatory market makers. Having the Authority collect and allocate levy payments to all market makers would make the mandatory-commercial approach “very strong” in terms of the ability to allocate the costs of market making (meaning against this criterion it would be assessed similar to the commercial approach).

## **Assessment of the industry forum approach**

Applying the same framework of trade-offs as the Authority, Meridian has assessed the commercial and mandatory hybrid approach developed by the industry forum on market making.

The industry forum approach is very strong on the ability to increase the number of market makers because, the Authority will be able to request tenders for a specific number of market makers. The mandatory fall-back will also strongly incentivise the mandated firms to participate in the tender process and the Authority could choose to increase the number of mandated market makers in the fall-back option. This approach also scores very strongly on the ability to increase the diversity of market makers as it creates the possibility of more market makers, and a wider range of types of market makers through introducing a price signal.

The industry forum approach scores very strongly on the ability to involve markets in the design of services because the Authority can design a tender process that elicits useful information from the market. The use of price in choosing market makers contributes strongly to efficiency and reliability by providing a clear link between cost and service levels. The approach also scores very strongly on the ability to allocate costs because of the mechanisms through which beneficiaries would contribute to the costs of market making services. Allocating costs to beneficiaries via a levy and part of ASX fees is likely to improve incentives for consumers of the service to demand an efficient level of service.

Under the industry forum approach, consequences for non-performance are determined by the relevant contract the Authority agrees with providers. This financial consequence could be set very high (higher than penalties available under the Code). The industry forum approach can also fall back to the pre-prepared mandatory design and associated regulatory consequences in the event of outcomes unacceptable to the Authority.

Figure 2 below sets out the assessment of the industry forum approach against each trade-off using the same format used by the Authority in the consultation paper.

**Figure 2: Assessment of the industry forum approach against the key trade-offs**

		Key trade-offs				
		Can adjust number of market makers	Can increase diversity of market makers	Can involve markets in design of services	Can allocate costs of market making	Consequences of non-performance
Approach	Industry forum	✓✓ Very strong because: <ul style="list-style-type: none"> <li>• Authority can tender for more market makers and incentivise more participation by identifying more market makers in the mandatory fall-back</li> </ul>	✓✓ Very strong because: <ul style="list-style-type: none"> <li>• Authority can contract non-physical market makers through incentive payments</li> </ul>	✓✓ Very strong because: <ul style="list-style-type: none"> <li>• Commercial approach will provide clear price/quality trade-off data</li> </ul>	✓✓ Very strong because: <ul style="list-style-type: none"> <li>• Authority collects and allocates levy payments and a portion of ASX fees</li> </ul>	✓✓ Very strong because: <ul style="list-style-type: none"> <li>• Authority can contract for a service with very high financial penalties</li> <li>• If outcomes unacceptable to the Authority can apply the mandatory fall back and related reg. consequences</li> </ul>

Meridian therefore considers a commercial-mandatory approach to be the best way forward for the Authority. Meridian also strongly suggests that the Authority consider variations on the description of this approach in the consultation paper. The Authority should now progress to detailed development and assess the costs and benefits of variations on the commercial-mandatory hybrid approach.

Progressing a commercial approach with a mandatory fall-back would be consistent with the Electricity Price Review panel’s statements that an incentive-based scheme could be more efficient than a mandatory obligation, and compliance, monitoring and enforcement costs could be lower.

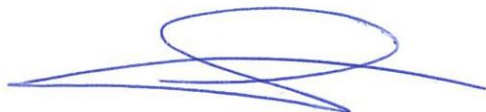
Appendix B of this submission is a table duplicating the Authority’s Table 1 from the consultation paper but with:

- Meridian’s suggested adjustments to the assessment; and
- the inclusion of a row assessing the approach proposed by the industry forum – so that the assessment can be seen alongside that for other approaches.

Meridian looks forward to working with the Authority on the next stages of the Hedge Market Enhancement project.

Please contact me if you have any queries regarding this submission.

Yours sincerely

A handwritten signature in blue ink, consisting of several overlapping loops and a long horizontal stroke extending to the right.

Sam Fleming  
**Regulatory Counsel**

## Appendix A Responses to consultation questions

	Question	Response
1(a)	Has the Authority correctly described the approaches above? If not, please identify any changes to the approach description.	The body of this submission notes several suggested changes to the approaches described in the consultation paper.
1(b)	Are there any other approaches the Authority should consider? If so, please provide a brief description of the approach and its merits.	Yes. The body of this submission and the letter to James Stevenson-Wallace dated 27 May 2020 describe the approach preferred by the industry forum on market making. This approach is a variation on a commercial-mandatory approach.
1(c)	Do you have strong preference or strong aversion to any of the approaches outlined? Please explain your reasoning.	Yes. To the extent that a change to the status quo is deemed necessary, Meridian has a strong preference for a commercial-mandatory approach but with variations from the description in the consultation paper.
2(a)	Has the Authority correctly described the trade-offs above? If not, please identify any changes to the trade-offs.	Yes. See the body of this submission for further detail.
2(b)	Are there any other trade-offs the Authority should consider? If so, please provide a brief description of the trade-off and its importance.	<p>The consultation paper in places notes that it is positive if an approach provides flexibility of market making to adjust to market changes over time. However, the Authority does not apply this criterion throughout its assessment.</p> <p>Meridian has not identified any other trade-offs.</p> <p>See the body of this submission for further detail.</p>
2(c)	What trade-offs are most valuable to you, and which are the least valuable to you, and why?	Meridian strongly agrees that the allocation of costs is a key factor. It is of most importance to the long term benefit of consumers that the beneficiaries-pay principle be applied regardless of the approach selected for further policy development. We agree with the text box in the consultation paper on who benefits from market making. As stated by the industry forum, “participants agree that the beneficiaries pay principle should be at the heart of any market making scheme. If it is not, the scheme will suffer

		<p>from free-rider issues whereby beneficiaries of the scheme will forever demand increased market making services because they are not exposed to the additional costs of providing those service improvements.”</p> <p>For further details see the body of this submission.</p>
3(a)	<p>Has the Authority correctly assessed each approach against the key trade-offs? If not, why not?</p>	<p>The body of this submission and Appendix B note several suggested changes to the assessment of approaches in the consultation paper.</p>
3(b)	<p>If you have identified any changes to the approaches or key trade-offs in questions one and two, please provide your assessment of those approaches and/or trade-offs.</p>	<p>See the body of this submission and Appendix B for Meridian’s suggested adjustments to the assessment of each approach as well as assessment of the industry forum approach.</p>



## Appendix B

## Assessment of each approach with Meridian adjustments

		Key trade-offs				
		Can adjust number of market makers	Can increase diversity of market makers	Can involve markets in design of services	Can allocate costs of market making	Consequences of non-performance
		<ul style="list-style-type: none"> <li>Increases reliability</li> <li>Increases confidence</li> </ul>	<ul style="list-style-type: none"> <li>Increases reliability</li> <li>Increases confidence</li> <li>Promotes efficiency</li> </ul>	<ul style="list-style-type: none"> <li>Promotes efficiency</li> </ul>	<ul style="list-style-type: none"> <li>Promotes efficiency</li> <li>Increases reliability</li> </ul>	<ul style="list-style-type: none"> <li>Increases reliability</li> <li>Increases confidence</li> </ul>
Approaches	Voluntary approach	<b>XX</b> Very weak because: <ul style="list-style-type: none"> <li>Very difficult to attract more market makers</li> </ul>	<b>✓</b> Strong because: <ul style="list-style-type: none"> <li>Obligated parties may contract non-physical market makers</li> </ul>	<b>—</b> Neutral because: <ul style="list-style-type: none"> <li>No reg. intervention</li> <li>May undersupply services (public good/market failure) esp. if volatile</li> <li>May oversupply services</li> </ul>	<b>X</b> Weak because: <ul style="list-style-type: none"> <li>Costs only fall on existing market makers</li> </ul>	<b>✓</b> Strong because: <ul style="list-style-type: none"> <li>Threat of regulatory intervention is constant</li> </ul>
	Voluntary approach with mandatory backstop	<b>✓</b> Strong because: <ul style="list-style-type: none"> <li>Authority can compel more physical market makers via Code</li> </ul>	<b>✓</b> Strong because: <ul style="list-style-type: none"> <li>Obligated parties may contract non-physical market makers</li> </ul>	<b>X</b> Weak because: <ul style="list-style-type: none"> <li>Authority administratively determines backstop service levels with no market data</li> </ul>	<b>✓</b> Strong because: <ul style="list-style-type: none"> <li>Authority allocates mandatory obligation</li> <li>Authority can collect and allocate levy payments</li> </ul>	<b>✓</b> Strong because: <ul style="list-style-type: none"> <li>Weak reg. consequences until backstop applies (then very strong)</li> </ul>
	Commercial approach	Strong because Authority can: <b>✓</b> <ul style="list-style-type: none"> <li>Contract for a specified number of market makers</li> <li>Offer incentive payments</li> </ul>	<b>✓✓</b> Very strong because: <ul style="list-style-type: none"> <li>Authority can contract non-physical market makers by increasing payments</li> </ul>	<b>✓✓</b> Very strong because: <ul style="list-style-type: none"> <li>Commercial approach will provide clear price/quality trade-off data</li> </ul>	<b>✓✓</b> Very strong because: <ul style="list-style-type: none"> <li>Authority collects and allocates levy payments</li> </ul>	<b>✓</b> Strong because: <ul style="list-style-type: none"> <li>Strong financial consequence</li> </ul>
	Mandatory-commercial approach	<b>✓✓</b> Very strong because: <ul style="list-style-type: none"> <li>Authority can compel more physical market makers via Code</li> <li>Authority can attract more market makers by increasing payments</li> </ul>	<b>✓✓</b> Very strong because: <ul style="list-style-type: none"> <li>Authority can contract non-physical market makers by increasing payments</li> </ul>	<b>✓</b> Strong because: <ul style="list-style-type: none"> <li>Authority can gather price/quality trade-off data from commercial parties</li> </ul>	<b>✓</b> Strong because: <ul style="list-style-type: none"> <li>Authority allocates mandatory obligation</li> <li>Authority collects and allocate levy payments to cover commercial obligations</li> </ul>	<b>✓</b> Strong because: <ul style="list-style-type: none"> <li>Mandated providers: Very strong reg. consequences</li> <li>Commercial providers: strong financial/weak reg. consequence</li> </ul>
	Mandatory approach with transferrable providers	<b>✓✓</b> Very strong because: <ul style="list-style-type: none"> <li>Authority can compel more obligated parties via Code</li> </ul>	<b>✓</b> Strong because: <ul style="list-style-type: none"> <li>Obligated parties may contract non-physical market makers</li> </ul>	<b>✓</b> Strong because: <ul style="list-style-type: none"> <li>Authority may gather price/quality trade-off data from obligated parties</li> </ul>	<b>✓</b> Strong because: <ul style="list-style-type: none"> <li>Authority allocates mandatory obligation</li> <li>Authority can collect and allocate levy payments</li> </ul>	<b>✓</b> Strong because: <ul style="list-style-type: none"> <li>Mandated providers: Very strong reg. consequences</li> <li>Commercial providers: strong financial/weak reg. consequence</li> </ul>
	Mandatory approach	<b>✓✓</b> Very strong because: <ul style="list-style-type: none"> <li>Authority can compel more market makers via Code</li> </ul>	<b>XX</b> Very weak because: <ul style="list-style-type: none"> <li>Authority cannot compel suitable non-physical market makers</li> </ul>	<b>XX</b> Very weak because: <ul style="list-style-type: none"> <li>Authority administratively determines service levels with no market data</li> </ul>	<b>✓</b> Strong because: <ul style="list-style-type: none"> <li>Authority allocates mandatory obligation</li> <li>Authority can collect and allocate levy payments</li> </ul>	<b>✓</b> Strong because: <ul style="list-style-type: none"> <li>Strong reg. consequences</li> </ul>

Approaches	Industry forum approach	✓✓ Very strong because: <ul style="list-style-type: none"> <li>• Authority can tender for more market makers and incentivise more participation by identifying more market makers in the mandatory fall-back</li> </ul>	✓✓ Very strong because: <ul style="list-style-type: none"> <li>• Authority can contract non-physical market makers through incentive payments</li> </ul>	✓✓ Very strong because: <ul style="list-style-type: none"> <li>• Commercial approach will provide clear price/quality trade-off data</li> </ul>	✓✓ Very strong because: <ul style="list-style-type: none"> <li>• Authority collects and allocates levy payments and a portion of ASX fees</li> </ul>	✓✓ Very strong because: <ul style="list-style-type: none"> <li>• Authority can contract for a service with very high financial penalties</li> <li>• If outcomes unacceptable to the Authority can apply the mandatory fall back and related reg. consequences</li> </ul>