Ministry for Primary Industries Manatū Ahu Matua



TE HUAPAE MATAORA MO TANGAROA THE FUTURE OF OUR FISHERIES



VOLUME IV: ENABLING INNOVATIVE TRAWL TECHNOLOGIES (EITT)

CONSULTATION DOCUMENT 2016

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Purpose

This document provides information on proposed amendments to fisheries regulations to create a regime that enables the approval of innovative trawl technologies (EITT) for use in New Zealand's commercial fisheries.

These proposed amendments are part of the Ministry for Primary Industries' (MPI) Te Huapae Mataora Mo Tangaroa: The Future of our Fisheries programme.

An overview of the programme is available in Volume 1. Additional details about specific aspects of the programme are available in the following supporting documents:

- Volume II: The Fisheries Management System Review
- Volume III: Integrated Electronic Monitoring and Reporting System

MPI invites comment from interested parties on proposed amendments to fisheries regulations to create a regime for EITT use, as well as other aspects of the Future of our Fisheries programme.

Submissions

MPI welcomes written submissions on the proposals contained in this document. All submissions must be received by MPI no later than 5.00pm on **Friday 23 December 2016**.

Submissions should be sent directly to: fisheries.review@mpi.govt.nz

Or, should you wish to forward hard copy submissions, please send them to the following address to arrive by close of business on **Friday 23 December 2016**.

Future of our Fisheries Ministry for Primary Industries PO Box 2526 Wellington 6140 New Zealand

We will consider all relevant material made in submissions, so you are welcome to provide information supporting your comments. Please make sure you include the following information in your submission:

- the title of the consultation document;
- your name and title;
- your organisation's name (if you are submitting on behalf of an organisation), and whether your submission represents the whole organisation or a section of it;
- your contact details (such as phone number, address, and e-mail).

Submissions are public information

Please note that your submission is public information. Submissions may be the subject of requests for information under the Official Information Act 1982. The Official Information Act specifies that information is to be made available to requesters unless there are sufficient grounds for withholding it, as set out in the Official Information Act. Submitters may wish to indicate grounds for withholding specific information contained in their submission, such as if the information is commercially sensitive or if they wish personal information to be withheld. MPI will take such indications into account when determining whether or not to release the information.

Executive summary

MPI proposes to amend regulations relating to trawl net restrictions to create a regime that enables the use of innovative trawl technologies. Primary factors driving innovation include reducing the bycatch of undersized fish, reducing the quantity of unwanted fish, and enabling fishers to derive maximum benefit from their catch by improving catch quality.

Existing commercial fishing regulations relating to the use of trawl nets are prescriptive. The prescriptive nature means that they prevent the commercial use of innovative trawl technologies that breach the current regulatory requirements for trawl nets.

Although existing regulations provide the benchmark, there is room for improvement in terms of gear performance. An amended regime is needed that is responsive to ongoing changes in technology without compromising the enforceability, effectiveness, and intent of the current regime (that is, limiting the impact of trawl nets on fish, other aquatic life, and the benthic environment).

MPI's objectives relating to enabling the use of innovative trawl technologies are to:

• support the sustainable use of fisheries resources, consistent with the purpose of the Fisheries Act 1996;

- create opportunities to add value across the sector with trawl gear that achieves a better quality catch thereby improving access to existing markets and enabling access to new market opportunities;
- ensure the enforceability, effectiveness, and intent of the current regime is not compromised;
- develop simple, robust, and testable criteria to allow for the performance of new technologies to be assessed as performing at least as well as those permitted by existing regulations;
- provide for flexibility to enable the design and construction of trawl gear to be updated.

The consultation document looks at four options to achieve these objectives:

- maintain current regulations and do not consider use of non-regulatory provisions (current state);
- maintain current regulations and consider use of nonregulatory provisions;
- amend existing regulations to enable the commercial use of approved, innovative trawl gear (MPI's preferred option);
- amend regulations to deregulate the use of trawl gear.

MPI's preferred option of amending existing regulations is the only proposed option that will achieve all the objectives relating to enabling use of innovative trawl technologies.



Scope

The following table sets out what is in and out of the scope for the Enabling Innovative Trawl Technologies (subsequently referred to in this document as EITT) proposals:

	In scope		Out of scope
•	Amendments to fisheries regulations to provide for the approval of innovations in trawl fishing gear.	•	Amendments to fisheries regulations that prohibit the use of trawl methods in specific areas (that is, existing area closures).
•	Process for assessing and approving trawl gear innovations.	•	Amendments to fisheries regulations that relate to trawl gear specifications, such as mesh size.
		•	Amendments to fisheries regulations prohibiting the use of trawling as a fishing method.

The regulatory proposals outlined in this document are only aimed at innovative trawl technologies that do not fit within the existing regulatory specifications. Innovations currently being trialled and/or used that fit within existing specifications can continue to be used without any additional approval or special permit; there are no additional requirements beyond those associated with normal commercial fishing activity.

The current regulations would remain to serve as a benchmark and maintain existing controls to continue to ensure sustainability. Existing regulations that specify mesh sizes, or where trawling may occur are not within the scope of this consultation document.



Current state

Profile of commercial fishing fleet

As at September 2016, 1004 fishing vessels had reported commercial fishing activity in New Zealand waters during the 2016 calendar year. Approximately 18 percent of those vessels reported using trawl methods at some point during the year.

Table 1 sets out a profile of the commercial fishing fleet for the year to September 2016. It categorises vessels by overall length and vessels that have reported using trawl methods.

Catch taken by trawling

What component of New Zealand's catch is taken by trawling?

Trawling is the method used to take the greatest amount of catch in our wild capture fisheries. Approximately 84 percent of New Zealand's total catch was taken by trawling methods during 2015.

The trawled catch in 2015 was approximately equivalent from both bottom trawling and mid-water trawling.¹

The main species by volume – combined Total Allowable Commercial Catch (TACC) for the main stocks are given below – taken by trawling in deep water and middledepths fisheries include hoki (TACC of 150 000 tonnes), squid (TACC of 77 000 tonnes), southern blue whiting (TACC of 42 000 tonnes), jack mackerel (TACC of 41 000 tonnes) and barracouta (TACC of 21 000 tonnes). Inshore species, a high proportion of which are taken by trawl methods, include red cod (TACC of 8200 tonnes), tarakihi (TACC of 6400 tonnes), snapper (TACC of 6300 tonnes), gurnard (TACC of 5600 tonnes), and trevally (TACC of 3900 tonnes).

What are the primary benefits of trawling?

Trawling is a long-established fishing method that provides a cost-effective way to catch large quantities of fish, particularly those that aggregate. Many species of fish cannot be caught cost effectively by other methods.

The quantity of fish able to be caught by trawling in a single fishing event makes it possible to support factory vessels and on-board/at-sea processing, which helps to optimise returns from vessel operating costs.

What are the main drivers for innovation?

The primary factors driving the search for innovations include reducing the bycatch of undersized fish, reducing the quantity of unwanted fish, and enabling fishers to derive maximum benefit from their catch by improving catch quality.

Fish caught in conventional trawls are often damaged by contact with other fish and the gear, especially when large volumes are caught in long trawl tows. Trawl innovations seek to address this and ensure that fish can be brought to the vessel in the best possible condition. This could result in trawl-caught fish fetching a higher market price.

Table 1: Total number of commercial fishing vessels that have reported fishing activity for the year to September 2016 by overall length (m) and those that used trawl methods

Overall length (metres)	Total number of vessels	Number of vessels that reported using trawl fishing methods
Less than 6	240	-
6-11.9	295	22
12-17.9	308	74
18-23.9	96	40
24-29.9	19	15
30-35.9	8	4
36-44.9	10	7
45-59.9	6	4
60-74.9	13	10
75+	9	9
Total	1004	185

1 In this context the term "mid-water trawl" refers to trawl gear that has different design specifications to bottom trawl gear. Mid-water trawl gear is frequently fished on the bottom and the term does not imply that there is no contact between the trawl gear and the benthic environment. Conventional trawls rely mostly on net mesh size and shape to select for desirable fish size and allow unwanted sizes to escape. The ultimate fate of fish that escape is not known, and as catch accumulates in the net, the ability for small fish to escape is reduced. The result is that conventional trawls can catch quantities of unwanted fish that are either lawfully discarded (where a minimum legal size exists) or must be landed, but cannot be profitably marketed. Trawl innovations seek to improve the size and species selectivity of trawl gear to reduce unwanted bycatch and waste.

Conventional trawling is also associated with other concerns, such as benthic impacts and impacts on protected species. These are clear drivers for innovation, but more difficult to address, given the basic operation of trawl gear, particularly bottom trawl gear in contact with the sea floor.

These concerns are currently addressed by a range of management measures. These include areas that are closed to trawling to protect benthic habitats, and mitigation measures to reduce impacts on protected species, for example, mandatory use of various seabird scaring devices, offal management practices, and sea lion exclusion devices.

Overseas trends

Globally, there is an accelerating trend towards recognising the bycatch and waste issues associated with trawling, and various regulatory and operational approaches to addressing those issues, including gear design, increased observing, and landing all catch. The United Nations Food and Agriculture Organisation (FAO) has a Code of Conduct for Responsible Fishing, which includes obligations to minimise waste in fisheries. International gear development has focused on a range of approaches to improve the efficiency and selectivity of trawl gear for fish sizes and species.

Developments include the use of square mesh nets (conventional trawl gear uses diamond mesh nets) and various large mesh escape panels, as well as grid sorters to facilitate the escape of large animals (sharks, rays, marine mammals, turtles) from the nets. Square mesh tends to work for "round" fish, which are a better shape for escaping through square meshes. Several New Zealand species of commercial importance are not round, but rather laterally compressed and less suited to escaping square mesh nets. Current mesh size regulations are based on trials with diamond mesh which better suits these fish. However, diamond meshes tend to collapse under tension and that changes the effective mesh size and potential for fish to escape.

Internationally, focus has also been on modifications to the trawl "doors" or "otter boards" that are used to keep the nets open. Modifications have aimed to improve efficiency by reducing drag and also by lifting trawl sweeps that herd the fish up above the sea floor. Doing so can also reduce the effects of the trawl gear on the sea floor.

Domestic trends

In 2012, MPI committed to a partnership (through the Primary Growth Partnership (PGP)) with Sanford Ltd, Aotearoa Fisheries Ltd and the Sealord Group to develop innovative fish harvesting and handling systems via the Precision Seafood Harvesting (PSH) programme. MPI is also aware of some individual innovators who are working on innovations aimed at improving specific aspects of trawl gear performance.

The focus of domestic innovations is in line with overseas trends. The broad aims of the innovations that MPI is aware of are to modify trawl technology to improve catch quality and selectivity. In inshore fisheries, there is an additional focus of improving survivability rates for unintended catch.

Concurrent with this proposal, MPI is consulting on amendments to regulations to support the introduction of an Integrated Electronic Monitoring and Reporting System (IEMRS). Although the two are separate issues, future opportunities may exist for IEMRS to facilitate operational aspects of innovative trawl technologies. For example, camera technology may be able to be used to monitor the return to the sea of live fish that have been taken using a type of innovative trawl technology.

What are the current regulatory settings?

Commercial fishing regulations that relate to trawl net specifications have been in existence since at least the 1980s and are based on the presumption that nets will consist solely of mesh. They include constraints on minimum net mesh sizes and restrictions relating to structural features of trawl nets (see Annex I for details).

Under the current regulations the use of innovative trawl technologies would be unlawful if they did not meet the existing regulated specifications. As an example, the PSH programme mentioned earlier has developed nets that are not made of mesh.

Consultation Question:

• Do you agree with our description of the EITT current state?

Problem definition

The underlying issues to which this proposal is responding are:

- The existing regulations prescribe aspects of trawl fishing gear that limit the ability to commercially implement innovations that do not comply. The existing controls are based around the specification of net mesh size and the exclusion of any structural features that might alter the effect of mesh sizes (such as net sleeves, liners, flappers²).
- Some current innovations under development replace net mesh (in some parts of the net) with materials that cannot be defined as mesh, and as mesh size cannot be measured, the innovations do not comply.
- Trials and experiments that allow the development of these innovations are authorised by special permits (issued under section 97(1)(a)(iv) of the Fisheries Act 1996). However, special permits are not considered appropriate for ongoing authorisation of trawl gear for commercial use. The purpose of a special permit, as stated in the Fisheries Act, does not extend to commercial use, but is instead focused on education, investigative research, dealing with unwanted aquatic life and trials and experiments of fishing gear and fishing vessels.

These issues result in lost opportunities to create and add value to the wild fish harvest, as well as dampening the incentives to innovate. It is also possible that innovations to address benthic impacts and adverse effects on protected species are being stifled. Options for addressing the problem definition are discussed in the next section.

Consultation Question:

• Do you agree with our description of the EITT problem?

Objectives

The proposed high-level objectives of EITT are to:

- support the sustainable use of fisheries resources, consistent with the purpose of the Fisheries Act 1996;
- create opportunities to add value across the sector with trawl gear that achieves a better quality catch thereby improving access to existing markets and enabling access to new market opportunities;
- ensure the enforceability, effectiveness, and intent of the current regime is not compromised;
- develop simple, robust, and testable criteria to allow for the performance of new technologies to be assessed as performing at least as well as those permitted by existing regulations;
- provide for flexibility to enable the design and construction of trawl gear to be updated.

Consultation Question:

• Do you agree with the EITT objectives?

² The terms "liners", "sleeves" and "flappers" are used in the Fisheries (Commercial Fishing) Regulations 2001 but are not defined.

Options and impact analysis

Four options to address the problem definition have been considered by MPI in developing this proposal:

- maintain current regulations but do not consider use of non-regulatory provisions (current state);
- maintain current regulations and consider use of non-regulatory provisions;
- 3. amend existing regulations to enable the

commercial use of approved, innovative trawl gear
(MPI's preferred option);

x

amend regulations to deregulate the use of trawl gear.

Table 2 compares the four options against the EITT objectives. An analysis of the options is set out below.

Technologies objectives Options 3. Amend existing 2. Consider using 1. Current non-regulatory regulations (MPI 4. Deregulate use **Objectives** state provisions preferred option) of trawl gear Support sustainable use x of fisheries resources Create opportunities to x x add value Ensure current regime x

x

x

Table 2. Comparison of the four options against the Enabling Innovative Trawl

x

not compromised
Develop criteria for

assessmentProvide for flexibility

Option 1:



Maintain current regulations but do not consider use of non-regulatory provisions (current state)

Under this option, the Government would not make any changes to the fisheries regulations. Additionally, MPI would not consider the available non-regulatory options available that could potentially be used to facilitate use of innovative trawl technologies.

Innovative trawl gear that did not comply with existing regulations would not be permitted for commercial use.

This option would not contribute to the objectives relating to adding value, developing criteria for assessment, or providing for flexibility. It would not encourage or support innovation and allow commercial use of new technologies.

Option 2:

Maintain current regulations and consider use of non-regulatory provisions

Under this option, the Government would not make any changes to the fisheries regulations. Innovative trawl gear that did not comply with existing regulations would only be permitted for commercial use if some way of fitting its use within an existing provision could be found.

MPI has considered the available non-regulatory provisions that could enable use of innovative trawl gear. Provisions include voluntary measures, the fishing permit regime and extending the use of special permits.

The use of voluntary measures such as codes of practice is not feasible because MPI is constrained by the current regulatory framework given its prescriptive nature. Use of trawl gear that does not meet the existing regulations would be non-compliant and therefore unlawful.

MPI has considered whether there might be some flexibility in the current fishing permit regime to allow for the attachment of conditions allowing for more flexibility. This is not practical or even legally permissible. Conditions attached to fishing permits must be standard and generic for all permit holders – so conditions relating to trawl gear would need to be placed on all permits whether the permit holder is operating a trawler or not.

A condition also generally imposes more onerous restrictions. It would not be appropriate or lawful to circumvent the existing regulations with permit conditions that allow unlawful activity.

The other provision considered was extending the use of special permits issued under the Fisheries Act 1996. Section 97 special permits are currently being used for the development and trialling of two trawl innovations underway that do not meet current restrictions: these are the Primary Growth Partnership Precision Seafood Harvesting model (funded by MPI, Sanford Ltd, Sealord Group and Aotearoa Fisheries Ltd (now called Moana)); and an independently funded stainless steel cage-like system in the codend of the net.

MPI does not support the use of special permits for the next step in the process, that is, the authorisation of innovative trawl gear for ongoing commercial use. The purposes of special permits, as stated in the Fisheries Act 1996, do not extend to commercial use, but are instead focused on education, investigative research, dealing with unwanted aquatic life, and trials and experiments of fishing gear and fishing vessels.

As with Option 1, this option would not achieve the objectives that relate to adding value, developing criteria for assessment, or providing for flexibility. It would not support innovation and allow commercial use of new technologies.

Option 3: Amend existing regulations (*MPI's preferred option*)

Amendments to existing regulations would provide a framework for assessing new technologies against currently regulated trawl gear. The existing prescriptive regulations would remain while the regulatory amendment would be more performance-based. The Director-General would assess innovations and be able to approve new innovative trawl technologies for commercial use.

This option would contribute to all objectives. It would address the problem definition by providing a more enabling environment for the commercial use of approved, innovative trawl gear. Evidence of investment in new trawl technologies, for example, Precision Seafood Harvesting and a series of trawl products under development by independent innovators, highlights the need to address this problem now.

Enabling the use of innovative trawl technologies would provide the opportunity for New Zealand to be at the forefront of international trends in gear development and use. One possible implication is that existing trawl net manufacturers may be adversely impacted as new technologies come on board, but it is more likely they will remain unaffected or adapt to the changing market.

Option 4: Amend regulations to deregulate the use of trawl gear

This option would see the removal of the existing regulations governing trawl gear (see, for example, regulation 71 (Trawl Net Restrictions) of the Fisheries (Commercial Fishing) Regulations 2001) and amendments to the definition of "trawling" and "trawl net" as contained in those regulations (Annex I).

This approach has been considered in response to feedback from the fishing industry for more flexibility in design of trawl gear. Under this option the fishing industry would be required to work within broad definitions of "trawl net" and "trawling" to achieve the sustainability measures imposed by the Fisheries Regulations.

This option would only contribute to the objectives that relate to adding value and providing for flexibility. It would not contribute to the objectives relating to ensuring that the intent of the current regime is not compromised, nor allow for the development of assessment criteria. It may also not contribute to the objective regarding sustainable use of fisheries resources.

One of the primary reasons for the existing controls is to protect young fish. Their removal would have implications for MPI's ability to protect young fish. Some of these impacts could be controlled by catch limits under the QMS, however, that in itself may not be enough to mitigate the adverse impacts.

Existing regulatory controls also form part of the context within which existing catch limits are set. If these controls were significantly amended or removed, the impact would need to be considered in revised stock assessment processes. As an example, the way research interprets catch per unit of effort for any trawl fishery may need to be revised.

On balance, therefore, MPI does not favour deregulation as a practical option at this time. With the proposed introduction of other measures, such as removing minimum legal size restrictions and electronic monitoring on fishing vessels, the arguments for maintaining trawl net restrictions may gradually lessen over time. There may be a case for re-visiting this option if and when these measures are phased in across the fishing fleet.

Consultation Questions:

- Do you agree with the range of options addressed?
- Are there other options that we have not considered? If so, what are the potential costs and benefits of these options?
- Do you agree with MPI's assessment of each option's contribution to achieving the EITT objectives?

Outline of preferred option amend existing regulations

There are three key aspects to this option:

- setting criteria that will be used to assess whether innovative trawl gear meets the objective of performing at least as well as trawl gear currently provided for by regulations;
- enabling MPI's Director-General to **approve** trawl gear that does not comply with existing regulations;
- providing for fishers to **use** approved trawl gear.

The three aspects above are all elements of the proposed process for applicants seeking approval for new trawl technology. An outline of the proposed application process and the costs associated with that process is provided in Annex II. Details of the regulatory amendments required to address this option are discussed below.

Criteria to assess performance

MPI proposes that its Director-General use specified criteria to assess whether innovative trawl gear meets the objective of performing at least as well as trawl gear currently provided for by regulations.

Key criteria could be set out in the Fisheries (Commercial Fishing) Regulations 2001. Specific technical details relating to these, and any other criteria developed over time, could be set out in a circular.³ The advantage of using circulars is the ease with which they can be altered, amended or revoked.

MPI's envisages trawl technology performance improving over time as new innovations are developed. Regulations would be worded in such a way as to reflect this, and to provide the Director-General with flexibility when applying the criteria to assess applications.

MPI acknowledges that the possibility of criteria changing over time may create uncertainty for potential innovators. MPI considers, however, the risks created by uncertainty are outweighed by the need for flexibility. As criteria is updated, stakeholders will be informed.

The following four criteria are examples of what may be used to inform the Director-General's assessment of applications for innovative trawl gear:

Species composition of catch

This criterion would require assessment of the species composition of the catch from innovative trawl gear compared to conventional trawl gear to look at whether some species are more likely to be caught and retained than others.

Size composition of catch

This criterion would require assessment of the size composition of catch from innovative trawl gear compared to conventional trawl gear to look at how the gear performs in relation to catching and retaining small fish of an undesirable size, for example, below a minimum legal size.

Impact on protected species

This criterion would require assessment of the impact on protected species from innovative trawl gear compared to conventional trawl gear.

Benthic impacts

This criterion would require assessment of the impacts on the benthic environment from innovative trawl gear compared to conventional trawl gear.

Consultation Questions:

- Have the correct EITT assessment criteria been identified?
- Are there other EITT assessment criteria that should be considered?

Assessment of applications to approve innovative trawl gear

MPI envisages that once an application has been received, the subsequent decision-making process would be undertaken internally within MPI by technical experts. However, given the inherent difficulties likely to be involved in assessing performance against criteria, MPI considers that it may also be appropriate to involve MPI's Fisheries Science Working Groups in the assessment process.

MPI intends to take a pragmatic approach to the assessment process. If necessary, applicants will be able to re-submit specific parts of their application if, for example, it becomes apparent during the assessment process that additional information or analysis is required.

³ The Fisheries Act 1996 enables regulations to provide for circulars, which are able set out general criteria for a specific issue. Examples of existing circulars include those relating to seabird scaring devices (available www.fish.govt.nz/en-nz/ Environmental/Seabirds). An amendment to the Fisheries (Commercial Fishing) Regulations 2001 would provide the ability for the Director-General to issue circulars relating to criteria.

Approving innovative trawl gear

The Fisheries (Commercial Fishing) Regulations 2001 would be amended to provide the ability for the MPI Director-General to approve innovative trawl gear. The regulations would need to incorporate:

- a means by which the approval would be implemented, for example, by notice in the New Zealand Gazette, via circular or notification in writing to the applicant;
- whether approval could relate to the applicant only or to a specific piece or design of trawl gear;
- the ability, if required, to set conditions relating to use of the approved trawl gear. Examples of conditions could include:
 - the requirement to use a specific reporting code when completing catch and effort returns;
 - the requirement that each unit of approved gear must have a unique identifier.

Providing for use of approved gear

MPI considers it is crucial that there is an ability to monitor fishers' uptake and use of approved gear, including knowing whether gear was used on a tow-bytow basis, so that:

- there is the ability to assess ongoing aspects of performance of the gear (for example, catch or protected species interactions), which depends on knowing when it is used;
- compliance staff can be informed prior to conducting inspections on vessels;
- science processes can differentiate the gear and account for its use in analyses of, for example, catchper-unit-of-effort.

For these reasons, a means by which MPI can track uptake and use of approved innovative trawl gear is needed such as a requirement for vessel operators to notify their intention to use such gear, and the use of a model number or seal for the approved product.

Any process for tracking uptake and use of approved innovative trawl gear could either be retained within MPI or managed by FishServe. Within MPI, the FOCUS system could be used in the same way that, for example, special approvals under section 111 of the Fisheries Act 1996 are managed. However, the disadvantages of this system are that it is only available to compliance staff and does not have the ability to provide summarised information.

MPI proposes engaging FishServe to manage the process that would require fishers to notify their intention to use innovative trawl gear once it had been approved by MPI. The notification process could be added to the existing vessel registration process, which requires vessel operators to a) indicate the fishing methods they intend to use and b) notify the Director-General if any details relating to vessel registration changes. The existing offence provision in the Fisheries (Commercial Fishing) Regulations 2001 for failing to notify changes of information would apply to a fisher using approved trawl gear without having notified their intention to use that gear.

MPI's proposal to use the existing vessel registration conditions to track use of approved innovative trawl gear would not require additional regulatory changes.

Important elements to note about MPI's preferred option (amend regulations) are:

- the use of existing, conventional trawl gear will not be affected;
- the performance aspects of existing trawl gear will not be affected;
- the ability to use, in operational commercial fishing, approved innovative trawl technologies will be enabled;
- the assessment criteria will be clear;
- any authorisation or approval of innovative trawl gear will not override any relevant requirements of the Fisheries Act 1996 or associated regulations.

Costs

MPI proposes that all costs associated with new trawl gear development and testing would be borne by the individual innovator. The magnitude of costs is likely to vary considerably between different types of innovative trawl gear but could be substantial. Contestable government innovation grants may be available to meet some of these costs. Potential innovators must consider the balance between costs and the benefits from improved value of catch and marketing/sale of the technology.

There will be increased costs to MPI associated with this proposal – some of these will be covered by MPI's baseline funding, while others could be cost recovered from potential innovators (refer Annex II).

Broadly, MPI's Fisheries Management Directorate will meet the costs of developing criteria to assess applications for new trawl technologies, and the monitoring and review of these technologies. MPI's Compliance Directorate will need to educate and train Fisheries Officers, and expects there will be increased effort from Fisheries Officers inspecting new trawl gear.

Using the existing vessel registration process would not require additional costs to potential users of approved innovative trawl gear.

It may be necessary to amend computer systems so that use of approved innovative trawl gear can be linked to fishing vessels.

With regard to the costs associated with assessing and approving new applications (which will be carried out by MPI), the options are either for MPI to meet those

Table 3. Calculation of proposed hourly rate for approvals process

Hourly rate calculation	
Full annualised average personnel cost	\$185 543
Total estimate of chargeable hours	1418
Hourly cost (GST exclusive)	\$130.85
GST inclusive	\$150.65

costs under baseline funding, or to recover the costs either by charging the applicant directly or through the levy. The primary rationale for MPI meeting the costs is that imposing additional costs could be viewed as a disincentive to develop innovative trawl gear.

However, the cost recovery principles set out in the Fisheries Act 1996 state that a fee must be paid for a fisheries service if that service is provided at the request of an identifiable person. Charging an applicant directly, rather than recovering via a levy, is also consistent with existing approvals processes under the Fisheries Act 1996. We therefore propose to amend Schedule 2 of the Fisheries (Commercial Fishing) Regulations 2001 to introduce a fee for processing applications. Applicants receive private benefits from the ability to use innovative trawl technology including:

- use of the technology for more efficient harvesting;
- competitive advantage benefits over other industry participants who do not have access to the same technology;
- the ability to on-sell technology to other industry participants.

An outline of MPI's initial view of the application/ assessment process is set out in Annex II. It is likely that the total time spent on an individual application, and therefore the full cost of the process will vary significantly depending on the complexity of the technology being assessed and the quality of the application. An hourly rate is therefore the most equitable approach to recover costs.

The hourly rate MPI proposes has been calculated using personnel costs of staff responsible for assessing each application and processing the approval. These staff are likely to be key technical Fisheries Scientists and Fisheries Management experts. Table 3 sets out the calculation of the proposed hourly rate for the approvals process.

Other than the hourly fee for processing applications, MPI is not proposing any other direct costs to industry.

Consultation Question:

• Do you agree with the EITT application process and costs set out in Annex II?

Risks

Risks associated with MPI's preferred option include:

- The assessment criteria, assessment process and associated costs could be a disincentive for innovation.
 - This risk will be managed by MPI working closely with applicants to ensure that assessment criteria are clearly identified and that applicants are aware of what is required to be submitted for the assessment process.
- Data reporting and management will need to respond to the new trawl gear descriptions and reporting codes so that catch and effort by different gears can be distinguished.
 - This risk will be managed by ensuring that there is good communication between MPI's fisheries science, fisheries management and fisheries data management teams and that any additional reporting requirements are made clear to potential users of approved innovative trawl technologies.
- There may be a requirement to make consequential amendments to all regulations where trawling is mentioned or defined regardless of whether the regulations relate to trawl specifications.
 - MPI will work closely with Parliamentary Counsel Office during the drafting of any regulatory amendments.

Consultation Question:

• Do you agree with the EITT identified risks?

Implementation Plan

MPI will take the following steps to give effect to the amended regulations to support EITT:

- the Minister for Primary Industries will make a media statement announcing the Government's decisions;
- MPI will communicate the decisions to all those who made submissions on this consultation document;
- amended regulations will be introduced under the Fisheries Act 1996;
- MPI will post the new regulatory information on its website, along with guidance to assist innovators with applications;
- criteria to be used in assessing innovative trawl gear applications will be developed and published at around the time the regulations come into force.

Monitoring, evaluation and review

MPI will review EITT after its implementation to assess how effectively the process created by the regulatory changes is working. This includes reviewing the assessment criteria to ensure they are fit for purpose.

MPI will monitor all trawl gear being trialled, all gear being evaluated, and all gear that has been approved together with the uptake and use of any approved innovative trawl gear.⁴

Next steps

Following the receipt of submissions, officials will advise the Minister for Primary Industries on final policy options.

The Minister plans to advise the Cabinet Economic Growth and Infrastructure Committee (EGI) in March 2017.

⁴ If the gear being trialled does not meet existing trawl gear specifications, a s.97 special permit will be required before trialling can commence.

Annex I: Extracts from fisheries regulations that relate to trawl specifications and other mesh rules

Links to fisheries regulations that relate to trawl specifications, including mesh size requirements, are provided below:

- Regulation 71 of Fisheries (Commercial Fishing) Regulations 2001
- Regulation 5 of Fisheries (Auckland and Kermadec Areas Commercial Fishing) Regulations 1986
- Regulation 2C of Fisheries (South-East Area Commercial Fishing) Regulations 1986
- Regulation 3BA of Fisheries (Southland and Sub-Antarctic Areas Commercial Fishing) Regulations 1986
- Regulation 4A of Fisheries (Southland and Sub-Antarctic Areas Commercial Fishing) Regulations 1986
- Regulation 15A of Fisheries (Southland and Sub-Antarctic Areas Commercial Fishing) Regulations 1986

In addition to the regulations above, other fisheries regulations have provisions relating to use of trawl gear but not to trawl specifications. These include:

- Fisheries (Central Area Commercial Fishing) Regulations 1986
- Fisheries (Challenger Area Commercial Fishing) Regulations 1986



Annex II: Outline of process for assessing and approving use of new trawl technologies, including cost recovery

Ac	tivity and description	Cost recovery description
DE •	WELOPMENT The innovator (applicant) develops and trials new trawl gear (referencing criteria in a circular against which the application will be assessed). A special permit under section 97 of the Fisheries Act 1996 may be required.	All costs borne by innovator (applicant).
PR •	RE-APPLICATION Applicant may request meetings with MPI during development and testing stage to discuss development of new gear and seek guidance. MPI may provide advice to applicants to assist them in submitting a quality application.	Assessment costs (MPI) Proposed hourly rate as set out in Table 3 (first half hour free). Total cost will be dependent on how organised the applicant is in the first instance and how much guidance they require.
AP •	PLICATION CHECK AND REGISTRATION Applicant lodges application with MPI for the approval of the new gear.	No separate costs for lodging application
AP • •	 PPLICATION ASSESSMENT AND DECISION MPI technical experts receive and assess the application against assessment criteria. MPI technical experts makes recommendation to the Director-General to approve/decline the application; or asks applicant for further information. Applicant able to re-submit specific sections of the application directly to MPI if assessment process indicates additional information or analysis required. The Director-General makes final decision to accept/decline the application. Applicant advised of outcome. Approval process includes issuing the equivalent of a model number or seal for the approved product. If the application is approved, the applicant is then able to promote and sell the new trawl design (with model number or seal). 	Assessment costs (MPI) Proposed hourly rate as set out in Table 3. Total cost will be dependent on the complexity of the application and the quality of supporting technical information.
US •	ER APPROVAL PROCESS Vessel operators can then notify their intention (via FishServe) to use the approved trawl gear and must specify each vessel on which they intend to use the gear.	No additional costs to fishers.
C0 •	MPLIANCE AND MONITORING Compliance (Fisheries Officers) able to identify those vessel operators with approval to use new trawl gear (for example, a copy of approval to be kept on board for inspection and verification). Fisheries management able to identify approved new trawl technology (for example, a form of seal or indented number).	No additional costs to fishers.

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