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## FISHERIES (INNOVATIVE TRAWL TECHNOLOGIES) NOTICE 2017 MPI CONSULTATION

### Introduction and mandate

Fisheries Inshore New Zealand Ltd (*Fisheries Inshore*) is the Sector Representative Entity (*SRE*) for inshore finfish, pelagic and tuna fisheries in New Zealand. Its role is to deal with national issues on behalf of the sector and to work directly with, and behalf of, its quota owners, fishers and affiliated sector organisations.

Recent changes to inshore governance have seen Fisheries Inshore take responsibility as the Commercial Stakeholder Organisation (*CSO*) in Area 2 by establishing the Fisheries Inshore Area 2 Committee, we are also now the *CSO* for HMS fisheries. Our key outputs are:

- developing appropriate policy frameworks, processes and tools to assist the sector to manage inshore, pelagic and tuna fishstocks more effectively
- minimising fishing interactions with protected species and the associated ecosystems
- working positively with other fishers and users of marine space where we carry out our harvesting activities

Collectively, Fisheries Inshore members own more than 51% of the quota in 192 inshore fishstocks and between 40 and 51% in a further 13 fishstocks (of 239). This equates to about 76% of the sector by value and 84% by volume.

### Background

MPI is enabling new trawl technologies to provide for improved economic and environmental outcomes. This is a concept we support. The enabling provisions will be implemented through the *Fisheries (Trawling) Amendment Regulations 2017* that amend the *Fisheries (Commercial Fishing) Regulations 2001* and the *Fisheries (Innovative Trawl Technologies) Notice 2017*.

### Summary view on the consultation

The view of Fisheries Inshore is one of qualified support for the concept of facilitating a flexible approach to enable industry to develop innovative trawl technology. However, we consider that both the Regulations and the Notice could be improved to provide more specificity, improved clarity and to align better with the Fisheries Act 1996.

### Content and format of submission

This submission comprises two parts; the first addresses the *Fisheries (Trawling) Amendment Regulations 2017*, the second addresses the *Fisheries (Innovative Trawl Technologies) Notice 2017*.

While we acknowledge that MPI is not formally consulting on the regulations, we have provided views. The circulars cannot be considered in isolation and given the MPI did not consult on the regulations before they were promulgated, we consider it is important to provide our views on their content.

### Contact

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## Fisheries (Trawling) Amendment Regulations 2017

These Regulations amend the *Fisheries (Commercial Fishing) Regulations 2001*.

Issues to be addressed regarding the *Fisheries (Trawling) Amendment Regulations 2017* are as follows:

- R5(2) removes the requirement in R31(1) of the principal regulations to measure in accordance with Part 2 of Schedule 3. As a consequence, that Part of Schedule 2 is redundant and should also be deleted. A consequential amendment to the definition of “net mesh size” should also be made to R3(P). It is also unclear whether R59(P) or Part 1 of Schedule 2 are required if the intent of this regulatory amendment to remove the specifications for net measuring.
- R5(3) of the new regulation inserts a new Reg 31(2A) which states sub-clause 31(1) no longer applies to trawl nets. The existing 31(1) applies the minimum sizes from R31(6) to trawl nets for a range of species. Some of those species are caught by trawling, either as targets or as by-catch and some of those species have minimum mesh sizes in excess of 100 mm.

By excluding the application of the minimum mesh sizes in R31(6) to trawl nets, the new R71(1)(a)(iv) applies a 100 mm default minimum net size for trawl. It has never been clear whether the sizes in R31(6) are absolute and definitive and apply to both target and by-catch. For example, elephant fish are frequently caught in FMA3 trawls targeting FLA, ELE, RCO, TAR and BAR – only ELE has the minimum net mesh size of 150mm. Does the existing regulation mean that a minimum mesh of 150mm must be used in any trawling activity that might catch ELE, or just targeting ELE? Furthermore, if the replacement regulation lowers the minimum mesh to 100mm what is the reason and what impact might that have on the stock (e.g. reduction in yield-per-recruit, changes to CPUE)?

- R71A allows the chief executive to approve a trawl net. However, it is unclear what the CEO will be approving when they approve a trawl net. Net is defined in the existing regulations to be “a net or part of a net used, or capable of being used, to take fish”. The definition of trawl net is more inclusive and extends to all components of the trawl.

Clause 5(1)(b) of the draft notice refers to applicants providing:

*the specifications of net A, including a description (in words as well as by way of photos or diagrams) of—*

- i) each component (including any of the following that form part of the net: trawl doors, sweeps, bridles, ground gear, headline, body panel, lengthener, cod end, mesh type dimensions, rope (type, gauge, single braid, and colour), and liners);*
- ii) the materials of which the components are made; and*
- iii) the configuration of the components*

The details set out in C5(1)(b)(i) are not components of a net as stated, but rather a trawl net.

Consequently, it is unclear whether approvals will be in respect of a net or a trawl net. If a new net is defined with all its components (i.e. a trawl net), would a change in a component require the new (trawl) net to be re-approved? For example, if the new feature is the cod-end, would a change in the trawl door invalidate the approval of the trawl net?

- No guidance is provided in the regulations or draft notice as to how MPI will maintain the details provided through the applicant process. What level of protection will be provided to an applicant’s intellectual property provided as per these regulations and specifically the details provided for in C5(1)(b)?

Confirmation from MPI on the protection of intellectual property through the application process is required.

- R71(1) prohibits the use or carriage of certain nets that are not approved by the CEO. To test or trial a new net or component requires the new net to be used and carried on a fishing vessel prior to any application for approval by the CEO. In the absence of any other process, we would presume that the applicant will need a s97 special permit to conduct the research.
- R71(1)(a) carries over the existing prohibitions on trawl nets with the addition of the underlined text below. The amendment also adds to R71 with R71(1)(b):

*(1) A commercial fisher must not use for fishing, or have on board a fishing vessel, a trawl net if,—*

*(a) in the case of a trawl net that includes mesh, the trawl net has any 1 or more of the following features:*

- (i) more than 1 layer of mesh:*
- (ii) liners, sleeves, or flappers of any material:*

(iii) a method of strengthening with centres less than 1 m:

(iv) net mesh size less than 100 mm unless a fishing permit authorises the use or possession of the mesh:

(b) in any other case, the chief executive has not approved the trawl net for use under regulation 71A.

(2) Subclause (1)(a) does not prohibit a commercial fisher from using for fishing or possessing on a vessel a trawl net that has been approved for use under regulation 71A.

We consider that the drafting of the new R71 is unnecessarily opaque. This arises primarily from the use of the phrase “in any other case” in R71(1)(b). We assume the new R71 is drafted to make the distinction between trawl nets that have mesh, and those that do not. Nets with mesh cannot be used if any of R71(1)(a)(i)-(iv) apply, unless approved under R71A. Nets without mesh are the subject of R71(1)(b) and cannot be used unless approved under R71A.

This drafting could give rise to the view that under R71(1)(b), all trawl nets must have approval under regulation R71A. Greater clarity should have been provided by using the phrase “in the case of a trawl net that does not include mesh” in place of “in any other case”.

Confirmation from MPI that this is the intent of R71 may be useful.

- R71A(1)(a) states that the applicant net may be approved if it performs “at least as well as a specified net”. Clarity is required around what constitutes “at least as well as” with reference to the matters set out in R71B and detailed in the Notice. This is discussed further in our submissions on the Notice.
- R71A(1) allows for the approval of a trawl net based on the following criteria:
  - (a) A performs at least as well as a specified net in providing for the utilisation of fisheries resources while ensuring sustainability (see regulation 71B); and
  - (b) the use of A is consistent with relevant fisheries plans approved under section 11A of the Act.

We consider it is appropriate in R71A(1)(a) to refer to the purpose of the *Fisheries Act 1996* (Act) as set out in s8. However, by setting out specific criteria in R71B, this risks unreasonably narrowing the scope of matters considered and elevating some specified matters that are a subset of the purpose statement.

The catch-all drafted as R71B(3) is an attempt to incorporate the broader concepts in s8. First, it is unclear what other matters the chief executive may consider relevant other than those relating to ensuring sustainability or [providing for] utilisation [of fisheries resources].

Second, R71(B)(3)(a) states that “matters relating to ensuring sustainability other than those described in subclause (2)” can be used in the comparison. The matters in subclause 2 are species composition, size comparison, impact on protected species, and impact on benthic species. This clearly infers that the matters listed are related to ensuring sustainability. There is no rationale to elevate species size or species composition as mandatory criteria and to consider that there are matters relating to ensuring sustainability. This is to misinterpret and misapply the purpose of the Act.

- R71A(1)(b) states that the trawl gear should be “consistent with relevant fisheries plans approved under section 11A of the Act”. We note that there is currently no approved inshore fisheries plan.
- R71B(2) sets out four mandatory considerations, but does not detail the required performance for approval. There is no statement of the required outcomes or performance measures for this comparison other than that the net performs “at least as well as”. While this may be appropriate for the Regulations, no further clarity is provided in the draft Notice. This being the case, we question the wisdom of including species size and species composition as mandatory considerations without knowing what constitutes “better” or “worse”. We elaborate on this point below.
- R71B(2)(a) species composition—we are unclear as to the rationale for including species composition as a comparison? If a new net is more selective in the range of species caught, is that “better” or “worse” and what is the perspective to be used—market value, ACE availability, ecosystem effects?
- R71B(2)(b) species size—again it is not clear what constitutes “better” or “worse”. Selecting smaller fish may have higher or lower market value, or may result in lower catching costs. Selecting larger fish may increase yield-per-recruit, may increase stock fecundity (or have little effect depending on the steepness

function). If an applicant must specify what constitutes “better” or “worse” based on their specific circumstances this undermines the need for this criterion as a mandatory consideration.

- R71B(2)(c) impact on protected species—it is simply not possible within the testing and trial duration of a new net to be definitive on the impact on protected species, particularly when interactions are rare. In many cases, there are a large number of related factors that determine the risk of capture. Most of which are not related in any way to the configuration of trawl gear.

Further, if one net performs better than another, is that sufficient reason to decline the application? Section 8 of the Act states that ensuring sustainability includes “avoiding, remedying or mitigating any adverse effects of fishing ...” and s9(a) states that decisionmakers must take into account the principle that “associated and dependent species should be maintained above a level that ensures their long-term viability”.

Case law provides some interpretation of these sections and it is clear from that, and the context of the Act, that effects on protected species are an holistic consideration; not one to be made on a case-by-case basis as is implied here for specific nets. Just because one net catches fewer protected species in a trial does not provide the justification for assuming that constitutes an adverse effect.

- R71B(2)(d) impact on benthic species—the same problem exists with this criterion. Unless there is appropriate testing within the full range of environments with appropriate controls on all variables, it will be unclear how the new gear compares with existing technology. As with protected species, there are numerous variables that determine benthic impact that are not related to trawl gear.

This consideration must also be made within the broader context of the Act and not on a case-by-case basis to consider whether one net is “better” or “worse”. Benthic impact, like impacts on protected species, must be made at the universal level. As a simple example, trawling up 10kg of coral may be trivial if that is 0.000001% of the biomass, but significant if it is 20%. Context is everything.

### Fisheries (Innovative Trawl Technologies) Notice 2017

- C4 states that vulnerable fish species are classified as meaning “sharks and rays and any other fish identified as vulnerable [by MPI].” There are several species of sharks, rays and elasmobranchs that are in the QMS and this Notice defines all of these species as vulnerable. It is conceivable that a net may be designed specifically to catch “vulnerable marine species”.

We consider it is incorrect to automatically assume that sharks and rays are vulnerable, some are very fecund and simply adopt a life history strategy that is closer to K-selected than r-selected. By producing fewer, but comparatively very well-developed young they ensure a far greater proportion recruit into the adult population (i.e. fully formed pups rather than eggs and sperm). This does not make them vulnerable species.

Reference to vulnerable fish species should be removed. Should this concept be maintained, we consider that no species or group should be assigned to it *a priori*. Rather, the Notice could make provision for consultation on a definition of, and criteria for identifying, vulnerable fish species.

- C5(2)(d) highlights the performance comparisons required but neither the Notice nor the attached Schedule detail the performance indicators required through the comparison process. As referred to above in the discussion on the Regulations, it is unclear how one would determine whether a treatment net performed “at least as well as” a control.

### Schedule

Applicants are required to obtain and provide information from the trials between net A and net B that must be statistically robust. We make the following observations about the Schedule.

- The presentation of consolidated results does not allow for variability between tows to be demonstrated. It is unclear whether the Notice is requiring this format to be used for all applications or whether applicants can use amended versions of this format that enable more appropriate and informative data to be provided.

### Species Composition

- Clause 1 on species composition requires clarification of the weight required and whether this mean the estimated weight or the landed weight?
- In line with the earlier comment regarding the definition of vulnerable fish species, 1C in the table should be removed or requires a more appropriate definition.

#### Size Composition

- Clause 2, Table 2B refers to “size deemed important for fisheries management purposes”. There is no definition for this and whilst the footnote relates to guidance published by the chief executive and available on the MPI website this is not provided for review. Further, it is unlikely that such sizes will be generic and will differ among species and regions.

It is also likely that economic considerations will be germane. Is MPI’s view of an important size related to minimum landing size or an economic landing size or influence on the stock biomass?

- Any guidance documents must deal with these issues as well as species without MLS and the distinction of what size is deemed important for QMS and non-QMS species.

#### Impact on protected species

- It is not clear what management issue is being addressed by this comparison. A clear objective and management approach to this comparison is required. What is the fundamental objective for comparison of for protected species captures?
- Protected species interactions are rare events with multiple factors that result in these interactions. This makes such interactions very difficult to compare. How is MPI anticipating an assessment of the extent of impact between the nets? It is important to be clear whether the comparison of the nets is a function of random variables or a function of the net. If a net includes any component of a net, it is unclear as to which component of a net contributes to the risk for protected species and how the change in a component can change the overall risk of the net.
- The comparison of protected species refers to captures not mortalities and it is unclear why the comparison does not reflect the difference between captures and mortalities.
- Any consideration of the effect on protected species requires a completely different inquiry and not one based on a series of isolated events. See above for comments in relation to R71B(2)(c).

#### Impact on benthic species

- It is not clear what management issue is being addressed is by this comparison. A clear objective and management approach to this comparison is required.
- Clause 4, Table 4A requires an estimate to be made for the area of seafloor contacted by the trawl gear per weight of QMS species caught. It is unclear what comparisons are being made with regards to the impact on the seafloor when using weight of species caught. For a given area swept, it is better or worse to catch more QMS species and vice versa? The weight of the target species caught is not indicative of the spatial impact of the seafloor of the effect of that benthic contact.
- Any consideration of the effect on benthic species requires a completely different inquiry and not one based on a series of isolated events. See above for comments in relation to R71B(2)(d).