

Chair
Cabinet Economic Growth and Infrastructure Committee

Fisheries (Aquaculture Compensation) Regulations 2012

Proposal

- 1 I propose that the Economic Growth and Infrastructure Committee agree to the drafting of regulations that are intended to promote development of the aquaculture industry while ensuring fair compensation to affected quota owners.

Executive Summary

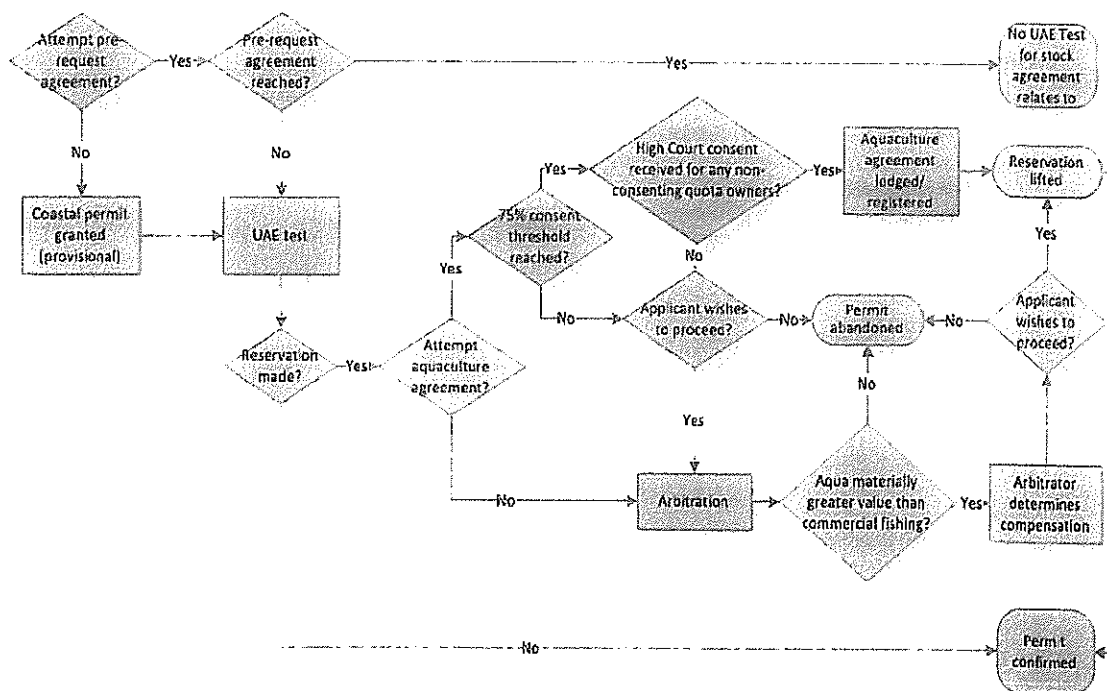
- 2 Aquaculture involves the occupation of coastal space which is authorised by a coastal permit (resource consent) granted under the Resource Management Act 1991.
- 3 As part of the approval process for a new marine farm, the Director-General of the Ministry for Primary Industries (MPI) is required by the Fisheries Act 1996 (the Act) to determine whether the proposed aquaculture activity will have an undue adverse effect (UAE) on fishing.
- 4 Where a UAE is found for recreational or customary fishing the aquaculture cannot proceed. Where a UAE is found for commercial fishing, the aquaculture applicant may negotiate a voluntary 'aquaculture agreement' with affected fishing quota owners to compensate them for the UAE.
- 5 The 2011 aquaculture reforms amended the Act to create an arbitration and compensation process that can be used when a UAE is found for commercial fishing and the coastal permit holder and quota owners have not reached an aquaculture agreement. The intent of the reforms is to provide for aquaculture development while protecting existing quota rights by ensuring that any loss of quota value is fairly compensated.
- 6 The Act requires an arbitrator to determine whether the aquaculture activity will be of materially greater value to New Zealand than the fishing that would be affected, before determining the value of compensation. The Act provides for regulations to be made to establish methodologies for determining the value of aquaculture and fishing, and for calculating compensation.
- 7 A semi-prescriptive approach is preferred for both parts of the arbitration. Analysis of the benefits and risks of the options indicates that a more flexible approach is appropriate for both methodologies. This will enable the arbitrator

- to account for uncertainties, caveats and limitations in the data and analysis presented by the parties. This will also result in some predictability for the parties involved, and provide some guidance to any negotiations prior to arbitration.
- 8 On the question of value, the preferred approach is to compare export revenues as a proxy measure of economic value. Officials are satisfied that using a proxy will allow for a simple cost effective approach to determining the value of fisheries and aquaculture for comparison, and that the best proxy would be export revenue generated from use of the affected water space.
 - 9 Export revenue is relatively simple to validate and is not as influenced by tax concerns or business structures as other options, such as profitability. In addition, there is an accepted correlation between revenue and contribution to Gross Domestic Product, as reflected in the Value Added Index. If the arbitrator is not satisfied with the extent and reliability of the data, they will be able to call for further evidence.
 - 10 A ratio of 5:1 is recommended to define when aquaculture is of materially greater economic value to New Zealand than fishing. There is no precedent to guide the methodology for determining materially greater economic value to New Zealand. I consider that a ratio of 5:1 is appropriate because it is a high enough threshold to provide a high level of certainty that the test of materially greater economic value has been met, even where there may be uncertainties in relation to data and analysis. At the same time it would not be so high as to act as a disincentive to aquaculture development.
 - 11 Quota price and ACE price are the preferred basis of determining the value of quota for the purpose of calculating compensation.
 - 12 Approval is sought for Parliamentary Counsel Office to be instructed to draft regulations in accordance with the policy set out in this paper.

Background

- 13 Aquaculture involves the occupation of coastal space and the use of marine farming structures, such as mussel longlines, salmon sea cages, and inter-tidal oyster racks, which may adversely affect fishing.
- 14 The Act requires that aquaculture proposals cannot proceed if the Director-General of MPI finds that the aquaculture activity would have an undue adverse effect (UAE) on commercial, customary, or recreational fishing.
- 15 Changes were made in 2004 to allow aquaculture to proceed when an UAE was found for commercial fishing, but only if the aquaculture applicant was able to reach a voluntary agreement with the affected fishing quota owners to compensate them.

- 16 As part of the 2011 aquaculture reforms, the Act was amended to allow arbitration to take place if an aquaculture applicant chose not to attempt to negotiate an agreement with quota owners, or an agreement was unable to be concluded. It is important to note that the aquaculture applicant is not required to attempt to negotiate an agreement with quota owners before requesting arbitration.
- 17 The Act requires an arbitrator to determine whether the aquaculture activity will be of materially greater value to New Zealand than the fishing that would be affected, before calculating the loss in value of affected quota due to the aquaculture activities. New section 186ZR of the Act provides for the creation of regulations that prescribe methodologies for determining economic value, and compensation to quota owners for the loss in value of affected quota.
- 18 The intent is to provide for aquaculture development while protecting existing quota rights by ensuring that any catch loss is fairly compensated. Certainty about protection of quota rights provides an important incentive for fishers to invest in fisheries and contribute to successful fisheries management. The diagram below shows where the arbitration process sits within the UAE process:



Comment

Parameters for arbitration

- 19 The Fisheries Act 1996 and the Arbitration Act 1996 both establish parameters for arbitration.

Fisheries Act

- 20 The Fisheries Act requires that methodologies be established for answering the question of economic value and determining compensation.
- 21 An arbitrator must determine the question of economic value based on data and analysis provided by the applicant and the affected quota holders, and must follow the methodology specified in regulations.
- 22 In determining compensation an arbitrator must follow the methodology set out in regulations. Compensation must be calculated based on the size of the affected quota holding and corresponding loss of quota value, and in proportion to the impact on fishing.

Arbitration Act

- 23 The Arbitration Act specifies general procedures, rules and powers that apply to arbitration in New Zealand.
- 24 Under the Arbitration Act an arbitrator may consolidate multi-party proceedings, determine the process for participation, including through submissions, set time limits for steps in the proceedings, and allocate costs (the Fisheries Act does not provide for allocation of arbitration costs except where the applicant decides not to proceed with the aquaculture proposal). It is expected that an arbitrator would require the applicant to pay the majority of arbitration costs.

The question of economic value to New Zealand

Proposal

- 25 I propose that an arbitrator's determination of economic value be based on a comparison of the export revenue that aquaculture and commercial fishing generate from the use of the affected water space. The approach would be semi-prescriptive in that if an arbitrator was not satisfied with the extent and reliability of the data and analysis provided, additional information may be sought.
- 26 For both commercial fishing and aquaculture, the export price used for each fishstock/species would be the product form that generates the highest total value of the relevant species (for example, headed and gutted or dressed). The product form export price per kilogram (kg) would be calculated by dividing the export value of each species by the export volume. This price would be converted to \$ received per greenweight kg using conversion factors notified under section 188 of the Fisheries Act. This step is necessary as commercial fishing catch loss and aquaculture productivity are both expressed in greenweight.

- 27 In the event that a conversion factor has not been notified for the product form of highest value an arbitrator is to use a whole product form, a similar conversion factor for a different fish species, or an alternative conversion factor as supplied by either party to the arbitration.
- 28 The relevant commercial revenue is that generated by fishing activity unable to proceed in the affected quota management area if the aquaculture proposal proceeds. The export revenue of the affected fishing would be calculated using the average annual catch loss in kg (as determined by the UAE test) of all commercially fished stocks in the affected quota management area, multiplied by the export price per greenweight kg for each affected fish stock.
- 29 The earnings from aquaculture would be estimated using production figures for one hectare of aquaculture space for each aquaculture species and the export price per greenweight kg for those species. Export price per greenweight kg would be multiplied by greenweight production per hectare (kg) and then by the number of productive hectares of the aquaculture space to derive the earnings of the marine farm.
- 30 All affected fish stocks would be considered in answering the question of economic value; however, compensation would only be paid for stocks subject to a UAE reservation.
- 31 The Act requires that data and analysis would be provided by the parties; the parties would be free to provide any revenue data that they consider to be relevant. If an arbitrator was not satisfied with the extent and reliability of the data and analysis provided by the parties they may seek additional information.

Analysis - Export revenue as a proxy measure of economic value

- 32 A comparison of export revenue approach is proposed as a proxy for answering the preliminary question of whether the proposed aquaculture activity, or fishing, is of materially greater economic value to New Zealand. This is a yes/no question.
- 33 The proxy measure is valid as it leads to the same yes or no answer that a full estimate of economic benefits would produce.
- 34 New Zealand Institute of Economic Research (NZIER) advice is that comparing the revenues from the two activities is the best way to proceed in determining which one produces more economic value. It is an easy figure to verify and is not as influenced by tax concerns or business structures. The other options considered but not recommended were comparing asset values and profitability. Revenue is preferred to compare the economic value of aquaculture and commercial fishing for the following reasons:
- i. revenue can be verified against other sources. Both aquaculture and fishing operation revenue can be verified by multiplying production by

- export price. In contrast, data on asset values, and information on enterprise-specific costs and profits is not readily available;
- ii. revenue avoids the variability of internal business decisions. Whether an aquaculture or fishing company is profitable may be a function of business decisions about investment, employee pay, or managerial discretion. Revenue as opposed to profit or taxable income, is less affected by those decisions;
 - iii. choices about business structures, to do with liability and tax, can affect asset values and profit. Revenue – aquaculture production and catch loss multiplied by export price - is less affected by these considerations; and
 - iv. focusing on revenue also brings in some of the wider economic benefits. Revenue is used to pay employees, cover debt, invest in capital, and return a profit to owners. It is also used to pay for the supplies and goods used in business which generate indirect impacts.

Materiality

- 35 On the question of what constitutes 'materially greater economic value' I propose that rather than leaving this decision to an arbitrator, a minimum ratio of 5:1 be set in the regulations. This would require an aquaculture proposal to deliver at least five times more economic value (determined by export revenue as a proxy for value) to New Zealand than would the commercial fishing lost in the affected area. This would prevent fishing being displaced by marginal aquaculture development and avoid undermining the value of quota.
- 36 There is no legal definition of "materially greater" but in my view a 5:1 ratio provides sufficient separation of value to be confident that the aquaculture proposal will contribute materially greater economic value to New Zealand. A 5:1 ratio also provides assurance that any uncertainty in the data used in the value calculation is taken into account.

Determining compensation

- 37 The Act provides for compensation to be calculated in proportion to the impact on fishing, including:
- i. loss of quota value;
 - ii. increased costs and consequential disruption costs, including solatium; and
 - iii. complementary uses.

Proposal

- 38 I propose that the compensation payable to affected quota owners would be calculated for each stock subject to a UAE by multiplying the percentage impact on the average annual commercial catch above the threshold (the output of the UAE test) by the quota value for each affected stock. The approach would be semi-prescriptive in that if an arbitrator was not satisfied

with the extent and reliability of the quota value data and analysis additional information may be sought.

- 39 Section 187ZR(3)(b) of the Act specifies that compensation be based on the size of the quota holding and the loss of quota value including by reference to recent transfers of quota or Annual Catch Entitlement (ACE). The regulations would specify that in order to assess quota value an arbitrator must consider published quota trade prices and/or ACE trade prices (with the appropriate discount factor applied).
- 40 Increased fishing costs are calculated as part of the UAE test, so are already incorporated in the impact figure produced by the UAE test. Consequential disruption costs and the solatium payment need to be calculated separately. I propose that the payment for consequential disruption and solatium be calculated using a fixed multiplier of 1.2. This constitutes a 10% payment for disruption costs and a further 10% payment for solatium, consistent with an international comparison conducted by Lincoln University.
- 41 The Act also requires an arbitrator to consider any proposals that the parties may submit for complementary use of the site. For example, they might agree to increase the space between mussel lines so that fishers can access the area or to develop one part of a large marine farm first, allowing the rest of the site to be fished until it is required for marine farm production. An arbitrator may adjust the compensation to take account of such agreements.
- 42 Given the variability of possible proposals for complementary uses, each would need to be assessed individually based on evidence presented.

Analysis of approach

- 43 Fixed, semi-prescriptive and fully flexible options in the regulations were considered for determining compensation.
- 44 Based on concerns raised in submissions, and advice from an independent arbitrator, the Ministry considers that the regulations should only be fixed to the extent needed to ensure that s186ZR(3)(b) is met.
- 45 There is limited benefit, however, in enabling additional evidence to be presented by individual quota owners on consequential disruption costs as Section 186ZQ(3) of the Act requires that the level of compensation must be the same for each quota share for each quota stock.
- 46 It is acknowledged that data and analysis is not robust for all fish stocks. A fixed approach would not support the arbitrator to make defensible decisions in the event that they were not satisfied that the data and analysis were reliable.
- 47 A fully flexible approach would likely require significantly more time for the arbitration process. This approach would reduce the certainty of process for all parties, which could lead to increased litigation.

Other options for determining quota value

- 48 Other options for establishing quota value considered, but not recommended, were export price and port price. Quota and ACE (NPV) prices are preferred because:
- i. quota and ACE prices are transparent, and certain; although in many cases the quota market is not liquid and ACE prices are the only means of deriving the quota values;
 - ii. quota and ACE data sets are readily available for fish stocks likely to be impacted by aquaculture development; and
 - iii. no specialist advice or treatment of the data will be required; this will help to minimise costs.

Consultation

- 49 Options for aspects of the arbitration and compensation methodology were consulted on between 24 August and 28 September 2011. To support this process the Ministry released a consultation document and questionnaire. Briefings were also provided to Aquaculture New Zealand, Seafood Industry Council (SeaFIC), Te Ohu Kaimoana (TOKM) and technical advisors to the Iwi Leaders Group.
- 50 Thirty submissions were received.
- 51 Six submissions were received from aquaculture stakeholders. Four of these supported comparing asset values when evaluating the economic value contribution of fishing and aquaculture activity to the wider economy. Three aquaculture submitters supported a prescriptive approach to determining compensation.
- 52 Sixteen submissions were received from commercial fishing stakeholders. SeaFIC and the majority of other commercial fishers (11) supported an approach to answering the question of value which enables the arbitrator to conduct a full economic analysis. SeaFIC and twelve other commercial fishing submitters supported a non-prescriptive and flexible approach to determining compensation, allowing an arbitrator full discretion to consider the best available information.
- 53 TOKM supported a semi-prescriptive approach to arbitration based on comparing asset values, but allowing additional information to be presented where there is low certainty associated with the available information; although TOKM noted this would not be warranted if the available data shows a large differential between the values of aquaculture and fishing.
- 54 The following departments were consulted on the contents of this paper: The Ministry for Economic Development (MED), the Ministry for the Environment (MfE), the Department of Conservation (DOC), the Ministry of Justice (Justice), Te Puni Kōkiri (TPK) and The Department of Prime Minister and Cabinet. The Treasury was informed of the paper.

- 55 Input was also received from the Arbitrators and Mediators Institute of New Zealand (AMINZ) and Dispute Resolution Services Ltd on arbitration procedure and from NZIER on valuation considerations.
- 56 Officials have engaged closely with technical advisors to the Iwi Aquaculture Leaders Group in the formulation of this proposal.

Financial Implications

- 57 The recommendations in this paper do not have any financial implications.

Human Rights

- 58 The proposals in this paper do not raise any issues in relation to the New Zealand Bill of Rights Act 1990 or the Human Rights Act 1993.

Legislative Implications

- 59 A regulation is required to implement this proposal.

Regulatory Impact Analysis

- 60 Regulatory Impact Analysis requirements apply to the proposals in this paper. A Regulatory Impact Statement (RIS) prepared by MPI is attached.
- 61 The MPI Regulatory and Standards Team has reviewed the RIS and associated supporting material, and considers that the information and analysis summarised in the RIS meets the quality assurance criteria.

Publicity

- 62 No publicity is planned for the introduction of these regulations.
- 63 Once approved, MPI will notify all interested parties through its website and provide additional guidance material to all interested parties.

Recommendations

64 I recommend that the Committee:

1. **Note** that as part of the approval process for a new marine farm, the Director-General of the Ministry for Primary Industries is required by the Fisheries Act 1996 to determine if the proposed aquaculture activity will have an undue adverse effect (UAE) on fishing;
2. **Note** that the recent aquaculture reforms amended the Fisheries Act 1996 to establish an arbitration and compensation process that can be used when a UAE is found for commercial fishing;
3. **Note** that the intent of the arbitration process is to allow aquaculture development to occur while ensuring that any catch and loss of quota value is fairly compensated;
4. **Note** section 186ZR of the Fisheries Act 1996 provides for the promulgation of regulations that prescribe methodologies for determining the economic value of fishing and aquaculture, and how any compensation to quota owners is to be calculated;
5. **Note** that in accordance with the Arbitration Act 1996, the approach taken by an arbitrator to determine economic value and compensation will be semi-prescriptive, in that if an arbitrator was not satisfied with the extent and reliability of the data and analysis available additional information may be sought;
6. **Agree** that regulations be made under section 186ZR that provide that:

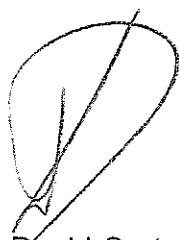
Determination of economic value

- 6.1. an arbitrator will be required to rely on the use of export revenue as a proxy measure for economic value when determining whether the proposed aquaculture activity, or fishing, is of materially greater economic value to New Zealand.
- 6.2. the export price to be used for each commercial fishing and aquaculture species is the export price of the product state that generates the highest export value for the relevant species;

- 6.3. the export price is to be converted to greenweight export price by dividing by, when available, conversion factors notified under section 188 of the Fisheries Act 1996;
- 6.4. an arbitrator is to use the whole product form, a similar conversion factor for a different fish species, or an alternative conversion factor as supplied by either party to the arbitration in the event that a conversion factor has not been notified;
- 6.5. the relevant fishing activity, when determining economic value, is to be the total fishing unable to proceed if the aquaculture proposal proceeds;
- 6.6. all the affected fish stocks are to be considered in answering the question of economic value; but that compensation is only to be paid for stocks subject to a UAE reservation;
- 6.7. the earnings from commercial fishing unable to proceed in the quota management area that would be affected by the proposed aquaculture is to be calculated using the average annual catch loss (as determined by the UAE test) of all fish stocks in the affected area, multiplied by the export price, expressed as \$ per greenweight kilogram, of each relevant species associated with each fish stock;
- 6.8. the earnings from aquaculture is to be calculated using production figures for one hectare of aquaculture space for each aquaculture species and the export prices, expressed as \$ per greenweight kilogram, for those species;
- 6.9. the export price per greenweight kilogram is to be multiplied by production per hectare and then the number of productive hectares of the aquaculture space to derive the earnings of the marine farm;
- 6.10. a ratio of 5:1 is to be set as the threshold level above which the value of aquaculture is deemed to have materially exceeded the value of fishing lost in the affected area;

Determination of compensation

- 6.11. the compensation payable to affected quota owners is to be calculated for each stock subject to a reservation by multiplying the percentage impact on the average annual commercial catch above the UAE threshold (the output of the UAE test) by the quota value for each stock;
 - 6.12. an arbitrator is to refer to published quota trade prices and/or the net present value of Annual Catch Entitlement (ACE) trade prices when assessing quota value;
 - 6.13. an arbitrator is to take account of submissions received and adjust the level of compensation to take account of any complementary use agreements reached between the consent holder and quota owners;
 - 6.14. any consequential disruption costs for any adjustments required as a result of the impact of aquaculture activities, including an additional solatium payment, is to be provided for by applying a 1.2 multiplier to the figure for loss of quota value;
7. **Agree** that the Parliamentary Council Office be instructed to draft regulations in accordance with the policy agreed to above; and
 8. **Authorise** the Minister for Primary Industries to take minor policy decisions that may change during drafting of regulations referred to in recommendation 7 above.



Hon David Carter
Minister for Primary Industries

21/6 /2012



Cabinet Economic Growth and Infrastructure Committee

EGI Min (12) 13/8

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Minute of Decision

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Fisheries (Aquaculture Compensation): Proposed Regulations

Portfolio: Primary Industries

On 27 June 2012, the Cabinet Economic Growth and Infrastructure Committee:

- 1 **noted** that as part of the approval process for a new marine farm, the Director-General of the Ministry for Primary Industries is required by the Fisheries Act 1996 to determine if the proposed aquaculture activity will have an undue adverse effect (UAE) on fishing;
- 2 **noted** that the recent aquaculture reforms amended the Fisheries Act 1996 to establish an arbitration and compensation process that can be used when a UAE is found for commercial fishing;
- 3 **noted** that the intent of the arbitration process is to allow aquaculture development to occur while ensuring that any catch and loss of quota value is fairly compensated;
- 4 **noted** that section 186ZR of the Fisheries Act 1996 provides for the promulgation of regulations that prescribe methodologies for determining the economic value of fishing and aquaculture, and how any compensation to quota owners is to be calculated;
- 5 **noted** that in accordance with the Arbitration Act 1996, the approach taken by an arbitrator to determine economic value and compensation will be semi-prescriptive, in that if an arbitrator was not satisfied with the extent and reliability of the data and analysis available, additional information may be sought;
- 6 **agreed** that regulations be made under section 186ZR of the Fisheries Act 1996 that provide that:

Determination of economic value

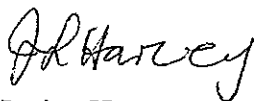
- 6.1 an arbitrator will be required to rely on the use of export revenue as a proxy measure for economic value when determining whether the proposed aquaculture activity, or fishing, is of materially greater economic value to New Zealand;
- 6.2 the export price to be used for each commercial fishing and aquaculture species is the export price of the product state that generates the highest export value for the relevant species;

- 6.3 the export price is to be converted to greenweight export price by dividing by, when available, conversion factors notified under section 188 of the Fisheries Act 1996;
- 6.4 an arbitrator is to use the whole product form, a similar conversion factor for a different fish species, or an alternative conversion factor as supplied by either party to the arbitration, in the event that a conversion factor has not been notified;
- 6.5 the relevant fishing activity, when determining economic value, is to be the total fishing unable to proceed if the aquaculture proposal proceeds;
- 6.6 all the affected fish stocks are to be considered in answering the question of economic value, but that compensation is only to be paid for stocks subject to a UAE reservation;
- 6.7 the earnings from commercial fishing unable to proceed in the quota management area that would be affected by the proposed aquaculture is to be calculated using the average annual catch loss (as determined by the UAE test) of all fish stocks in the affected area, multiplied by the export price, expressed as \$ per greenweight kilogram, of each relevant species associated with each fish stock;
- 6.8 the earnings from aquaculture is to be calculated using production figures for one hectare of aquaculture space for each aquaculture species and the export prices, expressed as \$ per greenweight kilogram, for those species;
- 6.9 the export price per greenweight kilogram is to be multiplied by production per hectare and then the number of productive hectares of the aquaculture space to derive the earnings of the marine farm;
- 6.10 a ratio of 5:1 is to be set as the threshold level above which the value of aquaculture is deemed to have materially exceeded the value of fishing lost in the affected area;

Determination of compensation

- 6.11 the compensation payable to affected quota owners is to be calculated for each stock subject to a reservation by multiplying the percentage impact on the average annual commercial catch above the UAE threshold (the output of the UAE test) by the quota value for each stock;
 - 6.12 an arbitrator is to refer to published quota trade prices and/or the net present value of Annual Catch Entitlement (ACE) trade prices when assessing quota value;
 - 6.13 an arbitrator is to take account of submissions received and adjust the level of compensation to take account of any complementary use agreements reached between the consent holder and quota owners;
 - 6.14 any consequential disruption costs for any adjustments required as a result of the impact of aquaculture activities, including an additional solatium payment, is to be provided for by applying a 1.2 multiplier to the figure for loss of quota value;
- 7 **invited** the Minister for Primary Industries to issue drafting instructions to the Parliamentary Council Office to draft regulations to give effect to the above paragraphs;

8 **authorised** the Minister for Primary Industries to take minor policy decisions that arise during the drafting process.



Janine Harvey
Committee Secretary

Reference: EGI (12) 122

