Dr Neil Bass



Independent Review of Aquaculture Licensing c/o Deidre Morgan, Secretary, Independent Review Group Department of Agriculture, Food and the Marine National Seafood Centre Clonakilty P85 TX47 County Cork

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Submission to the Review Group on Aquaculture Licensing

Section1.
Background

I have worked in the Irish finfish farming industry for some 40 years. Prior to this, I was involved with finfish, prawn, other invertebrate culture and aeration system development in the UK, both as part of my PhD studies and in my early employment. I moved to Ireland in 1978.

As far as I am aware I produced the first Environmental Impact Statement (EIS) for a salmon farm licence application in Ireland in 1989-1990 when working for the ESB subsidiary Salmara Fisheries. I was a member of the Sea Trout Working Group from 1992 until its demise. Since ESB's divestment of Salmara in 1994, I have worked as an environmental and aquaculture consultant, trading as *Watermark aqua-environmental*. To my knowledge, I am responsible for the majority of the finfish farm EIS's and licence applications submitted to DAFM since 2005. Since 2006 I have been involved in the development of dispersional modelling methodologies with RPS Group Consulting Engineers Belfast, as an aid to the objective assessment of the environmental and ecological impacts of salmon farms on a bay by bay basis, including the potential for sea lice impacts in the two-way relationship between farmed and wild-origin salmon stocks. Such models are now employed in every EIS compiled by Watermark.

I submit that my background and long experience in the aquaculture sector leave me well-qualified to make a submission to the Review Group.

Section 2. Introduction.

I welcome the establishment of the Review Group. Frankly it is about time. The issue of licensing has probably been the greatest obstacle to the rational and sustainable development of the Irish aquaculture (and processing) sector over the last two decades. Had the industry been more mature, wealthier and more powerful, the behaviour of successive governments in requiring aquaculture to be licensed but not delivering an effective licensing system and administration would have been rigorously tested through the courts years ago.

It is notable that, whilst the Department has been very slow indeed to licence sites over the last decade or more, it has radically increased compliance activities over the same period. Whilst compliance is obviously necessary and desirable, the level of activity has affected some farmers who have already found it difficult enough to maintain viability when faced with no means of expansion or variation in their business model as a result of the effective licensing embargo.

There are of course reasons for the licensing chaos that now exists but they most certainly do not lie with the aquaculture sector. My personal view is that inept, or at worst, deliberately obstructive administration are the cause. The failure of government to implement the Habitats and Birds Directives in a timely manner invoked the wrath of Europe, culminating in the ECJ judgement against Ireland of December 2007. Reading between the lines. I believe it likely that this resulted in very poor relationships between personnel in successive administrations and EU departments, in particular in DG Mara and DG Environment. For Irish aquaculture regulation at least, this has led to nothing but delay upon delay and a deliberate strategy of total opacity in the administration of the licensing process. I believe that it has also caused overcompensation and delay in all government policy associated with national environmental monitoring and assessment ever since. Whether my suspicions are accurate or not, the overriding consequence of the current state of affairs is an anti-competitive atmosphere for the development of Irish aquaculture, totally at odds with stated European and (astonishingly) Irish Government policy and aspirations. This has allowed other European states to stride ahead of us, with perfectly workable licensing and regulatory systems that are fairer and far simpler to administer and regulate than what we have been saddled with in Ireland.

However, whilst I strongly blame Government and its civil service for the circumstances in which the Irish aquaculture finds itself, there is no doubt that the challenges faced by the industry have caused it to greatly enhance its knowledge and expertise in its efforts to satisfy the apparent needs of the licensing and compliance system. Coupled with the hydrographic conditions along Ireland's seaboard, this now offers a good springboard for the development of a sustainable industry, given an adequate licensing system. However, in order to avoid the consequences of over-intensification from which, in my view at least, Norway and Chile (amongst others) suffer, part of the review group remit should be to examine carefully with government how the Irish industry should be distributed, where and how operators of small, outdated, or inshore sites should be encouraged to move to more offshore locations and what the limits on total production Bay by bay catchment budgeting and dispersional modelling will be invaluable tools in making such assessments. My personal view is that, in the case of salmon farming, a well dispersed national industry, producing and maximum total of, say, 50,000 tonnes pa (similar to the production in much smaller aquaculture areas such as the Shetlands or the Faeroes) would be a reasonable long-term objective¹. IMTA should be carefully considered as an element of a sustainable, national aquaculture industry.

Note that current production is probably heading towards 15,000 tonnes pa; production in the past, albeit including the use of many inshore sites which I would be inclined to replace with fewer, larger "offshore" sites, peaked at about 23,000 tonnes around 2002- 2003.

Before proposing a list of requirements for a revised licensing system, I wish to make a plea that the review group avoids the trap of considering Ireland's future aquaculture and licensing needs largely in the context of global high-volume producers such as Norway, Chile and Scotland. In my opinion, the Irish model as now practised, (and going forward, to include licence applications currently with the Department), using relatively few, large, well dispersed, relatively offshore sites, with low stocking densities (mainly under organic regulations) and in very hydroactive conditions offers a very different environmental profile to that offered in other nations' industries. For example, in Norway production can be very intensive indeed in limited areas, such as Hardangerfjord, where annual production is over 70,000 tonnes. Overintensification of farming east of Chiloe Island in the Los Lagos region of Chile has led to more than one major production catastrophe in the last decade or so. Such examples are largely the result of widely different socioeconomic conditions and drivers than those that apply in Ireland. Irish aquaculture should largely be assessed on its own merits, taking advantage of the tools and databases that have been developed in the indigenous industry in recent years.

Section 3.

Proposals for the new licence format and its administration.

3.1. "EIA scoping"

It is my understanding that there is currently a departmental "verbal" policy in place, originating I believe from the late 1990's, which requires licence applications to be preceded by an "EIA public scoping letter", in which all parties deemed to be concerned are contacted by the use of an department-approved letter from the potential applicant, describing the proposal in outline and seeking views. As far as I am aware, this requirement is not in legislation or part of a written departmental protocol. It has nonetheless been part of the majority of salmon farm applications as a departmental requirement since its introduction. Where used, all scoping responses are returned to the department and copied by them to the applicant, to be analysed and included in the EIS, attached to the application. Bearing in mind the degree of consultation involved in the licensing process post application and the lack of precedents in other licence application processes, it is felt that this is an unnecessary procedure, which, in all events should be clarified and, preferably, scrapped.

3.2. Confirmation of parties to an application

Parity is requested to planning law, where observers (i.e. objectors or supporters) of the licence application state their interest at the outset of the application process and remain party to the process even through any appeals phase, to the post-appeal decision. This differs from current aquaculture licensing regulations, where new parties to the application can enter the process at any stage. The former process is considered be a more constructive approach because it discourages or avoids the rallying of huge numbers of objections or appeals, frequently using template letters, late in the process which, in consequence, must all be processed by the department, which is obviously a time-consuming process. As in planning law, it would be reasonable for each party to an application to pay a small fee to the Department (€20 for each standard planning objection).

3.3. Decision timeline

No business could survive the time taken to reach a licence decision under the present aquaculture licensing scheme which, in the case of one salmon farm application, now exceeds 11 years without decision. It is requested that an equity be achieved between the time it takes to licence aquaculture operations and other "polluting" businesses. A guaranteed timescale from application to Minister's decision in the region of 1 year is requested. In particular, reasonable time limits should be put on steps for which the regulator is responsible. These are completely absent in the present licence processing procedure, where only the steps by the applicant, consultation parties, appellants and ALAB have time limits (extendable for communication of given reasons in writing in the case of ALAB).

The timeline could be shortened considerably if the licensing process returned to the use of simultaneous public and statutory consultation periods from the present consecutive periods.

To my knowledge, the only finfish licence application to progress to a Ministerial decision since about 2004 (under appeal at the date of this submission) is the application for a site at Shot Head, Bantry Bay, number T5/555. experience with this application is that a very considerable time elapsed between first submission and publication for public and statutory consultation, apparently due to a lengthy period of "internal consultation" within the department, of which no details were supplied to the applicant. Despite the time taken, no changes were required in the application or the EIS documentation before they were published for statutory and public consultation. The two consultation processes ran consecutively rather than simultaneously. Following consultation and responses from the applicant, the EIS document was subjected to thorough review and a written report by the MI. A further full review and written report of the EIS followed, termed an EIA, by a committee chaired by Dr Aengus Parsons, now Director of Research NUIG. These documents showed broad similarities but only a small number of relatively minor issues were raised (in MI report) which were deemed to require provision of additional information by the applicant. Even following this level of assessment of the application and EIS document, it has been examined and reported on yet again, in its entirety, on the instruction of ALAB, by its technical advisor, during the appeals process. Inevitably this entire, repetitive process, involving consideration of 700 pages or more of applicant documentation must have contributed considerably to the time taken to process this application to its current stage (some six years). It is submitted that such repetition cannot possibly be regarded as a necessary component of a rational licensing procedure.

3.4. Transparency with regard to progress of applications

The total opacity in respect of reporting progress of licence applications seems to indicate a total lack of concern for normal business deadlines within the licensing body. To address this, it is requested that the revised regulations provide for the appointment of a specific case officer for each licence application, with the stated objective of providing fully transparent communication regarding application progress and to consider the concerns of applicants.

3.5. Licence tenure.

Current aquaculture licence tenure is normally ten years. This is really of the order of only three full production cycles in the case of salmon farming, which offers little security for the funding and development of a viable business. This has few precedents in the licensing of other types of business. It is requested that aquaculture licences should be extended to a minimum period of at least 20 years to provide greater security of tenure and so that licences are more eligible for use as collateral to raise equity and working capital.

3.6. Licensed production parameters.

The example given here is for marine finfish but should be adaptable for shellfish. As things currently stand, the licensed production parameter is highly variable from licence to licence, varying from annual number of smolts stocked to harvest tonnage. International best practice uses Maximum Allowable Biomass (MAB) on site at any time as the most appropriate primary regulatory production parameter for an aquaculture licence, because this determines the maximum impact of the operation on the environment, in terms of nutrients, BOD, solutes, solids and medication discharges and oxygen consumption. MAB is the controlling parameter in both Scottish and Norwegian licences and its use here would put the Irish industry on an even footing. Use of this licence parameter was recommended in the 2006 Government-sponsored report Steering a new Course for a Restructured, Sustainable and Profitable Irish Seafood Industry 2007-201.

3.7. Licence renewals and new licence determinations

Licence renewal of finfish farms currently requires a new EIA / EIS, in spite of the fact that licensed operations are closely and regularly monitored under their licence terms and written, government-issued protocols. It is submitted that such time-series empirical datasets are far more informative than the snapshot and projections that are provided by an EIA/EIS. It is therefore requested that licence renewals should proceed on the basis of the results of regular statutory monitoring and that a new EIA / EIS should not be required. Much the same should hold where minor changes in licence terms are required. Where the results of the statutory monitoring record are satisfactory, the need for a new EIA / EIS is questioned.

3.8. Separation of licensing and compliance duties in the Department

It is submitted that the Government's stated objectives for growth in aquaculture (which are in line with published EU policy) will not be realised without a greater Departmental focus on improving the aquaculture licensing process for operators in this country. However the licensing body's time and resources are currently heavily focussed on compliance. The growth targets already published in government and executive agency documentation can only possibly be achieved by the streamlining of the licensing process and its separation from the Department's compliance functions. Again this was a recommendation of the Government-sponsored 2006 report Steering a new Course for a Restructured,

Sustainable and Profitable Irish Seafood Industry 2007-2013 and was also included in the Draft Licence Template proposed by the Department itself in 2010. It is therefore requested that the licensing and compliance functions within the Department be separated and that a dedicated team is appointed from within the Department's licensing authority, which has a specific remit of achieving the streamlining of the licensing process.

3.9. Appropriate Expertise

Aquaculture is a biological business. It is therefore submitted that the licence application process should have significantly more input from in-house biologists. Issues related to fish husbandry, fish health and the marine ecosystem require the expertise of marine biology experts, employed within the licensing division, rather than in a separate agency (i.e. the Marine Institute). This is not currently the case and there can be no doubt whatever that the AFMD team in Clonakilty struggle with the biological concepts involved in the area which they are tasked to regulate. Certainly the same cannot be said of the regulatory bodies in other aquaculture countries such as Scotland and Norway or even Chile, all of whom I have been in contact with on occasion. One result of the current Irish circumstance is that DAFM's Marine Engineering Division (MED) is often tasked with a disproportionate level of responsibility for licence review and adjudication in areas where it has no relevant expertise. The MED can be expected to have an increasing role in the regulation and compliance of marine structures and other structural, physical and engineering-related issues going forward, following the issuing of the Protocol for the Structural Design of Marine Finfish Farms in April 2016. This makes it even more necessary for there to be a greater allocation of appropriate expertise in the areas of biology, marine biology and fish health management, in the licensing division in order that licence applications and reviews can be processed in a timely manner.

3.10. Protocol No. 4 for Offshore Finfish Farms. Audit of Operations.

This is one of number of protocols associated with a finfish aquaculture licence, which is intended to provide for an integrated assessment of finfish farms, based on a number of key monitoring programs, so as to enable DAFM to:_

- Establish licence compliance.
- Inform decisions on increased farm production proposals.
- Advise farm operators of changes in environmental parameters or other factors which need to be taken into account in their operations.
- Make information from monitoring programmes readily available to interested parties and the public as required.

However, it submitted that this protocol has never been fully implemented. The only direct audit of operations currently carried out is the annual finfish farm survey by MED. Whilst sea lice data monitoring and fish health and food safety monitoring are also carried out (under other protocols), there are currently no other audits of operations as described in Protocol No. 4.

It is requested that other audits of operations with clearly measurable compliance indicators contained in the Protocol are carried out for the advice of stakeholders such as customers, NGO's and independent certification bodies.

3.11. Protocol for structural design of marine fish farms.

This is a new protocol, first issued in April 2016, that has yet to be used as part of the grant of an aquaculture licence. As all protocols, it is subject to revision, for example if new licensing regulations are issued by the Review Group. The protocol requires that only draft installation drawings are required, as guidance and as a basis of calculation in the EIS submission and that detailed drawings and specifications will only be required post-grant of a licence. In this case, specification requirements must be checked against a range of hydrographic and climate conditions specified in the protocol that will apply at the site. The completed, detailed specification must then be certified by a suitably qualified, government / MED Approved Person who will advise MED accordingly. It will not be until after this certification has been accepted by MED that the deployment of the specified installation will be permitted. However at present, whilst the time required for specification, modelling and certification are largely in the hands of the licence applicant, there is no time limit set by which point MED must approve the installation certification and allow deployment proceed. This is another potential road block, in this case with the potential to further delay the installation and operation of a site, for which a licence has already been granted. Since it is the Approved Person's role is to advise DAFM/MED of the structural security of the proposed installation, there would seem to be little requirement for further deliberation by MED prior to installation.

It is therefore requested that the Protocol be appended to the new licence format, along with other relevant protocols, for cross-referencing in the licence document and that a reasonable time limit is put in place by which time MED must approve the certified installation, or not approve it, with reasons.

3.12. Is the primary legislation adequate?

It is submitted that the primary legislation covering aquaculture is fit for purpose and that the implementation of recommendations for the streamlining and modernising of the licensing process can readily be brought into law alongside existing primary legislation via the enactment of an appropriate statutory instrument. It is therefore suggested that the statutory instrument route is employed to implement acceptable licensing recommendations and that there is no need for significant redrafting of primary aquaculture legislation.

Dr Neil Bass February 2017.