



NUI Galway
OÉ Gaillimh

MOREFISH

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Submission to the Independent Aquaculture Licence Review Group

As an independent stakeholder with a direct interest in the sustainable development of the Irish aquaculture sector we welcome the establishment by Minister Michael Creed TD of the independent review group on licencing. The issue of licensing has been the greatest obstacle and impediment to the development of jobs and exports from seafood, coastal areas and the fish processing sector in Ireland for two decades now.

MOREFISH is a Dept. of Agriculture, Food and the Marine (DAFM), multidisciplinary aquaculture project that develops and tests new innovative technologies and novel processes to significantly improve production management and efficiencies at inland aquaculture sites. The project brings together a critical mass of engineering and scientific expertise, industry stakeholders and policy-makers, commercial operators and international experts to respond directly to pressing technical and policy gaps identified by this DAFM call that cites sustainable aquaculture as a priority with particular relevance to management and alleviation of finfish diseases through development of novel innovations. Specifically, MOREFISH targets the development of beyond-state-of-the-art approaches that will increase fish biomass yields, productivity and stocking densities, mitigate contamination and cross-infection, and reduce production costs and waste.

Having worked closely with the freshwater aquaculture sector over the past two years we have the following observations to make:

1. Production Parameter

Fish stocking parameters for aquaculture licences are contrary to industry best practice. They are also highly variable from licence to licence and vary from number of smolts stocked per year to annual harvest tonnage. Neither metric takes any account of the variable nature of animal husbandry where fish grow and develop to varying degrees over varying timeframes.

International best practice uses Maximum Allowable Biomass (MAB) on the site at any point in time as the most appropriate primary regulatory production parameter of an aquaculture licence, because this determines the maximum impact of the operation on the environment, in terms of nutrients, BOD, solutes and solids outputs and oxygen consumption. –MAB is the controlling parameter in both Scottish and Norwegian licences and puts the Irish industry on an even footing.

The Government sponsored 2006 report *Steering a new Course for a Restructured, Sustainable and Profitable Irish Seafood Industry 2007-2013* made a similar recommendation, *“The stocking conditions of all marine salmonid aquaculture licenses should be regularised such that limitations are placed on standing stock only,.....”*

It is requested that finfish production should be only be managed and defined according to the Maximum Allowable Biomass (MAB) on site at any given time in the production cycle.

On 27th January 2017 the MOREFISH programme hosted a workshop for the freshwater aquaculture industry in the Athlone Institute of Technology campus and, as part of this workshop, an invited industry expert and academic from the Danish Technical University presented an overview of the Danish Trout Industry [Per Bovbjerg Pedersen].

Per Bovbjerg Pedersen outlined in his presentation the progressive approach of the Danish regulatory agencies in facilitating trial periods for new technology evaluations, and setting the conditions for proactive appraisal & incentivising the industry to look at ways of reducing the environmental impacts of fish farms, whilst also making the industry sustainable and financially viable going forward.

The result of this approach is that almost 50% of the Danish freshwater production is now utilising technologies assessed during the trialling periods set up by the Ministry of Environment and Food of Denmark, meaning that the damming of rivers is no longer required (-in line with the Water Framework Directive goals), generating a 93% reduction in the discharge of organic matter, 76% reduction in the discharge of Phosphorus & 50% reduction in the discharge of Nitrogen.

Under new legislation Danish fish farming is now regulated on discharge rather than feed use meaning that a farm has no limitations on production volumes – effectively decoupling the discharge volumes from production quotas. This in effect means that there is a real incentive for fish farmers to invest in technologies to limit their discharge values and give the wherewithal for businesses to grow and plan for a sustainable and profitable future.

2. Licence Format.

The department has issued a number of written protocols over the years, which govern a variety of operating activities including Benthic Monitoring, Water Column Monitoring, Pest Control / Sea lice monitoring, Fallowing and Structural Design and site layout. —Although the Benthic monitoring protocol was revised in 2008 and the Engineering protocol was published in 2016 the majority of these have not been revised since 2000, despite advances in international best practice.

Licences are too descriptive and may have become outdated over time. Protocols should be separate to the legally-binding licence document, and instead attached to the licence as referenced appendices, giving the licensing authority the freedom to up-date them, as and when required. As with many other licensed industry operations, aquaculture licences should cross reference the protocols and regulations in the licence but not make those parameters part of the legal licence document.

In line with FoodWise 2025 there is trajectory to strategically grow and develop agri-food sector encompassing aquaculture by 85% in exports to €19 billion. However, there is a dual need to ensure environmental protection and to mitigate decline in biodiversity. Aquaculture is currently disadvantaged as it has not conducted a risk assessment of effluents, which appears to be a pivot point to inform sustainable intensification moving forward.

It is requested that an aquaculture licence comprise only the legally binding content, based on a simple template, to which conditions and protocols are annexed such that they can be managed and updated in a more dynamic way. It is also requested that the composition of aquaculture effluent should be risk assessed for appropriateness and frequency of sampling, which reflects the need to determine farms of good water quality status, as framed by WFD 2027. This risk assessment should also comprise add-on platform features to reflect emerging issues including climate change and enable integration of existing (such as www.catchments.ie) and new information using predictive and simulative models to inform decision making and policy.

3. Tenure.

Tenure should be such as to provide regulatory certainty to investors as well as a sufficient planning horizon for operators to prepare viable business plans. The tenure of operating licences in many other industries are infinite and maintained on the basis of adherence to identifiable parameters with clearly defined scenarios which might trigger a licence revocation. This approach was recommended by the 2006 Government-sponsored report: *“Steering a new Course for a restructured, sustainable and profitable Irish seafood industry 2007-2013”*. It recommended that *“aquaculture licences should be extended to a minimum period of 20 years to provide greater security of tenure and so that licences can be used as collateral to raise equity and working capital. This should be done by adopting this policy for new licences being issued and by changing the licence duration as existing licences come up for renewal.”*

It is requested that aquaculture licences are provided for a period of at least 20 years, with the powers of revocation clearly defined and understood.

If aquaculture was placed in the same context as other food products within the Department of Agriculture, Food and Marine and new licence processes put in place it would generally boost the confidence of the sector – which can be a leading export sector.

With a correct and fit for purpose process, all opinions can and should be heard and the gradual build-up of consensus and precedent over time should lead to quicker decisions having answered questions and developed policies in a systematic way.

In summary our belief is that the aquaculture sector needs a new, efficient, evidence based licencing system that has:

- Definite timelines – where licences could be automatically granted if deadlines are missed by official bodies
- A clear and transparent licencing application process which is streamlined and cost-effective for both official bodies and the industry. For example Environmental Impact Statements are both very necessary but can be onerous for industry. There may be opportunities to help the industry in developing such systems that drive sustainability.
- A minimum of a 20 year licence
- Renewals of licences based on good standing, adherence to licence conditions and monitoring results (i.e. a strong evidence base to support licence renewal)
- Enables fish farmers to seek funding from the EMFF for updating technology and equipment
- More transparency in the process for farmers and objectors alike and fora for consultation between stakeholders

These are just some of this issues we believe should be addressed. It is acknowledged government and EU policy is striving to develop this sector and we believe this consultation could be an important step into developing a healthy, high-value and export driven sector with excellent employment opportunities. Please do not hesitate to contact us for further input.

Yours Sincerely,

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