1. Do you have any general views on the current state of the farmed salmon industry in Scotland?
The Scottish salmon farming industry is active in many remote communities in the west coast and islands. The industry supports 10,340 jobs in Scotland, providing earnings of £270M per annum. Many of these jobs are helping to support sustainable rural communities by providing year-round stable employment. This in turn helps to keep rural schools, post offices, shops and community halls open. The industry has faced new environmental challenges recently but has taken proactive measures to meet them.

2. There have been several recent reports which suggest how the farmed salmon industry might be developed. Do you have any views on action that might be taken to help the sector grow in the future?
The Scottish Government has taken valuable steps to support the industry in meeting its growth goals. The establishment of the Scottish Aquaculture Innovation Centre has helped to stimulate the development of new tools and procedures to assist the industry tackle challenges which act as bottlenecks to further sustainable expansion. The development of the new Depomod model is also to be welcomed and should allow better accuracy in modelling the impact of farms.

The regulation surrounding the development of new sites is tough and should remain so, however the number of licences required to establish a salmon farm, does not help to support a holistic approach to salmon farming. Currently to operate a salmon farm the following licences are required:

- Crown Estate Lease (Crown Estate)
- Planning Permission (Local authority)
- CAR licence (SEPA)
- Marine Licence (Marine Scotland)
- Aquaculture Production Business Licence (Marine Scotland)

It is our belief that these licences could and should be combined into no more than 2 documents, controlled by no more than two bodies. It is particularly important that medicine usage and sea lice control are covered by the one licence to provide a well-rounded approach to the issue of minimising both in a sustainable manner.

3. The farmed salmon industry is currently managing a range of fish health and environmental challenges. Do you have any views on how these might be addressed?
Rising seawater temperatures and the emergence of new diseases such as Amoebic Gill Disease have challenged the industry recently. This together with reduced sensitivity to sea lice medicines has made it harder to control sea lice numbers. These challenges have led to considerable investment and innovation within the industry as it has had to find new solutions to both old and new problems.

Grieg has cut production and increased fallow periods (the length of time sites remain empty after harvesting the fish prior to restocking) to allow us to get on top of these challenges in as short a timeframe as possible. We have cut our harvest biomass from a peak of 19,723 tonnes in 2015 to a low of 12,055 tonnes in 2017. We plan to harvest a similar amount in 2018. This is a proactive, sustainable and pragmatic approach to these challenges.

We have invested in the following control methods to help maximise survival:

- More demanding Farm Management agreements with other neighbouring operators, placing an emphasis on synchronous fallowing and close working cooperation
- Sea lice skirts, these are tarpaulins which surround the top 6 meters of the salmon pens and help to prevent the planktonic stage of the sea lice from encountering and settling on our salmon
- Cleanerfish programme, we are culturing lumpsuckers (*Cyclopterus lumpus*) which eat the lice from our salmon. Going forward we plan to stock lumpsuckers on all our sites. We are not using wild caught cleanerfish.
- Aeration systems, these are designed to draw deep water up to the surface in our net pens. This system can help to keep algae and jellyfish, as well as planktonic sea lice, away from our salmon. This will reduce sea lice infection rates and improve the gill health of our salmon
- Freshwater treatments for sea lice, Grieg Seafood have the capacity to treat our fish with freshwater. This is effective at controlling Amoebic Gill Disease (AGD) and sea lice. It also reduces our reliance on sea lice medicines.

While these changes, many of which have been introduced at a commercial scale in the last year, still need time to fully demonstrate their effectiveness, we are very encouraged by early results. At the end of March 2018 Grieg Seafood’s total salmon lice numbers per fish were reduced by 83% when compared to the figures for the end of March 2017. Adult female salmon louse numbers were reduced by 87% on the previous year.

4. Do you feel that the current national collection of data on salmon operations and fish health and related matters is adequate?
Grieg Seafood are supportive of data collection on salmon farming. We provide data as requested by the regulating authorities and accept that informed public scrutiny can help to drive performance improvement within our industry. It is however worth noting that data collection is time consuming and comes at a cost. We would
therefore ask that any data collection is done with a specific aim in mind and in as efficient a manner as possible. While Grieg Seafood are not currently a member of SSPO, we remain committed to supplying data relating to sea lice levels and salmon survival to SSPO, to allow them to publish data relating to the Scottish salmon farming industry as a whole.

5. Do you have any views on whether the regulatory regime which applies to the farmed salmon industry is sufficiently robust?
As previously stated under point two, Scottish regulation of the salmon farming sector is very robust as it should be. We would however wish to see a more holistic approach to regulation which could be promoted by combining a number of the required licences to promote more joined up regulation.

6. Do you have any comments on how the UK’s departure from the European Union might impact on the farmed salmon sector?
Scottish salmon is the UK’s largest food export with an export value of £600M in 2017. The value grew by 35% compared with 2016. Industries such as salmon farming, which can help address the trade deficit will become even more important to the UK post-Brexit. There is a strong demand for Scottish salmon and while free-trade with the EU would be beneficial we are confident that there will be a strong market for our product whatever the eventual terms of Brexit may be. About 20% of Grieg Seafood Shetland's employees are EU nationals. They are not seasonal workers but are long-term valued members of our workforce and communities in rural Scotland. We wish to see their right to remain protected.

Grieg Seafood Shetland Ltd
April 2018