Final Business and Regulatory Impact Assessment

Title of Proposal
The Specified Crustaceans (Prohibition on Landing, Sale and Carriage) (Scotland) Order 2017

Purpose and intended effect

- **Background**
  Edible crab, velvet crab and lobster are important to Scotland's rural economy, with commercial landings of these species into Scotland worth £35.3 million in 2016. Scottish vessels were responsible for 93% of landings by value (£32.9 million).

  Crab and lobster are primarily caught using static gear, commonly known as creels. These are baited traps placed on the seabed and left to 'soak' for a period of time before being recovered. The Scottish static gear fishing fleet currently consists of approx. 1,400 active vessels around the coast.

  Stock assessments by Marine Scotland Science have reported that edible crab, velvet crab and lobster are being fished at levels close to or above the F_{MSY} proxy (the fishing mortality consistent with the largest average yield that can continuously be taken from a stock under existing environmental conditions). Their management advice is that reducing the level of fishing mortality could result in a higher yield and biomass for these stocks in the long term.

  In recent years the static gear sector of the fishing industry has expressed increasing concern for the health of the crab and lobster fisheries. Fishing associations and individual fishermen have made representations to Marine Scotland, through the network of Regional Inshore Fisheries Groups (RIFGs) and the Inshore Fisheries Management and Conservation (IFMAC) stakeholder group, calling for the introduction of new management measures.

  <u>Current regulatory framework</u>
  Edible crab, velvet crab and lobster are not covered by a quota set by the EU as a Total Allowable Catch (TAC). The main harvest controls on fishing for these species within Scottish waters are:

  - Controls on the landing of specified animals (e.g. undersized shellfish), with regulations set at either an EU or national level.
  - Limits on the number of commercial vessels permitted to target the fishery (vessels must have a shellfish entitlement attached to their licence).
  - Seasonal and permanent closures on static gear fishing activity in specified areas of the Scottish coast.

  <u>Local management</u>
  Local management of crab and lobster fisheries is in place in the Scottish islands:

- The Shetland Shellfish Management Organisation (SSMO) has powers through a Regulating Order to manage the shellfish fisheries in Shetland's inshore waters (0-6 nautical miles from the coast).

- In the Outer Hebrides and Orkney, localised landing controls for crab and lobster have been in force since 2015 and 2016 respectively. These controls were developed by the Regional Inshore Fisheries Groups (RIFG) for these areas as part of their fisheries management plans, and were introduced following public consultation by Marine Scotland

- **Objective**
  The objective of the legislation is to introduce management measures for Scotland's crab and lobster fisheries that can help to reduce fishing mortality and increase the long-term average yield of the stocks, therefore improving their sustainability.

- **Rationale for Government intervention**
  The Inshore Fisheries Strategy 2015 outlines the Scottish Government's vision of a more sustainable and profitable inshore fisheries sector, which includes effectively managing key commercial stocks that are at risk of overexploitation.

  By introducing new landing controls for crab and lobster that can help to reduce fishing mortality and increase the long-term average yield, the Scottish Government will be contributing positively to the management and economic returns of these fisheries.

  This will contribute to the Scottish Government's National Performance Framework objective of valuing and enjoying our built and natural environment and protecting it and enhancing it for future generations.

  In the absence of Government intervention, Scotland's crab and lobster stocks (which are a public resource) could decline as high fishing mortality reduces the spawning stock biomass. This could reduce the potential yield and economic returns of these fisheries in the long term.

Consultation

- **Within Government**
  Discussions took place between Marine Scotland Compliance, Marine Scotland Science, and Marine Scotland's Sea Fisheries Division, as part of the internal pre-consultation process.

- **Public Consultation**
  Informed by scientific stock assessments and discussions with the fishing industry, Marine Scotland issued a public consultation on management proposals for the crab and lobster fisheries which took place from 26 February 2016 to 20 May 2016.

The consultation sought views on the following proposals:

- increasing the minimum landing size for edible crab to 150 mm carapace width
- increasing the minimum landing size for velvet crab to 70 mm carapace width
- prohibiting the landing of berried (egg bearing) velvet crab
- increasing the minimum landing size for lobster to 90 mm carapace length
- decreasing the maximum landing size for female lobster to 145 mm carapace length
- introducing a maximum landing size for male lobster of 145 mm carapace length
- prohibiting the landing of 'crippled' lobsters (those missing one or both claws)
- introducing prohibitions on sale and carriage to match any landing prohibitions that are implemented on a uniform basis across the entire Scottish coast

A total of 119 responses were received, coming from 93 private individuals and 26 organisations. Respondents were primarily those with a direct interest in Scotland's crab and lobster fisheries, with the majority of private individuals and organisations being either fishermen or fishing associations respectively.

Most of the management proposals were supported by a majority of respondents, and are being introduced as originally proposed. However, key changes to several of the proposals are detailed as follows:

- The minimum landing size of edible crab will not be increased to 150 mm in Shetland, as the SSMO stated in its response that it wished to retain a minimum landing size of 140 mm.

  The SSMO already has a number of measures in place to manage Shetland's edible crab fishery using its Regulating Order powers, and has achieved Marine Stewardship Council (MSC) certification for the fishery.

- A majority of respondents from the east coast, and the Solway Firth on the west coast, were opposed to increasing the minimum landing size of lobster. However, a majority of respondents from the rest of the west coast supported the proposal.

  Taking account of the differing nature of the fishery around the Scottish coast, the possible economic impacts, and the views received during the consultation, the minimum landing size is being increased on the west coast from Cape Wrath to as far south as latitude 55°N.

- The maximum landing size of female lobster will not be decreased to 145 mm in Shetland or Orkney. The SSMO stated in its response that it wished

to retain a maximum landing size of 155 mm, while respondents from Orkney were generally opposed to the proposal.

Shetland and Orkney already have in place a more restrictive landing control for their respective lobster fisheries, with a 90 mm minimum landing size.

- A maximum landing size for male lobster and a prohibition on the landing of 'crippled' lobster are not being introduced. These proposals were opposed by a majority of respondents, due to the possible economic impact and enforcement challenges.

A full analysis of responses to each of the management proposals is available in the consultation outcome report: www.gov.scot/Publications/2017/01/1817.

- **Business**
  Discussions took place with businesses involved in the crab and lobster fisheries – including representatives of static gear and processing interests – throughout the consultation period.

  Marine Scotland has regularly updated fishing industry representatives through the IFMAC stakeholder group, and the network of RIFGs.

Options

- **Option 1 - Do nothing**

  This would maintain the current management arrangements for Scotland's crab and lobster fisheries.

- **Option 2 - Introduce new management measures**

  The following management measures will be brought into force:

  - The minimum landing size of edible crab will be increased to 150 mm carapace width (except the Shetland Islands)
  - The minimum landing size of velvet crab will be increased to 70 mm carapace width
  - A minimum sale size of 70 mm carapace width will be introduced for velvet crab
  - A minimum carriage size of 70 mm carapace width will be introduced for velvet crab
  - The landing of berried velvet crab will be prohibited
  - The minimum landing size of lobster will be increased to 90 mm carapace length on the west coast (except the Solway Firth). This involves an immediate increase to 88 mm, then to 90 mm one year thereafter.
  - The maximum landing size of female lobster will be decreased to 145 mm

carapace length (except the Orkney Islands and Shetland Islands)

Sectors and groups affected
Scottish and other British fishing vessels with a shellfish entitlement that currently fish for and land edible crab, velvet crab or lobster in Scotland, as well as fish merchants and fish processors, will be those most directly affected by the introduction of new management arrangements.

Marine Scotland Compliance will also be directly affected, as they will be responsible for the enforcement of these arrangements.

Costs and Benefits

- **Option 1 – Do nothing**

  Benefits

  - Scottish and other British fishing vessels will be able to continue to land crab and lobster that comply with existing Scottish fisheries legislation into Scottish ports.

  Costs

  - Maintaining the current management arrangements would increase the risk of reduced spawning stock biomass. This in turn could lead to a reduction in the yield and economic returns from the crab and lobster fisheries.

  - There is increasing consumer interest in the provenance of produce. Retailers, such as supermarkets, are making a concerted effort to ensure that the fish they sell come from sustainable sources. Maintaining the current management arrangements could eventually result in the loss of access to markets.

- **Option 2 – Introduce new management measures**

  Benefits

  - Increasing minimum landing sizes of edible crab, velvet crab and lobster could increase the spawning stock biomass (the total weight of the fish in a stock that are capable of spawning), and potentially the yield, of these stocks.

  - Prohibiting the sale and carriage of undersized velvet crab will aid the enforcement of the accompanying minimum landing size provision.

  - Prohibiting the landing of berried velvet crab should help to improve the stock's reproductive potential by providing additional protection to mature egg-bearing individuals.

- Decreasing the maximum landing size of female lobster should help to improve the reproductive potential of the stock. Scientific studies of lobster egg production report that females measuring larger than 145 mm produce over three times as many eggs as those measuring 87 mm, and that the eggs are of a higher quality.

Costs

Data provided by Marine Scotland Science on the percentages in landings (by weight) of animals caught between the current and new landing sizes[1] have been used to estimate the potential impact[2] of the new management measures on businesses.

- Increasing the minimum landing sizes of edible crab, velvet crab and lobster is expected to cause a short term reduction in landings of these species:

  - Increasing the minimum landing size of edible crab to 150 mm could result in a short term reduction in landings of between 787 to 1,423 tonnes (£1.1 million to £2 million).

  - Increasing the minimum landing size of velvet crab to 70 mm could result in a short term reduction in landings of between 131 to 305 tonnes (£331,000 to £774,000).

  - Increasing the minimum landing size of lobster to 90 mm on the west coast could result in a short term reduction in landings of between 8 to 23 tonnes (£100,500 to £277,300).

  This is a short term reduction, as it is expected that the majority of surviving newly-undersized animals will grow to a harvestable size within one year of the minimum landing size increases coming into force.

  Additionally, the minimum landing size for lobster is being increased on a staggered basis in order to mitigate any financial impact, with an immediate increase to 88 mm, then to 90 mm one year thereafter.

  Provided that exploitation rates remain stable in the longer term, the recruitment potential (spawning stock biomass) of these species would also be expected on average to increase.

- Prohibiting the landing of berried velvet crab will remove egg-bearing females from the commercial fishery. This could result in a reduction in landings of between 2.5 to 24 tonnes (£6,500 to £59,700).

- Decreasing the maximum landing size of female lobster to 145 mm will remove females above this size from the commercial fishery. This could

[1] Based on market sampling data collected from 2012-16.
[2] Based on landings data collected from 2016.

result in a reduction in landings of up to 5 tonnes (£62,700).

A full breakdown of the potential impact of the new management measures at a fishery district level is provided in Annex A.

Scottish Firms Impact Test

Discussions with the fishing industry were an on-going part of the policy development and consultation process.

Prior to consultation, Marine Scotland established a short-life working group through IFMAC to discuss concerns that had been raised by members regarding the level of fishing effort in the creel sector. There was a general consensus within the group that new controls for the crab and lobster fisheries were necessary. The discussion by the group on increasing the landing sizes for edible crab, velvet crab and lobster helped to inform the development of the proposals in the consultation document.

Reservations were noted from some in the working group regarding one or more of the landing size proposals, either due to the nature of their local fishery or other factors. In order to ensure that these views were captured during consultation, a question was included with each management proposal for respondents to state whether there were any areas of the coast where it should not be introduced.

Following the close of the consultation in May 2016, Marine Scotland provided an opportunity for additional comments on the draft management recommendations that were developed based on the analysis of the consultation responses. These draft recommendations were announced at a meeting of the IFMAC stakeholder group in September 2016, and then issued to the Chairs of the RIFGs for discussion with their members. Comments from the RIFGs were fed back to Marine Scotland and informed the consideration of the final management measures.

Competition Assessment
The management measures are not expected to result in any negative impact on competition. The measures will apply to all Scottish and other British fishing boats that fish for and land edible crab, velvet crab or lobster in Scotland.

Test run of business forms
No new business forms will be introduced.

Legal Aid Impact Test
The management measures have been discussed with the Scottish Government Access to Justice Team, who have agreed that they should have no impact on the legal aid fund.

Enforcement, sanctions and monitoring
Marine Scotland Compliance is responsible for the monitoring and enforcement of marine and fishing laws. Fishery Officers have the power to perform inspections of fishing vessels at sea or in ports, fish markets and processing factories, in order to ensure compliance with legislation. Where a breach of fisheries regulations has been detected, it will be reported as appropriate to the prosecuting authorities. This can

result in a fine of up to £50,000.

Implementation and delivery plan

The management measures will be introduced through new secondary legislation, using the powers conferred by the Sea Fish (Conservation) Act 1967. The Specified Crustaceans (Prohibition on Landing, Sale and Carriage) (Scotland) Order 2017 will come into force from 25 February 2018.

- **Post-implementation review**
  Marine Scotland will monitor the impact of the new management arrangements, and consider any practical or unforeseen consequences should they arise.

Summary and recommendation

Marine Scotland recommends Option 2. Introducing new management measures for Scotland's edible crab, velvet crab and lobster fisheries can help to reduce the fishing mortality and increase the long term average yield and recruitment of these fisheries. These are measures that can contribute positively to management of the stocks and economic returns from these fisheries.

- **Summary costs and benefits table**

Option 1 – Do nothing	
Total benefit per annum: - economic, environmental, social	Total cost per annum: - economic, environmental, social - policy and administrative
• Scottish and other British fishing vessels will be able to continue to land crab and lobster that comply with existing Scottish fisheries legislation into Scottish ports.	• Would increase the risk of reduced spawning stock biomass. This in turn could lead to a reduction in yield and economic returns from the fisheries. • Could result in eventual loss of access to potential markets, due to increasing consumer interest in the provenance of produce. Food retailers are making efforts to ensure that the fish they sell comes from sustainable sources.

Option 2 – Introduce new management measures	
Total benefit per annum: - economic, environmental, social	Total cost per annum: - economic, environmental, social - policy and administrative
• Increasing minimum landing sizes of edible crab, velvet crab and lobster could increase the spawning stock biomass, and potentially the yield, of these stocks. • Prohibiting the landing of berried velvet crab should help improve the stock's	• Increasing the minimum landing sizes of edible crab, velvet crab and lobster is expected to cause a short term reduction in landings of these species. • Prohibiting the landing of berried velvet crab will remove egg-bearing females from the commercial fishery.

reproductive potential by protecting mature, egg-bearing individuals. • Prohibiting the sale and carriage of undersized velvet crab will aid the enforcement of the accompanying minimum landing size provision. • Decreasing the maximum landing size of female lobster should help to improve the reproductive potential of the stock.	• Decreasing the maximum landing size of female lobster will remove females above this size from the commercial fishery.

Declaration and publication

I have read the Business and Regulatory Impact Assessment and I am satisfied that (a) it represents a fair and reasonable view of the expected costs, benefits and impact of the policy, and (b) that the benefits justify the costs. I am satisfied that business impact has been assessed with the support of businesses in Scotland.

Signed:

Date:

Fergus Ewing
Cabinet Secretary for the Rural Economy and Connectivity

Scottish Government Contact point:

Ross Cumming

Marine Scotland
Area 1B South
Victoria Quay
Edinburgh
EH6 6QQ

0131 244 6214

ross.cumming@gov.scot

Annex A – Breakdown of potential impact of new management measures at fishery district level

Table 1 - Potential impact of increasing the minimum landing size of edible crab to 150 mm carapace width

District	Low estimate			High estimate		
	Reduction	Tonnes	Value (£'000)	Reduction	Tonnes	Value (£'000)
Aberdeen	16%	56	71	22%	77	97
Anstruther	20%	26	32	27%	35	44
Ayr	2%	0	1	21%	4	5
Buckie	16%	11	13	22%	16	18
Campbeltown	1%	5	7	17%	73	92
Eyemouth	20%	93	118	27%	126	160
Fraserburgh	15%	87	129	21%	119	177
Kinlochbervie	2%	4	8	6%	10	22
Lochinver	2%	4	7	5%	10	16
Mallaig	1%	0	0	6%	2	3
Oban	1%	4	5	16%	67	86
Orkney	8%	266	372	13%	446	625
Peterhead	16%	45	57	22%	62	78
Portree	3%	15	19	13%	62	80
Scrabster	5%	140	220	9%	246	385
Shetland	N/A*	-	-	N/A*	-	-
Stornoway	N/A†	-	-	N/A†	-	-
Ullapool	3%	31	48	6%	68	106
Total	**6%**	**787**	**1,106**	**12%**	**1,423**	**1,995**

*Minimum landing size will remain at 140 mm.

†150 mm minimum landing size already in force.

Table 2 - Potential impact of increasing the minimum landing size of velvet crab to 70 mm carapace width

District	Low estimate			High estimate		
	Reduction	Tonnes	Value (£'000)	Reduction	Tonnes	Value (£'000)
Aberdeen	21%	18	45	43%	36	90
Anstruther	14%	5	13	41%	15	39
Ayr	27%	0	1	35%	1	1
Buckie	23%	5	10	43%	9	19
Campbeltown	16%	35	84	39%	85	203
Eyemouth	13%	5	9	41%	15	27
Fraserburgh	23%	11	18	43%	21	34
Kinlochbervie	N/A*	-	-	N/A*	-	-
Lochinver	N/A*	-	-	N/A*	-	-
Mallaig	3%	1	2	7%	2	5
Oban	15%	30	82	40%	80	218
Orkney	N/A†	-	-	N/A†	-	-
Peterhead	23%	5	11	43%	9	20
Portree	7%	4	11	19%	11	30
Scrabster	14%	6	31	27%	12	60
Shetland	N/A†	-	-	N/A†	-	-
Stornoway	N/A†	-	-	N/A†	-	-
Ullapool	20%	6	15	37%	12	27
Total	**8%**	**131**	**331**	**19%**	**305**	**774**

*Not assessed.

†70 mm minimum landing size already in force.

Table 3 - Potential impact of increasing the minimum landing size of lobster to 90 mm carapace length

District	Low estimate			High estimate		
	Reduction	Tonnes	Value (£'000)	Reduction	Tonnes	Value (£'000)
Aberdeen	N/A*	-	-	N/A*	-	-
Anstruther	N/A*	-	-	N/A*	-	-
Ayr	1.8%	1.5	16.6	5%	4.2	47.4
Buckie	N/A*	-	-	N/A*	-	-
Campbeltown	4.6%	2.0	23.9	14%	6.2	73.6
Eyemouth	N/A*	-	-	N/A*	-	-
Fraserburgh	N/A*	-	-	N/A*	-	-
Kinlochbervie	N/A†	-	-	N/A†	-	-
Lochinver	N/A†	-	-	N/A†	-	-
Mallaig	N/A†	-	-	N/A†	-	-
Oban	4.0%	2.5	30.2	13%	8.2	98.2
Orkney	N/A‡	-	-	N/A‡	-	-
Peterhead	N/A*	-	-	N/A*	-	-
Portree	2.8%	0.4	5.0	9%	1.2	16.6
Scrabster	N/A*	-	-	N/A*	-	-
Shetland	N/A‡	-	-	N/A‡	-	-
Stornoway	N/A‡	-	-	N/A‡	-	-
Ullapool	6.6%	2.0	24.7	11%	3.4	41.6
Total	**0.7%**	**8.4**	**100.5**	**2%**	**23.2**	**277.3**

*Minimum landing size will remain at 87 mm.

†Not assessed.

‡90 mm minimum landing size already in force.

Table 4 - Potential impact of prohibiting the landing of berried velvet crab

District	Low estimate			High estimate		
	Reduction	Tonnes	Value (£'000)	Reduction	Tonnes	Value (£'000)
Aberdeen	0.30%	0.25	0.64	2.5%	2.1	5.4
Anstruther	0.18%	0.07	0.17	2.4%	0.9	2.2
Ayr	0.66%	0.01	0.02	8.7%	0.2	0.3
Buckie	0.33%	0.07	0.14	2.6%	0.5	1.1
Campbeltown	0.28%	0.61	1.46	3.8%	8.1	19.4
Eyemouth	0.17%	0.06	0.11	2.3%	0.8	1.6
Fraserburgh	0.33%	0.16	0.26	2.6%	1.2	2.0
Kinlochbervie	N/A*	-	-	N/A*	-	-
Lochinver	N/A*	-	-	N/A*	-	-
Mallaig	0.04%	0.01	0.03	0.5%	0.2	0.4
Oban	0.23%	0.47	1.27	3.1%	6.3	17.2
Orkney	N/A†	-	-	N/A†	-	-
Peterhead	0.33%	0.07	0.16	2.6%	0.5	1.2
Portree	0.13%	0.07	0.21	1.1%	0.6	1.8
Scrabster	0.21%	0.09	0.46	1.1%	0.5	2.5
Shetland	N/A*	-	-	N/A*	-	-
Stornoway	0.19%	0.49	1.36	0.4%	1.1	2.9
Ullapool	0.29%	0.09	0.21	2.2%	0.7	1.6
Total	**0.16%**	**2.52**	**6.51**	**1.5%**	**23.8**	**59.7**

*Not assessed.

†Prohibition already in force.

Table 5 - Potential impact of decreasing the maximum landing size of female lobster to 145 mm carapace length

District	Low estimate			High estimate		
	Reduction	Tonnes	Value (£'000)	Reduction	Tonnes	Value (£'000)
Aberdeen	0%	0	0	0.7%	1.3	15.5
Anstruther	0%	0	0	0.9%	1.0	13.2
Ayr	0%	0	0	0.0%	0.0	0.0
Buckie	0%	0	0	0.6%	0.1	1.1
Campbeltown	0%	0	0	0.1%	0.04	0.5
Eyemouth	0%	0	0	0.9%	1.9	21.4
Fraserburgh	0%	0	0	0.6%	0.2	2.9
Kinlochbervie	N/A*	-	-	N/A*	-	-
Lochinver	N/A*	-	-	N/A*	-	-
Mallaig	N/A*	-	-	N/A*	-	-
Oban	0%	0	0	0.1%	0.1	0.8
Orkney	N/A†	-	-	N/A†	-	-
Peterhead	0%	0	0	0.6%	0.1	1.2
Portree	0%	0	0	0.1%	0.01	0.2
Scrabster	0%	0	0	0.9%	0.4	4.5
Shetland	N/A†	-	-	N/A†	-	-
Stornoway	N/A‡	-	-	N/A‡	-	-
Ullapool	0%	0	0	0.4%	0.1	1.5
Total	**0%**	**0**	**0**	**0.5%**	**5.2**	**62.7**

*Not assessed.

†Maximum landing size will remain at 155 mm.

‡145 mm maximum landing size already in force.