

## Regulator Assessment: Qualifying Regulatory Provisions

<b>Title of proposal</b>	Improvements to marine licensing - Aggregate Regional Monitoring Approach for geophysical surveying
<b>Lead Regulator</b>	<b>Marine Management Organisation</b>
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<b>Date of assessment</b>	April 2017
<b>Commencement date</b>	January 2017
<b>Origin</b>	Domestic
<b>Does this include implementation of a Cutting Red Tape review?</b>	No
<b>Which areas of the UK will be affected?</b>	The English marine area.

### Brief outline of proposed new or amended regulatory activity

The Marine and Coastal Access Act 2009, provides the regulatory framework for determining marine licences. The MMO has worked with the Aggregate Industry to develop a process to allow industry to coordinate their geophysical surveys of dredging sites through standardisation and and coordination at a regional scale rather than a site specific level.

Prior to the development of this new regional monitoring approach, each aggregate dredging licence holder was required to undertake multiple expensive surveys (multibeam bathymetry, sidescan sonar and seabed monitoring) at the site specific level. The approach applied under the this new approach will mean that licence holders can use less expensive sampling methods and analysis, which will provide a higher quality of data and their monitoring can be co-ordinated at regional level, reducing duplication of effort.

### Which type of business will be affected? How many are estimated to be affected?

This change will affect businesses in the aggregate dredging sector, totalling 11 operators who operate in English Waters. The change will be positive for businesses, allowing them to co-ordinate their monitoring requirements, reducing survey effort, analysis and costs, as well as simplifying and phasing reporting, which will spread time, effort and cost over time.

### Summary of costs and benefits

Price base year	Implementation date	Duration of policy (years)	Net Present Value	Business Net Present Value	Net cost to business (EANDCB)	BIT score
2016	2017	10	0.59	0.59	-0.1	-0.1

**Please set out the impact to business clearly with a breakdown of costs and benefits**

The following figures have been calculated using information provided by the aggregates trade body, the British Marine Aggregate Producers Association (see Annex 1).

**Benefits**

1. Reduced survey effort, mobilisation and analysis

Licence holders currently undertake their operational monitoring surveys (multibeam bathymetry, sidescan sonar and seabed monitoring) independent of one another, due to independent reporting requirements and timeframes. This means that they are unable to:

- Work together to reduce duplication of survey effort (where their direct and indirect footprints overlap);
- Reduce the number of mobilisation events; and
- Share the management associated with the delivery of the surveys.

They also have to analyse the survey data they have collected independently, therefore reducing consistent standards and opportunities to identify changes at a contextual level. Moving to a regional approach will allow all the above work to be co-ordinated therefore reducing duplication of effort and reducing the resource requirement to undertake surveys and reporting associated with them.

**Before** this change:

- Number of aggregate Licence areas = 60
- Estimated cost of undertaking geophysical monitoring each year = £200,000

Over a 10 year period under the old model, this means that the cost to industry to undertake surveying is estimated at:

$£200,000 \times 10 \text{ years} = £2\text{m}$

(Equivalent to £33,333 of survey costs for each licence area over 10 years).

**After** the implementation of this change:

- Number of aggregate Licence areas = 60
- Estimated cost of undertaking geophysical monitoring each year = £100,000

Over a 10 year period under the new model, this means that the cost to industry to undertake surveying is estimated at:

$£100,000 \times 10 \text{ years} = £1\text{m}$

(Equivalent to £16,666 of survey costs for each licence area over 10 years).

Cost saving:  $£2\text{m} - £1\text{m} = £1\text{m}$  over 10 years

(Equivalent to annual savings of **£100,000** or £16,666 in each Licence area)

## **Costs**

Familiarisation cost: It is not anticipated that there will be any familiarisation costs as the requirement for operational monitoring is not new to licence holders, and the process in which they submit monitoring reports will not change.

### Transitional costs (e.g. changes to systems, training)

There will be some initial transitional costs, as each licence area in each region will need to be assessed, to see how it can be aligned with the regional monitoring approach; and the licence conditions will need to be varied to capture the regional monitoring requirements.

The alignment of regional monitoring has already been trialled on the South Coast and cost the 7 licence holders operating in that region £4,000

Therefore, to apply this approach to the other 4 regions would cost approximately: 4 x £4,000 = £16,000.

The variation of the existing licences to capture the regional monitoring requirements would be processed by variation, currently attracting a £200 fee paid upfront as set out by the MMOs statutory fees and charges<sup>1</sup>. For all 60 licences in all 5 regions this would equate to: 60 x 200 = £12,000

**Total costs = £32,000**

### Summary of calculations

#### Annual Benefits

Reduced survey effort, mobilisation and analysis = £100,000

**Total Benefits = £100,000**

#### Annual Costs

Familiarisation Costs = £0

Transitional Costs = £32,000 (one off cost across 60 licences)

**Total Costs = £32,000**

**Net Savings to Business = £68,000**

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<sup>1</sup> <http://www.legislation.gov.uk/ukxi/2014/2555/contents>

**Please provide any additional information (if required) that may assist the RPC to validate the BIT Score**

In addition to the quantitative costs and benefits calculated above, we have been unable to quantify the following additional likely benefits:

Processing of reports for consultation: All the regional monitoring reports will likely be submitted at the same time, therefore the distribution of the reports for consultation can be undertaken all at once under one consultation, reducing any duplication of effort.

Review of reports: As all the reports will be received and consulted on at the same time, it means that the reports can all be reviewed at the same time, providing a contextual picture of the region rather than at a site specific level. This will reduce the need to cross reference between reports, making the review process more efficient and will also allow the source of impacts to be identified more easily.

Consistent Methods: Undertaking survey effort, analysis and reporting at the same time ensures that consistent methods are used across the board; ensuring data is undertaken to an industry wide standard and is comparable. This should reduce issues with the standard of reporting and remove the requirement to undertake additional work.

Resource management and workload forecasting: The regional monitoring approach allows workloads to be easily forecasted, as reporting for each region will already set and phased to control the volume of work being undertaken by licence holders and submitted to regulators and advisers, therefore reducing the impact on available resource.

## ANNEX 1



# **MARINE AGGREGATE REGIONAL MONITORING & MANAGEMENT Cost/Benefit Statement on behalf of the marine aggregate sector**

## Background

Marine aggregate operators have increasingly been required to undertake a range of marine surveys (bathymetry, side scan sonar, seabed sediment sampling and benthic sampling) to deliver the compliance conditions attached to site specific marine licences. Often, the scope and frequency of these compliance requirements would vary between licences, and as a consequence the surveys would be designed and commissioned by individual industry operators in consultation with regulators and advisors at a licence specific scale. Given the proximity of many marine licence areas to one another, this approach resulted in considerable duplication of time and effort by all parties involved in the process. This duplication of effort was also reflected in the costs expended by industry to undertake such work, as a consequence of multiple surveys being commissioned to acquire data from adjacent sites at different times.

## Introduction of Regional Seabed Monitoring Plans

In 2014, the marine aggregate industry commissioned a series of Regional Seabed Monitoring Plans (RSMP) to determine the baseline environmental conditions across five geographic regions; the Humber, the Anglian, the Outer Thames, the Eastern English Channel and the South coast.

These works were undertaken to fulfil the seabed sampling conditions attached to marine licences for marine aggregate extraction issued by the Marine Management Organisation (MMO) from 2013 onwards. Additionally, marine aggregate operators chose to apply this new approach to a number of existing marine aggregate licence and application areas that were present in each region. In total the RSMP programme applies to over 60 marine aggregate production licence and application areas operated by 10 operating companies, and has required seabed data to be collected from 3,500 sample stations.

For each region, a baseline array of sample stations focussing on primary and secondary impact zones of the licence/application areas being surveyed has been defined, together with a supporting array of regional context sample stations and regional reference areas.

## Development of a wider approach to Regional Monitoring & Management

The practical delivery of the RSMP baseline surveys, simultaneously across five regions during 2014/15, highlighted the significant time, effort and costs that were involved for industry and also for the regulators and advisors that would ultimately receive and review the data for compliance purposes. Given that repeat monitoring surveys would be required to deliver the compliance requirements throughout the term of each marine licence (typically 15 years, but with the potential for licences being renewed for a further 15 years), there was the potential for the workload and cost to be concentrated into particular years with implications for practical resourcing and delivery.

Given the practical savings in time, effort and cost that could be realised through a more coordinate approach, it was agreed that the benefits derived from the RSMP approach, of planning, undertaking and reporting the compliance surveys required at a licence specific scale using a common standard, could be extended across to all the standard compliance monitoring requirements that applied to all licences.

For this to occur in practice, it was recognised the common monitoring requirements that applied to every licence area would need to be standardised, so their scope and frequency was consistent.

In turn, this would allow the timings of all standard monitoring survey events to be aligned at a regional scale so that all licences were required to deliver the same surveys at the same time.

By aligning the timings at a regional scale, it should then be possible to stagger the various regional survey events across multiple years so the pressures on workload and cost could be spread more evenly, rather than being concentrated into particular years.

An agreed monitoring plan will be developed by the industry for each region. This will define the management blueprint that sets out the timings and scope of all the various standard compliance and reporting events that will apply to all existing marine licences for aggregate extraction. This framework is also intended to apply to any new marine licences that may be permitted in the future.

Given the potential long term benefits of this approach, the marine aggregate sector has been working closely with MMO and their advisors to agree the terms of reference for each regional monitoring plan.

#### Industry Cost/Benefit Statement

The regional monitoring approach is intended to apply across the full term of all marine licences for marine mineral extraction – typically 15 years.

During this period, interim regional surveys will be required in years 2/7/12 (comprising multibeam bathymetry) while full regional surveys will be required in years 4/9/14 (comprising multibeam bathymetry, sidescan sonar and seabed monitoring). The results from the interim and full regional surveys will be used to inform the substantive reviews for site specific marine licences undertaken by regulators every 5 years (in years 6/11/16).

The integrated approach used to define each regional survey array will allow the data acquired (whether acoustic coverage or sample stations) to apply across multiple licence areas, therefore reducing duplication of effort. This approach also increases the robustness and consistency of the baseline data that is being acquired, and of any monitoring data obtained thereafter.

The principle cost/benefit savings derived through this new approach arise through a combination of factors:

- i. ***Reduction in compliance survey effort*** – The regional monitoring surveys will be designed to take into account the direct and indirect impact footprints from all of the licence and application areas that are present. Due to their proximity to one another, survey coverages can often overlap with one another therefore the regional data will be able to fulfil the requirements of multiple licence areas, reducing amount of survey time that has to be expended. This reduces survey time and associated weather risk.
- ii. ***Reduction in compliance survey data analysis*** – As the scope of the regional monitoring will encompass all licensed interests, the regional data acquired should be able to be processed to the same consistent standard.
- iii. ***Simplified compliance reporting*** – Licence-specific compliance surveys will be able to be reported on a more consistent basis, drawing on a single regional survey report.
- iv. ***Spread of time/effort/cost over time*** – By phasing the regional survey requirements across a number of years, the time/effort/costs associated with delivering the requirements should be able to be managed more effectively. This allows the resourcing requirements within operators, regulators and advisors to be managed more effectively as the workload over time will be more consistent. Staggering the delivery regional

surveys also delivers more practical advantages given the capacity available within the survey contractors can vary.

- v. ***Reduction in survey costs*** – By commissioning a single regional survey rather than multiple site specific surveys, savings are realised by reducing the number of mobilisation events and the general management associated with delivering a survey. A larger survey also enables economies of scale to be realised when booking vessel time.

A number of these factors were already being developed to a degree by individual operators/groups of operators, such as designing surveys that covered multiple licence areas. Consequently it is almost impossible to assign the precise costs savings that will be solely realised through the adoption of the regional monitoring programme for each of these components.

Nevertheless it is possible to provide an estimate of the quantum of total savings that may be realised through the adoption of the regional monitoring programme. Scaled across 60 licence areas in five regions, it is estimated that the total cost to industry to deliver the standard compliance monitoring requirements on a regional basis over a 15 year term will be c.£1.5 million. This represents a 50% saving against the estimated costs for delivering the same requirements using the more traditional licence-specific approach (c.£3m/15 years).

These savings should be considered in addition to those previously identified for the regional seabed monitoring programme (£5.8m/15 years).

There are also anticipated to be further significant savings in time, effort and resources to industry operators, regulators and advisors that arise from the more coordinated approach to compliance monitoring delivered through the regional programme – in terms of delivering the substantive reviews required every 5 years. These savings have not been quantified at this time though.

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