Title: The Merchant Shipping (Accident Reporting and

Investigation) Regulations 2012

PIR No: PIR Number

Original IA/RPC No: DfT00130

Lead department or agency: Department for Transport on behalf of the Marine Accident

Investigation Branch (MAIB)

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Summary: Intervention and Review

Post Implementation Review

Source of intervention: EU

Type of regulation: Secondary legislation

Type of review: Statutory - other

Date measure came into force: 31/07/2012

Recommendation: Keep

RPC Opinion: Awaiting Scrutiny

1. What were the policy objectives and the intended effects? How far were these objectives and intended effects expected to have been delivered by the review date?

Merchant seafaring and commercial fishing are two of the most hazardous occupations in the UK (fishing is significantly more hazardous than agriculture or construction¹). The UK's Marine Accident Investigation Branch (MAIB) was established in 1989 following the public inquiry into the Herald of Free Enterprise disaster. Its duties, set out in secondary legislation, were to investigate marine accidents, to learn lessons and make recommendations to help prevent future accidents of a similar nature. In 2009, the EC published a Directive requiring European Maritime Administrations to set up similar bodies with investigative duties.

The objective of the 2012 regulations was to update existing secondary legislation to accommodate the requirements of Directive 2009/18/EC (the Directive). The policy objective of these regulations was to continue with the MAIB's work, while harmonising the reporting and investigation of marine accidents and incidents in the UK with the new EU-wide regime.

When the 2012 regulations were being drafted, concerns were raised that they represented 'gold-plating' of the Directive. The Directive does not require the investigation of inland waterways vessels or fishing vessels under 15 metres in length, whilst the 2012 regulations continued to require investigations into accidents involving such vessels. However, since the Marchioness disaster (1989) the UK public remains concerned about the safety of inland waterways passenger vessels. Additionally, approximately 80 percent of the UK's commercial fishing vessels are under 15 metres in length (in scope of these regulations, but not the Directive). The very poor safety record of this industry (forming one third of MAIB investigations) does not justify exempting these vessels from accident investigation simply because the Directive does not include them.

Given the scope of MAIB's investigation duties pre-dated the Directive and were in response to specific domestic circumstances, ministers were content that the Directive did not capture the extant national requirement for marine accident investigation, and that gold-plating was justified. It is considered that the rationale for gold-plating continues to exist, as whilst safety standards have improved, fishing continues to have a poor safety record, whilst when accidents involving domestic passenger vessels occur (London DUKWs, Millennium Time) they receive significant media attention.

2a. Describe the rationale for the evidence sought and the level of resources used to collect it, i.e. the assessment of proportionality.

¹ Between 2007 and 2014, the fatality rate on UK fishing vessels was 60 fatalities per 100,000. The fatality rates in agriculture and construction in a similar period were 9.1 and 2.3 fatalities per 100,000 respectively – Fishing Industry Safety Group (FISG). Therefore, fishing vessel fatalities are in excess of 25 times higher than fatalities in construction. In 2016 fatalities to fishermen rose to 66 per 100,000 – Fishing Industry Safety Group (FISG).

Based on the cross-governmental PIR guidance the MAIB identified three primary points to support the view that a low-evidence review was most appropriate for these regulations:

- 1) The estimated economic net impact of the regulations pertaining to the MAIB's work is below £50m (the MAIB's annual budget is c.£4m per year and the Impact Assessment estimated net costs of £6.08m). The cost of the regulations on business were expected to be minimal beyond reporting requirements in the event of an accident. The stakeholder evidence supported the view (with only 1 respondent disagreeing) that the time and effort required in reporting an accident was reasonable. With regards to the cost to business of engaging with an investigation, there is an expectation, and for internationally trading vessels, an obligation on vessel owners to investigate accidents. MAIB investigation actions largely run in parallel with company investigations; and are typically conducted during the post-accident recuperation period (lost time). The cost of additional analysis are borne by the branch. As a result, the costs to business of participating in an MAIB investigation are therefore considered to be minimal.
- 2) The profile of the regulations is relatively low, they are of interest to a limited number of people (primarily industry experts), and outside this select group the potential level of regulation scrutiny is also fairly limited.
- 3) Linked to this, the regulations that frame the Branch's activities are neither contentious nor risky. The MAIB has been in existence since 1989, when its duty to investigate maritime accidents was first established. The Directive which led to the 2012 Regulations, established a similar regime across other European maritime administrations that previously did not have a body with an investigatory function. However, the substance of the regulations did not change significantly as a result of the Directive given the UK's pre-existing regime the majority of the changes were there to ensure member states were able to benefit from each other's investigations.

The PIR guidance indicates that a low level evidence is appropriate in such circumstances. The requirements of the regulations are largely on the MAIB, and there is little contention about the branch's activities.

2b. Describe the principal data collection approaches that have been used to gathering evidence for this PIR.

The MAIB has used the following sources of evidence to support this review:

- 1) Internal monitoring in accordance with the impact assessment (IA) DfT00130, which has confirmed that the MAIB remains an effective body for marine accident investigations;
- 2) a 2013 audit by EMSA, which established the UK's conduct of marine accident investigation was compliant with Directive 2009/18/EC;
- a pre-audit review of the UK's compliance with the IMO Code of the International Standards and Recommended Practices for a Safety Investigation into a Marine Casualty or Marine Incident (Casualty Investigation Code), which has identified no concerns; and
- 4) a consultation with stakeholders, which has indicated 80.65% satisfaction with the regulations. The consultation questionnaire was sent to 56 recipients and 19 responses were received. The results of the consultation were significantly positive. Responses were received from ferry operators, trade bodies, port authorities, medium-large vessel operators, workboat contractors, small businesses (e.g. sailing school), EMSA, membership organisations for small commercial craft, associations (e.g. pilots, harbour masters, inland waterways). These responses are considered to be representative of the UK marine sector.

3. To what extent has the regulation achieved its policy objectives?

The policy objectives have been fully met. The MAIB continues to operate successfully in the investigation of marine accidents and the promulgation of safety messages to industry through its recommendations.

Compliance with Directive and maintaining high standards

The Regulations are compliant with the Directive and the IMO Casualty Investigation Code. This is evidenced by the results of an audit by EMSA in 2013 and the MAIB's pre-audit review of the UK's compliance with the IMO Casualty Investigation Code. Copies of the Executive Summary of EMSA's audit and the MAIB's IMO pre-audit review are attached in support of this PIR Report.

MAIB statistics for over the last twelve years illustrate that the number of investigations conducted by the Branch has shown an increase since 2011, when the Directive came into force. This is as a result of the Directive increasing the range of marine casualties that Member States are obligated to investigate. This notwithstanding, the MAIB's annual spend has remained fairly constant throughout this period (as can be seen in the response to Q5b). Additionally, throughout the period MAIB has maintained high standards of work, which is evidenced by the results of a consultation with stakeholders relating to the impact of the Regulations. For example:

- 94.7% responded that the MAIB's work helps to improve safety in the marine industry.
- 84.2% agreed that the MAIB is effective at identifying and promulgating safety lessons, and
- 94.7% agreed that MAIB recommendations improve safety.

A copy of the consultation questionnaire results is attached in support of this PIR Report. In addition, the MAIB's Chief Inspector has for a number of successive years been elected by his international counterparts as Chair of the Marine Accident Investigators' International Forum (MAIIF), and as Chair of the EU Permanent Cooperation Framework (PCF). This demonstrates the MAIB's reputation within Europe (and more widely around the globe) for high standards and the effective implementation of the Directive, through the Regulations. The MAIB sets standards of operation that are followed by its European equivalents.

Harmonisation of approach

The Directive has had the effect of harmonising the approach to marine casualty investigation among EU Member States. Specifically:

- The use of a common database, the European Marine Casualty Information Platform (EMCIP), has enhanced the sharing of information and improved identification of common / recurring safety issues:
- the Common Methodology, issued by the EU Commission to underpin the Directive, has provided for common standards and principles; and,
- the PCF committee, chaired by the MAIB's Chief Inspector, has overseen seminars and workshops intended to allow Member States to compare working practices, investigation methods, technical expertise, and share information and knowledge.

Minimising impact on business

No data is available on the monetised costs to businesses in meeting their obligations under the Regulations. However, the results of a consultation with stakeholders on the Regulations confirmed that 89.4% believe that the time and effort expended in reporting an accident is reasonable. Also, 84.2% confirmed that they would participate in an investigation that resulted in a publicly available report even if they were not required to do so, indicating that any financial costs involved are outweighed by the importance of the investigation and achieving greater safety. The survey invited stakeholders to add comments to their responses, but no specific comments were received regarding costs to businesses being unreasonable, unwarranted or disproportionate. The survey results indicate that the industry is content with any costs incurred and that improving safety is of sufficient importance to outweigh any such costs.

4. Have there been any unintended effects?

None identified. In a consultation with stakeholders on the impact of the Regulations, the responses to each question have been significantly positive, thereby denoting no unintended effects. Furthermore, stakeholders were given the opportunity to provide comments in the consultation survey and none of the comments pertained to any unintended effects.

The MAIB is not aware of any unintended effects of the Regulations with regard to the work it carries out under them.

5a. Please provide a brief recap of the original assumptions about the costs and benefits of the regulation and its effects on business (e.g. as set out in the IA)

The original impact assessment identified the following costs as a result of the regulations:

- 1) Transition costs to MAIB and DfT to develop a new database that is compatible with EMCIP (£0.14m, 2011 prices).
- 2) On-going costs to MAIB to undertake extra investigations (£0.69m p.a., 2011 prices).
- 3) An increase in reporting requirements for certain types of accidents and vessel types (not quantified, assumed to be minimal relative to previous requirements).
- 4) Familiarisation costs (not quantified, due to a lack of evidence).

The original impact assessment also referred to costs to business from engaging with MAIB investigations, which were not quantified. As there was already an expectation that firms would investigate accidents in the case of such an event, and that the MAIB uses its own resource to conduct its investigations, it was assumed that the time cost of engaging with the MAIB investigation would be negligible. Where there were time costs, it was assumed that this would not significantly impact on the productivity of the firms affected, but would be absorbed within non-productive time given such vessels would be out of action regardless.

5b. What have been the actual costs and benefits of the regulation and its effects on business?

Assumptions in the original Impact Assessment for these Regulations were that the legislation would not significantly impact the productivity of many vessels affected, but would be absorbed within current levels of non-productive time. It was also assumed that the MAIB faced the budgetary risk of being exposed to unexpected levels of marine incidents in the future, as the Directive requires all accidents of a certain severity to be investigated.

MAIB Budget

With regard to the assumption relating to the MAIB's budgetary risk, the MAIB has a fixed budget with all business conducted within the budget. No additional costs, relating to normal business under the Regulations, have been incurred. The MAIB's budget and outturn figures before and after implementation of the Regulations are as follows (all in nominal terms):

•	2008: Budget £4,046,000	Outturn £3,808,000
•	2009: Budget £4,172,000	Outturn £4,009,000
•	2010: Budget £4,173,000	Outturn £3,832,000
•	2011: Budget £3,632,000	Outturn £3,627,000
•	2012: Budget £3,629,000	Outturn £3,490,000
•	2013: Budget £3,665,000	Outturn £3,558,000
•	2014: Budget £3,746,000	Outturn £3,992,000 (exceptional circumstance of 2 ROV surveys)
•	2015: Budget £3,988,000	Outturn £4,022,000 (exceptional circumstance of vessel salvage)
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Business Impact

With regard to the assumption that the legislation would not significantly impact the productivity of many vessels, in a consultation with stakeholders:

- 68.4% of responders believed that the Regulations did not have a disproportionate impact on businesses with fewer than 50 employees. Of those responders who did not respond positively to this question only one provided an additional comment on this point. However, it was a general comment that small businesses should have their size taken into account, not a specific comment on the actual impact on their business.
- 89.4% agreed that the time and effort expended in reporting accidents to the MAIB is reasonable.
- 94.7% agreed that MAIB recommendations improve safety, and the same percentage agreed that the MAIB's work helps to improve safety within their sector of the marine industry.
- 84.2% agreed that the MAIB's work helps to promote public confidence in the marine industry, which indicates that this is beneficial for their businesses.

It remains the case that the costs of any additional analysis required as a result of an MAIB investigation is borne by the branch. When an investigation is complete, industry stakeholders are invited to suggest options for preventing such accidents in future, though these events are voluntary and travel costs are reimbursed.

<u>Uncertainties in Impact Assessment</u>

The Impact Assessment identified a number of uncertainties around the estimated costs of the proposal. Some of these uncertainties were around the cost of an investigation, which is dependent on the seriousness of the accident being investigated. As can be seen in the MAIB's spending data, in 2014 and 2015 the MAIB's spend exceeded its budget due to exceptional circumstances. This uncertainty is to be expected however given the nature of the MAIB's work.

Another uncertainty identified was around the impact on 'UK businesses'. Given the international nature of the sector, a UK registered vessel may not be owned by a UK company or even operate in UK waters. Conversely, vessels that operate in UK waters may not be owned by UK companies or be UK registered. For the sake of simplicity, the impact assessment appraised on all businesses covered by the legislation regardless of whether they were UK businesses or not.

Finally, there was some uncertainty around the cost to business from engaging with an investigation. However, it remains MAIB practice not to interfere in the operations of a vessel when conducting an investigation, and as stated in the previous section the majority of costs are borne by the branch. It therefore remains plausible that the costs to business from engaging with an investigation remain negligible.

Conclusion

It is concluded, therefore, that the assumption on the effects the Regulations would have on businesses were correct. The assumption that the Directive would increase the MAIB's budgetary risk has not materialised, as the additional costs incurred conducting an increased number of investigations have been absorbed within the existing budget.

6. Has the evidence identified any opportunities for reducing the burden on business?

No. As outlined in Section 1 above, the regulation updated existing national legislation to capture the requirements of the Directive, which itself captured the requirements of the IMO Casualty Investigation Code. These obligations remain extant. The UK has discretion to reduce the impact on business, specifically, by removing the obligation on vessel owners to report accidents and on the MAIB to investigate very serious accidents (death / loss of vessel) for those sectors falling outside the scope of the Directive. The two main areas concerned are inland waterways vessels, and commercial fishing vessels

under 15 metres in length. As previously discussed, public interest in the safety standards of the former, and the safety record of the latter do not justify a lighter touch.

7. For EU measures, how does the UK's implementation compare with that in other EU member states in terms of costs to business?

The provisions of the Directive have been adopted into domestic legislation by all EU Member States. It has not been possible to produce a meaningful monetised comparison given significant national variations.

EMSA's Annual Report for 2016 confirms that implementation of Directive 2009/18/EC is effective across the Member States. It states that across the period 2011-2015, Member States' investigative bodies have launched 749 investigations and 566 reports have been published. Among the 1000 safety recommendation issued, 40% were related to operational practices, in particular safe working practices. Half of the safety recommendations were addressed to shipping companies and the rate of positive responses was above 75%.

The UK is a major contributor to the EMCIP database, providing 35% of all EU cases. Two reasons have been identified for this apparent inconsistency:

Firstly, unlike the land-locked EU countries, 95% of the UK's imports and exports by volume are transported by sea; the country has a large fishing fleet; and almost all shipping leaving northern Europe passes through UK waters. A high volume of cases are therefore reported to the MAIB.

Secondly, for most EU countries the Directive required them to commence, or adopt a new approach to, marine accident investigation. As such, their organisations, while compliant with the Directive, are nascent and still developing. Specifically, most are smaller than and do not have the capability of the UK's MAIB, which was already in place and is seen as a world leader in its field and a role model for the nations whose own capability is still growing.

8. Assessment of risks or uncertainties in evidence base / Other issues to note

It is extremely difficult to for the MAIB to demonstrate the actual impact of its work under the Regulations because the wider safety impacts are long-term in nature and it can take many years to achieve change within the maritime industry. It is also impossible to monetise the benefits of recommendations which prevent losses of life at sea in the future, or which prevent the future loss of vessels and cargo.

9. What next steps are proposed for the regulation (e.g. remain/renewal, amendment, removal or replacement)?

Based on the evidence gathered for this PIR, we propose the Regulations should <u>remain</u> as they are, in their current form, as they are effective and are viewed positively by the marine industry:

As already outlined in this PIR, our evidence supports the following:

- There has been no adverse impact on the MAIB's budget (12 year comparison).
- Stakeholders have largely felt that the regulatory burden is appropriate.
- The legalisation has not significantly impacted the productivity of many vessels (stakeholder consultation survey).
- The MAIB has achieved compliance with the regulations (EMSA audit Executive Summary and IMO Code pre-audit review).
- The marine industry responded very positively to a consultation survey on the impact of the Regulations, and the work of the MAIB.

I have read the PIR and I am satisfied that it represents a fair and proportionate assessment of the impact of the policy.		
Signed: Shafiq Pandor	Date: 12/01/2017	
Signed:	Date:	

Sign-off for Post Implementation Review: