



Maritime &  
Coastguard  
Agency

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**Transposition of Recast Marine Equipment Directive (2014/90/EU) Impact  
Assessment – Supplementary Evidence.**

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## **Nomenclature**

**British Marine:** A membership organisation for the leisure, superyacht and small commercial marine industry.

**COLREG:** International Regulations for Preventing Collisions at Sea, 1972

**COSS:** Committee on Safe Seas and the Prevention of Pollution from Ships

**DoC:** Declaration of Conformity

**EMSA:** European Maritime Safety Agency

**EPIRB:** Emergency Position Indicating Radio Beacon

**EU-flagged ship:** A ship entitled to fly the flag of an EU Member State.

**Flag Administration:** The Government of the State whose flag a ship is entitled to fly responsible for issuing safety certificates pursuant to IMO Conventions.

**GT:** Gross Tonnage

**ILAMA:** International Life-saving Appliance Manufacturers' Association, a membership organisation which exists to promote excellence in manufacturing, training and maintenance of life-saving appliances globally to enhance safety at sea.

**IMO:** The International Maritime Organization, a United Nations' body with its office in the UK.

**IMO Conventions:** In the context of the MED, this means the following conventions SOLAS, MARPOL and COLREG, together with their protocols and codes of mandatory application.

**International Instruments:** The requirements applicable to marine equipment formed by the IMO Conventions, relevant resolutions and circulars.

**ISO:** International Organization for Standardization

**MarED:** The co-ordination group for the Notified Bodies appointed by the Member States to carry out the conformity assessment procedures referred to in the Marine Equipment Directive. Its website contains information on Notified Bodies, manufacturers, equipment available and the Directive.

**MARPOL:** The International Convention for the Prevention of Pollution from Ships, 1973

**MCA:** The Maritime and Coastguard Agency

**MED:** The Marine Equipment Directive

**MGN:** Marine Guidance Notice

**NB:** Notified Body

**OEM:** Original Equipment Manufacturer

**RSS:** The Registry of Shipping and Seamen, Cardiff

**RTC:** Red Tape Challenge, the government's initiative to reduce the overall burden of regulation through abolishment or simplification in order to boost business and economic growth and save taxpayer money

**SEA EUROPE:** The European Ships and Maritime Equipment Association is the voice of the European maritime technology industry. SEA Europe promotes and supports European business enterprises which are involved in the building, construction, maintenance and repair of all types of ships and other relevant maritime structures, including the complete supply chain of systems, equipment and services

**SI:** Statutory Instrument

**SOLAS:** The International Convention for the Safety of Life at Sea, 1974

**UKAS:** The United Kingdom Accreditation Service, which is the national accreditation body in the UK

**UKSR:** United Kingdom Ship Register

## 1. **Introduction**

- 1.1. In addition to the impact assessment, this document aims to expand on some of the costs and benefits associated with transposition and provide supplementary information which stakeholders may find useful.
- 1.2. The supplementary information mostly concerns costs and burdens that are thought to be negligible or impossible to quantify, but were necessary to investigate, and provides some additional detail on the costs and benefits outlined in the Impact Assessment (IA). This document should be considered with reference to the IA.
- 1.3. Directive 2014/90/EU of the EU Parliament and of the Council on Marine Equipment and Repealing Directive 96/98/EC was published in the Official Journal in September 2014 and requires transposition into the law of the EU Member States by the 18 September 2016.
- 1.4. Government intervention is required to ensure the necessary regulatory framework is developed to fulfil the requirements of the MED, a mandatory process for the UK as an EU Member State.
- 1.5. Within the IA, Policy Option 2 (to transpose the Directive and to retain proportionate gold plating) is the preferred option out of those detailed., Accordingly, the below sections include in depth analysis of the costs associated with this option and include comparison to the other Policy Options within the IA where relevant. To ensure all stakeholders were taken into account, and all potential costs and benefits were considered, this supplementary evidence document has been split into specific sections relevant to each affected stakeholder. The sum of some UK stakeholders can be seen in table 1, and were derived from the members of British Marine and using the MarED website.

Table 1: Summary of stakeholders

Manufacturers	156
Average MED certificates issued per manufacturer	6.4
Total number of valid MED certificates that have been issued to UK applicants/manufacturers	994
Notified Bodies	10
Importers and Distributors	139

## 2. **Costs and impacts to Notified Bodies (NB)**

- 2.1. NBs will be affected by the recast Directive in the sense that they form an essential part of the MED approval system. Policy Option 2 would lead to a higher demand for MED equipment than Policy Option 1, but lower demand than Policy Option 3, from a UK perspective.
- 2.2. Although there is this potential disparity, as the approval system is per product, irrespective of the total unit sales, these effects on the NBs would be minimal when compared with ship owners. This is assumed due to the fact that UK NBs do not issue MED approval to UK manufacturers and for UK ships only but have contracts with a variety of manufacturers internationally and such equipment will be used across a variety of EU flagged ships.

### **Costs to UK NBs Associated with Accreditation and Functioning as an NB**

- 2.3. The fees NBs charge are proportionate to the costs of the tests they conduct or have conducted on their behalf, staffing necessary, and consumables used. However these are

difficult to quantify. The costs to the NBs and test houses are both commercially sensitive, and they often operate as an entity whereby performing many tests and certificates for a variety of products and sectors beyond the marine industry. This means that although their overall costs may be known to them, it is impossible to isolate those specific to the MED approval process. This was the general consensus of the responses of 9 UK NBs, and eight test houses contacted.

- 2.4. To become accredited to ISO/IEC 17065 (2012), (the requirement for bodies to certify products, processes and services) and other requirements of MED NBs, there is also an initial outlay. For a breakdown of these fees summarised in section 5.17 of the IA, see annex A. The requirement to comply specifically with this standard is a new requirement for the MED recast, and will affect those NBs which had previously chosen a different accreditation standard to demonstrate compliance with the 96/98/EC Directive's requirements. This is likely to be the biggest impact, both in terms of time and cost, on NBs, and will be applicable across all levels of implementation of the Directive. It is however not practicable to assess the staff and administrative costs associated with meeting these standards as each NB has differing levels of operation and infrastructure and these costs will vary between each UK NB. It should also be noted that NBs are currently assessed by UKAS and will go through annual assessment under the current MED. The specific impact could be the need for additional assessment outside their existing accreditation cycle in order to transition to the recast MED.

### **3. Costs and impacts to manufacturers**

#### **Costs to manufacturers in seeking MED approval**

- 3.1. An essential difference in MED approved equipment and equipment meeting the requirements of the IMO Conventions is the rigorous testing and quality assurance process that a product must go through in order to receive 'MED approval'. There are various compliance routes that a manufacturer can take before the wheel mark can be affixed and a Declaration of Conformity issued. These Module based pathways are dependent on the quantity of equipment being produced, and, to a certain extent, manufacturer preference. Consequently, to obtain MED approval for a product a manufacturer will have to pay to gain such approval. To some extent it is a similar situation to that of the NBs, whereby the price of the certification is set, irrespective of the production quantity, though a difference for manufacturers could arise in the case of module G compliance, whereby each individual product is examined by the NB and also for the quality assurance which may call for testing at set production intervals.
- 3.2. Manufacturers could be subject to costs of over £100,000 for pre-compliance testing and test house costs for a product, but inevitably this is subject to many other factors such as the complexity of the technologies, whether the tests are passed first time and the staff needed to conduct the work. Other manufacturers to which have been consulted have stated that to approve and maintain (including surveillance) MED approved equipment is approximately 7.5 times more expensive than ISO standard compliant and approved products with regards relevant certification. For example, an ISO 12402 lifejacket could cost, on average, £3,000 in total approval costs, valid for 5 years, whereas an MED approved lifejacket may initially be on average £12,000 and further incur annual fees of £2,000 for the upkeep of surveillance of a quality module such as Module D, some example costings are shown in table 2.

Table 2: Estimated cost for certification of marine equipment

Equipment Type	Equipment	Approximate non-MED overall first year costs	Approximate MED first year costs	Percentage Change
Life-Saving Appliances	MED Approved Lifejacket	£2,500-£3,500	£9,000 - £15,000	260 – 329%
Pollution Prevention	Oily Water Separators	£1,920	£5,720	198%
Pollution Prevention	Marine Sewage Treatment Plant	£1,920	£5,720	198%

- 3.3. A definitive value of the cost to manufacturers across the UK is also difficult to estimate, due to the demand for products being undefined, for example where a ship owner may already have MED approved equipment, the difficulty in predicting when equipment would need replacing across the entire UK fleet, and other limitations are outlined in section 6. Additionally, with the nature of the varying equipment types differing so much it is not possible to quantify the absolute costs to manufacturers in seeking MED approval for their equipment. It can however be noted that the approval process does not fundamentally change between the existing and recast Directives and regardless of Policy Option, these costs would still exist leading to a negligible change in this respect.
- 3.4. Again it is hard to derive a bottom line number with regards the approval costs of marine equipment due to the varying routes for conformity assessment and every type of equipment requiring differing testing regimes. However, it has been assumed that the certification fees are factored into the cost of the equipment which is further explored in this supplementary document.

**Costs to manufacturers through meeting formal conformity standards**

- 3.5. The recast Directive also sets out formal requirements to be met by Manufacturers with regards the marking of marine equipment, as detailed in the IA. These requirements could be fulfilled with simple labelling and sequential serial numbers which have been quantified in section 5.8 and 5.9 of the impact assessment, however all manufacturers contacted stated this was already an industry standard.
- 3.6. Other formal obligations of manufacturers include the requirements for the DoC with regards supply in multiple languages. Several approaches could be made to fulfil this. Firstly there are free online services but these may not be sufficient. Secondly some manufacturers will have bi lingual employees so may not need to seek further translation of their DoC. Finally, a professional translation service (see annex B) could see costs of between £120 and £150 (for translation of a 1000 word document). This information was used as the basis for the calculations in sections 5.10-5.13 of the IA. This would be a one off cost per equipment as a manufacturer would need to set this up per document per language and then amend serial numbers for each DoC as necessary. A realistic assumption would be that manufacturers would translate into the most common languages. As noted in table 1. There are, on average, 6.4 MED certificates per UK based manufacturer, however, this is averaged across all applicants and the total certificates issued. Since some certificates would need little amending due to some products being very similar, or even the same trade number, a large body of the text would not need amending. Without knowing the linguistic abilities of staff

within all UK companies and the extent of similarities within each DoC, the central estimate of £404,352 per year for all manufacturers may be significantly less.

- 3.7. In almost all cases these are and will be issued electronically and the time taken to supply these by manufacturers will not change. The only added issue is the storage on board a ship. Again the change is that the DoC has to be kept on board for the life of the equipment concerned and this would likely be kept electronically on board the ship's computer system. As mentioned in section 5.14 of the IA, this could be facilitated electronically at minimal additional cost.

### **Cost to manufacturers based on voluntary adoption of an electronic tag**

- 3.8. Up to 8% of world trade is in counterfeit merchandise, and the market for it has grown at least 10,000% in the past 20 years (Chaudhry & Zimmerman, 2012). If this figure holds true for marine equipment, not only is it a huge burden on industry, but it also poses a grave risk to safety. The existing wheel mark is relatively easy to replicate, and as such, steps are in place in the recast Directive to address this.
- 3.9. As the technology for the 'electronic tag' is to date undefined, and manufacturers' take up in using the electronic tag is unknown, it is impossible to give a true figure, but it is possible to gauge the interest of manufacturers and estimate using a variety of existing technologies.
- 3.10. Another factor that must be stated is that the use of the electronic tag is not mandatory, so if an undesirable technology is selected and this is disproportionately expensive to use, manufacturers do not have to adopt it and can continue to use the wheel mark only. There is also no fixed date for the adoption of the electronic tag. The earliest this can be adopted is the 18 September 2016, however, it may not be implemented or applied to any equipment until well after this date, potentially several years. There are two parts to the implementation of the electronic tag. Firstly that the European Commission will confirm the technology to be used and how the tag should be used. The second is that the European Commission will highlight individual items of marine equipment which may use the tag.
- 3.11. From most of the manufacturers that have been approached, they either have a system in place to prevent counterfeiting of their products, or, they do not see the benefit of the tag due to counterfeiting of their products not being observed. Some have, however said they have started to look into the implementation of a tag, estimations have included a range of labour costs in the region of £10 - £15 per hour. Those of the latter opinion have all indicated that a Quick Response (QR) code type technology would be most suitable and this is what is seen on other products which seek to reduce counterfeiting, some with an additional serial code on a holographic backing, or a bespoke tag.
- 3.12. Some existing technologies that could be adopted are summarised below:
- Radio Frequency Identification (RFID) Tags
    - Radio Frequency Identification, which store information in a tag which can be read by a scanner at a distance and not necessarily in line of sight. Information such as manufacturer, date of manufacture, serial number etc. could be stored on such tags.
  - Quick Response Barcode tags
    - Quick Response Codes, store information in the form of a 2D barcode which can be read by an image scanning technology such as a camera phone or office scanner. They can store numeric, alphanumeric or binary information. This could allow the same information above and or forwarding to a web based database of authentic products to be used.
  - Hybrid Technologies
    - Consisting of a Quick Response code, unique serial number printed on a holographic sticker. This is a relatively unique multiple verification technology and

allows a person to visually verify that a product is genuine but also has the ability to have information stored in a Quick Response code.

- Cryptographic Invisible Security Marking
  - This is a technology that is in varying forms but entails microscopic printing of a pattern of dots. With a scanning technology or smart phone an image can be taken of the product and the dots are analysed to state that a product is genuine. However, it does not hold any information about the product and cannot be detected visually.
- Silent Tags
  - Are similar to Radio Frequency Identification but work on a passive method of needing a bespoke scanning technology to 'ask' if there are any tags in the vicinity matching a pre-defined password. If a tag with the specified password is in range the scanner will give a positive return but again no information about the product is held and these are primarily for tracking the movement of products in a warehouse / shop etc.

3.13. From these, the only feasible options considered are those that use a physical tag and an easy scanning method; mainly Radio Frequency Identification tag and Quick Response codes (see annex C for comparison). This has been the consensus that emerged from talks with manufacturers, from the perspectives of those that currently use it, and those that would consider it. Its current use on marine equipment shows that it is a proven technology suitable for certain products. However there is the possibility that another emerging technology may be used. Although these 'anti-counterfeiting' technologies inherently imply non fraudulent use or replication, this may not be strictly true, and the ingenuity of counterfeiters should not be underestimated, however it will add another layer of security and another hurdle to be passed in order to pass equipment as MED approved.

3.14. Although there is a wide range of equipment within the Directive, the burden of the electronic tag is unlikely to differ significantly between products. From most manufacturers that have engaged in this area, for larger equipment, it has been estimated that an extra labour hour is envisaged for the process of printing and programming the physical tag, affixing the tag to the product, and updating any relevant database. For smaller, mass produced products, it would be a much quicker process due to the affixing of tags to batches of equipment as opposed to individual programming of bespoke items.

3.15. Irrespective of size, the activity has been reported to have the potential to cost an additional £40-70 per batch, as this is the variance of production cost per hour and this will vary dependant on the product type. For some of the larger manufacturers this could be an additional full time staff member (at approximately £20,000 per annum), but this is unlikely to be the situation with micro and small enterprises. Also, many manufacturers may not choose to use it, therefore the costs to UK businesses as a whole could range from £0 - £3,120,000, the larger estimate considering if all 156 manufacturers adopted the technology and as a result hired another full time staff member. A summary of the two mainstream technologies which are likely to be used can be seen in annex C.

3.16. In terms of reporting the impacts, it is important to stress that the tag's use is voluntary, and only a potential cost, but the above demonstrates the likely costs that could be foreseen and are hugely variable. Other non-cost related burdens could be infrastructure issues of creating additional printing or programming facilities in house, and in larger operations more staff may need to be taken on, for example an extra person could typically expect to earn £20,000 salary as previously reported.

3.17. As mentioned previously, any costs associated with electronic tags is highly dependant on the technology adopted. If a piece of equipment incurs extra costs during manufacture such as staff wages or additional materials needed, there is the likelihood that this will be



proportionately applied to the recommended retail price. However, with the limitations outlined beforehand, an estimate is impossible due to wide variance in equipment type and potential costs to manufacturers.

## 4. Costs to importers and distributors

### Costs to importers through paying tax and duties

- 4.1. Companies which import equipment from outside the EU and offer it for supply to the EU market (the Directive's definition of importer) and companies which make marine equipment available on the market other than a manufacturer or an importer (the Directive's definition of a distributor) could both be affected by changes relating to equipment requirements on board UK vessels.
- 4.2. Attempts have been made to engage with many importers and distributors and it has proved difficult to disentangle the difference in costs for importing and distributing MED and non-MED equipment. The network is complicated and also contains further third party companies who acts as procurement agents on behalf of ship operators. Many companies were contacted and reiterated this finding. An initial difficulty that has been encountered is with situations where multiple components may be distributed before being then marketed/ approved to form a new product such as liferafts, for example:
  - Manufacturer of Position indicating light and a separate manufacturer of liferaft may go through: Distributer 1 → Distributer 2 → Ship procurement company → Ship yard → Ship.
- 4.3. Importers from outside of the EU or EU special territories will have their goods subject to Value Added Tax (VAT, currently set at 20%) and customs duty which can vary from no charge to above 2.5% depending on the product. For example, for inflatable liferafts, the import duty is 2.7%. Value Added Tax is not charged if the value of the product is less than £15.00, and import duty is not charged on anything under £135, however, with marine equipment this is rarely the case, and importers are highly likely to surpass this when ordering a shipment as the tax threshold is applied to the entire consignment.
- 4.4. It is not an issue exclusive to MED products, and total duties are calculated as a percentage of the customs value of the goods imported therefore takes into account the price paid for the goods, and the shipping and insurance costs. As these are percentage based, the more expensive pieces of equipment will levy greater fees, however this is likely to be proportionate to the profit margins and the difference will be less than the differences seen in the final recommended retail prices. This has been the consensus received from distributors.
- 4.5. Due to different requirements of MED approved equipment (and therefore the international instruments) or other standards such as ISO these can give rise to different dimensions of such equipment which is another potential discrepancy that should be considered. If inflatable liferafts with a SOLAS B pack are used as an example, and a standard 20' General Purpose (GP) shipping container is used, the shipping costs from China to Southampton would be £613.28- £645.56, depending on port of origin and carrier. Based on the dimensional constraints (see table 3), and an optimised configuration, this could fit up to 144 ISO liferafts versus 108 MED liferafts (both of a 12 man capacity, see table 4). It could be concluded that shipping MED rafts is 33.3 % more expensive, however this only works out as an additional £1.42-£1.49 per raft. In a wider context, if a given product is more expensive to bring to market, it will only occur where there is sufficient market demand and it can be assumed that the associated costs will be taken into account when setting the Recommended Retail Price (RRP). It is safe to therefore assume that any costs to importers and distributors relating to cost price is negligible, and between the three Policy Options there will always be a market for MED equipment.

Table 3: Table illustrating the different physical dimensions associated with different certified liferafts of the same 12 man capacity.

		Height (m)	Width (m)	Length (m)	m <sup>3</sup>	Weight (kg)
<b>Single 12 Man Raft</b>	ISO	0.38	0.9	0.56	0.15613	66
	MED	0.389	1.088	0.666	0.28187	69
<b>20' General Purpose</b>		2.438	2.591	6.096	38.5076	

- 4.6. From the importers and distributors approached, none were able to provide figures for the different aspects and cost proportions used due to the many variables and complexities involved. However, based on generic assumptions and that the UK importer buys directly from the manufacturer without any additional handlers or trade discounts, as a rough guide the price charged to trade buyers is normally around two times the cost price.
- 4.7. The RRP is generally two to three times the trade or wholesale price, with most retailers opting for the lower end of the range at a 50% mark-up. This is not a hard and fast rule, and these assumptions will vary considerably for several reasons:
- There will be a difference between products
  - If the cost price is relatively high or low for a given product range
  - They are also subject to fluctuations. These fluctuations are generally absorbed in the trade price margins and not passed onto the end customer.
  - Taxes are applied to the goods in the state that they enter the country, and since different goods are assigned different percentages, if the product is to be assembled in the UK the tax rate would apply to the different components depending on their commodity code.
- 4.8. If these assumed ratios are adopted in the case of the liferaft example above, and the commodity code for liferafts sets import duty at 2.7% then the differences can be seen in this simplified overview of the entire cost progression for an average MED and non-MED liferaft based on the assumption listed above. Insurance costs were averaged out from several sites. As previously mentioned, the increased costs will be reflected in the final price, and the returns to importers and distributors should take this into account and therefore, while the market exists, they will not be conducting their businesses at a loss and the differences are negligible, additionally the recast Directive does not cause an impact in this regard as this framework currently exists and will not change.

Table 4: Demonstration of the potential associated costs from production through to retail including importers and distributors.

	Total Units per standard 20' GP shipping container:	Average Shipping cost:	Insurance cost:	Total cost of products to importers (excluding tax):	Total cost of products to importers including import duty and VAT:	Cost to importers per unit:	Cost to distributors per unit:	Average RRP per unit:
ISO Liferaft:	144	£629.42	£341.50	£59,447.03	£73,262.52	£502.03	£1,004.05	£2,008.10
MED Liferaft:	108	£629.42	£408.47	£48,861.81	£60,217.30	£547.96	£1,095.92	£2,191.83
Price difference:			£66.97	£-10,585.22	£-13,045.22	£45.93	£91.87	£183.73
Percentage change:			19.61%	-17.81%	-17.81%	9.15%	9.15%	9.15%

- 4.9. A new provision in the recast Directive introduces requirements for importers and distributors like manufacturers to maintain records about the equipment's approval they offer for supply under their own name for a 10 year period, or the expected life of the product (whichever is greater).
- 4.10. The implications of this are likely to be minimal if an electronic records system is adopted. A hypothetical situation of a company importing 10,000 lifejackets for marketing under its name would need a file containing the product's approval details. There will be some variation between products, but it can be estimated that the record will take the form of a document of several pages. 3-4 pages of text would equate to approximately 10 Kilobytes each, and would require additional data storage of 100 Megabytes.
- 4.11. To fulfil this additional data storage requirement, if this level of file storage is not already in place, these companies could chose something as simple as an external hard drive or virtual offsite storage. The result of these options would only be additional annual costs of £8.50 up to £100 depending on the back up devices chosen, but the cost of implementation would be minimal. As previously noted in section 1.5 and table 1, British Marine put the total number of UK marine equipment importers and distributors at 139. Therefore, an approximate range of annual costs to business applicable across all Policy Options could be £0 up to £13,900 depending on the technology selected, with the upper estimate factoring in all 139 importers and distributors using the more costly back up devices. This figure may vary further as a proportion of manufacturers may be acting as importers and distributors and these costs may be double counted.
- 4.12. Specifically pertaining to MED products, there is a requirement to make available the DoC to the next entity in the distribution chain by virtue of this having to be supplied to the relevant ship, however depending on the medium the DoC is supplied, no further action may be required by the distribution network. This could take the form of a digitised version on a website, an email attachment or a hard copy. If an importer or distributor is not acting as a manufacturer and receives hard copy DoCs, this may lead to increased staffing costs, however, this is unlikely to exceed an hour per batch of equipment supplied if, for example, the OEM does not supply the DoC and the distributor needs to proactively seek the DoC from the OEM to be supplied to the relevant ship.
- 4.13. Another possible consideration regarding the requirement to forwarding the DoC is any language barriers that may be encountered for audit purposes or challenges of authenticity. This language obligation would be faced by manufacturers, and the costs to them have been broken down in section 3.6.

## **5. Costs and impacts to ship owners and operators**

### **Cost to ship operators through increased cost in marine equipment**

- 5.1. The different costs of MED and non-MED equipment may be seen most prominently by ship owners and operators. As Policy Option 2 of the IA reduces gold plating across the UK fleet, it is envisaged that, once placed on-board, even with a reduced requirement for compliance, ship operators will not sell and replace their MED equipment, therefore the savings will be seen most starkly for new build, new to flag ships.
- 5.2. Data has been collected on the different prices of products of different standards to highlight this. A range of items were chosen to act as a representative sample of the scope of equipment within Annex A.1 of the Directive. These equipment types were selected as they give a representation of the equipment commonly used on all ship types and where non-MED and MED equipment are comparable as opposed to some navigation equipment that will be wildly different in design and performance with that equipment meeting the international instruments and is MED approved, as opposed to equipment meeting small craft leisure standards. This is observed in the comparison table 5 with radio communication being largely

different in cost even with smaller hand held technology due to the associated performance standards of the international instruments and recreational standards being so different.

- 5.3. The range covered life-saving appliances, marine pollution prevention, radio-communication equipment and fire protection including small, medium and large equipment. The average was generated using the data received from manufacturers.
- 5.4. The Directive's full Annex A.1 comprises some 330 pieces of equipment, areas of which may or may not be needed on a vessel depending on the carriage requirements (see annex G of this document) therefore, the selection made took this into account and chose prevalent products. Only equipment from Annex A.1 was chosen as Annex A.2 comprises equipment without internationally agreed testing standards and is not MED approved.
- 5.5. The equipment selection is summarised in table 5 below. The averages have been calculated on an annual basis, over the first five years of life to acknowledge servicing costs.

Table 5: Estimated lifetime cost differences, including servicing, of different pieces of MED and non-MED equipment.

Equipment:	Average Annual Total Costs of MED equipment over 5 years of life including servicing:	Average Annual Total Costs of non-MED equipment over 5 years of life including servicing:	Cost difference:	Percentage Change Non MED to MED:
Sewage Treatment Plant	£2202.79	£1490.80	£712.00	47.76%
Inflatable Liferrafts	£673.87	£441.06	£232.81	52.78%
Oily Water Separator	£2363.39	£1004.25	£1,359.14	135.34%
Foam Life Jackets	£6.34	£10.77	£-4.43	-41.14%
Inflatable Life Jackets	£60.66	£34.84	£25.82	74.12%
Portable Fire Extinguishers	£56.38	£53.31	£3.07	5.76%
Portable survival craft two-way VHF radiotelephone apparatus	£125.27	£47.28	£77.98	164.92%
Hand Flares	£1.80	£2.23	£-0.44	-19.52%

- 5.6. Some of the biggest percentage differences have been found in VHF radios, oily water separators and lifejackets. It is important to note that when comparing MED and non-MED equipment, it is rare to have a like for like comparison. With VHF radios this is likely to be due to the fact that the MED approval necessary for the commercial market has higher standards as per the Recommendation ITU-R M.493-13 issued by the Radiocommunication Section of the International Telecommunication Union. It calls for class A (generally for large commercial vessels) or B radios (generally lighter commercial vessels) whereas the class D

is a specifically designed leisure equivalent. A much greater market demand in the leisure sector has also driven down the prices of recreational VHF radios versus the commercial sector. In addition, the prices of oily water separators and sewage treatment plants have a large range, which can be put down to the differing capacities that are generally associated with different certification levels. In general, larger convention ships will require sewage treatment for many more people, and much more oily water treated than non-convention ships, but the outlay for the piece of equipment for the ship operator would be the same.

- 5.7. The type approval necessary for MED approval is an attribute that will explain some of the price difference, however manufacturers attempt to minimise the costs to the consumers by spreading this increase temporally as well as over the initial production total.
- 5.8. Inflatable lifejackets are also structurally different in their ISO and MED approved forms; MED approval, by virtue of the international instruments details requirements for a double chamber and the need for a light, whereas ISO only requires one chamber and there are no specifications for a light.
- 5.9. Additionally, servicing is not mandated in leisure equipment whereas in SOLAS approved equipment, annual servicing is required at an MCA approved service station (for LSA). Although it is not an obligation, the lifejacket manufacturers looked at in this dataset recommend annual servicing, the Oily Water Separator and Sewage Treatment Plant manufacturers were approached directly for annual maintenance estimates and VHF Radios would still require replacement batteries. Therefore the data used in these calculations is as per the manufacturer's guidelines.
- 5.10. With regards to oily water separators and sewage treatment plants, there were significant differences in the sizes and capacities between certifications. A direct cost comparison would have been misleading, and judging them by their respective capacity units (person capacity for sewage treatment plants, and litres processed for oily water separators) was seen as a better way to compare.
- 5.11. It must also be appreciated that these are estimates only, and do not take into account any discounts that may be applied for bulk orders or contracts. The data was gathered from up to 10 manufacturers for each piece of equipment, with engagement from a range of companies, micro, small, medium and large.
- 5.12. The percentage change, and additional costs of MED and non-MED equipment have the potential to be applied to the UK fleet in order to obtain a baseline figure for Policy Option 2. In the following section the methods and resources used to obtain an estimate and forecast of the UK fleet affected are outlined.

## **6. Costs and impacts to the UK**

### **Quantifying the ships affected**

- 6.1. In order to calculate a bottom line cost for this and other Policy Options it was necessary to assess the number of ships registered in the UK and to establish which of these will be affected by the recast.
- 6.2. The primary data field used for classifying the UK Fleet and therefore evaluating the impact of each Policy Option is the 'UK Class Code' which is detailed further in annex E. UK Class Codes are listed in technical statutory instruments (SIs) for example, as defined in '1998 No. 1012 PART I' [The Merchant Shipping (Fire Protection: Large Ships) Regulations 1998] and '1998 No. 1011 PART I — Classification of ships Regulation', amongst others.
- 6.3. The Registry of Shipping and Seamen Cardiff (RSS) maintains the UK Fleet Register for commercial purposes and classifies data as per 'SI 1988 No. 1926 - The Merchant Shipping (Registration of Fishing Vessels) Regulations 1988,' and 'SI 1993 No. 3138 - The Merchant Shipping (Registration of Ships) Regulations.' The MCA UK Ship Register (UKSR) obtains

vessel flag-in and out data from RSS and combines Customer Service and Account Managers to organise the data for use in Survey and Inspection for each company. UKSR maintain three spreadsheets: (1) UK Merchant, (2) Small Ships and (3) Large Yachts. The MCA also maintain the 'Code Vessel' spreadsheet. There is no requirement for RSS or the UKSR to classify vessels with UK Class Codes. UK Class Codes are assigned to vessels as per aforementioned SIs by surveyors.

- 6.4. The analysis conducted has been as thorough as possible to exhaust all possibilities, to ensure accurate retrieval of UK Class Codes and prevent double counting.
- 6.5. Small Commercial Vessels (sail and motor), Workboats and Pilot Boats are wholly classified as 'code vessels' or 'code boats,' details of which are obtained from the Code Vessel database. These vessels comply with equivalent codes of practice to SIs. Domestic passenger ships can operate in various UK class codes congruent to their certificated mode and area of operation. Code boats and Domestic Passenger Ships may also be 'dual certificated,' that is, to hold multiple certificates of operation dependent on the requirements of the vessel. These variations to certification add commercial benefit by allowing flexible operating parameters for companies. Subsequently the complex variations of UK Class Codes prevents a deterministic evaluation of the various Policy Options as UK Class Codes are also divided by tonnage, passenger capacity and vessel length.
- 6.6. Directive 2009/45/EC – “Safety Rules and Standards for Passenger Ships” sets requirements for EU member states to classify vessels, similar to UK Class Codes, and are divided into four different classes (A, B, C and D) according to the sea area(s) in which they are certificated to operate. However, Domestic Passenger Vessels were not analysed by their EU classes as Domestic Passenger Vessels on the UK Flag and operating in EU waters will be accounted for under their respective Survey and Inspection regimes, assigned UK Class Codes.
- 6.7. RSS Register Part 1 records Pleasure Vessels (15,861). These Pleasure Vessels are assessed as UK Class Code XII defined as Pleasure Vessels of 13.7m length or more. It is not possible to scrutinise the data to differentiate which vessels are within Class XII (over 13.7m length) and which are unclassified pleasure vessels. Therefore, the quantity of Class XII vessels recorded may be significantly greater than reality.
- 6.8. This complex matrix of UK ships and vessels is governed by the carriage requirement, UK class code and application of the MED in the various Policy Options, rendering the production of definitive quantitative values as nil, as an accurate figure would require an unreasonable and impracticable resource of time and man hours. However, an appreciation of the impact can be borne given the data and analysis currently performed.
- 6.9. The full distribution of the UK fleet can be seen in annex F and a summary is seen in table 6 below.

Table 6: Summary of the vessel totals found in the UK Ship Register separated into the types affected by different Policy Options:

Internationally Trading	Domestic Passenger	Fishing Vessels >24m	Fishing Vessels <24m	Small Cargo Vessels	Other (small commercial vessels etc.)
615	126	234	5511	103	16057

- 6.10. It should be noted again that applicable existing ships will not replace all convention equipment at the date of transposition, therefore this report has taken the make-up of the current fleet and applied it to the current figure of 3% of new to flag vessels being new build. When this data is combined with the average equipment totals found on the different vessel types, and weighted appropriately to obtain a representative figure for different equipment

types and sizes, it is possible to obtain an estimate for UK ship owners by multiplying out the total new build, new to flag ships forecast, the equipment costs at different certification standards, and the high, low and average amounts of equipment that are found on the different ship types for Policy Option 2 compared to 1 and 3. The central estimates for cost savings compared to Policy Option 3 are, in year 1, £87,030.67 for Policy Option 1, and £84,591.32 for Policy Option 2, and are further quantified in sections 5.26 – 5.40 of the IA.

### **Cost to the UK government and the MCA through enhanced market surveillance**

- 6.11. The enhanced market surveillance programme introduced in the MED recast will cost the MCA £16,400, and is broken down in section 5.19 – 5.21 of the IA. There may be further costs incurred for scanning technologies however this is heavily dependent on what technology is selected. An upper estimate for this would be £45,000 as an initial outlay and is explained more in section 5.23 of the IA.
- 6.12. As market surveillance is a requirement of the recast Directive, it is a necessary cost to the MCA for each of the Policy Options. The level of production and sale of MED-approved equipment however, may have an influence on the extent of the surveillance needed with demand for such equipment in the UK driving the size of the market.
- 6.13. The MCA is recruiting a full time Higher Executive Officer as Policy Advisor for Marine Equipment Quality Assurance, which will carry out approximately 60% of the market surveillance activity, with the remainder being absorbed equally between the Senior Executive Officer Policy Lead for Marine Equipment Quality Assurance and MCA surveyors with a target of 50 inspections across the UK market per annum.
- 6.14. In terms of modelling this into a market surveillance plan, it is estimated that the Higher Executive Office will conduct approximately 30 inspections, and 10 by the policy lead. It can be assumed that each of these inspections will take, on average, a standard working day of 7.4 hours, and each visit requiring a short report which could take approximately two hours to write up. This equates approximately to the following staff costs:
- £3,278.94 per calendar year for the policy advisor (HEO) to carry out market surveillance activities and £886.20 for report writing.
  - £1,403.04 per calendar year for the policy lead (SEO) to carry out market surveillance activities and £379.20 for report writing.
- 6.15. It should however be noted that the 'new' HEO within the MCA is not in addition to current staffing but utilises a restructure in existing staff compliment to react to this new stream of required work as opposed to taking on additional staff to existing compliment.
- 6.16. This equates to a total in additional staff time for the enhanced market surveillance activity of £5947.38 in staff time dedicated to this activity. It is also worth reporting that in terms of time, these staff compliments will now be focussed to market surveillance activity for a circa 296 hours each year when previously other policy work would have been carried out during this time.
- 6.17. In addition to these figures, marine office surveyors will be required to carry out market surveillance activities. However, it is important to note that marine office surveyors currently carry out this activity so transposing the Directive in any of the Policy Options does not change this but for the purpose of reporting this the following model can be drawn:
- 6.18. It is assumed that an MS1 surveyor will be carrying out this activity from an MCA marine office and that they will be doing such in their region so the time taken would be closer to half a day's work (3.6 hours). The MS1 hourly rate is reported as £20.67 per hour (correct at 1 August 2015). Therefore, a total cost would be £744.12, based on the target of 10 visits for field surveyors. The report writing time as part of the surveyor market surveillance is to fill in a standard form which is current practice. These forms will be sent to the policy advisor and is not factored in here. This would however cause an extra hour's work per form for the policy

advisor to review and write up any report needed, so an additional 10 hours work is caused, equating to an extra £147.70 of HEO staff time.

- 6.19. The conclusive number in terms of staff cost to the tax payer in this area would be approximately £6839.00. However, it is again worth reporting that such work is not in additional staff, outside of part of the work that would be conducted by the HEO. The MCA is not hiring new staff which adds compliment. The MCA is coping with this within the existing compliment and restructuring the relevant policy branch to cope with this extra work. However, as previously mentioned, this does detract from other areas of work.
- 6.20. Market surveillance will be applied proportionally and equipment would only be seized or withdrawn from the market where there is an inherent, conclusive risk to safety of life or to the marine environment, for example out of date flares, or hydrostatic release units still being offered for supply to the market. However, the MCA would not seek to abuse this power in any way, or seek to cause any financial burdens on the maritime industry where it is not proportionate to issue such market surveillance measure. This said, with the additional market surveillance activity, there is a higher chance of a product recall being initiated where such equipment may not have been found due to lack of resource in market surveillance.
- 6.21. An example of such market surveillance measure, can be seen in the UK coordinated product recall for an EPIRB where a series of EPIRB was highlighted as potentially not working and therefore causing a genuine risk to safety (see annex D). In the UK 2100 owners were written to regarding where these EPIRBs had been registered with and over 775 were recalled. In this case, 775 products were replaced by the Australian OEM in the UK on a new for old basis and by referring to online prices, such an EPIRB selling for \$329 (Australian Dollars), approximately £152. Therefore, a total of £117,800 would have been lost in sales for the replacement EPIRB units.
- 6.22. This is substantial in that £117,800 would have been lost in lost earnings by the manufacturer in that case. Regardless, if the MCA is going to be doing more of this work, more instances like this may be found. It is important to record in the IA that it is hard to bottom this out as a finite number, as every product in the MED is different and will bear a differing price tag. Also that the number of cases of non-compliant or unsafe products in the UK market is unpredictable in terms of finite figure. A counter argument for this financial burden, is that time expired articles such as flares and hydrostatic release units or equipment that is faulty and poses a risk to the safety of UK citizens or to the UK marine environment should not be sold in the first instance, and should be seized to protect the safety of consumers as opposed to being offered for supply to the market or UK ships.

## **7. Benefits to member states, manufacturers and NBs through increased efficiency and reduced lag**

- 7.1. The benefits of Policy Option 2 that have been identified are discussed below. These benefits are broken down as follows.
- 7.2. Directive 96/98/EC MED and Directive 2014/90/EU recast harmonise approval of equipment standards requirements as set by the International Maritime Organisation (IMO), which the UK is a contracting government of and participant in technical sub-committees, working and correspondence groups. Many IMO equipment standards are employed from standardization bodies such as ISO, the International Electrotechnical Commission and the European Committee for Standardization etc. and are in turn updated as per the parent standards' bodies work plan. The current and Recast Directives require users to apply standards stipulated by standardization bodies, as mandated by IMO instruments, in their latest version, and communicates such changes in annexes on a 1-2 year cycle.



- 7.3. On an annual basis the European Maritime Safety Agency (EMSA) accepts proposals from the Member States and Industry bodies such as the European Ships and Maritime Equipment Association (SEA EUROPE) and the International Life-saving Appliance Manufacturers' Association (ILAMA) for amendments to the Directive Annex to ensure that the Directive and standards are up to date. This process is time consuming for Maritime Administrations, as Europe attempts to stay current but lags behind that of progressive international standards due to current EU procedures. After participation with the EU to amend the MED equipment standards' annexes, maritime administrations then repeat the work to transpose the amendments into national legislation. In the UK this is communicated to stakeholders via Merchant Shipping Notices and is resource heavy in time and man hours to administer.
- 7.4. The current process is also inefficient for NBs, manufacturers and ship operators. Often the only way users can ensure the correct standard version is by keeping oversight of the relevant standardization body's programme of work to ensure they are aware of a new version of an ISO/ IEC standard etc. If a standard is amended by the relevant standardisation body it then automatically becomes the applicable requirement to marine equipment for placing on board an EU ship on the date of such amendment being in force. This issue is worse for manufacturers as they also need to be aware of standards being changed outside of the MED as they may need to amend their products or manufacturing techniques accordingly to ensure compliance with the amended standards and issues can arise with equipment being manufactured to an older version of a testing standard no longer being able to be supplied to EU flagged ships.
- 7.5. The recast Directive sets out that the communication of standards will be through European Commission Regulations as opposed to through the Directive itself. These are likely to look similar to the existing MED annexes in that they will contain relevant standards applicable to marine equipment. However, the important change is that only the performance standards of IMO apply automatically in their up to date form, not the testing standards of the standardization bodies. This is a positive policy direction as manufacturers and NBs can be certain of the testing standards that apply to marine equipment at any given time with regards which equipment can be placed on board a ship for any given time after the adoption of such standard and for how long equipment can be manufactured to a previous standard version. There will still be a need to monitor developments at IMO. However, IMO developments do not normally happen within less than a year. Additionally, this streamlines work for the MCA as current transposition of EU marine equipment standards on an annual basis will be not required, as European Commission regulations will automatically apply in the Member States as opposed to requiring specific transposition into national law.
- 7.6. The new communication procedure also removes the hard and fast cut off for placing on board EU ships equipment manufactured to a previous standard version as is observed at present. The intention is to transition in new standards in line with IMO time frames. The below tables, 7 and 8, show this difference graphically in terms of how applicable dates for placing on board a ship and offering for supply are affected by amendment to testing standards presently and how these are likely to operate in the recast Directive.

Table 7: Simplified current transition regimes.

	Current transition regime				
Year	2016	2017	2018	2019	2020
Outgoing testing standard					
Amended testing standard					

In the current process, when a testing standard is amended by a standardisation body, equipment in compliance with a previous amendment may no longer be offered for supply or fitted on board an EU ship without further approval and in a worst case scenario such equipment may not be capable of complying with the amended standard

Table 8: Simplified proposed transition periods.

		Proposed transition period in line with IMO requirements									
Year		2014	2015	2016	2017	2018	2019	2020	2021	2022	
Outgoing testing standards	Last placing on the market										
	Last placing On board an EU ship										
Amended testing standards	First placing on the market										
	Placed On-board										

7.7. In this example there is a further period where equipment manufactured to a previous standard may be placed on board an EU ship, allowing manufacturers to ‘empty’ their stocks. However there is no hard and fast rule as to what this period will be as it will be linked with the relevant standard and equipment. The above is for example only.

7.8. The advantages of the proposed transition period of the recast Directive are:

- Simplifies survey and inspection activities including port state control with explicit standards being communicated and not needing to refer to third party documentation such as the standardisation body’s website;
- Reduces lag for manufacturers and NBs to issue updated certification and an absolute date for which manufacturers can aim for; and

- Streamlines procurement, ship building and contractual obligations between manufacturers and ship-owners with manufacturers being able to 'empty their stocks' after the adoption of a new test standard.

## **8. Benefits to seafarers**

### **Societal benefits to seafarers**

- 8.1. In general terms, societal benefits are benefits that include the private and external benefits. They can be extricated by looking at all those affected and in the context of the different aspects of the recast Directive.
- 8.2. By requiring MED approved equipment on board any ship, there is a level of confidence that the equipment complies with the requirements of the international instruments and has been manufactured in accordance with approved quality control systems. This naturally leaves such equipment at a higher standard with regards safety and its ability to prevent pollution. This also gives seafarers the added confidence in the equipment on board the ships they sail on. In this regard seafarers are further assured that the equipment will function correctly in an emergency.
- 8.3. A wider range of seafarers, that is domestic and fishermen, will benefit from the Re-Cast MED in Policy Option 2. The Re-Cast MED when applied to higher risk vessel and operations will reduce this risk as consistent standards will increase reliability and traceability. Subsequently, seafarers will be less likely to encounter fraudulent equipment vital for saving life at sea.
- 8.4. The international instruments leave a significant margin of discretion to the flag administrations. In the absence of harmonisation, this leads to varying levels of safety for products which the competent national authorities have certified as complying with those conventions and standards. As a result, the smooth functioning of the internal market is affected and it becomes difficult for the Member States to accept equipment certified in another Member State to be placed on board ships flying their flags without further verification.
- 8.5. The harmonisation created by the MED addresses these problems. Council Directive 96/98/EC gives common rules to eliminate differences in the implementation of international standards by means of a clearly identified set of requirements and uniform certification procedures. This increases safety for the maritime industry, seafarers and environment.
- 8.6. The Directive's requirements of manufacturers gives added benefits to the UK through increased traceability of marine equipment. Specifically, manufacturers will be formally required to perform tasks that are currently observed as standard industry practices, uniformly. These are largely related to the marking of equipment to which they declare conformity. These include the requirement to ensure marine equipment is traceable once offered for supply to the market through indicating the manufacturer's contact details and address and adding serial/ batch numbers to equipment. Additionally a formal obligation is put upon the manufacturer with regard the continued safety of marine equipment through requiring a manufacturer to act on their own initiative when they find their equipment to not be in compliance with the Directive and to issue instructions for the safe installation of marine equipment once supplied to a ship.
- 8.7. These requirements ensure that equipment is of a higher standard regarding safety to seafarers on board UK ships by requiring manufacturers to act proactively in rectifying noncompliance with the Directive. Also by ensuring all equipment within the scope of the Directive has additional measures for traceability back to a manufacturer, there will be further barriers to fraudulent equipment entering the union market. Furthermore, with a wider application of the Directive within this Policy Option, there is a higher guarantee of safer

compliant equipment being used and removal of un-safe fraudulent equipment from the market and from being placed on board UK ships due to these formal requirements of manufacturers within the MED system applying to a higher percentage of equipment used on UK ships. These requirements also offer a higher level of confidence to seafarers in knowing equipment they will use in the workplace with regards their safety and to protecting the marine environment is indeed fit for purpose and will operate as expected.

### **Benefits to seafarers through enhanced market surveillance**

8.8. By surveying the market and scrutinising the approval of such equipment, UK seafarers are benefitted through a reduction in noncompliant equipment and removal of such fraudulent equipment. Specifically the provisions of market surveillance will assist in ensuring only compliant equipment is circulated within the market and that dangerous equipment is removed and to ensure that manufacturers only supply compliant equipment. Also, by applying this Policy Option, this surveillance mechanism will be applied to more equipment placed on board UK ships by virtue of the fact that more ships would be required to carry MED approved equipment, further increasing the safety to UK seafarers.

### **Benefits to seafarers through the introduction of an electronic tag**

8.9. The benefits of the electronic tag across all options, should it be adopted, will directly affect seafarers by the increase and ease of ensuring that equipment is compliant and non-fraudulent. Policy Option 2 increases the prevalence of MED equipment on the ships that are deemed to pose a higher risk to safety or the environment, and will therefore benefit further seafarers.

8.10. As mentioned in section 3.9, the technology is undefined, but several possibilities have been investigated. A range of products were assessed, to cover a relatively simple technology, to those more complicated and expensive. Inevitably, the more complex will be more difficult to replicate and therefore a safer technology, however, as with many aspects of this evidence base, a balance must be found.

8.11. The benefits of the electronic tag across all options, should it be adopted, will directly affect seafarers by the increase and ease of ensuring that equipment is compliant and non-fraudulent. Policy Option 2 increases the prevalence of MED equipment on the ships that are deemed to pose a higher risk to safety or the environment, and will therefore benefit seafarers. With Policy Option 2, there will be a greater prevalence of compliant equipment than Option 1 which will infer increased safety and a reduction in malpractice. It is likely that the new technology will be something that does not require much additional expense and potentially something as readily available as an application on a smart phone. This would make the information about its authenticity easy to access, and some tags may contain additional pertinent information about the equipment.

## **9. Benefit to ship operator**

### **Benefits to ship operators through wide acceptance of MED equipment and added safety**

9.1. Ship owners and operators will benefit from the peace of mind that their equipment is compliant, and could be subject to less scrutiny from Port States. Similar to the benefits to seafarers, it will create a harmonised approach and remove some subjectivity of flag states. The increased clarity and universal acceptance will facilitate their work and business commitments. With the global trade, and the increasing reliance on imports, ship operators can know that if they need to purchase marine products abroad, the knowledge that it has been independently approved will ease any concerns about the equipment's safety or protection of the environment. Increased safety of equipment should reduce incidents of injuries and fatalities in the workplace, and ship owners and operators will potentially benefit from this financially in reduction in compensation, any required days absence, recurring health and rehabilitation costs, increased productivity and cheaper insurance costs.

- 9.2. Non-financial gains could be improved public perceptions of their businesses, safeguarding the marine environment and reducing any pain, grief and suffering for employees and their families.
- 9.3. Ship operators and builders benefit from consistent application of standards that the MED produces by harmonising approval across Member States. There is a notion that non-Member State ship builders and equipment suppliers providing services to EU ship operators may not understand the MED causing increased work for EU ship owners and operators. Ship owners and operators have not voiced concern or any huge alarms outside the issues already under discussion at industry forums such as the 'Safety Equipment Advisory Committee.'

#### **Benefits to ship operators through the adoption of an electronic tag and added traceability**

- 9.4. The benefits identified for seafarers with the adoption of an electronic tag would carry through to the ship operators and owners. They will also be able to quickly identify that the equipment used in their operations is compliant and of the standard that they purchased. Similar to the societal benefits, this will facilitate a safer work place and an improved marine environment.
- 9.5. Whilst operators are generally unaware what the electronic tagging measures are, industry representatives have expressed that electronic tagging will ease the burden on operators by not having to catalogue and update hard copy certificates on board.
- 9.6. The requirements of manufacturers within the Directive cause an additional benefit to UK ships, ship operators and owners through added traceability during procurement and installation, a ship company can easily verify with the manufacturer or the manufacturer's authorised representative the validity of the equipment, where it may have concerns over such equipment to ensure it is genuine and that any product recall initiated by the manufacturer can be easily facilitated due to this added traceability. The formal obligation to supply installation instructions to ship operators gives assurance that all MED approved equipment will be supplied uniformly regarding the safe installation and that instructions will not need to be sought by the operator's procurement services. Within this Policy Option, further ship operators will benefit from these formal requirements of manufacturers as MED equipment will be required on a wider range of ship types and alternative un-verified equipment will not be relied upon.

#### **Benefits to ship operators through enhanced market surveillance**

- 9.7. Ship operators will also see a benefit of the obligation of Member States to carry out market surveillance with a higher level of guarantee of the relevant equipment's compliance being held ensuring that only genuine high standard equipment is purchased and installed on board UK ships. Further that non-compliant equipment is caught at the source as opposed to being installed and being picked up during survey leading to interruptions in operation or the need to replace such equipment.

### **10. Benefit to UK government**

#### **Benefits to MCA surveyors attesting equipment's compliance**

- 10.1. The MCA surveyors benefit from the MED due to the speed and ease with which they can visually attest to an item of equipment's compliance. There is a level of subjectivity in some domestic laws and regulations that is removed with the MED. With a more efficient survey and inspection process, surveyors will save more time when looking into the identified higher risk vessels than would be possible in Policy Option 1. Policy staff within the MCA would also be able to implement standards faster for a greater scope of vessels, which would also save time and staffing costs.

10.2. By using MED, as opposed to equivalent standards, there is a greater level of scrutiny and testing applied to the equipment on board the high risk vessels in the UK fleet. Without applying the MED, policy staff would have to create a new standard, and develop additional policies to compensate for this.

### **Benefits to MCA in continued guarantee of safety to UK ships**

10.3. The Directive is also linked to Regulation EC No 2002/2099, launching the Committee on Safe Seas and the Prevention of Pollution from Ships (COSS). EUROPEAN COMMISSION may have certain implementation tasks delegated to them, which may be subject to a committee procedure. In this procedure, the COSS would discuss the issues and democratically form an opinion on the matter. This consultation process involves member states, and would give the UK a platform over safety and environment concerns.

10.4. The MCA will benefit from implementing partial gold-plating (Policy Option 2) to cover the equipment standards and approvals for domestic vessels. This aids the Agency in (1) reallocating HQ resources to support Survey and Inspection work, (2) HQ staff to concentrate resources on other projects, (3) development of equivalent codes of practice by adopting a consistent method for equipment standards.

10.5. When considering the MCA's role within the MED process the added requirements in the Directive are invaluable in ensuring compliant equipment is installed on board UK ships. Firstly by the requirements for such equipment to be marked with the wheel mark and supplied with an EU declaration of conformity as is required in the existing Directive, this gives an ease of confidence to MCA surveyors who can confirm compliance and associated safety of such equipment through these means, as opposed to thorough examination of their own. Through the added requirements of traceability the MCA surveyor further benefits, as a concern surveyors sometimes have is the validity of such marine equipment's approval. By adding traceability the manufacturer can easily be identified and contacted to ensure approval is valid as opposed to the non-uniform methods of traceability currently observed. By following this Policy Option there is less onus on the attending surveyor to a variety of ship types as visual compliance can be confirmed without the need to otherwise attest to the compliance and associated safety of marine equipment that would otherwise need to take place if equipment is not MED approved and an associated uniform approach to marking equipment is not followed. There are other wider benefits to the MCA with regards MED policy. In the event of equipment needing to be withdrawn from the market, by adding traceability to marine equipment, such market surveillance measures can be facilitated with ease by referencing batch/ serial numbers within such recall/ withdrawal notice. Finally there is less chance of faulty and unsafe equipment only being found through the MCA's market surveillance measures as opposed to the formal requirement for manufacturers to act on their own accord.

### **Benefits to the MCA through EU market surveillance**

10.6. The MCA will also see benefits in the requirement to carry out market surveillance as there is a unified approach to market surveillance and as such no one Member State will be advantaged / disadvantaged either by means of base level of safety or economically with all Member States required to implement market surveillance to the same level as opposed to Member states implementing market surveillance voluntarily and then to differing levels. There is also further guidance and support offered within the framework of the Directive as opposed to the status quo.

### **Benefits to the MCA through adoption of an electronic tag**

10.7. With electronic tagging, the MCA surveyors will be readily equipped with any additional software required to check for compliance, saving time and staffing costs. Their familiarisation with equipment on a purely visual level may be compromised with an elegant forgery, however if the technology comes into effect then it will be far simpler and more accurate to check for compliance.

## **11. Benefits to UK manufacturers**

### **Benefits to manufacturers through enhanced market surveillance**

- 11.1. The new requirements for market surveillance of MED equipment ensures that Member States take a uniform approach to enforcing the requirements of the Directive to equipment offered for supply to the market or their ships and makes the requirement for market surveillance mandatory. This ensures that equipment is further scrutinised after manufacture regarding relevant paperwork and that markings are present and that such equipment does not present a risk to the safety or the marine environment. This also provides for a unified methodology of surveying the union market and reduces the chance of noncompliant or fraudulent equipment being installed on board UK ships. By ensuring that equipment in distribution within the UK market is surveyed and checked for compliance, UK manufacturers are further protected against competing fraudulent equipment.
- 11.2. Manufacturers will not be obliged to affix an electronic tag to their product. Those who wish to do so will be entering into the commitment with the knowledge that their product is far less susceptible to reproduction without permission.

### **Benefits to manufacturers in marketing their equipment**

- 11.3. In addition to the added clarity for testing standards to be applied by manufacturers to marine equipment mentioned in 7.4 previously, there is also the continued benefit of UK manufacturers being able to easily market their equipment to all EU Member States markets and ships.

## **12. Additional information**

- 12.1. This supplementary document has reiterated some points of the IA where necessary for further explanation, but may omit some details which are explained as far as necessary in the IA. The full quantification of these costs and benefits can be found on the summary pages within the IA.
- 12.2. This document hopes to address some queries surrounding the IA at consultation, however if there are outstanding concerns, please contact the MCA.

## Annex A: UKAS Accreditation fees

UKAS Price List <sup>1</sup> from 1 April 2015
All prices are subject to Value Added Tax at the applicable rate
Pre and initial assessments for new customers GBP 1,100 per man day
Standard assessment day rate GBP 836 per man day
Travel and Subsistence GBP 193 per site and billable travel day per person
Non-'UK Domestic' <sup>2</sup> Flights Charged at actual cost <sup>3</sup>
Technical Supplement where third party assessor fees exceed GBP 600 per man day
Excess over GBP 600 will be charged (unchanged)
Annual Accreditation Fees: Annual Accreditation Fee for organisations <sup>4</sup> accredited to: EN 45011 (and its replacement ISO/IEC 17065), ISO 14065, ISO/IEC 17024, ISO/IEC 17021 or EMAS Regulation 1221/2009
GBP 2,090
Annual Accreditation Fee Supplement for all organisations with a Head Office or Critical location based outside of the United Kingdom
GBP 714
Annual Accreditation Fee for organisations <sup>4</sup> accredited to ISO/IEC 17025, ISO/IEC 17020, ISO/IEC 17043, ISO 15189 or ISO Guide 34
GBP 0
Miscellaneous Charges: Application fee for new customers GBP 1,500 (unchanged)
Invoice surcharge for organisations with head office based outside of the European Union 10%
Cancellation charges Policy unchanged
Measurement audit tests Prices on application
Fee for Reinstatement of Accreditation following Financial Suspension GBP 1,000 (unchanged)
Ancillary Expenses (e.g. translation costs) Charged at actual cost
1 A different pricing structure applies to ISAS, IQIPS or UK headquartered Medical laboratories transferring from CPA 2 Flights that either originate and/or terminate in a country that is not the United Kingdom 3 The standard of air travel is normally economy on short haul, premium economy on medium haul and business class on long haul 4 Organisations with multiple accreditations pay a single annual fee at the highest applicable rate. Annual accreditation fees are invoiced in July



## Annex B: Translation costs

Organisation	Cost	Language(s)	Details	Contact	Web
Lingo 24	Minimum charge £50; rates for translation start from £100 per 1000 words.	Full list at <a href="http://www.lingo24.com/language_translations.html">www.lingo24.com/language_translations.html</a>	131-151 Great Titchfield Street, London, W1W 5BB +44 (0) 20 7952 7500		<a href="http://www.lingo24.com/">http://www.lingo24.com/</a>
CITAS (Community Interpreting, Translation and Access Service)	Minimum Charge (up to 200 words) £ 30.00 then per word: Group 1 (French, German, Spanish, Portuguese, Polish, Italian) £0.11 Group 2 (Arabic, Dutch, Greek, Hungarian, Bulgarian, Romanian, Turkish, Danish, Finnish, Norwegian, Pushtu, Farsi, Kurdish, Albanian, Amharic, Tigrina, Somali, Swedish, Urdu, Punjabi, Hindi, Bengali, Slovak, Gujarati, Russian, Serbo-Croat) £0.12 Group 3 (Rare Languages-Chinese, Japanese, Hebrew, Korean, Welsh, Estonian, Icelandic, Lingala Vietnamese, Indonesian, Thai, Tagalog, Mongolian) £0.14 Urgent Translation 25% Extra Specialist translations (i.e. medical, legal, financial, technical) 20% Extra Proofreading per 1000 thousand words & thereafter £ 36.00	55 languages	non-profit translation	Palingswick House, 241 King Street, London, W6 9LP. Tel: 0845 521 0405 Fax: 0845 521 0406 interpreting@citass.org.uk	<a href="http://www.citass.org.uk/">http://www.citass.org.uk/</a>
Lambeth council Interpreting and Translation Service	1-100 words - £35.00 101-250 words - £40.00 251-500 words - £65.00 501-750 words - £85.00 751-1000 words - £120.00	Somali, Portuguese, French, Arabic, Polish, Lingala and more. Currently no Farsi/Bengali		Marjorie Domange 10th floor, Blue Star House 234-244 Stockwell Road London SW9 9SP Tel: 020 7926 9688 Fax: 020 7926 9362 Email: mdomange@lambeth.gov.uk	<a href="http://www.lambeth.gov.uk/Services/EducationLearning/SchoolsColleges/interpretingtranslation.htm">http://www.lambeth.gov.uk/Services/EducationLearning/SchoolsColleges/interpretingtranslation.htm</a>
Language Line		130 languages		0800 917 6564 translations@language line.co.uk	<a href="http://www.language line.co.uk">http://www.language line.co.uk</a>
Clarion Interpreters		British Sign Language interpretation and other languages including: America, French, Russian, Farsi, International, Irish and other sign languages		office@clarioncall.net 01763 209001 The Old Dairy Brook Road, Triplow, Royston, SG8 7RG	<a href="http://www.clarioncall.net/">http://www.clarioncall.net/</a>
Croydon Translation & Interpreting Service				Tel: 020 8407 1369 Fax: 020 8633 9423 ctis@croydon.gov.uk Customer Services Division, Taberner House, 5th Floor, North East Side, Park Lane CROYDON CR9 3JS	<a href="http://www.croydon.gov.uk/community/equality/translation/">http://www.croydon.gov.uk/community/equality/translation/</a>
Language Connect	English to Bengali - £95.00 + VAT per 1000 words. A minimum fee of £45.00 + VAT applies for up to 450 words. Rates vary according to language	140 languages		0845 094 5660 info@languageconnect.net Unit 9 Empire Square, Tabard Street London SE1 4NA	<a href="http://www.languageconnect.net/">http://www.languageconnect.net/</a>

## Annex C: Table of comparisons of electronic tag technologies

Criteria	Quick Response Code	Radio Frequency Identification tag
<i>Holds data on the device</i>	Can hold basic information such as serial numbers and manufacturers/ name/ equipment type and or a web address to forward the reader.	Can store basic information such as a serial number/ manufacturers contact details / product type.
<i>Can forward to a website</i>	Yes	No (Yes if it contains a web address but would need to use a differing device to access web browser)
<i>Can be physically affixed to a product</i>	Yes	Yes
<i>Can be physically affixed to packaging/ documentation</i>	Yes	Yes
<i>Can be printed directly to a product / packaging</i>	Yes	No
<i>Can be scanned with a bespoke scanner</i>	Yes	Yes
<i>Can be scanned with a smart phone/ office scanner</i>	Yes. The EU could create its own smart phone app for this purpose.	No
<i>Can be visually recognised</i>	Yes	Yes
<i>Can be hidden within the product (on the inside of the product not normally visible)</i>	No, if hidden, it cannot be scanned. A scanner needs to physically see the code in order to scan.	Yes, as the scanner seeks a radio frequency the tag could be up to normally 10m away from the scanner and still read the information.
<i>Can be reprogrammed / interfered with</i>	No, if the image is interfered with it would not be readable.	Radio Frequency Identification tags can be manufactured in a way that prevents them being reprogrammable.
<i>Costs for implementation</i>	Very little set up as Quick Response codes can be created for free and a common smart phone is all that is required to read them. Costs could be as little as the labour cost for programming and affixing of the code.**	Set up software to programme units circa £15,000, circa £1,500-£3,000 per scanner and labour cost of 1 hour additional production per unit of marine equipment*

\*Based on figures from an organisation in setting up a Radio Frequency Identification system for their product range.

\*\*From extensive searches for costs of software to create Quick Response codes the vast majority are free. The most sophisticated version is less than £10.00. So it can be concluded that the burden is the creation and printing of the actual code to be affixed to the equipment.



# SAFETY ALERT - TECHNICAL No. 52

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## GME EPIRB – PRODUCT RECALL

EPIRB Manufacturer GME have issued a Global Recall for a series of EPIRBs manufactured between January 2005 and February 2008. This recall applies only to MT400/ MT401/ MT403 models with serial numbers between 50101000 and 80250722. GME are concerned that they may not work in an emergency situation. The recall includes a replacement service.

### Problem

GME have identified a fault with the microprocessor of certain units that effectively shuts down the beacon.

The affected beacons are those with serial numbers 50101000 – 80250722 from the MT400/MT401/MT403 ranges.

### Action required

Those in possession of a GME EPIRB should check the beacon model and serial number. The serial number can be found on the left side of the beacon at the base of the identity panel.

If you find that you are in possession of one or more affected beacons, you are urged to contact [recall@gme.net.au](mailto:recall@gme.net.au) or your local distributor to arrange a replacement of your beacon at no extra charge.

GME would like to remind all EPIRB users, regardless of brand, that regular tests are essential. There should be a simple self-test mechanism on all units. Beacon batteries should be replaced at intervals recommended by the manufacturer.

For more information please see the GME website here: <http://www.gme.net.au/>. To view the recall issued on the GME website please follow this link: [http://www.gme.net.au/public/pdf/brochures/47880-1\\_safetyrecall.pdf](http://www.gme.net.au/public/pdf/brochures/47880-1_safetyrecall.pdf)

**Annex E: Table of UK Class Codes**

<b>Passenger Ships</b>	
<b>Class Code</b>	<b>Description</b>
I	Ships Engaged on voyages any of which are long international voyages.
II	Ships engaged on voyages any of which are short international voyages.
II(A)	Ships engaged on voyages of any kind other than international voyages, which are not classes III to VI(A)
III	Ships engaged only on voyages in the course of which they are at no time more than 70 miles by sea from their point of departure and not more than 18 miles from the coast of the UK and which are at sea only in favourable weather and during restricted periods.
IV	Ships engaged only on voyages in Category A, B, C or D waters.
V	Ships engaged only on voyages in Category A, B or C waters.
VI	Ships engaged only on voyages with not more than 250 passengers on board, to sea, or in Category A, B, C or D waters, in all cases in favourable weather and during restricted periods, in the course of which the ships are at no time more than 15 miles, exclusive of any Category A, B, C or D waters, from the point of departure nor more than 3 miles from land.
VI(A)	Ships carrying not more than 50 passengers for a distance of not more than 6 miles on voyages to or from isolated commentates on the islands or coast of the UK and which do not proceed for a distance of more than 3 miles from land; subject to any conditions which the Secretary of State may impose.
<b>Cargo Ships</b>	
VII	Ships (other than classes VII(A), VII(T), XI and XII) engaged on voyages any of which are long international voyages.
VII(A)	Ships employed as fish processing or canning factory ships, and ships engaged in the carriage of persons employed in the fish processing or canning industries.

VII(T)	Tankers engaged on voyages any of which are long international voyages.
VIII	Ships (other than classes IX, XI and XII) engaged on only on short international voyages.
VIII(A)	Ships (Other than classes VIII(A)(T), IX, IX(A), XI and XII) engaged on voyages which are not international voyages.
VIII(T)	Tankers engaged only on short international voyages.
VIII(A)(T)	Tankers engaged only on voyages which are not international voyages.
IX	Tugs and Tenders which proceed to sea but not engaged on long international voyages.
IX(A)	Ships which do not proceed to sea
IX(A)(T)	Tankers which do not proceed to sea
XI	Sailing Ships (other than ships of class XII) which proceed to sea
XII	Pleasure Vessels of 13.7 meters on length or over.

**Annex F: Table to show the breakdown of the UK fleet**

Classification of Ships										
UK Class	Quantity									
	UK Ship Register - Data accurate for June 2015							Code Vessel database Data accurate for June 2015	RSS Data accurate for May 2015	Sub Totals
	UK Merchant Spreadsheet			Smaller Vessels Spreadsheet		Large Yachts Spreadsheet Not Applicable				
	Accurate Figures	Acquired via Ship Inspection and Survey	Subjective Figures	Verified via Ship Inspection and Survey	Verified via Code Vessel database					
Passenger Ships Engaged on International Voyages										
I	11	0	0	0	--	--	--	--	11	
II	27	0	0	0	--	--	--	--	27	
Passenger Ships Not Engaged on International Voyages										
II(A)	24	1	1	1	--	--	--	--	27	
III	4	0	2	0	--	--	--	--	6	
IV	43	0	0	6	--	--	--	--	49	
V	9	2	0	52	--	--	--	--	63	
VI	4	1	0	3	--	--	--	--	8	
VI(A)	0	0	0	0	--	--	--	--	0	
Ships other than Passenger Ships										
VII	369	6	9	6	--	--	--	--	390	
VII(A)	0	0	0	0	--	--	--	--	0	

VII(T)	72	4	1	1	--	--	--	--	78
VIII	57	9	4	9	--	--	--	--	79
VIII(A)	9	10	42	27	--	--	--	--	88
VIII(T)	3	0	0	0	--	--	--	--	3
VIII(A)(T)	0	0	0	0	--	--	--	--	0
IX	16	32	71	26	--	--	--	--	145
IX(A)	3	12	12	20	--	--	--	--	47
IX(A)(T)	9	2	2	2	--	--	--	--	15
X	0	1	0	8	--	--	--	--	9
XI	0	1	0	1	--	--	--	--	2
XII	0	0	0	2	--	--	--	15,861	15863
Coded Vessels									
Code V/L	0	2	0	--	71	--	5437	--	5437
Unverifiable Data									
#N/A	0	0	0	94	--	--	--	--	94
Fishing Vessels									
FV, <15m	--	--	--	--	--	--	--	5,099	5099
FV, 15-24m	--	--	--	--	--	--	--	412	412
FV, >24m	--	--	--	--	--	--	--	234	234
Sub-Totals	660	81	144	258	--	0	5437	21606	28,186

Roman Numeral Key:

Roman Numeral:	Numeric Equivalent:
I	1
II	2
III	3
IV	4
V	5
VI	6
VII	7
VIII	8
IX	9
X	10
XI	11
XII	12



**Annex G: Carriage Requirement spreadsheet including number of vessels affected in policy option 2 and the applicable Regulations, (hereinafter Regs).**

Source of Carriage Requirements and Associated Standards of Equipment:

Key:

Equipment is required by the Directive and the Ship/ Equipment type is within the scope of the Conventions
Equipment type is required by the relevant Convention chapter and will be within the scope of the new Directive
Equipment type is required by the Conventions dependant on ship size, the MED will apply in the new Directive
Equipment is to be applied based on increased risk to safety of life because of number of passengers and lack of an alternative approval system.
Equipment is where the regulations provide for non-Convention equipment in which case that standard must be met.
Where the instrument forms a carriage requirement for equipment and requires the performance standards of a Convention to be met or for the equipment to be approved to a Convention standard;
Equipment approved equipment will be accepted but is not mandatory. Where the instrument forms a carriage requirement for equipment but does not specify a standard for the equipment or specifies a non Convention standard; the equipment shall be MED approved or meet a recognised international or national standard or the standard appropriate to the ships operation specified in the instrument.

Ref #	UK Ship/Vessel Class	Description of Ship Type	No. ships	Life-Saving Appliances		Fire Protection and Extinction		Pollution Prevention		Radio Communication		Safety of Navigation		Collision Prevention	
				Regulations/ Code	Equipment Standards	Regulations/ Code	Equipment Standards	Regulations/ Code	Equipment Standards	Regulations/ Code	Equipment Standards	Regulations/ Code	Equipment Standards	Regulations/ Code	Equipment Standards
1	I	Passenger ships engaged on voyages any of which are long international voyages	0	The Merchant Shipping (Life-Saving Appliances for Ships other than Ships of Classes III to VI(A)) Regulations	All SOLAS performance standards not approved.	The Merchant Shipping (Fire Protection) Regulations 2003	All SOLAS performance standards not approved.	The Merchant Shipping (Prevention of Pollution by Sewage and Garbage from Ships) Regulations 2008, The Merchant Shipping (Prevention of Oil Pollution) Regulations, The Merchant Shipping (Prevention of Air Pollution from Ships) Regulations 2008	Sewage treatment plant (in accordance with MED regs), Oil Filtering equipment in accordance with MSN 1734 or MED regs. Air pollution in accordance with MSN 1734	The Merchant Shipping (Radio Installations) Regulations	In compliance with MED Regs	The Merchant Shipping (Safety of Navigation) Regulations 2002	For ships over 150GT SOLAS standard approved by the SoS or a person authorised by him. For ships less than 150GT does not have to meet the IMO performance standards	Merchant shipping (distress and prevention of collisions) Regs 1996	COLREG Approved (to which MED is used)
2	II	Passenger ships engaged only on short international voyages	0	The Merchant Shipping (Life-Saving Appliances for Ships other than Ships of Classes III to VI(A)) Regulations	All SOLAS performance standards not approved.	The Merchant Shipping (Fire Protection) Regulations 2003	All SOLAS performance standards not approved.	The Merchant Shipping (Prevention of Pollution by Sewage and Garbage from Ships) Regulations 2008, The Merchant Shipping (Prevention of Oil Pollution) Regulations, The Merchant Shipping (Prevention of Air Pollution from Ships) Regulations 2008	Sewage treatment plant (in accordance with MED regs), Oil Filtering equipment in accordance with MSN 1734 or MED regs. Air pollution in accordance with MSN 1734	The Merchant Shipping (Radio Installations) Regulations	In compliance with MED Regs	The Merchant Shipping (Safety of Navigation) Regulations 2002	For ships over 150GT SOLAS standard approved by the SoS or a person authorised by him. For ships less than 150GT does not have to meet the IMO performance standards	Merchant shipping (distress and prevention of collisions) Regs 1996	COLREG Approved (to which MED is used)
3	II(A) (less than 21.34 M Length)	Passenger ships on non-international voyage other than classes III to IV(A) or classes A-D	0	The Merchant Shipping (Life-Saving Appliances for Ships other than Ships of Classes III to VI(A)) Regulations	All SOLAS performance standards not approved.	The Merchant Shipping (Fire Protection: Small Ships) Regulations 1998	NON-SOLAS fire pump/ hose. Non-SOLAS non portable fire extinguisher (45l min capacity)	The Merchant Shipping (Prevention of Oil Pollution) Regulations, The Merchant Shipping (Prevention of Air Pollution from Ships) Regulations 2008	Oil Filtering equipment in accordance with MSN 1734 or MED regs. Air pollution in accordance with MSN 1734	The Merchant Shipping (Radio Installations) Regulations	In compliance with MED Regs	The Merchant Shipping (Safety of Navigation) Regulations 2002	For ships over 150GT SOLAS standard approved by the SoS or a person authorised by him. For ships less than 150GT does not have to meet the IMO performance standards	Merchant shipping (distress and prevention of collisions) Regs 1996	COLREG Approved (to which MED is used)
4	II(A)	Passenger ships on non-international voyage other than classes III to IV(A) or classes A-D	0	The Merchant Shipping (Life-Saving Appliances for Ships other than Ships of Classes III to VI(A)) Regulations	All SOLAS performance standards not approved.	The Merchant Shipping (Fire Protection) Regulations 2003	All SOLAS approved.	The Merchant Shipping (Prevention of Oil Pollution) Regulations, The Merchant Shipping (Prevention of Air Pollution from Ships) Regulations 2008	Oil Filtering equipment in accordance with MSN 1734 or MED regs. Air pollution in accordance with MSN 1734	The Merchant Shipping (Radio Installations) Regulations	In compliance with MED Regs	The Merchant Shipping (Safety of Navigation) Regulations 2002	For ships over 150GT SOLAS standard approved by the SoS or a person authorised by him. For ships less than 150GT does not have to meet the IMO performance standards	Merchant shipping (distress and prevention of collisions) Regs 1996	COLREG Approved (to which MED is used)
5	EU A	Passenger ship engaged on domestic voyage other than EU B-D (New ships and existing ships over 24)	N/A	The Merchant Shipping (Passenger Ships on Domestic Voyages) Regulations 2000	SOLAS (approved) MED shall be accepted	The Merchant Shipping (Passenger Ships on Domestic Voyages) Regulations 2000	SOLAS (approved) MED shall be accepted	The Merchant Shipping (Prevention of Oil Pollution) Regulations, The Merchant Shipping (Prevention of Air Pollution from Ships) Regulations 2008	Oil Filtering equipment in accordance with MSN 1734 or MED regs. Air pollution in accordance with MSN 1734	The Merchant Shipping (Passenger Ships on Domestic Voyages) Regulations 2000	SOLAS (approved) MED shall be accepted	The Merchant Shipping (Passenger Ships on Domestic Voyages) Regulations 2000	SOLAS (Approved), with regards approval MED is accepted.	Merchant shipping (distress and prevention of collisions) Regs 1996	COLREG Approved (to which MED is used)

Ref #	UK Ship/Vessel Class	Description of Ship Type	No. ships	Life-Saving Appliances		Fire Protection and Extinction		Pollution Prevention		Radio Communication		Safety of Navigation		Collision Prevention	
				Regulations/ Code	Equipment Standards	Regulations/ Code	Equipment Standards	Regulations/ Code	Equipment Standards	Regulations/ Code	Equipment Standards	Regulations/ Code	Equipment Standards	Regulations/ Code	Equipment Standards
6	II (of 21.34M or over, under 500GT)	Passenger ships engaged only on voyages in the course of which they are at no time more than 70 miles by sea from their point of departure nor more than 18 miles from the coast of the United Kingdom, and which are at sea only in favourable weather and during restricted periods	0	The Merchant Shipping (Life-Saving Appliances For Passenger Ships Of Classes III To VI(A)) Regulations 1999	SOLAS PERFORMANCE standard + NON SOLAS ORIL & inflatable boat	The Merchant Shipping (Fire Protection: Small Ships) Regulations 1998	NON-SOLAS: fire pump (if not operated by power), 45l foam/CO2 extinguisher (in boiler rooms),	The Merchant Shipping (Prevention of Oil Pollution) Regulations, The Merchant Shipping (Prevention of Air Pollution from Ships) Regulations 2008	Oil Filtering equipment in accordance with MSN 1734 or MED regs. Air pollution in accordance with MSN 1734	The Merchant Shipping (Radio Installations) Regulations	In compliance with MED Regs	The Merchant Shipping (Safety of Navigation) Regulations 2002	For ships over 150GT SOLAS standard approved by the SoS or a person authorised by him. For ships less than 150GT does not have to meet the IMO performance standards	Merchant shipping (distress and prevention of collisions) Regs 1996	COLREG Approved (to which MED is used)
7	III (of less than 21.34M, under 500GT)	Passenger ships engaged only on voyages in the course of which they are at no time more than 70 miles by sea from their point of departure nor more than 18 miles from the coast of the United Kingdom, and which are at sea only in favourable weather and during restricted periods	0	The Merchant Shipping (Life-Saving Appliances For Passenger Ships Of Classes III To VI(A)) Regulations 1999	SOLAS PERFORMANCE standard + NON SOLAS ORIL & inflatable boat	The Merchant Shipping (Fire Protection: Small Ships) Regulations 1998	NON-SOLAS fire pump/ hose. Non - SOLAS non portable fire extinguisher (45l min capacity)	The Merchant Shipping (Prevention of Oil Pollution) Regulations, The Merchant Shipping (Prevention of Air Pollution from Ships) Regulations 2008	Oil Filtering equipment in accordance with MSN 1734 or MED regs. Air pollution in accordance with MSN 1734	The Merchant Shipping (Radio Installations) Regulations	In compliance with MED Regs	The Merchant Shipping (Safety of Navigation) Regulations 2002	For ships over 150GT SOLAS standard approved by the SoS or a person authorised by him. For ships less than 150GT does not have to meet the IMO performance standards	Merchant shipping (distress and prevention of collisions) Regs 1996	COLREG Approved (to which MED is used)

Ref #	UK Ship/Vessel Class	Description of Ship Type	No. ships	Life-Saving Appliances		Fire Protection and Extinction		Pollution Prevention		Radio Communication		Safety of Navigation		Collision Prevention	
				Regulations/ Code	Equipment Standards	Regulations/ Code	Equipment Standards	Regulations/ Code	Equipment Standards	Regulations/ Code	Equipment Standards	Regulations/ Code	Equipment Standards	Regulations/ Code	Equipment Standards
8	III	Passenger ships engaged only on voyages in the course of which they are at no time more than 70 miles by sea from their point of departure nor more than 18 miles from the coast of the United Kingdom, and which are at sea only in favourable weather and during restricted periods		The Merchant Shipping (Life-Saving Appliances For Passenger Ships Of Classes III To VI(A)) Regulations 1999	SOLAS PERFORMANCE standard + NON SOLAS ORIL & inflatable boat	The Merchant Shipping (Fire Protection) Regulations 2003	All SOLAS approved.	The Merchant Shipping (Prevention of Oil Pollution) Regulations, The Merchant Shipping (Prevention of Air Pollution from Ships) Regulations 2008	Oil Filtering equipment in accordance with MSN 1734 or MED regs. Air pollution in accordance with MSN 1734	The Merchant Shipping (Radio Installations) Regulations	In compliance with MED Regs	The Merchant Shipping (Safety of Navigation) Regulations 2002	For ships over 150GT SOLAS standard approved by the SoS or a person authorised by him. For ships less than 150GT does not have to meet the IMO performance standards	Merchant shipping (distress and prevention of collisions) Regs 1996	COLREG Approved (to which MED is used)
9	EU B	Passenger ship engaged on domestic voyage in the course of which it is at no point further than 20 miles from the line of the coast where shipwrecked persons can land corresponding to the medium tide height. (New ships and existing ships over 24)	N/A	The Merchant Shipping (Passenger Ships on Domestic Voyages) Regulations 2000	SOLAS approved MED accepted)	The Merchant Shipping (Passenger Ships on Domestic Voyages) Regulations 2000	Combination of SOLAS performance standard and SOLAS approved. (MED accepted)	The Merchant Shipping (Prevention of Oil Pollution) Regulations, The Merchant Shipping (Prevention of Air Pollution from Ships) Regulations 2008	Oil Filtering equipment in accordance with MSN 1734 or MED regs. Air pollution in accordance with MSN 1734	The Merchant Shipping (Passenger Ships on Domestic Voyages) Regulations 2000	SOLAS (approved) MED accepted	The Merchant Shipping (Passenger Ships on Domestic Voyages) Regulations 2000	SOLAS (Approved), with regards approval MED is accepted.	Merchant shipping (distress and prevention of collisions) Regs 1996	COLREG Approved (to which MED is used)
10	EU C	Passenger ship on domestic voyage in areas where the probability of exceeding 2.5 meters wave height is smaller than 10% over a one year period for all year round operation or over a specific restricted period of the year and no more than 15 miles from the line of the coast. (New ships and existing	N/A	The Merchant Shipping (Passenger Ships on Domestic Voyages) Regulations 2000	SOLAS approved MED accepted)	The Merchant Shipping (Passenger Ships on Domestic Voyages) Regulations 2000	Combination of SOLAS performance standard and SOLAS approved. (MED accepted)	The Merchant Shipping (Prevention of Oil Pollution) Regulations, The Merchant Shipping (Prevention of Air Pollution from Ships) Regulations 2008	Oil Filtering equipment in accordance with MSN 1734 or MED regs. Air pollution in accordance with MSN 1734	The Merchant Shipping (Passenger Ships on Domestic Voyages) Regulations 2000	SOLAS (approved) MED accepted	The Merchant Shipping (Passenger Ships on Domestic Voyages) Regulations 2000	SOLAS (Approved), with regards approval MED is accepted.	Merchant shipping (distress and prevention of collisions) Regs 1996	COLREG Approved (to which MED is used)

Ref #	UK Ship/Vessel Class	Description of Ship Type	No. ships	Life-Saving Appliances		Fire Protection and Extinction		Pollution Prevention		Radio Communication		Safety of Navigation		Collision Prevention	
				Regulations/ Code	Equipment Standards	Regulations/ Code	Equipment Standards	Regulations/ Code	Equipment Standards	Regulations/ Code	Equipment Standards	Regulations/ Code	Equipment Standards	Regulations/ Code	Equipment Standards
		ships over 24)													
11	EU D	Passenger ship on domestic voyage in sea areas where the probability of wave height exceeding 1.5 meters is less than 10% over a one year period all year round or over a specific period and no more than 6 miles from the coast line. (New ships and existing ships over 24)	N/A	The Merchant Shipping (Passenger Ships on Domestic Voyages) Regulations 2000	SOLAS approved MED accepted)	The Merchant Shipping (Passenger Ships on Domestic Voyages) Regulations 2000	Combination of SOLAS performance standard and SOLAS approved. (MED accepted)	The Merchant Shipping (Prevention of Oil Pollution) Regulations, The Merchant Shipping (Prevention of Air Pollution from Ships) Regulations 2008	Oil Filtering equipment in accordance with MSN 1734 or MED regs. Air pollution in accordance with MSN 1734	The Merchant Shipping (Passenger Ships on Domestic Voyages) Regulations 2000	SOLAS (approved) MED accepted)	The Merchant Shipping (Passenger Ships on Domestic Voyages) Regulations 2000	SOLAS (Approved), with regards approval MED is accepted.	Merchant shipping (distress and prevention of collisions) Regs 1996	COLREG Approved (to which MED is used)
12	IV	Passenger ships engaged only on voyages in Category A, B, C and D waters	0	The Merchant Shipping (Passenger Ships) (Safety Code for UK Categorised Waters) Regulations 2010	All SOLAS performance standard + ORILS = MCA approved, Lifejackets = MCA or MED approved or BS EN 394 and 396:1994. Buoyancy Aids = BS EN 395:1994 (CEN 100N Standard) or MCA approved. Public address/general alarm = no detailed testing standard. Means of Recovery = MCA approved. All other items = MED approved	The Merchant Shipping (Passenger Ships) (Safety Code for UK Categorised	flexible hoses conveying oil/fuel oil: MED or ISO 7840, Fire Safety Systems: SOLAS, Portable fire extinguishers: MED/ BS EN 3 Part 1 to 6;1996, all else MED approved	The Merchant Shipping (Passenger Ships) (Safety Code for UK Categorised	all in compliance with MARPOL convention as required	The Merchant Shipping (Passenger Ships) (Safety Code for UK Categorised Waters Regulations) 2010	All MED approved	The Merchant Shipping (Passenger Ships) (Safety Code for UK Categorised Waters Regulations) 2010	AIS: SOLAS performance, All else MED approved	Merchant shipping (distress and prevention of collisions) Regs 1996	COLREG Approved (to which MED is used)

Ref #	UK Ship/Vessel Class	Description of Ship Type	No. ships	Life-Saving Appliances		Fire Protection and Extinction		Pollution Prevention		Radio Communication		Safety of Navigation		Collision Prevention	
				Regulations/ Code	Equipment Standards	Regulations/ Code	Equipment Standards	Regulations/ Code	Equipment Standards	Regulations/ Code	Equipment Standards	Regulations/ Code	Equipment Standards	Regulations/ Code	Equipment Standards
13	V	Passenger ships engaged only on voyages in Category A, B, and C waters	0	The Merchant Shipping (Passenger Ships) (Safety Code for UK Categorised Waters) Regulations 2010	ORILS = MCA approved, Lifejackets = MCA or MED approved or BS EN 394 and 396:1994. Buoyancy Aids = BS EN 395:1994 (CEN 100N Standard) or MCA approved. Public address/general alarm = no detailed testing standard. Means of Recover = MCA approved. All other items = MED approved	The Merchant Shipping (Passenger Ships) (Safety Code for UK Categorised	flexible hoses conveying oil/fuel oil: MED or ISO 7840, Fire Safety Systems: SOLAS, Portable fire extinguishers: MED/ BS EN 3 Part 1 to 6;1996, all else MED approved	The Merchant Shipping (Passenger Ships) (Safety Code for UK Categorised	all in compliance with MARPOL convention as required	The Merchant Shipping (Passenger Ships) (Safety Code for UK Categorised Waters Regulations) 2010	All MED approved	The Merchant Shipping (Passenger Ships) (Safety Code for UK Categorised Waters Regulations) 2010	AIS: SOLAS performance, All else MED approved	Merchant shipping (distress and prevention of collisions) Regs 1996	COLREG Approved (to which MED is used)
14	VI (21.34M or over and under 500GT) fully decked	Passenger ships engaged only on voyages with not more than 250 passengers on board, to sea, or in Category A, B, C and D waters, in all cases in favourable weather and during restricted periods, in the course of which the ships are at no time more than 15 miles, exclusive of any Category A, B, C and D waters, from their point of departure nor more than 3 miles from land	0	The Merchant Shipping (Life-Saving Appliances For Passenger Ships Of Classes III To VI(A)) Regulations 1999	All SOLAS performance standards + Non SOLAS ORIL, buoyant apparatus and lifejacket	The Merchant Shipping (Fire Protection: Small Ships) Regulations 1998	NON-SOLAS: fire pump (if not operated by power), 45l foam/CO2 extinguisher (in boiler rooms),	The Merchant Shipping (Prevention of Oil Pollution) Regulations, The Merchant Shipping (Prevention of Air Pollution from Ships) Regulations 2008	Oil Filtering equipment in accordance with MSN 1734 or MED regs. Air pollution in accordance with MSN 1734	The Merchant Shipping (Radio Installations) Regulations	In compliance with MED Regs	The Merchant Shipping (Safety of Navigation) Regulations 2002	For ships over 150GT SOLAS standard approved by the SoS or a person authorised by him. For ships less than 150GT does not have to meet the IMO performance standards	Merchant shipping (distress and prevention of collisions) Regs 1996	COLREG Approved (to which MED is used)

Ref #	UK Ship/Vessel Class	Description of Ship Type	No. ships	Life-Saving Appliances		Fire Protection and Extinction		Pollution Prevention		Radio Communication		Safety of Navigation		Collision Prevention	
				Regulations/ Code	Equipment Standards	Regulations/ Code	Equipment Standards	Regulations/ Code	Equipment Standards	Regulations/ Code	Equipment Standards	Regulations/ Code	Equipment Standards	Regulations/ Code	Equipment Standards
15	VI (under 21.34M, under 500GT) fully decked	Passenger ships engaged only on voyages with not more than 250 passengers on board, to sea, or in Category A, B, C and D waters, in all cases in favourable weather and during restricted periods, in the course of which the ships are at no time more than 15 miles, exclusive of any Category A, B, C and D waters, from their point of departure nor more than 3 miles from land		The Merchant Shipping (Life-Saving Appliances For Passenger Ships Of Classes III To VI(A)) Regulations 1999	All SOLAS performance standards + Non SOLAS ORIL, buoyant apparatus and lifejacket	The Merchant Shipping (Fire Protection: Small Ships) Regulations 1998	NON-SOLAS fire pump/ hose. Non - SOLAS non portable fire extinguisher (45l min capacity)	The Merchant Shipping (Prevention of Oil Pollution) Regulations, The Merchant Shipping (Prevention of Air Pollution from Ships) Regulations 2008	Oil Filtering equipment in accordance with MSN 1734 or MED regs. Air pollution in accordance with MSN 1734	The Merchant Shipping (Radio Installations) Regulations	In compliance with MED Regs	The Merchant Shipping (Safety of Navigation) Regulations 2002	For ships over 150GT SOLAS standard approved by the SoS or a person authorised by him. For ships less than 150GT does not have to meet the IMO performance standards	Merchant shipping (distress and prevention of collisions) Regs 1996	COLREG Approved (to which MED is used)
16	VI under 500GT not fully decked	Passenger ships engaged only on voyages with not more than 250 passengers on board, to sea, or in Category A, B, C and D waters, in all cases in favourable weather and during restricted periods, in the course of which the ships are at no time more than 15 miles, exclusive of any Category A, B, C and D waters, from their point of departure nor more than 3 miles from land		The Merchant Shipping (Life-Saving Appliances For Passenger Ships Of Classes III To VI(A)) Regulations 1999	All SOLAS performance standards + Non SOLAS ORIL, buoyant apparatus and lifejacket	The Merchant Shipping (Fire Protection: Small Ships) Regulations 1998	NON-SOLAS hand pumped hose.	The Merchant Shipping (Prevention of Oil Pollution) Regulations, The Merchant Shipping (Prevention of Air Pollution from Ships) Regulations 2008	Oil Filtering equipment in accordance with MSN 1734 or MED regs. Air pollution in accordance with MSN 1734	The Merchant Shipping (Radio Installations) Regulations	In compliance with MED Regs	The Merchant Shipping (Safety of Navigation) Regulations 2002	For ships over 150GT SOLAS standard approved by the SoS or a person authorised by him. For ships less than 150GT does not have to meet the IMO performance standards	Merchant shipping (distress and prevention of collisions) Regs 1996	COLREG Approved (to which MED is used)

Ref #	UK Ship/Vessel Class	Description of Ship Type	No. ships	Life-Saving Appliances		Fire Protection and Extinction		Pollution Prevention		Radio Communication		Safety of Navigation		Collision Prevention	
				Regulations/ Code	Equipment Standards	Regulations/ Code	Equipment Standards	Regulations/ Code	Equipment Standards	Regulations/ Code	Equipment Standards	Regulations/ Code	Equipment Standards	Regulations/ Code	Equipment Standards
17	VI	Passenger ships engaged only on voyages with not more than 250 passengers on board, to sea, or in Category A, B, C and D waters, in all cases in favourable weather and during restricted periods, in the course of which the ships are at no time more than 15 miles, exclusive of any Category A, B, C and D waters, from their point of departure nor more than 3 miles from land	0	The Merchant Shipping (Life-Saving Appliances For Passenger Ships Of Classes III To VI(A)) Regulations 1999	All SOLAS performance standards + Non SOLAS ORIL, buoyant apparatus and lifejacket	The Merchant Shipping (Fire Protection) Regulations 2003	All SOLAS approved.	The Merchant Shipping (Prevention of Oil Pollution) Regulations, The Merchant Shipping (Prevention of Air Pollution from Ships) Regulations 2008	Oil Filtering equipment in accordance with MSN 1734 or MED regs. Air pollution in accordance with MSN 1734	The Merchant Shipping (Radio Installations) Regulations	In compliance with MED Regs	The Merchant Shipping (Safety of Navigation) Regulations 2002	For ships over 150GT SOLAS standard approved by the SoS or a person authorised by him. For ships less than 150GT does not have to meet the IMO performance standards	Merchant shipping (distress and prevention of collisions) Regs 1996	COLREG Approved (to which MED is used)
18	VI(A) (21.34M or over and under 500GT) fully decked	Passenger ships carrying not more than 50 passengers for a distance of not more than 6 miles on voyages to or from isolated communities on the islands or coast of the United Kingdom and which do not proceed for a distance of more than 3 miles from land	0	The Merchant Shipping (Life-Saving Appliances For Passenger Ships Of Classes III To VI(A)) Regulations 1999	All SOLAS performance standards + Non SOLAS ORIL, buoyant apparatus and lifejacket	The Merchant Shipping (Fire Protection: Small Ships) Regulations 1998	NON-SOLAS: fire pump (if not operated by power), 45l foam/CO2 extinguisher (in boiler rooms),	The Merchant Shipping (Prevention of Oil Pollution) Regulations, The Merchant Shipping (Prevention of Air Pollution from Ships) Regulations 2008	Oil Filtering equipment in accordance with MSN 1734 or MED regs. Air pollution in accordance with MSN 1734	The Merchant Shipping (Radio Installations) Regulations	In compliance with MED Regs	The Merchant Shipping (Safety of Navigation) Regulations 2002	For ships over 150GT SOLAS standard approved by the SoS or a person authorised by him. For ships less than 150GT does not have to meet the IMO performance standards	Merchant shipping (distress and prevention of collisions) Regs 1996	COLREG Approved (to which MED is used)



Ref #	UK Ship/Vessel Class	Description of Ship Type	No. ships	Life-Saving Appliances		Fire Protection and Extinction		Pollution Prevention		Radio Communication		Safety of Navigation		Collision Prevention	
				Regulations/ Code	Equipment Standards	Regulations/ Code	Equipment Standards	Regulations/ Code	Equipment Standards	Regulations/ Code	Equipment Standards	Regulations/ Code	Equipment Standards	Regulations/ Code	Equipment Standards
19	VI(A) (under 21.34M, under 500GT) fully decked	Passenger ships carrying not more than 50 passengers for a distance of not more than 6 miles on voyages to or from isolated communities on the islands or coast of the United Kingdom and which do not proceed for a distance of more than 3 miles from land		The Merchant Shipping (Life-Saving Appliances For Passenger Ships Of Classes III To VI(A)) Regulations 2002	All SOLAS performance standards + Non SOLAS ORIL, buoyant apparatus and lifejacket	The Merchant Shipping (Fire Protection: Small Ships) Regulations 1998	NON-SOLAS fire pump/ hose. Non - SOLAS non portable fire extinguisher (45l min capacity)	The Merchant Shipping (Prevention of Oil Pollution) Regulations, The Merchant Shipping (Prevention of Air Pollution from Ships) Regulations 2008	Oil Filtering equipment in accordance with MSN 1734 or MED regs. Air pollution in accordance with MSN 1734	The Merchant Shipping (Radio Installations) Regulations	In compliance with MED Regs	The Merchant Shipping (Safety of Navigation) Regulations 2002	For ships over 150GT SOLAS standard approved by the SoS or a person authorised by him. For ships less than 150GT does not have to meet the IMO performance standards	Merchant shipping (distress and prevention of collisions) Regs 1996	COLREG Approved (to which MED is used)
20	VI(A) under 500GT not fully decked	Passenger ships carrying not more than 50 passengers for a distance of not more than 6 miles on voyages to or from isolated communities on the islands or coast of the United Kingdom and which do not proceed for a distance of more than 3 miles from land		The Merchant Shipping (Life-Saving Appliances For Passenger Ships Of Classes III To VI(A)) Regulations 1999	All SOLAS performance standards + Non SOLAS ORIL, buoyant apparatus and lifejacket	The Merchant Shipping (Fire Protection: Small Ships) Regulations 1998	NON-SOLAS hand pumped hose.	The Merchant Shipping (Prevention of Oil Pollution) Regulations, The Merchant Shipping (Prevention of Air Pollution from Ships) Regulations 2008	Oil Filtering equipment in accordance with MSN 1734 or MED regs. Air pollution in accordance with MSN 1734	The Merchant Shipping (Radio Installations) Regulations	In compliance with MED Regs	The Merchant Shipping (Safety of Navigation) Regulations 2002	For ships over 150GT SOLAS standard approved by the SoS or a person authorised by him. For ships less than 150GT does not have to meet the IMO performance standards	Merchant shipping (distress and prevention of collisions) Regs 1996	COLREG Approved (to which MED is used)
21	VI(A)	Passenger ships carrying not more than 50 passengers for a distance of not more than 6 miles on voyages to or from isolated communities on the islands or coast of the United Kingdom and which do not proceed for a distance of more than 3 miles from land		The Merchant Shipping (Life-Saving Appliances For Passenger Ships Of Classes III To VI(A)) Regulations 1999	All SOLAS performance standards + Non SOLAS ORIL, buoyant apparatus and lifejacket	The Merchant Shipping (Fire Protection) Regulations 2003	All SOLAS approved.	The Merchant Shipping (Prevention of Oil Pollution) Regulations, The Merchant Shipping (Prevention of Air Pollution from Ships) Regulations 2008	Oil Filtering equipment in accordance with MSN 1734 or MED regs. Air pollution in accordance with MSN 1734	The Merchant Shipping (Radio Installations) Regulations	In compliance with MED Regs	The Merchant Shipping (Safety of Navigation) Regulations 2002	For ships over 150GT SOLAS standard approved by the SoS or a person authorised by him. For ships less than 150GT does not have to meet the IMO performance standards	Merchant shipping (distress and prevention of collisions) Regs 1996	COLREG Approved (to which MED is used)

Ref #	UK Ship/Vessel Class	Description of Ship Type	No. ships	Life-Saving Appliances		Fire Protection and Extinction		Pollution Prevention		Radio Communication		Safety of Navigation		Collision Prevention	
				Regulations/ Code	Equipment Standards	Regulations/ Code	Equipment Standards	Regulations/ Code	Equipment Standards	Regulations/ Code	Equipment Standards	Regulations/ Code	Equipment Standards	Regulations/ Code	Equipment Standards
23	VII	Cargo ships (other than ships of Classes I, VII(A), VII(T), XI and XII) engaged on voyages any of which are long international voyages	0	The Merchant Shipping (Life-Saving Appliances for Ships other than Ships of Classes III to VI(A)) Regulations	All SOLAS performance standard	The Merchant Shipping (Fire Protection) Regulations 2003	All SOLAS approved.	The Merchant Shipping (Prevention of Pollution by Sewage and Garbage from Ships) Regulations 2008, The Merchant Shipping (Prevention of Oil Pollution) Regulations, The Merchant Shipping (Prevention of Air Pollution from Ships) Regulations 2008	Sewage treatment plant (in accordance with MED regs), Oil Filtering equipment in accordance with MSN 1734 or MED regs. Air pollution in accordance with MSN 1734	The Merchant Shipping (Radio Installations) Regulations (over 300GT)	In compliance with MED Regs	The Merchant Shipping (Safety of Navigation) Regulations 2002	For ships over 150GT SOLAS standard approved by the SoS or a person authorised by him. For ships less than 150GT does not have to meet the IMO performance standards	Merchant shipping (distress and prevention of collisions) Regs 1996	COLREG Approved (to which MED is used)
24	VII(A)	Cargo ships employed as fish processing or canning factory ships, and ships engaged in the carriage of persons employed in the fish processing or canning industries	11	The Merchant Shipping (Life-Saving Appliances for Ships other than Ships of Classes III to VI(A)) Regulations	All SOLAS performance standard	The Merchant Shipping (Fire Protection) Regulations 2003	All SOLAS approved.	The Merchant Shipping (Prevention of Pollution by Sewage and Garbage from Ships) Regulations 2008, The Merchant Shipping (Prevention of Oil Pollution) Regulations, The Merchant Shipping (Prevention of Air Pollution from Ships) Regulations 2008	Sewage treatment plant (in accordance with MED regs), Oil Filtering equipment in accordance with MSN 1734 or MED regs. Air pollution in accordance with MSN 1734	The Merchant Shipping (Radio Installations) Regulations (over 300GT)	In compliance with MED Regs	The Merchant Shipping (Safety of Navigation) Regulations 2002	For ships over 150GT SOLAS standard approved by the SoS or a person authorised by him. For ships less than 150GT does not have to meet the IMO performance standards	Merchant shipping (distress and prevention of collisions) Regs 1996	COLREG Approved (to which MED is used)
25	VII(T)	Tankers engaged on voyages any of which are long international voyages	27	The Merchant Shipping (Life-Saving Appliances for Ships other than Ships of Classes III to VI(A)) Regulations	All SOLAS performance standard	The Merchant Shipping (Fire Protection) Regulations 2003	All SOLAS approved.	The Merchant Shipping (Prevention of Pollution by Sewage and Garbage from Ships) Regulations 2008, The Merchant Shipping (Prevention of Oil Pollution) Regulations, The Merchant Shipping (Prevention of Air Pollution from Ships) Regulations 2008	Sewage treatment plant (in accordance with MED regs), Oil Filtering equipment in accordance with MSN 1734 or MED regs. Air pollution in accordance with MSN 1734	The Merchant Shipping (Radio Installations) Regulations (over 300GT)	In compliance with MED Regs	The Merchant Shipping (Safety of Navigation) Regulations 2002	For ships over 150GT SOLAS standard approved by the SoS or a person authorised by him. For ships less than 150GT does not have to meet the IMO performance standards	Merchant shipping (distress and prevention of collisions) Regs 1996	COLREG Approved (to which MED is used)
28	VII under 500GT	Cargo ships (other than ships of Classes I, VII(A), VII(T), XI and XII) engaged on voyages any of which are long international voyages	0	The Merchant Shipping (Life-Saving Appliances for Ships other than Ships of Classes III to VI(A)) Regulations	All SOLAS performance + non SOLAS inflated boat	The Merchant Shipping (Fire Protection: Small Ships) Regulations 1998	non powered pump with throw of not less than 6m and foam fire extinguisher of 45l capacity in engine rooms.	The Merchant Shipping (Prevention of Pollution by Sewage and Garbage from Ships) Regulations 2008, The Merchant Shipping (Prevention of Oil Pollution) Regulations, The Merchant Shipping (Prevention of Air Pollution from Ships) Regulations 2008	Sewage treatment plant (in accordance with MED regs), Oil Filtering equipment in accordance with MSN 1734 or MED regs. Air pollution in accordance with MSN 1734	The Merchant Shipping (Radio Installations) Regulations (over 300GT)	In compliance with MED Regs	The Merchant Shipping (Safety of Navigation) Regulations 2002	For ships over 150GT SOLAS standard approved by the SoS or a person authorised by him. For ships less than 150GT does not have to meet the IMO performance standards	Merchant shipping (distress and prevention of collisions) Regs 1996	COLREG Approved (to which MED is used)

Ref #	UK Ship/Vessel Class	Description of Ship Type	No. ships	Life-Saving Appliances		Fire Protection and Extinction		Pollution Prevention		Radio Communication		Safety of Navigation		Collision Prevention	
				Regulations/ Code	Equipment Standards	Regulations/ Code	Equipment Standards	Regulations/ Code	Equipment Standards	Regulations/ Code	Equipment Standards	Regulations/ Code	Equipment Standards	Regulations/ Code	Equipment Standards
26	VIII	ships (other than ships of Classes II, VIII(T), IX, XI and XII) engaged only on short international voyages	0	The Merchant Shipping (Life-Saving Appliances for Ships other than Ships of Classes III to VI(A)) Regulations	All SOLAS performance standard	The Merchant Shipping (Fire Protection) Regulations 2003	All SOLAS approved.	The Merchant Shipping (Prevention of Pollution by Sewage and Garbage from Ships) Regulations 2008, The Merchant Shipping (Prevention of Oil Pollution) Regulations, The Merchant Shipping (Prevention of Air Pollution from Ships) Regulations 2008	Sewage treatment plant (in accordance with MED regs), Oil Filtering equipment in accordance with MSN 1734 or MED regs. Air pollution in accordance with MSN 1734	The Merchant Shipping (Radio Installations) Regulations (over 300GT)	In compliance with MED Regs	The Merchant Shipping (Safety of Navigation) Regulations 2002	For ships over 150GT SOLAS standard approved by the SoS or a person authorised by him. For ships less than 150GT does not have to meet the IMO performance standards	Merchant shipping (distress and prevention of collisions) Regs 1996	COLREG Approved (to which MED is used)
27	VIII(T)	tankers engaged on voyages any of which are short international voyages	6	The Merchant Shipping (Life-Saving Appliances for Ships other than Ships of Classes III to VI(A)) Regulations	All SOLAS performance standard	The Merchant Shipping (Fire Protection) Regulations 2004	All SOLAS approved.	The Merchant Shipping (Prevention of Pollution by Sewage and Garbage from Ships) Regulations 2008, The Merchant Shipping (Prevention of Oil Pollution) Regulations, The Merchant Shipping (Prevention of Air Pollution from Ships) Regulations 2008	Sewage treatment plant (in accordance with MED regs), Oil Filtering equipment in accordance with MSN 1734 or MED regs. Air pollution in accordance with MSN 1734	The Merchant Shipping (Radio Installations) Regulations (over 300GT)	In compliance with MED Regs	The Merchant Shipping (Safety of Navigation) Regulations 2002	For ships over 150GT SOLAS standard approved by the SoS or a person authorised by him. For ships less than 150GT does not have to meet the IMO performance standards	Merchant shipping (distress and prevention of collisions) Regs 1996	COLREG Approved (to which MED is used)
29	VII(A) under 500GT	Cargo ships employed as fish processing or canning factory ships, and ships engaged in the carriage of persons employed in the fish processing or canning industries	0	The Merchant Shipping (Life-Saving Appliances for Ships other than Ships of Classes III to VI(A)) Regulations	All SOLAS performance + non SOLAS inflated boat	The Merchant Shipping (Fire Protection: Small Ships) Regulations 1998	non powered pump with throw of not less than 6m and foam fire extinguisher of 45l capacity in engine rooms.	The Merchant Shipping (Prevention of Pollution by Sewage and Garbage from Ships) Regulations 2008, The Merchant Shipping (Prevention of Oil Pollution) Regulations, The Merchant Shipping (Prevention of Air Pollution from Ships) Regulations 2008	Sewage treatment plant (in accordance with MED regs), Oil Filtering equipment in accordance with MSN 1734 or MED regs. Air pollution in accordance with MSN 1734	The Merchant Shipping (Radio Installations) Regulations (over 300GT)	In compliance with MED Regs	The Merchant Shipping (Safety of Navigation) Regulations 2002	For ships over 150GT SOLAS standard approved by the SoS or a person authorised by him. For ships less than 150GT does not have to meet the IMO performance standards	Merchant shipping (distress and prevention of collisions) Regs 1996	COLREG Approved (to which MED is used)
30	VII(T) Under 500	Tankers engaged on voyages any of which are long international voyages	0	The Merchant Shipping (Life-Saving Appliances for Ships other than Ships of Classes III to VI(A)) Regulations	All SOLAS performance + non SOLAS inflated boat	The Merchant Shipping (Fire Protection: Small Ships) Regulations 1998	non powered pump with throw of not less than 6m and foam fire extinguisher of 45l capacity in engine rooms.	The Merchant Shipping (Prevention of Pollution by Sewage and Garbage from Ships) Regulations 2008, The Merchant Shipping (Prevention of Oil Pollution) Regulations, The Merchant Shipping (Prevention of Air Pollution from Ships) Regulations 2008	Sewage treatment plant (in accordance with MED regs), Oil Filtering equipment in accordance with MSN 1734 or MED regs. Air pollution in accordance with MSN 1734	The Merchant Shipping (Radio Installations) Regulations (over 300GT)	In compliance with MED Regs	The Merchant Shipping (Safety of Navigation) Regulations 2002	For ships over 150GT SOLAS standard approved by the SoS or a person authorised by him. For ships less than 150GT does not have to meet the IMO performance standards	Merchant shipping (distress and prevention of collisions) Regs 1996	COLREG Approved (to which MED is used)

Ref #	UK Ship/Vessel Class	Description of Ship Type	No. ships	Life-Saving Appliances		Fire Protection and Extinction		Pollution Prevention		Radio Communication		Safety of Navigation		Collision Prevention	
				Regulations/ Code	Equipment Standards	Regulations/ Code	Equipment Standards	Regulations/ Code	Equipment Standards	Regulations/ Code	Equipment Standards	Regulations/ Code	Equipment Standards	Regulations/ Code	Equipment Standards
31	VIII 150-500GT	ships (other than ships of Classes II, VIII(T), IX, XI and XII) engaged only on short international voyages	0	The Merchant Shipping (Life-Saving Appliances for Ships other than Ships of Classes III to VI(A)) Regulations	All SOLAS performance + non SOLAS inflated boat	The Merchant Shipping (Fire Protection: Small Ships) Regulations 1998	non powered pump with throw of not less than 6m and foam fire extinguisher of 45l capacity in engine rooms.	The Merchant Shipping (Prevention of Pollution by Sewage and Garbage from Ships) Regulations 2008, The Merchant Shipping (Prevention of Oil Pollution) Regulations, The Merchant Shipping (Prevention of Air Pollution from Ships) Regulations 2008	Sewage treatment plant (in accordance with MED regs), Oil Filtering equipment in accordance with MSN 1734 or MED regs. Air pollution in accordance with MSN 1734	The Merchant Shipping (Radio Installations) Regulations (over 300GT)	In compliance with MED Regs	The Merchant Shipping (Safety of Navigation) Regulations 2002	For ships over 150GT SOLAS standard approved by the SoS or a person authorised by him. For ships less than 150GT does not have to meet the IMO performance standards	Merchant shipping (distress and prevention of collisions) Regs 1996	COLREG Approved (to which MED is used)
32	VIII under 150GT over 21.34M	ships (other than ships of Classes II, VIII(T), IX, XI and XII) engaged only on short international voyages	0	The Merchant Shipping (Life-Saving Appliances for Ships other than Ships of Classes III to VI(A)) Regulations	All SOLAS performance + non SOLAS inflated boat	The Merchant Shipping (Fire Protection: Small Ships) Regulations 1998	In machinery spaces, gas injection system fire smothering gas to at least 60/ 40% of volume of space for wood/ steel bulkheads	The Merchant Shipping (Prevention of Pollution by Sewage and Garbage from Ships) Regulations 2008, The Merchant Shipping (Prevention of Oil Pollution) Regulations, The Merchant Shipping (Prevention of Air Pollution from Ships) Regulations 2008	Sewage treatment plant (in accordance with MED regs), Oil Filtering equipment in accordance with MSN 1734 or MED regs. Air pollution in accordance with MSN 1734	The Merchant Shipping (Radio Installations) Regulations (over 300GT)	In compliance with MED Regs	The Merchant Shipping (Safety of Navigation) Regulations 2002	For ships over 150GT SOLAS standard approved by the SoS or a person authorised by him. For ships less than 150GT does not have to meet the IMO performance standards	Merchant shipping (distress and prevention of collisions) Regs 1996	COLREG Approved (to which MED is used)
33	VIII under 150GT under 21.34M	ships (other than ships of Classes II, VIII(T), IX, XI and XII) engaged only on short international voyages	0	The Merchant Shipping (Life-Saving Appliances for Ships other than Ships of Classes III to VI(A)) Regulations	All SOLAS performance + non SOLAS inflated boat	The Merchant Shipping (Fire Protection: Small Ships) Regulations 1998	non powered pump with throw of not less than 6m. Water spraying system provided by a hand pump to inject into machinery spaces.	The Merchant Shipping (Prevention of Pollution by Sewage and Garbage from Ships) Regulations 2008, The Merchant Shipping (Prevention of Oil Pollution) Regulations, The Merchant Shipping (Prevention of Air Pollution from Ships) Regulations 2008	Sewage treatment plant (in accordance with MED regs), Oil Filtering equipment in accordance with MSN 1734 or MED regs. Air pollution in accordance with MSN 1734	The Merchant Shipping (Radio Installations) Regulations (over 300GT)	In compliance with MED Regs	The Merchant Shipping (Safety of Navigation) Regulations 2002	For ships over 150GT SOLAS standard approved by the SoS or a person authorised by him. For ships less than 150GT does not have to meet the IMO performance standards	Merchant shipping (distress and prevention of collisions) Regs 1996	COLREG Approved (to which MED is used)
34	VIII(T) 150-500	tankers engaged on voyages any of which are short international voyages	0	The Merchant Shipping (Life-Saving Appliances for Ships other than Ships of Classes III to VI(A)) Regulations	All SOLAS performance + non SOLAS inflated boat	The Merchant Shipping (Fire Protection: Small Ships) Regulations 1998	non powered pump with throw of not less than 6m and foam fire extinguisher of 45l capacity in engine rooms.	The Merchant Shipping (Prevention of Pollution by Sewage and Garbage from Ships) Regulations 2008, The Merchant Shipping (Prevention of Oil Pollution) Regulations, The Merchant Shipping (Prevention of Air Pollution from Ships) Regulations 2008	Sewage treatment plant (in accordance with MED regs), Oil Filtering equipment in accordance with MSN 1734 or MED regs. Air pollution in accordance with MSN 1734	The Merchant Shipping (Radio Installations) Regulations (over 300GT)	In compliance with MED Regs	The Merchant Shipping (Safety of Navigation) Regulations 2002	For ships over 150GT SOLAS standard approved by the SoS or a person authorised by him. For ships less than 150GT does not have to meet the IMO performance standards	Merchant shipping (distress and prevention of collisions) Regs 1996	COLREG Approved (to which MED is used)

Ref #	UK Ship/Vessel Class	Description of Ship Type	No. ships	Life-Saving Appliances		Fire Protection and Extinction		Pollution Prevention		Radio Communication		Safety of Navigation		Collision Prevention	
				Regulations/ Code	Equipment Standards	Regulations/ Code	Equipment Standards	Regulations/ Code	Equipment Standards	Regulations/ Code	Equipment Standards	Regulations/ Code	Equipment Standards	Regulations/ Code	Equipment Standards
35	VIII(T) under 150	tankers engaged on voyages any of which are short international voyages		The Merchant Shipping (Life-Saving Appliances for Ships other than Ships of Classes III to VI(A)) Regulations	All SOLAS performance + non SOLAS inflated boat	The Merchant Shipping (Fire Protection: Small Ships) Regulations 1998	over 21.34M: In machinery spaces, gas injection system fire smothering gas to at least 60/ 40% of volume of space for wood/ steel bulkheads Under 21.34: non powered pump with throw of not less than 6m. Water spraying system provided by a hand pump to inject into machinery spaces.	The Merchant Shipping (Prevention of Pollution by Sewage and Garbage from Ships) Regulations 2008, The Merchant Shipping (Prevention of Oil Pollution) Regulations, The Merchant Shipping (Prevention of Air Pollution from Ships) Regulations 2008	Sewage treatment plant (in accordance with MED regs), Oil Filtering equipment in accordance with MSN 1734 or MED regs. Air pollution in accordance with MSN 1734	The Merchant Shipping (Radio Installations) Regulations (over 300GT)	In compliance with MED Regs	The Merchant Shipping (Safety of Navigation) Regulations 2002	For ships over 150GT SOLAS standard approved by the SoS or a person authorised by him. For ships less than 150GT does not have to meet the IMO performance standards	Merchant shipping (distress and prevention of collisions) Regs 1996	COLREG Approved (to which MED is used)
36	VIII(A) 150-500GT	ships (other than ships of Classes II(A) to VI(A) inclusive, VIII(A)(T), IX, IX(A), IX(A)(T), XI and XII) engaged only on voyages which are not international voyages	1	The Merchant Shipping (Life-Saving Appliances for Ships other than Ships of Classes III to VI(A)) Regulations	All SOLAS performance + non SOLAS inflated boat	The Merchant Shipping (Fire Protection: Small Ships) Regulations 1998	non powered pump with throw of not less than 6m and foam fire extinguisher of 45l capacity in engine rooms.	The Merchant Shipping (Prevention of Oil Pollution) Regulations, The Merchant Shipping (Prevention of Air Pollution from Ships) Regulations 2008	Oil Filtering equipment in accordance with MSN 1734 or MED regs. Air pollution in accordance with MSN 1734	The Merchant Shipping (Radio Installations) Regulations (over 300GT)	In compliance with MED Regs	The Merchant Shipping (Safety of Navigation) Regulations 2002	For ships over 150GT SOLAS standard approved by the SoS or a person authorised by him. For ships less than 150GT does not have to meet the IMO performance standards	Merchant shipping (distress and prevention of collisions) Regs 1996	COLREG Approved (to which MED is used)
37	VIII(A) under 150GT	ships (other than ships of Classes II(A) to VI(A) inclusive, VIII(A)(T), IX, IX(A), IX(A)(T), XI and XII) engaged only on voyages which are not international voyages	1	The Merchant Shipping (Life-Saving Appliances for Ships other than Ships of Classes III to VI(A)) Regulations	All SOLAS performance + non SOLAS inflated boat	The Merchant Shipping (Fire Protection: Small Ships) Regulations 1998	over 21.34M: In machinery spaces, gas injection system fire smothering gas to at least 60/ 40% of volume of space for wood/ steel bulkheads Under 21.34: non powered pump with throw of not less than 6m. Water spraying system provided by a hand pump to inject into machinery spaces.	The Merchant Shipping (Prevention of Oil Pollution) Regulations, The Merchant Shipping (Prevention of Air Pollution from Ships) Regulations 2008	Oil Filtering equipment in accordance with MSN 1734 or MED regs. Air pollution in accordance with MSN 1734	The Merchant Shipping (Radio Installations) Regulations (over 300GT)	In compliance with MED Regs	The Merchant Shipping (Safety of Navigation) Regulations 2002	For ships over 150GT SOLAS standard approved by the SoS or a person authorised by him. For ships less than 150GT does not have to meet the IMO performance standards	Merchant shipping (distress and prevention of collisions) Regs 1996	COLREG Approved (to which MED is used)
38	VIII(A)	ships (other than ships of Classes II(A) to VI(A) inclusive, VIII(A)(T), IX, IX(A), IX(A)(T), XI and XII) engaged only on voyages which are not international voyages	26	The Merchant Shipping (Life-Saving Appliances for Ships other than Ships of Classes III to VI(A)) Regulations	All SOLAS performance + non SOLAS inflated boat (for <500GT)	The Merchant Shipping (Fire Protection) Regulations 2003	All SOLAS approved.	The Merchant Shipping (Prevention of Oil Pollution) Regulations, The Merchant Shipping (Prevention of Air Pollution from Ships) Regulations 2008	Oil Filtering equipment in accordance with MSN 1734 or MED regs. Air pollution in accordance with MSN 1734	The Merchant Shipping (Radio Installations) Regulations (over 300GT)	In compliance with MED Regs	The Merchant Shipping (Safety of Navigation) Regulations 2002	For ships over 150GT SOLAS standard approved by the SoS or a person authorised by him. For ships less than 150GT does not have to meet the IMO performance standards	Merchant shipping (distress and prevention of collisions) Regs 1996	COLREG Approved (to which MED is used)
39	II(A)(T) 150-500	tankers engaged only on voyages which are not international voyages	6	The Merchant Shipping (Life-Saving Appliances for Ships other than Ships of Classes III to VI(A)) Regulations	All SOLAS performance + non SOLAS inflated boat	The Merchant Shipping (Fire Protection: Small Ships) Regulations 1998	non powered pump with throw of not less than 6m and foam fire extinguisher of 45l capacity in engine rooms.	The Merchant Shipping (Prevention of Oil Pollution) Regulations, The Merchant Shipping (Prevention of Air Pollution from Ships) Regulations 2008	Oil Filtering equipment in accordance with MSN 1734 or MED regs. Air pollution in accordance with MSN 1734	The Merchant Shipping (Radio Installations) Regulations (over 300GT)	In compliance with MED Regs	The Merchant Shipping (Safety of Navigation) Regulations 2002	For ships over 150GT SOLAS standard approved by the SoS or a person authorised by him. For ships less than 150GT does not have to meet the IMO performance standards	Merchant shipping (distress and prevention of collisions) Regs 1996	COLREG Approved (to which MED is used)

Ref #	UK Ship/Vessel Class	Description of Ship Type	No. ships	Life-Saving Appliances		Fire Protection and Extinction		Pollution Prevention		Radio Communication		Safety of Navigation		Collision Prevention	
				Regulations/ Code	Equipment Standards	Regulations/ Code	Equipment Standards	Regulations/ Code	Equipment Standards	Regulations/ Code	Equipment Standards	Regulations/ Code	Equipment Standards	Regulations/ Code	Equipment Standards
40	VIII(A)(T) under 150	tankers engaged only on voyages which are not international voyages		The Merchant Shipping (Life-Saving Appliances for Ships other than Ships of Classes III to VI(A)) Regulations	All SOLAS performance + non SOLAS inflated boat	The Merchant Shipping (Fire Protection: Small Ships) Regulations 1998	over 21.34M: In machinery spaces, gas injection system fire smothering gas to at least 60/ 40% of volume of space for wood/ steel bulkheads Under 21.34: non powered pump with throw of not less than 6m. Water spraying system provided by a hand pump to inject into machinery spaces.	The Merchant Shipping (Prevention of Oil Pollution) Regulations, The Merchant Shipping (Prevention of Air Pollution from Ships) Regulations 2008	Oil Filtering equipment in accordance with MSN 1734 or MED regs. Air pollution in accordance with MSN 1734	The Merchant Shipping (Radio Installations) Regulations (over 300GT)	In compliance with MED Regs	The Merchant Shipping (Safety of Navigation) Regulations 2002	For ships over 150GT SOLAS standard approved by the SoS or a person authorised by him. For ships less than 150GT does not have to meet the IMO performance standards	Merchant shipping (distress and prevention of collisions) Regs 1996	COLREG Approved (to which MED is used)
41	VIII(A)(T)	tankers engaged only on voyages which are not international voyages	43	The Merchant Shipping (Life-Saving Appliances for Ships other than Ships of Classes III to VI(A)) Regulations	All SOLAS + non SOLAS inflated boat (for <500GT)	The Merchant Shipping (Fire Protection) Regulations 2003	All SOLAS approved.	The Merchant Shipping (Prevention of Oil Pollution) Regulations, The Merchant Shipping (Prevention of Air Pollution from Ships) Regulations 2008	Oil Filtering equipment in accordance with MSN 1734 or MED regs. Air pollution in accordance with MSN 1734	The Merchant Shipping (Radio Installations) Regulations (over 300GT)	In compliance with MED Regs	The Merchant Shipping (Safety of Navigation) Regulations 2002	For ships over 150GT SOLAS standard approved by the SoS or a person authorised by him. For ships less than 150GT does not have to meet the IMO performance standards	Merchant shipping (distress and prevention of collisions) Regs 1996	COLREG Approved (to which MED is used)
42	IX 150 - 500GT	tugs and tenders (other than ships of Classes II, II(A), III, VI and VI(A)) which proceed to sea but are not engaged on long international voyages		The Merchant Shipping (Life-Saving Appliances for Ships other than Ships of Classes III to VI(A)) Regulations	All SOLAS + non SOLAS inflated boat	The Merchant Shipping (Fire Protection: Small Ships) Regulations 1998	non powered pump with throw of not less than 6m and foam fire extinguisher of 45l capacity in engine rooms.	The Merchant Shipping (Prevention of Oil Pollution) Regulations, The Merchant Shipping (Prevention of Air Pollution from Ships) Regulations 2008	Oil Filtering equipment in accordance with MSN 1734 or MED regs. Air pollution in accordance with MSN 1734	The Merchant Shipping (Radio Installations) Regulations (over 300GT)	In compliance with MED Regs	The Merchant Shipping (Safety of Navigation) Regulations 2002	For ships over 150GT SOLAS standard approved by the SoS or a person authorised by him. For ships less than 150GT does not have to meet the IMO performance standards	Merchant shipping (distress and prevention of collisions) Regs 1996	COLREG Approved (to which MED is used)
43	IX under 150	tugs and tenders (other than ships of Classes II, II(A), III, VI and VI(A)) which proceed to sea but are not engaged on long international voyages	52	The Merchant Shipping (Life-Saving Appliances for Ships other than Ships of Classes III to VI(A)) Regulations	All SOLAS + non SOLAS inflated boat	The Merchant Shipping (Fire Protection: Small Ships) Regulations 1998	over 21.34M: In machinery spaces, gas injection system fire smothering gas to at least 60/ 40% of volume of space for wood/ steel bulkheads Under 21.34: non powered pump with throw of not less than 6m. Water spraying system provided by a hand pump to inject into machinery spaces.	The Merchant Shipping (Prevention of Oil Pollution) Regulations, The Merchant Shipping (Prevention of Air Pollution from Ships) Regulations 2008	Oil Filtering equipment in accordance with MSN 1734 or MED regs. Air pollution in accordance with MSN 1734	The Merchant Shipping (Radio Installations) Regulations (over 300GT)	In compliance with MED Regs	The Merchant Shipping (Safety of Navigation) Regulations 2002	For ships over 150GT SOLAS standard approved by the SoS or a person authorised by him. For ships less than 150GT does not have to meet the IMO performance standards	Merchant shipping (distress and prevention of collisions) Regs 1996	COLREG Approved (to which MED is used)
44	IX	tugs and tenders (other than ships of Classes II, II(A), III, VI and VI(A)) which proceed to sea but are not engaged on long international voyages	11	The Merchant Shipping (Life-Saving Appliances for Ships other than Ships of Classes III to VI(A)) Regulations	All SOLAS performance but not for Buoyant apparatus or inflated boat	The Merchant Shipping (Fire Protection) Regulations 2003	All SOLAS approved.	The Merchant Shipping (Prevention of Oil Pollution) Regulations, The Merchant Shipping (Prevention of Air Pollution from Ships) Regulations 2008	Oil Filtering equipment in accordance with MSN 1734 or MED regs. Air pollution in accordance with MSN 1734	The Merchant Shipping (Radio Installations) Regulations (over 300GT)	In compliance with MED Regs	The Merchant Shipping (Safety of Navigation) Regulations 2002	For ships over 150GT SOLAS standard approved by the SoS or a person authorised by him. For ships less than 150GT does not have to meet the IMO performance standards	Merchant shipping (distress and prevention of collisions) Regs 1996	COLREG Approved (to which MED is used)

Ref #	UK Ship/Vessel Class	Description of Ship Type	No. ships	Life-Saving Appliances		Fire Protection and Extinction		Pollution Prevention		Radio Communication		Safety of Navigation		Collision Prevention	
				Regulations/ Code	Equipment Standards	Regulations/ Code	Equipment Standards	Regulations/ Code	Equipment Standards	Regulations/ Code	Equipment Standards	Regulations/ Code	Equipment Standards	Regulations/ Code	Equipment Standards
45	IX(A) under 150-500GT	ships (other than ships of Classes IV to VI inclusive) which do not proceed to sea	3	The Merchant Shipping (Life-Saving Appliances for Ships other than Ships of Classes III to VI(A)) Regulations / MGN 469	All SOLAS, option for non SOLAS liferaft / Lifebuoys to BS standards, Lifejackets to BS 396, Liferaft : ORIL. Unspecified standard of radar reflector, flares.	The Merchant Shipping (Fire Protection: Small Ships) Regulations 1998	non powered pump with throw of not less than 6m and foam fire extinguisher of 45l capacity in engine rooms.	The Merchant Shipping (Prevention of Oil Pollution) Regulations, The Merchant Shipping (Prevention of Air Pollution from Ships) Regulations 2008	Oil Filtering equipment in accordance with MSN 1734 or MED regs. Air pollution in accordance with MSN 1734			*		Merchant shipping (distress and prevention of collisions) Regs 1996	COLREG Approved (to which MED is used)
46	IX(A) under 150	ships (other than ships of Classes IV to VI inclusive) which do not proceed to sea	3	The Merchant Shipping (Life-Saving Appliances for Ships other than Ships of Classes III to VI(A)) Regulations / MGN 469	All SOLAS, option for non SOLAS liferaft / Lifebuoys to BS standards, Lifejackets to BS 396, Liferaft : ORIL. Unspecified standard of radar reflector, flares.	The Merchant Shipping (Fire Protection: Small Ships) Regulations 1998	over 21.34M: In machinery spaces, gas injection system fire smothering gas to at least 60/ 40% of volume of space for wood/ steel bulkheads Under 21.34: non powered pump with throw of not less than 6m. Water spraying system provided by a hand pump to inject into machinery spaces.	The Merchant Shipping (Prevention of Oil Pollution) Regulations, The Merchant Shipping (Prevention of Air Pollution from Ships) Regulations 2008	Oil Filtering equipment in accordance with MSN 1734 or MED regs. Air pollution in accordance with MSN 1734			*		Merchant shipping (distress and prevention of collisions) Regs 1996	COLREG Approved (to which MED is used)
47	IX(A)	ships (other than ships of Classes IV to VI inclusive) which do not proceed to sea	5	The Merchant Shipping (Life-Saving Appliances for Ships other than Ships of Classes III to VI(A)) Regulations / MGN 469	All SOLAS, option for non SOLAS liferaft / Lifebuoys to BS standards, Lifejackets to BS 396, Liferaft : ORIL. Unspecified standard of radar reflector, flares.	The Merchant Shipping (Fire Protection) Regulations 2003/ MGN 469	All SOLAS performance standards not approved. / Fire extinguisher approved to BS EN 3 series.	The Merchant Shipping (Prevention of Oil Pollution) Regulations, The Merchant Shipping (Prevention of Air Pollution from Ships) Regulations 2008	Oil Filtering equipment in accordance with MSN 1734 or MED regs. Air pollution in accordance with MSN 1734			*		Merchant shipping (distress and prevention of collisions) Regs 1996	COLREG Approved (to which MED is used)
48	IX (A) operating in Categorized water and less than 12m		N/A	The Merchant Shipping (Life-Saving Appliances for Ships other than Ships of Classes III to VI(A)) Regulations	All SOLAS + Non SOLAS lifebuoy option	The Merchant Shipping (Fire Protection) Regulations 2003	All SOLAS approved.	The Merchant Shipping (Prevention of Oil Pollution) Regulations, The Merchant Shipping (Prevention of Air Pollution from Ships) Regulations 2008	Oil Filtering equipment in accordance with MSN 1734 or MED regs. Air pollution in accordance with MSN 1734			*		Merchant shipping (distress and prevention of collisions) Regs 1996	COLREG Approved (to which MED is used)
49	IX(A)(T)	tankers which do not proceed to sea	0	The Merchant Shipping (Life-Saving Appliances for Ships other than Ships of Classes III to VI(A)) Regulations	SOLAS + option for non SOLAS liferaft	The Merchant Shipping (Fire Protection) Regulations 2003	All SOLAS approved.	The Merchant Shipping (Prevention of Oil Pollution) Regulations, The Merchant Shipping (Prevention of Air Pollution from Ships) Regulations 2008	Oil Filtering equipment in accordance with MSN 1734 or MED regs. Air pollution in accordance with MSN 1734			*		Merchant shipping (distress and prevention of collisions) Regs 1996	COLREG Approved (to which MED is used)
50	IX (A)(T) operating in Categorized water and less than 12m		N/A	The Merchant Shipping (Life-Saving Appliances for Ships other than Ships of Classes III to VI(A)) Regulations	All SOLAS + Non SOLAS lifebuoy option	The Merchant Shipping (Fire Protection) Regulations 2003	All SOLAS performance standards not approved.	The Merchant Shipping (Prevention of Oil Pollution) Regulations, The Merchant Shipping (Prevention of Air Pollution from Ships) Regulations 2008	Oil Filtering equipment in accordance with MSN 1734 or MED regs. Air pollution in accordance with MSN 1734			*		Merchant shipping (distress and prevention of collisions) Regs 1996	COLREG Approved (to which MED is used)

Ref #	UK Ship/Vessel Class	Description of Ship Type	No. ships	Life-Saving Appliances		Fire Protection and Extinction		Pollution Prevention		Radio Communication		Safety of Navigation		Collision Prevention		
				Regulations/ Code	Equipment Standards	Regulations/ Code	Equipment Standards	Regulations/ Code	Equipment Standards	Regulations/ Code	Equipment Standards	Regulations/ Code	Equipment Standards	Regulations/ Code	Equipment Standards	
51	XI (150-500)	sailing ships (other than fishing vessels and ships of Class XII) which proceed to sea	6	The Merchant Shipping (Life-Saving Appliances for Ships other than Ships of Classes III to VI(A)) Regulations	SOLAS + Non SOLAS lifebuoy option & inflated boat	The Merchant Shipping (Fire Protection: Small Ships) Regulations 1998	non powered pump with throw of not less than 6m and foam fire extinguisher of 45l capacity in engine rooms.	The Merchant Shipping (Prevention of Oil Pollution) Regulations, The Merchant Shipping (Prevention of Air Pollution from Ships) Regulations 2008	Oil Filtering equipment in accordance with MSN 1734 or MED regs. Air pollution in accordance with MSN 1734			The Merchant Shipping (Safety of Navigation) Regulations 2002	For ships over 150GT SOLAS standard approved by the SoS or a person authorised by him. For ships less than 150GT does not have to meet the IMO performance standards	Merchant shipping (distress and prevention of collisions) Regs 1996	COLREG Approved (to which MED is used)	
52	XI 150	sailing ships (other than fishing vessels and ships of Class XII) which proceed to sea		The Merchant Shipping (Life-Saving Appliances for Ships other than Ships of Classes III to VI(A)) Regulations	All SOLAS + Non SOLAS lifebuoy option inflated boat	The Merchant Shipping (Fire Protection: Small Ships) Regulations 1998	over 21.34M: In machinery spaces, gas injection system fire smothering gas to at least 60/ 40% of volume of space for wood/ steel bulkheads Under 21.34: non powered pump with throw of not less than 6m. Water spraying system provided by a hand pump to inject into machinery spaces.	The Merchant Shipping (Prevention of Oil Pollution) Regulations, The Merchant Shipping (Prevention of Air Pollution from Ships) Regulations 2008	Oil Filtering equipment in accordance with MSN 1734 or MED regs. Air pollution in accordance with MSN 1734			The Merchant Shipping (Safety of Navigation) Regulations 2002	For ships over 150GT SOLAS standard approved by the SoS or a person authorised by him. For ships less than 150GT does not have to meet the IMO performance standards	Merchant shipping (distress and prevention of collisions) Regs 1996	COLREG Approved (to which MED is used)	
53	XI	sailing ships (other than fishing vessels and ships of Class XII) which proceed to sea		384	The Merchant Shipping (Life-Saving Appliances for Ships other than Ships of Classes III to VI(A)) Regulations	All SOLAS + Non SOLAS lifebuoy option inflated boat	The Merchant Shipping (Fire Protection) Regulations 2003	All SOLAS approved.	The Merchant Shipping (Prevention of Oil Pollution) Regulations, The Merchant Shipping (Prevention of Air Pollution from Ships) Regulations 2008	Oil Filtering equipment in accordance with MSN 1734 or MED regs. Air pollution in accordance with MSN 1734			The Merchant Shipping (Safety of Navigation) Regulations 2002	For ships over 150GT SOLAS standard approved by the SoS or a person authorised by him. For ships less than 150GT does not have to meet the IMO performance standards	Merchant shipping (distress and prevention of collisions) Regs 1996	COLREG Approved (to which MED is used)
54	XII 150 - 500	pleasure vessels of 13.7 metres in length or over		0	The Merchant Shipping (Life-Saving Appliances for Ships other than Ships of Classes III to VI(A)) Regulations	SOLAS but option for non SOLAS liferaft inflated boat	The Merchant Shipping (Fire Protection: Small Ships) Regulations 1998	non powered pump with throw of not less than 6m and foam fire extinguisher of 45l capacity in engine rooms.	The Merchant Shipping (Prevention of Oil Pollution) Regulations, The Merchant Shipping (Prevention of Air Pollution from Ships) Regulations 2008	Oil Filtering equipment in accordance with MSN 1734 or MED regs. Air pollution in accordance with MSN 1734			The Merchant Shipping (Safety of Navigation) Regulations 2002	For ships over 150GT SOLAS standard approved by the SoS or a person authorised by him. For ships less than 150GT does not have to meet the IMO performance standards	Merchant shipping (distress and prevention of collisions) Regs 1996	COLREG Approved (to which MED is used)
55	XII 150 under 21.34	pleasure vessels of 13.7 metres in length or over			The Merchant Shipping (Life-Saving Appliances for Ships other than Ships of Classes III to VI(A)) Regulations	SOLAS but option for non SOLAS liferaft inflated boat	The Merchant Shipping (Fire Protection: Small Ships) Regulations 1998	Non powered pump with throw of not less than 6m.	The Merchant Shipping (Prevention of Oil Pollution) Regulations, The Merchant Shipping (Prevention of Air Pollution from Ships) Regulations 2008	Oil Filtering equipment in accordance with MSN 1734 or MED regs. Air pollution in accordance with MSN 1734			The Merchant Shipping (Safety of Navigation) Regulations 2002	For ships over 150GT SOLAS standard approved by the SoS or a person authorised by him. For ships less than 150GT does not have to meet the IMO performance standards	Merchant shipping (distress and prevention of collisions) Regs 1996	COLREG Approved (to which MED is used)
56	XII 150 over 21.34	pleasure vessels of 13.7 metres in length or over			The Merchant Shipping (Life-Saving Appliances for Ships other than Ships of Classes III to VI(A)) Regulations	SOLAS but option for non SOLAS liferaft inflated boat	The Merchant Shipping (Fire Protection: Small Ships) Regulations 1998	Non powered pump with throw of not less than 6m.	The Merchant Shipping (Prevention of Oil Pollution) Regulations, The Merchant Shipping (Prevention of Air Pollution from Ships) Regulations 2008	Oil Filtering equipment in accordance with MSN 1734 or MED regs. Air pollution in accordance with MSN 1734			The Merchant Shipping (Safety of Navigation) Regulations 2002	For ships over 150GT SOLAS standard approved by the SoS or a person authorised by him. For ships less than 150GT does not have to meet the IMO performance standards	Merchant shipping (distress and prevention of collisions) Regs 1996	COLREG Approved (to which MED is used)



Ref #	UK Ship/Vessel Class	Description of Ship Type	No. ships	Life-Saving Appliances		Fire Protection and Extinction		Pollution Prevention		Radio Communication		Safety of Navigation		Collision Prevention	
				Regulations/ Code	Equipment Standards	Regulations/ Code	Equipment Standards	Regulations/ Code	Equipment Standards	Regulations/ Code	Equipment Standards	Regulations/ Code	Equipment Standards	Regulations/ Code	Equipment Standards
57	XII	pleasure vessels of 13.7 metres in length or over	--	The Merchant Shipping (Life-Saving Appliances for Ships other than Ships of Classes III to VI(A)) Regulations	SOLAS but option for non SOLAS liferaft inflated boat	The Merchant Shipping (Fire Protection) Regulations 2003	All SOLAS performance standards not approved.	The Merchant Shipping (Prevention of Oil Pollution) Regulations, The Merchant Shipping (Prevention of Air Pollution from Ships) Regulations 2008	Oil Filtering equipment in accordance with MSN 1734 or MED regs. Air pollution in accordance with MSN 1734			The Merchant Shipping (Safety of Navigation) Regulations 2002	For ships over 150GT SOLAS standard approved by the SoS or a person authorised by him. For ships less than 150GT does not have to meet the IMO performance standards	Merchant shipping (distress and prevention of collisions) Regs 1996	COLREG Approved (to which MED is used)
58	High Speed Craft	All UK High speed craft not certified against the Large Yacht Code, Codes of Practice for SCV Sailing/ Motor or sport of pleasure from a NDP.	N/A	The Merchant Shipping (High Speed Craft) Regulations 2004	In compliance with MED Regs	The Merchant Shipping (High Speed Craft) Regulations 2004	In compliance with MED Regs	The Merchant Shipping (High Speed Craft) Regulations 2004	In compliance with MED Regs	The Merchant Shipping (High Speed Craft) Regulations 2004	In compliance with MED Regs	The Merchant Shipping (High Speed Craft) Regulations 2004	In compliance with MED Regs	Merchant shipping (distress and prevention of collisions) Regs 1996	COLREG Approved (to which MED is used)
59	Small Commercial Vessels	Small Vessels in Commercial Use for Sport or Pleasure, Workboats and Pilot Boats. Vessels under 24m LL	--	MGN 280	Liferafts: ISO 9650, MED approved, ISAF or ORC. HRU: non-SOLAS Lifebuoys: Horseshoe type. Lifejackets: MED approved, BS EN 396 of 150N or BS EN 399 of 275N or equivalent ISO/CEN standard. TPA suits: No standard, Immersion Suit: Approved in MS Regs (MED), Flares: MED approved or SOLAS other than hand held smoke (no standard). Line throwers: non stated	MGN 280	Flexible hoses in engine spaces: ISO 7840. Fire Alarm: Non specified, Port holes in machinery boundaries: FTP Code. Machinery boundaries coatings: FTP Code, FRP divisions: non-FTP test procedure. Curtains and combustible materials: ISO 9094, Upholstered furniture: alternative test to FTP. Fire detectors: no standard. Fire extinguishers: Minimum rating 5A/34B, Or EN 3 (cited in MED) Fire pump: Hand operated fire pump/ nozzle. Fixed fire fighting systems: MCA standard, fixed fire systems: SOLAS,	MGN 280	Sewage Pumps: MARPOL/ ISO 8099, others: MARPOL	MGN 280	406MHz EPIRB: Not specified, VHF Radio/ DSC GMDSS radio: not specified	MGN 280	SART: not specified, Nav lights: in compliance with the COLREG regulations, Compass/ Bearing Compass: non specified, Echo Sounder: not specified, GPS and Log: not specified, signalling lamp: not specified, Radar reflector: IMO perf standards, Searchlight: no standard	Merchant shipping (distress and prevention of collisions) Regs 1996	COLREG Approved (to which MED is used)/ CA may consider alternative where not practice

Ref #	UK Ship/Vessel Class	Description of Ship Type	No. ships	Life-Saving Appliances		Fire Protection and Extinction		Pollution Prevention		Radio Communication		Safety of Navigation		Collision Prevention	
				Regulations/ Code	Equipment Standards	Regulations/ Code	Equipment Standards	Regulations/ Code	Equipment Standards	Regulations/ Code	Equipment Standards	Regulations/ Code	Equipment Standards	Regulations/ Code	Equipment Standards
60	Workboats and Pilot Boats less 24m LL 2014	Small Workboats to sea and Pilot boats under 24m LL		The safety of small workboats and pilot boats - a code of practice applicable to small workboats operating in commercial use to sea and all pilot boats.	Liferafts: SOLAS, Wheelmarked or DfT but with non SOLAS container or equivalent, 9650 certified by MED NB in container other than SOLAS, or Valiase packed or SOLAS ORIL MED approved of Dft Approved, Lifebuoys: non standard specified, horseshoe type accepted. Lifejackets: Df/ MED approved/ BS EN 396/ BS EN ISO 12402 III/ VI/ BS EN 399/ 12402 Pt II. TPAs: MED approved, Immersion suit: MED approved, VHF no standard specified, EPIRB non specified, SART: non specified, Flares: MED approved, SOLAS performance standard, hand held smoke no standard.	The safety of small workboats and pilot boats - a code of practice applicable to small workboats operating in commercial use to sea and all pilot boats.	Engine boundaries, SOLAS and other arrangements, Structural and spread of flame measures specify standards either ISO or IMO but no approval. Fire detector: basic performance standard. Portable fire extinguisher: minimum 34B, 5A/34B, recognised standard 13A/113B. Non SOLAS hand fire pump, power driven pump not approved, fixed fire extinguisher: MCA approved. BS EN 3 is the MCA accepted portable fire extinguisher standard.	The Merchant Shipping (Prevention of Pollution by Sewage and Garbage from Ships) Regulations 2008, The Merchant Shipping (Prevention of Oil Pollution) Regulations, The Merchant Shipping (Prevention of Air Pollution from Ships) Regulations 2008	Sewage treatment plant (in accordance with MED regs), Oil Filtering equipment in accordance with MSN 1734 or MED regs. Air pollution in accordance with MSN 1734	The safety of small workboats and pilot boats - a code of practice applicable to small workboats operating in commercial use to sea and all pilot boats.	functional requirements stated and required as per the GMDSS area of operation. Approved by the relevant authority.	The safety of small workboats and pilot boats - a code of practice applicable to small workboats operating in commercial use to sea and all pilot boats.	Performance standard for Compass but no approval. Echo sounder no standard. GPS no standard, Log: no standard, Radar: EN standards and R&TTE Directive, signalling lamp: no standard, Radar reflector: ISO standards,	Merchant shipping (distress and prevention of collisions) Regs 1996	COLREG Approved (to which MED is used)/ CA may consider alternative where not practice
61	Workboats and pilot boats 1998	Small workboats and pilot boats under 24mLL		The safety of small workboats and pilot boats a code of practice (brown code)	Lifejackets: BS EN 369/ BS EN 399 or MCA approved. LSA to be MCA approved unless otherwise stated.	The safety of small workboats and pilot boats a code of practice (brown code)	Boundaries: SOLAS and other equivalent test standards. Smoke/ fire detectors: performance standard, fixed fire fighting system MCA approved,	The Merchant Shipping (Prevention of Oil Pollution) Regulations, The Merchant Shipping (Prevention of Air Pollution from Ships) Regulations 2008	Oil Filtering equipment in accordance with MSN 1734 or MED regs. Air pollution in accordance with MSN 1734					Merchant shipping (distress and prevention of collisions) Regs 1996	COLREG Approved (to which MED is used)/ CA may consider alternative where not practice
62	Small Commercial Sailing Vessels			Safety of small commercial sailing vessels a code of practice (blue)	MCA approved or comply with BSI CEN or ISO standard/ Liferafts MCA approved, ORC	Safety of small commercial sailing vessels a code of practice (blue)	hand powered fire pump/ power driven pump, fire extinguisher BS 5423 13A/113B, fixed fire fighting system standard not specified, fire extinguisher 5A/ 34B, fire hose of unspecified standard and 10mm nozzle. Smoke/ fire detection no standard,				Performance requirements for ship radio installation, EPIRB of unspecified standard		Magnetic Compass performance requirements, Echo sounder of unspecified standard, log of unspecified standard, Radar reflector ISO standard	Merchant shipping (distress and prevention of collisions) Regs 1996	COLREG Approved (to which MED is used)/ CA may consider alternative where not practice
63	Small Commercial Vessels operating from NDP			Red Code	Liferafts: MCA approved (non SOLAS reversible or SOLAS), ORC, Lifejackets: BS EN 396/ 399 or MCA approved, lifebuoy: horseshoe,		boundaries of an adequate standard to hold extinguishing medium. Manual fire pump/ power driven pump, multipurpose portable fire extinguisher certified to EN 3 by an accredited certification body.	The Merchant Shipping (Prevention of Oil Pollution) Regulations, The Merchant Shipping (Prevention of Air Pollution from Ships) Regulations 2008	Oil Filtering equipment in accordance with MSN 1734 or MED regs. Air pollution in accordance with MSN 1734		VHF with DSC/ Portable VHF (no standards)		Magnetic compass (no standard), radar reflector (no standard)	Merchant shipping (distress and prevention of collisions) Regs 1996	COLREG Approved (to which MED is used)/ CA may consider alternative where not practice

Ref #	UK Ship/Vessel Class	Description of Ship Type	No. ships	Life-Saving Appliances		Fire Protection and Extinction		Pollution Prevention		Radio Communication		Safety of Navigation		Collision Prevention		
				Regulations/ Code	Equipment Standards	Regulations/ Code	Equipment Standards	Regulations/ Code	Equipment Standards	Regulations/ Code	Equipment Standards	Regulations/ Code	Equipment Standards	Regulations/ Code	Equipment Standards	
64	Small Commercial Motor Vessels	Yellow Code		Yellow Code	Approved by the DfT or BSI, CEN or ISO standard. Orally inflated lifejackets?!, Liferaft: DTP approved/ ORC. Lifebuoy: no standard. TPA: no standard.		Basic performance standards for engine space boundaries, Fixed extinguishing system (no standard), upholstered furniture BS 5852, Smoke detection: no standard, Hand/ power driven fire pump (no standard), Multi purpose fire extinguisher BS 5423 13A/ 113B, Fire hose (no standard)	The Merchant Shipping (Prevention of Pollution by Sewage and Garbage from Ships) Regulations 2008, The Merchant Shipping (Prevention of Oil Pollution) Regulations, The Merchant Shipping (Prevention of Air Pollution from Ships) Regulations 2008		Sewage treatment plant (in accordance with MED regs), Oil Filtering equipment in accordance with MSN 1734 or MED regs. Air pollution in accordance with MSN 1734		EPIRB: no standard, SART: no standard, Performance for VHF installation/ other radio installation,		Magnetic compass: no standard. Echo sounder: not specified, log: not specified. Signal lamp: not specified, Radar reflector: ISO 8729/ BS 7380	Merchant shipping (distress and prevention of collisions) Regs 1996	COLREG Approved (to which MED is used)/ CA may consider alternative where not practice
65	Large Yachts	Yachts of 24m and over LL not carrying more than 12 pax	N/A	LY3	All to be type accepted by the Administration as complying with LSA Code & 81(70). Rescue boats may be white (for ship over 500), Ship under 500: rescue boat non SOLAS (performance standards specified), alternative launching appliance with performance standard,	LY3	fire detection and alarm system: SOLAS and FFS, Structural protection composites: in accordance with a recognised international standard, All other is SOLAS performance standard, EEBD: FSS Code, Sprinkler systems approved FSS, FFA all of an approved type but some non SOLAS performance standards, for over 500GT all SOLAS chapter II2.	The Merchant Shipping (Prevention of Pollution by Sewage and Garbage from Ships) Regulations 2008, The Merchant Shipping (Prevention of Oil Pollution) Regulations, The Merchant Shipping (Prevention of Air Pollution from Ships) Regulations 2008		Sewage treatment plant (in accordance with MED regs), Oil Filtering equipment in accordance with MSN 1734 or MED regs. Air pollution in accordance with MSN 1734		approved by the relevant authority		No standard specified for equipment, States for equipment on under 300GT does not have to be an approved type. Allowance for non SOLAS equipment such as hand bearing compass on non steal ship. For over 300GT SOLAS approved AIS, over 300GT carry a Long range identification tracking system, SOLAS BNWAS, over 3000 GT comply with Ch V SOLAS, search light no standard.	LY3	Alternatives to COLREG may be accepted
66	Inland small Pax	Not proceeding to sea not carrying more than 12 pax	N/A	Inland waters small passenger boat code	Lifebuoy no standard, Lifejackets Dft or MED approved/ BS EN 396/ 399. Liferrafts: Dft approved SOLAS or non-SOLAS including ORIL, ISAF stored in FRP or valise		Machinery compartment boundaries: performance requirement, furnishings and fittings recommend fire retardant materials are used. Fire detection: no standard, fixed fire extinguishing system: no standard, portable fire extinguisher 5A/34B, fire pump, hand driven or power driven, Cat C/ D water: fire extinguisher to recognised standard 13A/ 113B all vessels fire extinguisher to recognised standard 5A/34B. Any portable extinguisher should be approved by BSI and or British approval of fire equipment, EN3 or MED	The Merchant Shipping (Prevention of Oil Pollution) Regulations, The Merchant Shipping (Prevention of Air Pollution from Ships) Regulations 2008		Oil Filtering equipment in accordance with MSN 1734 or MED regs. Air pollution in accordance with MSN 1734		Local authority requirements mobile phone may be acceptable.		magnetic compass: no standard, Radar reflector approved to IMO performance standards	Merchant shipping (distress and prevention of collisions) Regs 1996	COLREG Approved (to which MED is used)

Ref #	UK Ship/Vessel Class	Description of Ship Type	No. ships	Life-Saving Appliances		Fire Protection and Extinction		Pollution Prevention		Radio Communication		Safety of Navigation		Collision Prevention			
				Regulations/ Code	Equipment Standards	Regulations/ Code	Equipment Standards	Regulations/ Code	Equipment Standards	Regulations/ Code	Equipment Standards	Regulations/ Code	Equipment Standards	Regulations/ Code	Equipment Standards		
67	Fishing vessels of less than 15M LOA	Fishing vessels of less than 15m LOA, fishing vessels of 15m LOA to less than 24m registered length in categorized water can comply with this code for decked vessels of 12 m to less than 15 meters.	145	Code of Practice for the safety of Fishing Vessels of less than 15m LOA	Flares: approved type, Lifejackets: BS EN 396/ 399, Liferaft: SOLAS/ wheelmared or Dft approved container other than SOLAS, ISO 9650, Lifebuoy: basic characteristic i.e. horseshoe, radar reflector: basic performance.		Fire detector: basic performance requirements, Fire extinguishers EN 3 or MED as amended by 2002/75/EC, fixed system: no standard, pumps: hand or any other		The Merchant Shipping (Prevention of Oil Pollution) Regulations, The Merchant Shipping (Prevention of Air Pollution from Ships) Regulations 2008		Oil Filtering equipment in accordance with MSN 1734 or MED regs. Air pollution in accordance with MSN 1734		EPIRB: Comply with IMO A810(19)/ETS 300062, Radio: basic performance		Merchant shipping (distress and prevention of collisions) Regs 1996	COLREG Approved (to which MED is used)	
68	Fishing Vessels of 15m LOA - 24m registered length		47		approved by the MCA or signatory Administration to SOLAS 74 or by a nominated body in accordance with Delegation of type approval: liferafts, lifejackets, lifebuoy, line thrower, flares, / satisfaction of the CA, radar reflector no standard.		Exposed surfaces in accom space: in accordance with FTP code, Curtains, floors furnishings: satisfaction of CA, Structural divisions SOLAS performance standard, fire detection: basic performance standard, fixed system: to the satisfaction of the CA, Portable fire extinguisher: BS EN 3 (MED accepted)		The Merchant Shipping (Prevention of Oil Pollution) Regulations, The Merchant Shipping (Prevention of Air Pollution from Ships) Regulations 2008		Oil Filtering equipment in accordance with MSN 1734 or MED regs. Air pollution in accordance with MSN 1734		hand held VHF and EPIRB of approved type (by MCA/ signatory Administration/ nominated body), performance requirement for ship radio.		magnetic compass: performance standard, goal based satisfaction of CA for location of position, measuring speed/ distance, measuring depth.	Merchant shipping (distress and prevention of collisions) Regs 1996	COLREG Approved (to which MED is used)
69	Fishing vessel over 24m		15	Code of practice for the safe construction and operation of fishing vessels of 24m registered length and over.	approved by the MCA/ a signatory administration at SOLAS 74 or nominated bodies		Bulkheads FTP approved, materials/ furnishings to satisfaction of MCA, fire detection and alarm approved by MCA/ class society (performance standards specified, fire extinguishers: approved (SOLAS capacity) by MCA / Class society, fixed system: to the satisfaction of the MCA, fire pumps: SOLAS performance, fire mains: performance standard stated.		The Merchant Shipping (Prevention of Oil Pollution) Regulations, The Merchant Shipping (Prevention of Air Pollution from Ships) Regulations 2008		Oil Filtering equipment in accordance with MSN 1734 or MED regs. Air pollution in accordance with MSN 1734				Merchant shipping (distress and prevention of collisions) Regs 1996	COLREG Approved (to which MED is used)	