**EXPLANATORY MEMORANDUM TO**
**THE MERCHANT SHIPPING AND FISHING VESSELS (HEALTH AND SAFETY AT WORK) (BIOLOGICAL AGENTS) REGULATIONS 2010**

**2010 No. 323**

**1.** This explanatory memorandum has been prepared by the Maritime and Coastguard Agency and is laid before Parliament by Command of Her Majesty.

## 2. Purpose of the instrument

2.1 These Regulations do what is necessary to complete implementation of Council Directive 2000/54/EC of 18 September 2000, on the introduction of measures to protect workers from risks related to exposure to biological agents at work, by extending to the maritime sector the duty on employers to reduce the risk to their employees' health resulting from exposure to biological agents at work. Regulations introduced by the Health and Safety Executive have already implemented the Directive for land based workers.

2.2 These regulations make a number of references to Annexes to the Directive as amended from time to time. Currently those Annexes are to Directive 2000/54/EC in its original form which was published in the Official Journal of the European Union at O.J. L 262, 17/10/2000, p.21. This can be accessed via the Eur-Lex website at eur-lex.europa.eu.

## 3. Matters of special interest to the Joint Committee on Statutory Instruments

3.1 None.

## 4. Legislative Context

4.1 Council Directive 89/391/EEC (the "Framework Directive") introduced general measures to encourage improvements in the safety and health of workers at work and was implemented by the Merchant Shipping and Fishing Vessels (Health and Safety at Work) Regulations 1997 (SI 1997/2962) (the "General Duties" Regulations).

4.2 Council Directive 2000/54/EC (the seventh individual Directive within the meaning of Article 16(1) of the Framework Directive) introduced minimum safety and health requirements for the protection of workers from risks related to exposure to biological agents at work.

4.3 The requirements of Directive 2000/54/EC, which build on the general safety and health provisions contained in the Framework Directive, are to be implemented for workers in the maritime sector by means of the Merchant Shipping and Fishing Vessel (Health and Safety at Work) (Biological Agents) Regulations 2010. The Control of Substances Hazardous to Health Regulations 2002 (as amended) and The Control of Substances Hazardous to Health Regulations (Northern Ireland) 2003 (as amended), introduced by the Health and Safety Executive and the Health and Safety Executive for Northern Ireland respectively, have already implemented the Directive for land based workers and these new Merchant Shipping and Fishing Vessel Regulations, which follow the requirements of the Directive, complete the United Kingdom's implementation of this Directive.

## 5. Territorial Extent and Application

5.1 This instrument applies to all United Kingdom ships whether in the United Kingdom or anywhere else in the world and to all seafarers on such vessels irrespective of nationality, ethnic origin, religion, gender etc. They also apply to a limited extent to non-UK ships when in UK waters.

## 6. European Convention on Human Rights

6.1 As the instrument is subject to negative resolution procedure and does not amend primary legislation, no statement is required.

## 7. Policy background

- ***What is being done and why***

7.1 The Merchant Shipping and Fishing Vessel (Health and Safety at Work) (Biological Agents) Regulations 2010 complete the UK implementation of Council Directive 2000/54/EC, concerning the introduction of minimum safety and health requirements for the protection of workers from risks related to exposure to biological agents at work. As mentioned above, corresponding Regulations have been produced for land based workers. It is therefore necessary to make these Regulations to ensure application of the Directive to workers in the Merchant Shipping and Fishing Sectors to avoid disparity of regulatory coverage between land based workers and those working on ships. This is especially the case at the water margin, i.e. in dock and port areas, where land based workers (e.g. stevedores and other dock workers) could be working on board a ship alongside members of the crew.

7.2 The policy objectives of Directive 2000/54/EC are to protect the health of workers from the risks arising from exposure to biological agents. Certain provisions of the Directive relate to work in laboratories and similar facilities and thus may not currently be relevant to the maritime and fishing sectors although there is nothing to say they might not become relevant in the future. Similarly some biological agents such as Lassa Fever and the Ebola Virus are unlikely to be found on ships operating within Europe but could be prevalent in other areas of the world whereas Rubella (German Measles) can be found in Europe. It is for this reason that the Regulations require employers to identify which of their employees may be at risk, and from which biological agents, to assess the degree of risk and to introduce measures to eliminate or, where that is not possible, minimise the risk. They therefore fully reflect the Directive requirements.

- ***Consolidation***

7.3 No legislation, other than a general requirement to safeguard health and safety contained in the General Duties Regulations and regulations covering the carrying of hazardous cargos which remain in force, previously existed to protect of workers in the maritime sector from the risks to their health and safety arising from exposure to biological agents at work.

## 8. Consultation outcome

8.1 In order to gauge the potential effect on the merchant, yachting, coded vessel and fishing sectors notification of the consultation was sent to some 380 individuals, companies and organisations inviting their comments on the proposed Regulations, associated guidance etc. necessary to implement Directive 2000/54/EC. Copies of the documentation were also placed on the MCA website but no facility exists to establish how many times they were viewed.

8.2 Only 12 responses were received of which only 5 related to the draft Regulations. The remainder either offered comments on matters other than the draft Regulations (e.g. the level of guidance contained in the draft Marine Guidance Note); offered no comments; or supported what was proposed. The most significant of the comments on the draft Regulations were:-

- ***an assertion that the extent of the Regulations was excessive as they covered issues that were unlikely to arise in the shipping industry***.

  Whilst it is true that the Regulations do potentially cover issues that are unlikely to arise on ships, it is nonetheless necessary to cover every provision of the Directive in order to give full effect to the Biological Agents Directive as there would otherwise be a potential for infraction proceedings as a result of the failure to fully implement the Directive for all sectors. Should any provision of the Regulations not be relevant to a ship e.g. use of a biological agent in a work process, it will not be necessary for employers to take any action in respect of that provision. It should also be noted that the Regulations go no further than is necessary to implement the Directive. i.e. there is no "gold-plating" of the Directive's requirements.

- ***a request that the detail of the regulations be re-examined so as not to increase the potential for further criminalisation of a Master. The penalties in respect of offences committed under the Regulations were considered to be grossly disproportionate.-***

  Having reviewed the Regulations, it was considered that other than in a couple of instances, the penalties were in line with those in other sets of Regulations which had previously been introduced to give effect to other EC health and safety Directives. Those where this was not the case have been adjusted accordingly. It should however be noted that prosecution for non-compliance with the Regulations is a last resort where either lesser measures, such as an improvement/prohibition notice or detention of the vessel, have failed to achieve the desired improvement or where conditions are clearly so hazardous as to justify prosecution.

8.3 All the comments made on the draft Regulations, including those referred to in paragraph 8.1 above, have been covered as far as is possible in the Merchant Shipping and Fishing Vessel (Health and Safety at Work) (Biological Agents) Regulations 2010.

## 9. Guidance

9.1. In line with usual practice a Marine Guidance Note, produced by the Maritime and Coastguard Agency, will be issued to industry and will provide guidance on the requirements of the Merchant Shipping and Fishing Vessel (Health and Safety at Work) (Biological Agents) Regulations 2010. Further guidance will be included in the "Code of Safe Working Practices for Merchant Seamen published by The Stationery Office.

## 10. Impact

10.1 The impact on business, charities or voluntary bodies, is likely to be low as the effect of the Regulations is likely to be limited to persons involved with water or sewage treatment or the provision of medical care. In addition the Merchant Shipping and Fishing Vessels (Health and Safety at Work) Regulations 1997 already require risk assessments to be undertaken, and appropriate measures to be taken to alleviate any risks identified and the Merchant Shipping and Fishing Vessel (Health and Safety at Work) (Biological Agents) Regulations 200X build on the requirements of those earlier Regulations by introducing provisions specifically relating to Biological Agents. It is therefore considered likely that appropriate risk assessments will have been undertaken and relevant protective measures put in place.

10.2 The impact on the public sector is considered to be minimal as reviewing the application of the provisions of the Regulations on ships will be carried out as part of MCA's normal survey regime.

10.3 An Impact Assessment is attached to this memorandum at Annex 2.

## 11. Regulating small business

11.1 The legislation applies to small business.

11.2 There is little scope for minimising the impact of the requirements on firms employing up to 20 people, as EC Health and Safety Directives are required to be applied to all workers irrespective of the size of the company employing them. It is however policy when implementing an EC Directive to go no further than is necessary to implement the provisions of that Directive i.e. there is no "gold-plating" of the Directive requirements. In addition it is not envisaged that the Regulations will have any significant effect on small businesses as they are considered unlikely to operate the types of vessel most likely to be affected.

## 12. Monitoring & review

12.1 The Maritime and Coastguard Agency will evaluate how the regulations have changed working practices. This will be assisted by any relevant data collected as a result of the implementation by the UK of the ILO Maritime Labour Convention 2006 which will require the Maritime and Coastguard Agency to be notified of any occupational seafarer injuries/diseases.

12.2 All health and safety Directives are also subject to a regular review by the EC to which MCA will contribute as appropriate. The next EC review for the Chemical Agents Directive is due in 2013. In addition it is proposed to monitor compliance to see if any problems arise which need to be resolved by amending the regulations, or associated guidance, to make matters clearer to those organisations/persons covered by the Directive's provisions.

## 13. Contact

Michael Lines
Maritime and Coastguard Agency
Spring Place
105 Commercial Road
Southampton
SO15 1EG
(Tel: 02380 329 246, Fax: 02380 329 251, e-mail: mike.lines@mcga.gov.uk)

can answer any queries regarding the instruments.

# Summary: Intervention & Options

| Department /Agency: | Title: | |
|---|---|---|
| **Maritime & Coastguard Agency** | **Impact Assessment of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Biological Agents) Regulations 2010** | |
| **Stage:** Implementation | **Version:** Final | **Date:** January 2010 |
| **Related Publications:** Final versions of Statutory Instrument and Marine Guidance Note are attached. | | |

**Available to view or download at:**

http://www.mcga.gov.uk/c4mca/mcga07-home/shipsandcargoes/mcga-shipsregsandguidance.htm

**Contact for enquiries:** Michael Lines **Telephone:** 023 80 329 246

What is the problem under consideration? Why is government intervention necessary?

Workers exposed to biological agents at work can suffer adverse effects to their health and safety as a result. Depending upon the agent to which a worker is exposed, exposure can result in effects ranging from minor to very serious, and in the worst cases can even have fatal consequences. There is a risk that some ship operators might not take adequate precautions to mitigate the risks for workers exposed to biological agents at work. To address these risks, Directive 2000/54/EC of the European Parliament and of the Council dated 18 September 2000 introduced measures intended to protect workers from risks related to exposure to biological agents at work. The UK is obliged to fully implement this Directive. Failure to implement this Directive could result in infraction proceedings being taken by the EC and could also result in some workers still being exposed to these risks. Also, under the Francovich principle, the UK Government could be liable to pay compensation to all those affected by the failure to implement Directive 2000/54/EC.

What are the policy objectives and the intended effects?

To contribute to improved working practices that reduce the risk of developing biological agent related diseases resulting from exposure to such agents on merchant ships, commercial fishing vessels and all vessels with workers on board including those operating on inland waters.

What policy options have been considered? Please justify any preferred option.

(1) Do nothing
(2) Extend the Health & Safety Regulations for land-based workers to the maritime sectors; or
(3) Introduce a single set of regulations to implement only this Directive

Option (1) would leave the UK in breach of its EU commitments and is thus not considered to be appropriate. Option (2) is not considered viable as separate HSE and HSE (NI) Regulations are needed to cover the whole of the UK and it would be questionable which applied in particular circumstances. Additionally those Regulations are intended to cover work involving biological agents on land and thus address different issues to those raised by carrying out involving such agents on ships. They also cease to apply outside GB / NI. Option (3) is therefore considered to be the appropriate way to proceed and is justified in the Evidence Base.

When will the policy be reviewed to establish the actual costs and benefits and the achievement of the desired effects? The policy will be reviewed in 2013 as part of the EC Directive reporting cycle. In addition, it is proposed to monitor compliance to see if any problems arise which need to be resolved by amending the regulations, or associated guidance, to make matters clearer to those organisations / persons covered by the Directive provisions.

**Ministerial Sign-off** For final stage Impact Assessments:

***I have read the Impact Assessment and I am satisfied that (a) it represents a fair and reasonable view of the expected costs, benefits and impact of the policy, and (b) the benefits justify the costs.***

Signed by the responsible Minister:

Paul Clark .....Date: 11th February 2010

# Summary: Analysis & Evidence

| Policy Option: 3 | Description: **Introduce new Merchant Shipping Regulations to implement EC Directive 2000/54/EC** |
|---|---|

**COSTS**

| ANNUAL COSTS | |
|---|---|
| **One-off** (Transition) **Yrs** | Description and scale of **key monetised costs** by 'main affected groups' The MCA does not have access to any evidence to enable it to monetise the costs of these Regulations. In addition, no such evidence was provided by consultees. |
| **£** | |
| **Average Annual Cost** (excluding one-off) | |
| **£** | **Total Cost** (PV) **£** |

Other **key non-monetised costs** by 'main affected groups' The costs considered most likely to arise are those relating to training of seafarers and the provision of any specialised safety equipment. Such costs are, however, considered unlikely to arise on most vessels either because safeguards are already be in place or because biological agents are not present. This view is supported by the consultation responses, none of which indicated that any costs would arise.

**BENEFITS**

| ANNUAL BENEFITS | |
|---|---|
| **One-off** **Yrs** | Description and scale of **key monetised benefits** by 'main affected groups' The MCA does not have access to any evidence to enable it to monetise the benefits of these Regulations. Initial informal consultation suggested that the potential benefits of these Regulations were likely to be minimal at best. This view was borne out by formal consultation where none of the respondees considered that any benefits would arise. This could be because biological agents are either not present on UK ships, or because risks have already been considered and appropriate measures put in place to protect workers. |
| **£** | |
| **Average Annual Benefit** (excluding one-off) | |
| **£** | **Total Benefit** (PV) **£** |

Other **key non-monetised benefits** by 'main affected groups' 1.) There could be a reduction in the risk of workers being exposed to biological agents. Should any reduction in exposure to biological agents arise due to these Regulations, there could be a reduction in the overall costs to society of exposure to biological agents in terms of lost output and human and medical costs. 2.) Implementation will ensure that the UK has met its EU commitments.

Key Assumptions/Sensitivities/Risks 1.) It is assumed that work related to exposure to biological agents is unlikely occur on ships and fishing vessels, except possibly in relation to sewage treatment or medical care, and that even then industry is already well aware of the risks and the need for appropriate safety precautions, such as vaccination, to be taken. 2.) Non-implementation could result in infraction proceedings, and could also render the Government liable to pay compensation to all those affected under the Francovich principle. 3.) The limited nature of the evidence base means that the costs and benefits of these Regulations are uncertain and cannot be monetised.

| Price Base Year - | Time Period Years - | **Net Benefit Range** (NPV) **£** | **NET BENEFIT** (NPV Best estimate) **£** |
|---|---|---|---|

| | | | | |
|---|---|---|---|---|
| What is the geographic coverage of the policy/option? | | | UK ships worldwide | |
| On what date will the policy be implemented? | | | 6 April 2010 | |
| Which organisation(s) will enforce the policy? | | | MCA | |
| What is the total annual cost of enforcement for these organisations? | | | £ 0 | |
| Does enforcement comply with Hampton principles? | | | Yes | |
| Will implementation go beyond minimum EU requirements? | | | No | |
| What is the value of the proposed offsetting measure per year? | | | £ N/A | |
| What is the value of changes in greenhouse gas emissions? | | | £ N/A | |
| Will the proposal have a significant impact on competition? | | | No | |
| Annual cost (£-£) per organisation (excluding one-off) | Micro | Small | Medium | Large |
| Are any of these organisations exempt? | No | No | N/A | N/A |

**Impact on Admin Burdens Baseline** (2005 Prices) (Increase - Decrease)

Increase of £ 0 Decrease of £ 0 **Net Impact** **£** 0

Key: **Annual costs and benefits: Constant Prices** **(Net) Present Value**

## 1. PURPOSE OF IMPACT ASSESSMENT

The purpose of this final stage Impact Assessment is to consider the costs and benefits of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Biological Agents) Regulations 2010, which implement Directive 2000/54/EC in relation to owners / operators of UK Merchant Ships, Yachts, Fishing Vessels, Hovercraft, Pilot Vessels, Inland Waterway Vessels and other vessels with employed workers on them as well as to the employers of such workers.

These Regulations apply to seafarers of any nationality when employed on a UK registered vessels but do not apply to seafarers, including UK seafarers employed, on non-UK vessels other than to a limited extent when such vessels are in UK waters.

In the preceding paragraph reference to:-

> "***UK Merchant Ships, Yachts, Fishing Vessels, Hovercraft, Pilot Vessels, Inland Waterway Vessels and all other vessels with employed workers working on them"*** means all such UK registered vessels irrespective of where in the world they are operating, including on inland waters, or the nationality, location or place of business of the ship owner;
>
> ***"worker"*** means any person employed to work on any UK vessel referred to above, irrespective of that person's nationality or place of domicile; and,
>
> ***"employer"*** means the employer of any person employed to work on any UK vessel referred to above, irrespective of the nationality, location or place of business of that employer

These Regulations will also apply to non-UK vessels when in UK waters albeit on a "no more favourable treatment" basis intended to ensure that UK vessels are not put at a competitive disadvantage by non-UK vessels failure to meet similar standards to those required for UK vessels.

## 2. SCOPE OF IMPACT ASSESSMENT

The costs and benefits that are considered in this final stage Impact Assessment relate to the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Biological Agents) Regulations 2010 that are published alongside this Impact Assessment.

## 3. THE ISSUES

Biological agents come in many different types and the results of exposure to them can result in consequences ranging from very minor infections to very dangerous or even fatal diseases. In an endeavour to protect workers whose health and safety may be put at risk by carrying out work involving potential exposure to biological agents, the EC produced Directive 2000/54/EC which introduced measures intended to protect workers from risks related to work potentially involving exposure to biological agents. In this context, Directive 2000/54/EC categorises 'biological agents' into the four following risk groups according to their level of risk of infection:

1. Group 1 biological agent means one that is unlikely to cause human disease;

2. Group 2 biological agent means one that can cause human disease and might be a hazard to workers; it is unlikely to spread to the community; there is usually effective prophylaxis or treatment available;

3. Group 3 biological agent means one that can cause severe human disease and present a serious hazard to workers; it may present a risk of spreading to the community, but there is usually effective prophylaxis or treatment available;

4. Group 4 biological agent means one that causes severe human disease and is a serious hazard to workers; it may present a high risk of spreading to the community; there is usually no effective prophylaxis or treatment available.

Included in these groups are diseases caused by biological agents ranging from such well known ones as the common cold, measles or mumps, through Legionnaires Disease and the Norwalk Virus up to AIDS, CJD and Ebola, with varying degrees of severity for the person infected. It should be noted, however, that the principle purpose of the Directive is the protection of workers who are likely to be exposed to the biological agents as part of their work and not those who may come into contact with them outside work (e.g. during shore leave).

The Health and Safety Executive and the Health and Safety Executive for Northern Ireland have already implemented this Directive by means of their respective Control of Substances Hazardous to Health Regulations. The Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Biological Agents) Regulations 2010 are intended to give effect to the Directive in respect of the maritime and fishing sectors in order to complete the UK's implementation of this Directive.

**(i) Evidence on Risks Arising from Exposure to Biological Agents At Work**

It has not been possible to find Health and Safety Executive statistics for land based workers on the incidence of diseases that arise directly from exposure to Biological Agents. This is because such agents are not covered separately by their regulations. In any event, such statistics would not necessarily be representative of the position on ships as land based workers exposed to biological agents at work may work in locations such as laboratories, hospitals, and similar establishments, where exposure is a much greater possibility than on a ship at sea.

There are also no statistics relating specifically to diseases to seafarers resulting from exposure to Biological agents at work as there is currently no requirement for any occupational diseases to be notified to the Maritime and Coastguard Agency (MCA), although such a requirement will be introduced as part of the implementation by the UK of the ILO Maritime Labour Convention 2006. Information provided to the Marine Accident Investigation Branch does also not cover this. In these circumstances it is not therefore possible to assess the current effect of biological agents on seafarers.

**(ii) Regulatory Background**

The Control of Substances Hazardous to Health Regulations 2002 (as amended) and the Control of Substances Hazardous to Health Regulations (Northern Ireland) 2003 (as amended) introduced by the Health and Safety Executive and the Health and Safety Executive for Northern Ireland respectively implement the Biological Agents Directive for land based workers within the United Kingdom and apply to all work involving biological agents carried out in the United Kingdom **except** where such work is carried out on board a ship as part of the normal shipboard activities of a ship's crew, and is carried out under the direction of the master; and is not liable to expose persons at work other than the master and crew to a risk to their safety. Where work is carried out in a port outside the UK, land based workers will most likely be subject to their own national legislation whilst the master and crew will be subject to the

Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Biological Agents) Regulations 2010.

The Merchant Shipping and Fishing Vessels (Health and Safety at Work) Regulations 1997 (the "General Duties" Regulations), which implemented the EC "Framework" Health and Safety Directive are considered to already cover biological agents, albeit in a generalised way, as they require employers to ensure the health and safety of workers by complying with certain general duties set out in those regulations. These duties include the following:-

(a) the avoidance of risks;

(b) the evaluation of unavoidable risks and the taking of action to reduce them;

(c) adoption of work patterns and procedures which take account of the capacity of the individual;

(d) adaptation of procedures to take account of new technology and other changes in working practices, equipment, the working environment and any other factors which may affect health and safety;

(e) adoption of a coherent approach to management of the vessel or undertaking, taking account of health and safety at every level of the organisation;

(f) giving collective protective measures priority over individual protective measures; and

(g) the provision of appropriate and relevant information and instruction for workers.

Without prejudice to the generality of the duties set out in (a) to (g) above, the matters to which those duties extend includes in particular -

(i) provision and maintenance of plant, machinery and equipment and systems of work that are, so far as is reasonably practicable, safe and without risk to health;

(ii) arrangements for ensuring, so far as is reasonably practicable, safety and absence of risk to health in connection with the use, handling, stowage and transport of articles and substances;

(iii) such arrangements as are appropriate, having regard to the nature of, and the substances used in, the activities and and size of the operation, for the effective planning, organisation, control, monitoring and review of preventive and protective measures;

(iv) provision of such information, instruction, training and supervision as is necessary to ensure the health and safety of workers and that of other persons aboard ship who may be affected by their acts or omissions;

(v) maintenance of all places of work in the ship in a condition that is, so far as is reasonably practicable, safe and without risk to health;

(vi) arrangements to ensure, so far as is reasonably practicable, that no person has access to any area of the ship to which it is necessary to restrict access on grounds of health and safety unless the individual concerned has received adequate and appropriate health and safety instruction;

(vii) provision and maintenance of an environment for persons aboard ship that is, so far as is reasonably practicable, safe and without risk to health;

(viii) collaboration with any other persons upon whom a duty is placed by the Regulations to protect, so far as is reasonably practicable, the health and safety of all authorised persons aboard the ship or engaged in loading or unloading activities in relation to that ship.

Directive 2000/54/EC builds on those requirements by introducing specific requirements relating to the health and safety of workers likely to be exposed to biological agents at work. It is

necessary for the provisions of that Directive to be implemented by means of Regulations in order to meet the UK's obligations to give effect to it.

## 4. OPTIONS FOR IMPLEMENTATION

There are only two possible options to give effect to Directive 2000/54/EC for the Maritime sector. These options are to extend the application of HSE's land-based regulations to the maritime sector (Option 2) or to introduce new Merchant Shipping Regulations to give effect to the Directive (Option 3). These options and the reasons for accepting or rejecting a particular option are set out below.

### (i) Option 1 – Do Nothing

This option is the counterfactual for the purposes of this impact assessment. However, it would leave the UK in breach of its EU commitments. Given that the provisions of EC Directives must be given the force of law in Member States, this is not considered to be appropriate. Failure to implement this Directive could not only result in infraction proceedings being taken by the EC but could potentially leave the UK Government, under the Francovich principle, liable to pay compensation to all those affected by the failure to implement Directive 2000/54/EC. This option has therefore not been considered further in this Impact Assessment.

### Option 2 - Extend the application of HSE's land-based regulations to the maritime sector

There are several problems with adopting this option as follows:-

(a) There are separate Regulations covering Great Britain (produced by HSE) and Northern Ireland (produced by HSE(NI)) which cover workers on land. They also apply to certain offshore installations within UK waters. However, the HSE/HSE(NI) Regulations do not apply outside the UK, but even if they did, it would be questionable which of these Regulations would apply to a particular incident which occurred outside the UK.

(b) The HSE/HSE(NI) Regulations are intended to cover work involving potential exposure to biological agents carried out at premises on land or offshore installations. They may also contain more detailed provisions carried forward from earlier HSE/HSE(NI) Regulations or introduced by HSE/HSE(NI) which would amount to "gold plating" of the Directive. As a result, the HSE/HSE(NI) Regulations may not be entirely compatible with the differing requirements of ship operation and could also put UK shipping at a commercial disadvantage compared to its competitors.

(c) HSE/HSE(NI) Inspectors are not familiar with the operation of ships or their crews.

(d) The policy of implementing EC Directives for the maritime and fishing sectors by means of regulations specific to merchant shipping and fishing vessels is a well established and widely used practice with which industry is both familiar and in agreement.

For these reasons, it is not considered appropriate to adopt this course of action.

### Option 3 - Introduce a single set of regulations to implement only this Directive

This is the preferred option for the following reasons:-

(a) Merchant Shipping Regulations are applicable to UK ships wherever they may be in the world. They are also applicable to non UK ships when in UK waters.

(b) Merchant Shipping Regulations are specifically drafted with ships in mind and whilst they can contain provisions brought forward from earlier Regulations on the basis of no

lowering of existing standards, they do not otherwise seek to "gold plate" Directive requirements.

(c) The policy of implementing EC Directives for the maritime and fishing sectors by means of regulations specific to merchant shipping and fishing vessels is a well established and widely used practice with which industry is both familiar and in agreement.

## 5. IMPLEMENTATION AND DELIVERY PLAN

The 380 individuals, companies and organisations in the maritime, yachting, coded vessel and fishing sectors who form the backbone of the consultation list for Regulations implementing EC Health and Safety Directives were approached for information on the likely costs of implementation of these Regulations and any potential benefits resulting from them. These consultees include the main organisations representing owners, unions, fishermen and yachtsmen. Their views were that any costs were likely to be minimal at worst and that any benefits were also likely to be minimal. This probably results from the General Duties Regulations already requiring employers to carry out general risk assessments and to take appropriate measures to remove, or reduce as far as possible, any risks identified as a result. This would include the consideration of any risks that might arise from the carrying out of any work that might potentially result in exposure to biological agents.

Notwithstanding that consultees considered that costs and benefits are likely to be minimal, it is nevertheless the intention to defer the coming into force of the Regulations, once made, until 6 April 2010 in order to allow time for small and medium sized businesses to adapt to the requirements of the new Regulations should they not have been aware of them previously.

## 6. INTERVENTION

It is a requirement that Directives be implemented by means of legislation in all Member States. HSE/HSE(NI) have already done so for land-based workers in the UK. The Merchant Shipping and Fishing Vessel (Health and Safety at Work) (Biological Agents) Regulations 2010 complete implementation for the UK by extending the Directive's provisions to all seafarers on UK registered ships, fishing vessels, yachts and other craft both sea going and on inland waters on which there are employed workers. Failure to introduce these Regulations would leave the UK open to infraction proceedings by the EC and leave UK ships open to enforcement action for non compliance in other EC ports. Non-implementation could also render the Government liable to pay compensation to all those affected under the Frankovich principle.

## 7. COSTS AND BENEFITS

### (i) Sectors and Groups affected

The Merchant Shipping and Fishing Vessel (Health and Safety at Work) (Biological Agents) Regulations 2010 will apply to all UK ships and other vessels on which workers are employed irrespective of whether they are Merchant Ships, Yachts, Fishing Vessels, Pilot Vessels, Inland Waterway Vessels or any other type of vessel. The main groups affected by the proposed Regulations will be the owners and operators of UK ships, as well the employers of the workers working on those ships and the workers themselves. Given the international nature of shipping, and the potential for ships to join the UK register from other registers, not all of these owners, operators or employers, or indeed the workers themselves will necessarily be based in the United Kingdom. In addition, UK based operators / employers could employ non-UK workers and non-UK UK based operators / employers could employ UK workers. Due to the uncertainty surrounding the costs and benefits of these Regulations, this Impact Assessment cannot seek to differentiate between the costs and benefits for UK and non-UK based owners, operators, employers or workers. It therefore looks at the costs and benefits in a more generalised way applicable to all UK ships and vessels.

**(ii) Costs resulting from the Merchant Shipping and Fishing Vessels (Health and Safety at Work) Biological Agents) Regulations 2010**

Given the requirements of the General Duties Regulations, and its requirement that employers undertake general risk assessments to identify risks to workers and then take appropriate measures to eliminate or reduce as far as possible and risks so identified, the MCA consider that the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Biological Agents) Regulations 2010 will only have a very limited effect on the UK maritime sector. This view is supported by the outcome of the consultation exercise and is likely to have occurred because the maritime sector has already have been considering, albeit perhaps in a more generalised way, the risks arising from exposure to biological agents and the measures required to alleviate them.

In order to gauge the potential effect on the merchant, yachting, coded vessel and fishing sectors notification was sent to some 380 individuals, companies and organisations inviting their comments on the proposed Regulations necessary to implement Directive 2000/54/EC together with the associated Marine Guidance Note, Impact Assessment, Explanatory Memorandum and Transposition Note. Copies of the documentation were also placed on the MCA website, although it was not possible to establish how many times they were viewed. Only 11 replies were received, of which only one indicated that any costs might arise but these were not quantified.

The results from the consultation are consistent with the MCA's initial assessment that these regulations will only have a minimal cost impact either because of the requirements of the existing General Duties Regulations or because of the very limited circumstances in which exposure could potentially occur. The MCA consider that the industry is likely to be aware of these circumstances already and to have put in place the necessary countermeasures.

**Requirements of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Biological Agents) Regulations 2010**

Introduction of these Regulations could require the following actions to be undertaken:-

**Familiarisation with the new regulations**

Introduction of these Regulations could potentially require an employer, or other person acting on their behalf, to familiarise themselves with the requirements of the regulations and analyse their effect either on a specific ship or on the company / organisation as a whole. However, the Regulations will not involve every vessel / company as the majority of vessels are considered unlikely to have biological agents on board to which these Regulations apply and to which workers could potentially be exposed.

The number of vessels where crews actually carry out, or could potentially carry out, work involving exposure to biological agents which falls within the new regulations, and where familiarisation with these Regulations will consequently be required, is not known. Areas where these Regulations could be relevant are sewage treatment plants on ships and medical care on cruise ships where outbreaks of Norwalk Virus and Legionnaires disease could occur. However, there are now only a few UK registered cruise ships and they will already be aware of the risks and measures to be taken so this is unlikely to be a problem. Similarly sewage treatment plants have existed for many years so the measures needed to deal with them will already be in place. On this basis, and having regard also the existing requirements of the General Duties Regulations and the consultation responses, the Maritime and Coastguard Agency does not consider that the new Regulations will require any significant familiarisation for the majority of UK ships.

**Training**

It is possible that some training could be required in certain circumstances where work actually involving exposure to biological agents is to be undertaken on individual vessels. It has, however, not been possible to assess what level of training will be required, and if so at what cost, to meet the requirements of these Regulations as no information was forthcoming from the consultees covered by the MCA's formal consultation. Of the responses that were received, only one suggested that some training might be required but this was not quantified in monetary terms. None of the other consultees indicated that any costs would be incurred as a result of the new Regulations. This suggests that any costs which might potentially arise are likely to be minimal at worst for UK ships and would accord with the Maritime and Coastguard Agency view that such training as may be required is likely to be already in place as a result of the requirements of the General Duties Regulations.

**Costs of using alternative biological agents**

The Directive and the new Regulations require that where risks from exposure to biological agents are identified they should be alleviated by the use of alternative agents which are either non hazardous or are less hazardous. Given that the potential avenues of exposure on ships are primarily naturally occurring biological agents, this is not considered to be an option.

**Provision of Specialised Safety Equipment**

Whilst there may be some limited instances where specialised safety equipment is required to be provided, such provision is already covered by the requirements of the General Duties Regulations and the Merchant Shipping and Fishing Vessels (Personal Protective Equipment) Regulations 1999. The MCA therefore consider that any costs relating to the provision of specialised safety equipment will be minimal.

**(iii) Benefits resulting from the Merchant Shipping and Fishing Vessels (Health and Safety at Work)(Biological Agents) Regulations 2010**

No information is available on the number of deaths or diseases arising from exposure to biological agents whilst at work on UK ships. However, the MCA believes that the risk of developing diseases directly related to exposure to biological agents at work is negligible as compliance with the requirements of the General Duties Regulations is likely to already have removed any risks that existed previously. In these circumstances, it is considered that extension of the Directive 2000/54/EC to workers at sea will have a negligible beneficial impact. .

Obviously it cannot be assumed in the absence of any data that deaths or diseases will never result from exposure to such agents, consequently the 380 consultees referred to previously were asked to quantify any benefits that they considered might accrue from the introduction of the new Regulations. None of the responses offered any comments on potential benefits that might accrue from the new Regulations. This ties in with the MCA view that employers have either already addressed the issue themselves as part of their general risk assessment under the General Duties Regulations or that there is little or no risk of exposure to biological agents at work on UK ships.

It should be noted that the 380 consultees approached for comments are in the main already familiar with UK merchant shipping legislation and its requirements in so far as it affects them. However, as part of the exercise to grow the UK register, there might be ships joining the UK register from outside the EU, whose operators are not familiar with the health and safety requirements applicable to UK ships, including those relating to biological agents. There is therefore potential for the new Regulations and the related guidance to assist in preventing exposure to biological agents and thus the development of diseases caused by biological agents on such vessels. It is, however, not possible to quantify any such benefits given that it

would be difficult or impossible to conclusively demonstrate that exposure to biological agents had been prevented by the introduction of the Regulations. Nevertheless, anything that has the potential to prevent exposure to biological agents can only be beneficial.

Should any reduction in exposure to biological agents result from the Regulations, there could be a reduction in overall costs to society of exposure to biological agents. In particular, it is possible that the human costs of exposure to biological agents and the loss of output due to exposure to biological agents could be reduced. It is also possible that some benefits might accrue to persons / organisations involved with the provision of medical, or social services facilities in seafarer's countries of domicile. However, it should be noted that some 17,000 seafarers on UK ships are nationals of other EEA countries or are from outside the EEA and medical treatment / social security may well be provided outside the UK under the relevant local provisions.

In addition to the potential benefits to seafarers, the owners and operators of UK vessels serving ports in other EC States could potentially benefit from the introduction of the Regulations in so far as they will be less likely to face sanctions for non compliance with the requirements of the Directive. Introduction of the Regulations would also remove the risk to the Government of infraction proceedings for failing to implement the Directive as well as the risk that the Government could, under the Frankovich principle, be liable to pay compensation to all those affected by the failure to implement the Directive.

## 8. SIMPLIFICATION

Introduction of the new Regulations offers no scope for simplification of earlier requirements as there are currently no regulations in place, other than the General Duties Regulations, which could be said to deal with the protection of workers from the risks resulting from exposure to biological agents at work. Even then the General Duties Regulations only establish minimum general health and safety requirements and these new Regulations actually build on the requirements of the General Duties Regulations rather than superseding them. No simplification is therefore feasible.

## 9. POST IMPLEMENTATION REVIEW

The MCA will evaluate how the new Regulations have changed working practices. This will be assisted by any relevant data collected as a result of the implementation by the UK of the ILO Maritime Labour Convention 2006 which requires notification to the Maritime and Coastguard Agency of seafarer occupational injuries/diseases. Reports of occupational diseases arising from exposure to Biological Agents are not currently required but the number of such diseases in recent years is thought to be generally low and of low severity such that post implementation review will require at least five years of data to provide a meaningful evidence base and even then it is likely to be difficult to attribute any change in that comes to the new Regulations.

All health and safety Directives are, however, subject to a regular review by the EC to which MCA will contribute as appropriate. The next EC review for the Biological Agents Directive is due in 2013**.** In addition, it is proposed to monitor compliance to see if any problems arise which need to be resolved by amending the Regulations, or associated guidance, to make matters clearer to those organisations / persons covered by the Directive's provisions.

## 10. SMALL FIRMS IMPACT TEST

The MCA envisage that any impact of the Regulations on vessel operators will be commensurate with their size; with smaller firms operating smaller less wide ranging vessels than larger companies. This is because smaller companies are more likely to operate smaller vessels ranging from open day trip boats to small coastal vessels, where the Regulations are likely to have a minimal to nil effect.

The MCA ensured that the consultees on the Regulations included small, medium and large businesses - a number of consultees including the British Chamber of Shipping, RYA and BMF have small business members, and a number of the specific consultees would be classified as small or medium enterprises. Out of the 11 responses received from consultees, 5 either supported the proposals or had no comment to make and the remaining 6 offered comments not related to the effect on small firms. In the circumstances it is not considered that the Regulations will place a disproportionate burden on small firms.

## 11. COMPETITION ASSESSMENT

As the Regulations implement an EC Health and Safety Directive and do not go beyond its requirements, coupled with the existing requirements of the General duties Regulations, the MCA do not consider that the Regulations will have a significant impact on competition.

However, failure to implement the Directive could result in UK flagged vessels failing to meet EC requirements and could result in them facing sanctions in ports in other EC countries up to and including detention for non-compliance.

## 12. HEALTH IMPACT

The Regulations introduce measures intended to safeguard the health of workers from the risks associated with exposure to biological agents at work.

## 13. RACE EQUALITY

The Regulations are applicable to all seafarers on UK ships irrespective of their race, nationality, ethnic origin.

## 14. DISABILITY EQUALITY

The Regulations are applicable to all seafarers on UK ships. They do not however contain any provisions relating to disability equality as the fitness or otherwise of a seafarer to work on a ship is covered by separate regulations

## 15. GENDER EQUALITY

The Regulations are applicable to all seafarers on UK ships irrespective of their gender.

## 16. HUMAN RIGHTS

The Regulations do not raise any human rights issues.

## 17. ENFORCEMENT, SANCTIONS AND MONITORING

Enforcement will be carried out by the Maritime and Coastguard Agency as part of its existing enforcement activities. The Regulations provide for sanctions for non-compliance. These include provisions for a fine not exceeding the statutory maximum (currently £5,000) on summary conviction in some cases. In the case of a conviction in the Crown Court, the Regulations do not impose any limit on the amount of the fine and there is also the possibility of imprisonment for up to two years. These penalties are in line with those for other health and safety offences and are considered to be proportionate to the nature of the offences. Provisions also exist whereby a ship may be detained in UK waters where a surveyor of ships suspects that an offence has been committed.

# Specific Impact Tests: Checklist

| **Type of testing undertaken** | ***Results in Evidence Base?*** | ***Results annexed?*** |
|---|---|---|
| Competition Assessment | Yes | No |
| Small Firms Impact Test | Yes | No |
| Legal Aid | No | No |
| Sustainable Development | No | No |
| Carbon Assessment | No | No |
| Other Environment | No | No |
| Health Impact Assessment | Yes | No |
| Race Equality | Yes | No |
| Disability Equality | Yes | No |
| Gender Equality | Yes | No |
| Human Rights | Yes | No |
| Rural Proofing | No | No |

# Annexes

Copies of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Biological Agents) Regulations 2010 and the related Marine Guidance Note are attached.

## TRANSPOSITION NOTE

Relating to the implementation for the maritime sector of Council Directive 2000/54/EC of 18 September 2000 (the seventh individual Directive within the meaning of Article 16(1) of Directive 89/391/EEC) on the introduction of measures to protect workers from the risks related to exposure to biological agents at work

The Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Biological Agents) Regulations 2010 implement Council Directive 2000/54/EC for the maritime sector, which includes all commercial sea-going and inland waterway merchant and fishing vessels of whatever size. The regulations also apply to commercial and private pleasure vessels on which workers are employed.

Implementation of Council Directive 2000/54/EC in respect of workers employed in land based industries is the responsibility of the Health and Safety Executive.

The responsibility for implementation of Council Directive 2000/54EC for the maritime sector rests with the Secretary of State through the introduction of new Regulations.

Maritime and Coastguard Agency
Department for Transport
January 2010

**TABLE RELATING TO IMPLEMENTATION OF ARTICLES OF DIRECTIVE 2000/54/EC**

| | | |
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| **CHAPTER I<br>GENERAL PROVISIONS** | | |
| **Article 1<br>Objective** | | |
| **Article or Paragraph of Directive** | **Purpose of Article or Paragraph in Directive** | **Implementation in the UK by** |
| **Article 1(1)** | States the purpose of the Directive | Transposition not required. |
| **Article 1(2)** | States that the requirements of Directive 89/391/EEC shall apply fully to the whole area referred to in paragraph 1, without prejudice to more stringent and/or specific provisions contained in this Directive. | Transposed by Regulation 5(1) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Biological Agents) Regulations 2010.<br><br>The reference to the General Duties Regulations in this regulation is defined in Regulation 2(1) and means the Regulations which implemented Directive 89/391/EEC |
| **Article 1(3)** | States that This Directive shall apply without prejudice to the provisions of Council Directive 90/219/EEC and of Council Directive 90/220/EEC | Transposed by Regulation 5(2) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Biological Agents) Regulations 2010<br><br>Directive 90/220/EEC has however been repealed and replaced by Directive 2001/18/EC and it is the later Directive that is referred to in Regulation 5(2) |
| **Article 2<br>Definitions** | | |
| **Article 2** | For the purpose of this Directive:<br><br>(a) 'biological agents' shall mean micro-organisms, including those which have been genetically modified, cell cultures and human endoparasites, which may be able to provoke any infection, allergy or toxicity;<br>(b) 'micro-organism' shall mean a microbiological entity, cellular or non-cellular, capable of replication or of transferring genetic material;<br><br>(c) 'cell culture' shall mean the *in-vitro* growth of cells derived from multicellular organisms. | Transposed by Regulation 2(1) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Biological Agents) Regulations 2010 |

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| | 'Biological agents' shall be classified into four risk groups, according to their level of risk of infection:<br><br>1. group 1 biological agent means one that is unlikely to cause human disease:<br><br>2. group 2 biological agent means one that can cause human disease and might be a hazard to workers; it is unlikely to spread to the community; there is usually effective prophylaxis or treatment available;<br><br>3. group 3 biological agent means one that can cause severe human disease and present a serious hazard to workers; it may present a risk of spreading to the community, but there is usually effective prophylaxis or treatment available;<br><br>4. group 4 biological agent means one that causes severe human disease and is a serious hazard to workers; it may present a high risk of spreading to the community; there is usually no effective prophylaxis or treatment available. | |
| **Article 3**<br>**Scope — Determination and assessment of risks** | | |
| **Article 3(1)** | This Directive shall apply to activities in which workers are or are potentially exposed to biological agents as a result of their work. | Transposed by Regulation 4(1) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Biological Agents) Regulations 2010 |
| **Article 3(2)** | In the case of any activity likely to involve a risk of exposure to biological agents, the nature, degree and duration of workers' exposure must be determined in order to make it possible to assess any risk to the workers' health or safety and to lay down the measures to be taken.<br><br>In the case of activities involving exposure to several groups of biological agents, the risk shall be assessed on the basis of the danger presented by all hazardous biological agents present.<br><br>The assessment must be renewed regularly and in any event when any change occurs in the conditions which | Transposed by Regulation 6(1)(a)(i) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Biological Agents) Regulations 2010<br><br>Transposed by Regulation 6(1)(a)(ii) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Biological Agents) Regulations 2010<br><br>Transposed by Regulation 6(1)(c) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Biological |

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| | may affect workers' exposure to biological agents. | Agents) Regulations 2010 |
| | The employer must supply the competent authorities, at their request, with the information used for making the assessment. | Transposed by Regulation 6(1)(d) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Biological Agents) Regulations 2010 |
| **Article 3(3)** | The assessment referred to in paragraph 2 shall be conducted on the basis of all available information including: | |
| | (a) classification of biological agents which are or may be a hazard to human health, as referred to in Article 18; | Transposed by Regulation 6(1)(b)(i) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Biological Agents) Regulations 2010 |
| | (b) recommendations from a competent authority which indicate that the biological agent should be controlled in order to protect workers' health when workers are or may be exposed to such a biological agent as a result of their work; | Transposed by Regulation 6(1)(b)(ii) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Biological Agents) Regulations 2010 |
| | (c) information on diseases which may be contracted as a result of the work of the workers; | Transposed by Regulation 6(1)(b)(iii) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Biological Agents) Regulations 2010 |
| | (d) potential allergenic or toxigenic effects as a result of the work of the workers; | Transposed by Regulation 6(1)(b)(iv) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Biological Agents) Regulations 2010 |
| | (e) knowledge of a disease from which a worker is found to be suffering and which has a direct connection with his work. | Transposed by Regulation 6(1)(b)(v) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Biological Agents) Regulations 2010 |
| **Article 4<br>Application of the various Articles in relation to assessment of risks** | | |
| **Article 4(1)** | If the results of the assessment referred to in Article 3 show that the exposure and/or potential exposure is to a group 1 biological agent, with no identifiable health risk to workers, Articles 5 to 17 and Article 19 shall not apply. | Transposed by Regulation 4(4) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Biological Agents) Regulations 2010 |
| | However, point 1 of Annex VI should be | Transposed by Regulation 4(5) of the |

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| | observed. | Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Biological Agents) Regulations 2010 |
| **Article 4(2)** | If the results of the assessment referred to in Article 3 show that the activity does not involve a deliberate intention to work with or use a biological agent but may result in the workers' being exposed to a biological agent, as in the course of the activities for which an indicative list is given in Annex I, Articles 5, 7, 8, 10, 11, 12, 13 and 14 shall apply unless the results of the assessment referred to in Article 3 show them to be unnecessary. | Transposed by Regulation 4(6) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Biological Agents) Regulations 2010 |
| **CHAPTER II<br>EMPLOYERS' OBLIGATIONS** | | |
| **Article 5<br>Replacement** | | |
| **Article 5** | The employer shall avoid the use of a harmful biological agent if the nature of the activity so permits, by replacing it with a biological agent which, under its conditions of use, is not dangerous or is less dangerous to workers' health, as the case may be, in the present state of knowledge. | Transposed by Regulation 8 of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Biological Agents) Regulations 2010 |
| **Article 6<br>Reduction of risks** | | |
| **Article 6(1)** | Where the results of the assessment referred to in Article 3 reveal a risk to workers' health or safety, workers' exposure must be prevented. | Transposed by Regulation 9(1) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Biological Agents) Regulations 2010 |
| **Article 6(2)** | Where this is not technically practicable, having regard to the activity and the risk assessment referred to in Article 3, the risk of exposure must be reduced to as low a level as necessary in order to protect adequately the health and safety of the workers concerned, in particular by the following measures which are to be applied in the light of the results of the assessment referred to in Article 3:<br><br>(a) keeping as low as possible the number of workers exposed or likely to be exposed; | Transposed by Regulation 9(2) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Biological Agents) Regulations 2010<br><br>Transposed by Regulation 9(2)(a) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Biological Agents) Regulations 2010 |

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| | (b) design of work processes and engineering control measures so as to avoid or minimise the release of biological agents into the place of work; | Transposed by Regulation 9(2)(b) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Biological Agents) Regulations 2010 |
| | (c) collective protection measures and/or, where exposure cannot be avoided by other means, individual protection measures; | Transposed by Regulation 9(2)(c) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Biological Agents) Regulations 2010 |
| | (d) hygiene measures compatible with the aim of the prevention or reduction of the accidental transfer or release of a biological agent from the workplace; | Transposed by Regulation 9(2)(d) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Biological Agents) Regulations 2010 |
| | (e) use of the biohazard sign depicted in Annex II and other relevant warning signs; | Transposed by Regulation 9(2)(e) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Biological Agents) Regulations 2010 |
| | (f) drawing up plans to deal with accidents involving biological agents; | Transposed by Regulation 9(2)(f) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Biological Agents) Regulations 2010 |
| | (g) testing, where it is necessary and technically possible, for the presence, outside the primary physical confinement, of biological agents used at work; | Transposed by Regulation 9(2)(g) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Biological Agents) Regulations 2010 |
| | (h) means for safe collection, storage and disposal of waste by workers including the use of secure and identifiable containers, after suitable treatment where appropriate; | Transposed by Regulation 9(2)(h) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Biological Agents) Regulations 2010 |
| | (i) arrangements for the safe handling and transport of biological agents within the workplace. | Transposed by Regulation 9(2)(i) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Biological Agents) Regulations 2010 |
| **Article 7<br>Information for the competent authority** | | |
| **Article 7(1)** | Where the results of the assessment referred to in Article 3 reveal risk to workers' health or safety, employers shall, when requested, make available to the competent authority appropriate information on:<br>(a) the results of the assessment;<br>(b) the activities in which workers have been exposed or may have been exposed to biological agents;<br>(c) the number of workers exposed; | Transposed by Regulation 10(1)(a) to (f) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Biological Agents) Regulations 2010 |

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| | (d) the name and capabilities of the person responsible for safety and health at work;<br><br>(e) the protective and preventive measures taken, including working procedures and methods;<br><br>(f) an emergency plan for the protection of workers from exposure to group 3 or a group 4 biological agent which might result from a loss of physical containment . | |
| **Article 7(2)** | Employers shall inform forthwith the competent authority of any accident or incident which may have resulted in the release of a biological agent and which could cause severe human infection and/or illness. | Transposed by Regulation 10(2) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Biological Agents) Regulations 2010 |
| **Article 7(3)** | The list referred to in Article 11 and the medical record referred to in Article 14 shall be made available to the competent authority in cases where the undertaking ceases activity, in accordance with national laws and/or practice. | Transposed by Regulation 18(3) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Biological Agents) Regulations 2010 |
| **Article 8<br>Hygiene and individual protection** | | |
| **Article 8(1)** | Employers shall be obliged, in the case of all activities for which there is a risk to the health or safety of workers due to work with biological agents, to take appropriate measures to ensure that:<br>(a) workers do not eat or drink in working areas where there is a risk of contamination by biological agents;<br><br>(b) workers are provided with appropriate protective clothing or other appropriate special clothing;<br><br>(c) workers are provided with appropriate and adequate washing and toilet facilities, which may include eye washes and/or skin antiseptics;<br><br>(d) any necessary protective equipment is:<br><br>— properly stored in a well- defined place,<br><br>— checked and cleaned if possible before, and in any case after, each use, | Transposed by Regulation 11(1)(a) to (f) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Biological Agents) Regulations 2010 |

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| | — is repaired, where defective, or is replaced before further use;<br><br>(e) procedures are specified for taking, handling and processing samples of human or animal origin. | |
| **Article 8(2)** | Working clothes and protective equipment, including protective clothing referred to in paragraph 1, which may be contaminated by biological agents, must be removed on leaving the working area and, before taking the measures referred to in the second subparagraph, kept separately from other clothing.<br><br>The employer must ensure that such clothing and protective equipment is decontaminated and cleaned or, if necessary, destroyed. | Transposed by Regulation 11(2)(a) and (c) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Biological Agents) Regulations 2010<br><br>Transposed by Regulation 11(2)(b) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Biological Agents) Regulations 2010 |
| **Article 8(3)** | Workers may not be charged for the cost of the measures referred to in paragraphs 1 and 2. | Transposed by Regulation 30 of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Biological Agents) Regulations 2010 which reflects the requirements of paragraph 5 of Article 6 of Directive 89/391/EEC, which was implemented by Regulation 22 of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) Regulations 1997, that measures related to safety, hygiene and health at work may in no circumstances involve the workers in financial cost |
| **Article 9<br>Information and training of workers** | | |
| **Article 9(1)** | Appropriate measures shall be taken by the employer to ensure that workers and/or any workers' representatives in the undertaking or establishment receive sufficient and appropriate training, on the basis of all available information, in particular in the form of information and instructions, concerning:<br><br>(a) potential risks to health;<br><br>(b) precautions to be taken to prevent exposure;<br><br>(c) hygiene requirements;<br><br>(d) wearing and use of protective equipment and clothing;<br><br>(e) steps to be taken by workers in the | Transposed by Regulation 12(1)(a) to (e) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Biological Agents) Regulations 2010 |

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| | case of incidents and to prevent incidents. | |
| **Article 9(2)** | The training shall be:<br><br>(a) given at the beginning of work involving contact with biological agents,<br><br>(b) adapted to take account of new or changed risks, and<br><br>(c) repeated periodically if necessary. | Transposed by Regulation 12(2)(a) to (c) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Biological Agents) Regulations 2010 |
| **Article 10**<br>**Worker information in particular cases** | | |
| **Article 10(1)** | Employers shall provide written instructions at the workplace and, if appropriate, display notices which shall, as a minimum, include the procedure to be followed in the case of:<br><br>(a) a serious accident or incident involving the handling of a biological agent;<br><br>(b) handling a group 4 biological agent. | Transposed by Regulation 13 (1)(a) and (b) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Biological Agents) Regulations 2010 |
| **Article 10(2)** | Workers shall immediately report any accident or incident involving the handling of a biological agent to the person in charge, or to the person responsible for safety and health at work. | Transposed by Regulation 13(2) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Biological Agents) Regulations 2010 |
| **Article 10(3)** | Employers shall inform forthwith the workers and/or any workers' representatives of any accident or incident which may have resulted in the release of a biological agent and which could cause severe human infection and/or illness.<br><br>In addition, employers shall inform the workers and/or any workers' representatives in the undertaking or establishment as quickly as possible when a serious accident or incident occurs, of the causes thereof and of the measures taken or to be taken to rectify the situation. | Transposed by Regulation 13(3) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Biological Agents) Regulations 2010<br><br>Transposed by Regulation 13(3) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Biological Agents) Regulations 2010 |
| **Article 10(4)** | Each worker shall have access to the information on the list referred to in | Transposed by Regulation 13(4) of the Merchant Shipping and Fishing Vessels |

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| | Article 11 which relates to him personally. | (Health and Safety at Work) (Biological Agents) Regulations 2010 |
| **Article 10(5)** | Workers and/or any workers' representatives in the undertaking or establishment shall have access to anonymous collective information. | Transposed by Regulation 13(5) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Biological Agents) Regulations 2010 |
| **Article 10(6)** | Employers shall provide workers and/or their representatives, at their request, with the information provided for in Article 7(1). | Transposed by Regulation 13(6) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Biological Agents) Regulations 2010 |
| **Article 11<br>List of exposed workers** | | |
| **Article 11(1)** | Employers shall keep a list of workers exposed to group 3 and/or group 4 biological agents, indicating the type of work done and, whenever possible, the biological agent to which they have been exposed, as well as records of exposures, accidents and incidents, as appropriate. | Transposed by Regulation 14(1) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Biological Agents) Regulations 2010 |
| **Article 11(2)** | The list referred to in paragraph 1 shall be kept for at least 10 years following the end of exposure, in accordance with national laws and/or practice.<br><br>In the case of those exposures which may result in infections:<br><br>(a) with biological agents known to be capable of establishing persistent or latent infections;<br><br>(b) that, in the light of present knowledge, are undiagnosable until illness develops many years later;<br><br>(c) that have particularly long incubation periods before illness develops;<br><br>(d) that result in illnesses which recrudesce at times over a long period despite treatment, or<br><br>(e) that may have serious long-term sequelae,<br><br>the list shall be kept for an appropriately longer time up to 40 years following the last known exposure. | Transposed by Regulation 18(1) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Biological Agents) Regulations 2010<br><br>Transposed by Regulation 18(2) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Biological Agents) Regulations 2010 |

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| **Article 11(3)** | The doctor referred to in Article 14 and/or the competent authority for health and safety at work, and any other person responsible for health and safety at work, shall have access to the list referred to in paragraph 1. | Transposed by Regulation 14(2) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Biological Agents) Regulations 2010 |
| **Article 12**<br>**Consultation and participation of workers** | | |
| **Article 12** | Consultation and participation of workers and/or their representatives in connection with matters covered by this Directive shall take place in accordance with Article 11 of Directive 89/391/EEC. | Transposed by Regulation 15 of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Biological Agents) Regulations 2010<br><br>Regulation 20 of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) Regulations 1997 implements Article 11 of Directive 89/391/EC |
| **Article 13**<br>**Notification to the competent authority** | | |
| **Article 13(1)** | Prior notification shall be made to the competent authority of the use for the first time of:<br><br>(a) group 2 biological agents;<br><br>(b) group 3 biological agents;<br><br>(c) group 4 biological agents.<br><br>The notification shall be made at least 30 days before the commencement of the work.<br><br>Subject to paragraph 2, prior notification shall also be made of the use for the first time of each subsequent group 4 biological agent and of any subsequent new group 3 biological agent where the employer himself provisionally classifies that biological agent. | Transposed by Regulation 16(1) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Biological Agents) Regulations 2010<br><br>Transposed by Regulation 16(2) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Biological Agents) Regulations 2010 |
| **Article 13(2)** | Laboratories providing a diagnostic service in relation to group 4 biological agents shall be required only to make an initial notification of their intention. | Transposed by Regulation 16(3) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Biological Agents) Regulations 2010 |

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| **Article 13(3)** | Renotification must take place in any case where there are substantial changes of importance to safety or health at work to processes and/or procedures which render the notification out of date. | Transposed by Regulation 16(4) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Biological Agents) Regulations 2010 |
| **Article 13(4)** | The notification referred to in paragraphs 1, 2 and 3 shall include:<br>(a) the name and address of the undertaking and/or establishment;<br>(b) the name and capabilities of the person responsible for safety and health at work;<br>(c) the results of the assessment referred to in Article 3;<br>(d) the species of the biological agent;<br>(e) the protection and preventive measures that are envisaged. | Transposed by Regulation 16(5)(a) to (f) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Biological Agents) Regulations 2010<br>It has however been necessary to adapt the provisions slightly to reflect their application to ships and not land based premises. |
| **CHAPTER III<br>MISCELLANEOUS PROVISIONS** | | |
| **Article 14<br>Health surveillance** | | |
| **Article 14(1)** | The Member States shall establish, in accordance with national laws and practice, arrangements for carrying out relevant health surveillance of workers for whom the results of the assessment referred to in Article 3 reveal a risk to health or safety. | Transposed by Regulation 17(1) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Biological Agents) Regulations 2010 |
| **Article 14(2)** | The arrangements referred to in paragraph 1 shall be such that each worker shall be able to undergo, if appropriate, relevant health surveillance:<br>(a) prior to exposure;<br>(b) at regular intervals thereafter.<br>Those arrangements shall be such that it is directly possible to implement individual and occupational hygiene measures. | Transposed by Regulation 17(2) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Biological Agents) Regulations 2010 |
| **Article 14(3)** | The assessment referred to in Article 3 should identify those workers for whom special protective measures may be | Transposed by Regulation 6(1)(a)(iv) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Biological |

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| | required.<br><br>When necessary, effective vaccines should be made available for those workers who are not already immune to the biological agent to which they are exposed or are likely to be exposed.<br><br>When employers make vaccines available, they should take account of the recommended code of practice set out in Annex VII.<br><br>If a worker is found to be suffering from an infection and/or illness which is suspected to be the result of exposure, the doctor or authority responsible for health surveillance of workers shall offer such surveillance to other workers who have been similarly exposed.<br><br>In that event, a reassessment of the risk of exposure shall be carried out in accordance with Article 3. | Agents) Regulations 2010<br><br>Transposed by Regulation 17(3) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Biological Agents) Regulations 2010<br><br>Transposed by Regulation 17(3) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Biological Agents) Regulations 2010<br><br>Transposed by Regulation 17(4)(a) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Biological Agents) Regulations 2010<br><br>Transposed by Regulation 17(4)(b) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Biological Agents) Regulations 2010 |
| **Article 14(4)** | In cases where health surveillance is carried out, an individual medical record shall be kept for at least 10 years following the end of exposure, in accordance with national laws and practice.<br><br>In the special cases referred to in Article 11(2) second subparagraph, an individual medical record shall be kept for an appropriately longer time up to 40 years following the last known exposure. | Transposed by Regulations 17(5) and 18(1)(b) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Biological Agents) Regulations 2010<br><br>Transposed by Regulation 18(2) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Biological Agents) Regulations 2010 |
| **Article 14(5)** | The doctor or authority responsible for health surveillance shall propose any protective or preventive measures to be taken in respect of any individual worker. | Transposed by Regulation 17(5)(b) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Biological Agents) Regulations 2010 |
| **Article 14(6)** | Information and advice must be given to workers regarding any health surveillance which they may undergo following the end of exposure. | Transposed by Regulation 17(6) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Biological Agents) Regulations 2010 |
| **Article 14(7)** | In accordance with national laws and/or practice: | |

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| | (a) workers shall have access to the results of the health surveillance which concern them, and<br><br>(b) the workers concerned or the employer may request a review of the results of the health surveillance. | Transposed by Regulation 17(7) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Biological Agents) Regulations 2010<br><br>Transposed by Regulation 17(8) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Biological Agents) Regulations 2010 |
| **Article 14(8)** | Practical recommendations for the health surveillance of workers are given in Annex IV. | Transposed by Regulation 17(9) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Biological Agents) Regulations 2010 |
| **Article 14(9)** | All cases of diseases or death identified in accordance with national laws and/or practice as resulting from occupational exposure to biological agents shall be notified to the competent authority. | Transposed by Regulation 17(10) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Biological Agents) Regulations 2010 |
| **Article 15**<br>**Health and veterinary care facilities other than diagnostic laboratories** | | |
| **Article 15(1)** | For the purpose of the assessment referred to in Article 3, particular attention should be paid to:<br><br>(a) uncertainties about the presence of biological agents in human patients or animals and the materials and specimens taken from them;<br><br>(b) the hazard represented by biological agents known or suspected to be present in human patients or animals and materials and specimens taken from them;<br><br>(c) the risks posed by the nature of the work. | Transposed by Regulation 19(1)(a) to (c) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Biological Agents) Regulations 2010 |
| **Article 15(2)** | Appropriate measures shall be taken in health and veterinary care facilities in order to protect the health and safety of the workers concerned.<br><br>The measures to be taken shall include in particular:<br><br>(a) specifying appropriate decontamination and disinfection procedures, and | Transposed by Regulation 19(2)(a) and (b) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Biological Agents) Regulations 2010 |

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| | (b) implementing procedures enabling contaminated waste to be handled and disposed of without risk. | |
| **Article 15(3)** | In isolation facilities where there are human patients or animals who are, or who are suspected of being, infected with group 3 or group 4 biological agents, containment measures shall be selected from those in Annex V column A, in order to minimise the risk of infection. | Transposed by Regulation 19(3) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Biological Agents) Regulations 2010 |
| **Article 16**<br>**Special measures for industrial processes, laboratories and animal rooms** | | |
| **Article 16(1)** | The following measures must be taken in laboratories, including diagnostic laboratories, and in rooms for laboratory animals which have been deliberately infected with group 2, 3 or 4 biological agents or which are or are suspected to be carriers of such agents.<br><br>(a) Laboratories carrying out work which involves the handling of group 2, 3 or 4 biological agents for research, development, teaching or diagnostic purposes shall determine the containment measures in accordance with Annex V, in order to minimise the risk of infection.<br><br>(b) Following the assessment referred to in Article 3, measures shall be determined in accordance with Annex V, after fixing the physical containment level required for the biological agents according to the degree of risk.<br><br>Activities involving the handling of a biological agent must be carried out:<br><br>— only in working areas corresponding to at least containment level 2, for a group 2 biological agent,<br><br>— only in working areas corresponding to at least containment level 3, for a group 3 biological agent,<br><br>— only in working areas corresponding to at least containment level 4, for a group 4 biological agent.<br><br>(c) Laboratories handling materials in respect of which there exist uncertainties about the presence of biological agents which may cause human disease but which do not have | Transposed by Regulation 20(1)(a) to (d) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Biological Agents) Regulations 2010 |

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| | as their aim working with biological agents as such (i.e. cultivating or concentrating them) should adopt containment level 2 at least. Containment levels 3 or 4 must be used, when appropriate, where it is known or it is suspected that they are necessary, except where guidelines provided by the competent national authorities show that, in certain cases, a lower containment level is appropriate. | |
| **Article 16(2)** | The following measures concerning industrial processes<br>using group 2, 3 or 4 biological agents must be taken:<br><br>(a) The containment principles set out in the second subparagraph of paragraph 1(b) should also apply to industrial processes on the basis of the practical measures and appropriate procedures given in Annex VI.<br><br>(b) In accordance with the assessment of the risk linked to the use of group 2, 3 or 4 biological agents, the competent authorities may decide on appropriate measures which must be applied to the industrial use of such biological agents. | Transposed by Regulation 20(2) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Biological Agents) Regulations 2010<br><br>Transposed by Regulation 20(3) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Biological Agents) Regulations 2010 |
| **Article 16(3)** | For all activities covered by paragraphs 1 and 2 where it has not been possible to carry out a conclusive assessment of a biological agent but concerning which it appears that the use envisaged might involve a serious health risk for workers, activities may only be carried out in workplaces where the containment level corresponds at least to level 3. | Transposed by Regulation 20(4) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Biological Agents) Regulations 2010 |
| **Article 17**<br>**Use of data** | | |
| **Article 17** | The Commission shall have access to the use made by the competent national authorities of the information referred to in Article 14(9). | Transposition not required |
| **Article 18**<br>**Classification of biological agents** | | |
| **Article 18 (1)** | States that Community classification shall be on the basis of the definitions in the second paragraph of Article 2, points 2 to 4 (groups 2 to 4). | Transposition not required as this relates to actions to be taken by the EC |
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| **Article 18 (2)** | States that pending Community classification Member States shall classify biological agents that are or may be a hazard to human health on the basis of the definition in the second paragraph of Article 2, points 2 to 4 (groups 2 to 4). | Transposed by Regulation 7(1) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Biological Agents) Regulations 2010. However in line with the related HSE Regulations the classification requirements are applied also to employers |
| **Article 18 (3)** | If the biological agent to be assessed cannot be classified clearly in one of the groups defined in the second paragraph of Article 2, it must be classified in the highest risk group among the alternatives. | Transposed by Regulation 7(1) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Biological Agents) Regulations 2010. However in line with the related HSE Regulations the classification requirements are applied also to employers |
| **Article 19<br>Annexes** | | |
| **Article 19** | States that purely technical adjustments to the Annexes in the light of technical progress, changes in international regulations or specifications and new findings in the field of biological agents shall be adopted in accordance with the procedure laid down in Article 17 of Directive 89/391/EEC. | Transposition not required |
| **Article 20<br>Notifying the Commission** | | |
| **Article 20** | Requires Member States to communicate to the Commission the provisions of national law which they adopt in the field governed by this Directive. | Transposition not required as this relates to action by Member States |
| **Article 21<br>Repeal** | | |
| **Article 21** | States that Directive 90/679/EEC, amended by the Directives referred to in Annex VIII, part A is repealed, without prejudice to the obligations of the Member States in respect of the deadlines for transposition laid down in Annex VIII, part B.<br><br>Also states that references to the repealed Directive shall be construed as references to this Directive and shall be correlated in accordance with the correlation table set out in Annex IX. | Transposition not required<br><br>Transposition not required |

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| **Article 22**<br>**Entry into force** | | |
| **Article 22** | States that the Directive enters into force on the twentieth day following its publication in the *Official Journal of the European Communities*. | Transposition not required |
| **Article 23**<br>**Addresses** | | |
| **Article 23** | States that the Directive is addressed to the Member States. | Transposition not required |
| **ANNEX I**<br>**INDICATIVE LIST OF ACTIVITIES**<br>**(Article 4(2))** | | Reference to Annex contained in Regulation 4(6) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Biological Agents) Regulations 2010 but actual text of Annex is not transposed into the regulations |
| **ANNEX II**<br>**BIOHAZARD SIGN**<br>**(Article 6(2)(e))** | | Reference to Annex contained in Regulation 9(2)(e) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Biological Agents) Regulations 2010 but actual sign is not transposed into the regulations |
| **ANNEX III**<br>**COMMUNITY CLASSIFICATION** | | Reference to Annex contained in definitions of group 2, group 3 and group 4 biological agents in regulation 2(1) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Biological Agents) Regulations 2010 but actual text of Annex is not transposed into the regulations |
| **ANNEX IV**<br>**PRACTICAL RECOMMENDATIONS FOR THE HEALTH SURVEILLANCE OF WORKERS** | | Reference to Annex contained in Regulation 17(9) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Biological Agents) Regulations 2010 but actual text of Annex is not transposed into the regulations |
| **ANNEX V**<br>**INDICATIONS CONCERNING CONTAINMENT MEASURES AND CONTAINMENT LEVELS** | | Reference to Annex contained in Regulations 2(1), 19(3), 20(1)(a)-(d), and 20(4) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) |

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| | (Biological Agents) Regulations 2010 but actual text of Annex is not transposed into the regulations |
| **ANNEX VI**<br>**CONTAINMENT FOR INDUSTRIAL PROCESSES** | Reference to Annex contained in Regulation 20(2) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Biological Agents) Regulations 2010 but actual text of Annex is not transposed into the regulations |
| **ANNEX VII**<br>**RECOMMENDED CODE OF PRACTICE ON VACCINATION** | Reference to Annex contained in Regulations 17(3) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Biological Agents) Regulations 2010 but actual text of Annex is not transposed into the regulations |
| **ANNEX VIII**<br>**REPEALED DIRECTIVES** | Transposition not required |
| **ANNEX IX**<br>**CORRELATION TABLE** | Transposition not required |