



House of Commons  
Environmental Audit  
Committee

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**Protecting the Arctic:  
Government Response  
to the Committee's  
Second Report of  
Session 2012–13.**

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**Third Special Report of Session  
2012–13**

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## Environmental Audit Committee

The Environmental Audit Committee is appointed by the House of Commons to consider to what extent the policies and programmes of government departments and non-departmental public bodies contribute to environmental protection and sustainable development; to audit their performance against such targets as may be set for them by Her Majesty's Ministers; and to report thereon to the House.

### Current membership

Joan Walley MP (*Labour, Stoke-on-Trent North*) (Chair)  
Peter Aldous MP (*Conservative, Waveney*)  
Richard Benyon MP (*Conservative, Newbury*) [*ex-officio*]  
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Martin Caton MP (*Labour, Gower*)  
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Paul Uppal MP (*Conservative, Wolverhampton South West*)  
Dr Alan Whitehead MP (*Labour, Southampton, Test*)  
Simon Wright MP (*Liberal Democrat, Norwich South*)

The following members were also members of the committee during the parliament:

Ian Murray MP (*Labour, Edinburgh South*)  
Sheryll Murray MP (*Conservative, South East Cornwall*)

### Powers

The constitution and powers are set out in House of Commons Standing Orders, principally in SO No 152A. These are available on the internet via [www.parliament.uk](http://www.parliament.uk).

### Publications

The Reports and evidence of the Committee are published by The Stationery Office by Order of the House. All publications of the Committee (including press notices) are on the internet at [www.parliament.uk/eacom](http://www.parliament.uk/eacom). A list of Reports of the Committee in the present Parliament is at the back of this volume.

The Reports of the Committee, the formal minutes relating to that report, oral evidence taken and some or all written evidence are available in a printed volume.

### Committee staff

The current staff of the Committee are Simon Fiander (Clerk), Nicholas Beech (Second Clerk), Lee Nicholson (Committee Specialist), Andrew Wallace (Senior Committee Assistant), Anna Browning (Committee Assistant), Yago Zayed (Committee Support Assistant) and Nicholas Davies (Media Officer).

### Contacts

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# Third Special Report

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The Environmental Audit Committee reported to the House on *Protecting the Arctic* in its Second Report of Session 2012–13, published on 20 September 2012 (HC 171). The Government response to the Committee's Report was received on 19 December 2012 and is appended below. As discussed in our Report, we intend to take further evidence on the implications of the latest scientific analysis of the speed and extent of ice-cap melting. We also intend to take further evidence from Shell on its arctic programme.

## Appendix — Government response

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### Introduction

The Government is grateful to the Environmental Audit Committee for producing its report into *Protecting the Arctic*. The Arctic is changing rapidly primarily as a result of climate change already built into the global system. It is not the Arctic of twenty years ago and it will likely be different again twenty years from now. Global Arctic policy must be ready for and take account of these changes. Increasing activity should be balanced with robust environmental protection, which enables resilience to the rapid changes facing the region. The Committee's report is therefore a well-timed and constructive contribution to the debate on the Arctic.

The Arctic represents a critical region for the global environment. As the Government's written evidence to the Committee made clear, the UK is not an Arctic state, but it is a close neighbour with a long history and strong environmental, political, economic and scientific interests in the region. Events in the Arctic, whether natural or human-induced, have an impact on the UK, and vice versa.

The Government fully recognises the sovereignty of the Arctic states and welcomes the positive steps they are already taking to address the changes being seen in the Arctic, both unilaterally and through for such as the Arctic Council. The Government is also mindful that four million people live in the Arctic and welcomes the role that the Arctic Council's Permanent Participants can, do and should play in deciding the future of the Arctic.

The Government remains committed to working bilaterally and multilaterally with Arctic states and others to ensure a stable, peaceful Arctic, well governed by the Arctic states, supplemented and complemented by international agreements and treaties on specific issues.

The Government recognises the need to communicate its Arctic policy effectively, both with domestic and international partners, and to keep its policy current towards this changing environment. That is why in this response the Government has committed to

producing and publishing a policy framework for the Arctic in 2013. In so doing, the Government will consult interested stakeholders, including the Arctic states, and develop plans for public outreach to increase awareness of the UK's ongoing interests in the Arctic.

The Government believes it has adopted the right approach towards the Arctic and is, and is seen to be, a “good neighbour” to the Arctic and the Arctic states. We believe the actions outlined in this response will ensure this continues to be the case.

## Government response to the recommendations of the report

**1. There is growing evidence that the damaging effects of climate change are being felt strongly in the Arctic. The ice-cap is retreating. In September 2012 it had reached its lowest extent since records began, and new evidence shows that it is also thinning faster than previously thought. The general view that the ice-cap is not at risk of a summer collapse in the next few years may need to be revisited and revised. A collapse not only threatens the unique ecosystems there, but would have damaging ramifications for regional and global climate. (Paragraph 28)**

The Government fully understands that Arctic climate is changing and perhaps faster than most other regions. The possible future negative impacts of recently observed reductions in summer sea-ice extent and overall sea-ice volume compared to 1979–2000 are very concerning.

We note that the recent long term trend in sea-ice and in-year seasonal variations are generally well represented by most climate models. However, we recognise that year-to-year to decadal variations in sea-ice extent and thickness have only been captured by few models to date. We understand that some recent modelling is showing signs of being capable of capturing the essence of all three aspects—in-year and in-decadal variations and long-term trends.

Based on observations and available climate model evidence, we do not anticipate a complete “collapse” of sea-ice cover in “the next few years”, with the late summer Arctic Ocean being essentially free of sea-ice being the norm as early as 2015 to 2020. However, assuming greenhouse gas emissions continue without significant reductions in the near future, recent modelling experiments indicate that the Arctic may become essentially sea-ice free for some days or weeks in most summers, at some time after 2030 and before 2080, with increasing indications of an earlier, rather than later date.

The Government is aware that recent research suggests that less sea-ice could directly impact on regions outside the Arctic, including NW Europe, for example by changing the frequency of winter cold weather events and indirectly through links with Atlantic Ocean circulation and temperature, which themselves drive variations in European weather.

DECC and DEFRA support the Met Office Hadley Centre Climate Programme and the NERC Arctic Research Programme and encourage UK and international research collaborations. The Government is also encouraging and funding significant research to improve our understanding of the changes occurring in the region, improve climate and earth system model representation of the Arctic, and to understand the impacts of such change outside the region.

**2. In the absence of urgent action on climate change, there may be a number of tipping points in climate-drive systems in the Arctic, which threaten to rapidly escalate the danger for the whole planet. A collapse of summer sea-ice, increased methane emissions from thawing permafrost, runaway melting of the Greenland ice-sheet, and a collapse of the thermo-haline circulation, may all be approaching in the Arctic and will have disastrous consequences for global climate and sea levels. These together comprise a wake-up call to reinvigorate efforts to tackle climate change. A lack of consensus on precisely how fast any tipping points are approaching in the Arctic should not be used as an argument for inaction; rather it demonstrates the need for continued and sustained research to underpin further action. The UK makes an essential contribution to Arctic science, and we look to the Government to continue supporting Arctic science as a key component of its work on climate change. (Paragraph 45)**

We agree that urgent international action is needed to tackle climate change through reductions in greenhouse gas emissions and the Government is working through the UNFCCC to deliver a global legally binding agreement by 2015 to come into effect by 2020 and to agree additional mitigation actions that will help to bridge the gap between current business-as-usual emissions and a climate responsible trajectory consistent with our 2°C goal.

The Government is fully aware of the need for increased understanding of the Arctic system, and is funding and will continue to fund Arctic science as a key component of its climate change research. NERC and Met Office Hadley Centre lead UK research efforts. The 5-year, £15m NERC Arctic Research Programme is now co-funded by DECC and DEFRA and a significant component of the 3-year £50m DECC and DEFRA-funded Met Office Hadley Centre Climate Programme is devoted to developing a better understanding of climate system “tipping points” and resilience, including methane release and ice-sheet dynamics, to improving climate and Earth System models, and to understanding possible impacts on regional and global environment and societies.

**3. Geo-engineering techniques for the Arctic at present do not offer a credible long term solution for tackling climate change. Further research is needed to understand how such techniques work and their wider impacts on climate systems. In the meantime, therefore, we remain unconvinced that using ‘technical fixes’ is the right approach and efforts should not be diverted from tackling the fundamental drivers of global climate change. (Paragraph 50)**

We agree that geo-engineering (sometimes called climate engineering) does not offer a credible long-term solution for tackling climate change, and are also unconvinced that using technical fixes is the right approach. Government maintains that actions must focus on tackling the root cause of climate change by reducing emissions of greenhouse gases from human activities and adapting to those impacts that are unavoidable. We agree that understanding of the efficacy, costs and societal and environmental impacts of geo-engineering techniques needs to be improved and are supportive of the need to undertake relevant, careful and responsible multi-disciplinary research. In order to understand better the possible impacts of geo-engineering techniques, DECC is working with the Natural Environment Research Council (NERC) and the Met Office Hadley Centre to report on knowledge gaps and priorities to inform the development of a research strategy for geo-engineering.

**4. The risks to ecosystems from the effects of Arctic warming and potential climate tipping points, together with additional risks from energy and shipping development make it imperative that any readily available opportunity to make a difference is grasped. Tackling emissions from shipping is such an opportunity, and the Government must engage positively with the EU's efforts to look at options for doing this. (Paragraph 55)**

The Government agrees with the Committee that reducing emissions from shipping is immensely important, and notes that the Committee focuses in particular on black carbon and greenhouse gases. These are both areas where the UK is active in the work of the International Maritime Organization (IMO) which, as we indicated in evidence to the Committee, is an effective body with a substantial record of achievement.

The issue of black carbon is being considered by an IMO correspondence group chaired by the United States under the auspices of the IMO's Bulk Liquids and Gases Sub-committee. The UK is playing an active role in the work of the group. The Correspondence Group is tasked with considering three key issues that will underpin the IMO response to the issue of black carbon. These are:

- agreeing a definition of black carbon, utilising work already undertaken by UNEP and individual States;
- identifying suitable measurement methods to apply to maritime emissions of black carbon, and gathering information about the scale of the problem; and
- developing a range of control options for black carbon emissions from shipping and evaluating their likely practicality and effectiveness.

The Correspondence Group will report its outcome to the next session of IMO's Bulk Liquids and Gases Sub-Committee in early March 2013. The Sub-Committee will then develop a work programme for further action on the issue.

The Government strongly supports and is actively involved in the work of the IMO to address greenhouse gas emissions from ships, through both technical and market-based measures. The Government is pleased with IMO's successful adoption, in 2011, of a technical measure for new ships—the Energy Efficiency Design Index (EEDI). The Government considers that emissions trading should be the IMO's preferred market-based measure, and the UK is active in the IMO as a leading proponent of a global emissions trading system. Given that a market-based measure will take several years to negotiate and bring into effect, the UK is also actively working with a range of other States from both within and outside the EU, and with the European Commission, to develop a technical and operational measure which will apply to those existing ships which are not covered by the EEDI.

The UK has also been actively participating in the European Commission's ongoing work to develop an EU measure to address greenhouse gas emissions from ships. The European Commission's announcement on 1 October that the EU legislative proposal which the Commission will put forward in early 2013 relates to monitoring, reporting and verification of CO<sub>2</sub> emissions from shipping usefully complements the future work in the IMO on a technical and operational measure.

**5. Oil companies primarily respond to market supply and demand. The Government's approach in helping avoid dangerous climate change is to encourage the UK to reduce consumption, not supply, of fossil fuels, through, for example, electricity market reform and the EU Emissions Trading System. We are concerned that there appears to be a lack of strategic thinking and policy coherence within Government on this issue, illustrated by its failure to demonstrate how future oil and gas extraction from the Arctic can be reconciled to commitments to limit temperature rises to 2°C. The Government should seek to resolve this matter. (Paragraph 64)**

The Government believes that national and international action to tackle climate change is essential. Our approach is based on reducing greenhouse gas emissions through domestic and internationally binding targets, increased use of low carbon energy sources, improvements in energy efficiency and, where possible, carbon sequestration. This emphasis on reducing emissions rather than limiting production is reflected in the agreements reached under the UNFCCC process. There is currently no international mechanism to agree limits on production.

However, the Government recognises that the world economy will continue to rely on fossil fuels as we transition to a low carbon economy. The International Energy Agency (IEA) 2011 World Energy Outlook forecasted that in 2035 world oil demand will be 78.3million barrels per day compared to 86.7 million barrels per day in 2010, with gas demand expected to rise from 3,076 billion cubic metres in 2009 to 3,876 billion cubic metres in 2035 under its 450 Scenario, which sets out an energy pathway consistent with a 50% chance of meeting the goal of limiting the increase in average global temperature to 2°C. The same document also forecasts that oil output from existing sources will decline to around 40 million barrels per day by 2035, with the difference between this level and demand requiring the development of substantial new production capacity. This implies that we will need to source over 30 million barrels per day new oil production between now and 2035 even under a two degree scenario, and therefore there need be no inconsistency between extracting more oil and gas from the Arctic (or any other source) and maintaining a 50% chance of meeting our two degree target according to IEA analysis, so long as the overall level of global oil and gas production does not exceed levels needed in a two degree world.

Such an approach is also consistent with our energy security goals.

With the decline in domestic oil production, the UK will become increasingly reliant on imported oil, with import dependency rising from 30% now to over 80% by 2030. It is against this background that we need to ensure we have continued access to a well supplied and competitive world oil market, whilst reducing our exposure to volatile oil and gas prices and ensuring energy security through innovation in renewable technologies.

**6. The development of Citizens Advisory Councils to engage citizens in oversight of the Arctic oil industry should be part of the Govt Strategy for the Arctic. (Paragraph 92)**

The Government fully recognises the need for those affected by developments to be able to make their views heard. Such contributions help ensure decisions are properly informed by local concerns. We would therefore welcome the use of Citizens Advisory Councils where

these are appropriate to local circumstances. However, we would not advocate a one-size-fits-all approach by seeking to have the use of such Councils made mandatory across the Arctic, since alternative arrangements may be better suited to some situations. The Government welcomes and supports the steps being taken in the Arctic Council, particularly the Sustainable Development Working Group, around developing Social Corporate Responsibility.

The Government also recognises the political sensitivity of environmental planning. It is for national governments to determine the regulatory structure within which such decisions are made.

**7. Drilling is already going ahead in the Arctic and regulatory authorities are approving plans to drill. However, only a small fraction of oil would be recovered in the event of a significant oil spill in the Arctic and it might take decades for wildlife to recover. Given the heightened risks of drilling for oil and gas in the Arctic, including a lack of conclusive evidence that oil spill response techniques will work fully effectively in Arctic conditions, we conclude that there should be a moratorium on drilling in the Arctic until:**

The Government is acutely aware of the potential environmental impacts of an oil spill in the Arctic and recognises the risks of drilling for hydrocarbons. We therefore fully support the use of the highest environmental and drilling standards in the Arctic. As detailed under point 12, we welcome steps already being taken by the Arctic littoral states and by the Arctic Council in identifying and protecting areas of particular ecological significance in the Arctic, and their introduction of specially designated marine areas. We are committed to working towards a new global mechanism to regulate the conservation of marine biodiversity in Areas Beyond National Jurisdiction; we will press for a new Implementing Agreement under the United Nations Convention on the Law of the Sea to deliver this; and, in the event this becomes a reality, we will work with the Arctic Council, Arctic states and the UN on its application in the Arctic. We have made clear to Arctic states that we are willing to provide advice on secure and sustainable drilling where needed. We are fully supportive of efforts to enhance Arctic oil spill prevention and response mechanisms and stand ready to respond to any request for assistance within the limits of our capabilities.

We believe these measures—combined with effective and ambitious global action to reduce global greenhouse gas emissions—are more likely to be effective in protecting the Arctic environment than pressing for a complete moratorium on all drilling in the Arctic region.

- **the regulatory regimes of all Arctic states impose the highest available environmental standards, and require the best available and safest technology to be used for all components of drilling. The risk standard adopted must be ‘As Low as Possible’ and the Government should work with Arctic states, including through the Arctic Council, to help bring this about.**

We welcome the use of the highest environmental and drilling standards in the Arctic, as elsewhere. However what constitutes such standards varies according to the conditions in which drilling takes place—for example there are likely to be differences in what is most appropriate onshore versus offshore, or in deep rather than shallow water, or again in seas subject to seasonal ice cover compared with seas that are ice-free all year round.

While we would of course be happy to provide advice where this is sought, the UK has no experience of regulating drilling in Arctic conditions and is therefore not best placed to advise on such activity. The states with such experience are the Arctic states themselves, who also have relevant jurisdiction, and we would therefore expect them to be able to use or, if they think it necessary, develop their existing regulatory systems to provide suitable levels of environmental protection.

- **a pan-Arctic oil spill response standard is in place. The UK Government should seek to persuade the Arctic Council to draw on the expertise of other states in its work to develop such a standard.**

The Government welcomes the steps already taken by the Arctic Council in seeking an agreement on co-operation on marine oil pollution preparedness and response in the Arctic that would bind all the Arctic states. The Government further welcomes work being undertaken, particularly by the Emergency Prevention, Preparedness and Response (EPPR) Working Group of the Arctic Council, to develop operational guidelines that will support that binding agreement including an Arctic Region Oil Spill Response and Logistics Guide. EPPR is collaborating with the IMO and other experts, including on the production of the Arctic Region Chapter of the IMO's In-Situ Burn of Oil Spills on Water and Broken and Solid Ice Conditions.

Other organisations are also considering oil spill response in the Arctic. For example, the International Petroleum Industry Environmental Conservation Association (IPIECA) is working on "Spill Response in the Arctic Offshore". And cooperation agreements such as BONN and HELCOM (the governing body of the Convention on the Protection of the Marine Environment of the Baltic Sea Area) provide useful forums for sharing technical and operational developments in relation to oil in ice conditions, and permit the sharing of resources for responding to incidents.

The Government will support moves that promote strong collaboration between all expert bodies looking to pull together best practice for dealing with oil in Arctic conditions, including the Arctic Council, to ensure robust, evidence-based oil spill response arrangements are in place across the Arctic.

- **a much higher, preferably unlimited, financial liability regime for oil and gas operations is in place throughout the Arctic. Such a liability regime should require companies operating there to demonstrate that they have adequate funds, financial guarantees or insurance, to meet the costs of responding to an oil spill. The UK Government should seek to advance this through the Arctic Council and the IMO. Consideration should also be given to setting up a liability deposit bond scheme which could be administered by the Arctic Council.**

Setting the limits of financial liability for oil and gas operations is a matter for the countries in whose national jurisdiction the activities are taking place. It is not for the UK Government to dictate what these financial limits should be or whether or how a liability deposit bond scheme should be established or administered. However, it is in the strong interests of those countries and the oil and gas companies themselves to ensure that adequate funds, financial guarantees or insurance are in place before commencement of commercial operations.

In the event of an oil spill, the Government would stand ready to respond to any request for assistance within the limits of our capabilities.

- **an oil and gas industry group is set up to peer-review companies' drilling and spill response plans and operating practices, reporting publicly. The Government should seek, through the Arctic Council, to engage the oil companies operating in the Arctic to set this up.**

The Government agrees that such a peer review process could help spread best practice. However any such peer-review process would need to be acceptable to the relevant national authorities and complement national regulation. It would also have to be demonstrably expert in its opinions. And if such a system were established, the Government believes that companies' participation should be on a voluntary basis, as involvement could be both costly and potentially result in duplication of work done within national administrations.

- **further independent research and testing on oil spill response techniques in Arctic conditions is conducted, including assessing the environmental side-effects of such techniques. Only once response techniques have been independently proven to be as effective as those used for temperate latitudes should drilling be permitted to go ahead. Through the Arctic Council, the Government should seek to persuade Arctic littoral states to carry out and publish the results of such further research and testing.**

The Government notes that a large degree of research and development into the effectiveness of oil spill response techniques in Arctic conditions has already been conducted and published by industry, governments and independent research institutions. However, the Government agrees with the Committee that more needs to be done. The Government welcomes the strong lead in this field played by Arctic states, in particular the United States and Norway, and will encourage them to continue their research programmes and make all results publicly available.

- **an internationally recognised environmental sanctuary is established in at least part of the Arctic. (Paragraph 106)**

As is noted in point 12, the Government welcomes the steps already being taken by the Arctic littoral states and by the Arctic Council in identifying and protecting areas of heightened ecological significance in the Arctic and their introduction of specially designated Arctic marine areas within their national jurisdictions based on scientific evidence. The Government is also working towards delivering a new global mechanism to regulate the conservation of marine biodiversity in the High Seas. The Government believes such an agreement should set up a clear means of designating High Seas Marine Protected Areas, building on the work undertaken by Regional Seas Conventions, such as OSPAR.

**8. An increase in Arctic shipping is inevitably bringing new opportunities for UK businesses and ports, and that will enable UK authorities to play a regulatory role in future Arctic shipping. The Government should review how it can support the relevant sectors of the economy but with a clear focus on meeting the requirements of sustainable development of the Arctic. (Paragraph 111)**

The Government believes that the UK ports and shipping industries, together with the wider maritime cluster, are generally well placed to take advantage of any commercial opportunities that expansion of Arctic shipping may present in the short term.

The Government intends to keep under review, in the longer term, whether there is anything that it is best placed to do, in order both to facilitate worthwhile trade opportunities and to help ensure that this is done with due regard to the environment.

**9. There are clear risks from increased shipping to Arctic ecosystems and effective standards must be put in place as soon as possible in readiness for an inevitable increase in the volume of Arctic shipping. The Government should use its influence in the IMO and Arctic Council to:**

- **ensure the Polar Code, currently being developed, is robust and provides for environmentally safe navigation through Arctic waters. We are disappointed that the IMO chose to not give evidence to us on this inquiry, which hindered our scrutiny of the IMO's work to develop this Code;**
- **speed up the development of the Polar Code by working with other members of the IMO to identify Chapters that could be agreed to a quicker timeframe than the rest of the Code. Although essential to reach international agreement on shipping regulations, the pace of its work is slow;**

The Government fully agrees that the development of the Polar Code within the IMO must produce a clear direction on the design, equipment and, where appropriate, operational methods of shipping which will transit or be employed within this fragile environment. Government officials are playing a leading role in the development of the Code so as to ensure it comprehensively addresses safety and environmental issues. The range of issues to be covered has necessarily expanded to ensure a satisfactory coverage.

In particular, the environmental aspects of the Code have been assessed as better presented as references to the relevant articles of the appropriate Annex to the International Convention for the Prevention of Pollution from Ships (MARPOL) with any additional requirements stated within the Code and made mandatory by complementary references within MARPOL. This will go some way to reduce the burden of development of the Code and will also immediately reflect any future revisions of MARPOL.

The Code will be implemented as a single Mandatory Instrument by way of amendments to existing IMO mandatory instruments. It is probable that this will be arranged in order to allow for a single implementation of all its aspects which is essential to ensure a universal application. The time available for discussion at IMO is entirely dependent on the IMO schedule of the relevant meetings and the UK is strongly committed to intersessional work with other IMO Member States which assists progress on development of the Code.

- **increase the maximum financial liability of ship operators for pollution in the Arctic; and**

In the IMO's "High Level Action Plan of the Organization and priorities for the 2012–2013" there is an action to give consideration to a proposal to amend the limits of liability

of the Protocol of 1996 to the Convention on Limitation of Liability for Maritime Claims, 1976 in accordance with article 8 of that Convention.

The Bunkers Convention was adopted to ensure that adequate, prompt, and effective compensation is available to persons who suffer damage caused by spills of oil, when carried as fuel in ships' bunkers. It requires ships over 1,000 gross tonnage to maintain insurance or other financial security, such as the guarantee of a bank or similar financial institution, to cover the liability of the registered owner for pollution damage in an amount equal to the limits of liability under the applicable national or international limitation regime, but in all cases, not exceeding an amount calculated in accordance with the Convention on Limitation of Liability for Maritime Claims, 1976, as amended.

Amendments to increase the limits of liability in the 1996 Protocol to the Convention on Limitation of Liability for Maritime Claims were adopted by the Legal Committee of the IMO, when the Committee met for its 99th session in London.

The Convention on Limitation of Liability for Maritime Claims sets specified limits of liability for two types of claims against shipowners—claims for loss of life or personal injury, and property claims (such as damage to other ships, property or harbour works). Taking into account the experience of incidents, as well as inflation rates, the limits set in the 1996 Protocol have, in recent years, been seen to be inadequate to cover the costs of claims, especially those arising from incidents involving bunker fuel spills.

The new limits are expected to enter into force 36 months from the date of notification of the adoption, under the tacit acceptance procedure. This is expected to be during 2015.

- **increase the protections afforded to the Arctic under existing IMO shipping regulations, including seeking support to designate the Arctic as a 'Particularly Sensitive Sea Area' within the MARPOL regulations (Paragraph 120)**

The Government fully agrees that the Arctic should receive the level of protection from ship-source pollution which it needs, and the UK plays an active part in the work of the IMO which is the body best qualified to regulate international shipping. The IMO brings together coastal States, flag States and port States, and the international associations which represent industry and environmental interests, and makes the most of their combined knowledge and expertise.

The Government considers it immensely important that the expansion of shipping in the Arctic should not have a damaging effect on the environment. To this end, the UK will certainly work with the IMO to endeavour to provide, where scientific evidence demonstrates that a particular vulnerability requires an increase in the level of protection which is applied to Arctic waters under MARPOL or other IMO international instruments, that the necessary increase in the level of protection is achieved.

Particularly Sensitive Sea Area (PSSA) is the designation which the IMO can make to protect waters which are not only significant for recognised ecological, socio-economic or scientific reasons but are also at risk from international shipping. A proposal for a PSSA is not usually developed if another IMO designation or designations would be more appropriate to address the vulnerability of the waters in question. It is normal practice in the IMO for the littoral state (or states) concerned to develop and submit the proposal to

the IMO. If one of more of the Arctic states submitted a proposal for a PSSA covering all or part of the Arctic waters, the UK would give it full consideration and would assess the proposal against the IMO's criteria for PSSAs on the basis of the evidence provided by the proponent (or proponents).

The Committee also identifies a ban on the use of heavy fuel oil in Arctic waters as a possible measure. Proposals to ban the use of heavy fuel oil in the Arctic have been discussed at the IMO following the decision in 2011 to ban the use and carriage of heavy fuel oil in the Antarctic region. While there are environmental arguments in favour of a ban, the alternative lighter distillate fuels also represent a significant environmental hazard if they leak. Additionally, the potential for oil development in the Arctic renders it quite likely vessels will be carrying crude oil as cargo in the region—and a general prohibition on carriage of heavy oils would prevent such activity. A ban on the use of heavy fuel oil in the Arctic would be more practicable, but it would need to be demonstrated that such a ban would address a significant environmental vulnerability and that it would represent a proportionate response to the threat identified. If the carriage of bulk crude oil in the region is permitted then it may be difficult to justify a ban on the use of heavy fuel oil as fuel.

**10. The Government should play a full role in developing a new international agreement on the conservation and sustainable use of the marine biological diversity of the Arctic beyond national jurisdictions (Paragraph 124)**

In the Natural Environment White Paper, the Government committed itself to work towards delivering a new global mechanism to regulate the conservation of marine biodiversity in the high seas. Such an agreement should set up a clear means of designating High Seas Marine Protected Areas (MPAs), building on the work undertaken by Regional Seas Conventions.

The Government is therefore committed to the negotiation of a new Implementing Agreement (IA) under the United Nations Convention on the Law of the Sea for the conservation and sustainable use of marine biological diversity in Areas Beyond National Jurisdiction and in particular, addressing the need for a coherent global regime for MPAs and environmental impact assessments (EIAs).

At the United Nations Biodiversity Beyond National Jurisdiction (UN BBNJ) Working Group in May no agreement could be reached that would indicate that a decision on whether to start negotiations for a new Agreement should be taken by the next United Nations General Assembly. Instead, it was agreed that discussions on the issues should continue and to undertake two workshops, one covering MPAs and EIAs and the other on Marine Genetic Resources (MGR) during the next 12 months to further inform its work. Subsequently, the Rio+20 summit agreed that the United Nations General Assembly should take a decision on a new IA in 2014.

The UK is playing a full role in these negotiations and has indicated that it would like to be part of the EU Task Forces which have been set up as part of the EU preparations for the UN BBNJ intersessional workshops and which are taking place in 2013.

We accept that a new IA will include discussions on the need for an access and benefit sharing (ABS) mechanism for the exploitation of MGR. However, the UK does not agree at this stage that the outcome of those negotiations for an IA should include an ABS system for MGR without a better understanding of the type of regime that could be put in place and its effects on research and sustainable utilisation of these resources.

**11. As an observer on the Arctic Council, the Government should seek to influence Arctic states to regulate their fisheries sustainably. Any bilateral agreements between the UK and other states should seek to ensure that smaller boats, which more readily support sustainable fishing practice, are able to benefit from any quotas agreed. (Paragraph 125)**

The management of fisheries does not fall within the remit of the Arctic Council. However, by and large the Arctic states sustainably manage fish stocks under their control. For stocks that are jointly managed with a proportion being fished in the Arctic, the UK would always argue that scientific advice should be respected.

Where the UK enters into bilateral agreements with Arctic states we do so under the European Union. We only accept fishing opportunities where the science indicates it is safe to do so. Our experience is that larger vessels fishing in the Arctic are as capable of fishing sustainably as smaller vessels and can fish more efficiently through needing less fishing trips and time in the area to take their quotas. We do accept, however, that quotas should be made available for indigenous Arctic vessels.

**12. We support the need for an internationally recognised environmental sanctuary covering part of the Arctic. The Government should seek to gather support for this within the Arctic Council, and to encourage the Council and UN to begin a dialogue on the scope for this. We see the development of such a Sanctuary as a pre-requisite for further development of the Arctic's natural resources. (Paragraph 139)**

The Government welcomes the steps already being taken by the Arctic littoral states and by the Arctic Council in identifying and protecting areas of heightened ecological significance in the Arctic and their introduction of specially designated Arctic marine areas within their national jurisdictions based on scientific evidence.

As mentioned earlier, the Natural Environment White Paper committed the Government to work towards delivering a new global mechanism to regulate the conservation of marine biodiversity in Areas Beyond National Jurisdiction. The Government will therefore press for a new Implementing Agreement under the United Nations Convention on the Law of the Sea to cover, in particular, the need for a coherent global regime for Marine Protected Areas and Environmental Impact Assessments. The Government believes such an agreement should set up a clear means of designating High Seas Marine Protected Areas, building on the work undertaken by Regional Seas Conventions, such as OSPAR. At Rio+20 it was agreed that a decision on whether a new Implementing Agreement should be negotiated should be taken before the end of the 69th session of the United Nations General Assembly in 2014. In the event this becomes a reality, the Government will work with the Arctic Council, Arctic states and the UN to establish whether there is a scientific basis for an internationally recognised Marine Protected Area in the area of the Arctic beyond national jurisdictions.

13. We recommend that the Government begin the development of an Arctic Strategy to bring together the UK's diverse interests in the Arctic and engage all stakeholders. Such a strategy should include analysis of the potential impact of climate change on the Arctic and necessary responses, as well as how and where the Government would act to support sustainable development in the Arctic. It should identify potential end-states for the Arctic and how the Government intend to use its influence at the UN and the Arctic Council to bring those about, taking account of the limits on the UK's ability to directly drive such changes. In particular, an Arctic strategy should include:

- a narrative on how the Rio principles and the outcomes from Rio+20 Summit will guide the UK's approach to the Arctic;
- how the Government intends to use its science and research to increase its influence on Arctic matters;
- how the Government plans to secure action against the pre-conditions we consider should be attached to further drilling in the Arctic;
- the need for an area of the Arctic to be set aside as a 'sanctuary' and protected from oil and gas development, to be progressed in dialogue with both the Arctic Council and the UN;
- how the Government will use its influence at the IMO, UN and Arctic Council to help protect the Arctic from the possible impacts of increased international shipping, and how it will support relevant sectors of the UK economy to take advantage of future opportunities in a sustainable way;
- the Government's commitment to support the sustainable management of Arctic fisheries;
- consideration of the ideal of a 'wider' Council, convened under the UN, to allow the interests of non-Arctic states to be taken into account in the development and environmental protection of the Arctic, and identification of available levers to bring that about;
- how the Government will work to develop Citizens Advisory Councils to engage citizens in the oversight of the Arctic oil industry; and
- opportunities for 'grand bargains' that might be explored with potential observer states, including China, on wider environmental issues. (paragraph 155)

The Government remains of the view that it would be inappropriate for the UK to have an Arctic Strategy akin to the strategies produced by the Arctic states because the UK does not have Arctic jurisdiction. However, the Government recognises the importance of making more accessible its Arctic policies, and will therefore produce and publish a policy framework for the Arctic in 2013. As part of the development of this framework, the Government will consult interested stakeholders, including the Arctic states, and include plans for public outreach to increase awareness of the UK's interests in the Arctic.

The policy framework will underpin the Government's commitments to put sustainable development at the centre of the international agenda. It will also reaffirm that the UK

highly values its status as an observer to the Arctic Council, and that we will fully utilise this status to contribute to the work of the Arctic Council, where invited to do so, and to ensure that economic and environmental agendas in the Arctic go hand in hand. We will also continue to advocate that any activities in the Arctic need to be informed by high quality Arctic science. The policy framework will therefore reflect the role that UK science has played and will continue to play in the Arctic.

The policy framework will bring together the Government's views and action on the UK's main Arctic policy interests, including: oil and gas extraction; Marine Protected Areas; sustainable fishing; shipping; and Arctic governance. The implementation and delivery of the framework will be overseen by the existing cross-Government Arctic network group, which will publish regular updates to the framework, as appropriate.