© 2016, Elsevier. Licensed under the Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International http://creativecommons.org/licenses/by-nc-nd/4.0/

Viewpoint

Brexit: The marine governance horrendogram just got more horrendous!

Suzanne J. Boyes* & Michael Elliott

Institute of Estuarine and Coastal Studies, University of Hull, Hull, HU6 7RX, UK

*Email: S.J.Boyes@hull.ac.uk; Tel. +44 1482 466762

1. Introduction

On Thursday 23rd June 2016, the British people voted in a referendum on the following question: 'Should the United Kingdom remain a member of the European Union or leave the European Union?' Of the 33,551,983 who voted, 51.9% (17,410,742) voted to leave (48.1% voted to remain). Although there is an agreed basic framework, as there is no precedent for a country leaving the European Union (EU), there is a lack of clarity surrounding the process and timetable for Brexit¹. The UK has to reformulate its relationship with the rest of the EU during a 2-year period triggered by the request to leave under Article 50 of the Lisbon Treaty (effective 2009). The start of that 'divorce settlement' is triggered by the Member State (the UK) and as yet (July 2016) the UK Government position is not to trigger Article 50 until their negotiating position has been defined internally. The 2-year period is separate to the 'framework agreement' with the rest of Europe which will take an undefined time to negotiate. The latter will be a reversal of the lengthy process of joining the EU to ensure alignment of the Member State laws with EU law, and could possibly take between 10-20 years.

So what does all this mean for the future of the marine environment of a dominant maritime state such as the UK? Building on our previous work in the *Marine Pollution Bulletin* and elsewhere (Boyes and Elliott, 2014, 2015), we take the current legislation giving protection and management to the UK marine environment and consider how this could and should change depending on the exit scenario chosen and the impact this would have on UK marine environmental governance. We define governance here as the policies, politics, administration and legislation and reflect on the importance of the vertical hierarchy of legislative instruments from the local to the global (Elliott, 2014).

2. Current EU legislation

The EU has the most comprehensive and influential set of environmental policies in the world which date from the first Environmental Programme in the early 1970s. It has provided a model for many other countries and has many similarities with elsewhere, for example the Clean Water and Oceans Acts in the US. The entire EU legal framework, consisting (as of 2015) of 12,421 Directives, Regulations

¹ Brexit is an abbreviation of 'British Exit', people who voted for the UK to leave the European Union. Conversely Bremain indicates 'British Remain', people who voted for the UK to stay in the European Union.

and Decisions (Bigagli, 2015), shapes and defines the common market between Member States, protects and improves the quality of the environment, and ensures the free movement of people and trade within EU Member States. The UK has been a major player in shaping these policies since joining the European Economic Community (as it then was) on 1 January 1973. Hence the UK has been adopting all of the aspects through the environmental programmes of the then European Economic Community and, since 1993, the European Union.

The history of European marine environmental protection has passed through many phases (Box 1) thus resulting in our previous 'horrendogram' (Boyes & Elliott, 2014) which centred on the global and international agreements which underpinned the European directives and what was expected of those Member States implementing them. The 1970s saw the first directives and regulations produced by the European Economic Community reacting to specific sectoral activities causing problems in the marine environment (e.g. pollution, fisheries, dumping of materials, nature). However since 2000, EU directives have evolved to address the environment in a more holistic manner, adopting framework directives such as the Water Framework Directive (WFD) and the Marine Strategy Framework Directive (MSFD) (Borja et al., 2010; Boyes & Elliott, 2014) and addressing global issues such as climate change. Since 2008 in particular, there have been fewer major proposals by the Commission, instead the focus has been on reviewing exiting legislation (e.g. Fitness Checks to nature directives (Milieu et al., 2015)) and where necessary filling gaps in protection while ensuring that the environment can deliver economic benefits (Blue Growth) (e.g. the newest Framework Directive for Maritime Spatial Planning). The ethos has been on addressing and managing issues affecting the marine environment in a holistic manner, using the ecosystem approach and encouraging neighbouring Member States to work together to address transboundary issues.

Box 1 General decadal trends in marine environmental management		
1960's	control on chemical pollutants, metals, DDT; gross biota assessments and lethal testing;	
	small area assessments; licensing for estuarine activities but not marine ones	
1970's	control and assessments of pesticides, oils, gross biota, toxicology, environmental quality,	
	the use of Environmental Quality Objectives/Environmental Quality Standards; employing	
	better dilution for waste (e.g. long-sea outfalls - 'the solution to pollution is dilution'), a	
	sectoral approach to control; adoption of international conventions for pollution, waste	
	and dredging disposal, fisheries; first licences for coastal activities	
1980's	first assessments of Persistent Organic Pollutants, sub-lethal biological effects	
	determination, better treatment of waste, use of environmental classification schemes,	
	adoption of biodiversity agreements; increasing permits for seas	
1990's	realisation of importance of Endocrine Disrupting Substances, sublethal effects	
	assessments, movement towards quantitative indicators and baseline/threshold and	
	trigger values, use of Environmental Management Systems; consideration of habitat	
	structure in governance, use of integrating and integrative studies; convening of world	
	summits and recognition of global problems; first use of the Ecosystem Approach and	
	Ecosystem-based management; introduction of cost-benefit and cost-effectiveness in	

	environmental decisions; proposals for and definitions of Ecosystem Services in decision
	making and assessment; increasing monitoring systems
2000's	whole ecosystem analyses and assessments, realisation of catchment controls and connectivity in estuarine and marine management (estuary-coast-sea links), focus on ecological quality; realisation of the problems of biological pollutants such as alien species, action on global problems and transboundary problems; increasing concerns regarding climate change
2010's	some movement to integrated science, political concerns that the economic crash requires easing environmental controls on business; reductions to monitoring programmes because of cost; limited movements to joined-up thinking in legislation and administration, some solutions to global problems especially climate change; increasing use of renewable energy generation

In turn these EU directives required enabling legislation to be passed and/or adopted by Member States and thus the actions required by the Member State in implementing that legislation. Elsewhere, Boyes & Elliott (2015) showed the plethora of administrative bodies required to implement the governance instruments. Most notably, any maritime state which has the overall aim, as in the UK, of ensuring a vision of 'clean, safe, healthy, biologically diverse and productive seas and oceans' requires the appropriate instruments covering all users and uses of the seas. The plethora of marine uses and users (for fisheries, seabed extraction, water abstraction, recreation, navigation, energy removal, etc) all require to be controlled to prevent marine deterioration, hence the amount of legislation.

3. Brexit scenarios

Given that the UK has voted to leave the EU, various scenarios are being debated, for example:

Scenario 1: Negotiate to join the European Economic Area (EEA)² containing states from the EU and European Free Trade Association (EFTA): This scenario would entail the UK staying within the internal market through membership of the European Economic Area (EEA) by joining EFTA (of Norway, Iceland and Lichtenstein); hence an 'arms-length' relationship with the EU. The UK would be expected to adopt the full body of EU laws (acquis communitaire), but without the power and opportunity to influence EU-decision making. Various EU environmental legislative instruments related to the marine environment are included in the EEA Agreement, although the following marine-related directives and policies do not apply: Wild Birds Directive, Habitats Directive, Bathing Water Directive and Common Fisheries Policy (CFP). The WFD and MSFD were both felt to be relevant to the EEA by the EU, but the EEA States felt although the WFD was relevant to the EEA, the MSFD was not relevant for incorporation into the EEA Agreement. A number of reasons have been given for this: (i) the directive

² The European Economic Area (EEA) is the bridge between the EU and three of the four members of the European Free Trade Association (EFTA) – Norway, Iceland and Liechtenstein; the fourth EFTA country is Switzerland who negotiated a separate bilateral agreement with the EU (Buchan, 2012).

may fall outside the scope of the EEA Agreement; (ii) incorporation may not be required due to the contents or nature of the act, or (iii) it may have expired in the EU (EFTA, 2016).

It is argued that the EEA agreement only applies to the territories of the EEA countries (which extend to the limit of territorial waters, i.e. 12 nautical miles) and that as the MSFD applies mostly outside territorial waters (to 200 nm or mid-lines), it is not within the EEA agreement. Norway has long debated the inclusion of the MSFD to the EEA Agreement, but ultimately did not. Norway has the world's second longest coastline spanning three seas, within which large-scale petroleum and fisheries activities take place. It may well be that the cost of monitoring and reporting on all the required MSFD components over such an extensive area made it unattractive (Dr. Sabine Cochrane, Akvaplan-niva, pers. comm.). However, despite this, Norway is following many of the aspects involved in implementing the MSFD including its Integrated Management Plans for the North, Norwegian and Barents Seas.

The key issue between EEA membership and EU directive adoption appears to be whether or not the subject matter is necessary to economic and market-related issues. For example, the Habitats Directive and Wild Birds Directive are pure conservation measures, therefore beyond the necessary scope and the geographical area of the EEA Agreement. If they went down this path, the UK could, as with Norway, be accused of 'wanting to have its cake and eat it too' in wanting the benefits of the EU (e.g. H2020³ participation) without the responsibilities of membership. However, it is notable that as an Associated member, Norway pays 75% of the net per capita contribution of the UK for those benefits, and still has to adopt and implement relevant directives but without powers to influence the decision-making process.

Scenario 2: Completely outside the EU: Once Article 50 of the Lisbon Treaty is activated by the UK, a two-year period for negotiations will begin during the withdrawal process. New legislation would be required at the moment of withdrawal from the EU (2018/2019 under a two year exit strategy) but obligations adopted under national/domestic legislation would continue to apply until repealed or amended by the UK or devolved governments which could take many years. For the UK to still trade with European counties, standards for manufacturing and design would still have to be met (under EU regulations). The UK would lose access to funding sources (e.g. European Regional Development Fund (ERDF) and for research, H2020) and EU institutions (with the exception of the European Environment Agency). In contrast, following Brexit the UK would still continue its role as a signatory to international agreements such as the Regional Sea Convention for the Protection of the Marine Environment of the North-East Atlantic (the OSPAR Convention). OSPAR has played an influential role in protection of the

³ H2020 is an EU Research and Innovation programme with nearly €80 billion of funding available over 7 years (2014 to 2020)

UK and wider European marine environment (IEEP, 2016), and the EU directives currently are the means to adopting its recommendations and agreements.

International Law and Conventions (e.g. Convention of Biological Diversity; United Nations Framework Convention on Climate Change (UNFCCC); Ramsar Convention; Bern Convention), to which the UK is a signatory will still apply to the UK and national legislation will have to be in place to meet those international commitments. The UK is also a signatory to the United Nations Convention on the Law of the Sea (UNCLOS) and therefore committed to manage and conserve resources in its Exclusive Economic Zone (EEZ), but with no means of enforcement. Under this scenario, the UK would have to rely on UK legislation to implement International law, as EU legislation will no longer be there to provide enforcement and protection measures.

With over 40 years inside the EU and its predecessor the EEC, there is obviously a close integration

4. Implications for the UK marine environment

between UK legislation and EU and International environmental law. EU directives are agreed and automatically adopted by the Member States and then interpreted and transposed into their own national regulations through a piece of enacting legislation approved by their Parliament. The horrendogram Figure 1 adapted from Boyes & Elliott (2014) demonstrates the number of regulations directly used to implement marine related European directives (20 regulations covering 20 different marine pressures) enacted through the European Communities Act 1972 (which incorporates the provisions of the EU treaties into UK law). This is in contrast to primary Acts of parliament made to address national policy objectives (18 Acts covering just 8 different policy areas of planning, harbour developments, conservation, archaeology, energy, flooding, marine licensing and fisheries) (Figure 1). Key pieces of UK legislation such as the Wildlife and Countryside Act, 1981 (as amended) and the Marine and Coastal Access Act (MCAA) 2009 would still be important legislation as they were passed as primary UK Acts of parliament. If the UK adopts Scenario 2 and fully withdraws from the EU, the European Communities Act 1972 will be repealed and all EU regulations which currently manage and protect the marine environment would need to be reintegrated back into the UK legal system through either Acts of Parliament or some form of delegated legislation (e.g. Statutory Instruments) (Environmental Analyst Ltd, 2016). This would include legislation to manage key pressures and activities such as pollution, environmental liability, shipping, invasive species, environmental impact assessments, clean water for bathing and drinking, sewage and nitrates all of which are primarily managed through regulations at present. Protection would weaken over time without the enforcement and financial penalties of Member States being taken to the Court of Justice for infringement proceedings (termed infraction) if they fail to implement EU law or knowingly allow

damage to occur. It would be a UK Parliamentary decision whether to continue with the environmental legislation, to reduce or increase its protection, or to repeal it completely.

In 2005, Lord Davidson QC was asked to examine the UK European-sourced legislation (Davidson, 2006), to identify areas where there might be an unnecessary regulatory burden (termed 'gold-plating' of legislation). His report concluded that there was some room for improvement, and recommended that any future legislation should be implemented so as not to go beyond the minimum requirements set by a directive. The UK Minister of State for Farming, Food and the Marine Environment (Defra) George Eustice has claimed that leaving the EU would free the UK from 'spirit-crushing' environmental directives, leaving the UK to develop a more flexible approach to environmental protection (The Guardian, 30th May, 2016). Eustice also stated that whilst the Birds and Habitats directives and their enabling UK legislation would be removed, many of the EU environmental directives would stay, but with less rigidity.

The levels of environmental protection afforded by any newly updated legislation would depend on the political will of the elected government and could result in lower or increased levels of protection. The UK has its own Marine Policy Statement (MPS) (HM Government, 2011) which sets out a vision for the UK marine environment through objectives and policy areas. With the MPS currently adopted by all the devolved administrations (Scotland, Wales and Northern Ireland), it is unlikely these marine policy objectives will change in the immediate future and will remain in place until it is withdrawn, amended or replaced. As detailed in the MCAA, the MPS will be reviewed as and when the relevant policy authorities (the Secretary of State in conjunction with devolved authorities) consider it appropriate to do so. It is possible for any of the devolved policy authorities to withdraw from the MPS but this would 'not change the effect or validity of any existing Marine Plans which had been prepared when the MPS was in effect' (HM Government, 2011).

At the time of writing, just as the relationship between the UK and the EU is not defined, the repercussions for the separate countries within the UK (England, Wales, Scotland and Northern Ireland) are also unknown. Given that the populations of the first two of these voted to leave the EU whereas the latter pair voted to remain adds an extra complication. There could be different priorities across these internal borders and, in the case of Northern Ireland, its joint border with another EU Member State, the Republic of Ireland. However, this discussion must wait for later.

5. Concluding remarks

Brexit is a status not expected to occur by most people involved in the research, management and governance of the marine environment; but now it has, the UK needs to decide how it will proceed. Whichever scenario the UK adopts for Brexit will ultimately have repercussions for the protection and

management of the UK marine environment. We emphasise here that the European marine environment, as with any multinational, multi-use and multi-user situation, requires coordinated management and governance which can operate across borders. The removal or reduction of any such controls following Brexit is in contrast to the recent emphasis by the UK House of Lords EU Select Committee regarding the need for greater not less cooperation in marine assessment and management (House of Lords, 2015). Hence the Scenario 1 (the Norway model) would seem like a backward step where the UK would be expected to adopt EU legislation into national law but without the capacity or influence to help make decisions at the European level. Similarly, Scenario 2, a full move away from the EU would require some structures to be put into place to manage transboundary marine problems and the marine economy and coordinated assessment to determine the efficacy of management measures.

Brexit cannot mean the removal of all EU marine environmental legislation overnight as the UK will still aim for the vision of 'clean, safe, healthy, biologically diverse and productive seas and oceans' – if it did not have EU marine legislation then it will still require something similar and would be unwise to undo all the effort previously put into fulfilling the EU directives. In any event, the withdrawal process can take up to two years after triggering Article 50 in which time we are still a member of the EU and must abide by its rules. During this period, the Maritime Spatial Planning Directive (2014/89/EU) will still have to be implemented into UK law by September 2016, as will the revised EIA Directive (2014/52/EU) by May 2017. In essence, the rewriting, revision or removal of such a considerable number of instruments (e.g. 20 out of 38 just related to the marine environment) has huge constitutional implications.

References

Bigagli, E. 2015. The EU legal framework for the management of marine complex social—ecological systems. Marine Policy, 54: 44–51

Boyes, S.J. & Elliott, M. 2014. Marine Legislation – the ultimate 'horrendogram': International Law, European Directives & National Implementation. Marine Pollution Bulletin, 86, pp. 39-47

Boyes, S.J. & Elliott, M. 2015. The excessive complexity of national marine governance systems - has this decreased in England since the introduction of the Marine and Coastal Access Act 2009? Marine Policy, 51: 57-65

Borja, Á, Elliott, M., Carstensen, J., Heiskanen, A-S. & van de Bund, W. 2010. Marine management – towards an integrated implementation of the European Marine Strategy Framework and the Water Framework Directives. Marine Pollution Bulletin 60: 2175-2186.

© 2016, Elsevier. Licensed under the Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International http://creativecommons.org/licenses/by-nc-nd/4.0/

Buchan, D. 2012. Outsiders on the inside Swiss and Norwegian lessons for the UK. Centre for European Reform. http://www.cer.org.uk/publications/archive/policy-brief/2012/outsiders-inside-swiss-and-norwegian-lessons-uk

Davidson, N. 2006. Davidson Review – Implementation of EU Legislation. Final Report. http://www.cabinetoffice.gov.uk/regulation/reviewing regulation/davidson review/index.asp

EFTA, 2016. 32008L0056: Directive 2008/56/EC of the European Parliament and of the Council of 17 June 2008 establishing a framework for community action in the field of marine environmental policy (Marine Strategy Framework Directive). http://www.efta.int/eea-lex/32008L0056 (accessed July 2016)

Elliott, M. 2014. Integrated marine science and management: wading through the morass. Marine Pollution Bulletin, 86(1/2): 1-4.

Environment Analyst Ltd, 2016. Fears grow for Nature Directives in the UK post-Brexit. https://environment-analyst.com/48344/fears-grow-for-nature-directives-in-the-uk-post-brexit?q=Nature+Directives

HM Government, 2011. UK Marine Policy Statement. HM Government, Northern Ireland Executive, Scottish Government & Welsh Assembly Government. March 2011

https://www.gov.uk/government/publications/uk-marine-policy-statement

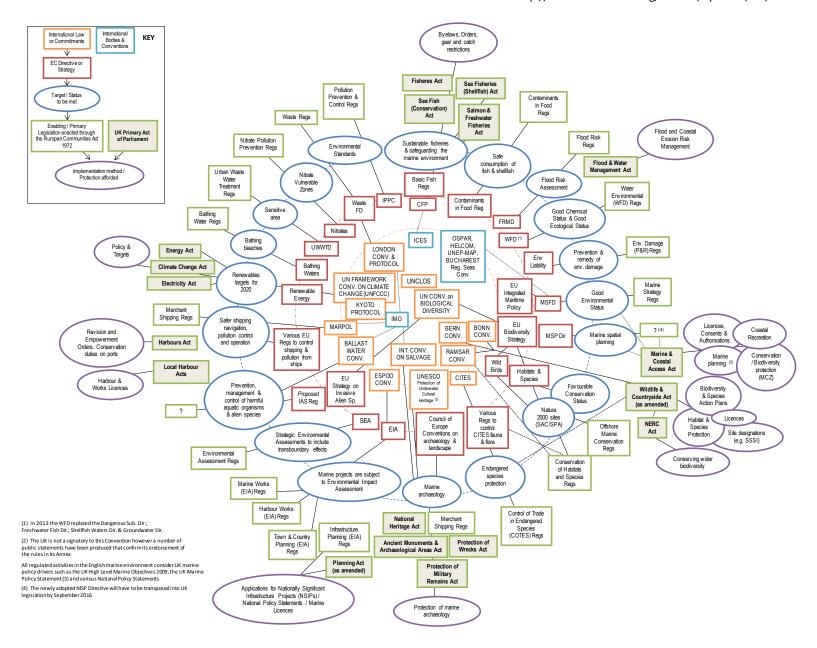
House of Lords, 2015. The North Sea under pressure: is regional marine co-operation the answer? House of Lords, European Union Committee. 10th Report of Session 2014–15.

http://www.publications.parliament.uk/pa/ld201415/ldselect/ldeucom/137/137.pdf)

IEEP, 2016. The potential policy and environmental consequences for the UK of a departure from the European Union. Prepared by Institute for European Environmental Policy. March 2016. http://www.ieep.eu/assets/2000/IEEP Brexit 2016.pdf

Milieu, IEEP, ICF & Ecosystems Ltd. 2015. Evaluation Study to Support the Fitness Check of the Birds and Habitats Directives. Draft Emerging Findings.

http://ec.europa.eu/environment/nature/legislation/fitness_check/docs/consultation/Fitness%20Check%20final%20draft%20emerging%20findings%20report.pdf



© 2016, Elsevier. Licensed under the Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International http://creativecommons.org/licenses/by-nc-nd/4.0/

Figure 1: Marine environmental legislation horrendogram showing Regulations made through the European Communities Act 1972 to implement an EU directive versus a UK Primary Act of Parliament (adapted from Boyes & Elliott, 2014)