MARITIME AFFAIRS: JOURNAL OF THE NATIONAL
MARITIME FOUNDATION OF INDIA
2022, VOL. 18, NO. 1, 26–41
https://doi.org/10.1080/09733159.2022.2091571

The role of UNCLOS in upholding maritime order and global ocean governance: A new global order for the oceans through leadership and pressure points

Ana Olivert

Independent Consultant

ABSTRACT

On the 40th anniversary of United Nations Convention on the Law of the Sea (UNCLOS), the oceans are facing unprecedented challenges and threats, for which solutions can be found in both international law and the law of the sea. This article explains why UNCLOS continues to be the main source for States to find solutions in those areas falling within the law of the sea where it does not provide immediate answers. Despite the unquestionable contribution of UNCLOS towards securing a peaceful legal order for the seas, the ambition of securing equity has not been attained and enforcement on the high seas is weak. The idea of how a new culture of cooperation and compliance could reverse current trends affecting the oceans is also explored here. In this regard, the European Union (EU) has been taken as an example of a key global player to put forward a vision with the necessary actions and policies on the basis of UNCLOS, coupled with the doctrine of the pressure points, to entice States to comply with international law.

KEYWORDS

UNCLOS; plastic pollution; overfishing; climate change; cooperation and compliance; leadership; pressure points; the EU

Introduction: The law of the sea

The development of the law of the sea is inseparable from the development of international law. International law emerged with the appearance of independent, territorially defined States in the post-medieval history.[1] Modern international law of the sea emerged as treaty law between States in the nineteenth century due to the development of maritime trading routes. At the time, major uses of the oceans were limited to navigation and fishing,[2] and pollution was a non-issue.

In that period, there were some unsuccessful attempts to codify State practice on the law of the sea. It was actually the work of the International Law Commission (ILC), created by the United Nations (UN) in 1948, to progressively codify international law that initiated a real advancement in treaty law making.[3] In this regard, the ILC draft articles, codifying international customary law at the time, served as the basis for the 1958 Geneva Conventions on the territorial seas and contiguous zone, the high seas, the continental shelf, and fishing and the conservation of living resources on the high seas.

CONTACT Ana Olivert anolam75@yahoo.es

As Ambassador Arvid Pardo stated: "International law does not exist in a vacuum. Instead, it rather closely reflects the beliefs, needs and perceived interests at any point in time of the predominant classes of the most influential States within the international community".[4]

Since the UN Conferences on the Law of the Sea in 1958 (UNCLOS I) and 1960 (UNCLOS II), certain developments called for a new legal order to properly deal with the emerging issues at the time.[5] During the 1960s, many former colonies obtained their independence and rightly claimed their right for economic development through the establishment of exclusive economic zones (EEZs) and the recognition of equal rights in a new legal order. The development of science and technology led coastal States to further extend national jurisdiction to control offshore living and non-living natural resources. For example, the discovery of manganese nodules increased the interest in seabed mining.[6] Furthermore, marine pollution from shipping was becoming an issue of great concern with several oil tankers running aground in the second half of the twentieth century, spilling large quantities of crude oil into the sea (for example, the *Torrey Canyon*[7] in 1967; the *Amoco Cadiz*[8] in 1978; and the *Exxon Valdez*[9] in 1989).

The United Nations Convention on the Law of the Sea (UNCLOS)[10] was drafted in the 1970s, adopted in 1982, and came into force for 168 State parties, including the European Union (EU), in 1994. It represented the codification of State practice and the development of the law of the sea, bringing about a most-expected new legal order for the uses of the seas and its resources in distinct maritime zones, where States exercised different levels of jurisdiction according to the purposes of each zone. It also put forward a very comprehensive and flexible mechanism for the peaceful settlement of disputes. UNCLOS III was negotiated with no preparatory work by the ILC, but largely based on political trends and customary international law. Decisions were taken by consensus, based on the lowest common denominator to obtain the maximum level of ratifications.[11] This is extremely relevant to understand the nature of UNCLOS as a "package deal", providing a framework of rules where no reservations are allowed (Article 309) and where to amend the Convention is practically an impossible task (Article 312).

According to the Preamble of the Convention[12], the ultimate goal of UNCLOS is the "contribution to the realization of a just and equitable economic order which takes into account the interests and needs of mankind as whole and, in particular, the special interests and needs of developing countries".

Despite the unquestionable contribution that UNCLOS makes to the law of the sea, it has not managed to achieve the ambition of securing equity. The recognition of sovereign rights over natural resources in the EEZ has not dramatically changed the economic situation of developing States. It has been rightly said that "the most benefiting States by the Convention are those with the largest coastlines, in detriment to the poor and weak States such as landlocked States".[13] It has also been recognised that despite a high degree of compliance of the rules set forth in UNCLOS, enforcement on the high seas continues to be a weakness.[14] This is rooted in the fact that high seas are governed by the principle of freedom of the high seas (Article 87) and the exclusive flag State jurisdiction (Article 92). Further, the emergence of flags of convenience and fraudulent registration of ships has weakened compliance with international rules adopted by organisations, such as International Maritime Organization (IMO), Food and Agriculture Organization (FAO) and International Labour Organization (ILO).

Here, it is worthwhile mentioning a specific event that took place in 2016 as it could potentially trigger State practice undermining the peaceful settlement of disputes established in UNCLOS. This is the case brought by the Philippines against China for activities in the South China Sea, heard by an arbitration tribunal constituted under Annex VII of UNCLOS.[15] The tribunal ruled in favour of the Philippines, but China *rejected the ruling*.

Current challenges of the law of the sea and UNCLOS

Forty years after the adoption of UNCLOS, the international community faces many critical challenges with regard to the oceans. The message of the UN Secretary-General during the 2021 World's Ocean Day was indeed alarming. He stressed that many of the benefits that the global oceans provide to mankind are being undermined by our actions.[16] According to him, the three main threats that the oceans are facing today are: plastic pollution; overfishing, which is causing an annual loss of almost $90 billion in net benefits; and the effects of climate change resulting from high level of carbon emissions, which are leading to ocean warming and acidification, destruction of biodiversity and rise in sea level.[17]

There are more than 3 billion people who rely on the oceans for their livelihood, with the vast majority being from developing countries.[18] The oceans represent great economic value for humanity since, apart from facilitating trade and connecting nations, they are a source of food, water and natural resources to sustain industries. Most importantly, oceans are key to sustaining life on Earth since they moderate temperature, produce oxygen and capture anthropogenic carbon dioxide (CO_2).[19]

The international community is at a crossroad since the current climate crisis and modern challenges of the law of the sea are not only increasing the inequalities between States but also creating political tensions (for example, migration by sea[20]). Today, the question raised by many people is whether the Convention is still an adequate legal framework to provide a solution to these issues. It is hence opportune to analyse this question, focusing on plastic waste, overfishing and the effects of climate change, and to provide some reflections on a new legal order on the basis of UNCLOS for the twenty-first century.

Plastic waste

It is a reality that, today, rivers and oceans are choking with plastic waste, a land-based source of pollution. The UNCLOS, however, cannot offer solutions to address this problem. Global plastic production has risen exponentially in the last few decades and it now amounts to some 400 million tonnes per year. Only an estimated 12 per cent of this waste is incinerated and 9 per cent is recycled. It is estimated that plastic waste ending up in aquatic ecosystems will triple from around 11 million tonnes in 2016 to around 29 million tonnes in 2040.[21] On 2 March 2022, the heads of state, ministers of environment and representatives from 175 nations endorsed a resolution[22] at the UN Environment Assembly in Nairobi to end plastic pollution through an international legally binding treaty by 2024. The resolution addresses plastic pollution, including plastics in the marine environment and encompasses the full cycle of plastic, including production, design and disposal.

Overfishing

The fisheries and aquaculture sector supports the livelihoods of 10–12 per cent of the world's population. In the last few decades, this sector's production has significantly outpaced population growth, thus increasing its contribution to food security and nutrition. However, according to the FAO, the number of sustainable fisheries in the world is decreasing, with the proportion of fish stocks fished at biologically unsustainable levels increasing from 10 per cent in 1974 to 34 per cent in 2017.[23]

Fisheries was a very important economic activity at the time UNCLOS was negotiated and this is reflected in the many provisions related to fisheries in the Convention. Part V of UNCLOS, dealing with the EEZ, recognises the sovereign rights of coastal States for the purpose of exploring and exploiting, conserving and managing the natural resources, whether living (fisheries) or non-living (Article 56), including the enforcement jurisdiction in this regard (Article 73). The Convention juggles between the recognition of sovereign rights over fisheries resources and the imposition of obligations on coastal States in relation to the conservation and utilisation of these resources (Articles 61 and 62). The compromise seems to have been achieved by excluding coastal States from compulsory jurisdiction in relation to any dispute relating to its sovereign rights with respect to living resources in the EEZ or their exercise (Article 120).

The rules on conservation oblige the coastal States to adopt a set of measures, such as determination of allowable catch on the basis of science, adoption of management measures to prevent over-exploitation and restoration of fish stocks to produce maximum sustainable yield. It also binds States to take account of associated or dependent species upon harvested species, and to contribute and exchange scientific information on catch and effort data. The harvesting of fish shall be based on the optimum utilisation, with other States having access to fisheries in the EEZ allowed to catch the surplus. An open list of detailed fisheries rules that the coastal States may adopt are also provided by the Convention (Article 62(4)).

Articles 63–68 lay down obligations of coastal States with regard to the conservation and management of different species, such as marine mammals, and species having their life cycle in areas within and beyond the EEZ of the coastal State. Conservation and management of living resources of the high seas is regulated in Part VII (Articles 116–120), where there is a clear obligation to cooperate between States and, where appropriate, to create regional fisheries organisations to this end (Article 118).

This obligation to cooperate in the conservation and management of living resources of the high seas has been further developed by the 1995 implementing agreement related to the conservation and management of straddling fish stocks and highly migratory fish stocks.[24] Moreover, the Committee on Fisheries, FAO, has adopted numerous binding and non-binding instruments on the basis of UNCLOS, to contribute to better fisheries management, such as the 1995 Code of Conduct for Responsible Fisheries, the 2016 Port State Measures Agreement, and the 2001 International Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing. There are also a series of United Nations General Assembly (UNGA) resolutions that have a direct impact on fishing, such as Resolution 46/215 that establishes a moratorium on large-scale pelagic driftnet fishing on the high seas, including enclosed seas and semi-enclosed seas, and Resolution 61/105 to protect vulnerable marine ecosystems on the

high seas. The UNGA resolutions are not binding per se, however they have legal importance since they may represent State practice establishing a rule of customary international law, or because they may be the basis for the adoption of legally binding acts by States or international organisations.

Overfishing caused by fishing activities could be the result of a combination of factors, such as lack of proper legislation and enforcement, overcapacity and illegal, unreported and unregulated (IUU) fishing. Overfishing, or harvesting beyond the maximum sustainable yield, leads to a situation where the stock cannot replenish itself, thereby preventing a sustainable level of productivity. To rectify this situation, it is necessary that, based on the UNCLOS, States adopt fisheries legislation based on the best scientific advice complemented with efficient enforcement measures.

Biological overfishing may lead to economic overfishing (or overcapacity), as well. Low fish stock abundance means that fishing takes more time and costs more money as fleets need to exert more effort to obtain the same quantity of fish. Overcapacity is further fuelled by fisheries subsidies that increase capacity. Fisheries subsidies are estimated to range from US$ 14 billion to US$ 54 billion per year globally.[25] As mentioned earlier, economic losses derived from overfishing are estimated in almost $90 billion in net benefits.[26] On 17 June 2022, the 12th Ministerial Conference of the Word Trade Organization (WTO) held in Geneva adopted the most expected agreement on fisheries subsidies,[27] that prohibits certain forms of fisheries subsidies that contribute to overcapacity and overfishing, and eliminate subsidies that contribute to IUU fishing.

The problem of IUU fishing requires a combination of adequate legislation at the national level, effective international cooperation, market schemes to validate that the catches have been legally taken and port State measures. From the available international legal instruments and guidelines at the disposal of States, all based on UNCLOS, it would seem there are sufficient tools to crack down on IUU fishing. The FAO also offers technical assistance and capacity building to developing countries to conform with their obligations under international law.

Thus, the problem of overfishing is a complex one, and it is more prominent in certain areas of the world than others. A combination of measures on the basis of UNCLOS are desirable to bring fishing capacity in equilibrium with sustainable fishing. First of all, the States should enact proper legislation to manage fisheries resources, establish marine protected areas to protect vulnerable habitats and ecosystems and fish during critical periods of their life cycle (for example, nursery areas and spawning stocks, fragile ecosystems), and apply effective enforcement measures. Second, to get a grip on IUU fishing that contributes to overfishing, international cooperation is essential, together with the adoption of market and port State measures. Finally, the agreement on fisheries subsidies will make a key contribution towards reducing overcapacity and overfishing.

The effects of climate change on the oceans

Climate change is taking a toll on the oceans. The burning of fossil fuels releases CO_2 and other greenhouse gases (GHG) into the atmosphere, the concentrations of which have increased by 40 per cent since pre-industrial times. According to the Sixth Assessment Report of the IPCC, GHG emissions continued to rise to 2019, and some pathways

that return median warming to below 1.5°C by the end of the century show mid-century overshoots of up to 1.8°C median warming.[28]

Oceans are one of the biggest carbon sinks on Earth, sequestrating 30 per cent of CO_2 and contributing to the cooling of the atmosphere by absorbing 93 per cent of the heat. The absorption of increasing amounts of anthropogenic CO_2 by the oceans results in acidification of waters – a 26 per cent increase has been seen since the Industrial Revolution. When oceans become warmer and have less oxygen, it leads to biodiversity loss and impaired primary production. In fact, primary production has been projected to decrease by 3–9 per cent by 2100.[29] This directly affects food security and the livelihoods of the world's population dependent on the oceans. Ocean circulation is also changing, with a weakening of patterns, such as the California, Canary, the Humboldt and the Benguela current upwellings.[30] In addition, over the period 1901–2010, global mean sea level has risen by 0.19 m,[31] and even if warming is reversed by net negative emissions, sea level rise would continue in their current direction for decades to millennia.[32]

Since the effects of climate change on the oceans are the result of high concentrations of anthropogenic CO_2 in the atmosphere, it is necessary to reverse these adverse effects by reducing greenhouse gas emissions through its appropriate legal framework, namely, the 2015 Paris Climate Agreement of the United Nations Framework Convention on Climate Change (UNFCCC).[33]

The warming of the oceans influences ocean circulation and hence, migratory fish patterns move northwards. We can see this effect in cod and small pelagic fish, such as mackerel and herring, in the North-East Atlantic.[34] Changing patterns of fish, and therefore their abundance, force coastal States to renegotiate access rights and allocate quotas through new agreements. This is always a conflicting matter, especially when historic fishing rights are involved. An example of this is the 2013 "mackerel war[35]" between the coastal States in the North-East Atlantic: the EU, Norway, Iceland and the Faroe Islands. In this case, Iceland unilaterally claimed a higher quota of this lucrative fish on the basis that a larger share of the stock was now in its EEZ. The dispute brought the coastal States to the WTO dispute settlement mechanism. A new sharing arrangement has not been agreed since. The Faroe Islands followed a similar approach regarding the Atlanto-Scandian herring, by unilaterally deciding on a higher quota in 2011, to which the EU responded by imposing trade measures in 2013.[36] A solution to the sharing arrangement remains elusive here as well. Although the Convention does not provide any specific provision to deal with these situations, the solution is to be found through negotiation of new agreements on the basis of UNCLOS.

Apart from this, since maritime zones are measured from the land, the sea level rise may reduce the maritime zones belonging to States as a result of the diminution of the State's land. The rise in sea level can therefore affect maritime boundaries of and between States and in extreme situations, it may imply the disappearance of small island States.[37] This, in turn, raises questions of statehood under international law should the territory and population of a State disappear.

The effects of sea level rise and international law have been the subject of study by the ILC since 2019. The ILC was mandated[38] to analyse the existing international law, including treaty and customary law, with the view to codify customary law and contribute to its progressive development. This would then allow the international community to ascertain the degree to which current international law is able to respond to these

issues and where there is a need for States to develop a practical solution to respond effectively to the issues prompted by sea level rise. To this end, different working groups were set up and States were invited to submit relevant practices.

In this context and in relation to the UNCLOS, it is interesting to note the declaration made in 2018 by the Pacific Islands Forum (PIF), an intergovernmental organisation of 18 Pacific island States that collectively gather 48 million square kilometre (sq km) of EEZ.[39] The PIF, on behalf of its member states, stated that once a forum member's maritime zones are delineated in accordance with UNCLOS, that member's maritime zones could not be challenged or reduced as a result of sea level rise and climate change. This was founded on the basis of the UNCLOS principles of stability, security, certainty and predictability, that once maritime boundaries are presented at the UN they should not be altered. This same position was expressed again during the One Ocean Summit in February 2022, in France.[40] The ILC is in the process of finalising the final outcome of this work.

Another effect of climate change has been the melting of the ice caps, which emphasises the need for effective protection of the Arctic Ocean and its resources. The Central Arctic Ocean has generally been covered by ice the whole year round. However, it is believed that the Arctic Ocean could be largely free of sea ice in summer as early as the late 2030s.[41] The UNCLOS sets a general framework for the protection of the marine environment for ice-covered areas in Article 234, whereby coastal States are allowed to adopt and enforce laws within the limits of their EEZs. However, due to global warming and the melting of the ice caps, the high seas in the Arctic are becoming increasingly accessible. There are other provisions of UNCLOS that could be applicable in the area, such as those in relation to semi-enclosed seas and the different rights and obligations in different maritime zones. However, given the peculiarities of this fragile ecosystem, the question still remains as regards the effective protection of the Arctic from fishing, mining, navigation and other uses of the seas.

Three legally binding agreements have been adopted under the auspices of the Arctic Council, the leading intergovernmental forum for cooperation in this ocean: (i) the 2011 Agreement on Cooperation on Aeronautical and Maritime Search and Rescue in the Arctic; (ii) the 2013 Agreement on Cooperation on Marine Oil Pollution Preparedness and Response in the Artic; and (iii) the 2017 Agreement on Enhancing International Arctic Scientific Cooperation. Realising that the melting of the ice caps is slowly allowing access to new fishing grounds, the coastal States in Central Arctic Ocean initiated discussions, leading to the signature of the Agreement to Prevent Unregulated High Seas Fisheries in the Central Arctic Ocean on 3 October 2018, which entered into force on 25 June 2021.[42] The agreement, based on UNCLOS and the 1995 Fish Stocks Agreement, has been ratified by Canada, Iceland, Denmark on behalf Greenland, Norway, the United States (US), the Russian Federation, China, Japan, South Korea and the EU. It establishes a moratorium for commercial fishing activities for an initial period of 16 years, within which commercial fishing is not allowed as a general rule, unless authorised by a regional fisheries management organisation (RFMO), to be yet created. This treaty is an important step towards promoting responsible governance and ecosystem-based approach to the management of marine resources in the Arctic.

Besides this, safer shipping and better protection of the marine environment in the two polar regions are reinforced by the International Code for Ships Operating in

Polar Waters (the Polar Code).[43] The Polar Code was adopted by the IMO and entered into force in 2017. It is mandatory under both the International Convention for the Safety of Life at Sea[44] and the International Convention for the Prevention of Pollution from Ships.[45]

Notwithstanding these advancements on the protection of the Arctic Ocean, issues still remain regarding an effective governance system for the exploitation of living and non-living natural resources in the Central Arctic Ocean. Practical solutions need to be elaborated on the basis of UNCLOS.

For these specific challenges, UNCLOS does not offer an immediate answer, but the framework that UNCLOS provides serves as basis to substantiate solutions that States may adopt. Such solutions could be based on the principles enshrined in the Convention (for example, State practice developed by Pacific Island States to protect their maritime boundaries from the effects of sea level rise), or by implementing the Convention's provisions (for example, possible future governance for underwater cables and pipelines). This approach is in line with the view that multilateral conventions, as frameworks for international cooperation and coexistence, must offer stability and utility.[46]

Does mankind need a new legal order for the oceans?

We have seen that out of the three main threats affecting the oceans, two cannot be addressed by UNCLOS. This reflects how interrelated public international law and the law of the sea are in a globalised world. In fact, the lack of adequate implementation of a treaty tackling climate change has consequences in the oceans by increasing sea levels, undermining maritime delimitations, destroying biodiversity and other. Similarly, the adoption of a treaty tackling plastic pollution on land will benefit the health of the oceans.

In the 40 years since the adoption of UNCLOS, we have seen persistent inequalities in the world, which will continue to rise as a consequence of increased population growth in a world coloured by the effects of climate change and decline in resources. According to the World Bank, in 2015, more than 736 million people were living below the international poverty line.[47] There have also been large-scale displacements triggered by climate and weather-related hazards in many parts of the world.[48]

These circumstances call for a new order to reverse current trends. Thus, there is a need for a new order that, based on common values and principles, provides a more cooperative and equitable world for mankind. The international community can no longer afford to have international actors behaving on the wrong assumption that whatever happens to the world is not their problem, because in a globalised world, evidence demonstrates that everything is interrelated. This does not necessarily mean creating new rules, but establishing a new culture. In this regard, the author believes in the power of leadership to bring forward right actions and policies, coupled with the necessary "pressure points"[49] to entice States to respect international law. Otherwise, a lack of compliance necessarily affects the rights of others, thereby undermining cooperation and equitable sharing of benefits, with the consequent destabilisation of the legal system.

How would it be possible to implement this theory to reverse current threats affecting the oceans?

This new order may be under formation already. The EU can be taken as an example of a key international player. The EU is party to the UNCLOS; it is constructed on solid values and principles; and oceans are of critical importance to the block. Indeed, the EU coastline extends to 68,000 km (more than Russia and the US combined) and the area of water under EU jurisdiction is greater than its land area.[50]

The EU is an international organisation of 27 democratic States, founded on the values of respect for human dignity, freedoms, democracy, equality, the rule of law and respect for human rights.[51] Article 3(5) of the Treaty of the EU establishes that in its relations to the world, the EU shall contribute to peace, security, sustainable development of the Earth, solidarity and mutual respect among peoples, free and fair trade, eradication of poverty and protection of human rights, as well as to the strict observance and development of international law, including respect for the principles of the UN Charter.

The European Economic Community (EEC), renamed the EU in 2009, felt compelled to become a party[52] to the UNCLOS in 1998, together with its member states, because of its exclusive competence in the area of fisheries management and conservation. The fisheries policy was transferred to the EU by its member states, preventing them from acting in that field on their own. When joining the UNCLOS, the EU made the requisite declaration of competence under Article 2, Annex IX of UNCLOS, containing a description of the different competences involved, namely, exclusive Union competence (such as conservation and management of fishing resources) and matters that fall within the shared competence of the Union and its member states (for instance, maritime transport, safety of shipping and prevention of pollution).

After joining UNCLOS, the EU has taken part in the implementation and further development of the Convention in the frameworks of the State parties meetings as well as the UNGA. The Convention and its implementing treaties (adopted by, for example, IMO, ILO, FAO and United Nations Environment Programme [UNEP]) have been transposed into its internal legal order through legislation and policies, dictating the way it acts internally and in its relations with the world, thus shaping the EU as a key player promoting UNCLOS globally.

Some examples illustrate this situation. In the area of sustainable fisheries and ocean governance, the EU enters into agreements with third countries and is party to RFMOs. The EU has signed sustainable fisheries partnership agreements with 21 States in Africa and the Pacific; northern fisheries agreements with four States in the North Sea and North-East Atlantic region; and is also actively participating in five tuna and 11 non-tuna regional fisheries organisations, making it a leading actor in RFMOs worldwide.[53] Fisheries agreements between the EU and third countries and RFMOs are based on UNCLOS and its implementing treaties.[54]

The principles of UNCLOS are also inserted in the basic regulation[55] governing the fisheries policy in the EU, whereby Part VI of that regulation lays down the objectives and principles under which the external fisheries relations of the EU shall be conducted. In this regard, the EU shall act in accordance with its international obligations (UNCLOS and its implementing instruments). In particular, the EU supports and contributes to the development of scientific knowledge and advice, promotes and supports actions necessary to eradicate IUU fishing, promotes the establishment and strengthening of compliance committees of RFMOs and agreements with third countries are based on surplus and sustainable fishing.

In relation to governance of the high seas, the European Commission has announced the establishment of a High Ambition Coalition on Biodiversity Beyond National Jurisdiction (High Seas Coalition) during the One Ocean Summit in February 2022. The coalition aims at attracting parties which are committed to achieve an ambitious outcome on the ongoing negotiations on the Implementing Agreement on Biodiversity Beyond National Jurisdiction.

The High Seas Coalition's statement of purpose includes, amongst its key objectives, the aim of establishing "a fair and equitable benefit-sharing regime of marine genetic resources, which ensures that the benefits arising from their utilisation are shared in the interest of humanity and for the conservation and sustainable use of the ocean (point 3). It also aims to foster transparency of research activities on marine genetic resources of areas beyond national jurisdictions, as well as inclusiveness in international scientific collaboration, in order to strengthen marine scientific research capabilities of all countries, including developing countries (point 4)".[56]

In addition, the EU works closely with third countries to promote compliance with international fisheries rules – through direct collaboration with third countries under fisheries agreements, incentives and dialogue. In particular, the EU is a world leader in fighting IUU fishing, a practice that puts at risk the sustainability of fish stocks, threatens food security and impacts socio-economic conditions. As the EU is the largest single market for fisheries products in the world, it is in an advantageous position to influence better international fisheries management. In order to introduce fisheries products in the EU market, flag States must certify the legality of the catches made by vessels flying their flag with a catch certificate,[57] as required by the FAO Port State Measures Agreement.[58] Thanks to this system, the EU has helped more than 50 countries improve their systems to fight IUU fishing.[59] The EU has also provided support through regional programmes that promote sustainable fisheries.[60]

Safe and secure shipping has been equally endorsed by the EU, by implementing IMO conventions and playing an important role to entice third countries to do the same, since EU ports can deny entry to vessels flying the flag of States that have not ratified those conventions or are not in compliance with them.

The EU has also been fighting marine plastic pollution by phasing out single-use plastics,[61] which are the more frequently used plastics that often end up in the sea. Further, it has undertaken actions for cleaning up beaches, collecting gear that is lost/discarded at sea, and accelerating the transition to a circular economy. In fact, the EU played a key role in securing the support of the global community for the agreement, in Nairobi, to put forward a legally binding global instrument to tackle plastic pollution.[62]

The EU, thus, is not only an important promoter of the UNCLOS but also a key international player for improving the overall health of the oceans. This is so because of its actions to promote better international fisheries management and ocean governance, its high ambition to lead global climate action[63] to achieve net-zero greenhouse gas emissions by 2050, and its dedicated goal to eliminate plastic litter at sea. The EU is a team player that works closely with the UN system, including the FAO, IMO and ILO, to achieve the sustainable development goals.

However, having a global player is not enough to achieve a more cooperative and equitable world order. Good leadership needs to be coupled with the exertion of pressure points to entice non-compliant States to remain within the system of international

law. In this regard, the author believes in the doctrine of the "Atom and the Pressure Points" developed by Professor D.J. Attard.[64] Under this doctrine, the atom represents the system of international law and the particles orbiting around it represent States. The pressure points are those elements that influence State behaviour to remain within the system of international law.

According to Professor Attard, sovereign independent States pursue their own national interests, and this is what influences the whole system of public international law which tries to balance these often-conflicting interests. Under the doctrine of pressure points, States have to live within the law in order to survive in the international community. The stability of international law is based on a system of pressure points that ranges from reciprocity to coercion.

There are many elements that can work as pressure points. Some examples are public opinion and media; the availability of science; reciprocity and cooperation; court decisions; advisory opinions; and ultimately, Chapter VII of the UN Charter.

Public opinion and media are very important pressure points in national and international politics. Nowadays, through modern media, the dissemination of public opinion globally is almost instantaneous, and the actions or inactions of States can no longer be hidden. The democratisation brought about by media has surpassed that of the most open democracies in the world, allowing single individuals to address the international community (for instance, Greta Thunberg on climate action), influencing public opinion and consequently national politics, ultimately having an impact on the way States behave. The availability of science is also very relevant because it influences the development of law, bringing certainty underpinning legal obligations. New data and science are pressure points because they oblige States to accept realities they can no longer deny.

Reciprocity and cooperation are also pressure points. Since States expect to receive the same treatment they give, reciprocity pressures States to respect the law. Moreover, in an international community that faces global challenges, States cannot afford to live without cooperation because global challenges cannot be solved by single States. In this regard, treaties addressing global challenges (such as UNCLOS, the Paris Agreement and treaty tackling plastic pollution) encourage international cooperation. When States decide to be outside the circle of cooperation, they risk exile and isolation from other States.

Court decisions and advisory opinions from tribunals too influence State actions. Court decisions, even if not respected by States, are important pressure points because they give moral authority to the States. Advisory opinions have great influential effect since States know they often end up in treaties or serve as basis to pursue further legal actions. In this regard, the Advisory Opinion No 21 of International Tribunal for the Law of the Sea (ITLOS)[65] influenced the EU to reform a regulation[66] to properly implement its international obligation of due diligence. As a result, the European Commission is in the position to take action to stop a vessel from fishing illegally outside EU waters, when the concerned Member State fails to do so.

Finally, Chapter VII of the UN Charter related to action with respect to threats to peace, breaches of the peace and acts of aggression offers the ultimate pressure point, allowing the Security Council to intervene.

Conclusions

Currently, the international community is witnessing global threats (namely, plastic pollution, overfishing and the effects of climate in the oceans) and an array of challenges confronting the oceans. Because of the specific characteristics of these threats, plastic pollution and climate change need to be appropriately tackled by specific treaties beyond the scope of the law of the sea. In relation to overfishing, the effects of climate change and other modern challenges of the law of the sea, States should be able to find effective solutions in UNCLOS or on the basis of that Convention.

In this vein, it is perceived that UNCLOS will continue to evolve over the years, together with the continued development of international law that is shaped by the interests and needs of the most influential States in the international community.

By taking the oceans as example, one can equally notice that the world is facing global challenges that cannot be solved by States acting alone. At the same time, it comes very evident that whatever happens to the world it should be a matter of concern for all, because in a globalised world everything is interrelated, and affects all.

With this backdrop, a new order based on collaboration and compliance needs to be developed, if we are to overturn current trends. In this regard, the power of leadership driven by actors who believe in solid values and principles, are willing to contribute to global peace, security and the sustainable development of the Earth as well as the protection of human rights and strict observance of international law, would aid in this endeavour. The EU is taken as an illustrative example that can be replicated by others engaged willing to become international players promoting UNCLOS and contributing to improve the health of the oceans and its peaceful uses. The second element for this new order is to exert "pressure points", which are all those elements (*inter alia*; public opinion, reciprocity, court decisions, coercion) that influence State behaviour to respect the rule of law.

Leadership and pressure points are incentives for States to develop collaborative approaches and to enhance compliance. Otherwise, the lack of compliance of legal obligations necessarily affects the rights of others, hence undermining cooperation and the equitable share of benefits with the consequent destabilisation of the legal system.

Notes

1. Robin Churchill and Vaughan Lowe, *The Law of the Sea*, 3rd ed. (Manchester: Manchester University Press, 1999), p. 4.
2. Ibid., 2.
3. Yoshifumi Tanaka, *The International Law of the Sea* (New York: Cambridge University Press, 2012), p. 22.
4. Arvid Pardo, "The Law of the Sea: Its Past and its Future," *Oregon Law Review* 63, no. 1 (1984): 9.
5. Malcom Shaw, *International Law*, 8th ed. (Cambridge: Cambridge University Press, 2017), pp. 411–12.
6. Churchill and Lowe, *The Law of the Sea*, p. 223.
7. Proshanto K. Mukherjee and Mark Brownrigg, *Farthing on International Shipping*. World Maritime University Studies in Maritime Affairs 1, 4th ed. (Berlin: Springer, 2013), p. 301.
8. Ibid., p. 306.
9. Ibid., pp. 307, 319.

10. "United Nations Convention on the Law of the Sea, Montego Bay," *United Nations Treaty Series* 1833, no. 31363, adopted December 10, 1982, entered into force November 16, 1994.
11. Tanaka, *The International Law of the Sea*, p. 27.
12. "United Nations Convention on the Law of the Sea, Montego Bay.".
13. Churchill and Lowe, *The Law of the Sea*, p. 15.
14. House of Lords, International Relations and Defence Committee, 2nd Report of Session 2021–2022, *UNCLOS: The Law of the Sea in the 21st Century* (London: Published by the Authority of the House of Lords, 2022), p. 80.
15. Permanent Court of Arbitration (PCA), "South China Sea Arbitration (Philippines v China)," PCA Case No 2013-19, July 12, 2016, https://pcacases.com/web/sendAttach/2086 (accessed May 30, 2022).
16. Secretary-General, UN, "The Message for World Oceans Day," June 8, 2021, https://www.un.org/depts/los/SGmessage/SGMsgWOD.htm (accessed May 30, 2022).
17. Ibid. See also UNGA Res. A/70/L.1, October 21, 2015, 14; stating that: "*Climate change is one of the greatest challenges of our time […] Increases in global temperature, sea level rise, ocean acidification and other climate change impacts are seriously affecting coastal areas and low-lying coastal countries, including many least developed countries and small island developing States. The survival of many societies, and of the biological support systems of the planet, is at risk*." See https://www.un.org/en/development/desa/population/migration/generalassembly/docs/globalcompact/A_RES_70_1_E.pdf (accessed May 30, 2022).
18. Ibid.
19. UN, "Sustainable Development Goal 14: Life below Water," https://www.un.org/sustainabledevelopment/oceans/ (accessed May 30, 2022).
20. The International Organization for Migration (IOM) has pointed out in its last report that; "In 2020, the Mediterranean continued to be the place with the highest known number of deaths during migration, recording over 1,460 fatalities". See M. McAuliffe and A. Triandafyllidou, *World Migration Report 2022* (Geneva: International Organization for Migration [IOM], 2021), 31, World Migration Report 2022. IOM Publications Platform (accessed May 30, 2022). As a matter of fact, increased irregular migration by sea poses greater challenges to those that have to render assistance at sea, especially the shipmaster (Article 98 UNCLOS), and to those States that need to cooperate for the subsequent disembarkation. An illustrative example is the MV Tampa affair, see S. B. Kaye, '*Tampering with Border Protection: The Legal and Policy Implications of the Voyage of the MV Tampa*,' Protecting Australia's Maritime Borders: The MV Tampa and Beyond (University of Wollongong, 2002), pp. 59–81.
21. United Nations Environment Programme (UNEP), *Drowning in Plastics: Marine Litter and Plastic Waste Vital Graphics* (Nairobi: UNEP 2021), https://wedocs.unep.org/xmlui/bitstream/handle/20.500.11822/36964/VITGRAPH.pdf (accessed May 30, 2022), https://wedocs.unep.org/xmlui/bitstream/handle/20.500.11822/36964/VITGRAPH.pdf (accessed May 30, 2022).
22. UNEP, "End Plastic Pollution: Towards an International Legally Binding Instrument," Draft Resolution, UNEP/EA.5/L.23/Rev.1, March 2, 2022.
23. FAO, *The State of World Fisheries and Aquaculture 2020* (Rome: FAO, 2020), p. 7.
24. "Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 Relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks," *United Nations Treaty Series* 2167, no. 37924, adopted August 4, 1995, entered into force December 11, 2001.
25. World Trade Organization (WTO), *Factsheet: Negotiations on Fisheries Subsidies*, https://www.wto.org/english/tratop_e/rulesneg_e/fish_e/fish_intro_e.htm (accessed May 30, 2022).
26. Secretary-General, UN, "The Message for World Oceans Day."
27. World Trade Organization (WTO), "Agreement on Fisheries Subsidies," 12th Ministerial Conference, Geneva, June 17, 2022, WT/MIN(22)/W/22 https://docs.wto.org/dol2fe/Pages/SS/directdoc.aspx?filename=q:/WT/MIN22/W22.pdf&Open=True (accessed May 30, 2022).

28. Intergovernmental Panel on Climate Change (IPCC) Sixth Assessment Report (AR 6 2022) 156, https://report.ipcc.ch/ar6wg3/pdf/IPCC_AR6_WGIII_FinalDraft_FullReport.pdf (accessed May 30, 2022).
29. Manuel Barange et al., *Impacts of Climate Change on Fisheries and Aquaculture: Synthesis of Current Knowledge, Adaptation and Mitigation Options* (Rome: FAO, 2018), p. 1, https://www.fao.org/3/i9705en/i9705en.pdf (accessed May 30, 2022).
30. Upwellings are cold currents that carry nutrient-rich water towards the surface, creating highly productive fishing grounds. Around 25 per cent of total global marine fish catches come from five upwellings, occupying 5 per cent of ocean area. See S. Jennings, M.J. Kaiser, and J.D. Reynolds, *Marine Fisheries Ecology* (Oxford: Blackwell Science Ltd, 2001), p. 24.
31. Barange et al., *Impacts of Climate Change on Fisheries and Aquaculture*, p. 8.
32. Intergovernmental Panel on Climate Change (IPCC) Sixth Assessment Report (AR 6 2022) p. 156, https://report.ipcc.ch/ar6wg3/pdf/IPCC_AR6_WGIII_FinalDraft_FullReport.pdf (accessed May 20, 2022).
33. "United Nations Framework Convention on Climate Change," *United Nations Treaty Series* 1771, no. 30822, adopted May 9, 1992, entered into force March 21, 1994, p. 107.
34. International Commission for Exploration of the Seas (ICES), Special Request Advice, "EU Request on Distributional Shifts in Fish Stocks" (Copenhagen: ICES, 2017), https://ices-library.figshare.com/articles/report/EU_request_on_distributional_shifts_in_fish_stocks/18686750 (accessed May 30, 2022).
35. Robin Churchill, "Managing Straddling Fish Stocks in the Northeast Atlantic: A Multiplicity of Instruments and Regime Linkages – But How Effective a Management?" in Governing High Seas Fisheries: The Interplay of Global and Regional Regimes, ed. O.S. Stokke (Oxford: Oxford University Press, 2001), p. 235.
36. Commission Implementing Regulation (EU) No 793/2013 of 20 August 2013 Establishing Measures in respect of the Faeroe Islands to Ensure the Conservation of the Atlanto-Scandian Herring Stock, *Official Journal of the European Union*, vol 56, L 223, August 8, 2013, p. 1.
37. For example, some States, most of which are located in the South of the Pacific Ocean, such as Maldives (being the lowest lying country on the planet), Kiribati, the Marshall Islands or Tuvalu, are at serious risk of disappearing whether the sea level keeps rising at the current level. See: Mary-Elena Carr et al., "Sea Level Rise in a Changing Climate. What Do We Know?" in *Threatened Island Nations: Legal Implications of Rising Seas and a Changing Climate*, ed. Michael B. Gerrard and Gregory E. Wannier (New York, Cambridge University Press, 2013), p. 15.
38. ILC, "Sea Level Rise in Relation to International Law: Mandate," A/73/10, https://legal.un.org/ilc/reports/2018/english/annex_B.pdf (accessed May 30, 2022).
39. PIF, "Securing our Future in the Pacific," December 30, 2019, https://legal.un.org/ilc/sessions/72/pdfs/english/slr_pif.pdf (accessed May 30, 2022).
40. "Statement by the Pacific Oceans Commissioner, Forum SG Henry Puna," High-Level Plenary Session at the Once Ocean Summit, France, February 2022, https://www.forumsec.org/2022/02/12/forum-leaders-sea-level-rise-declaration-keeps-faith-with-unclos-oceans-commissioner-puna-at-france-ocean-planet-summit/ (accessed May 30, 2022).
41. Arctic Monitoring and Assessment Programme (AMAP), *Snow, Water, Ice and Permafrost: Summary for Policy-makers* (Oslo: AMAP, 2017).
42. "Agreement to Prevent Unregulated High Seas Fisheries in the Central Arctic Ocean," adopted October 3, 2018, entered into force June 25, 2021, https://www.dfo-mpo.gc.ca/international/documents/pdf/EN-CAO.pdf (accessed May 30, 2022).
43. IMO, "International Code for Ships Operating in Polar Waters (Polar Code)," MEPC 68/21/Add.1. Annex 10, 3, adopted November 2014, entered into force January 1, 2017.
44. "International Convention for the Safety of Life at Sea," *United Nations Treaty Series* 1184, no. 2, adopted November 1, 1974, entered into force May 25, 1980.

45. "International Convention for the Prevention of Pollution from Ships," *United Nations Treaty Series* 1340, no. 62, adopted November 2, 1973, entered into force October 2, 1983.
46. Vaughan Lowe, "Written Evidence (UNC0046, point 3)," to the International Relations and Defence Committee, House of Lords, *UNCLOS: The Law of the Sea in the 21st Century*. November 17, 2021.
47. The World Bank, *Piecing together the Poverty Puzzle* (Washington, DC: World Bank Group, 2018), p. 41.
48. International Organization for Migration (IOM), *World Migration Report 2020* (Geneva: IOM, 2020), p. 2.
49. "Pressure Points" are those elements that influence State behaviour to remain within the system of international law. They are further developed later in this section.
50. European Commission, *Restore our Oceans and Waters: A Synergy Info Pack by CORDIS* (Luxembourg: Publications Office of the European Union, 2022), http://data.europa.eu/doi/10.2830/578013 (accessed May 30, 2022).
51. See Article 2 of the "Consolidated Version of the Treaty on the European Union," *Official Journal of the European Union*, 51, C115 (September 5, 2008), p. 13.
52. "Council Decision 98/392, of 23 March 1998, concerning the Conclusion by the European Community of the United Convention of 10 December 1982 on the Law of the Sea and the Agreement of 28 July 1994 relating to the Implementation of Part XI thereof," *Official Journal of the European Communities*, 179, L179 (June 23, 1998), p. 1.
53. The 21 States in Africa and the Pacific are Cabo Verde, Comoros, Cook Island, Ivory Coast, Equatorial Guinea, Gabon, Greenland, Guinea Bissau, Kiribati, Liberia, Madagascar, Mauritania, Mauritius, Micronesia, Morocco, Mozambique, Sao Tome et Principe, Senegal, Seychelles, Solomon Islands, and the Gambia. The four coastal States in the North Sea and North-East Atlantic are the United Kingdom (UK), Norway, and Faroe Islands. There is currently no agreement with Iceland. The EU participates in the following regional fisheries organisations: the International Commission for the Conservation of Atlantic Tunas (ICCAT); Indian Ocean Tuna Commission (IOTC); Western Central Pacific Fisheries Commission (WCPFC); Inter-American Tropical Tuna Commission (IATTC); Commission for the Conservation of Southern Bluefin Tuna (CCSBT); North-East Atlantic Fisheries Commission (NEAFC); Northwest Atlantic Fisheries Commission (NAFO); North Atlantic Salmon Conservation Organization (NASCO); South-East Atlantic Fisheries Organization (SEAFO); Southern-Indian Ocean Fisheries Agreement (SIOFA); South Pacific Regional Fisheries Management Organization (SPRFMO); Convention on Conservation of Antarctic Marine Living Resources (CCAMLR); General Fisheries Commission for the Mediterranean (GFCM); Convention on the Conservation and Management of Pollock Resources in the Central Bering Sea (CCBSP); Western Central Atlantic Fisheries Commission (WECAFC); and the Fisheries Committee for the Eastern Central Atlantic (CECAF). European Commission, *Facts and Figures on the Common Fisheries Policy: Basic Statistical Data – 2020 Edition* (Luxembourg: Publications Office of the European Union, 2020).
54. "Council Decision 98/414/EC of 8 June 1998 on the Ratification by the European Community of the Agreement for the Implementation of the Provisions of the UNCLOS Relating to the Conservation and Management of Straddling Stocks and Highly Migratory Fish Stocks," *Official Journal of the European Communities*, 41, L189 (July 3, 1998), p. 14.

    "Council Decision 96/428/EC of 25 June 1996 on Acceptance by the Community of the Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas", *Official Journal of the European Communities*, 39, L177 (July 16, 1996),p. 24.
55. "Regulation (EU) No 1380/2013 of the European Parliament and of the Council of 11 December 2013 on the Common Fisheries Policy," *Official Journal of the European Union*, 56, L354 (December 28, 2013), p. 22.
56. European Commission, *A High Ambition Coalition on Biodiversity Beyond National Jurisdiction – Protecting the Ocean: Time for Action*, Ref ARES(2022) 107868 – January 7, 2022, https://ec.europa.eu/oceans-and-fisheries/system/files/2022-01/Declaration-High-

Ambition-Coalition-on-Biodiversity-beyond-National-Jurisdiction-ocean_en.pdf (accessed May 30, 2022).

57. See Article 12 of "Regulation (EU) No 1005/2008 Establishing a Community System to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing ('IUU Fishing')," *Official Journal of the European Union*, 51, L286 (January 29, 2008), p. 1.
58. FAO, "Agreement on Port State Measures to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing," adopted in 2009, entry into force in June 5, 2016, https://www.fao.org/3/i5469t/I5469T.pdf (accessed May 30, 2022).
59. European Commission, "Factsheet: Tackling Illegal, Unreported, and Unregulated (IUU) Fishing," June 2021, https://ec.europa.eu/oceans-and-fisheries/fisheries/rules/illegal-fishing_en#ecl-inpage-461 (accessed May 30, 2022).
60. See Article 51, "Mutual Assistance," of "Regulation (EU) No 1005/2008 on IUU Fishing." A practical example of this support is the project "Improved Regional Fisheries Governance in Western Africa (PESCAO) (2018–2022)," approved by Commission Decision C (2017) 2951 of April 28, 2017, https://www.efca.europa.eu/en/content/pescao (accessed May 30, 2022).
61. "Directive (EU) 2019/904 of the European Parliament and of the Council of 5 June 2019 on the Reduction of the Impact of Certain Plastic Products on the Environment," *Official Journal of the European Union*, 62, L 155 (June 12, 2019), p. 1.
62. European Commission, "EU Helps Launch Negotiations on Landmark Global Agreement on Plastic Pollution," Press release, March 2, 2022, Brussels, https://ec.europa.eu/commission/presscorner/detail/%20nl/ip_22_1466 (accessed May 20, 2022).
63. "Communication from the European Commission, A Clean Planet for All: A European Strategic Long-term Vision for a Prosperous, Modern, Competitive and Climate Neutral Economy," COM(2018) 773. Brussels, November 28, 2018, https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52018DC0773&from=EN (accessed May 20, 2022).
64. Professor David Joseph Attard is the Director of IMO International Maritime Law Institute (IMLI), and Judge at the International Tribunal of the Law of the Sea. The doctrine of the "Atom and the Pressure Points" was explained during the lectures of the course "Public International Law" at IMLI in the academic year 2020–21.
65. ITLOS, "Request for Advisory Opinion Submitted by the Subregional Fisheries Commission, Order of 24 May 2013," 2013, 202, https://www.itlos.org/fileadmin/itlos/documents/cases/case_no.21/advisory_opinion_published/2015_21-advop-E.pdf (accessed May 20, 2022).
66. See Article 7(6) of "Regulation (EU) 2017/2403 of the European Parliament and of the Council of 12 December 2017 on the Sustainable Management of External Fishing Fleets," *Official Journal of the European Union*, 60, L347 (December 28, 2017), p. 8.

Disclosure statement

No potential conflict of interest was reported by the author(s).

Notes on contributor

Ana Olivert is an Former legal officer at the Directorate General for Maritime Affairs and Fisheries at the European Commission of the European Union. Current international fisheries policy and legal consultant.