

ATMOSPHERIC POLLUTION OF THE MARINE ENVIRONMENT

Constantin ANECHITOAE¹
Florica BRASOVEANU²

¹ Ovidius University – Constanta, Romania Faculty of Law „Ovidius” University of Constanta, anechitoae@yahoo.com

² Ovidius University – Constanta, Romania Faculty of Law „Ovidius” University of Constanta, anechitoae@yahoo.com

Abstract: *Convention for the Maritime Law held in Montego Bay; MARPOL 73/78; European Union, Rio Summit - 1992*

INTRODUCTION

On 10 December 1982 at Montego Bay The Convention on the Law of the Sea was adopted.

The participating countries represented by over 400 delegates have made it clear, in the very preamble of the Convention that they wish to develop - by the Convention - the principles contained in resolution 2749 (XXV) of 17 December 1970, where UNO stated that the seabed and subsoil thereof, beyond the limits of national jurisdiction, and the resources of this area are "common heritage of mankind", therefore the exploration and exploitation of the area will be done in the interest of all humanity.

They are convinced that the progressive development and codification of the sea law, carried by the said Convention, will contribute to strengthening peace and security, cooperation and friendly relations among all nations, in accordance with the principles of justice and equal rights, that will foster economic and social progress of all peoples of the world, according to the purposes and principles of the UN, as they are stated in the Charter.

The art. 2 states that state sovereignty extends beyond its land territory and internal waters on adjacent sea areas designated under the territorial sea. This sovereignty extends also at the airspace above the territorial sea and its bed and subsoil.

The atmospheric and extraatmospherical space related to marine environment were established in the interest of territorial limits.

The upper limit of the maritime border

The conquest of space is based on technologies evolved from on new principles and developed from what was done more daring and advanced by man¹.

So, besides air law a new branch, that of cosmic law, grows common today, as it rules the exploration and the use of cosmic space to wards peaceful goals, rights and obligations of cosmonauts, engineers and others involved in the research of cosmic space².

În ceea ce privește limita superioară a frontierei maritime, este apreciată în doctrină a fi în funcție de posibilitățile tehnice ale mijloacelor de zbor aerian. As to the upper limit of marine frontier, it is set accordingly to the technical possibilities of flight³ or at around 110 km above sea⁴.

Professor's Dumitru Mazilu definition of air space⁵, supports doctrine allegations that it is the air column above soil and sea up to around 100 or 110 km above sea level⁶.

Romanian Criminal Code of 17/07/2009⁷, art. 8 par. (2) defines the territory of Romania as the land, the territorial sea and waters, soil and subsoil, air comprised between state frontiers.

Airspace - public and private legal matters

Theologically, as related by the Gospels, air was created by

Gid during the first day of mankind history, along with the creation of surrounded by a planetary ocean land.⁸

Historically, Nicolas Maesco Matte believes that the legal analysis of air properties began far earlier than the existence of any air laws, at a moment where air was seen as private law legal matter⁹.

Roman law saw the air, the sun and the water as *res communis*¹⁰ (things that can't be private property by their nature)¹¹ and also *res extra commercium*.

Hugo Grotius claims that private property didn't extend over all existing things, because some of those remained public as they would serve everyone.

Documents of 1285 reveal that within acts of buying or selling a property in Norwich rights over sky and air were comprised¹².

In time, rules for environmental protection were adopted, with protection of air and soil and subsoil there included as well.

Thus, in the 19th century, the idea of real damage started to replace the idea of *uti, fruti et abutendi* that the owner might have over environment on their property. In 1815 a court ruled that the simple passing of a balloon over a private property does not constitute a crime.

The environmental law drastically sanctions the pollution of environment according to the principle „polluter pays”.

There are some aspects that question private property as related to public interest e.g. when high voltage cables pass over a private house.

Regarding subsoil property, we present the case of gas pipes passing private or public property, case where suppliers signed contracts with the owners proving them with a small amount of gas in exchange for using their property.

Considering air as an accessory to earth, as ruled by several civil codes rises difficulties in obeying the law.

Given the situation of private property close to airports, it is rather impossible to believe that we could forbid taking off or landing of planes over our field.

Development of flights brought hopes and fears, therefore legal doctrine tried to suggest some legal rights for the states to protect the environment. *Paul Fauchille* is the man who claimed a free air space in 1901. Considering the world's highest building at the time, the Eiffel Tower, he suggested that states have control up to 1500 m. Above that height, state should have the right to rule but only to protect public health and own economical interest.

Except these limited rights, Fauchille will deny the state any right to rule the air, considering that states cannot modify nor own atmosphere¹³.

Private legal rules do not clarify the property of air nor the upper limit of air space. The 559 art. par 1 of the Romanian

1 Inspired from air law.

2 Ion Grecescu. *Air Law*. București: Ed. Rum – Irina, 1994, p. 16.

3 Stelian Scăunaș. *International Public Law. Ediția 2*. București: Ed. C.H. Beck, 2007, p. 240.

4 Alexandru Bolintineanu; Adrian Năstase; Bogdan Aurescu. *Op. cit.* p. 77.

5 Dumitru Mazilu. *Dreptul internațional public. Vol. I*. București: Ed. Lumina Lex, 2001, p. 402.

6 Legal Subcommittee of the United Nations Committee on the Peaceful Uses of Outer Space approached on several occasions, this problem without reaching agreement on a text. However the Subcommittee view was that the limit of the State airspace stands at 100-110 km above sea.

7 Adopted by Law no. 286/2009, published in the Official Gazette, Part I no. 510 of 24/07/2009, when entered into force

8 On Day 6, Scripture says „On this day God has found once again that what had been created was beautiful and good. The animals, reptiles and man were made when there were plentiful water, air, greenery and fruit tree”.

9 Nicolas Maesco Matte. *Who does air belong to?* Article: Ad honorem Ion Dogaru. Legal Studies București: Ed. All Beck, 2005, pp. 124-128.

10 Res „good thing” = thing susceptible of appropriation. Res communis = thing that belongs to the community. Felicia Ștef. *Latin legal Phrasebook*. București: Ed. Oscar Print, 1996, p. 258.

11 Vasile Băcu. *Course notes. Roman Law*. București: Ed. IUS – RBA, 1996, p. 70.

12 „To the heights of heaven and earth depths”. Vezi: Nicolas Maesco Matte. *Cui aparține aerul și spațiul?* Articol în: Ad honorem Ion Dogaru. *Studii juridice alese*. București: Ed. All Beck, 2005, p. 125.

13 Fauchille Paul, *Le domaine arien et le regime juridique des aerostats*, Revue Generale de Droit International Public, 1901, p. 414 et suiv. Citat de: Nicolas Maesco Matte. *Op. cit.*, p. 128.

Civil Code of 17/07/2009¹⁴, states: „Property over land goes as well over subsoil and air above the land, with respect to the legal boundaries, but without stating how high and the 859 art par 1 states „Riches of public interest of soil, air, waters with energetical potential, beaches, territorial sea, resources of economical zone and continental plateau constitute public property”.

Art. 559 alin. (1) C. civ. fully reflects art. 135 para. (3) of the 2003 Romanian Constitution related to "public wealth".

Till international practice does not change the concept of air property with that of air sovereignty, the freedom of navigation in the atmosphere does not hold major impediments.

Air pollution

Within maritime and fluvial activity, aquatic environment pollution is the responsibility of all states, for them to take all legal and technical measures ment to counter any act of aggression towards water, beaches or marine animals.

Compared to their means of transportation, maritime transportation has been for quite some time an ecological one, with oil tankers more safe than ever we can easily state that while transporting 25% of the annual quantity of goods shipped over the world, marine transportation is the least polluting to the environment.¹⁵

But ships pollution sources do not only affect water., but human health as well. It is the case of polluting the atmosphere.

Change and warming of the planet have led environmental awareness regarding air pollution. In maritime activities , emissions of greenhouse gases , designated by the acronym "GES " increased with increasing tons of sea transport to more than eight billion tonnes in 2011¹⁶.

In maritime activities, air pollutants with greenhouse gas emissions from ships world fleet , are substances that reduce the ozone layer and carry major risks for individuals, but also for fauna and flora.

United Nations Framework Convention on climate change called " Rio Summit " 1992 integrates the reduction of carbon emissions resulting from transportation from 2012

International legal norms in the prevention of air pollution from ships

As regards to the major role in the fight against pollution , the International Maritime Organisation (IMO) has progressively strengthened its legislation, adopting Annex VI to the MARPOL 73/78 Convention¹⁷ on the prevention of air pollution from ships.

Entered into force on 19 May 2005 and revised in 2008 , this tool requests a draconian timetable for the emission reductions from shipping.

If undeniably the Annex VI imposes strong operational constraints for crews , it entails obligations for all public and private authorities.

As regards to the public authorities , States and their competent maritime administrators , according to Rule 18, commissioning of a register of local suppliers of marine fuel and supply bunkers to be subject to a delivery note indicating the sulfur content is requested, accompanied with a sample signed by the ship's representative.

In case of improper delivery , states should take steps to put in bunkers under dispute. Control by the State of port (Port State Control) requires harmonious application of procedures to verify compliance with these provisions.

Additional procedures relating to cremation certificate on board the registration of substances (that Deplete the Ozone Layer) management plan of volatile organic compounds, methods of

deviation technical files whose diesel, filters or delivery notes - scrubbers- of bunkers and the presence of their samples are designed to bring added in terms of respect for the law.

With regard to private parties , shipowners plying the flag of a State in Annex VI must comply with regulatory constraints imposed by the device and especially to obtain a certificate from the classification society International Air Pollution Prevention - Certificate LAPP, or the international certificate of atmospheric pollution prevention motorului- EIAPP certificate for diesel engines.

Among other things, non-members MARPOL Protocol, are not allowed to grant a more favorable treatment, their vessels must comply with prescriptions of Annex VI in the territorial waters of a State who ratified.

European legal norms on the prevention of air pollution from ships

European legislation on air pollution has evolved over the past two decades. This development took place in two main phases First, Europe has developed a general framework will to quantitatively reduce the greenhouse gas emissions and improving the health of our fellow citizens.

Secondly, the regulation became sectoral, integrating progressively main modes of transport. The specific framework implemented on the sulfur content of marine fuels is a definitive witness the exchange of status

Since the 1990s, in order to protect human health and improve environmental quality, European courts have defined a long-term integrated strategy against atmospheric pollution through various instruments, such as Pure air for Europe program, Sixth Environmental Action Programme and the Thematic Strategy on Air Pollution, in which all modes of transport were clearly identified as a source of emissions.

Europe has ratified the Vienna Convention for the Protection of the Ozone Layer and the Montreal Protocol on substances that deplete the ozone layer , adopting several provisions indirectly focused on shipping.

At the same time, Europe has ratified the 2002 Kyoto Protocol, which refers to GHG emissions (of developed countries) with stabilization level of 2 degrees.

Indeed, the overall increase of 2 degrees C temperature could lead to dramatic environmental consequences . It requires a reduction of GHG emissions by 50 to 85%.

Among other things , based on recent conclusions of the European Commission on policy overall growth in 2020 , reheating climate is a crucial stake, both at European level and worldwide.

With an ever-increasing population pressure on the environment will increase considerably In this perspective , the Commission defines as a priority 20 % GHG reduction compared to 30 % the level of 1990, if conditions are favorable.

14 Adopted by Law no. 287/2009 , published in the Official Gazette , Part I no. 510 of 24/07/2009, when entered into force

15 Laurent Fedi. *Le droit maritime français*. Nr. 737/VI/2012, pp. 491-502.

16 Laurent Fedi. *International shipping facing air pollution: Strategic games of the XXI century* Traducere: Iulian Negru. In Revista de Drept Maritim nr. 1/2013, pp. 28-36.

17 MARPOL 73/78 means the International Convention for the Prevention of Pollution from Ships, 1973 , as amended by the Protocol of 1978 relating thereto and by any other amendment in force thereafter Romania joined the MARPOL by Law no. 6/1993 , published in the Official Gazette , Part I no. 57 of 18 March 1993

Conclusions

MARPOL remains the main international instrument covering operational and accidental pollution prevention of marine environment. Revised Annex VI intends to confine in a sustainable manner atmospheric pollution of vessels who are more numerous to the ocean planet. Transport is a global industry the solution to reduce the environmental footprint of shipping must be global itself.

IMO remains the entitled entity to apply such a device internationally. Analysis of air pollution international legal framework tends to show proactive policy of IMO and if the latter had failed to govern effectively the reduction of atmospheric emissions of ships, the risk of atomizing the rules was very real with consequences of major distortions of competition and additional operational difficulties to maritime operators.

United States and Canada had already implemented legislation on transport vessels operating in their territorial waters.

If Europe promises a universal regime under IMO, which remains the best way to regulate the environmental performance of ships, defining standards for particulate emissions in the long term is a requirement that must be met. A certain pressure is therefore still applied on IMO.

As about the european cabotage and sea motorways, we must denounce the negative effects of MARPOL.

Bibliography

- [1] Anechitoae, Constantin. *Convenții maritime internaționale. Prevederi privind șapitul marin*. In: *Conflicte asimetrice i conflicte inghetate*. Coordonator: Vasile Simileanu; Dumitru Codita. București: Ed. Top Form, 2014, pp. 38-50.
- [2] Anechitoae Constantin. *Maritime and inland water law. Selectiv bibliography*. Germania: Lambert Academic Publishing, 2013, 228 p. ISBN 978-3-659-33494-8
- [3] Anechitoae, Constantin. *Dreptul mării. Ediția a II-a revăzută și adăugită*. București: Pro Universitaria, 2013, 292 p. ISBN 978-606-647-732-1.
- [4] Anechitoae, Constantin. *Dreptul mării*. București: Pro Universitaria, 2013, 234 p., ISBN 978-606-647-637-9.
- [5] Anechitoae, Constantin. *Introducere în dreptul mării*. București: Editura BREN, 2012. 276 pagini. ISBN 978-606-648-0031-4.
- [6] Anechitoae Constantin. *Drept maritim și portuar. Maritime and inland water law. Droit maritime et fluvial – Bibliografie selectivă. Selectiv bibliography. Bibliographie sélective. Vol. I. Ediție trilingvă*. București: Editura Academiei Române, 2009. 391 pagini. ISBN 978-973-27-1825-4
- [7] Anechitoae, Constantin. *Introducere în drept maritim internațional. Note de curs*. București: Ed. BREN, 2010.
- [8] Anechitoae Constantin. *Drept maritim și portuar. Vol. I. Ediție trilingvă*. București: Ed. Academiei Române, 2009.
- [9] Anechitoae, Constantin. *Introducere în drept portuar*. București: Ed. Bren, 2009.
- [10] Anechitoae, Constantin. *Convenții internaționale maritime. Legislație maritimă*. Vol. 1 și 2. București: Ed. Bren, 2005.
- [11] Anechitoae, Constantin. *Principiul libertății mărilor*. Ediția a 2-a revăzută și adăugită. București: Ed. BREN, 2004.
- [12] Grotius, Hugo. *De jure belli ac pacis* (Despre dreptul războiului și al păcii), București: Ed. științifică, 1968.
- [13] Mazilu, Dumitru. *Drept internațional public: curs. Ediția a 3-a. Vol. 1*. București: Ed. Lumina Lex, 2008.
- [14] Mazilu, Dumitru. *Tratat de teoria generală a dreptului. Cu un studiu amplu consacrat teoriei generale a statului (titlul III)*. Ediția a 2-a. București, Ed. Lumina Lex, 2007.
- [15] Mazilu, Dumitru. *Dreptul mării: Concepte și Instituții consacrate de Convenția de la Montego-Bay*. București: Ed. Lumina Lex, 2006.
- [16] Mazilu, Dumitru. *Integrare europeană. Drept comunitar și instituții europene*. Ed. a 4-a. București: Ed. Lumina Lex, 2006.
- [17] Mazilu, Dumitru. *Dreptul păcii. Tratat*. București: Ed. All Beck, 2006.
- [18] Mazilu, Dumitru. *Dreptul Mării. Concepte și instituții consacrate de Convenția de la Montego Bay*. București: Ed. Lumina Lex, 2002.
- [19] Mazilu, Dumitru; ȘANDRU, Daniel-Mihail. *Reglementări privind comerțul internațional: Texte selectate*. București, Ed. Lumina Lex, 2002.
- [20] Mazilu, Dumitru. *Drept Internațional Public, vol. 2*. București: Ed. Lumina Lex, 2002.
- [21] Mazilu, Dumitru. *Drept Internațional Public, vol. 1*. București: Ed. Lumina Lex, 2001.
- [22] Mazilu, Dumitru. *Reguli de navigație pe Canalul Dunăre-Marea Neagră și Canalul Poarta Albă-Midia Năvodari*. În: *Revista de drept comercial* nr. 9/2000.
- [23] Mazilu, Dumitru. *Semnificații ale adaptării noii convenții asupra dreptului mării*. În: *Revista Economică*, nr. 21, 18 mai 1982, pp. 28–29.
- [24] Mazilu, Dumitru. *Echitate și justiție în viața internațională*. București: Ed. Politică, 1979.
- [25] Neagu, Nicolae. *Introducere în dreptul internațional public*. Constanța: Ed. Academiei Navale „Mircea cel Bătrân”, 2005.
- [26] Popa, Daniela. *Marea Neagră – frontiera estică a structurilor euro-atlantice*. București: Ed. Solaris Print, 2010