Proceedings of the ICLAFI – ICUCH Symposium

The UNESCO Convention on the Protection of Underwater Cultural Heritage: how do we make it work?

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INTRODUCTION

The 2001 UNESCO Underwater Convention offers a legal framework to regulate activities that are directed at underwater cultural heritage or incidentally affect it, especially in international waters. States Parties to the Convention are obliged to implement this framework into national legislation and to bring it into practice. In particular, States Parties must make sure that their nationals and ships sailing under their flag report finds of cultural heritage to them and do not engage in activities that go against the rules of the Convention.

The Convention stresses the importance of cooperation between States Parties in the execution of the rules of the Convention. This begins with the sharing of information between all Member States and UNESCO. Furthermore, according to the Convention the decision making process in regard to a discovered ship wreck must be a joint process of the States Parties that have a verifiable link with the heritage concerned, including the coastal state, when the find is done within the Exclusive Economic Zone (EEZ)/the Continental Shelf. One State Party may be coordinating the execution of the jointly taken decisions, but it must always do so in a manner that is in interest of the international community.

However, for the Convention to be more than a piece of paper and be effective in the protection of the underwater cultural heritage, it is important that cooperation will be more than talks, responsibilities are taken and rules of the Convention are enforced when necessary.

At this joint symposium of ICLAFI (ICOMOS International Scientific Committee on Legal, Administrative and Financial Issues) and ICUCH (ICOMOS International Committee on the Underwater Cultural Heritage) participants discussed the ways in which we can make the Convention truly work. How can the obligations and responsibilities of the Convention best be implemented within national legal systems, and equally important, in the working practice? How can we make sure that the legal aspects of the Convention match the practice of managing underwater cultural heritage? Finally, we wanted to discuss in what ways States Parties can address each other when obligations, including enforcement, aren’t met.
SETTING THE SCENE

The symposium started with an introductory session in which a few speakers set the scene and warmed up the discussion.

PAPERS

Etienne Clément - The elaboration of the UNESCO 2001 Convention on the Protection of the Underwater Cultural Heritage

James K. Reap - United States law on underwater cultural heritage: Can it support the goals and objectives of the UNESCO Convention?
The elaboration of the UNESCO 2001 Convention on the Protection of the Underwater Cultural Heritage

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Introduction

The protection of the underwater cultural heritage, in particular ancient shipwrecks laying on the seabed under various jurisdictions, is by nature an international issue. It is therefore natural that the United Nations, in particular UNESCO as the specialized agency with the UN mandate for cultural heritage, has looked into the matter and adopted in 2001 the Convention on the Protection of the Underwater Cultural Heritage, one of the seven UNESCO Conventions in the area of culture. It was elaborated as a response from the international community to the removal and destruction of underwater cultural heritage by industrial activities and by the so-called “treasures hunters”. The Convention reflects the growing recognition of the need to ensure the same protection to underwater cultural heritage as that already accorded to land-based heritage. It provides legal protection, enables States Parties to adopt common approaches to preservation and provides effective professional guidelines. The main principles of the Convention and its Annex had long been endorsed by professionals in UCH. It is to be remembered that the draft of the Annex was drafted by UCH professionals who started working on it in 1983. The Convention entered into force in January 2009. As of 15 July 2017, 57 countries are States Parties to it, which is an honorable score but does not give it the status of a universal instrument. For instance only two countries in Asia and the Pacific have joined it. But those States which joined it made an important commitment by agreeing on rules applicable by vessels bearing their flag and by their nationals, including also the treasures hunters.

Keys steps towards a Convention

UNESCO has been concerned with the protection of UCH since its early days. Its Recommendation on International Principles Applicable to Archaeological Excavations, a non-legally binding text adopted by the General conference in 1956 applies also to underwater archaeology.

The Council of Europe, as early as 1978, began to develop a draft European convention for the protection of the underwater cultural heritage. The draft reached an advanced stage but was never adopted by the Council of Ministers.

The issue was raised again during the negotiations for the United Nations Law of the Sea Convention and resulted, in the closing days of these negotiations, in the adoption of two articles (149 and 303). However these articles are widely felt by cultural experts to be unsatisfactory and incomplete. They are indeed ineffective to protect underwater cultural heritage beyond the contiguous zone, they do not resolve the conflict between ownership claims, salvage claims and cultural heritage interests and they do not give any guidance on how underwater cultural heritage should be treated. They are also sufficiently ambiguous to give rise to alternative interpretations.
In 1990, under the leadership of its Chairperson, Professor Patrick J. O’Keefe, the Cultural Heritage Law Committee of the International Law Association undertook to study the international legal protection of the underwater cultural heritage. It produced its first report and a draft text of a convention for the meeting of the International Law Association in Cairo in 1992. One year later, the Director-General of UNESCO was requested by the UNESCO Executive Board to undertake a study into the feasibility of a new international instrument. As the International Law Association had an advisory status with UNESCO and was well advanced in its work on a draft convention, the Director-General decided to wait until the ILA work was complete before reporting back to the UNESCO Executive Board. In 1994, in Buenos Aires, the Cultural Heritage Law Committee produced its final report and draft convention to the ILA meeting which adopted it and transmitted it to the Director-General of UNESCO.

In parallel to this legal process, a group of influential underwater archaeologists who were members of the International Council of Monuments and Sites (ICOMOS) created the ICOMOS Committee for Underwater Cultural Heritage (ICUCH) and advocated within ICOMOS for the development of specific ethical and professional standards for underwater archaeology. They argued that underwater archaeology had particular requirements related to its environment which has led to the development of specific techniques and that underwater conservation is always a pressing and expensive immediate necessity. Their efforts led to the preparation and adoption of the International Charter on the Protection and Management of Underwater Cultural Heritage by ICOMOS General Conference in Sofia in 1996. To be noted that the ICUCH played a major role during the whole negotiation process of the 2001 Convention, in particular through its Chairpersons, Graeme Henderson (Australia) and Robert Grenier (Canada).

With the ILA draft in its hands, as a useful basis for a possible new instrument, the UNESCO Secretariat was ready to start preparing a feasibility study requested by the Executive Board. Within the UNESCO Secretariat in 1994, Dr. Lyndel V. Prot was the Head of the International Section of the Division of Cultural Heritage. She played a major role, as a renowned lawyer and an international civil servant, all over the process of elaboration of the Convention. I had the honor to be the other member of her two-person team and rejoined later by a then junior colleague, Mr. Ieng Srong. In preparing the feasibility study, the Secretariat looked at the relevant articles of the United Nations Convention on the Law of the Sea and at the International Charter on the Protection and Management of Underwater Cultural Heritage.

In 1995, a large number of artifacts found in the wreck of the Titanic, which was discovered several years before, were exhibited all over the world. This travelling exhibition gave a sort of technology signal that most shipwrecks that could be found on the seabed were technically accessible and that cultural objects could be removed. At the occasion of one such international exhibition in Greenwich (United Kingdom), an expert meeting was organized for legal experts and underwater archaeologists. It included those experts who had worked on the ILA draft and the ICOMOS Charter as well as lawyers familiarized with salvage Law. The discussions anticipated the difficulty of finding a compromise on a draft legally-binding text which could be accepted and implemented universally.

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1 Professor Patrick J. O’Keefe has worked for more than 40 years on legal instruments to protect the underwater cultural heritage. He has written many articles and drafted legislation on legal protection of underwater cultural heritage.
The Director-General submitted the feasibility study to the Executive Board in May—June 1995 and recommended that this Board transmits its recommendation to the UNESCO General Conference which has the authority, under UNESCO’s constitution, to decide on the elaboration of a Convention. But during the discussion, although a number of delegates emphasized the urgency of the situation, the majority requested more time before launching the preparation of a Convention. They insisted that the jurisdictional aspects of the question should be further studied, namely the compatibility of a possible new convention with the provisions on jurisdiction contained in the United Nations Convention on the Law of the Sea (UNCLOS).

Therefore, instead of transmitting the Director-General’s recommendation to the General conference, the Executive Board requested him to urgently convene an expert meeting to discuss this issue and to report to the General Conference just a few months later. But the time was too short between June and October 1995 to convene, before the General Conference, an expert meeting based on a fair geographical balance and representing the various interests involved. The Secretariat therefore wrote to all countries which had expressed an interest in order to receive their comments on the feasibility study. Thirteen replies (Australia, Colombia, France, Germany, Greece, Italy, The Netherlands, Philippines, Spain, Turkey, United Kingdom, United States and the U.N. Division for Ocean Affairs and the Law of the Sea) were received. A majority of them were in favor of a Convention. But divergent opinions were expressed about the content of the norms, for instance on the concept of a specific cultural heritage zone or on specific protected areas. It was also accepted that UNESCO was the appropriate forum and that the norms to be prepared should duly take into account the balance achieved in the UNCLOS Convention.

The 1995 session of the UNESCO General Conference did not launch yet the formal process of elaborating a Convention. Instead, it invited the Director-General:

- to pursue further discussions with the United Nations in respect of the UNCLOS and with the International Maritime Organization (IMO)
- to organize, in consultations with UN and IMO, a meeting of experts representing expertise in archaeology, salvage and jurisdictional regimes
- to make the views of the experts known to UNESCO Member States and invite their comments;
- and to report back to the 29th session of the General Conference (1997)

Therefore UNESCO Secretariat had proposed to the IMO (London) and to the United Nations Division of the Law of the Sea (New York) to nominate some of the above experts in order to ensure consistency with the work already developed within these two organizations. The expert meeting took place in May 1996. It was chaired by Dr. Carsten Lund (Denmark). To be noted that Dr. Lund remained the Chair of all further intergovernmental experts meetings that took place until the adoption of the Convention in 2001. The 1996 meetings was an important one because it agreed that a possible Convention be grounded on the principle incorporated in Article 303 (1) of the UNCLOS Convention which says that: “States have a duty to protect objects of an archaeological and historical nature found at sea and shall cooperate for this purpose”. The majority agreed that UNESCO was the right venue for such a Convention, although a minority group believe that it should be adopted within the Law of the sea framework at the United Nations in New York.

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2 UNESCO General Conference documents 28C/39 and 28C/39 Add
The General Conference finally gave the green light for a Convention in October 1997 at its 29th session. It decided that the question should be regulated and that the method adopted should be an international convention. It invited the Director-General to convene meetings, but this time with experts representing their Governments. Four such governmental experts meetings took place from 1998 to 2001. The UNESCO Convention on the Protection of the Underwater Cultural Heritage was finally adopted on 2 November by the Plenary Session of the 31st General Conference with 88 votes in favor, 4 against and 15 abstentions.

**Major issues during the negotiation of a Convention**

The three main issues at the core of the experts’ deliberations were:

- the jurisdiction (including the necessary compliance with the UNCLOS)
- the relation with the Law of salvage or salvage law
- the standards for research in underwater cultural heritage.

**Jurisdiction**

In the territorial sea, the national legislation of the coastal State applies to underwater cultural heritage. Beyond the territorial sea, the coastal State’s jurisdiction is generally very limited under national legislations. Often the coastal States have jurisdiction over their own nationals and vessels bearing their flag. But it is often expressed in vague terms and with serious difficulties of implementation without any State cooperation system. Underwater cultural heritage being largely located in the oceans which fall under the Law of the Sea Convention, its legal regime falls under UNCLOS articles 149 and 303:

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3 UNESCO General Conference Document 29C/Resolution 21
4 UNESCO General Conference Documents 31C/24 and 31C/Resolution XV, para D
Article 149 Archaeological and historical objects.
All objects of an archaeological and historical nature found in the area shall be preserved or disposed of for the benefit of mankind as a whole, particular regard being paid to the preferential rights of the State or country of origin, or the State of cultural origin, or the State of historical and archaeological origin.

Article 303 Archaeological and historical objects found at sea
   i. States have the duty to protect objects of an archaeological and historical nature found at sea and shall co-operate for this purpose.
   ii. In order to control traffic in such objects, the coastal State may, in applying Article 33, presume that their removal from the sea-bed in the zone referred to in that article without its approval would result in an infringement within its territory or territorial sea of the laws and regulations referred to in that article.
   iii. Nothing in this article affects the rights of identifiable owners, the law of salvage or other rules of admiralty, or laws and practices with respect to cultural exchanges.
   iv. This article is without prejudice to other international agreements and rules of international law regarding the protection of objects of an archaeological and historical nature.

These articles, according to archaeologists and lawyers concerned with the preservation of the underwater cultural heritage, were considered as insufficient for an effective protection of the cultural heritage. Indeed, in the Exclusive Economic Zone and on the Continental Shelf, UCH remains practically unprotected. Another serious problem is that the provision in Article 303 stating that “Nothing in this article affects the rights of identifiable owners, the law of salvage or other rules of admiralty...” appeared to protect the commercial exploitation of historic shipwrecks, leading to the destruction of archaeological resources without their scientific examination. The relation with salvage law was therefore an issue of very lively discussions, often antagonistic, during the several experts meetings form 1998 to 2001.

Salvage law
Salvage Law or Law of Salvage or Law of Finds is based on practical and economic considerations. The function of salvage is to encourage the recovery of goods at sea that are in danger of being lost. The primary objective of the salvage industry, recognized in salvage law, is the recovery of commercially valuable property from a shipwreck. But in some countries, the salvage industry had extended its activity to commercial exploitation of submerged archaeological sites, often by teams of unqualified persons. Therefore for many years archaeologists had been concerned by the loss of scientific information caused by such unprofessional excavation and by the destruction of artefacts not considered commercially valuable.

The activities of the salvage industry were regulated by the 1989 International Convention on Salvage, adopted under the auspices of the International Maritime organization (IMO). It does not include provisions on the underwater cultural heritage. As the Article 303, iii, of the UNCLOS protects salvage law, most experts considered that the international legal framework in 1998 was an invitation to looting.
Standards for research in UCH

When the first meeting of experts opened in 1996, the International Council of Monuments and Sites (ICOMOS) had just adopted its International Charter on the Protection and Management of Underwater Cultural Heritage at its General Conference in Sofia (see above).

To be noted that the International Law Association had included in several provisions of its draft Convention on UCH that underwater excavations were to be undertaken in accordance with the ICOMOS UCH Charter, which would be an annex to the ILA draft.

Therefore given the importance of the ICOMOS Charter which sets standards for research and conservation of the UCH, the members of the ICOMOS Committee for Underwater Cultural heritage (ICUCH) were associated closely to the elaboration of the text of the UNESCO Convention. They were very influential in the process leading to the adoption of the 2001 Convention.

The way towards a compromise

The process involved a long and patient campaign initiated by underwater archaeologists in Europe, Australia, North America and later in other regions. They needed to convince even their own peers - i.e. the ‘land’ archaeologists- to team-up with them in order to convince Ministries of Foreign affairs of their respective countries to support the idea of a Convention. Indeed in many countries Ministries of Foreign Affairs were quite hesitant to open negotiations on an issue related to the Law of the Sea, only a few years after the entry into force of the UNCLOS Convention. To be noted that members of the International Law Association (ILA), especially Professor Patrick J. O’Keefe, the Chairperson of the ILA Cultural Heritage Law Committee, played an important role in the informal lobby in favor of an effective convention. Other influential institutions included ICOMOS, ICUCH, the International Council of Museums (ICOM) and several Maritime museums all over the world.

In 1998, reaching of a compromise to be included in a Convention appeared to be very challenging. At the beginning of the discussions, there was a consensus only on the necessity to avoid creating a new “archaeological zone” in addition to the zones established by UNCLOS. There was also an agreement that a Convention should refer to some kind of guidelines on how to treat UCH.

All the other issues were the object of profound divergences between experts and between the UNESCO Member States. However, gradually, a consensus emerged to obtain protection of UCH wherever it is located beyond the territorial seas, in all maritime zones including international waters, through a State cooperation system.

The salvage Industry was also represented in the experts meetings. Indeed at the request of the UNESCO General Conference, UNESCO Secretariat had asked the International Maritime Organization (IMO) to designate experts to represent the interests of the maritime industry, including the salvage industry. The Tourism diving industry was not invited as such, but several countries’ delegations included experts which expressed the views of this sector. The consistency with the UNCLOS Convention was ensured by representatives of the UN Division of the Law of the Sea (New York) who played a very positive role in this respect. Some “Treasures Hunters”, although not invited officially, showed up at one of the meetings and opposed the adoption of a text, without success. To be noted that “treasures hunters” were more influential among international TV
channels, which, during the years of the negotiations, displayed TV shows glorifying their activities.

The negotiations also had to face language difficulties. For instance, archaeologists and lawyers understood differently the concept of “rules”, the former saw them as rules applicable to professionals and the latter as rules applicable to States. This has rendered the role of the courageous Chairperson, Dr. Carsten Lund (Denmark), an almost impossible task.5

The composition of each country’s delegation was also a challenge. Only important delegations could include international lawyers, cultural heritage lawyers, salvage lawyers as well as archaeologists. But most delegations were composed of only one international lawyer, often with little background in archaeology.

The compromise adopted in 2001

Despite the antagonistic positions that continued to be expressed during the whole negotiation process, a compromise was reached in 2001. It included a very advanced State cooperation system containing provisions of legal and professional or ethical nature binding both States parties and UCH professionals. The Convention was structured under a main text and an Annex which is an integral part of the Convention. The main text contains basic principles for the protection of UCH and a detailed State cooperation system. The Annex includes widely recognized practical rules for the treatment and research of UCH which reflects practically the text of the ICOMOS Charter.

The basic principles of the Convention include the obligation to preserve UCH “for the benefit of humanity”, the “in situ” preservation as the first option (not the only one), a commitment for no commercial exploitation and an obligation of training and information sharing. It does not include the sovereignty rights of States and the issue of the ownership of wrecks which remain regulated by civil law, other domestic law and private international law.

The compromise on the relation with salvage law was one of the most difficult to reach. It is contained in Article 4 of the 2001 Convention which excludes the application of salvage law, except when and if three cumulative conditions are met:

Article 4- Relationship to Law of Salvage or Law of Finds

Any activity relating to underwater cultural heritage to which this Convention applies shall not be subject to the law of salvage or law of finds, unless it:

(a) is authorized by the competent authorities, and
(b) in full conformity with this Convention, and
(c) ensures that any recovery of the underwater cultural heritage achieves its maximum protection.

But the Convention was not adopted by consensus. The Culture commission of the General Conference had recommended the Plenary of the UNESCO 31st General Conference to adopt the draft Convention by 94 votes in favor, 5 against and 19 abstentions. The Plenary adopted it with 88 votes in favor, 4 against and 15 abstentions.6

6 UNESCO General Conference Documents 31 C/24 and 31 C/Resolution XV, para D
Conclusion
Sixteen years later, the Convention is ratified by 57 countries. This relatively low level of ratification can be explained by several factors. Perhaps it still reflects the fact that the Convention may have a few detractors among some of the UNESCO Member States. But most probably, many countries do not consider the ratification as a priority as they do not have the technology nor the human or financial resources to be involved in activities towards the underwater cultural heritage. In these countries, there are also very few archaeologists who have training in underwater archaeology. There is therefore no effective influential group that could persuade their respective authorities to join the Convention or that could campaign among the public on the importance of this heritage for their country and for humanity. But the advancement of technology and the ability of a growing number of countries to own such technology may however have a positive influence on the rate of ratifications in the following years.

References


United States law on underwater cultural heritage: Can it support the goals and objectives of the UNESCO Convention?

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Background
The law of the sea is one of the oldest areas of international law. It stretches as far back as the 17th century with the "Cannon Shot Rule" which set up a three-mile territorial sea. More recently, in 1949, the United States made its mark on the modern framework of the law of the sea when President Harry Truman asserted the U.S.’s jurisdiction and control of natural resources of the continental shelf. Known as the Truman Declaration, this assertion gave rise to a modern rethinking of the law of the sea with the gathering of UNCLOS I in 1956. UNCLOS I resulted in four conventions: the Territorial Sea and Contiguous Zone, the Continental Shelf, the High Seas, and the Fishing and Conservation of Living Resources of the High Seas. UNCLOS convened two more times in 1960 with UNCLOS II and in 1973 with UNCLOS III. UNCLOS III resulted in the Law of the Sea Convention (LOSC) which came into force in 1994 and codified modern international rights and responsibilities in regard to use of the world’s oceans and their resources.¹

Maritime zones play a particularly relevant role in laws regarding UCH and their protection. Under the LOSC, territorial waters are considered to be the first 12 nautical miles from the coast. This zone is considered to be under the sovereign control of the nations to which it applies. The next significant boundary is the Contiguous zone which reaches 12 nautical miles beyond the Territorial sea. In this zone, a nation can enforce its laws in regard to customs, taxation, immigration, and pollution. Outside of the Contiguous zone, extends the Exclusive Economic Zone (EEZ) which stretches 200 nautical miles from the coast of the state. Finally, there is the continental shelf. The border of this area is somewhat unique because, depending on the topography of the ocean floor, it could extend beyond the EEZ. As mentioned above, the U.S. was the first nation to declare its exclusive right to control and exploitation of the natural resources contained within the continental shelf. The LOSC adopts this same understanding of a nation’s rights to this area.

Another major accomplishment of the LOSC was its creation of a mechanism for international cooperation and dispute resolution over maritime issues: The International Tribunal for the Law of the Sea (ITLOS).

The LOSC also provided some legal framework for the protection of underwater cultural heritage (UCH) found at sea; in particular, Articles 149 and 303 are relevant to UCH. Article 149 deals with archaeological and historical objects located on the ocean floor which lay beyond the limits of national jurisdictions. It states:

"All objects of an archaeological and historical nature found in the Area shall be preserved or disposed of for the benefit of mankind as a whole, particular regard being paid to the preferential rights of the State or country of origin, or the State of cultural origin, or the State of historical and archaeological origin."²

Article 303 deals with archaeological and historical objects found at sea. This article is primarily concerned with the international trafficking of cultural heritage. It creates a duty for states to “protect objects of an archaeological and historical nature found at sea” and allows states to assume that the removal of such objects from their Contiguous zone as an infringement of its territory and laws.

Most of the LOSC is now recognized as customary international law, perhaps including the duty to protect the UCH covered by Articles 149 and 303. However, protection of UCH on the continental shelf beyond the contiguous zone was considered by many legal scholars to be inadequate. This was, in part, the impetus for the 2001 UNESCO Convention.

The US and the 2001 UNESCO Convention

While the U.S. is not a party to LOSC, it actively participated as an observer delegation during the development of the 2001 UNESCO convention. In fact, the U.S. had one of the largest delegations representing a variety of interests, the most controversial being those of the salvage industry. The U.S. delegation expressed support for the preservation principles included in the Convention. However, as with the LOSC, the U.S. did not become a signatory. Nevertheless, the delegation indicated support for UCH protection and management consistent with customary international law.

The U.S. cited two primary reasons for refraining from signing the 2001 Convention. First, the U.S. disapproved of the “creeping coastal state jurisdiction” over the UCH on the outer continental shelf (OCS) and EEZ, seeing the possibility of creating new rights for coastal states over foreign nationals and vessels. Second, the U.S. objected to the provision allowing a coastal state to impose protective measures, including recovery, in situations of “immediate danger” to UCH without the formal consent of the flag state to be inconsistent with the current legal regime in the U.S.³

US cooperation

Although the U.S. is not a formal party to the 2001 Convention, it has shown that it seeks to follow the fundamental spirit of the Convention. One example of this is The Agreement Concerning the Shipwrecked Vessel RMS Titanic which the U.S. negotiated with the United Kingdom, France, and Canada. This agreement provided for the preservation and management of the RMS Titanic which currently lies on the Canadian continental shelf. It designates the wreck as a historical wreck of international importance and establishes it as a memorial to the lives lost from the tragedy. The agreement also obligates the parties to take “all reasonable measures” to protect recovered artifacts and regulate access to the wreck.⁴

⁴ *Agreement Concerning the Shipwrecked Vessel RMS Titanic*, National Oceanic and Atmospheric Administration, Article 3.
The U.S. has also entered into agreements with France to manage and protect the sunken warships CSS Alabama and La Belle, and with Japan on the Kohyoteki midget submarines. These agreements recognized the ownership and sovereign immunity of the respective sunken warships and, more generally, that coastal states hold jurisdiction and authority over foreign sunken warships located within their territorial seas.

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5 La Belle Agreement between France and the U.S., March 31, 2003; CSS Alabama Agreement between France and the U.S., March 8, 1995; Agreement between United States and Japan (February 12, 2004).
US laws and policies

In addition to the aforementioned international agreements, the U.S. has adopted a number of laws and formal policies that are consistent with the 2001 Convention. Specifically, these laws include:

- Antiquities Act of 1906
- Archaeological Resources Protection Act of 1979
- National Marine Sanctuaries Act of 1972
- Abandoned Shipwrecks Act of 1987
- Sunken Military Craft Act of 2004
- National Historic Preservation Act of 1966
- National Environmental Policy Act of 1969

Below is a brief explanation of each of these laws and how they mesh with the policies promoted by the 2001 Convention.

**Antiquities Act of 1906**

The Antiquities Act, passed by the United States Congress and signed into law by President Theodore Roosevelt in 1906, gives the President authority to proclaim national monuments on lands owned or controlled by the United States and to protect “historic landmarks, historic and prehistoric structures, and other objects of historic or scientific interest.”\(^6\) While most monuments are on land, there are several marine national monuments managed by the National Oceanographic and Atmospheric Administration (NOAA).\(^7\) The most notable marine national monuments include the Marianas Trench, Papahānaumokuākea, and Northeast Canyons and Seamounts. Beyond designation, research and recovery of antiquities on such lands requires permits. The Antiquities Act, has been used to protect cultural property in a marine environment managed by the U.S. National Park Service, the Canaveral National Seashore.\(^8\) Yet, while designating marine national monuments to protect natural and cultural heritage within the EEZ/OCS is clearly within the U.S. government’s authority, it is unclear whether and to what extent the U.S. will use its authority to enforce the permit process on lands outside designated Marine National Monuments.

\[\text{One of the Wake Island shipwrecks just outside the channel to the marina. Image courtesy of USAF/Mark Ingoglia.}\]

**Archaeological Resources Protection Act of 1979**

The Archaeological Resources Protection Act of 1979 was enacted

“...to secure, for the present and future benefit of the American people, the protection of archaeological resources and sites which are on public lands and

\(^6\) 54 U.S.C. § 320301
Indian lands, and to foster increased cooperation and exchange of information between governmental authorities, the professional archaeological community, and private individuals (Sec. 2(4)(b))."

OCS is not included in the definition of “public lands.” The US has notified other nations that it will enforce national law against foreign-flagged vessels and nationals within the 12-mile territorial sea, 24-mile contiguous zone, and 200-mile EEZ in a manner consistent with customary international law. However, this statute does not protect cultural resources in those zones from either foreign or U.S. nationals and flagged vessels. Consequently, while this statute establishes the U.S.’s authority to protect UCH, it has not resulted in concrete steps towards enforcement of such policies. Nonetheless, ARPA may be a tool to prevent trafficking in underwater cultural property. Section 6(c) prohibits interstate or international sale, purchase, or transport of any archaeological resource excavated or removed in violation of a State or local law, ordinance, or regulation.9

**National Marine Sanctuaries Act of 1972**

In 1972, President Richard Nixon signed the National Marine Sanctuaries Act (NMSA), authorizing the designation and protection of areas in the marine environment. The laws specifically called for protection of areas possessing significant “conservation, recreational, ecological, historical, scientific, educational, cultural, archaeological, or esthetic qualities.” The law grants the U.S. authority to protect natural and cultural resources on the OCS and within the 200-mile EEZ. Authority is delegated to the National Oceanographic and Atmospheric Administration (NOAA) to regulate activities, issue permits, assess civil penalties, and conduct enforcement to protect resources. The NMSA prohibits removing or injuring historic resources within the sanctuary, and any alteration of the seabed. The NMSA may be enforced against US-flagged vessels and nationals or against foreign-flagged vessels and nationals with their consent. However, in the case of seabed alteration, the law may enforced against foreign vessels and nationals without their consent. The NMSA appears to be entirely consistent with customary international law as incorporated in the LOSC.10

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9 16 U.S.C. §§ 470aa-470mm
The Abandoned Shipwreck Act of 1987 (ASA) law grew out of legal uncertainty and the severe damage caused by treasure hunters to wrecks in the Great Lakes and other coastal areas during the 1970s. It asserts title to “abandoned shipwrecks” embedded in a State's submerged lands, embedded in coralline formations protected by a State on its submerged lands, and abandoned shipwrecks located on a State's submerged lands and
included in or determined eligible for inclusion in the National Register of Historic Places. The Act transfers title and control of the shipwrecks to the states on which land it rests.\textsuperscript{11}

In general, abandonment is established after a considerable period where the owner has not attempted to salvage the property or claim it under salvage law, or through other evidence. One example where abandonment was established was in the case of the “Dunkirk Schooner,” pictured above. The court in \textit{Northeast Research v. One Shipwrecked Vessel} found the wreck to be abandoned and title passed automatically to the State of New York under the ASA.\textsuperscript{12}

\textbf{Sunken Military Craft Act (SMCA) 2004}

This statute was the product of a series of court cases\textsuperscript{13} that eventually led President William Clinton to adopt the Statement on the United States Policy for the Protection of Sunken Warships.\textsuperscript{14} Not long thereafter, Congress passed the Sunken Military Craft Act of 2004. SMCA protects sunken U.S. military craft in U.S. waters, the high seas, and marine zones controlled by foreign nations. SMCA also provides authority for the protection of foreign military craft lying within U.S. waters. In addition to protecting these military resources, SMCA also protects associated contents including archaeological and historical resources and, often, war graves. The Naval History and Heritage Command (NHHC) manages the wrecks of more than 17,000 ships and aircraft across the globe. The Department of the Navy has established a permitting program for “controlled site disturbance” of military craft for archaeological, historical or educational purposes.\textsuperscript{15}

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{USS_Hatteras_wreck_site.png}
\caption{3D rendering of the USS Hatteras wreck site, looking at the starboard and port paddle wheels. Generated by BlueView mapping data. Image: NOAA/ExploreOcean/James Glaeser, Northwest Hyrdro, Inc.}
\end{figure}

\footnotesize
\begin{enumerate}
\item[12] \textit{Ne. Research, LLC v. One Shipwrecked Vessel}, 729 F.3d 197 (2d Cir. 2013).
\item[14] 37 WCPD 195 (Monday, January 22, 2001).
\end{enumerate

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National Historic Preservation Act of 1966

Section 106 of the National Historic Preservation Act of 1966 (NHPA) requires federal agencies to conduct a review process to “take into account” the effects of any proposed federally funded or licensed projects (“undertaking”) impacting any historic property included in or eligible for listing in the National Register of Historic Places (National Register).16 The U.S. National Park Service, which administers the National Register program, has published a bulletin dedicated to the nomination of historic vessels and shipwrecks both floating and submerged.17 As part of its required procedural review, NHPA regulations provides for inventorying a project area, determining if properties eligible for the National Register will be affected and whether an adverse effect is expected. A consultation process with appropriate parties seeks to mitigate or avoid any adverse effects. Unfortunately, the Act is procedural rather than substantive in nature and cannot prevent an undertaking or require mitigation.

National Environmental Policy Act of 1969

The Environmental Policy Act of 1969 (NEPA)18 seeks to ensure that all branches of government give prior consideration to the effects of “major federal action significantly affecting the quality of the human environment,” including UCH. Environmental assessments (EA) and environmental impact statements (EIS) are the tools used to assess the likely impacts from the proposed actions and their possible alternatives. Agencies are to take a “hard look” at the potential long and short-term impact of their actions on the environment (including historical and archaeological resources) as they conduct activities under the authorizing legislation.

Summary

Although the United States has not ratified either the Law of the Sea Convention or the Convention of the Protection of the Underwater Cultural Heritage, a number of federal laws have recognize importance of cultural property, including UCH. The protection of UCH under these laws varies greatly. Some laws like the NHPA and NEPA are purely procedural but, if the best of circumstances, can result in the avoidance of UCH or mitigation of the effects of federal projects. Others like the Archaeological Resources Protection Act and the Antiquities Act potentially provide substantive protections, but have not been utilized to their full potential. Other laws could have substantive and far-reaching implications. The Abandoned Shipwreck Act protects UCH in the submerged lands of the states and the National Marine Sanctuaries Act protects any UCH located in National Marine Sanctuaries. The Sunken Military Craft Act protects U.S. military craft wherever they are located as well as foreign sunken craft in US waters. These laws provide substantive protections, but such protections tend to be narrow in scope or jurisdiction. Yet, taken as a whole, these tools could serve to establish a comprehensive UCH preservation framework for the U.S. that supports the goals of 2001 UNESCO Convention.

Gaps in protection of UCH on outer continental shelf under US statutes

The greatest gap in the protection of UCH is within the EEZ/OCS, outside of sanctuaries and marine national monuments, and from looting and unscientific salvaging. Enacting a

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18 42 U.S.C. § 4321 et seq.
law to fill this gap would help fulfill the duty under international law to protect UCH and be consistent with emerging international legal trends and standards.

**Potential ways to fill the gaps**

Ole Varmer, an attorney and scholar on UCH, believes the best place to begin redressing the gaps in protection for UCH is to amend the NMSA by extending the existing authorization system and sanctions to activities that affect UCH outside of National Marine Sanctuaries. Next, he suggests that an amendment could be made to the Archaeological Resources Protection Act to apply to the Outer Continental Shelf. Finally, an amendment to the Antiquities Act or its implementing regulations could be made to clarify its application on the outer continental shelf outside of marine national monuments. All of these actions have the potential to bring the United States into closer alignment with the 2001 UNESCO Convention and partnership with its States Parties.

**References**


Leonard de Wit (The Netherlands)
Head of Regional advisory department North-West, Cultural Heritage Agency of the Netherlands

UNESCO 2001: Protecting our shared underwater heritage by working together
In the beginning of 2016, our minister stated that the Kingdom of the Netherlands is going to adopt the UNESCO Convention to protect underwater cultural heritage. In 2001, when the member states adopted the Convention, the Netherlands abstained from voting because of ambiguity with UNCLOS. The Netherlands has a tradition to work on the implementation of international instruments, in the process of ratifying a convention. For the 2001 Convention we have started this process which prepares the alignment with other partners, and the adjustment into our legal system. As a first step an analysis has been made of the juridical consequences of the Convention on our national legislation and regulations. We have found that there are several obligations in the Convention for which the Netherlands must make additional legislation and/or regulations.

The Netherlands is very curious about the experience of other countries in terms of enforcement both inside and outside the territorial waters. And, how is the handling of the reporting obligation to nationals and captains of a ship flying under its own flag? How is spatial planning handled, of other objects than cultural heritage underwater, such as windmills at sea and drilling platforms? And lastly, what role can information and awareness have towards the ratification of UNESCO 2001 and what good practices are there? We are here to learn from your experiences, and we hope that it will not take too many years before we can join you as a SP, to protect with you our common cultural heritage underwater.

Joel Gilman (Australia)
Solicitor, State Heritage Office, Heritage Council of Western Australia

Australia’s project to ratify the 2001 UNESCO Convention on the Protection of the Underwater Cultural Heritage
This paper will discuss Australia’s current efforts towards ratification of the UNESCO Convention on the protection of UCH. Australia has determined that it must first bring its domestic legislation into line with the Convention before it can properly ratify. The presentation will examine efforts to date and various matters considered towards ratification. The federal government has indicated that it intends to introduce conforming legislation before the end of 2018.

Birgitta Ringbeck (Germany)
World Heritage Coordination, Federal Foreign Office

UNESCO Convention on the Protection of the Underwater Cultural Heritage – Status of the implementation in Germany
Main principles of the UNESCO Convention on the Protection of the Underwater Cultural Heritage, adopted in 2001, are in situ preservation as first option, no commercial exploitation as well as training and information sharing. Despite these objectives being supported, many states hesitate to ratify the Convention. Germany was among those countries which brought forward serious doubts concerning the compatibility of the Convention with the international law during the debates prior to the adoption of the
Convention. Meanwhile, these concerns could be removed; the framework for governing the implementation of the Convention has been drafted.

**Mariano Aznar (Spain)**
Professor of Public International Law, Universitat Jaume I

**Spain and the 2001 UNESCO Convention**

Spain early decided to actively negotiate and ratify the 2001 UNESCO Convention. Since then, it has promoted its acceptance worldwide and, at the same time, has adapted part of its domestic legislation. As a complex state, legislation on cultural heritage is shared between the State and the regions. Some problems arise in some cases around this shared responsibility. Some of the regions have already adapted their legislation regarding UCH while others still pends. For its part, with the promulgation of a new Law on Navigation in 2014 some important aspects of the protection of UCH have been regulated, including salvage law or the participation of different State agencies, including the Navy.

**Gideon Koren (Israel)**
Vice President, ICOMOS International; Advocate, Gideon Koren & Co

**Conventions – Can they really work?**

The topic of this symposium presents a question related to the UCH – how do we make it work? As a sort of preamble to the symposium itself, a general review of other conventions, and in particular, heritage conventions, and how they work, may provide a valuable comparative tool.

**General overview**

International law provides for two types of conventions - constitutional and declarative. The World Heritage Convention (WHC) is a constitutional convention. Hence, it applies only to the member states. This practice raises an immediate question – if a convention works only once a country agrees to it, what makes it preferable to simple cooperation? The response might be related to potential results of a breach - a convention can offer the threat of sanctions.

**The WHC as an example of weakness**

In recent years the World Heritage Convention has been forced to face a few challenges:

First, the need to deal with problematic SOC reports. Eventually (e.g. in the case of Dresden) the only effective sanction proposed by the WHC (withdrawal of inscription) proved counterproductive.

Second, in recent years, all heritage sites in terror-stricken countries, such as Syria and Iraq, have been exposed to existential danger. Some of the heritage sites have already fallen into the hands of various organizations and have even been destroyed. Unfortunately, conventions cannot stand against terrorist organizations like ISIS, and no sanctions can be imposed on them effectively.

The massive destruction also calls for a new attitude towards the understanding and status of reconstruction. The international heritage community might need to change the traditional concept of reconstruction reflected in the WHC. This raises the question: if
basic principles can be changed, maybe ad-hoc cooperation is a better tool than a convention?

It might be time to revisit the concept of conventions as the primary tool for international cooperation. In this respect, looking into ways to "make it work" is a fundamental discussion that needs to take place within the heritage community, in order to review and decide on the way forward.

**Etienne Clément (Belgium)**
Visiting lecturer/Consultant, Sciences Po. Lille, France

**The elaboration of the UNESCO 2001 Convention on the Protection of the Underwater Cultural Heritage**

The UNESCO Convention on the Protection of the Underwater Cultural Heritage was adopted in 2001. Like many such treaties, its text is the result of a compromise between opposing views. The negotiations leading to this instrument started in the Eighties at the initiative of underwater archaeologists who teamed up with lawyers and with the International Law Association. These pioneers considered that the United Nations Convention on the Law of the Sea (UNCLOS) did not protect adequately the underwater cultural heritage. But many States Parties to the UNCLOS were reluctant to re-open any kind of negotiation that might affect the delicate balance of the UNCLOS. Moreover, the industry of salvage was also extremely reluctant to any new international legislation that may affect their activities, especially in the high seas.

The process of preparation of an international legal instrument was suspended several times. It was finally put on tracks thanks to the pugnacity of a few UNESCO staff and ICOMOS members supported by Ministries of Foreign Affairs of several countries who convinced the UNESCO General Conference to enter the process of elaboration of a Convention. During the negotiation of the text, the views expressed by the delegations of UNESCO Member states were often antagonistic. In the discussions, the ICOMOS Committee on Underwater Cultural Heritage (ICUCH) played a major role, by sensitizing the diplomats to the urgency of adopting a legal instrument at a time when technology had made it possible to explore practically all ancient vessels lying on the seabed. The author has participated in some key steps of the elaboration of the Convention and will present some of the legal and ethical positions expressed at the negotiations and that have led to the compromise adopted in 2001.

**James K. Reap (USA)**
Professor and Graduate Coordinator, University of Georgia

**United States law on underwater cultural heritage: Can it support the goals and objectives of the UNESCO Convention?**

The United States is not a party to the Convention on Underwater Cultural Heritage. While it appears unlikely that it will ratify the Convention in the near future, the United States has national laws, regulations, and other international agreements that address underwater cultural heritage, and federal agencies have adopted rules to implement many of the Convention’s principles. This paper explores how U.S. laws, regulations, and agreements support the purposes of the Convention and suggests possible changes in domestic law and bilateral agreements that would bring the United States into closer alignment with the Convention and facilitate its cooperation with the Convention’s states parties.
LEGAL DISCOURSE AND THE REAL WORLD

The aim of this session was to illustrate how the legal instruments of the Underwater Heritage Convention contribute to a better protection of underwater cultural heritage in practice. What is the potential of the legal instruments of the Convention and what does this mean for the interpretation of the treaty provisions? Due to a wide debate among legal experts about the relationship between UNCLOS and the Underwater Heritage Convention, it was considered interesting to describe a practice where both treaties mutually reinforce each other, are complementary, or possibly even compete. In other words: to what extent does the legal discourse influence the real world, and vice versa?

PAPERS

Werner von Trützschler - The protection of underwater cultural heritage in Germany

Thomas Adlercreutz - What an abstention might lead to: A critical analysis of Sweden’s attitude to the Underwater Heritage Convention

Matleena Haapala & Satu-Kaarina Virtala - Wrecks of the WWI become officially cultural heritage in Finland
The protection of underwater cultural heritage in Germany

Werner von Trützschler

The protection of underwater cultural heritage in Germany

Although Germany has not yet signed and ratified the UNESCO Convention on the Protection of Underwater Cultural Heritage, the archaeological cultural heritage under water in Germany is both legally and practically protected.

In Germany, with its federal state structure, competencies are shared between the Confederation (Bund) and the 16 states (Länder). Monument protection and the preservation of monuments are within the responsibility of the federal states. Therefore in Germany we have 16 different monument protection laws in Germany. These are similar but not identical.

Thus in the majority of the laws archaeological monuments under water are expressly protected. In the laws of the states Berlin (§ 2 (5)), Brandenburg (§ 2 (1)), Bremen (§ 2 (1)), Mecklenburg-Vorpommern (§ 2 (5)), Saarland (§ 2 (4)), Sachsen-Anhalt (§ 2 (2)) and Schleswig-Holstein (§ 1 (2)) the definition of the archaeological monument also explicitly includes cultural goods in or under waters, in some of them also moors are mentioned.

In some other laws, findings in waters are expressly mentioned in the regulations concerning the handling of archaeological discoveries. This is the case in the laws of Hamburg (§ 15 (1)), Niedersachsen (§ 14 (1)) and Sachsen (§ 14 (1)).

This leaves only the monument protection laws of Baden-Württemberg, Bavaria, Hessen and Thuringia without a direct reference to underwater findings. This however does not mean that archaeological heritage under water is not protected, explored and cared for in these states. And the extensive underwater archaeology carried out by the monument authorities of Baden-Württemberg in Lake Constance is good proof of this.

In addition to interpretation of the laws, the European Convention on the Protection of the Archaeological Heritage (Revised), also named the Valletta Convention, which was ratified by Germany in 2003, also obliges all the federal states to protect the archaeological heritage under water. In its Article 1 this Convention defines archaeological heritage as follows:

"(3) The archaeological heritage shall include structures, constructions, groups of buildings, developed sites, moveable objects, monuments of other kinds as well as their context, whether situated on land or under water."

In most of the states, monuments are automatically subject to the protection of the law (declaratory procedure), if they meet the criteria set out in the legal definition and when identified are entered into a heritage list (Denkmalliste).
In some states the registration of monuments in the heritage list is an administrative act (constitutive procedure) which is subject to a judicial review. Only those objects which are part of the heritage list are legally protected.

Searching for and excavating archaeological finds requires an explicit authorization (permission to dig) in all states of the Federal Republic of Germany. All monument protection laws oblige those who discover archaeological remains to notify the relevant monument protection authorities immediately. The excavation site must remain several (work) days in an unchanged state.

The question who owns the findings is regulated in civil law. According to § 584 BGB (Schatzfundparagraph) a thing which has been hidden for such a long time that the owner can no longer be ascertained, one half belongs to the discoverer and the other half to the landowner of the property where it was found. In case that the monument protection law constitutes a so-called treasure shelf (quod nullius est fit domini regis: “that which belongs to nobody becomes our Lord the King’s”) findings whose owners can no longer be found are the property of the state where they were discovered.

Most of the monument protection laws contain the so-called "polluter pays" principle. Anyone who causes archaeological measures must also bear their costs.

Under certain conditions all laws permit expropriation against compensation.

According to some federal laws monument protection is to be taken into account. Interesting in this context is the Federal Law on Waterways. Its § 7 (4) reads as follows:

“In the maintenance of the Federal Waterways, as well as the establishment and operation of the federal shipping facilities, the requirements of monument protection must be taken into account.”

It can be summarized that by German laws underwater archaeological heritage is protected inland and in the territorial sea but not in the Exclusive Economic Zone.

To conclude this short overview let us take a look at the people both professionals and amateurs who care about underwater archaeological heritage.

The Association of Archaeologists in the Federal Republic of Germany members of which are the archaeologists of the State Preservation Offices of the 16 states has formed already in 1993 a “Commission for Underwater Archaeology”. This Commission is composed of representatives of the archaeology responsible for coastal and inland waters, as well as experts with relevant experience in the field of inland waterways and maritime archaeology. In the Working Group of the Commission for Underwater Archaeology, it also unites professional underwater archaeologists as well as volunteers of archaeology organized in underwater archaeological associations. The tasks of the Commission are:

- Communication, coordination and integration in the field of conservation of monuments under water and underwater research.
- Consultation of the members of the Association of Archaeologists on the issues of underwater archaeology and the representation of this special field of archaeology to the public.
- Promotion of research and development of regional and international networks for special research questions.
- Training and further education of specialist archaeologists and volunteers in the field of underwater archaeology.
- Promotion and protection of cultural assets under water through public relations work, in particular also in contact with sports divers and their organizations.

The Commission cooperates with the German Society for the Promotion of Underwater Archaeology (Deutsche Gesellschaft zur Förderung der Unterwasserarchäologie e.V. (DEGUWA)). This association of professional archaeologists, historians and scientists of related disciplines, as well as laymen and sports divers serves the goal to promote research and teaching in underwater archaeology and to enhance the protection of the underwater cultural heritage. All members of this society work on a voluntary basis.

The objectives are achieved by cooperation with universities, heritage agencies, museums, non-profit organizations and sports divers at national and international levels. Underwater excavations and surveys are carried out in cooperation with the responsible authorities.

Annual conferences serve as venue for the exchange of the latest research results, whilst the SKYLLIS journal serves its dissemination. The training scheme of the Society follows the standards of the Nautical Archaeology Society (NAS). The Society is a member of German ICOMOS and a member of the Advisory body of the UNESCO Convention on the Protection of Underwater Cultural Heritage.

The German Sports Divers Association (Verband Deutscher Sporttaucher e.V.) which is the umbrella organization for several local sports divers associations has created three special courses on underwater archaeology in order to inform the sports divers and raise awareness: “Because only what you recognize, you can also understand and protect!”.

And what you would probably not suspect for a state known for its Alpine mountains there is also a Bavarian Society for Underwater Archaeology. This association mainly deals with the documentation and preservation of underwater archaeological monuments in Bavarian waters, especially the numerous lakes on the foothills of the Alps. These include, for example, the exploration of prehistoric lakeside settlements or the investigation of old bridge structures and submerged watercraft.

Still there is no doubt that signing and ratifying the UNESCO Convention on the Protection of Underwater Cultural Heritage would strengthen the position of underwater archaeology in Germany.

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What an abstention might lead to: A critical analysis of Sweden's attitude to the Underwater Heritage Convention

Thomas Adlercreutz
Jur. Kand., Sweden

The case of The Sword

The first day of June 1676 was a bad – nay, disastrous - day for the Royal Swedish navy. The Danish King was eager to retake the provinces lost in the peace treaty of Roskilde in 1658. Sweden had made a very bad military show at the battle of Fehrbellin in Brandenburg in 1675. A combined Danish and Dutch fleet was approaching the Swedish Island of Öland in mid-Baltic, where they encountered the Swedes and their commanding men-of-war The Crown (Kronan) and The Sword (Svärdet), two of the most imposing military vessels of their time. The Crown was badly manoeuvred, got caught in sidewind and capsized. Its gunpowder supply exploded and the sinking was rapid.

The naval command was then taken over by the The Sword, which engaged in a violent two hour cannon fight with an overpowering array of Danish and Dutch ships. The Sword's rigging got smouldered and when in the end the main mast fell, the Sword surrendered. It would have made a great prize for the victors. However, an incendiary ship got too close, The Sword caught fire, its gunpowder deposit blew up taking all of the stern away. When the ship went down, it took the admiral and 600 of his crew to their graves at about 86 meters below sea level.

What was then a military disaster, has today turned into a showpiece for the Swedish maritime heritage. The Crown was discovered in 1980 by Anders Franzén, the man who many years ago had found The Vasa, today in Sweden's most visited museum. With The Crown there was no option to salvage hull or any vital part of it, but an enormously rich trove of what remained of the ship and its crew's belongings, well preserved at the seabed, are today exhibited at the County Museum of Kalmar.

The location of The Sword remained a mystery for a long time, but in November of 2011 news of its rediscovery by a private party of divers became public (Dagens Nyheter 4 April 2012). The divers, however, would not divulge where the wreck was situated. They claimed that if the location became known, there would be an imminent risk of looting. Not even the authorities got to know where it was. This led the National Heritage Board of Sweden to report the divers to a public prosecutor for a breach of the Cultural Monuments Act. The prosecutor, however, determined that no crime was involved (Barometern 26 June 2012).

How did this come about? It had seeped through that the wreck in all likelihood was situated some hundred meters outside of Sweden's territorial waters. The Cultural Monuments Act then proclaimed that shipwrecks more than one hundred years old were protected as ancient monuments and that finders of property accruing to the state were duty-bound to report the find. It expressly said that this also applied to discoveries "on or beneath the seabed beyond the limits of national jurisdiction". I'll come back to the legal questions later, but first a look at the Baltic and Sweden's maritime heritage.
The Baltic Sea

The Baltic Sea is unique: the largest body of brackish (low-salinity) body of water in the world, it is also distinguished by its division into a series of basins of varying depths, separated by shallow areas or sills. The many rivers flowing into the Sea are the reason for its brackish character. Furthermore, the link with the North Sea is very narrow, the shallowest sill being only 18 m deep. Thus inflows of salt water must be extremely forceful to penetrate and renew the deepest waters of the Baltic Proper.

Nine countries share the Baltic Sea coastline; Sweden and Finland to the north, Russia, Estonia, Latvia and Lithuania to the east, followed by Poland in the south, and Germany and Denmark in the west. About 16 million people live on the coast, and around 80 million in the entire catchment area of the Baltic Sea. The catchment area includes part of Belarus, the Czech Republic, Norway, the Slovak Republic and Ukraine, as some of the rivers find their sources here.

Most likely, it is the low salinity that has caused the absence of the shipworm (*teredo navalis*) from the Baltic. This absence is the usual explanation for the fact the Baltic contains an unmatched presence of well preserved wooden wrecks, i.e. wrecks dating mainly before the mid 19th century. (Recent reports, however, indicate that the mollusk has now entered the southern parts of the sea, [https://www.havochvatten.se/hav/fiske--fritid/arter/arter-och-naturtyper/skeppsmask.html](https://www.havochvatten.se/hav/fiske--fritid/arter/arter-och-naturtyper/skeppsmask.html)).

Sweden's maritime heritage

Students of Sweden's cultural heritage often take note of the fact that statutory measures for the general protection of ancient remains were adopted comparatively early. Provisions protecting historic wrecks, however, have been existence for merely fifty years. This may seem surprising in light of the spectacular salvage in 1961 of the 17th century man-of-war Vasa, and its subsequent careful restoration, now to be seen in Stockholm's most visited museum. So for a long time there was a striking discrepancy between a strict cultural heritage regime on land, and a total lack of protective rules for remains under water. For the history of protective rules pertaining to the underwater cultural heritage, see Thomas Adlercreutz, The Protection of the Underwater Cultural Heritage, National Perspectives in light of the UNESCO Convention 2001.

In the National Heritage Board’s register of ancient remains there are now approximately 3,000 shipwrecks with an identified position and about 16,000 entries regarding wrecks lacking a known position. However, this register is far from complete. In 2013, the register contained 784 entries of shipwrecks protected under the Cultural Heritage Act (KLM. SFS 1988:950), where the prerequisite for protection was that the sinking could be assumed to have occurred more than one hundred years ago.

There is also a register at the National Maritime Museum in Stockholm. This register is the result of both archival and underwater research. In addition to protected wrecks, it also contains published notices and other excerpts from the press on averages from the 18th century and onwards. Furthermore, it contains excerpts as of 1745 from the reports of the diving companies which operated as state authorised monopolies until 1831, when their reports also ceased. There are some 3.500 entries under this part of the register. Also, there are excerpts from maritime inquiries. In its totality the register has notes on almost every known wreck, not just in the Swedish territorial sea, lakes and rivers, but also from adjacent waters. When the territorial seabed was thoroughly scanned in the
1980s and 90s in search of suspected foreign submarine activities, knowledge of wrecks also grew considerably. The collected knowledge on each wreck varies, of course, a great deal. Some entries can be classified as qualified guesswork.

The legislation does not apply just to maritime vestiges found now under water. It also protects wrecks and related items found on terra firma. Rivers may have changed course, old harbours may have been filled in, and landslides may have covered up what was once afloat. But in the case of Sweden, one need also take into consideration the tectonic process still at work of land emerging out of the sea after the last ice age. As of Neolithic times about one fifth of the present surface of the country has risen from under water. Where the vessels of yesterday found a resting place or one time harbour installations crumbled may today be a building site, in which archaeologists in the course of routine investigation find maritime debris of scientific importance.

To some extent, it is also the other way around. In the southernmost part of Sweden and in the Danish straits, the sea has submerged remains of Neolithic settlements.

As of 1 January 2014 the KML changed so that only wrecks dating from 1850 or before came under protection directly under the act. Before that date the time limit was set at one hundred years counted from the time of the loss. The National Maritime Museum estimated that of the 784, as few as 332 could with any certainty be dated to the year 1850 or before. 196 would lose their protection, and 256 ought to be further examined as to date of sinking.

There were provisions introduced in the Act, whereby an order of protection could be issued by the authorities. Such an order would therefore be required in order to protect legally the 196 + 256 wrecks which fell out of the scope of direct protection. How far this possibility of issuing orders regarding younger wrecks has been utilised has not been published. In all likelihood, this has happened in very few instances.

**A closer look at the legislation**

The KML originally gained legal force 1 January 1989, replacing several older acts of Parliament and Government regulations with similar contents. Preparatory works are to be found in the Government Bill and Parliament’s committee report (Proposition 1987/88:104, Kulturutskottets betänkande 1987/88:KrU21). Preparatory comments play a considerable part in the construction of Swedish statutory provisions, but one should not be overoptimistic when it comes to guidance on the underwater cultural heritage..

The Act is divided into six chapters, out of which the second, on ancient monuments and finds, is of interest here.

Under the KML ancient remains are protected directly by law, i.e. no administrative decision will normally be issued in order to identify what is protected. The scope of protection is laid out in Chapter 2, Section 1: "Permanent ancient monuments are protected under this Act. Permanent ancient monuments are the following [remains] of human activity in past ages, having resulted from use in previous times and having been permanently abandoned: ... 7. routes and bridges, harbour facilities, beacons, road markings, navigation marks and similar transport arrangements, as well as boundary markings and labyrinths, 8. remains of wrecks (author’s italics).

As has already been mentioned, on 1 January 2014 a precise age prerequisite was added: the remain must presumably have existed before the year 1850, or – in the case
of remains of wrecks – have been lost before that same year (Chapter 2, Section 1 a, Paragraph 1). The category is supposed to cover also wrecks of aircrafts (Proposition (Government Bill) 2012/13:96 p. 46) although the practicality of finding one from before the year 1850 seems slim. It was emphasised that this would also apply to wrecks found outside the border of national jurisdiction.

As has already been mentioned, a new measure was introduced to the KML. The responsible government agency for the cultural heritage, the County Administrative Board, became empowered to list remains younger than from before 1850, provided there are “particular reasons with regard to cultural heritage value” (Chapter 2, Section 1 a, Para 2).

In Section 2 it is further stated: "An ancient monument includes a large enough area of ground or on the seabed to preserve the remains and to afford them adequate scope with regard to their nature and significance." - This protected area is normally not delimited in advance, but may be so by an order of the County Administration, the State agency responsible at the regional level for managing the KML.

In Section 6 is itemised what the word protection stands for: "It is prohibited, without permission under this Chapter, to displace, remove, excavate, cover or, by building development, planting or in any other way, to alter or damage an ancient monument."

Section 7 gives the state agencies, i.e. the National Heritage Board and the County Administration access to ancient monuments in order to take measures for their care. These powers are, of course, essential for the upkeep of monuments on land, but of less practical significance under water.

Section 8 empowers the National Heritage Board and the County Administration to "examine ancient monuments, salvage a wreck being an ancient monument and investigate a place where ancient finds have been discovered". It further provides that "[i]f a wreck constituting an ancient monument and having no owner is salvaged, it shall accrue to the State."

Section 9 further empowers the County Administration to "issue regulations for the protection of an ancient monument. - Regulations may also be issued for an area, which under Section 2 does not belong to the ancient monument, provided that this does not significantly impede current use of the land. - The ... County Administration may issue a protection order for a place where ancient finds have been discovered, if this can be done without causing any significant inconvenience. A protection order may apply until the place has been investigated as provided in Section 8."

All development projects should be preceded by investigation as to the existence of ancient monuments which might be affected, and, if this be the case, consultation with the County Administration. If an ancient monument is discovered in the course of works, these are to be immediately suspended (Section 10).

Under Section 12 all interference with ancient monuments is subject to permission by the County Administration. Such permission may not be granted unless the monument causes a hindrance or inconvenience out of all reasonable proportion to its significance, but "[i]n the case of the owner of a wreck or of an ancient find belonging to a wreck, permission may be granted unless there are special reasons to the contrary. - If any person other than the owner of the land or water area or the owner of the wreck applies
for permission the application is to be refused if the owner objects to the measure and if there are no particular reasons why the application should be allowed."

In granting permission the County Administration may make reasonable stipulations for special investigations to record the ancient monument, to conserve ancient finds or special measures to preserve the monument (Section 13). The cost for such measures are to be borne by the developer, unless certain special criteria are met, one of which being that the monument was previously unknown (Section 14).

"Any person refused permission under Section 12 with reference to an ancient monument which, when discovered, was completely unknown and without visible sign above ground, is entitled to reasonable compensation out of public funds if the ancient monument causes him substantial hindrance or inconvenience. ..." (Section 15).

The provisions related so far pertain to all ancient monuments, *inter alia* wrecks. It could be noted at this point that elements that in some countries would be considered underwater cultural heritage, e.g. subaqueous geomorphic or paleontological remains are not protected under the KML. Such remains may be protected specially by decisions on nature reserves under the Environmental Code (Svensk Författningssamling 1998:808) but this code will not be dealt with in this article.

Not just the sites and the more or less fixed remains, but also movables are protected as ancient finds. The definition of *ancient finds* is to be found in Chapter 2 Section 3 of the KML: objects which have no owner when found and which

1. are discovered in or near an ancient monument and are connected with it, or
2. are found in other circumstances and are presumably from before the year 1850.

Ancient finds under 1. accrue to the State. Other ancient finds accrue to the finder. He or she is, however, duty-bound to invite the State to redeem the find if it "contains objects partly or wholly of gold, silver, copper, bronze or any other copper alloy, or if the find consists of two or more objects which were presumably deposited together." (Section 4).

Anybody, who discovers ancient finds which either accrue to the State or must be offered for redemption, has to report to the County Administration or certain other authorities. Finds belonging to wrecks can be reported to the Coastguard Service. Upon request the finder must surrender the object in return for a receipt, and state where, when and how the find was discovered. (Section 5).

Decisions to redeem ancient finds are taken by the National Heritage Board. Payment shall be assessed at an amount which is reasonable with regard to the nature of the find. For objects of precious metals payment must not be less than the value of the metal by weight, augmented by one-eighth. In addition a special finder's reward may be paid (Section 16).

The National Heritage Board may transfer ancient finds to museums, which undertake to care for the objects in the future. It is said specifically that this applies to wrecks (Section 17). If the museum is a non-State entity, then ownership is also considered as being transferred.

Of importance to the protection of both ancient monuments and ancient finds are the following provisions.
There is a general ban on the use of metal detectors in Sweden, not just on archaeological sites but everywhere, unless provisions exempting certain usages conducted by authorities apply, or an individual permission issued by the County Administration has been given (Chapter 2 Sections 18 – 20 of the KML).

A penalty of fines or prison may follow upon deliberate and negligent offences against the protective rules for ancient monuments and ancient finds (Sections 21 and 21 a). In aggravated cases with intent imprisonment may be imposed up to four years.

Under Section 22 measures of enforcement can be imposed upon offenders against the protective provisions, in order to rectify unauthorised infringements.

Section 22 a makes it possible to forfeit ancient finds which do not already accrue to the State, the value or proceeds of such finds, and metal detectors and other equipment used in offences, or the value of such equipment.

Section 23 empowers the County Administration to order its provisions to apply pending final determination of the matter.

Sections 24 and 25 have procedural rules on appeal and judicial review of decisions. Depending on the matter, the Government, an administrative court of law or an environmental court of law is competent to try appeals or review.

Related civil law

Under Swedish civil law, finds in general made on land are treated somewhat differently from finds made in water. In both cases wilfully discarded objects (res derelicta) become ownerless, and free for anyone to take possession of (provided the object is to be legally held, unlike e.g. unlicensed arms or drugs).

Objects which have been lost inadvertently or by accident do not lose their owners; ownership is not considered to be time limited. Such objects, if found on land, have to be reported by the finder to the police under provisions of the Act on Finds (Svensk författningssamling 1938:121). If no owner turns up within certain time limits, then the goods accrue to the finder, provided he pays police procedural costs.

Under the Act concerning Certain Finds from the Waters (Svensk Författningssamling 1918:163), the same principles also apply to goods found in lakes, rivers, canals, harbours, bays and incisions and other water areas between islands, bordering on the territorial sea. The definition here given coincides for practical purposes with the definition of internal waters in the Act on Sweden’s Territorial Sea (Svensk författningssamling 1966:374). Finds which have to be reported include deserted vessels, shipwrecks, tools and goods from vessels, regardless of taken from the bed, the shore or found floating. One difference in relation to what applies to finds on land is that the police have to put on public notice reported finds from the waters. Finds claimed are returned to the owner subject to payment of costs for publication, care of the object and a salvor’s reward. Finds not claimed become property of the salvor upon payment of police costs. The salvor may acquire exclusive salvage rights under the Act on Exclusive Rights of Salvage (Svensk författningssamling 1984:983).

Neither the Act on Finds, nor the Act concerning Certain Finds from the Waters is applicable to finds which meet the requirements of ancient finds under the KML. As an ancient find in some instances becomes property of the finder instantly, this implies that
a one-time owner's title expires more quickly than if the time limit requirements of the two first mentioned acts are to be met.

Another aspect of civil law that should be considered with respect to finds are the provisions of the Act on Acquisition of Movable Objects in Good Faith (Svensk författningssamling 1986:796). Whereas ownership in principle does not become void when an object has been lost, the opposite occurs if an object has been transferred to a person who acquires bona fide. Title passes regardless of whether the transferor was lawfully in possession of it. By good faith is meant that the acquisitor in all probability ought not to have suspected that the unlawful transferor lacked title, taking into account what kind of property that was offered, the circumstances under which it was offered and other circumstances. The former owner, however, has a right to reclaim the object within three months of when he came to know, or ought to have known, from whom to recover, on condition he reimburses the acquisitor his costs (Sections 3 and 4 of the last-mentioned act).

As of 1 July 2003 bona fide acquisition of stolen or forcibly taken goods is not possible. Ownership remains with the robbed person, unless he fails to reclaim the goods within six months from knowledge or presumed knowledge of who the holder is. No compensation needs to be issued to the holder (who may seek redress from the previous holder). However, after having held the property for ten consecutive years in good faith (without grounds for suspecting lack of title) the holder of stolen or forcibly taken goods does acquire ownership.

Ancient finds are not exempted from this legislation. As a breach of the KML provisions prohibiting unlicensed excavation is not legally equated with a theft, it is possible for someone who has acquired such an object in good faith to keep it – or at least receive compensation for surrendering it to the State. This will be dealt with further later in this article.

**Provisions relating to international law**

As of 1979 the breadth of Sweden's territorial sea is twelve nautical miles.

Under the 1958 Geneva Convention on the Continental Shelf, Sweden entered into bilateral agreements with other states regarding borderlines of the shelf, and has adopted national legislation for the application of the convention and bilateral agreements. (Continental Shelf Act, Svensk författningssamling 1966:314, and Continental Shelf Regulation, Svensk författningssamling 1966:315). This legislation allows for State control of mineral and other non-living natural resources as well as living resources on the seabed or subsoil thereof. Unlike the situation in e.g. Australia, Ireland, Jamaica, Portugal and Spain, (Patrick J. O'Keefe, 'Protection of the underwater cultural heritage: developments at UNESCO', *The International Journal of Nautical Archaeology*, (1996) 25.3 and 4, p. 171), Sweden has not interpreted the legislation as covering also cultural resources.

In 1992 an Act on Sweden's Economic Zone was adopted (Svensk författningssamling 1992:1140). The state authority upheld under this act does not stretch as far as giving ground for measures to protect specifically the cultural heritage. Other related acts regarding pollution from ships and the dumping of environmentally hazardous waste do, of course, contribute to better conditions for the preservation of subaqueous cultural vestiges (Svensk författningssamling 1980:424, 1971:1154).
Sweden ratified the 1982 United Nations Convention on the Law of the Sea (UNCLOS) in 1996. Of interest here are the parts of the convention which apply to the Area, particularly article 149. The concept of the Area goes back to a UN General Assembly Resolution 2749/XXV of 1970, which declared the seabed and the subsoil thereof beyond national jurisdiction to be "the common heritage of mankind". Article 149 obliges the State parties to preserve and dispose of all objects of an archaeological and historical nature found in the Area with particular regard to preferential rights of States or countries of origin. Although Sweden is far from the deep-sea beds constituting the Area, certain provisions were added to the KML (Government Bill 1995/96:140 p. 174).

Chapter 4, Section 4 has been amended to stipulate that ancient finds and wrecks found on the seabed or its subsoil outside the bounds of national jurisdiction (author's italics) and salvaged by a Swedish vessel or brought to Sweden accrue to the State, provided the loss presumably occurred more than one hundred years ago, as the time limit was then set. The present time limit, as we have seen, has been defined so that the loss presumably occurred before 1850.

So how, then, might outside the bounds of national jurisdiction be interpreted? There are no comments on the meaning of this rather blatant expansion of the Swedish jurisdiction to be found in the Government Bill. Certainly, UNCLOS provides for state intervention with regard to objects emanating from the Area, but as Sweden is far from the Area, that kind of intervention seems a rather remote occurrence.

Furthermore, Chapter 2, Section 17 has been supplemented with a paragraph to the effect that the National Heritage Board may assign State rights to salvaged wrecks to museums, undertaking their care for the future.

At the time of Swedish accession to the Convention it was announced (Proposition (Government Bill) 1995/96:140 p. 158) that Sweden would adopt a contiguous zone according to Article 303 with its provisions on control of objects of an archaeological and historical nature. Preparations have been slow. In 2015, however, a government inquiry launched proposals for the implementation of a Swedish contiguous zone (Sweden’s Public Inquiries, SOU 2015:10). So far, no timetable has been announced for the necessary legislative measures for such an implementation.

It could also be mentioned that, with backing from the respective ministers of culture, the Baltic Sea Heritage Co-operation started in 1997, with Denmark, Estonia, Finland, Germany, Latvia, Lithuania, Norway; Poland, Russia and Sweden as participants. The work is mainly informal with seminars and workshops for civil servants and museum officials as mainstay. There is a working group for the underwater heritage, which has among other things legal protection of the Baltic Sea heritage on its agenda. Apparently, the working group has not achieved much along that road.

**Sweden and the Underwater Heritage Convention**

Sweden took part in the preparatory conferences for the 2001 UNESCO Convention on the Protection of the Underwater Cultural Heritage without any enthusiasm, and abstained when the UNESCO General Conference adopted the convention. The official reason was given in an explanation of vote, referring to the fact that consensus had not been reached and criticising that the convention had been put to adoption prematurely. However, no objection was raised as to substance of the convention. It is, however, the understanding of this author that Foreign Ministry officials were indeed opposed to the extension of national jurisdiction into the Economic Zone and the Continental Shelf which
is inherent in the convention. No alternative solution has, however, been outlined from
the Swedish side. Even though there seems to be little political pressure on the Swedish
government to be more active in trying to protect wrecks within what can be considered
a Swedish zone of interest, the question of accession to the convention has been
broached several times in Parliament. The government has not been supportive. One
reason given is that it is not out of the question that Sweden may one day join
(Betänkande(Committee Report) 2001/02:KrU2).

Observations on scope and application

Two schools of thought

In a comparative perspective, legislations for protection of the cultural heritage can be
seen to oscillate between two basic conceptions. One is State or public claims to property
rights in monuments, fixed or movable. The heritage is seen as a kind of domain, to
which private possessors may have more or less extensive rights, but a controlling power
rests with an ultimate owner: the monarch, the republic, or nowadays the State through
its representation: government or a government agency. Legislations dominated by this
view may find it consequential to control also the transfer of cultural property.

The other approach, which seems to be the more modern one, is that the State, in which
much authority has been vested under principles of democratic government, has a duty
to control the use of property in the interest of the common good. It need not claim
property rights to do so, democracy permits restrictions to be imposed in public law on
owners and those who derive their rights from owners. This approach is very evident in
§14 of the German Federal Constitution.

With either basic view a delegation of State powers to local levels of government may
also be consistent. In a federal society the origin of power may, instead, be considered to
rest at regional state level. In practice, of course, there may not be dramatic differences
between the two conceptions.

In Sweden, as we have seen above, both the public law and the domain concepts are
being used. Restrictions are imposed on ancient monuments in situ, among them old
shipwrecks, but ownership is not claimed by the State, not even if - as may often be the
case with wrecks, but very rarely with monuments on terra firma - there is no other
owner. Section 8, giving the State ownership, applies only after salvage.

When it comes to ancient finds of a movable nature, then for historic reasons the Crown
prerogative rights are still exerted. This applies to ancient finds only; other movable
heritage items may be under export restrictions without any State claims to ownership.
The State claims ownership to anything that derives from a protected ancient monument,
regardless of the fact that the State does not own the monument, and the State also
claims a right of redemption, comparable to forced preemption, to many other finds,
which under civil law normally would accrue to the finder. It may be noted that
landowners, under Swedish law, have a self-evident right only to fixtures to real
property, and very limited rights to ownerless movables found on or in their real
property.

The importance of age and ownership

Swedish law poses two important questions when a new underwater discovery is being
made, or when someone wants to investigate or salvage vestiges already known. If it is a
wreck, the first question would be: since how long?
If the wreck is younger than 1850, the Act concerning Certain Finds from the Waters is applicable, unless the wreck comes under special protection under the KML following an *in casu* decision of County Administration. The find will have to be publicly announced, and the further issues of salvage would depend on whether an owner appears. So this would lead to the second question: is there an owner? If not, the finder may file for sole rights of salvage under the Act on sole rights of salvage (Svensk författningssamling 1984:983).

If, however, the wreckage occurred before 1850 the KLM alone applies. With regard to the wreck in itself the question of ownership becomes if not unimportant, so at least of limited significance. Under Section 12 there is a presumption that an owner of a wreck, or an ancient find belonging to it, should be given permission to salvage or take other measures which may disturb the remains, unless there are special reasons against. This is a position more favourable to owners of wrecks than to other owners of ancient monuments, but it is not an unconditional green light to take any measures. It is difficult to predict how strong the owners position is in practice, as there has - to the knowledge of this author - not been a case.

The reason for this would seem to be that there seldom are any known owners to wrecks dating before 1850. When commercial interests in salvaging hull and cargo have ceased, then ownership is rarely claimed. Even if that should happen, ownership may still be presumed to have been abandoned earlier. Although modern techniques of salvage may sometimes revive a commercial interest in more than a hundred and fifty years old wrecks, claims to ownership of wrecks of that age so far do not seem to have occurred in Swedish waters. The few claims to ownership of movables that have been made all seem to have been settled amicably. And even when ownership in itself seems undisputable, as for instance with wrecks of Danish men-of-war capsized in Swedish waters, the Kingdom of Denmark has refrained from making any claims and have - informally - rather pointed to the Swedish authorities as responsible for further investigation. Thus there is little to report from a point of case law.

However, it would still seem likely that claims could one day convincingly be made by legal successors of a one time charterer or ship-owner, or by descendants of passengers whose belongings can be traced. If the claim is for the wreck the question of ownership will be relevant for the County Administration in trying an application for salvage or investigation of the wreck under Section 12, as just mentioned above. The County Administration's first hand duty would not be to solve the civil law questions involved, particularly not if there are several conflicting claims. It would still need to take a position on ownership if it considers it detrimental to heritage interests to grant the application, because if it finds that the application is being made by an owner it would also have to find special reasons for refusing it.

If the application is refused, the applicant may appeal to the regionally relevant administrative court of law and from thence to the two higher echelons of the Administrative judicature.

If the claims are for ancient finds from a wreck, Section 16 makes it a task for the National Heritage Board to determine whether there is evidence to substantiate these claims. If the Board does not accept them, an appeal could be filed with the Administrative Court of Stockholm County, and further.
As mentioned under ‘Related civil law’, ancient finds are not exempted from the Act on Acquisition of Movable Objects in Good Faith. One implication of this is that a find which accrues to the State, still may be hard for the State to recover if the finder has turned it over to someone who received in good faith. Whether the acquisitor would pass the good faith test, is, of course, a question in itself, but if so, then the State will have to negotiate a settlement if it wants the object secured. Many finds from shipwrecks in Swedish waters are pieces of china of a kind normally traded with, so the prospects of making a bona fide acquisition stick are not slim. With regard to the rather recent introduction of an exception for stolen property to the general bona fide acquisition principle—related briefly under ‘Related civil law’ above—it should be pointed out that the taking of ancient finds is not considered theft under Swedish law for the simple reason that ancient finds by definition are ownerless. This also implies that good faith acquisitions of once illegally excavated items seem quite possible.

A case where no good faith could be presumed is the following. In 1991 the Norwegian museum for defence history received an anonymous offer to buy two bronze cannons. Accompanying photographs showed the cannons bearing the monogram of Christian II (King of Denmark 1513-1523, of Sweden 1520-1521). These cannons had presumably been taken as prize and subsequently mounted on a Swedish man-of-war, foundered in the 1520s at an unknown location. Another, later theory is that the cannons had remained on a Danish war ship till it foundered in 1566 off the Swedish island of Gotland in the Baltic. The offer to the museum was thought to have been made from Sweden, but the police could not find either the cannons or anyone to whom they could be firmly linked. In 1996, however, indications showed that these two cannons were located in a port on the Swedish west coast. They were not found there, but two years later the police arrested a man who in his car had newspaper articles on the cannons and the earlier investigations. In a barn belonging to this man two cannons were, indeed, retrieved which could be identified as the ones previously offered for sale. The man was charged and convicted for having kept and concealed ancient finds, which should have been reported to the State. The circumstances where considered to be aggravating and he received a suspended sentence combined with a heavy fine. The cannons were declared forfeited to the State (Skövde tingsrätt (District Court), Verdict 18 February 2002 in case no. B 1001-00).

The case is rather straightforward and shows that the legislation properly applied works well. However, more disconcerting is the fact that a third cannon, belonging to the same series was returned to the person from whom it had been impounded, following a decision not to bring charges against him (another than in the reported case). The suspect claimed that he had found the cannon before 1989 and consequently before the date when ancient finds of bronze had been reinstated as being redeemable by the State.

In another case a man was charged with having violated the KML in that he had taken a bronze ship’s bell from a ship wrecked in Swedish waters in 1884. This crime was considered to have fallen beyond the statutes of limitation, but the act nevertheless fell within the bounds of illegitimate disposition under the Penal Code and judged as such not time barred. The man was at the same time charged with having taken two ship’s bells off another wreck, not old enough to be protected under the KML. He was convicted on both charges (but on the second count just for one of the bells) to a heavy fine. The first bell was declared forfeited to the State, and the second was awarded to the relevant insurance company (Tierps tingsrätt (District Court), Verdict 2 December 2004 in case no. B 441-03).
Especially when cannons are salvaged from an old shipwreck, one must assume that the wreck itself must have been damaged. This, of course, is also a crime. However, investigation of a crime of that nature is much more difficult. First, as illustrated in the case of the cannons, it may not be sufficiently known what and where the wreck is. If outside of Swedish territorial waters, and not found in the Area in the sense of UNCLOS, it is doubtful whether Swedish jurisdiction applies at all. At least, the prosecutor that would not investigate the refusal of the divers who found the Sword seemed to find so.

If beyond penal action, there still might be civil law questions to consider. The first one would typically be who has title? Even a one century old shipwreck may have an owner, who has not relinquished his right to hull and cargo; that owner might be an insurance company. Ownership makes special provision regarding salvage applicable. The wreck may be that of a state vessel. Then questions of immunity come into the picture.

This supposition does not appear contradicted by a seemingly rather opposite verdict by the Swedish Supreme Court. Two fishermen held as security for damage caused to their trawl, marine research equipment belonging to the Federal Republic of Germany. The State of Sweden intervened, seeking restitution to West Germany. The Supreme Court did not support the Swedish State's position that it could exercise immunity ex parte the Federal Republic. (Nytt Juridiskt Arkiv 1965 p. 145).

**Concluding remarks on the importance of the Underwater Heritage Convention**

Returning now to The Sword and the divers refusal to disclose to the heritage authorities where the find was made, the public prosecutor found that there was no criminal charge to bring before the courts. Yet – as we have seen - the KML holds that wrecks and ancient finds from wrecks found on the seabed or the subsoil thereof outside the bounds of national jurisdiction accrue to the state, if salvaged or brought to a Swedish port. Why would the prosecutor not take heed of such *verba clara*?

One immediate reason might have been that in this case neither wreck nor any movables from it had been salvaged or brought to port. There is a duty to report finds of ancient monuments – in this case the wreck – but that duty is dependent on the find being made in the course of digging or other works, and it could not have seemed evident that any such works had been performed. The duty to report ancient finds is also connected to the nature of the find, and though theoretically Swedish criminal law under certain conditions applies outside of the area of national jurisdiction (Chapter 2 Section 2 of the Criminal Code), it must have seemed obscure to the prosecutor what ancient finds should have been reported when no object had been retrieved.

To the prosecutor's decision might also have contributed the fact that there was no clear evidence that the find of The Sword was made on Swedish territorial waters. In fact, the divers themselves claimed that it was situated on international waters, which in this case must have meant the Swedish Continental Shelf. International law (UNCLOS) supports protection of the cultural heritage only with regard to finds made in the contiguous zone or in the Area, and neither possibility was at hand. Given the fact that in international law there are no universally recognised rules protecting items of Cultural Heritage importance in the Continental Shelf or the Exclusive Economic Zone one may ask oneself what support could be found for any stretching of Sweden's legal powers in this regard? This question was asked already at the time of the implementation by this author, but more importantly by one of the leading experts in Sweden on the Law of the Sea, professor Hugo Tiberg (Swedish Journal of Jurisprudence, SvJT 2000, p. 977 note 13).
The situation would have been different if Sweden had been quicker in introducing a contiguous zone or if the Underwater Heritage Convention had been acceded to. The relevant provisions in UNCLOS for the contiguous zone have been mentioned before. In the Underwater Convention one would have found support for Swedish intervention in Article 9.1 (a): "A State Party shall require that when its national, or a vessel flying its flag, discovers or intends to engage in activities directed at underwater cultural heritage located in its exclusive economic zone or on its continental shelf, the national or the master of the vessel shall report such discovery or activity to it”.

Furthermore, Article 10 would have given support to Swedish claims for protection of the wreck and made Sweden the Coordinating State in the consultations which may have resulted from the discovery, if such consultations at all would have been requested. The fact that The Sword by most definitions would be considered a Swedish state vessel would probably have made such consultations superfluous.

As said before, there are no indications that Sweden in the foreseeable future will take any steps in the direction of joining the Underwater Heritage Convention. In fact, by moving the time limit for the protection of ancient monuments, including wrecks, back to the year 1850, Sweden has instead taken a step away from the Convention’s Article 1.1 (a) stipulating limit of one hundred years.

The thought has been offered that the Baltic Sea co-operation described above would provide an alternative to the Convention. Whereas the Convention in Article 6 welcomes regional or multilateral agreements, these must be seen in the framework of the Convention and not outside of it. Those who think that a Baltic regional agreement would be a workable alternative, cannot fully have pondered the limited effectiveness of regional agreements on Sea Law, amply demonstrated in the agreement between Estonia, Finland and Sweden proclaiming the 1994 wreck of the M/S Estonia a “final place of rest” for the 852 victims, and undertaking to punish anybody disturbing that place of rest (Agreement Between the Republic of Estonia, the Republic of Finland and the Kingdom of Sweden regarding the M/S Estonia, done at Tallinn 23 February 1995). This treaty has not prevented German and US nationals from extensive diving and filming on the wreck.

The responsible heritage authorities, the National Heritage Board and in this case also the National Maritime Museum, do not seem to have pressed for any accession to the Underwater Heritage Convention. They have pleaded for Swedish adoption of a contiguous zone, something which may happen before too long. That measure would charge Sweden with heritage monitoring and protection another 12 nautical miles outside of its territorial sea border. But the Baltic is much bigger and contains many wrecks and other heritage vestiges that would deserve the better protection resulting from a more universal accession to the Convention.
Wrecks of the WWI become officially cultural heritage in Finland

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Introduction
Shipwrecks from the First World War located within the Finnish territorial sea are “becoming of age”. According to national heritage legislation, the wrecks that can be considered to have sunk over one hundred years ago, or parts thereof, are protected as ancient sites. There is also an increasing interest among divers to find and visit the WWI underwater cultural heritage. Therefore the defense and museum authorities need to cooperate closely in the management of such heritage. Beyond the territorial waters, however, the Finnish museum authorities have no official role since Finland has not yet ratified the UNESCO Convention on the Protection of Underwater Heritage.

Protected wrecks and objects in general
According to the Finnish Antiquities Act (1963/295) the wrecks that can be considered to have sunk over one hundred years ago, or parts thereof, are protected as ancient sites. Such wrecks belong to the state where it is evident that the owner has abandoned the wreck. Also objects found in such wrecks or originating from them belong to the state. The Act is applied only within the Finnish territorial waters. Therefore, wrecks found on the Finnish economic zone or beyond do not enjoy said national protection or fall under said proprietary control.

The state museum authority is the National Board of Antiquities who determines whether the find qualifies as a protected one according to the Antiquities Act. Help from the coastguard authorities and from volunteers is valuable since the maritime archaeological field work resources of the Board are scarce. The Board also stands for the state interest in cases of illegal excavations at protected sites or export of finds from such sites.

Scuba diving to and around protected wrecks is in general allowed in Finland. It is, however, forbidden to interfere with the wreck, let alone remove any parts or movable objects from it unless an excavation permit has been granted by the National Board of Antiquities. There are some exceptions from the general rules. Firstly, the protected wreck may be situated on a restricted area designated as such pursuant to Territorial Surveillance Act (2000/755). Diving on a restricted area is allowed only with a permit by the defense authorities. Restricted areas are marked on Finnish sea carts. Secondly, a vulnerable protected wreck may be surrounded by a specific exclusion area pursuant to the Antiquities Act. At the moment there are four wrecks with a specific exclusion area in the Finnish territorial sea, and diving to these areas is subject to a permit.

Finland ratified the United Nations Convention on the Law of the Sea in 1996. Therefore, Finland is bound by article 303 of said Convention and might control the removal of archaeological and historical objects even on the contiguous zone referred to in article 33 of the same Convention. However, Finland does not have a contiguous zone. Yet the Finnish Customs area extends two sea miles beyond the territorial sea permitting the
control of exports from said area. There is national legislation concerning the export of cultural objects from the Finnish territory, but no specific rules or case law on whether and how exactly it would apply to archaeological or historical objects found beyond the territorial sea but within the Customs area.

**Wrecks of and objects from warships**

Should the find, which is considered to be more than one hundred years old, be a wreck or any other object apparently belonging to the armed forces of Finland or of any other state, must the military authorities be involved before any action.

Above all, the find may be or contain a hazardous explosive. It is for the military authorities to judge if this is the case and how to deal with such a find. Diving to wrecks of warships known to be hazardous is not permitted.

Another important aspect is the nature of military wrecks as the last resting place of the crew, which too is a reason to restrict activities around them.

Also a wreck of warship is protected by the Antiquities Act when a hundred years have passed since the submersion. Apart from the questions of hazardous material and the sanctity of the grave, these are primarily objects of archaeological and historical interest. The specialized museum authority is the Finnish Military Museum who works closely with the National Board of Antiquities on matters concerning military underwater heritage.

**The specific case of Åland**

The Åland Islands is an autonomous region southwest of the Finnish mainland. According to the decision by the Council of the League of Nations in 1921, Åland must remain a neutralized zone and it is thus demilitarized.

Being a large group of islands, Åland is rich with underwater maritime heritage, including casual military heritage from former times. According to the Act on the Autonomy of Åland (1991/1144) the legislative authority of Åland includes the protection of nature and the environment, the recreational use of nature, water law, prehistoric relics and the protection of buildings and artifacts with cultural and historical value. Therefore, the Antiquities Act (1963/295) is not applied in Åland, which has its own specific Law on the Protection of Maritime Cultural Heritage (2007/19). In outline, the prerequisites for protection follow those of the mainland legislation. However, scuba diving as a rule is allowed only with a permission granted by Åland’s government.

**Beyond the legal protection**

The Baltic Sea preserves wrecks well because it has no tide, it has low salinity and its deeps are oxygen-free. The visibility is often bad. In the Baltic Sea there are thousands of wrecks, and numerous divers are interested in finding and researching them. The most of the divers cooperate with the authorities.

Many interesting shipwrecks in the Finnish territorial sea are still too “young” to enjoy the national protection. Also the surveillance of the protected ones is a challenge to the authorities. Therefore, the divers interested in archaeological and historical sites bear a great responsibility and their cooperation with the authorities is highly appreciated.

The territorial limits of the Finnish jurisdiction or the fact that Finland is not party to the UNESCO Convention on the Protection of Underwater Heritage do not exclude occasional
cooperation with the authorities of other states or with responsible companies operating beyond the Finnish territorial sea.

One of the recent finds on the Finnish economic zone is the Russian armoured cruiser Pallada which was sunk in 1914 by a German U-boat. The wreck was found already in 2000 by divers, but its site was published much later. Soon after the publication, unfortunately, Pallada was reported to have become target of plunder.

The gas pipe project Nord Stream has in the recent years increased our knowledge of underwater maritime heritage in the Baltic Sea. For example, in May 2017 an American-made WWII bomber was found on the Finnish economic zone. The status of aircraft wrecks in general is a legislative question to be solved in the future, should such wrecks be found on the Finnish territorial waters.

**National legislation**

- Antiquities Act (1963/295)
- Customs Act (2016/304)
- Territorial Surveillance Act (2000/755)
- Act on the Finnish Economic Zone (2004/1058)
- Act on Restrictions to the Export of Cultural Objects (2016/933)
- Decree on Discovery and Salvation of Objects belonging to the Armed Forces (1983/84)
- Act on the Safe Management of Hazardous Chemicals and Explosives (2005/390)
- Act on the Autonomy of Åland (1991/1144)
- Åland’s Law on the Protection of Maritime Cultural Heritage (2007/19)

*The English translations of the Finnish national legislative titles are not official.*
Adrian Crăciunescu (Romania)
Lecturer, University of Architecture and Urban Planning "Ion Mincu", Bucharest

How should legal provisions about underwater cultural heritage be designed in Romanian legislation?

Romania accepted the Convention by a law promulgated in 2007. Unfortunately, 10 years after this, still no legal or technical measures were taken further, in order to implement the provisions of the Convention within the national legislation. In November 2016, "Preliminary Theses" for a Heritage Code were issued by the Government, as a legal step in promoting the initiative for codifying the present Romanian heritage legislation. Current legislation treats separately intangible, mobile and immovable heritage. During this process, an opportunity to amend present laws – either the one for the built historic monuments or the one for archaeology - came up for regulating the issues of underwater cultural heritage.

Practical legal and administrative issues emerged from the preliminary debates. They relate to the capacity of the administrative system to assume the tasks indicated by the Convention, but also to the real extent of the underwater cultural heritage of Romanian waters (maritime or inland). These waters have a rather low potential, this being mainly concentrated around former Greek and Roman colonies at the Black Sea, regarding structures or potential vessels sunk during antiquity.

Also, although trained divers and trained archaeologists do exist, no qualified underwater archaeologists could advise the Minister of Culture about this unregulated field of heritage. Under these circumstances, we first have to answer several questions before introducing proper legal provisions in our legislation, the most important being strategic:

- How detailed the procedures should be since during last decades underwater discoveries were very few and that very low capacity to enforce such procedures exists?
- Should we produce new bureaucratic structures or should we empower the existing ones knowing that no specialized people could be recruited? In both situations, should these administrative attributes be delegated to the structures of heritage administration or to the naval ones?

Anne Mie Draye (Belgium)
Full Professor Faculty of law, Hasselt University

The Underwater Cultural Heritage Convention and Belgian law: An adequate implementation?

Belgium ratified the UNESCO Convention on the Protection of Underwater Cultural Heritage on 5 August 2013. On 4 April 2014, a Belgian law on the protection of Underwater Cultural Heritage was adopted in order to implement this Convention in the domestic legal system.

The Belgian law deals with all “findings” in the territorial waters. In the exclusive economic zone and on the continental shelf, the legal system only applies to objects that have been underwater for more than 100 years. Activities affecting underwater cultural heritage are subject to prior authorization and control; property rights and the transfer of
these property rights are regulated. Protection in situ of underwater cultural heritage is considered to be the most appropriate solution.

The purpose of the presentation would be to provide an outline of this recent Belgian law and its implementing orders adopted with a view to enable effective protection.

The legal framework will first of all be evaluated from a theoretical point of view: does it implement the Convention in a sufficient way? Considering that some shipwrecks in the meantime indeed received legal protection, this evaluation will be completed by some reflections regarding the way in which theory was put into practice.

Borut Šantej (Slovenia)
Head of Programme, Institute for the Protection of Cultural Heritage of Slovenia

A tale of two waters: Ljubljanica and the Slovenian sea
The paper presents the difference in approach to protection and challenges presented by two areas of great heritage value. Ljubljanica is a calm flatland river of prime archaeological importance. The main dangers to its remains - treasure hunting and riverbank activities - were successfully averted by the employment of two proven protection methods, which are also primarily suggested by the Convention: the protection in situ and the authorisation of activities. The other area presented is the Slovenian territorial sea. This is a small (300 km2) and heavily used body of water bordering an urbanised and industrialised coastline and containing a large number of archaeological sites, from Neolithic remains, Roman ports to post-classical era shipwrecks. Every year, thousands of cargo ships bound for two of the busiest Mediterranean ports traverse and manoeuvre in its shallow waters just meters above the ancient remains, disturbing and scarring them with their turbulences, chains and anchors. The autonomous "protect and authorise" protection approach fails here. Due to spatial, economic and social constraints, the ports and marinas cannot be relocated to alternative locations, the transport routes cannot be changed and fishers and tourists will not go away. With the inability to prohibit uses or authorise activities, other solutions have to be devised. Their main characteristic is that they cannot be adopted or enforced by the heritage institutions alone, but demand a coordinated multi-sectoral approach and a wider social consensus.

Werner von Trützschler (Germany)

The protection of underwater cultural heritage in Germany
The paper describes the present legal and actual situation of the protection of underwater cultural heritage. It shows that even without Germany being so far a State Party of the UNESCO Convention on the Protection of Underwater Cultural Heritage, underwater cultural heritage both in the sea and in the lakes is protected and being cared for.

Thomas Adlercreutz (Sweden)
Jur. Kand., Sweden

What an abstention might lead to: A critical analysis of Sweden's attitude to the Underwater Heritage Convention.
1676 was a disastrous year for the Swedish royal navy. Its two most prestigious battleships blew up and sank, engaged in battle with Dutch and Danish ships off the island of Öland in the Baltic Sea. One of them, “Kronan” (The Crown), was found already
in 1980. Many remains have been salvaged and are now on show in the Kalmar County Museum. The other “Svärdet” (The Sword) was only located in 2011 by a private diving company. Its management refused to give the position, claiming that there was no other way to prevent illicit investigation and looting. The National Heritage Board of Sweden considered this to be in violation of the Cultural Heritage Act and reported to the Police. The Police took no action. Evidently, the wreck was just outside Sweden’s maritime territorial border. Sweden is not a party to the CPUCH, nor has it adopted a Contiguous Zone under UNCLOS.

This paper will deal with the Swedish position – or lack thereof – with regard to the CPUCH and discuss some of the consequences. It will touch on the tristate agreement between Estonia, Finland and Sweden regarding protection of the wreck of passenger ferry Estonia. It will also discuss the introduction of a Contiguous Zone as now proposed by an official inquiry. Finally, it will discuss the likelihood that Sweden will one day accede to the CPUCH.

Wojciech Kowalski (Poland)
Professor, University of Silesia

Underwater cultural heritage as res extra commercium under 2001 UNESCO Convention?

Patrick O’Keefe in his Commentary (Leicester 2002, pp 50-51) noted, that although para 7 of article 2 of the Convention forbids the commercial exploitation of underwater cultural heritage, there is nothing in this act which establishes what is meant by this.

This provision declares that underwater cultural heritage “shall not be commercially exploited”, and additionally rule 2 of the Annex a bit more precisely says that it “shall not be traded, sold, bought or bartered as commercial goods”. The rule 2 adds also certain indicators how it should be interpreted in given situations.

The aim of the presentation is to explain the meaning of quoted para 7 of art. 2 and rule 2 of the Annex. Both these provisions clearly establish a ban on the commercial exploitation but formulation of this principle needs to be discussed in the context of different legal traditions and practical circumstances.
INTERNATIONAL COOPERATION

During this session the speakers were invited to share their experiences with international cooperation in relation to the Convention. In which way does the Convention contribute to constructive cooperation between public authorities, science and private parties? The speakers focussed on good practices and elaborated on the critical success factors of good cooperation. So if it works in practice...what is making it work?

PAPERS

Prashantha Bandula Mandawala - Protection of the underwater cultural heritage of Sri Lanka through international cooperation

Mark Staniforth - Factors affecting the ratification of the UNESCO Convention 2001 in the Asia and the Pacific region

María Marta Rae - Analysis and diagnosis of how the right of damage acts in the theory of legal order that leads to the study of software: Heritage coefficient, which is inserted within the methodology of economic valorization subaquatic heritage

Riin Alatalu & Maili Roio - International cooperation. Case study: Figurehead from a merchant ship in Finnish Exclusive Economic Zone
Protection of the underwater cultural heritage of Sri Lanka through international cooperation

Prashantha Bandula Mandawala
Dean, Faculty of Technology, University of Sri Jayewardenepura
Acting Director General of Archaeology, Sri Lanka

Legislations
The underwater cultural heritage in Sri Lanka is legally protected by stating archaeological heritage as: "that part of the material heritage of mankind in respect of which archaeological methods provide primary information and includes all vestiges of human existence and places relating to all manifestations of human activity, abandoned structures and remains of all kinds (including subterranean and underwater sites), together with all the portable cultural material associated with them” in the Antiquities Ordinance of Sri Lanka. Although the Antiquities Ordinance, from its very inception in 1940, had the power to conduct underwater archaeology – in lakes, rivers and lagoons – it was only in 1998 that the Department was accorded jurisdiction over the territorial waters of Sri Lanka.

Early attempts
The first exposure of Sri Lanka to underwater archaeology was in the very early 1960s, when a team of sports divers, including the late Rodney Jonklaas, the late Mike Wilson, and the late Arthur C. Clarke, discovered an unknown wreck in the “Great Basses” (a rocky outcrop off the southeast coast, topped by a lighthouse). Since Sri Lanka Archaeology Department was unacquainted with maritime archaeology, was informed by Clarke and Wilson that the respected maritime archaeologist Peter Throckmorton was available to assist with research, invited him to conduct an underwater survey, an invitation was accepted. This project, however, did not herald a beginning of a substantial program of maritime archaeology, remaining an isolated incident.
In 1984, the first national workshop on maritime history and maritime archaeology organized by NARA, gathered so much of archaeologists, historians, lawyers and divers where they discussed and concluded the importance of protecting and conserving the maritime cultural heritage and bringing down newly implemented legal concepts was also explored in the workshop. Also "A theoretical framework for maritime archaeology and the maritime history of Sri Lanka"; the research paper presented by P.U Weerawardena at "The First National Archaeological Congress" organized by Post Graduate Institute of Archaeology (PGIAR), took attention of the Director of the PGIAR towards the Sri Lankan maritime cultural heritage. In this congress Arthur C. Clarke and Mike Wilson also participated and appointed representatives from the organizations such as: Maritime Heritage Trust Sri Lanka (MHT), and in Sri Lanka Sub Aqua club (SLSAC) in order to create an action plan to commence maritime archaeological activities around Sri Lanka.

One of the first attempts of substantial maritime excavation in Sri Lanka was the Colombo Reefs Archaeological Survey of 1989, the initiative of P. U. Weerawardena of the Department, Mark Redknop of the Nautical Archaeological Society and the National Museum of Wales, and Devendra, representing the non-governmental Maritime Heritage Trust (MHT). This project inadvertently helped to demonstrate the challenges of undertaking research in Sri Lanka in this period. Briefly described as "a survey of underwater archaeological sites within a context of reef environment and geomorphology" the project won funding from the Royal Geographical Society, the British Academy, and the British Museum. The lack of regulations covering archaeology in territorial waters and the volatile security conditions worked against this initiative. The team and equipment arrived in the country, but only the use of a magnetometer was permitted: diving on the site was not. Thus, when part way through the exercise the magnetometer malfunctioned, the project had to be abandoned.

In the latter part of 1980s, an Inter – ministerial committee under the involvement of NAARA was established. 15 ministries got involved with this committee directly or
indirectly to build up a legal background towards maritime cultural heritage; ministry of justice took the priority. In relation to the activities of maritime cultural heritage, the dominant ministry was the Ministry of Cultural and Religious Affairs and under it was the Department of Archaeology and Central Cultural Fund. PGIAR coordinated the activities. The Maritime Archaeology Department of Western Australian Maritime Museum acted as the resource provider in the progressive of activities. The Galle Harbour project was implemented as a result of collective insolvent of the above institutions. All those institutions were coordinated by the maritime archaeologist Lt. Com. Somasiri Devendra who one of the person in Sri Lankan trained in the activities of maritime cultural heritage for a considerable time.

1992-1999 Galle Harbour Project

In 1992 the Department of Archaeology (DOA), the Central Cultural Fund (CCF), Sri Lanka's Postgraduate Institute of Archaeology University of Kelaniya (PGIAR), and the Maritime Archaeology Department of the Western Australian Maritime Museum (MADWAM) pooled their resources to set up a multipurpose pilot project to train maritime archaeologists, provide conservators with skills specific to maritime archaeology, and, additionally, compile a database of shipwrecks in Galle Harbour. Project management and recruitment of volunteer counterpart divers were undertaken by the MHT and the Sri Lanka Sub Aquatic Club (SLSAC).

The project was initiated by Jeremy Green and other maritime archaeologists from Australia with the Sri Lankan counterpart team of amateur divers from SLSAC (Sri Lanka Sub-Aqua Club) led by late Gihan Jayatilake and a team of naval divers coordinated by Green and Devendra (Maritime Heritage Trust). The target of this project was to create a few professional maritime archaeologists in Sri Lanka and waterlogged artefacts conservators. The initial aim was targeted to obtain interest of a number of undergraduates of archaeology in maritime archaeology with the project and in 1992 this target couldn’t be reached as only a handful of archaeology students were interested. However few conservators who had been working in the conservation laboratory of DOA and CCF were joined with this project and Vicky Richards & John Carpenter, the two conservators from the Western Australian Maritime Museum thought the methods of conservations to local conservators using the artefacts found from the Galle Harbour in the explorations done during this year in the great sunken ship wreck, Hercules (1661). Large number of moving artefacts were found including the bell of the vessel. Training was also carried-out in the conservation of water-logged objects, scientific recording, underwater photography and the setting up of a conservation laboratory with the positive achievements reached in 1992, DOA, CCF and PGIAR with the assistance of (MADWAM) were able to create plans for 1993.

Accordingly at the first part of 1993, a group of 08 people who are being able to swim were interested out of them 06 belonging to the DOA, 02 from the University of Kelaniya and the other 02 from the PGIAR. A few more trainee conservators apart from the previously trained ones were also been called for the trained activities in conservation methodologies in relation to the Galle Harbour Project for the above two teams. While giving theoretical and practical trainings in maritime archaeology and artefact conservation, the undergraduates were trained in swimming and diving activities which were conducted by the team of western Australian divers.
The First Training Maritime Archaeologist Team in 1993.

For the purposes such as unstable artefact registration, classification and preparation of databases, Dr. Moira Tampoe from the University of Peradeniya got involved. Also, in conservation of waterlogged artefacts, Nereena de Silva got engaged as a full time volunteer during the project. The team of trainee maritime archaeologists had a very low fluency in English language and in the meantime the above mentioned volunteer officers helped with the spoken language issues created in between the Western Australian divers and the trainee divers. Conduction of the Galle Harbour Project was successful in this year than the previous year as Jeremy Green used side scan sonar technology with magnetometer and to find relative placement of date found by the above technologies, GPS technology was used. The Galle Harbour Project happened in 1993 consisted of 02 seasons and at the latter part of the second season 11 sites which were archaeologically valuable were around the Bay of Galle. From all the sites that were explored and identified in 1993, most precious valuable exploration was the Dutch East Indiaman "Avondster" shipwreck (Green, Devendra, Millar, 1993). At the middle part of the second season of the Galle Harbour Project, Director General of the Archaeological Department requested Jeremy Green and S. Devendra to make an urgent research over the silver coins shipwreck at great basses and to present him a report over that. In a day by doing a few turns of dives, he was able to find around 600 silver coins and also several beads, glass and earthen ware shards from the archaeological site.

During the period of 1994 and 1995, due to the lack of funds in Sri Lanka and Australia, work was suspended, however Green and Devendra continued on a modest scale with whatever funds they could gather the idea of carrying out an archaeological impact assessment was discussed but was not put into action. Finally, a rescue project was carried-out.

The first turning point

Though the Galle Harbour Maritime Archaeology Project didn’t get continued due to the lack of funds in the years 1994 and 95, at the end of 1995, the Sri Lanka Ports Authority
had decided and was making plans for a developmental project to convert the Galle Harbour to a major container yard and transhipment port. Hon. Lakshman Jayakody, then Minister of Cultural Affairs, realised the harbour development project would have an adverse effect and instructed that the Galle Bay be surveyed for shipwrecks before a new port was built there. Since there had been a number of maritime cultural heritage sites which were identified during 1992 and 93 Ministry of Cultural Affairs was educated by the Director General of the Archaeology, Director of PGIAR and by the Director General of CCF, the implementation of the above project was highly debated in the Parliament of Sri Lanka. Due to that fact it was decided that before implementing Galle Port Developmental Projects as a first step an Archaeological Impact Assessments (AIA) study was to be conducted to explore the archaeological sites in development areas and bring any artefacts found from the effected sites and conserve them by using shared budgets. Galle Harbour project which was pioneered by the DOA was conducted with the involvement of the trained maritime archaeologists under the supervision of CCF. National Museum Department of Sri Lanka contributed more closely with this project than the previous instances. MHT, SLSAC; the institutions who took part with the previous projects and the volunteers; Dr. Moira Tampoe and the artefact conservator Nereena De Silva also involved with the project as they did in the earlier project. The funds were allocated; the work was undertaken by a Sri Lankan-Australian team. CCF provided most of the conservators, archaeologists and the facilities for this work.

Before the rescue archaeology project commenced in 1997, all trained maritime archaeologists were inclined to the diving centre and under the supervision of archaeological department, they obtained their PADI open water diver licenses.

Galle maritime museum agreed to support the project by providing their premises to carryout conservation of the aquatic artefacts explored in the maritime sites. Sri Lanka Navy agreed to provide the Magalle Navy base to house the boats and other transportation services in order to support the project. At this movement, the MADWAM has been developed and designated as “centre of excellence”, and they agreed to provide expertise and equipment that are necessary for the project. 1997 Galle Harbour Maritime Archaeology Project commenced bit different to the previous years and the main objective was the training and data collection. The specialty of this project was there were expertise not only from Australia, but also from Netherlands, England an America. (Devandra, Muthucumarana, Unpublished, 2013. P. 7- 8). The remote sensing survey carried out in this project, could explore three modern shipwrecks consist of 21 archaeological sites. In the meantime while the survey was ongoing, team divers dived into those target sites and using buoys, those sites were re-marked. Among the artefacts there were; individual artefacts abandoned European type anchors, non-European type stone anchors, iron wrecks and wooden shipwrecks.

The rescue maritime archaeology project was implemented around the Galle Harbour under several stages. Training, surveying, data collecting and archival researching were among the functions. The collections of artefacts explored at the end of the exploration project and also the shipwrecks and other archaeological sites that were embedded on the Galle Harbour sea bed, were explored. In order to study the artefacts and to define them, it was essential to research the information analytically, historically, archaeologically.

K.D. Paranavithana; Department of National Archives Sri Lanka, Robert Parthesious and Lodewijk Wagenaar - Amsterdam Historical museum, co-operatively examined and researched these historical documents. Dutch Historical records which were related to the Galle harbour were supported with the researchers by Algemeen Rijksarchief of the National Archives, Netherlands. In reference to those historical records, it could have been able to uncover facts that there had been five shipwrecks sunken around the Galle harbour during the Dutch period. They were The “Geinwens” (1776), The “Dolfijn”, The “Barbesteijn” (1735) the “Hercules”, (1661) and the “Avondster” (1659). The historical records of the above sunken shipwrecks were being very useful not only to re-create their history but to ensure the guessing the sites of those sunken ships to be correct. For instance; though the magnetometer survey shows a higher degree of magnetic value around the site “G”, no evidence of archaeological value was found during the exploration on the sea bed. Anyway, after referring to the historical documents, it was uncovered that it was guessed that this is the place where Dutch East Indiamen “Geienwens” (1776) had been wrecked. After carrying out few short time excavations, a large number of copper alloy nails and a few wooden frame parts, which were belonging to a wooden wreck was found. This test excavation become the first underwater archaeological excavation experience obtained by the trainee maritime archaeologist.

The 1997 Galle harbour project consisted of two seasons and during the second season it was directed in unloading some stone anchors that were on the sea bed. Among these anchors, one of the most especial fact that was founded was two wooden flukes that were fixed to the Arabian type stone anchor. After landing these wooden flukes in the earth surface, they were put in to a safe container and after while analysing, dating and referring to the chemical conservation section of the Western Australian Maritime Museum to look in to further conservation processes was commenced. There the conservator; Ian Godfrey checked samples and identified as “Calophyllum” species (Godfrey, 1988). Thereafter, a wooden sample was sent to the University of Waikato for the C14 dating and accordingly date was given was, the time period is not later than 1000 BP. But Dr. Mohan Abeyrathne from CCF, again took consideration over the dating report given by the University of Waikato, and he himself calculates those records through Oxcal program and concluded that those wooden samples were belonging to the 1390-1650 AD. At the final sessions of the second season it was identified that the trainee maritime archaeologists and the trainee waterlogged artefact conservators who lively took part with the project, had been widely improved in their knowledge and skills.

In the archival research done during the year 1997, most attractive finding was identifying “Avondster”. At the galley of the Avondster shipwreck, there was a Dutch type
brick structure which helped in confirming one of the myths related to Archival research. During both the seasons in 1997, objective of every expert was to explore paying more attention towards Avondster. Unloading movable artefacts, collecting, sketching and stabilizing the wooden parts which had been raised from the sea bed by using sand bags, were among the activities carried out during the second season. However, at the end of both the seasons, maritime archaeologists were able to postpone the proposal of the Large Scale Developmental Project of Galle Harbour, by presenting an assessment report with regard to a possible damage.

Though some tasks had been continued in 1998, centring the Galle harbour, due to limited funds and limited conservation laboratory facilities, interfering in to excavation activities was not materialised. But unloading some artefacts which would be affected by the treasure hunters or by currents, or through swelling, and also site documentation, making the training programs more effective, were some targets that were planned to be reached in the year 1998.

![Archaeological Sites in the Galle Harbour](image)

### 2001-2006 Avondster Project

After maritime archaeological activities around Galle harbour in 1998, the need to establish an institution in case of doing researches over maritime cultural heritage of Sri Lanka, safeguarding it and management of the processes. These issues were understood by all the institutions and officers of the institutions concern. Though there had been diving archaeologists and conservators to carry on maritime archaeology fieldwork, there wasn’t a proper place for them to work and no one was attentive to the matter. Also accessing funds was not in a strong basis at that period. According to the amendments of the Antiquities Ordinance in 1998 the ownership of the movable and immovable marine cultural heritage in the territorial sea of Sri Lanka was given to DOA and thereby the need to provide an authority to implement powers over above functions became increasingly urgent. Close to the old port premises which belonged to the Sri Lankan Port Authority, an abandoned Jetty was assigned to the DOA and constructing a permanent
building on this Jetty considering the need of an institution for the maritime archaeological tasks was commenced. After the completion of the construction of the building in 1999, all the authoritative powers in related with the management of maritime cultural heritage of Sri Lanka above mentioned building was handed over to the CCF by the DOA. With that, the movable artefacts which were explored during 1992 to 1998, which were conserved in the main artefact conservation laboratory at Anuradapura and the artefacts discovered during the Archaeological Impact Assessment Project in Galle Harbour in 1997, was transported to the new maritime archaeological building at Galle. For taking care over the artefacts, CCF appointed two permanent artefact conservators to the Galle Maritime Archaeology Centre.

Meanwhile the discussions occurred among the local institutions in relation to the commencement of the maritime archaeological activities became a failure due to several reasons. However, finally the Government of Netherlands and Amsterdam Historical Museum agreed to offer funds for the project. In addition to funds, they agreed to provide more training and to donate equipments. In light of Netherlands Government’s support, Sri Lanka had to provide with staff premises, infrastructure, equipments available and also counterpart financial support.

In order to manage the situation and planning future projects several discussions were held among the institutions such as Mutual Heritage Centre of CCF, DOA, Department of National Museums, PGIAR of the University of Kelaniya, Sri Lanka and the University of Amsterdam, the Amsterdam Historical Museum and National Museum of Ethnology from Netherlands and Western Australian Maritime Archaeology Museum.

As the final outcome of those discussions all the institutions agreed to commence a 03 years project related to the Avondster shipwreck which was explored during Galle Harbour project and decided to commence excavation and conservation activities aimed as a training project and all institutions agreed to name this project as "Avondster Project". With the commencement of the Avondster project, and under the approval of DOA, CCF laid the foundation to the birth of the “Maritime Archaeology Unit (MAU) in Sri Lanka” in order to safeguard and manage maritime cultural heritage in Sri Lanka.

On 14th November 2001, Avondster project commenced centring the new MAU building premises and for this project a group of maritime archaeologists and a few waterlogged material conservation experts took part. The trained maritime archaeologist who were trained in Galle Harbour project were working at the land excavation sites of CCF, were attached to the MAU as permanent employees and employees of the DOA and the National Museum Department (NMD) were also participated.

Excavation & research project of the Avondster Shipwreck site is situated in Galle Harbour. The wreck was belongs to VOC Company which was shanked in Galle Harbour in 1659. The government of Netherlands provided funds though the Mutual Heritage Foundation and the excavation project was carried out from 2001 to end of 2004. Under the project the Maritime Archaeology Unit of Sri Lanka (MAU) was established and local archaeologists and conservators were trained for this new field of study (underwater archaeology).
The Avondster (1659)

The Avondster was originally a British ship, captured and modified by the Dutch. After a long life span of long distance trans-oceanic voyages it was assigned to short-haul coastal runs. The vessel was 30 meters long and constructed with two decks. The Avondster was wrecked on 2nd July 1659 while anchored in the Galle harbour. The choice of the Avondster for excavation was however based mainly on the physical condition of the site rather than the identity of the ship. After the ship was discovered in 1993 the site was monitored; it became clear that the wreck was increasingly exposed through changes in the dynamics of the seabed, and it was considered important to implement a rescue archaeology project on the site to safeguard this important collection. From 2001 till the end of 2004 important sections of the ship have been excavated and conserved in-situ. The Avondster project which was consisted of 03 major excavation namely, Bow section, Mid-ship Area and Stern Section of the ship.

Under the Avondster project the Sri Lankan team of archaeologists and conservators were trained to implement effective and professional maritime archaeology. The site was surveyed and recorded systematically. It was a slow process. The aim, however, was not only to survey but, it was through this process that the team was trained in different methods and theories. After the surveys and the recordings, the team was set up to do the first excavation.

During the execution of the project a group of well skilled and talented team of maritime archaeologists and conservators who was able to safe guards and manage maritime cultural heritage of Sri Lanka individually was created. It was very special that in the Avondster project, maritime archaeologists from South American countries such as Argentina, Mexico, Uruguay were also took part and gained training in maritime archaeology. The Avondster project was closed on the 23rd December 2004 and the group of foreign specialists who handed over the destiny of maritime cultural heritage of Sri Lanka in hands of Sri Lanka Team, departed on the same day to their motherlands.
Just after 03 days of the closing of the project on the 26th December 2006 the tsunami disaster was hit the bay of Galle thereby taking back 60% of the artefacts explored and conserved from Galle Harbour back to the sea bed. When the tsunami was hitting Galle, there had been a huge amount of fully conserved and partially conserved movable artefacts in the new MAU building. Not only that diving equipments, computers, still cameras, video cameras and a large amount of drawings which had been drawn for years were taken to the sea by the disastrous tsunami waves. Only the roof of the MAU building was remained and the luckiest thing was that any of the human resource who was trained in the previous projects was not affected at all. However, 03 publication were published in relation to the Avondster Project.

After the tsunami.
After tsunami

Due to the hazard happened and to reduce the damage occurred, maritime archaeologists and conservators team of got together as soon as possible and commenced collecting the non-damaged and the partially damaged artefacts eagerly and requested a proper place from the Government of Sri Lanka to carry out conservation processes in related to the artefacts. Government provided the team with a suitable place for the establishment of the MAU. After tsunami disaster, aids were provided by Australian Institute of Maritime Archaeology (AIMA), Cultural Emergency Response (CER) of the Netherlands, The Netherlands Cultural Fund, and Amsterdam Historical Museum eagerly provided relevant equipments and funds to commence the conservation activities of the cannon and anchor of the Avondster near the new building premises and the diving section, administrative section, library and the Data Processing Unit were also established with in the same building, with the support of the foreigners who came in as a relief teams. Nearly three months after the tsunami destroyed the facilities, the team were in a position to resume their activities.

On 24th March 2007 the new building for the MAU was officially opened and the basic infrastructure was restored and the recovered artefacts placed back in conservation. At this time reconstruction actions of the former building of MAU was handled by CCF and after the reconstruction were completed that building was used as MAU diving section and also as a wet material conservation section. Meanwhile the rest of the sections were established in the new building that was gained after tsunami. Since then the MAH is continuing its operation around Sri Lanka with 10 underwater archaeologists led by Rasika Muthucumarana.
After the tsunami disaster, some of the officers in MAU team requested them to be attached to the surface archaeological projects of the CCF and transferred themselves to those projects while some of the officers who were appointed to MAU from DOA and NMD were also made request and transferred themselves to their mother departments. There by it remained a few members with the MAU team. The team was limited to 04 maritime archaeologist and 02 conservators, therefore most of the field works were limited only to Galle Harbour. Among them, before the tsunami disaster during the Avondster project, the Avondster shipwreck was applied with in-situ preservation treatment and monitoring this was done by this small team. Also surveying and sketching the site J, Site E, Site A, site N and site O was also included to the tasks done by this small team.

**2006-2008 UNESCO Field School Project**

**First Field School Programme**

In November 2003, during the UNESCO Asia Pacific regional meeting held with the experts of ICOMOS International Committee on the Underwater Cultural Heritage (ICUCH) at Hong Kong a decision was taken to establish a field school within the zone to train maritime archaeologists, conservators and heritage managers who are needed for the zone. At the end of that meeting, ICUCH decided their annual meeting to be held at Galle. During the meeting the experts visited Galle the MAU premises and admired the tasks carried out by the maritime archaeologists and conservators and also paid a visit to Avondster shipwreck. Accordingly they unanimously decided that Galle is the best place to establish a maritime archaeology field training school in the Asian pacific region. As a result, with the allocations provided by UNESCO with support of Norwegian Government for a short training program (Initial Training) for the team members of the MAU to prepare them for the future field school project. After obtaining money from the UNESCO, the field school was commenced in Galle which was to be continued for whole 04 weeks in 2006.

As participants for this field school, 12 Sri Lankan’s participated; who were both maritime archaeologists and conservators and one Chinese maritime archaeologist was also participated. The main objective of this field school was to make the participants as Training of Trainers (TOT) of the forth coming field school, expertise were given from India, Netherlands, Australia and from Nautical Archaeological society of UK. As the field school was structurally organized with theoretical and practical programmers, the participants’ knowledge was upgraded considerably.
Field School Programme in 2007

UNESCO and ICCROM organized a “Cultural Impact Assessment and Maritime Archaeology” Field School in Galle, Sri Lanka from 1-9 April 2007, under the Asian Academy for Heritage Management (AAHM). The training was implemented in partnership with the PGIAR of the University of Kelaniya, the CCF and the Flinders University of Australia. Eighteen participants from eight countries (Australia, United Kingdom, Malaysia, Japan, Philippine, Pakistan, Thailand, and Sri Lanka) were offered the opportunity to study heritage conservation under the guidance of leading experts in this field. The curriculum of the nine-day training program consisted of lectures on topics ranging from conservation legislation to underwater archaeology, group work, field trips to heritage sites in Galle as well as diving sessions at several underwater heritage sites in the bay of Galle.
Second Field School Programme in 2008

As a result of the proposed regional field school program, the second field school was organized in Galle in the year 2008 according to the instructions provided by UNESCO and that was named as the “Advance Training of the Trainers program” an exploration was carried out to find suitable shipwreck for training purposes. It aims to find a wooden wreck with regional/Asian shipbuilding features, rather than a European sailing ship or an iron wreck. The short term exploration was partly funded by the UNESCO and carried out by MAU-CCF. The exploration was proposed to carry out from Kirinda to Galle. During the exploration at Godawaya (between Hambantota & Ambalantota) MAU found a wooden wreck in 32m depth, looks more older than the colonial period and ideal for the training purposes. The wreck is known as the Godawaya wooden wreck and later it was dated back to 1st century BC and as the oldest wreck site in the Asia Pacific region.
Field School Program 2008 - the exploration at Great Basses and Godaway. 
Although the second field school ended successfully, unfortunately due to the terrorism background at the impermanency created through that made UNESCO changed their mind, so Asia pacific regional field school for maritime archaeology was shifted to Bangkok. Thereafter, organizing that field school was recommended to the Underwater Archaeology Division (UAD) at Chanthabury, Thailand.

Archaeological Impact Assessment (AIA) Project of Galle

At the beginning of 2007, the project proposal for upgrading Galle Harbour as a commercial service Harbour which was planned in 1997, but failed to progress due to the Archaeological Impact Assessment (AIA) done in the meantime, came up again and as a result of the influence made by the MAU team over the concept, ports authority agreed to allocate funds to the DOA implementation of an AIA project. In order to activate this AIA project, DOA invited MAU and the MADWAM as a consultant to undertake a maritime archaeological survey of Galle Harbour as part of an Archaeological Impact Assessment (AIA) process. The scope of the consultancy was to carry out a maritime archaeological survey, and provide a report to the DASL outlining the impact of the proposed Galle Port development on the underwater cultural heritage of Galle Harbour. The survey took place between 14 November and 2 December 2007.

Related to the proposal of Port Developmental Project, the areas or the archaeological sites which directly affected by the constructions were examined in detail by carrying out a detail survey by using remote sensing equipment was the main objective of conducting AIA. Maritime archaeologists from MADWAM, Green, Anderson, Souter, participated in handling technical equipment such as; modern side scan sonar, magnetometer, GPS, and the local team dedicated and helped with the above team to succeed in their missions of AIA.

During this AIA project, a bigger attention was paid to the Hercules (1661) shipwreck, which was sunken close to Gibert Island which was to be buried due to the constructions done for the express way entrance of Galle Harbour developmental project. As a result of the explorations carried out around this site, the amount of canons that had been found from the Hercules (1661) shipwreck got increased from 32 up to 36. As a result of the excavations, few wooden frames that belonged to the shipwreck were also discovered which were totally covered by sand. Also a large number of cannon balls and more movable artefacts had been explored during this project.

At the end of the AIA project, the final report prepared was handed over to the Ports Authority of Sri Lanka by the DOA and of its copy which was recommended by the archaeologists, was handed over to UNESCO. According the second AIA project also got succeeded thus UNESCO influenced Sri Lankan ports Authority to make Galle Harbour a “Leisure port”, not a “commercial port”. Being greed to that concept, Ports Authority of Sri Lanka is now being examining the needed abilities to upgrade Galle Harbour as a “Leisure Harbour”.

Godawaya Collaboration Project in 2010

As a part of the regional field school project and as an expert exchange program 06 regional maritime archaeologists from 04 countries came to Sri Lanka for a joint field work session (two weeks) to survey on the Godawaya ancient shipwreck site. The program was hosted by the CCF, UNESCO and the Netherlands Cultural Fund. 03 from Indonesia, 01 from Malaysia, 01 from Philippines and 01 from India came to work with
MAU team. The field work was carried out successfully and few international publications were done after that.

NIO Collaboration Project/ NW Exploration - 2011

In 2011 two marine archaeologists from India (National Oceanographic Institute of Goa) came to Sri Lanka and again they participated to the exploration carried out by MAU team along the Northwest coast. The exploration was also partly funded by UNESCO. Halawatha and Kalpitiya areas was explored and a joint publication was done afterward.
Netherlands funded project for GIS

Netherlands Cultural Fund (NCF) and the MAU of CCF did signed a MOU to carry out a joint research and GIS project to build a database for the Underwater Cultural Heritage (UCH) of Sri Lanka. Netherland is partly fund for the project and the MAU carried out the project. GIS unit was established in 4th floor of the Sethsiripaya, Colombo and it is functioning as the data collecting (making data base) hub with the other institutes dealing with the UCH. The joint work will remain till 2019 and the database will be maintain by MAU-NCF afterward.
Korean Exchange program

In 2013 MAU of the CCF and the National Research Institute for Maritime Cultural Heritage of South Korea came to an agreement for an exchange expertise program for 05 years. According to the agreement one or two participant from each institute goes to the other for a month and work with that institute. From 2014 the exchange program is in progress.
China-Sri Lanka Joint Project in Search for Wreckages of Zheng He's Fleets off the Coast of Sri Lanka

According to the Memorandum of Understanding (MOU) between Institute of Acoustics Chinese Academy of Sciences (People’s Republic of China) and The CCF (Democratic Socialist Republic of Sri Lanka) in the Search for Wreckages of Zheng He's Fleets off the Coast of Sri Lanka, the two sides have agreed to carry out the first season survey off Sri Lanka in March and April 2015. The ship presently owned by the National Aquatic Resources Agency (NARA) of Sri Lanka was commissioned for the survey. On Chinese side, scientists from Institute of Acoustics, Chinese Academy of Sciences, and National Museum of China, attended this survey. On Sri Lankan side, officers from CCF, officers from DOA and officers from Sri Lanka Navy did attended the survey.
Survey was restricted to Sri Lankan coastal waters, basically surrounding the Beruwala harbour and the area demarcated by 10 nautical miles seaward from Waskaduwa and 10 nautical miles seaward from Ahungalla as sector I, and the area 10 nautical miles seaward from Ahungalla and 10 nautical miles seaward from Dodanduwa as sector II. Sometimes, there are a lot of fishing nets in the survey area, especially in night which was dangerous to the equipments. The beds on board were limited. Therefore, the survey was conducted only in daytime. In order to be efficient, the ship departures at 5:30 in the early morning, and came back to harbour at 18:30, before dark every day. Besides the time for ship to go to the survey point and back, there are about 11 hours to survey per day for 20 days.

The first and second season surveys were successfully completed in March and April 2015 and April 2016. According to the Memorandum of Understanding between Institute of Acoustics Chinese Academy of Sciences (People’s Republic of China) and The Central Cultural Fund (Democratic Socialist Republic of Sri Lanka) in the Search for Wreckages of Zheng He's Fleets off the Coast of Sri Lanka, the two sides have agreed to carry out the sea survey of Sri Lanka. The first season was successfully completed in March and April 2015. It is proposed to continue this survey till the year 2020.

**Participation of Members of MAU in international training programmes, workshops and conferences**

After Maritime Archaeology Field Schools conducted by UNESCO and ICCROM in the years 2006, 2007 and 2008, three members from MAU received scholarships on 2009 under Australian awards fellowship program, to participate in a six weeks maritime archaeology internal program at Flinders University, South Australia. During this program, participants had the chance to engage with theoretical and practical sessions for three weeks to get involved with the maritime archaeology field school for one week and the rest of the placement of maritime archaeology related institution there for two weeks.

*UNESCO Asia-Pacific Regional Field School Program on Underwater Cultural Heritage, Chanthaburi, Thailand - 2009-2011*

Due to the war situation, some diplomatic problems and lack of SL government support the UNESCO field school project was moved to Thailand. From 26th October 2009 to year 2012 the UNESCO field school on Underwater Cultural Heritage held at the Underwater Archaeology Division Training Centre in Ban Tha Chalaeb, Bangkaja Municipality, Chanthaburi, Thailand.
As a result of this field school and as one of the leading countries in the region, who carry out maritime archaeology field work every member of the MAU team had the opportunity to participate these field school programs. The organizers held foundation courses, advance courses, field work sessions and few symposiums during this period.

This course was part of the UNESCO regional project, funded by the Royal Government of Norway, entitled “Safeguarding the Underwater Cultural Heritage of Asia and the Pacific: Building Regional Capacities to Protect and Manage Underwater Archaeological Sites through the establishment of a Regional Centre of Excellence Field Training Facility and Programme of Instruction”.

During the years of 2009, 2010 and 2011, foundation courses organized by Thailand Underwater Archaeology Division (UAD) for UNESCO Asia Pacific Regional Maritime Archaeology Field School, all the MAU members did participated. Also, for the advance course of Geographical Information System (GIS) Field school which was organized by the same institute, one MAU member did participated while other MAU member did participated in the advance course on in-situ preservation organized by the Underwater Cultural Heritage Field School.
Members of the MAU did participated the below mentioned international workshops and conferences such as:

- UNESCO Convention for Underwater Cultural Heritage Ratification workshop held in 2012 at Cambodia,
- Society of Historical Archaeology conference (Historical Archaeology and Maritime Archaeology- London) in United Kingdom in 2013
- AIMA conference in Australian National University at Canberra-Australia in 2013,
- 2nd Asia pacific regional conference for underwater cultural heritage at University of Hawaii in 2014,
- ICUA 6th conference on underwater archaeology at Western Australian Maritime Museum in 2016.
- At the first Asia pacific regional conference for underwater cultural heritage at Philippines in 2011, three research papers were presented representing MAU, Sri Lanka.

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- Areas of the Avondster site, [http://maritimeasia.ws/maritimelanka/avondster/areas.html](http://maritimeasia.ws/maritimelanka/avondster/areas.html)

- Finds from the Avondster, [http://maritimeasia.ws/maritimelanka/avondster/finds.html](http://maritimeasia.ws/maritimelanka/avondster/finds.html)

Factors affecting the ratification of the UNESCO Convention 2001 in the Asia and the Pacific region

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Background
UNESCO has 195 member countries that are divided into five regions (see Table 1 below). These regions are not the same size, in terms of the numbers of countries, varying from 20 in the case of the Arab states to over 50 in the case of Europe and North America. In some cases countries are counted twice: for example, Algeria is counted once in the Arab states region and once in the Africa region. For the purposes of this paper I have arbitrarily assigned countries like Algeria and Egypt to the Arab states region and not included them in the Africa region. Finally as the regions have different numbers of countries within them I have indicated a percentage as well as a raw number of ratifications for each region.

<table>
<thead>
<tr>
<th>Region</th>
<th>Countries</th>
<th>Ratifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Africa</td>
<td>45</td>
<td>10 (22%)</td>
</tr>
<tr>
<td>The Arab states</td>
<td>20</td>
<td>9 (45%)</td>
</tr>
<tr>
<td>Asia &amp; the Pacific</td>
<td>46</td>
<td>2 (5%)</td>
</tr>
<tr>
<td>Europe &amp; North America</td>
<td>52</td>
<td>16 (30%)</td>
</tr>
<tr>
<td>Latin America &amp; the Caribbean</td>
<td>32</td>
<td>19 (60%)</td>
</tr>
</tbody>
</table>

Table 1 – Ratifications of the UNESCO Convention (2001) in the five UNESCO regions.

These percentages vary from a very low 5% in the Asia and the Pacific region to a high of 60% in the Latin America and the Caribbean region.

The Asia and the Pacific region will be the focus of this paper, in particular the factors that affect ratification and, in the absence of ratification, how international co-operation can play a part in fulfilling the intent of the UNESCO Convention (2001) by considering a case study of one country in the region – Vietnam.

Factors affecting ratification of the UNESCO Convention (2001)
There are six recognized UNESCO cultural conventions as well as many others in areas of education, sport, copyright and others. Among the UNESCO cultural conventions, some are seen as “successful” and “popular” such as the World Heritage Convention (1972) that has been ratified by 193 of the 195 UNESCO members and the Intangible Cultural Heritage (ICH) Convention (2003) that has been ratified by 173 UNESCO members. Other conventions are perceived as less “popular” and have taken much longer to gain ratifications – the UNESCO Convention (2001) on the Protection of Underwater Cultural Heritage (the UCH Convention) with 57 ratifications to date (2017) is seen as such an example. It should be noted, however, that the UNESCO Convention on the Means of Prohibiting the Illicit Import, Export and Transfer of Ownership of Cultural Property (1970) also took also 16 years (until 1986) to reach 56 ratifications (that Convention now has 132 ratifications).
Many reasons (or excuses?) for non-ratification have been advanced. One is a lack of trained personnel (“we have no trained people” so we can’t ratify). That suggestion fails to be convincing as international training programmes have been created and conducted by UNESCO and other organizations, throughout the world (Maarleveld et al. 2013). Another is the poverty argument (“we are too poor” so we can’t afford to ratify). That too fails to be convincing when countries like St. Vincent and the Grenadines, St. Kitts and Nevis, Grenada and Guinea-Bissau, which are all ranked among the twenty poorest nations in the world (by GDP) have ratified. Finally there is the “it takes time” argument, which is one that we hear regularly in Australia – that it takes time to get domestic state and federal legislation into line so that we can ratify the UCH Convention. Over long periods of time involving prolonged periods of inaction and a serious lack of progress this particular argument, too, fails to be convincing.

There are, of course, many political, cultural and economic factors which affect decisions about why any individual country chooses to ratify, or not, any particular UNESCO cultural convention. Some countries, such as Israel, have ratified very few UNESCO cultural conventions – Israel has only ratified the Hague Convention (1954) and the World Heritage Convention (1972). The US is another country that has only ratified those same two UNESCO cultural conventions and it took until 2009 (or more than 50 years) for the US to ratify the Hague Convention (1954).

I suggest that there are generally three inter-related factors that can affect a country’s decision to ratify a particular convention and I have described these as:

- **The neighbourhood factor (N)** – where one or more of your immediate neighbours ratifies a Convention, which often prompts a country to consider, and sometimes actually, ratify.
- **The leadership factor (L)** – where a regional, or other, “leader” country ratifies and others then follow suit. Leadership might be in terms of economic or political power or simply leading by example. This often entails bilateral or multilateral support, such as training for countries that need it.
- **The common language/culture factor (C)** – where a group of countries that share a common language and/or a common cultural heritage ratify.

Perhaps the best example of all three factors working together is Latin America and the Caribbean where 19 countries (60%) have ratified. Four Spanish-speaking countries of Central America have ratified (Panama in 2003, Mexico -- a significant regional leader -- in 2005, Honduras 2010 and Guatemala 2015). The islands of the Caribbean were early adopters of the UCH Convention and many of their neighbours have followed suit (St. Lucia in 2007, Barbados and Cuba in 2008, Grenada, Haiti and St. Kitts & Nevis in 2009, Trinidad & Tobago and St. Vincent & the Grenadines in 2010, Jamaica in 2011, Antigua & Barbuda in 2013). Then in South America where Spanish is the official language in four of the five countries to have ratified - Paraguay and Ecuador (2006), Argentina (2010), Guyana (2014) and Bolivia (2017), which complete the 19 ratifications in the region to date. In addition to the neighbourhood factor, the common language/culture factor of Spanish and the leadership of Spain (2005) on the world stage and Mexico (2005) at a regional level have all played significant roles.

The neighbourhood factor has also been working in the area of the Mediterranean and the Black Sea basin, which is slightly disguised by the fact that countries in this area fall into two separate UNESCO regions (the Arab states and Europe and North America).
Nevertheless 19 countries in this area have ratified which is a very high percentage of the countries with a coastline on the Mediterranean or Black Sea.

Finally there are countries where none of these factors appear to have had any bearing on the decision to ratify. Here there are two notable examples – Lithuania, which is alone of all the Scandinavian and Baltic area countries, and Cambodia, which is alone of all of the countries in the South Asia, South-east Asia, East Asia and the Pacific area.

Africa – to ratify or not to ratify, that is the question...

Africa has the second lowest rate of ratification (in percentage terms) of the UCH Convention – just 22% (or 10 of the 45 countries) of that region. I spent some time in South Africa in the late 1990s and one of the comments made to me on more than one occasion was that generally speaking most black Africans do not identify as “maritime people”, they have a “limited” seafaring tradition and that it was “very unlikely” that any African nation, particularly South Africa, would support the existing ICOMOS Charter on the Protection and Management of Underwater Cultural Heritage (1996) nor would they ratify the (at that stage still forthcoming) UNESCO UCH Convention.

The first African country to ratify the UNESCO Convention (2001) was, in fact, Nigeria in 2005 and for five years (until 2010) Nigeria was the only African nation to have ratified. In many respects for five years Nigeria looked very like Lithuania and Cambodia – an isolated case of ratification in an area where no other countries were ratifying.

Nevertheless Nigeria stood as a regional leader for West Africa and the leadership factor, and subsequently the neighbourhood factor, came into play with ratifications by three adjoining countries—Benin (2011), Togo (2013) and Ghana (2016). In addition, both Benin and Togo are former French colonies that share a common official language – French – and they may well have also been affected by the ratification by two other neighbouring, former French colonies in 2010 (Gabon and the DR of the Congo). The African ratifications are rounded out by neighbouring Namibia (2011) and South Africa (2015), another former French colony in Madagascar (2015) and former Portuguese colony Guinea-Bissau (2016). I would suggest that South Africa, as a powerful economic and political entity in Africa, could play a significant leadership role in Africa in the future.

I would argue that Africa demonstrates that these three factors have affected ratifications of the UNESCO Convention (2001). Nevertheless there is still a long way to go in West Africa with at least another eight countries with Atlantic coastlines that still have to ratify. The situation is much better there, however, than in East Africa where not a single one of the eight countries with an Indian Ocean or Red Sea coastline has ratified. Not one of the mainland countries of East Africa, north of South Africa, has yet ratified and this is in an area that actually does have a significant indigenous seafaring tradition. So it has to be acknowledged that sometimes these three factors have a limited, or indeed, no effect, particularly when faced with internal issues such as warfare in the Horn of Africa (Sudan, Eritrea and Somalia) and external economic and political pressure exerted by China in East Africa (Kenya and Tanzania).

Factors affecting ratification of the 2001 Convention in the Asia and the Pacific region

Unfortunately these three factors are simply not working in the Asia and the Pacific region. Cambodia (2004) was an “early adopter” of the UCH Convention but the neighbourhood factor never got going as Cambodia’s two coastal neighbouring countries
- Thailand and Vietnam – did not, and still have not, ratified. As far as leadership goes, of the four countries with potential for “leadership” in this region – India, China, Japan and Australia – none have ratified. I would put in a comment here that I have heard from several knowledgeable sources in New Zealand that New Zealand will only consider ratifying the UCH Convention after Australia has ratified. Indeed if Australia did ratify then New Zealand would almost certainly be forced to consider ratification by the Cultural Minister’s Council.

Finally common culture/language is not widespread with many mutually unintelligible languages, and a wide variety of written scripts, being a feature of the region.

You do hear poverty given as a reason for non-ratification in the region but the facts that, a) Cambodia is among the poorest countries there, and b) the rapidly growing GDP in many countries, make this argument unsustainable. This is much more a question of government priorities than poverty.

In countries which lack trained and experienced underwater archaeologists and underwater cultural heritage managers, which is true of most countries in the Asia and the Pacific region, capacity building is considered critical. UNESCO has spent considerable amounts in the Asia and the Pacific region on training, at least $5 million dollars (funded by the Royal Government of Norway) on training programmes such as the Regional capacity-building training courses on Underwater Cultural Heritage that ran in Sri Lanka (2007-2008) and then in Thailand (2009-2012) (Favis 2011; Manders & Underwood 2012 and 2015). In addition SEAMEO-SPAFA has conducted training courses in Underwater Archaeology, conservation and the management of UCH for more than thirty years in the ASEAN region. These courses usually run for four to six weeks and provide basic, and sometimes advanced, training across a range of theoretical and practical areas. Flinders University ran a six-week mid-career professional training programme in 2009 called the Flinders University Intensive Programme in Underwater Cultural Heritage Management (FUIPUCHM) that involved ten participants from 5 countries of the region (Staniforth 2011). A significant difference between the Flinders programme and the UNESCO training is that it was very specifically aimed at individuals already working in the field.

So there has been no shortage of training but training alone is not enough. Real, full-time, permanent jobs as underwater archaeologists or underwater cultural heritage managers are needed. More than 250 people in the region have been trained over the years but only a small number have full-time, permanent jobs in underwater archaeology or underwater cultural heritage management have been created. Anecdotally it seems that there is a pervasive view in the region that these training courses are a “perk” and provide an opportunity to go shopping or simply to visit another country. Many of those sent on these courses already have a full-time, permanent job and rarely utilize any of the knowledge or skills that they gain from this training.

One reason that has been suggested for the lack of interest in the UCH Convention has been that countries are more concerned with Intangible Cultural Heritage than Underwater Cultural Heritage. The figures for ratification might seem to support this idea with 36 of the 46 countries (nearly 80%) of the region having ratified the ICH Convention (2003). Closer examination shows that at least two of the three factors have had some influence in regard to the ICH Convention. Leadership - the very first nation in the region to ratify the ICH Convention was Japan (2004) closely followed by China (2004) and then India (2005) but Australia still has not ratified. Three of the four “leadership” nations of the region were early adopters of the ICH Convention. Furthermore the pattern of
ratification of the ICH Convention among the Pacific nations also shows the
neighbourhood factor at work where there was not a single Pacific nation in the first 100
ratifications (in 5 years). Then in 2008 Papua-New Guinea ratified, then Fiji, Tonga and
Vanuatu in 2010, Palau (2011), in 2013 Micronesia (Federated states of), Nauru and
Samoa, the Marshall Islands (2015), the Cook Islands and Tuvalu in 2016. So among the
Pacific nations it went from zero to eleven ratifications in just eight years.

The argument about interest in intangible cultural heritage rather than tangible
(underwater) cultural heritage might be more compelling if some of the countries of the
region had been less enthusiastic about World Heritage listing of tangible (terrestrial)
cultural heritage sites. World Heritage listing, of course, comes with some extremely
economically valuable spinoffs such as increased tourism (Imon et al. 2008). China with
50 World Heritage listed sites, India with 34, Japan with 20 and Australia with 19 (133
World Heritage listed sites in a total of four countries (2%) with more than 12% of all the
World Heritage listed sites) show that the "leadership" countries of the region are very
keen on the protection of terrestrial cultural heritage, as well as the tourism dollars that
this generates, but are less interested in the protection of underwater cultural heritage.

Vietnam Maritime Archaeology Project – International cooperation

Since 2008, a varying group of international researchers and trainers, mainly from the
US, Canada, Japan and Australia, and now working under the banner of the "Vietnam
Maritime Archaeology Project" (VMAP) have operated in Vietnam in association with the
Institute of Archaeology (IA), a Vietnamese national government research organization
based in Hanoi.

Between 2011 and 2016, VMAP and IA operated under the terms of a Memorandum of
Understanding (MOU) that covered collaborative research projects and training. As a
result VMAP has provided:

- "on-the-job” training including the use of high technology field equipment on-
going since 2009;
- Nautical Archaeology Society (NAS) Introduction (1 day) and Part 1 (2 day)
  training in Vietnam since 2011;
- SCUBA diving training since 2014; and
- Vietnam Underwater Archaeology Training (VUAT) – a four-week training
  programme in 2015.

From its inception VMAP, and the individual participants involved have worked with the
premise that "training alone is not enough” and that to be effective our training efforts
needed to be carried out in association with research projects and other activities such as
awareness raising (Staniforth 2014a, 2014 b and 2014c). VMAP has been involved, and
participated, in joint research projects (such as projects at Bach Dang, Van Don and,
more recently, Hoi An) that have allowed our Vietnamese colleagues to put some of the
above training into practice in a context where learning takes place as part of “purposeful
action” (O'Toole 2011:30).

The MOU also specified that IA would make a commitment to providing jobs and finding
funding in the area of underwater archaeology. As a result the number of IA staff has
steadily increased from 1 in 2009, 2 in 2011, 3 in 2013 to 4 in 2015. IA has established a
Department of Underwater Archaeology (2013), conducted an International Conference
on Underwater Cultural Heritage in Quang Ngai (2014) and then upgraded the
Department to a Centre of Underwater Archaeology in 2016. In 2017 they have been granted more than $0.5 million for equipment from the Vietnamese national government.

We believe that for capability building to be effective, a congruence of values is necessary between the international team and the host organisation. With shared values, capability building can achieve a mutual understanding of maritime archaeology and underwater cultural heritage as long-term sustainable (and sustained) assets, rather than as short-lived non-renewable resources (Staniforth & O’Toole 2017). Our notion of capability building is based on a programme taking place over an extended period of time – now nine years. The extended time period is necessary to achieve long-term change, or at least critical reflection, on the part of the host organisation. This process causes a direct exposure to the ethical and disciplinary tenets of maritime archaeology on the part of the host organisation. The programme is based on principles of commitment to empowerment, participative learning, learning reinforcement mechanisms, and intensive communication with the stakeholders of the host organisation.

The work in Vietnam may be best described as what Gideon Koren described on the first day of this symposium as “ad-hoc cooperation”. Our international team has been characterized by many individuals participating in the work in their own right as opposed to on behalf of an institution. This has consequences in terms of limited access to institutional support but has many benefits in terms of flexibility. Our efforts have been funded from a wide range of sources including a significant benefactor, universities, government agencies, non-government organizations, crowd funding and participant fees. Because our support for IA is conditional on IA committing staff and resources, we believe that this has been a successful model for international collaboration.

Conclusion
In this paper I have argued that there are three factors that affect decisions about ratification – the neighbourhood, leadership and common language/culture factors. I also suggest that these factors are currently not working in the Asia and the Pacific region. Capacity building is seen as essential but training alone is not enough. Targeting mid-career professionals already working in underwater archaeology or the management of underwater cultural heritage for training is seen as one effective solution. Finding ways to encourage countries to provide jobs for suitably trained and qualified people is critically important. Combining training with research and awareness raising activities over lengthy periods of time is also needed.

References


Analysis and diagnosis of how the right of damage acts in the theory of legal order that leads to the study of software: Heritage coefficient, which is inserted within the methodology of economic valorization underwater heritage

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Introduction

The Convention for the Protection of Underwater Cultural Heritage was developed by UNESCO member countries, where it was established that archaeological remains cannot be commercialized, since this is incompatible with conservation. When it was decided, it was ratified by only 18 countries. At that time, only two more countries were needed for entry into force. In 2001 Argentina voted in favor and it was ratified in 2009 under national law No. 26,556.

The Convention for the Protection of Underwater Cultural Heritage established that “heritage found in seas, lakes and rivers cannot be the object of any commercial purchase, sale or transaction, as this is against its effective protection”. This is what the archaeologists of different official organisms --CONICET Argentina, Agency CyTA-Institute Leloir, Program of Underwater Archeology (PROAS), National Institute of Anthropology and Latin American Thought (INAPL) have said.

The Convention encourages international cooperation. In an interview with archaeologist Dolores Elkin, she said: "Let us not forget that in the case of sunken ships, which constitute a large part of the underwater cultural heritage, the place of origin and the place of the shipwreck rarely coincide, so the best way of protecting that heritage is through the joint work of the various stakeholders". To this thought a hypothetical idea was added: the pieces that a sunken ship carried may be from the same country from where it set sail from another country where it was docking. This creates more complexity to the subject if we add the waters of the country where the shipwreck occurred or where it was found. Each country has its own legal regime. Each heritage piece has its own identity. Each piece of property has its own economic valorization which leads to its own financial system.

Theoretical basis

In order to solve this problem the economic valuation methodology, developed for heritage in general, can also be applied to underwater cultural heritage. The objects should be valued and assessed and then they turn to be part of the financial market under the legal figure of trust. After being registered they turn to be part of a fund of heritage economic investment.
The methodology is composed of a system of concatenated tables. A total of 170 and ten tend to infinity. In this case, only 17 tables were used. You can work in each table independently. The tables are related to the structure and legal order of each country. This corresponds to what is called Heritage Coefficient that can be extended as necessary. Each score that is obtained is based on the heritage value of the object that is valued in the place where it was extracted and therefore in the country where it was found. For this hypothetical case four countries are involved:

The country from which the objects come,

<table>
<thead>
<tr>
<th>Denomination of the general heritage categories with their different combinations</th>
<th>Event</th>
<th>Object</th>
<th>Object belonging to a wet</th>
<th>Network</th>
<th>Network belonging to a wet</th>
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An object or several objects may belong to a collection. It can be a work of art or several works of art or a collection of works of art about a specific author.

It can be in national waters

It can be of routes in national waters

It could be in international waters
## Object/s and/or artwork/s that come from a 3rd country or "n" countries

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**Note:** The table continues with more rows and columns for specific cultural components.
The objects coming from a 3rd country or “n” countries should be quantified

The value of the sunken vessel must be quantified according to Heritage Coefficient

\[ CP_v = 100 \left( \frac{1}{11} \left( \frac{41}{63} \right) \right) + 2 \]

\[ CP_v = 7.8 \]

E) Set of objects – International waters

\[ CP_p = 100 \left( \frac{1}{11} \left( \frac{41}{63} \right) \right) + 2 \]

\[ CP_p = 7.8 \]

H) Set of artworks – International waters

\[ CP_p = 100 \left( \frac{1}{11} \left( \frac{49}{63} \right) \right) + 2 \]

\[ CP_p = 9 \]

K) Collection – International waters

\[ CP_p = 100 \left( \frac{1}{11} \left( \frac{63}{63} \right) \right) + 2 \]

\[ CP_p = 11 \]

The country where the ship comes from,

Flotsam/s=(2nd country) in the discovered place

The flotsam is a property. The sea, river or lake is a property. The flotsam can be found in national territory or international territory or in a new or old commercial route.
### Flotsam/s=(2nd country) in the discovered place

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92
The flotsam should be quantified = (2nd Country) discovered place

The value of the flotsam must be quantified according to Heritage Coefficient

\[ CP_p = 100 \left( \frac{C^e(x)}{63} \right) + 2 \]

A) In national waters – the value of the property

\[ CP_p = 100 \left( \frac{1}{11} \left( \frac{42}{63} \right) \right) + 2 \quad CP_p = 8 \]

B) In national waters – The value of a set of properties and/or commercial routes - the value of the property

\[ CP_p = 100 \left( \frac{1}{11} \left( \frac{46}{63} \right) \right) + 2 \quad CP_p = 8.5 \]

C) In commercial routes - the value of a set of properties

\[ CP_p = 100 \left( \frac{1}{11} \left( \frac{48}{63} \right) \right) + 2 \quad CP_p = 8.8 \]

D) In international waters – The value of the property

\[ CP_p = 100 \left( \frac{1}{11} \left( \frac{51}{63} \right) \right) + 2 \quad CP_p = 9.2 \]

E) In international waters – the value of a set of properties

\[ CP_p = 100 \left( \frac{1}{11} \left( \frac{53}{63} \right) \right) + 2 \quad CP_p = 9.5 \]

The country where the ship sunk and where it was found

Event = (1st country) discovered place

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The shipwreck is an event, discovered by divers, in a casual way or because of an investigation purposely

It could be in national

It may be on a new or old trade route, or conquest in national

It could be in international waters.
**Event** = (1st Country) Discovered place

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<td>(116E3)</td>
<td>5 32 60</td>
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<td>(126E3)</td>
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<td>(156E3)</td>
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<td>21 48 90</td>
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<td>(176E3)</td>
<td>8 56 62 76 104</td>
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<td>(206E3)</td>
<td>9 56 83 77 120</td>
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<td>(326E3)</td>
<td>150 177 190</td>
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<td>14 59 69 83 137 163 191</td>
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<tr>
<td>(346E3)</td>
<td>28 86 77 111 125 138 151</td>
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<tr>
<td>(356E3)</td>
<td>41 69 85 139 152 165 179 192</td>
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<td>(366E3)</td>
<td>14 58 71 86 140 153 166 190</td>
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<td>(376E3)</td>
<td>42 88 70 143 156 182 193</td>
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<tr>
<td>(386E3)</td>
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<td>66 113 127 194</td>
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<td>72 86 101 115 129 154 177</td>
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<td>73 87 102 116 130 155 181 196</td>
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<td>(436E3)</td>
<td>88 116 130 156 182</td>
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<td>(446E3)</td>
<td>103 117 131 157 183 197</td>
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<td>(456E3)</td>
<td>118 132 144 158 170 194</td>
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<td>(466E3)</td>
<td>145 171 185 200</td>
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<td>(476E3)</td>
<td>149 169 172 186 201</td>
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<tr>
<td>(486E3)</td>
<td>180 172 186 201</td>
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<tr>
<td>(496E3)</td>
<td>174 188 222</td>
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</tbody>
</table>
They are the resources that must be taken into account to value the underwater cultural heritage.

In order to determine the heritage economic valuation, the first table of the Heritage Coefficient (jurisdiction and norm system) of each involved country must be set up. As an example, the table in Argentina on the subject, underwater cultural heritage and its normative and thematic scope will be presented.

On the other hand, it is necessary to take into account the different domain states, which can be presented in Argentina:

- The legal declaration of underwater heritage of the rescued pieces (they are of precarious domain) and as they are declared they are registered
- Ship domain that can be of a private enterprise or of the State private
- The sites, when they are legally declared turned to be registered (they are of precarious domain). The sites where the pieces were found may belong to different domain states:
  - international domain beyond 200 miles in offshore waters;
  - domain of the State, maritime waters within 200 miles;
  - domain of individuals when the course of water passes through a domain of a private person.

This domain hierarchy brings with it different types of legal problems. The Argentine jurisprudence through the document presented by Luis Gustavo Losada on the "misappropriation of treasures and archaeological and paleontological goods" where in
item III "the discovery of treasures in jurisdictional waters" denotes that the occasional discovery of cultural property in such waters has a specific legal regime.

In the first place, it should be noted that the sea, river or lake is a real estate, included among the public goods of the State. Boats that moor on the coasts of the seas or rivers of the Republic, their fragments and the objects of their cargo are considered among private property of the State. In the last case such goods are not susceptible of private appropriation, as they are cultural goods.

Treasures discovered in jurisdictional waters belong exclusively to the party State. It should also be remembered that law 23968 on the establishment of maritime spaces establishes the country's full sovereignty over airspace, sea bed and subsoil. An exclusive economic zone is assigned for the purposes of exploration, exploitation, conservation and management of the living and non-living natural resources of the waters overlying the seabed and other activities for exploration and economic extraction of the area. In this area, the Nation exercises all its fiscal and jurisdictional powers, preventive and repressive, in matters of taxation, customs, health, exchange and immigration.

This does not mean that the State cannot agree with private individuals on the exploration of the sea and establish, in this case, percentages or rewards on the eventual discovery of valuable heritage. In the case of the discovery of non-cultural treasures at sea, there are special cases in the international context that merit certain considerations.

A long legal dispute over the rights of a treasure faces Sea Search Armada (SSA) USA against the government of the Republic of Colombia. The conflict began in the 80s, when the company claimed to have located the San Jose galleon, sunk in 1708 by British forces in Colombian waters, with a fabulous cargo of gold. In 1994, the company filed a lawsuit in the city of Barranquilla, alleging ownership of what was found in the galleon, because it was located in an economically exclusive zone, in which the Nation exercised sovereign rights only regarding the exploitation and conservation of natural resources. In 2007, the Supreme Court of Justice of the Republic of Colombia ruled that the pieces that were found in San José were catalogued as of historical, artistic and archaeological value and would be owned by the country. Only the 50% of the extracted inventoried pieces as treasure were going to be given to the Company (SSA-USA). However, the parties did not reach an agreement. SSA-USA filed a lawsuit in the District Court of Columbia (USA) with which it sought compensation for U$D 17,000.00, as a result of the alleged breach of a contract that subscribed to the Colombian State. The District Court of Columbia ruled in favour of Colombia in the legal dispute over the parts of the San Jose galleon. The process has not been closed yet; the treasures of San Jose continue to be uncertain.

As noted, the rules of appropriation of a treasure in jurisdictional waters of a country are not clear and give rise to long legal disputes. Even though the 2001 UNESCO Convention on Underwater Heritage was an important step in legislating on controversial issues in this regard, many State parties have issued legal norms opposing the agreement (Colombia). In itself, the search for treasures in maritime waters will depend on the legislation of each State or agreements to that effect, both as regards their search conditions and the benefits of third parties (especially treasure-seeking companies).

**A very special case of a legal declaration, but without being declared "underwater heritage"**

On 13th March 1770, the British war sloop-of-war H.M.S. (His Majesty's Ship) Swift, from the Malvinas Islands, was sunk in the Deseado estuary, coast of the present province of
Santa Cruz, Argentina. Three people died, but 90 arrived at firm land. The Australian Patrick Rodney Grower, a direct descendant of a survivor, travelled to Puerto Deseado in 1975, carrying the diary of his ancestor with him in which he recounted the shipwreck.

With the narration of the archaeologist Dolores Elkin, who says: "This visit was the seed of an adventure carried out by a group of young divers from Puerto Deseado, who found remains of the sloop-of-war in an incredible state of conservation, thanks to the low temperature of the water and the sedimentary cover that had protected the ship and its contents."

In the 1990s, Elkin created the official program of underwater archaeology in Argentina. In 1997 Elkin directed the submarine investigation in the Swift sloop-of-war, summoned by the Brozoski Museum of Puerto Deseado.

It was registered as Cultural Heritage of the province of Santa Cruz under the scope of the Provincial Law 2472 and its amending law 3137 for the archaeological and paleontological properties of the province. By the Legal Declaration Nº 13/2003, "Provincial interest is exhibited the Swift sloop-of-war two centuries under the sea, through the regional museums Mario Brozoski (Puerto Deseado) and Father Manuel Jesus Molina (Rio Gallegos)" was dictated.

**PROPOSAL: Description of heritage principles**

These principles, considered as fundamental, mark the order in the normative system

**1st Principle:** "All the goods rescued (ship and pieces being moved) become part of the treasury of each country that is involved".

**2nd Principle:** "The site (s) and movable property must be previously legally declared to enter into the heritage economic system that contains them through an economic investment fund called underwater".

**3rd Principle:** "The actors have the mission of protecting heritage goods. They must first pass through the heritage valuation process, through the inter-subjective interpretation with the object to be valued. These should culminate with a contract and/or agreement and/or treaty. This procedure will depend on the jurisdiction to which the actor belongs".

Professionals (archaeologists, palaeontologists, etc.) who intervene in the rescue of the site must be registered in their country. They must present the underwater extraction and rescue project in the official enforcement body of corresponding jurisdiction/s. They must present a mapping of location (data that is within the Convention). This tool will serve for its approval; without the approval it would be an illegal case of extraction.
### ACTORS

<table>
<thead>
<tr>
<th>Direct</th>
<th>Lawful acts</th>
<th>Illicit acts</th>
<th>Indirect</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(0; 1]</td>
<td>(-1; 0]</td>
<td>All bodies responsible for the protection of heritage in all jurisdictions of each country</td>
</tr>
<tr>
<td>Researcher/s: archaeologist, palaeontologist, etc.</td>
<td>With authorization, of registered and unregistered pieces</td>
<td>Without authorization</td>
<td></td>
</tr>
<tr>
<td>Diver / rescue company</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Owner of the ship (country of origin - flying flag)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Owner of the location where the boat sank (country)</td>
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<td></td>
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</tbody>
</table>

All these actors must be valued and evaluated within the methodology together with what is rescued and with the site/s where the archaeological underwater site is located. For this, a location mapping of the pieces is required. This will determine the number of pieces each site has.

This goes to a contract or assessment agreement and heritage appraisal. The result goes to a separate fiduciary fund for heritage economic investment (involving all the states parties that have underwater deposits and the archaeologists who investigate and rescue those goods). The remuneration will come from that fund and divided according to the heritage valuation of each site and the heritage valuation of the piece and/or collection of the pieces.
Theoretical legal framework

To enter the world of science it is necessary to understand that this is handled with different types of research methodologies. For this case the search for opposites is used to analyse the problems of the legal system. It seeks to rescue the normative parameters that establish their internal order.

Problematic: Theory of the legal system

This section is based on the publication called "Manual of legislative technique" published by Piedad García Escudero Márquez (2011) where she describes that the normative legal order is impossible to know because it exceeds the quantitative limits. Not only the addressees but also the legal operators are not capable of covering such a number of rules, which produces what Carnelutti says: The legal system, whose most important merit should be simplicity, has unfortunately become a very complicated labyrinth in which those who should be the guides cannot get their bearings.

This proliferation of laws is a consequence of the increase in the scope of State action, for example as in Argentina in the area of heritage where the state is not introduced in the economic process because it only gives answers from the legislative technical point of view where patrimonial protection laws are proposed (grouping of assets), being special laws that also need continuous assistance and reform due to the acceleration of the changes in social reality.

The diagnosis of the problem is based on the complexity of the situations that the law must regulate: the multiplication of the law sources and the increasing technicality. All this causes a legislative expansion, a loss of the quality of the laws, as for its technique, as for its systematic coherence or its content.

Legislative proliferation is part of legal proliferation in general, joining abundance of laws and other norms to the abundance of administrative and judicial decisions as well as the development of legal literature, which we should take into account when trying to approach the subject by demanding methods to deliver simplicity and clarity.

The legislative technique is not intended to analyze each individual law. One of its greatest concerns is the unity and coherence of the legal system, in which there must be no contradictions and inconsistencies between the different rules that make it up, which may create perplexities in affected subjects and in the applicators of the Law.

There are structural defects that generate themselves a new regulation to correct the detected defects and also the deficit in the intensity of its effectiveness (called legislative hypostenia).

- The great instability of the norms, subjected to incessant and capricious modifications until actually making them instantaneous.
- The intense peculiarity of laws, which leads to a great fragmentation of the order
- The alarming fact of the growing incoherence of the legal order, in which the presence of antinomic or contradictory precepts is increasingly (a situation in which neither the citizen nor the legal professional knows what to expect, and is forced to ignore the order, often as a result of regulatory overlap or legal pollution).
1. PROPOSAL: Foundations for the normative organization

The objective of this paper is to show how the norms are inserted in the scope of a legal order to constitute a systematic and homogeneous set.

Answers to the above problems are based on:

- The introduction of rationality in legislation;
- The constitutional control of the quality of laws, as far as possible
- And even in the incorporation of technical elements, such as Informatics, to detect defects and inconsistencies in the laws and in the whole order. Both methodologies are incorporated in this last point: Heritage Coefficient and Heritage Economic Valorization, both subsumed by the theory of the legislative technique.

1.1. Development

Synthesis: Procuration of principles. Regulate the qualitative aspects to obtain the quantitative ones.

1st Principle: "Laws do not constitute isolated units, but form part of a system. So important for the legislative technique is the quality of the specific law as the homogeneity of the legal system and the absence of contradiction between the different norms that integrate it".

2nd Principle: "It is also necessary to take into account the way in which the incorporation of the norms to the legal system takes place: sanction, promulgation, and publication".

3rd Principle: "Therefore, it is of utmost importance to know which the law in force is in each historical moment. Legal security depends on it".

4th Principle: "The entry into force sets the day, month, year and place in which it is to take place. The subjects that subordinate the application of the norms are the time and the space as indispensable factors for their effective application".

5th principle: "The order of the amended laws will be that of their sanction. The modifications of precepts of the same law will follow the order of its internal division".

6th Principle: "A new law may abolish a previous law or may modify one or several laws".

7th Principle: "The legislator must always consider the problems of transience that the new law can provoke. The question is the incorporation of the new law to the legal order regarding the temporal succession with respect to previous rules to solve them in a clear and precise way, not leaving the resolution to the interpreter".

8th Principle: "The powers to the Executive and mandates of regulatory development must be express and precise in terms of their scope and execution term".
9th Principle: "Laws are not isolated elements. They are inserted in a legal system. They must maintain a coherence and sometimes maintain relations with other norms (or even other orders such as international ones) to which they are referred to".

10th Principle: "A code pretends to be a perfect and ordered system of legislation, based on the reason that produced the unification of the law. The code becomes a simplification instrument".

These are the first principles that must be fulfilled for inclusion in a methodological system of heritage valorization to become a tool of heritage economic impact.

2. Tool of application. Theoretical instructive

2.1. Description

The aim of this Instructive is to help the understanding of the confection of the tables of the software of the Heritage Coefficient.

The steps to prepare the first table (Component 1: Combination of jurisdictionary and normative hierarchy) are:

1st step: To investigate in each country all laws (especially on "underwater heritage") that mention natural and cultural heritage and the norms legally joint by the subject.

a) Ratification of international laws sanctioned by the nation. International treaties, agreements, recommendations or letters reported by UNESCO and/or the ICOMOS are analyses and verified if they are ratified by legal norms.
b) National constitution articles, where the natural and/or cultural heritage is treated.
c) Provincial constitution articles or how they are called in the country being analyzed, where the natural and/or cultural heritage is mentioned.
d) Laws: Look for natural and/or cultural heritage in the different laws. These may be divided into general norms: codes, regulative norms, etc. The specific norms describe the object to protect in detail. Example of the legal declarations, the case in question: "Swift sloop-of-war exposition is legally declared of provincial interest" or "declare the list or catalogue of heritage goods as cultural heritage: a, b, c, ... n."
e) Decree law: The search in the above mentioned law will be carried out in decree laws too.
f) Decree: The search in the above mentioned law will be carried out in decrees.
g) Resolution: The search in the above mentioned law will be carried out in resolutions.
h) General Resolution: The search in the above mentioned law will be carried out in general resolutions
i) Provision: The search in the above mentioned law will be carried out in provisions.

2nd step: If there exist subdivisions in each of the above mentioned matters (laws, decree laws, decrees, resolutions and provisions) they will be ordered. First the ones, coming from the Executive Power and then the ones coming from the Legislative Power in democratic countries and they will also be ordered in relation to the time of enactment based on the principles on the above mentioned legislative techniques.
**3rd step:** The final normative order is placed in the 1st row of the table in the “X” axis from low to high.

**4th step:** The court order is placed in the 1st column of the table in the "Y" axis and it is also organized from low to high. The organization of the legal territory is what it is called “jurisdiction”. The legal-administrative competitions are delimited by the jurisdictions held by each government that is analyzed. Jurisdictions are determined in some cases in the national constitutions.

**5th step:** Shaded areas are the application relationship between the jurisdiction and regulations.

a) Provisions are often implemented by executive bodies at all levels of government: local, municipal, provincial, national and world-wide; for this reason is not shaded. Therefore, the subsequent step is to place the real cardinal numbers, from low to high starting from local and finishing with world-wide.

b) Resolutions are applied by the executive, legislative and judicial powers, thus covering all organs of legal jurisdictions. Then the subsequent step is to number consecutively following the above mentioned, from low to high, beginning at the top of the following column.

c) Decisions in other countries have a variety of different ways to state them. They are ordered from low to high. The order is given by the organization of powers: 1st Executive, 2nd Legislative and 3rd Judicial Branch. Although the three branches are legally equal, for a correlative order based on the objective which is heritage assessment, the first one indicates the value, the second gives the value, and the latter has the tools to retain its value.

d) The municipal ordinance, is applied only at the municipal level (legislative, city council), for this reason boxes that correspond to local level are grayed (lower to municipal jurisdictional organization), ..., provincial, national and world-wide. This area will not be counted at the moment of placing the respective numbers.

e) Decree: The decree is implemented by the executive branch at all jurisdictional levels. May be that some countries do not apply it, in smaller towns. Therefore, this area is shaded in gray and will not be numbered. But if there are decrees about property located in these towns, this can be ambiguous and therefore it can or cannot be shaded, this depends on the legislation of the place of analysis.

f) Decree-Law: it is a rule that was made in a “de facto” government. It is not democratic. So it is minor before the law. It could have been used in all jurisdictional levels or not, that also depends on the available information. The blank boxes will be numbered. The gray boxes will not be taken into account.

g) Legal declaration: It is a specific norm. In this case it exists at provincial level.

h) Law: It is only applied at national and provincial levels. It is not applied in municipal or world-wide levels.

i) Provincial constitution: Articles corresponding to the natural and cultural heritage are incorporated.

j) National constitution: Articles corresponding to the natural and cultural heritage are incorporated.

k) World-wide: Treaties, recommendations, agreements or letters are generated by a country ratification national law. In this case, there is a homologation. Each cell is numbered consecutively as has been expressed, but the homologation is represented by two-way arrows on both sides of the boxes: ←→
6th step: How and where to insert the arrows.

Based on the pre-established order in the 1st row, the entire table is organized internally.

All arrows are as follows: 

Except for the homologous case that is represented or it may be, for example, that there is lack of information at world-wide level, so the nation weighs more and the representation, it is then like this:

As regards the diagonal arrows, they are represented as follows: which links the relation between two cells. It starts at 12 and finishes at 2 (see the example). This means that “cell 2 is heavier than cell 12”. So, regulations are divided into general and specific. The specific ones weigh more than the general ones, because what corresponds to specific regulations is confined to heritage protection. The specific one determines its higher protection at regulatory and jurisdictional level.

<table>
<thead>
<tr>
<th>1 General (legal declaration)</th>
<th>12 General (law)</th>
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<tbody>
<tr>
<td>2 Specific (legal declaration)</td>
<td>13 Specific (law)</td>
</tr>
</tbody>
</table>

But when there is a relationship between a standard (provision) and other standard (resolution) and between two different jurisdictions (municipal) and (provincial), the municipal resolution weighs less than the provincial provision.

a) Or perhaps, there is not any municipal regulation and there is a provision on heritage.

| 2 G | 13 G |
| 3 S | 14 S |

b) Or perhaps it is the opposite situation. There is no legislation at provincial level and there is at the municipal level. Or if there were a regulatory decree “<” a law, because it is complementary to the law.

| 2 G | 13 G |
| 3 G | 14 G |

c) Or there may be regulatory norms in both cases, so, the case is homologous. For example: ratification of a treaty by law.

| 2 G | 13 G |
| 3 G | 14 G |

d) But in this case, and it depends on the content of the rule, the jurisdiction will “weigh” more and therefore the arrow will be as represented in Chart a)

| 2 G | 13 G |
| 3 S | 14 S |

e) This case is repeated throughout the whole table when there is this type of correspondence.
f) When there is a match where the cells are separated by voided cells (grey), then the diagonal arrow format exists.

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<th>15 G</th>
<th>31 G</th>
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<tr>
<td>16 S</td>
<td>32 S</td>
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g) When there is a direct match of cells in a diagonal form (grey boundary zone) the arrow is used as the first case analyzed in points a), b), c) and d)

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<th>17 G</th>
<th>21 G</th>
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<td>18 S</td>
<td>22 S</td>
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<td>19 G</td>
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<td>20 S</td>
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E.g. The score of the legal declaration was calculated based on all the normative corpus that corresponds to value the underwater heritage, taking as an example the objects of the HMS Swift (sloop-of-ward) rescued by Dr. Dolores Elkin in Puerto Deseado, Province of Santa Cruz, Argentina. It was based on three tables:

1. Analysis, location and enumeration of the normative corpus (Annex 1)
2. Synthesis of the enumeration of the normative corpus
3. Scale that was determined with respect to the previous ones to then go to the corresponding formula of the Heritage Coefficient and calculate the value of the legal declaration of the case in question.
### 1st Component: Jurisdiction and Norms

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</table>

1. 18 → 25
2. 15
3. 11
4. 14
5. 12
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11. 2
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13. 4
14. 3
15. 1
16. 11
17. 12
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19. 8
20. 1
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23. 2
24. 1
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Rights of damage

This work section is based on the publication "Risks of development in the right of damages. Technology. Overcrowding. Consumption. Protection of health. Effect of scientific advances. Individual and collective damages. Consumers. Environment. Repair. Precautionary principle. Role of the State. Constitutional protection. Civil and Commercial Code" by LMR Garrido Cordobera (2016). He considers that the modern law that wants to progress in the search for the common benefit must fight for the just solution in damages, with the certainty that behind the damage is not any chance or impersonal or anonymous misfortune, but the act of a person or the creation of a risk and this is fully applicable to product liability and development risk. So, in a general sense, it can be said that the right of damages is intended to guarantee individuals compensation for certain forms of injury or impairment of their persons or their property and in its broadest aspect to ensure the community or groups the protection and redress of collective interests.

As regards the consumer product damage, the problem is of enormous interest and complexity because due to its nature it is both an individual and a collective damage, it affects communities of individuals and can occur in regions that escape the borders of a single country, always violating the right to quality of life.

It has always been maintained that it is necessary in matters such as the one that concerns a man-centered worldview that reinstates his supremacy and puts scientific and technical achievements at the service of society. It is to restore to the human being the dignity of being the nucleus, the center and not a mere statistical number or an economic instrument.
It is necessary to take into account that at present the criterion of considering the other man not as a being but as a number or a cost variable to be taken into account in case of compensation that it is not wrong. But there is another criterion that considers that this is an underestimation of the quality of life of the other and for the value of life itself. Then: What is the balance between these two criteria that act simultaneously in the Methodology of heritage economic valorization?

The position defended by Argentine law is that the victims cannot be sacrificed for the advancement of science (researchers: archaeologists, paleontologists, rescue technicians underwater divers), because this is not compatible with the notions of sustainable development or quality of life and even less with the rights of the man. It is also important to remember that future generations represented in the offspring are generally under risk.

There exists the tendency to attribute responsibility to the manufacturer, builder, or designer. It is said that the safety guarantee or better the security guarantee, corresponds to the structure of a free market and even to a planned economy corresponding to the nature of company and the assumption of the risks. Its activity is emphasized. The existence of a risk of activity has always been maintained, not as a basis for a subjective factor but in the objective of risk creation. It is necessary to define and consolidate the existence of such risks.

There is another current of thought that considers an unforeseeable and atypical risk and that it is unfair to make it fall on the manufacturer, builder or designer, because it is statistically ungovernable and unpredictable and therefore impossible to be ensured because its dimension is unknown. The level of accuracy of a product is provided by the continuous study of science and not on the thing itself.

There exists Rumelin’s legal theory on causality relation matters, by which the goal is reached in an involuntarily way.

Applying the criteria of what has been studied as regards the function and the police power it can be said that who contracts the obligation to provide a service - in this supposed control on the care of the heritage - the State must fulfill it in the appropriate way for the concretion of the purposes, so that as guarantor and protector of the common asset, its responsibility, especially taking into account that the cultural and natural heritage is a social good, will be engaged.

For all this, it is supported that the damage caused by "development risk" in the Argentine law, is a compensable damage, which must be indemnified; there is no rupture in the causal relationship. The time of the manifestation of the damage is what must be taken into account by the consolidation of the damages, and yet it is firmly considered that these serious damages must always be compensated.

We are faced here with a dilemma in legal security between the application bodies in Argentina (civil and commercial courts), which among their attributes provides the prescription and the need to take into account the characteristics of this type of damages and their Irreversible consequences, not only for the consumer but for their offspring as well.
There is a hierarchy of values to be taken into account:

1. On one hand, the innocent victim who crosses the unjust harm and who should not bear and whose only guilty conduct has been to believe in what he has been told about the safety or non-danger of accepting a certain product.
2. On the other hand, there is another victim (the whole society), because a collective damage appears.

Faced with the possible inexistence or insolvency of the manufacturers (builders and/or designers) in 2016 Dr. Garrido Cordobera proposed guarantee funds, an alternative operability, so that the repair is somehow satisfied, which does not exist in Argentina.

To enter into a guarantee fund, it is necessary to transpose the values of the qualitative aspects (object, event, age, authenticity, historical situation, geographical location, authors, etc.) to quantitative aspects by means of a suitable methodology, as the Heritage Economic Valuation Methodology. This methodology has the monetary unit of property derived from the administrative structure of each country for which the price is calculated. The hypothetical example only calculates the extraction of the objects giving the corresponding economic valuation. The rest (boat, event, etc.) belongs to another country/ies and at the moment there is no such information.

<table>
<thead>
<tr>
<th>Denomination</th>
<th>Partial results</th>
<th>Higher level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antiquity of the flotsam sighting: 2017 – 1982 = 35</td>
<td>$F(t) = \frac{10}{1000} \cdot x + 1$</td>
<td></td>
</tr>
<tr>
<td></td>
<td>$F(t) = \frac{10}{1000} \cdot 35 + 1$</td>
<td></td>
</tr>
<tr>
<td></td>
<td>$F(t) = 1.35$</td>
<td></td>
</tr>
<tr>
<td>Historical value</td>
<td>$VH = \frac{F(t)}{TMh}$</td>
<td>$VH = 2 \cdot \frac{1.35}{3}$</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$VH = 0.9$</td>
</tr>
<tr>
<td>Event value as Heritage Coefficient</td>
<td>6.85</td>
<td>2124</td>
</tr>
<tr>
<td>Value of the use of the property</td>
<td>25</td>
<td>35</td>
</tr>
</tbody>
</table>

\[
V_{Event} = 1.35 \cdot \left(0.9 + \frac{6.85}{2124} + \frac{25}{35}\right)
\]
\[
V_{Event} = 1.35 \cdot \left(0.9 + 0.0032 + 0.71\right)
\]
\[
V_{Event} = 1.35 \cdot 1.61
\]
\[
V_{Event} = 2.17 \text{ Heritage point}
\]
1st Country: result of the event (discovery)

\[ Ve(t) = \sum V1(e^{p(t-t_i)} - 1) \cdot \Delta(t-t_i) \]

\[ Ve(t) = 2.17 \cdot (2.73^{0.012(2017-1982)} - 1) \cdot \Delta(2017 - 1982) \]

\[ Ve(t) = 2.17 \cdot (2.73^{0.012 \cdot 35} - 1) \cdot 35 \]

\[ Ve(t) = 2.17 \cdot (2.73^{0.42} - 1) \cdot 35 \]

\[ Ve(t) = 2.17 \cdot (1.52 - 1) \cdot 35 \]

\[ Ve(t) = 2.17 \cdot 0.52 \cdot 35 \]

\[ Ve(t) = 39.42 \text{ Hp} \]

\[
HMU = \frac{\text{Expenses} + \text{Resources}}{HPU \cdot (100\text{HP}) \times \text{Amount of declared property in a country}}
\]

1\text{st Country} = Ve(t) \times HMU_{1\text{st country}}

1\text{st Country} = 39.42 \times HMU_{1\text{st country}}

| Flotsam (2\text{nd country}): Heritage valuation of the 2\text{nd principle} |
|--------------------------------------------------|-----------------|-----------------|
| DENOMINATION                                     | PARTIAL RESULTS | HIGHEST LEVEL |
| Antiquity                                        | 2017 - 1770 = 247 | 3.47           |
| Historical value                                 | 3.47            |                 |
| Value of the ship sunk in international territory (supposed) | 9.2 | 2124           |
| Value of the use of the property                 | 25              | 35             |
| Constructive value                               | 2               | 2              |
| Value of biotechnical, morphological, environmental aspects | 24 | 25             |
| Value of land, property buried without knowledge of its existence | 1 | 1            |

\[ F(t) = \frac{10}{1000} \cdot x + 1 \]

\[ F(t) = \frac{10}{1000} \cdot 247 + 1 \]

\[ F(t) = 2.47 + 1 = 3.47 \]

\[ VH = \frac{247}{15} \]

\[ VH = 3.47 \]

\[ VP_{ND} = \text{Flotsam 2nd Country} = 3.47 \left\{ \frac{9.2}{2124} + \frac{25}{35} + \frac{2}{2} + \frac{24}{25} + \frac{1}{1} \right\} \]

\[ VP_{ND} = \text{Flotsam 2nd Country} = 3.47 \left[ 0.004 + 0.71 + 1 + 0.96 + 1 \right] \]

\[ VP_{ND} = \text{Flotsam 2nd Country} = 3.47 \times 7.14 \]

\[ VP_{ND} = \text{Flotsam 2nd Country} = 24.77 \text{ Hp} \]
2nd Country: result of the flotsam

\[ VP_C(t) = VP_c \cdot e^{-\alpha \cdot t} \]
\[ VP_C(t) = 24.77 \left( 2.72^{-\frac{\ln2 \cdot t}{30}} \right) \]
\[ VP_C(t) = 24.77 \left( 2.72^{-\frac{\ln2 \cdot 3.47}{30}} \right) \]
\[ VP_C(t) = 24.77 \left( \frac{1}{2.720.69 \cdot 0.11} \right) \]
\[ VP_C(t) = 24.77 \left( \frac{1}{2.720.079} \right) \]
\[ VP_C(t) = 24.77 \left( \frac{1}{1.08} \right) \]
\[ VP_C(t) = 24.77 \cdot 0.92 = 22.93 \, Hp \]

\[ V_0 = \sum VP_{Nd} + VP_c(t) \]
\[ V_0 = 24.77 + 22.93 = 47.70 \]

\[ V_a(t) = V_0 \left( e^{P(t-50)} - 1 \right) \cdot \Delta(t-50) \]
\[ V_a(t) = 47.70 \left( e^{0.02(247-50)} - 1 \right) \cdot 1.97 \]
\[ V_a(t) = 47.70 \left( e^{3.94} - 1 \right) \cdot 1.97 \]
\[ V_a(t) = 47.70(51.41 - 1) \cdot 1.97 \]
\[ V_a(t) = 47.70 \cdot 50.41 \cdot 1.97 \]
\[ V_a(t) = 473478 \, Hp \]

\[ HMU = \frac{\text{Expenses + Resources}}{\text{HPU \,(100HP) \times Amount \,of \,declared \,property \,in \,a \,country}} \]

\[ 2nd \, Country = [VP_C(t) + VP_{ND} + V_a(t)] \cdot HMU_{2nd \,country} \]
\[ 2nd \, Country = [22.93 + 24.77 + 473478] \cdot HMU_{2nd \,country} \]
\[ 2nd \, Country = 473826 \cdot HMU_{2nd \,country} \]
3rd Country: Result of the collection of the objects

\[ VP_{ND} = Collection\ 3rd\ Country = 1.27\left\{ 61.73 + 0.63 + \frac{11}{2124} + \frac{366.18}{2124} \right\} \]
\[ VP_{ND} = Collection\ 3rd\ Country = 1.27\left\{ 61.73 + 0.63 + 0.0051 + 0.172 \right\} \]
\[ VP_{ND} = Collection\ 3rd\ Country = 1.27 \times 62.53 \]
\[ VP_{ND} = Collection\ 3rd\ Country = 79.42\ Hp \]

\[ Ve(t) = \sum V1(e^{\rho(t-t_i)} - 1) \Delta(t - t_i) \]
\[ Ve(t) = 79.42(2.73^{0.012(2017-1990)} - 1) \Delta(2017 - 1990) \]
\[ Ve(t) = 79.42(2.73^{0.012 \times 27} - 1) \times 27 \]
\[ Ve(t) = 79.42(2.73^{0.32} - 1) \times 27 \]
\[ Ve(t) = 79.42(1.38 - 1) \times 27 \]
\[ Ve(t) = 79.42 \times 0.38 \times 27 \]
\[ Ve(t) = 820.52\ Hp \]

\[ HMU = \frac{Expenses + Resources}{HPU (100HP)x\ Amount\ of\ declared\ property\ in\ a\ country} \]

\[ HMU = \frac{34,310,000}{100 \times 81} \]
\[ HMU = \frac{34,310,000}{8100} \]
\[ HMU = 4235.80 \]
The right to damages must conform to these new limits and it must be understood that issues such as environmental damage or specifically that produced by the risk of development also generates unfair damage, which strives for its repair.

Man encounters a great power that can lead to prodigies or cause catastrophic damages.

**Conclusion**

The economic valuation methodology is not only a tool to quantify but also serves as a corrective tool. If the international legislation on underwater heritage is analysed, it is seen that each involved country can link the regulations with respect to other countries involved. The methodology has the ability to see the normative corpus broadly on this topic in question. If two countries are homologated the missing gaps between them will be seen.

On the other hand the system generates advanced scientific software which must be evaluated in order to avoid damages. So it is necessary to study the collateral damages that this can cause, to be a correct tool of heritage impact.

**References**


On May 5, 2011, Estonian fisherman sailing under the flag of Finland pulled out a figurehead and brought it to the port of Dirhami in Estonia. The National Heritage Board of Estonia received information about the finding on May 11 from a local journalist and immediately started the supervision procedure necessary to identify the location of the finding and finders. The ship was identified as fishing vessel *Florence*, attempts were made to contact the captain. Unfortunately, the captain was not willing to cooperate and as soon as the official had introduced herself, the call was disconnected and later attempts were ignored. The figurehead had been removed from Dirhami port.

Dirhami is a small port at the North-West coast of Estonia. Until 2011 there was also a small customs office there. It was obvious that the customs officer and the captain of the harbour preferred to be loyal to the so-called loyal customer. However, the visit of the inspector to the harbour turned out to successful. After a long conversation with the captain of the port and the customs officer, the explanation that storing cultural treasures on the port territory is legally equal to storing there the drugs, the captain of the vessel contacted National Heritage Board and agreed to hand over the culturally valuable find and the coordinates of the finding site.
National Heritage Board handed the figurehead over to Estonian Maritime Museum for temporary storage and preliminary conservation works for clarification of the circumstances. National Heritage Board contacted the colleagues in Finland immediately to find out if there was a wreck at the given coordinates. Finnish coast guard surveyed the site in the Finnish EEZ from where a figurehead was cached, and a 26 m long wooden sailing vessel was found at 70 m depth at the reported coordinates. The wreck was inspected and video recorded by ROV. The coast guard confirmed that the galleon figure was from this wreck as there was a fresh mark of damage on the stem where the figure had been attached.

**Figurehead**

A full-length figurehead had preserved attached to the sternpost. The figurehead is of human size, ca 155 cm tall man whose right arm is on its chest and left foot stepping slightly forward. The figure stands on a step in the stem position and is mounted on scroll bases. The left arm is broken, probably there is part of the hand preserved attached to the waistline together with an oval item that may be a hat. The figure is wearing a neck cloth, long trousers and presumably double-breasted coat. According to the garments the figurehead can be dated to 19th century.

In the 19th century often a bust was used as a figurehead, but also the number of standing figureheads grew. In numerous cases the owner of the cargo vessel ordered his own figure as a figurehead (Stammers 2005, 61 - 63). The depiction of a human with a bended right or left hand on the chest has been one of the most used motives (see Hansen & Hansen 1990, Norton 1976, Stammers 2005). The origin of the figurehead will hopefully be clearer after the studies of the wreck and the figurehead itself (including studies of paint, etc.). It is possible that the figurehead depicts a merchant or a seaman.
Whose figurehead?

According to the coordinates the find was situated in the economic zone of Finland, thus diplomatic notes were exchanged between Estonia and Finland to decide the future of the figurehead and make sure if a wreck with fresh damages could be found at these coordinates. On Sept. 21st 2011 The Foreign Ministry of Finland officially confirmed that Finland does not have any ownership claims for the historic figurehead, and confirmed that there was a wreck found. Estonian Maritime Museum started the conservation works and began preparations for the exposition of the figurehead. The figurehead is currently under conservation in Göteborg, Sweden.

Neither Estonia nor Finland have ratified the UNESCO Convention on the protection of underwater heritage yet. However, as the member states of UNESCO it is recommendable to follow its principles. Estonia is making preparations for ratification, but there are still some amendments to be made in several legal documents. One of the debatable questions has been the age of the protected wrecks as many important wrecks are much younger. According to the time-schedule the ratification is expected to take place at the beginning of 2019.

The preamble of the Convention emphasises the importance of underwater heritage as inseparable part of cultural heritage of the mankind and as an important part of the history of nations and states and their interrelations.

In case of wrecks the questions of the rights of ownership and of origin can be handled according different aspects –to whom belong the wreck, the cargo, personal items, human remains, etc. Cultural heritage is the common property of the humankind and thus the sites of wrecks are handled as holistic sites including the cargo and other items as well the archaeological and natural environment. The UNESCO Convention has not regulated the questions of ownership, but has left it to be regulated by international justice and has emphasized on the need to improve international cooperation instead. The common practice of the states is that the state owns all of the property that has sunk minimum 100 years ago and on the condition that the owner has abandoned/given up the vessel. The vessel is declared abandoned when a) the owner has not taken any actions about its property within 25 years of the availability of relevant equipment; b) there exists no relevant equipment within 50 years after the last notice of interest from the owner (see Boesten 2002, 110-113). There exists no universal definition for the definition of abandoned vessel. The wrecks are considered as international heritage and the main target is to safeguard them for their preservation and to prevent the looting.

According to Finnish legislation all the wrecks older than 100 years and situated in the territory of Finland are the property of the state. However, although the figurehead was found in the Finnish economic zone, Finland did not demand handing it over to Finland, but agreed to leave it to Estonia on determined conditions how to conserve and expose our common heritage.

Epilogue

The same autumn (23.10.2011) there was a news about shipping vessel Florence, sailing under the flag of Finland with four Estonian fishermen on board, in EEZ of Finland. In thick fog it hit a cargo vessel under the name Amazon sailing under Bahama flag. Florence drowned within a minute, the crew was saved.
References


Underwater archaeology in India: Progress and prospects

India is most prominently located in the Indian Ocean. With her over 7,500 km long coastline and 2.2 million sq. km. water area and over 5 millennium old known maritime history, the Mistress of the Eastern Seas, is a rich repository of underwater cultural heritage. Underwater archaeology—informally—started about four decades back in India. Conscious about the importance of underwater cultural heritage, the Archaeological Survey of India (ASI)—the premier institution for the search, study and preservation of cultural heritage of the nation—played an active role since the beginning. Establishment of Underwater Archaeology Wing (UAW) gave a much desired boost to the discipline.

India has been associated with the Convention for the Protection of Underwater Cultural Heritage since its initial stage. Since it voted in favour of Convention, India was clear about its importance and took steps towards its implementation. ASI was playing a leading role in the region, when suddenly the whole process got derailed. Recent advances have generated new hopes for progress, not only for underwater archaeology, ratification of Convention but also for major regional cooperation in this area. The paper deals with the progress of the subject outlining the prospects based upon the recent developments.

The Agreement between the Netherlands and Australia concerning old Dutch Shipwrecks: a model for bilateral agreements under the 2001 UNESCO Convention on the Protection of the Underwater Cultural Heritage?

Since the late 1950s, four VOC shipwrecks from the 17th and 18th centuries have been found in Australian waters. The 1972 Agreement between the Netherlands and Australia concerning old Dutch Shipwrecks established the Australian Netherlands Committee on Old Dutch Shipwrecks (ANCODS) to maintain and allocate artefacts retrieved from these wrecks, as well as to manage the shipwreck sites. This presentation will examine the 1972 Agreement in detail and consider whether it might be a useful model for bilateral agreements of the kind contemplated by Article 6 of the 2001 UNESCO Convention on the Protection of the Underwater Cultural Heritage (the UCH Convention).

For example, Article 1 of the 1972 Agreement transfers to Australia all of the Netherlands legal ownership of these shipwrecks (as successor to the VOC). While this may make the work of the ANCODS committee somewhat easier, is it necessary or even desirable that a bilateral agreement under the UCH Convention should determine ownership of shipwrecks?
Protection of the underwater cultural heritage of Sri Lanka through international cooperation

The underwater cultural heritage in Sri Lanka is legally protected by the Antiquities Ordinance of Sri Lanka from its very inception in 1940, and its amendment in 1998 accorded with the jurisdiction over the territorial waters of Sri Lanka.

The first exposure of Sri Lanka to underwater archaeology was in the very early 1960s, when a team of foreign sports divers discovered an unknown wreck in the “Great Basses”.

First attempts of substantial maritime excavation in Sri Lanka was “a survey of underwater archaeological sites within a context of reef environment and geomorphology” in 1989, funded by the Royal Geographical Society, the British Academy, and the British Museum.

In 1992 the Department of Archaeology of Sri Lanka (DASL), the Central Cultural Fund (CCF), Postgraduate Institute of Archaeology University of Kelaniya, Sri Lanka (PGIAR) and the Maritime Archaeology Department of the Western Australian Maritime Museum (MADWAM) pooled their resources to set up a multipurpose pilot project to train maritime archaeologists, and to compile a database of shipwrecks in Galle Harbor.

In 2001 the excavation of the Avondster in Galle Harbour was initiated, funded by the Netherlands Cultural Fund as a capacity-building exercise for maritime heritage management in Sri Lanka. The Sri Lankan Maritime Archaeological Unit (MAU) was mobilized for the project which is continued up to today.

Following discussions between the DASL and MADWAM in 2007, MADWAM was engaged as a consultant to undertake a maritime archaeological survey of Galle Harbour as part of an Archaeological Impact Assessment (AIA) process.

According to the Memorandum of Understanding between the Institute of Acoustics of the Chinese Academy of Sciences and the CCF in the Search for Wreckages of Zheng He's Fleets off the Coast of Sri Lanka in 2015, the two sides have agreed to carry out the surveys till the year 2020.

Factors affecting the ratification of the UNESCO Convention 2001 in the Asia and the Pacific region

To date only two countries (Iran and Cambodia) out of the 46 countries in the Asia and the Pacific region have ratified the UNESCO Convention on the Protection of the Underwater Cultural Heritage 2001. This is the lowest rate of ratification of any UNESCO region (less than 5%). What are the factors affecting the ratification, or more importantly the lack of ratification, of the 2001 Convention in the Asia and the Pacific region? What might be done to increase the numbers of ratifications? In the absence of ratification, what can be done to improve the situation in the region with regard to maritime archaeology, the protection of Underwater Cultural Heritage (UCH) and the underlying
practices of the 2001 Convention such as the Annex? This presentation considers the factors affecting ratification and presents a particular case study of international cooperation in Vietnam. It then suggests some critical success factors for good collaboration and cooperation.

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**Analysis and diagnosis of how the right of damage acts in the theory of legal order that leads to the study of software: Heritage coefficient, which is inserted within the methodology of economic valorization underwater heritage**

The cultural and natural assets must pass first through the legal instance emanated from the legislative process to be considered "heritage".

Better knowledge of the legislative technique allows people involved in the legislative process (parliamentarians, advisors, civil servants) to contribute to a better quality of laws. The aim of this paper is to provide the possibility of introducing improvements in parliamentary work at all jurisdictional levels using Informatics tools. From this last process the laws are ordered methodologically in what is called heritage economic valorization becoming a new tool that values the assets in their entirety, turning this tool into software. Each country has its own legal regime. Each heritage piece has its own identity. Each piece of property has its own economic valorization which leads to its own financial system. This financial system must be included in a fund separated from the rest in order to protect the World Heritage. That is why it is necessary the study from the perspective of the right of damages, on the effects that this tool causes and will cause in the future and where this right is presented in a much broader content than civil liability. The application will be seen on technological damages by accepting collective damages, with the responsibility of repairing avoiding damages. Both actions: techniques of the legislative process and right of damages are in the economic valorization of the underwater heritage, when it is taken as a tool of heritage impact.

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**International cooperation. Case study: Figurehead from a merchant ship in Finnish Exclusive Economic Zone**

In 2011 Estonian fishermen trawled by accident a figurehead from a wreck of a merchant ship, dated to 19th century. The wreck laid in Finnish economic zone, it was not marked on navigation charts. The figurehead is currently under conservation in Sweden and will be exhibited in the Estonian Maritime Museum.

The fishermen brought the figurehead to Estonia but did not inform the officials.

The case study will reflect on the debates between various authorities and the fishermen as well between authorities of Estonia and Finland. The case study helps to give an overview of regulations and various legal issues in protection of underwater heritage.