

**In occasion of the**  
**10th anniversary of the Convention on the Protection of the Underwater Cultural Heritage**

***Scientific Colloquium***  
***on the Factors Impacting Underwater Cultural Heritage***

*Proceedings*  
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## **Introduction**

On the occasion of the 10th anniversary of the Convention on the Protection of the Underwater Cultural Heritage, UNESCO organized a Scientific Colloquium on the Factors impacting Underwater Cultural Heritage and a Regional Meeting on the Protection of the Underwater Cultural Heritage in cooperation with the Catholic University of Leuven, the University of Gent, the Flemish National Commission for UNESCO and the Flanders Heritage Agency.

The Scientific Colloquium brought together reputed international scholars, representatives from archaeological services and concerned enterprises for a scientific exchange on the eminent factors impacting underwater cultural heritage. The participants explored ways of developing positive collaboration in the mitigation of activities adversely affecting this heritage. A regional meeting for Europe open to State representatives and invited expert speakers took place after the colloquium. UNESCO also organized an evening talk for the public on 12 December 2011 in the Free University Brussels and an excursion to the medieval Cog workshop in Antwerp on 16 December 2011.

All events were a great success and surpassed prior expectations. More than 200 reputed experts and State representatives from 20 EU countries as well as observers from the European Commission and the USA attended.

The papers and videos of the various sessions will be made available on the Conference Website which also includes general information on the events ([www.unesco.org/new/en/culture/themes/underwater-cultural-heritage/impacting-factors](http://www.unesco.org/new/en/culture/themes/underwater-cultural-heritage/impacting-factors)).

## **The Scientific Colloquium**

The Scientific Colloquium on the Factors impacting Underwater Cultural Heritage was held at the prestigious Royal Library of Belgium in Brussels and lasted for two days. It brought together State representatives, international scholars, representatives from archaeological services and

concerned enterprises. They undertook to develop a basis for a future positive collaboration in the mitigation of activities adversely affecting submerged heritage.

Irina Bokova, the Director-General of UNESCO, began the colloquium by highlighting the importance of underwater cultural heritage and the need to protect it from contemporary threats. In her video message she also spoke of the important role played by the 2001 Convention in achieving these ends. She stressed that since its adoption ten years ago, the Convention had emerged as the most important international legal instrument for the safeguarding of underwater cultural heritage. It provided State authorities, policy makers and experts with much needed guidelines, practical protection tools and cooperation mechanisms while also setting ethical principles for all activities related to such heritage. By creating internationally accepted standards, the Convention also served to strengthen the discipline of underwater archaeology. She recognized the pivotal role of underwater archaeologists, researchers and other specialists in furthering the objectives of the Convention, particularly in regard to information-sharing and respecting the principles and rules set forth in the Convention and its annex. She concluded by declaring that protecting the world's underwater heritage through a comprehensive implementation of the Convention needed to be a common effort with the steadfast engagement of local and national authorities as well as professionals in the field.

Mrs Bokova's speech was followed by welcome addresses by Professor Koen van Balen from the Catholic University of Leuven and Marnix Pieters from the Cultural Heritage Agency of Belgium. Both speakers stressed that the goal of the colloquium was to create a multi-disciplinary approach. By exploring historical, technical, legislative, environmental and economic facets of underwater heritage, they opined that heritage could serve as a catalyst for sustainable development if managed in a holistic manner. They then invited their expert colleagues to take stock of the numerous contemporary threats to underwater heritage and to examine concrete and sustainable solutions to the pressing challenges at hand.

After the two welcome addresses, Geoff Bailey from the University of York, spoke on the significance of underwater cultural heritage. He especially stressed the importance of prehistoric submerged sites. These sites contain information such as travel patterns of early humans and prehistoric animals, which can be traced quite clearly on the seabed. Experts also discovered mammoth cemeteries, large deposits of stone tools and previously unknown land connections and exchanges among civilizations. Bailey underlined the very strong possibility that the largest part of the development of humanity actually took place in coastal areas, which are now under water due to the rise of the sea levels and as such, indicated the particular importance of underwater archaeology in this regard. Thijs Maarleveld, president of ICUCH/ ICOMOS then asked how much underwater cultural heritage was actually under pressure and which solutions could be found. Finally Constantin Chera, President of the Scientific and Technical Advisory Body of the 2001 Convention encouraged the audience to see the future of underwater archaeology with a positive and entrepreneurial eye, wishing them every success in the debates to follow.

The Colloquium was then divided in seven different sessions covering various topics of pressing actuality.

## **1. Commercial exploitation, commercial archaeological interventions and international cooperation**

*Chair Katerina Dellaporta*

Michel L'Hour from the French DRASSM, Xavier Nieto, Director of the National Museum for Underwater Archaeology of Spain and Alexandre Monteiro from the Universidade Nova de Lisboa, Portugal spoke on the impact and the extent of looting and of commercial interventions in their countries. Pillaging was singled out as a main issue threatening underwater cultural heritage. They stressed the need for a strict follow up of each case of pillaging and destruction because only such action was likely to decrease these acts of vandalism. Legal recourse was indicated to be of the biggest challenges, as many European countries still accept the good faith justification. Therefore, even when an item at issue is discovered in the international art market, it is difficult to obtain its return.

Ole Varmer from the National Oceanographic and Atmospheric Administration (NOAA) of the USA spoke next about the upcoming centenary of the Titanic and the treaty giving it legal protection. He also illustrated the harmonious relation of this treaty with the 2001 Convention's principles and text. Ole Varmer also spoke about the salvage and tourism which has impacted the iconic wreck over the years.

Following that, Martijn Manders from the Dutch Cultural Heritage Agency, Netherlands, addressed the issue of outsourcing archaeological services to commercial professional services from the perspective of national authorities. In return, Antony Firth from Wessex Archaeology, UK, gave his views on the work of professional archaeological services in the UK from an archaeological contractor's perspective. He especially stressed the danger posed by the short life time of firms and the practice of storing data on private computers or in privately held databases, which become inaccessible when these firms close.

## **2. Trawling and fishing**

*Chair Thijs Maarleveld*

The session on the impact of trawling and fishing on underwater cultural heritage showed that, indeed, a very large quantity of sites is impacted negatively by trawling activities. Many sites show deep trawl marks. Michael Brennan from the University of Rhode Island, USA, spoke about the quantification of such trawl damage on pre-modern shipwreck sites and showed some case studies from the Aegean and Black Seas. Thijs van Kolfshoten and Margot Kuitems, Leiden University, Netherlands, spoke about the impact of trawling and fishing on Dutch underwater cultural heritage sites.

Next, Philip MacMullen from the Sea Fish Industry Authority, UK, provided the views of the industry. He also warmly offered cooperation in the protection of submerged sites, stressing that much information is available on existing sites in the archives of the fishing industry and is used for spatial planning. This information could be of great use to underwater archaeology.

### **3. Construction works**

#### *Chair Thijs Maarleveld*

Jørgen Dencker from the Viking Ship Museum in Roskilde, Denmark, presented the ongoing work in the area of the planned Femarnbelt Fixed Link, a new Baltic tunnel linking Denmark and Germany. He explained how several shipwrecks had been found in the framework of the project and will now be researched as far as needed and possible. Andrea Otte from the Dutch Cultural Heritage Agency, Netherlands, spoke on the Maasvlakte 2 Extension Project, which will extend the Port of Rotterdam. Alexandre Monteiro from Portugal then intervened, giving several negative examples of coastal development and waterfront construction such as city, dyke, dam and marina building impacting underwater cultural heritage in a destructive manner. It was however also stressed that industrial projects can provide a considerable opportunity for archaeological research and facilitate surveys.

### **4. Developing the seabed, resource extraction and renewable energy development at Sea**

#### *Chair Nicolas Flemming*

Iain Shepherd from the Directorate-General for Maritime Affairs and Fisheries of the European Commission opened the session with a presentation on the need for marine data collection and the ongoing European project to assemble all such data in one location. Then, Brian Jordan from the Bureau of Ocean Energy Management, USA, spoke about energy development on the US Outer Continental Shelf and the connected challenges in locating, studying, and protecting underwater cultural heritage. The impact of oil and gas drilling operations on archaeological sites and their assessment and protection was then addressed by Amanda Evans from Tesla Offshore, USA. A positive example of cooperation between the industry and archaeology was given by Andreas Olsen from the Swedish National Maritime Museums. He described the cooperation between the industry and archaeological services in the Nord Stream Baltic pipeline project, where they discovered many shipwrecks due to the cooperation.

Andrew Bellamy from the British Marine Aggregate Producers Association (BMAPA), UK, spoke on the recovery of sand and gravel off the UK coast and the historic artifacts found in the course of this work. He illustrated the interplay between the presence of interesting material to be extracted for construction work and the presence of historic material, as for instance, traces of ancient human presence. He also stressed the strong will of the

industry to cooperate with archaeological services and the efforts undertaken to raise awareness in the concerned work forces.

Finally, Martijn Manders, Dutch Cultural Heritage Agency, Netherlands and Antony Firth, Wessex Archaeology, UK spoke on the impact wind farm projects have and may have on the submerged heritage in the North Sea.

## **5. Environmental impact and climate change**

*Chair Koen van Balen*

Alar Rosentau from Estonia spoke on the global sea level rise and the information that underwater cultural heritage can provide in this regard.

After this, Henrietta Mann, Dalhousie University, Canada presented her research on new bacteria discovered on the wreck of the Titanic and metal corrosion. She informed the participants about the impact and creation process of rusticles and the extent of destruction faced by metal wrecks over time.

Then, Stefan Wessman from the National Board of Antiquities of Finland spoke on the environmental impact assessment and archaeological heritage. He also referred to the recent Nordstream Pipeline project and stressed that the negotiations around the cooperation would have been easier had the 2001 Convention already been ratified by the countries concerned.

## **6. Tourism and the valorisation of underwater cultural heritage**

*Chair Marnix Pieters*

Pere Izquierdo I Tugas, from the Cultural Heritage Office of the Provincial Council of Barcelona, and Jordi Tresseras, from the University of Barcelona, in Spain, spoke on the rising opportunities for national economies from the valorisation of underwater cultural heritage. He gave in that regard, a very illustrative presentation of the economic importance of the protection of cultural heritage and, in particular, underwater cultural heritage.

James Delgado from the National Oceanographic and Atmospheric Administration (NOAA) of the USA, and Nicolas Flemming from the National Oceanography Centre Southampton, UK, spoke then on the impact of and opportunities arising from tourism to submerged sites. They called for the raising of public awareness and the joining of the various initiatives in this regard. A very illustrative phrase was mentioned in this regard: "Secrecy has not worked. It has been a disaster".

Next, Andreas Olsson from the Swedish National Maritime Museum presented his views on why the Vasa Museum had become such a major success. Among the causes he mentioned the draw of this very important wreck, its state of preservation, and also the visitor friendliness of the museum. He also presented a 3D virtual access to a shipwreck accessible on [www.nordewall.se](http://www.nordewall.se).

Sallamaria Tikkanen from the Maritime Museum of Finland spoke on the Nordic experience with public access through maritime dive trails and virtual simulation. She mentioned in that regard the importance of the Vrouwe Maria project.

## **7. Preventive conservation and development-led-archaeology between science and pragmatism**

*Chair James Delgado*

Martin Bates from the University of Wales Trinity Saint David, UK, spoke first on the role of archaeologists in understanding and preventing the impacts of marine industries on the prehistoric environment. Dimitris Sakellariou from the Hellenic Centre of Marine Research, Greece, then presented the latest research material and equipment used in his work, both on the shallow or on the deep seafloor. Nathalie Huet from the Department of Underwater and Undersea Archaeological Research (DRASSM), France, spoke on preventive conservation of wrecks, while Mark Dunkley from English Heritage, UK, encouraged the setting of national research agendas as a guide to mitigation.

Martin Segsneider from the Archaeological State Office Schleswig-Holstein, Germany, closed the circle of presentations by illustrating the impacting forces on a coastal landscape on the example of the Wadden Sea. Tourism, erosion and industry were designated as factors to be considered in the preservation of the submerged or half-submerged heritage of that area.

The presentations were followed by vivid discussions. Research posters related to the topics were then presented during the breaks.

The overall resulting impression of the two days of Colloquium was that underwater archaeology is progressing worldwide. Myriad problems are to be faced, be it with jurisdiction, with development, with looting and treasure hunting or with the lack of skills. However, the idea that underwater archaeology might be a minor facet of archaeology as a whole was rebutted by the vast range of work and achievement shown.

Indeed, the further the discussions progressed, the more it became clear that cooperation, exchange and cohesion in underwater archaeological research can bring major achievements and contributions to knowledge about the development and history of humanity. Conditions sine qua non were however the protection of underwater cultural heritage, the building of capacity and the raising of awareness in the public. These needs are addressed in the legal instrument of the 2001 Convention, which's anniversary was celebrated by the Colloquium.

## **Side Events:**

### ***Amazing History under Water***

*Evening conference, 12 December 2011*

An evening conference was organized at the Free University of Brussels to raise awareness among the general public. The well-attended conference brought together three of the most reputed underwater archaeologists: James Delgado (USA), Nicolas Flemming (UK) and Kenzo Hayashida (Japan). They spoke about the ancient sunken wrecks of Kublai Khan's Fleet, sunken cities, prehistoric landscapes and the famous *Titanic* wreck which will see its 100<sup>th</sup> anniversary in April 2012.

### ***Cultural Visit***

*Visit to the Kogge workshop, Antwerp, 16 December 2011*

The eventful week concluded with a much appreciated visit to the laboratories and workshops treating two Medieval Cogs in Antwerp. Members of the research team gave highly interesting presentations on the findings, research, conservation and dissemination of the shipwreck remains.

