

UN Decade of Ocean Science for Sustainable Development - Implementation Plan Review

1. Responder Details

Name of Responder

Robert Yorke

Institution Name

Joint Nautical Archaeology Policy Committee

Date

24th April 2020

Part 1 – UN Decade of Ocean Science for Sustainable Development

4. Do the vision, mission, and desired outcomes contained in the Implementation Plan reflect your expectations of the Decade? (Section 1.2)

The vision, mission and desired outcomes meet our expectations but how they are realised with consideration given to underwater cultural heritage is of utmost importance. We would like to stress that the underwater cultural heritage can be used as a social and scientific resource that can be used to help deliver many of the desired outcomes.

Clean Ocean: Cultural heritage can contribute to a clean ocean by enabling better understanding of the extent and risks of legacy pollution from shipwrecks, mining waste and land-based sources, which will also contribute to the Blue Economy. A clean ocean is also important for the long-term preservation of underwater cultural heritage.

Healthy Ocean: Cultural heritage is fundamental to understanding how many coastal and marine ecosystems achieved their present form, and to understanding the pressures upon them. Cultural heritage can be an important component of marine ecosystems.

Predictive Ocean: Understanding “Ocean Past”—human interaction with the historic environment—is essential to understanding our ocean’s past, present and to forecasting change and its implications for human well-being and sustainable development.

Safe Ocean: Cultural heritage informs the understanding of coastal inhabitation and intervention in the past and present—including the impact of previous catastrophes—to identify risks, present examples of human adaptations, and to encourage resilience.

Sustainably Harvested and Productive Ocean: Cultural heritage is a major contributor to the Blue Economy, especially through recreation and tourism; increasing productivity should enhance—not damage—irreplaceable cultural heritage.

Transparent and Accessible Ocean: Information about cultural heritage is fascinating to the public and enables engagement with many topics of Ocean Literacy; information about cultural heritage is also essential to understanding the past, present and future of humanity’s relationship with the seas and oceans.

Part 2 – Decade Action Framework

5. Do the scientific objectives address the main priorities for global ocean science over the Decade? (Section 2.1)

Objective 1: we welcome the opportunity for cross-collaboration in the process of acquiring data and providing open access data to help the studies of Cultural Heritage enter the mainstream of ocean science. A more ocean educated society will also lead to greater overall appreciation of the non-renewable Cultural Heritage resource and a desire for its investigation and preservation. This will result in societal benefits for maritime communities as they better understand and appreciate their heritage. It should also be noted that the underwater cultural heritage can hold a rich archive of data that reflects changes in the oceans from fixed points in time, and on a global scale. Analysis of the resource can feed valuable data back into mainstream science.

Objective 2: we particularly like the use of incorporating traditional knowledge into scientific recording systems. The preservation of and use of intangible oral heritage is important in conveying the importance of the need for a symbiotic sustainable relationship between people and the ocean.

Objective 3: mapping and sound scientific data (see above) are essential to guiding informed management. Mapping must incorporate Underwater Cultural Heritage (UCH) to ensure its sustainable management. A comprehensively globally mapped UCH will provide a unique data source for comparative, temporal and spatial scientific studies around the globe.

6. Will achieving the objectives lead to a step change in the way that ocean knowledge is generated and used? (Section 2.1)

Yes, cross disciplinary collaboration and data sharing will be beneficial to the understanding of our ocean's past, present and future.

Underwater cultural heritage projects acquire, over time, significant levels of scientific knowledge of the marine environment, which combined with marine technology can be better integrated and shared with other marine sciences. The challenge is to develop mechanisms for sharing data with marine sciences and encouraging a greater range of interdisciplinary research – which should be more easily achieved through mechanisms set out in the Decade Implementation Plan.

The inclusion of UCH will contribute to our understanding of the Oceans on a global scale and around a heritage theme that is universal. Our maritime heritage, charts human dispersal and global connections. The UCH is common and relevant to all nations making it an ideal vehicle to champion ocean knowledge.

The incorporation of the UCH into the Decade would provide a significant contribution to Ocean Literacy programmes.

7. Are there additional strategic orientations that should be included under any of the scientific objectives? (Section 2.1)

The scientific objectives have done an excellent job in considering the present and future capacity of the ocean and how we will understand it. However, it must not be forgotten that

data from the past can be incredibly informative and can be the baseline data on which to predict future oceanic conditions as is shown by these two publications
[https://www.researchgate.net/publication/266394597 Land Beneath the Waves Submerged landscapes and sea level change A joint geoscience-humanities strategy for European Continental Shelf Prehistoric Research/link/5431825e0cf29bbc127899d1/download](https://www.researchgate.net/publication/266394597_Land_Beneath_the_Waves_Submerged_landscapes_and_sea_level_change_A_joint_geoscience-humanities_strategy_for_European_Continental_Shelf_Prehistoric_Research/link/5431825e0cf29bbc127899d1/download)

<http://archmanche.maritimearchaeologytrust.org/downloads>

UCH can act as data sources from fixed dates – an underwater time capsule. Biological or mechanical changes since the date the UCH became submerged can be measured. A strategic approach is necessary to incorporate measurements that can be compared with each other to generate quantifiable global data sets.

By incorporating data about historic maritime communities and how they have interacted with the ocean, this will increase current society's ocean knowledge capacity and capability globally which ties in with Objective 1.

Objective 2 – *expanding ocean knowledge systems globally* should also look to the past to gain a full understanding of the current and future situations.

The use of UCH is even more crucial in objective 3 – *predict the whole ocean system*. This cannot be done without looking at past data to see the trends throughout history that have brought us to the present day.

8. Are there other examples of global scale outputs or benefits that should be highlighted under any of the scientific objectives? (Section 2.1)

The power of Citizen Science on a global scale cannot be underestimated. Using existing marine community networks, such as diving organisations or the international membership of the Nautical Archaeology Society, along with the driving force of the Ocean Decade will produce excellent citizen science project proposals that will generate vast data sources, expand our overall ocean knowledge and increase society's Ocean Literacy.

9. Are the criteria for endorsement of Decade Actions appropriate, and is the endorsement process clear? (Section 2.2)

Yes, the hierarchy of Decade Actions is clear and the vetting process for officially recognising Ocean Decade Actions is understandable.

10. Are the principles and approach to data, information and knowledge management clear and sound? (Section 2.3)

The principles are ambitious but worthwhile if achieved.

11. Do the capacity development principles and strategic framework cover global priorities for ocean science? (Section 2.4)

Yes.

12. Does the description of Decade engagement mechanisms provide adequate information on how you can engage in the Decade? (Section 2.5)

Yes, the plan outlines the many ways in which a person or institution can engage in the decade. The Key Stakeholders have been clearly thought out and as an UNESCO NGO the JNAPC would wish to become involved.

The instructions for being involved in Decade Actions, while still in their infancy, are logical and provide good guidance for those that are interested in engaging in this manner. The plan is to be commended for recognising that sharing of knowledge at a grass-roots level is just as important as influencing major policies.

We look forward to becoming part of 'Gen O' and encouraging our own stakeholders to do so as well.

13. Will the engagement mechanisms catalyse partnerships during the Decade, including the co-design and co-delivery of ocean science? (Section 2.5)

Definitely. Greater dialogue between the underwater cultural heritage and science communities will identify synergies that will significantly increase the transfer of scientific knowledge and develop research capacity. With greater inter-science dialogue, it will be feasible to develop common standards that will be of benefit to all marine sciences, including those applied to underwater cultural heritage.

14. Do you see a role for yourself and your institution in the Decade? (Section 2.5)

The JNAPC has a comprehensive membership of stakeholders in UCH who can bring expertise from many areas to the project. We do therefore see a role for ourselves.

Part 3 – Decade Implementation

15. Is the proposed governance framework adequate to ensure effective oversight and coordination of the Decade? (Section 3.1)

Yes, the framework appears to be logical and transparent.

16. If you are a resource provider, does the discussion of resource mobilisation provide adequate information on ways in which you could support the Decade? (Section 3.2)

See question 14:

The JNAPC has a comprehensive membership of stakeholders in UCH who can bring expertise from many areas to the project. We do therefore see a role for ourselves.

17. Are there other key metrics that should be collected to measure the progress of the Decade? (Section 3.3)

While metrics for numbers of activities and projects, and results of pure science investigations seem to be adequately covered in the implementation plan, details of ephemeral, but no less important, components of the Decade must also be collected. An example of this is quantifying and qualifying the success of the Ocean Literacy goals for the

Decade. Similarly, metrics for measuring the progress of underwater cultural heritage projects must be included to ensure the complete picture of the Decade is captured.

18. Do you have any other comments on the Implementation Plan?

It is strongly recommended that you consider adding experts in the field of underwater cultural heritage to your Executive Planning Group Members to ensure that you have included the full scope and possibilities available to the Decade of Ocean Science and Sustainability.

We also recommend that regular contact with the 2001 UNESCO Convention Secretariat will be essential. <http://www.unesco.org/new/en/culture/themes/underwater-cultural-heritage/contact/>

As a member of the Accredited NGOs for the UNESCO 2001 Convention on the Protection of the Underwater Cultural Heritage, we offer a formal link between the Decade and this group of expert organisations to assist in progressing the vision, mission and goals of the Implementation Plan. <http://www.unesco.org/new/en/culture/themes/underwater-cultural-heritage/partners/accredited-ngos/>