



Offshore Development: Shaping the Legacy for Marine Archaeology

MASIG One day Conference, 27 November 2025

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Overview

This document summarises the outcomes of the Marine Archaeology Special Interest Group (MASIG) one-day conference *Offshore Development: Shaping the Legacy for Marine Archaeology*, six years on from a previous session at the 2019 CIfA conference, reflecting on progress and identifying priorities for the sector.

The abstract for the 2025 session was as follows:

In 2019 the CIfA Marine Archaeology Special Interest Group presented the session ‘Offshore development: creating a legacy for marine archaeology’. Since then, we are better at collaboration, better at thinking beyond project boundaries and a number of initiatives are exploring how we produce and manage data more effectively and work with communities to better realise public benefit. Targets for decarbonisation and renewable energy, the ever increasing need for marine aggregates, and the growing volume of shipping traffic mean that we are experiencing an unprecedented period of seabed change. Now, more than ever, there is a need for the effective management and preservation of the marine archaeological resource. This session will use case studies to show how far we have come in six years, how initiatives are shaping ‘how we do things’ and will include a discussion session exploring what we need to do to secure the future of the profession.

The conference took place online over the course of the day and comprised six papers followed by a workshop style discussion chaired by Lauren Tidbury (Maritime Archaeology Trust) and Victoria Boothby (Haskoning). A summary of each of the papers is provided below, including an overview of some of the key observations captured through questions and discussion following each paper.

The papers and discussions highlighted clear advances in collaboration, development-led research (particularly landscape-scale palaeolandscape assessment), and growing recognition of the value of early engagement between developers, archaeologists, and regulators, alongside emerging improvements in heritage data systems and pathways for training and CPD. Across all talks, participants emphasised the need to move beyond reactive approaches by:

- improving data accessibility and standards, including an emphasis on collaboration and data sharing
- stronger training and workforce planning to fill skills gaps and provide opportunities for CPD
- strengthening advisory frameworks to provide clear guidance for developers and ensuring forthcoming changes to planning and environmental assessment processes reinforce, rather than weaken, heritage protection and public benefit
- community engagement as a source of public benefit and supporting public engagement while managing site vulnerability
- embedding integrated regional-to-national approaches (including across the land–sea interface) rather than project focus studies

Overall, the sector is better aligned than in 2019, but significant gaps remain, especially around skills availability, geoarchaeological assessment, data-release timelines, uneven curatorial capacity and the need to embed best practice under emerging changes to the planning system through the Planning and Infrastructure Bill and shift toward Environmental Outcome Reports.

The use of Artificial Intelligence

To align with best practice as set out in the CIfA statement on the use of Artificial Intelligence (AI), this statement is included to acknowledge the use of AI in developing this conference summary.

Copilot was used in January 2026 to provide a summary from the Microsoft Teams transcript recorded during the day conference in November 2025. The conference organisers and speakers are satisfied that the summaries generated by AI have been checked for accuracy and take responsibility for the factual accuracy of this document. The author of this document (Victoria Boothby) also declares that the use of AI within the project is responsible and lawful and complies with data protection and copyright legislation.

Session 1: The Profession

Reimagining the National Marine Heritage Record for England (Hefin Meara, Historic England)

The first paper, presented by Hefin Meara showcased the new Marine Heritage Record which has been updated as part of a long term program to streamline access to heritage data, the Heritage Information Access Strategy, or HIAS program. Historic England are the primary source for national data sets which include the National Heritage List for England, for designated assets, and also the National Marine Heritage data set.

The marine element of Historic England's National Record of the Historic Environment was first started back in the early 1990s, following on from the publication of a government white paper 'This Common Inheritance, which tasked the Royal Commission with creating and maintaining a record of archaeological material. Today, that record contains somewhere in the region of 53,000 records, mostly for shipwrecks and intertidal structures, along with additional supporting information, but this has always been stored using the same system as the terrestrial record.

Whilst this has the key advantage of allowing for marine and terrestrial data to be seamlessly interrogated, there are a number of disadvantages. Recording standards and information fields were very much focused on the 'terrestrial' which are not always ideal for recording marine information. There are also issues with coordinates and projections with the spatial elements of the largely terrestrial data sets recorded in British National Grid, which becomes less useful the further we get offshore. One of the key differences is that, for the marine data set, we don't know where the vast majority of the recorded wrecks (casualty data) are located and much of the information is buried in long text fields which are difficult to query.

Key features of the new system are as follows:

- built on Arches platform (open-source cultural heritage inventory)
- separates historic vessel (casualties) and wreck sites into linked entities, with a clearer representation of
 - multi-stage vessel histories
 - multi-candidate identifications for single wrecks
- allows detailed recording of
 - people, organizations, activities, artefacts
 - geophysical surveys, excavations, and management events
- enhanced capacity for
 - thematic studies
 - linking multiple data sources
 - public accessibility (full public launch expected ~2026)

Key points covered in the Q&A session which followed include

- Facilitating Data Submission: Practitioners are encouraged to submit reports and data directly to Historic England's dedicated marine historic environment record team, using established channels such as the Oasis system, to ensure all relevant information is captured and does not fall through the cracks. Specifically, through the Marine Data Exchange (MDE) Heritage Accelerator project, the backlog of 20 years of commercial offshore survey data will be drawn into the national record and integration with UK Hydrographic Office and Crown Estate datasets will be improved.

- **Public Accessibility and Launch Timeline:** The marine historic environment record is currently accessible via the Heritage Gateway, although a full public launch is planned for 2026. In the meantime, practitioners can request access or specific data by contacting Historic England staff directly.
- **Handling Commercially Sensitive Data:** There is ongoing debate about the timing of releasing commercially sensitive archaeological data, particularly data produced during offshore developments. The Marine Data Exchange Heritage Accelerator project is working to clarify expectations, with the aim that data will be deposited within six months of project consent, rather than waiting until after construction.
- **Charging and Data Models:** Historic England aims to make individual records freely accessible, in line with obligations for public data. However, larger scale data provision for commercial use may involve different models, with details yet to be finalised.
- **Integration with Terrestrial Records:** The new system primarily focuses on the marine zone but includes links to intertidal and some inland records. For more extensive inland data, users are directed to local authority historic environment records.
- **Sensitive Site Data and Public Access:** There is a recognised tension between open data policies and protecting vulnerable archaeological sites. While the general presumption is towards making data publicly available, particularly sensitive sites may have restricted information until appropriate statutory protections are in place, handled on a case-by-case basis.
- **Future Discussion:** The issue of whether public access to data increases site vulnerability was noted as a topic for further group discussion during the session.

The conversation highlighted the evolving landscape of marine archaeological data management, the push for transparency and accessibility, and the need to balance openness with site protection.

[Training and Work Experience for Marine Heritage – Alison James \(MSDS Marine\) and Peta Knott \(Nautical Archaeology Society\)](#)

Alison James, Director at MSDS Marine, outlined the growing demand for a skilled workforce in maritime archaeology, emphasising the sector’s evolution over the last two decades, particularly due to increased offshore development. She explained that while the sector is expanding and new partnerships are forming, there remains a pressing need for more effective management and preservation of marine resources, which hinges on developing the right skills in the workforce.

Key challenges identified included the lack of a sector-specific skills matrix, high staff turnover, a growing skills gap between university training and commercial requirements, and limited time and resources for in-house skills development. Alison stressed the importance of closer collaboration between academia and industry to ensure university courses reflect sector needs and highlighted that while many are eager to join the industry, applicants often lack the necessary practical and technical skills.

To address these gaps, MSDS Marine has implemented several initiatives.

- Participation in Level 7 heritage apprenticeships, offering formal training combined with work experience, though sector uptake remains low.
- Partnerships with other organisations (e.g., Haskoning) to facilitate knowledge exchange and specialist training, such as marine geophysics.
- Development of bespoke internal and external CPD training, including courses tailored to both archaeologists and non-specialists, mapped to National Occupational Standards.

- Hosting placements through schemes like Kickstart, providing practical experience and employability training for young people, and delivering paid internships for early career professionals.

Alison also highlighted the work of the Historic Environment Skills Forum as a valuable resource for sector-wide collaboration on skills development and encouraged wider participation. She concluded by emphasising the need for more partnership working and innovative approaches to training and placements, before passing over to Peta Knott to discuss the Nautical Archaeology Society's work.

The Nautical Archaeology Society (NAS), a registered charity with a 50-year history, operates internationally through its renowned training programme, now franchised in over 20 countries. Their mission centres on researching, recording, and safeguarding underwater and coastal heritage, involving a broad audience – from professionals to citizen scientists.

The NAS education programme, running for over 40 years, has trained more than 20,000 participants globally, expanding from a diver-focused approach to include non-divers and non-academics. In summary:

- The NAS delivers a structured, internationally recognised training programme that imparts practical archaeology skills, heritage awareness, and responsible access, empowering members to independently pursue maritime heritage work.
- The programme follows a three-stage qualification pathway, accommodating diverse backgrounds and skill sets, with flexible learning options including courses, fieldwork, publications, and both underwater and archival research.
- The NAS offers specialist and CPD-accredited courses on subjects such as underwater heritage law, submerged landscapes, conservation, digital illustration, geophysics, and photogrammetry, catering to professionals and non-professionals alike.
- The Society pioneers e-learning and blended course delivery, including a successful QGIS course developed in collaboration with industry experts.
- The NAS promotes innovation through practical experiences, providing access to various ROVs and adapting teaching to sector needs.
- They engage in sector-focused initiatives such as a polluting wrecks awareness course (with the MOD) and crowdsourcing projects like Welsh Wrecks, generating reports for government use.
- University students benefit from free memberships, discounted courses, and opportunities to bridge practical training gaps.
- The NAS fosters strong sector connections, organising bespoke training and exchange opportunities, exclusive site visits, and collaborative CPD events for professionals and avocational members.
- Public outreach is central, with community events and local heritage initiatives encouraging participation and stewardship.
- The NAS leverages the enthusiasm and transferable skills of avocational divers and community members to supplement professional capacity, demonstrating the effectiveness of volunteer-driven heritage work.

Looking ahead, NAS seeks collaboration with industry partners to develop public awareness and sector-relevant training, inviting input on future CPD offerings to ensure courses address current skills gaps. The Society's inclusive, adaptable approach positions it to make a significant contribution to workforce development in maritime archaeology.

Key points covered in the Q&A session which followed include:

- Skills Matrix: Historically, MASIG made a conscious decision to highlight the similarities between marine and terrestrial archaeology, promoting inclusivity by not distinguishing the disciplines. As such there isn't a dedicated skills matrix for marine archaeology. However, there is now a clear role for a marine-specific skills matrix, recognising the diversity within marine archaeology and the

potential to reference other specialised skills areas. MASIG proposes to revisit and discuss the issue in more detail.

- Collaboration: Collaboration with organisations beyond archaeology, such as the Geological Society, to develop broader skills matrices and training, especially for areas like submerged landscapes. The importance of cross-disciplinary partnerships was emphasised, to involve external experts to strengthen skills development within the field.

Session 2: Palaeolandscapes

Middle Palaeolithic Archaeology from Area 447, Southern North Sea (Rachel Bynoe, University of Southampton)

This case study, presented by Rachel Bynoe, presented findings from Middle Palaeolithic archaeology excavated from Area 447, located less than 20 km offshore from Walton-on-the-Naze and Clacton. The site was subject to aggregate dredging (approved in 2007) for beach replenishment, with material deposited along the Clacton–Holland-on-Sea coastline between 2014 and 2015. The prehistoric archaeological potential of these offshore deposits had been underestimated at the time, with limited mitigation put in place. However, community engagement following the project led to significant archaeological discoveries amongst the newly emplaced sands.

Key finds included an extensive collection of fauna (woolly mammoth, rhinoceros, horse, bison) and a notable assemblage of stone tools, in particular Middle Palaeolithic Levallois flakes and products, as well as earlier Acheulean hand axes. Despite the material being subject to dredging and beach redeposition, the Levallois artefacts were remarkably well preserved, suggesting a primary or near-primary context and low-energy depositional environments offshore. Analysis indicated expedient use of local resources, with some sampling bias possible due to the nature of public collecting.

The archaeological context was further refined using legacy seismic and core data from the extraction zone, identifying remnant channelised surfaces and low-energy environments with the best dating evidence from core VC23. Paired luminescence dating and palaeoenvironmental indicators (pollen, diatoms, molluscs) placed these deposits in late MIS 7 to MIS 6, suggesting a resource-rich ecotonal landscape proximate to an ancient coastline.

The study demonstrated the value of integrating archaeological finds with legacy geophysical and environmental datasets, highlighting the potential for re-examining archived cores. It also underscored the shortcomings of focusing only on palaeochannels in offshore investigations and the importance of broad, landscape-scale geoarchaeological assessment.

On a wider scale, the evidence from Area 447 contributes to understanding Neanderthal occupation and behaviour during MIS 7, reflecting their use of complex, resource-rich environments and challenging previous assumptions about the utility of submerged landscapes. The findings emphasise the need for proactive sediment coring, community engagement in monitoring, and robust, open data-sharing between industry and archaeology to unlock the potential of offshore prehistoric sites.

The section concluded with recommendations to move beyond a reactive, apologetic stance in requesting offshore archaeological investigations, advocating for collaboration with industry as a means to advance both research and heritage protection.

Key points covered in the Q&A session which followed include:

- **Preservation and Storage of Core Samples:** The discussion began with technical questions about how long core samples can remain viable for research, especially when stored under ordinary warehouse conditions rather than in cold storage. It was noted that these samples can stay well-preserved for four to five years, underscoring their potential value for future archaeological and palaeoenvironmental studies.

- **Unlocking Research Potential from Archives:** Participants highlighted the significant opportunities available from analysing previously collected and stored core samples, which allow for further scientific examination at relatively low cost.
- **Need for Systematic Study on Sample Longevity:** The conversation touched on the benefit of a dedicated research project to systematically evaluate how long core samples remain useful for analysis, identifying a gap in current knowledge and an area for future work.
- **Importance of Key Middle Palaeolithic Sites:** The value of certain archaeological finds, especially from significant Middle Palaeolithic sites, was emphasised, with reference to their outstanding importance for understanding both offshore and terrestrial records.
- **Comparisons and Broader Patterns:** Similarities between key sites were discussed, revealing patterns of technological activity and occupation in the lower Thames and coastal zones during the late stages of the last glacial period.
- **Towards a Holistic Landscape Approach:** The conversation stressed the importance of integrating marine and terrestrial archaeological perspectives, advocating a broad landscape approach rather than viewing these areas in isolation. This holistic method was described as an exciting and emerging trend in the field.
- **Sharing Knowledge with Stakeholders:** The group discussed the importance of communicating research results to external partners such as developers, aiming to strengthen relationships and enhance appreciation of the value of recovered material for wider palaeolandscape research.

Dogger Bank Wind Farm: Development-Led Palaeolandscape Research (Daniel Young, Haskoning)

Daniel Young, Principal Geoarchaeologist at Haskoning, presented an overview of ongoing work on the Dogger Bank Wind Farms (Dogger Bank A, B and C) and Sofia, highlighting the value of data originally collected for engineering purposes in advancing palaeolandscape assessment. This multi-year project, undertaken on behalf of several developers including SSE Renewables, Equinor and Vårgrønn (the Dogger Bank Wind Farms), and RWE (Sofia), exemplifies the value of collaborative, development-led research for palaeolandscape assessment.

The combined wind farms, located on Dogger Bank in the southern North Sea, cover an area larger than Greater London, with the capacity to power over seven million homes with a planned lifespan of 35 years.

Cultural heritage assessments have been ongoing since 2011, with multiple geophysical and geotechnical surveys informing both wind farm design and wider archaeological questions. Haskoning has adopted a regional approach to palaeolandscape assessment, integrating objectives and recommendations at each stage of reporting across all four wind farms. This approach recognises the challenges of identifying prehistoric sites offshore and addresses them through high-resolution mapping of palaeolandscapes, and in turn, archaeological potential. In summary:

- Dogger Bank's stratigraphy is shaped by complex glacial and post-glacial processes, featuring periods of incision, deposition, erosion and marine transgression.
- The project has significantly advanced our understanding of the palaeolandscape of Dogger Bank, identifying networks of palaeochannels and wetland zones significant for past human activity and resource use.
- Peat formation occurred on Dogger Bank between 15,000 and 9,000 years ago, spanning the late Upper Palaeolithic and early Mesolithic, with a range of wetland environments developing prior to marine transgression.

- Geoarchaeological review of nearly 500 borehole and vibrocore geotechnical logs allowed for targeted palaeoenvironmental assessments and robust ground-truthing of features and deposits identified in the geophysical data.
- Remotely operated vehicle (ROV) sampling during UXO surveys on eroded peat outcrops demonstrated the value of integrating different survey methodologies for data collection.
- Palaeoenvironmental studies revealed transitions from birch woodlands to coastal bogs and salt marshes, with signs of both natural and potentially human-induced burning events.

The culmination of the project is a detailed palaeolandscape map showing networks of palaeochannels, wetland areas, and zones of potential erosion. This map informs understanding of archaeological potential, related to resource access and preservation conditions, forming the basis for future investigations.

The project has addressed several sector priorities

- all project outputs will be shared with ADS and the Marine Data Exchange, ensuring broad accessibility
- geophysical datasets have been made available to academic researchers
- technical findings will be presented to non-specialists through tools such as an ArcGIS story map.
- the regional approach and proactive approach to the assessment of geotechnical and geophysical data sets, as well as the investigation of targets, including sampling peat outcrops during UXO surveys, illustrate a commitment to advancing offshore archaeological assessment beyond basic requirements
- early and ongoing engagement with curators and regulators has maximised sampling opportunities and promoted robust data sharing

The Dogger Bank wind farm project exemplifies a bespoke, landscape-scale approach to offshore cultural heritage assessment. Through integrated research, data sharing, and engagement with stakeholders, the team has advanced understanding of submerged palaeolandscapes and set a standard for future development-led archaeological investigations.

Key points covered in the Q&A session which followed include

- **Curatorial Knowledge Gaps:** There is a recognised need for increased Continuing Professional Development (CPD) for curators dealing with marine and offshore archaeology. Many curators, especially in regions like Scotland, feel underprepared and uncertain about what to request or require from offshore projects, highlighting the importance of targeted training and guidance.
- **Early Engagement and Bespoke Approaches:** Successful projects have benefitted from early involvement of curators and regulators, with bespoke, project-specific approaches rather than a one-size-fits-all model. Open communication and a willingness to ask questions have led to more productive collaborations and outcomes.
- **Guidance and Best Practice:** There is a clear demand for guidance to help curators understand what information is useful and what should be requested at different stages of offshore development. This is particularly crucial for those commenting on scoping documents or conditioning offshore developments, to ensure important data is captured from the outset.
- **Integration of Terrestrial and Marine Records:** Challenges remain in integrating geoarchaeological and palaeoenvironmental records across the land-sea interface, especially where different authorities manage onshore and offshore consents. This can lead to mismatches in approach and understanding.
- **Regulatory and Advisory Gaps:** In Scotland, marine licensing teams may lack training in marine historic environments, and with Historic Environment Scotland reducing its advisory role, local curators are taking on greater responsibility for marine planning advice, often with limited resources or expertise.

- **Regional Differences in Palaeolandscape Potential:** The potential for palaeolandscape research varies regionally (e.g., Scotland’s glacial history differs greatly from Doggerland), necessitating different methodological approaches and highlighting the importance of both geophysical and geotechnical data in certain contexts.
- **Need for Updated Research Frameworks:** Ongoing feedback into research frameworks is essential to keep them current with new data and findings from both development-led and research-led investigations, ultimately streamlining processes for all stakeholders and leading to more informed research.

Session 3: Maritime/Aviation Archaeology

Recovery and beyond - finds located within offshore development areas (Christin Heamagi, Maritime Archaeology Limited)

Christin Heamagi, representing Maritime Archaeology Limited, reflected on developments in offshore archaeology since 2019, drawing on her extensive experience across various offshore projects. She highlighted the shift in working practices brought about by the COVID-19 pandemic, especially how engagement with developers and contractors moved online via Teams and video, resulting in cost savings and environmental benefits while maintaining effective communication.

The presentation emphasised the growing recognition across the offshore industry of the need for early and continuous archaeological involvement, which is now more routinely communicated from management to on-site staff. Regular meetings between consultants, developers, and curators support this approach, keeping all parties updated and engaged.

Challenges discussed included the logistical difficulties of retaining physical samples for geoarchaeological analysis, with labs now often bagging rather than storing cores, potentially limiting future research. Nevertheless, there is increasing willingness among developers to commission archaeology-specific cores guided by clear research questions.

The presentation also addressed the importance of robust mitigation strategies, underlining that effective archaeological assessments require more than just geophysical surveys. It advocated for consistency in practice, referencing updated guidance from relevant organisations, and stressed the importance of clear communication channels and positive relationships with developers.

A key concern raised was the risk of developers or non-specialists conducting archaeological assessments without proper expertise, underscoring that engagement through toolbox talks should not be seen as a replacement for professional archaeological input.

The need for improved information sharing within the sector was highlighted, balancing commercial sensitivities with the need for greater transparency. The issue of how to address unplanned impacts on archaeological receptors and the complexities of offsetting such impacts was also discussed.

As a case study, a North Sea project was described where 22 historical anchors were systematically recovered from areas where impact could not be avoided by the construction activities. The anchors were recorded on deck (including using 3D techniques), and returned to the seabed outside of the area of impact. This proactive approach generated new data and knowledge, demonstrating the value of moving beyond minimal compliance.

In conclusion, the presentation echoed a recurring theme from previous conferences: the sector should be less apologetic in asserting the need for thorough offshore archaeological assessment and investigation, encouraging regulators and curators to demand standards that go beyond the basics.

Key points covered in the Q&A session which followed include

- Access to Geotechnical Samples: There are ongoing challenges around accessing geotechnical samples at logging facilities, particularly with vibrocore samples often being divided up for technical testing and subsequently stored in bags, which can hinder archaeological research.

- Importance of Early Engagement: Positive experiences have been reported when there is early and ongoing communication with developers and geotechnical units, allowing for timely access to samples and data.
- Need for Clear Research Objectives: It's crucial to communicate clearly to developers why access to samples is necessary and what the research objectives are, helping them to understand the archaeological requirements.
- Complexity of Processes: The procedures surrounding geotechnical testing can be difficult to fully grasp, especially as they vary between laboratories, making ongoing dialogue and clarification necessary.
- Persistence Pays Off: Maintaining regular reminders and engagement with developers is essential, as different individuals are responsible for various project stages, and missing the opportunity for access can occur if not actively pursued.
- Positive Outcomes Possible: With consistent communication, early involvement, and clear articulation of needs, it is possible to achieve favourable results for archaeological research.

Aircraft discoveries in offshore development areas (Alistair Byford-Bates, MSDS Marine)

Alistair Byford-Bates delivered a presentation providing an overview of the processes and challenges involved in investigating offshore aircraft crash sites, particularly highlighting how more of an aircraft often survives in marine environments than on land. He described the complexities of site formation, including the initial failure of the aircraft, its interaction with water, and subsequent impacts from environmental and human factors such as currents, weather, fishing activities, salvage attempts, and even modern influences like rubbish and commemorative materials.

The presentation outlined the importance of adapting terrestrial methodologies to the marine context and discussed how the post-crash dispersal of remains is affected by factors such as buoyancy, water currents, and interaction with industry or souvenir hunters. The TESTED approach (Tips, Engines, Surfaces, Tail, External fixtures, Doors) was introduced as a framework for identifying and recording aircraft wreckage, while stressing the need to be cautious due to differences in dispersal patterns offshore.

The case study focused on the discovery and recovery of a Fairey Barracuda aircraft by Wessex Archaeology during survey work for the IFA 2 interconnector project. Initially, there was uncertainty regarding the aircraft's identity, but this was resolved through recovery and research. Due to its location, full recovery was chosen over site relocation or disposal, in collaboration with archaeological curators and the client. The aircraft was largely intact, and significant parts were incorporated into a museum restoration project. The recovery operation lasted 86 days and involved careful dismantling, with additional challenges such as managing asbestos and radiological contamination, some of which required redeposition on the seabed within an archaeological exclusion zone.

Overall, the presentation emphasised the unique challenges of offshore aircraft archaeology, the value of interdisciplinary collaboration, and the importance of thorough documentation and consideration of environmental and safety risks.

Key points covered in the Q&A session which followed include:

- Defining Archaeological Significance: There is no definitive rule for when an aircraft becomes archaeologically significant. The field of archaeology is concerned with the study of the human past, and significance is not strictly determined by age. Modern examples, such as aircraft from the 1950s, demonstrate that importance can extend beyond just World War II relics.

- **Challenges in Aircraft Identification:** Identifying specific aircraft remains can be extremely difficult, especially when remains are dispersed or in poor condition. The investigation process is complicated by often patchy historical records, and it is common to encounter anomalies that are hard to connect to a single incident or aircraft.
- **Licensing and Legal Framework:** Under the Protection of Military Remains Act, a licence is required for excavation or recovery. The authorities expect applicants to identify both the type and specific aircraft before proceeding, which can be challenging due to incomplete records.
- **Ethical and Practical Considerations:** Decisions regarding the relocation or disturbance of aircraft remains must consider whether sites are within living memory, and the potential impact on relatives and communities. If casualties are known or suspected, contingency plans may involve rerouting projects to avoid disturbance.
- **Cost Constraints for Developers:** Mitigation strategies, such as micrositing to avoid sensitive remains, are often pursued first due to the significant costs associated with further investigation or rerouting. Commercial archaeologists face budgetary limitations, influencing the approaches taken.
- **Difficulties with Dispersed Sites:** Aircraft that break up on impact can scatter remains over large areas, making it challenging to “join the dots” and confirm the extent or identity of a site, which complicates both archaeological and development work.

Workshop

This session provided an opportunity to further discuss the main themes and issues explored during the day, particularly focusing on the challenges and opportunities faced by the sector. The following key areas emerged as the main topics of discussion.

- **Public Access to Data and Site Vulnerability:** The group considered whether making archaeological data public increases the risk to sites. There was a lively debate on the balance between open data for the benefit of wider research and education, and the need to protect sites from potential looting or harm. Several participants highlighted the role of public education in fostering respect for heritage, whilst acknowledging that some individuals may not be influenced by such efforts.
- **Confidentiality and Information Sharing:** The conversation noted an increase in the use of non-disclosure agreements in recent years, particularly among ROV (Remotely Operated Vehicle) operators and contractors, as the sector becomes more aware of confidentiality requirements not only for archaeological reasons but also for health and safety concerns (e.g., UXO – unexploded ordnance).
- **Benefits of Public Engagement:** Multiple speakers observed that community and public engagement can encourage better stewardship and reporting of discoveries, and that open sharing of information—when paired with adequate risk mitigation—can have significant benefits, especially given the scale of work and the involvement of amateur divers and volunteers.
- **Training, CPD, and Skills Gaps:** There was considerable discussion about continuing professional development (CPD), with concerns raised about whether the current training opportunities strike the right balance between technical skills and specialist subject knowledge. The group reflected on the importance of maintaining expertise across the sector, not just focusing on new entrants but also supporting ongoing development for established professionals. Several participants suggested more collaboration across organisations and sectors for CPD delivery.
- **Specialisation versus Generalisation:** Participants debated whether marine archaeologists should aim for broad general knowledge or develop deep specialisms in certain areas, with consensus leaning towards the value of broad oversight and knowing where to find expert advice, rather than every practitioner needing to be a subject matter expert in all areas.
- **Approaches to Data and Landscape Analysis:** The group discussed the potential drawbacks of focusing too narrowly on certain geomorphological features such as palaeochannels, advocating instead for a more holistic approach to landscape analysis which considers broader environmental and archaeological contexts. This included the need for proportionality and practicality in research methods, especially across large-scale development projects such as offshore wind farms and cable routes.
- **Resource Challenges and Curatorial Capacity:** There were reflections on the limited resources available within curatorial bodies and local authorities to manage the large volume of data and projects and the challenges of ensuring accountability and effective monitoring when resources are stretched.
- **International Perspectives and Future Challenges:** The closing remarks highlighted the increasing global scope of marine archaeology, the need to learn from practices in other countries, and the importance of sharing expertise as offshore development expands worldwide. The group recognised ongoing challenges, such as funding, capacity, and the consistent application of best practice.

Overall the session emphasised the importance of awareness raising, collaboration, practical training and the need for a flexible, joined-up approach to both research and heritage management in the offshore environment. The group agreed to circulate a summary and continue discussions to address the evolving challenges facing the sector.

Outcomes

Following the 2019 conference session a number of themes key emerged. These are described below with an update on progress as discussed in 2025.

Data Entry and Accessibility:

Since 2019, there has been growing recognition of the importance of both producing and sharing archaeological data, with mechanisms such as MEDIN and ADS already in place. However, the sector continues to face challenges in ensuring consistent data entry. The 2025 discussions highlight ongoing resourcing issues within curatorial bodies and local authorities, which impact the ability to manage and monitor large volumes of data effectively. While technical capabilities have advanced, the need for a standardised methodology for presenting information in a way that is accessible to non-specialists remains unresolved, with calls for more practical approaches and proportionality in research methods.

Investigation of Anomalies and the Unknown:

Progress has been made in the investigation of anomalies, particularly through the increased use of ROVs in UXO surveys, making such investigations more affordable and logistically feasible. The sector is moving towards a more holistic approach to landscape analysis, advocating for the consideration of wider environmental and archaeological contexts rather than focusing solely on specific features. However, the 2025 update indicates there is still caution in recommending investigations offshore to the same extent as onshore, and further empowerment of practitioners is needed to fully address unknowns.

Raising Standards in Offshore Assessment:

There is a consensus that the sector should be more assertive in requesting comprehensive offshore archaeological assessments. The 2025 discussions stress the importance of awareness raising, ongoing training, and collaboration to ensure that assessments not only meet basic standards but also strive for best practice. Regulators and curators are encouraged to insist on assessments that go beyond minimum requirements, although limited resources and enforcement capacity continue to be barriers.

Accountability and Enforcement:

The challenge of insufficient resourcing within curatorial bodies persists, making it difficult to enforce archaeological permit conditions robustly. The 2025 reflections note that there are still few, if any, examples of developers being held fully accountable for breaches. Ensuring accountability and effective monitoring remains a key issue, particularly given the increasing scale of offshore development and the limited capacity of oversight bodies.

Developing Integrated Frameworks:

The sector continues to recognise the need for a shift away from a purely site-based approach towards integrated regional and national frameworks, especially for submerged palaeolandscape research. There is an emphasis on collaboration across organisations and learning from international best practice, as well as the importance of crossing artificial onshore/offshore boundaries. The 2025 discussions reflect ongoing efforts to raise awareness and support a more joined-up and flexible approach to research and heritage management.