

International Evaluation of Marine Archaeology in Denmark

Report of the Working Group

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Recommendations have their own sequential numbers, independent of the Chapter numbers. A list of all the Recommendations is provided in Chapter 6.

Background: Maritime Archaeology in Denmark

For many decades Danish archaeologists have been at the forefront of developing methods and conducting research for the open sea (Baltic Sea, post glacial remains of submerged landscapes with human relicts etc). This world-class reputation has resulted in particular from the intensive personal input of the late Dr. phil. h.c. Ole Crumlin-Pedersen who led world expertise in ship and boat archaeology. This was initially focussed on Viking ships but expertise gained from that experience was transferred to the documentation and research into boats and ships of all periods.

The establishment of the research centre Centre for Maritime Archaeology at the National Museum of Denmark (Nationalmuseets Marinarkæologiske Forskningscenter 1993-2003) based in the vicinity of the Viking Ship Museum at Roskilde represented the high point in this expertise. Many research projects on prehistoric submerged sites, harbours and landing places, barriers, and boats and ships resulted in a great number of high quality seminars, colloquia and conferences that all led to major publications and are testament to this most fruitful period of research.

The closure of the Centre for Maritime Archaeology, the restructuring of the National Museum, including the closure of the Institute of Maritime Archaeology (Nationalmuseets Marinarkæologiske Undersøgelser) and the delegation and transfer of its objectives and staff to the Viking Ship Museum, the restructuring of Kulturstyrelsen, and the implementation of the Bologna process at Danish universities, have led to changes in heritage management (including the storage and presentation of artefacts). Kulturstyrelsen is now responsible for the monitoring and management of the (archaeological) heritage at the National level, the universities are responsible for the scientific education process, and the Regional Museums have been given the responsibility for the management of the archaeological heritage on a regional level including the implementation of developer-funded contract archaeology.

The Viking Ship Museum strives to maintain the international research profile of the Centre for Maritime Archaeology (Nationalmuseets Marinarkæologiske Forskningscenter). This is reflected in their participation as one of 11 partners in the European Commission's Seventh Framework Programme project SASMAP; a project to develop tools and techniques to Survey, Assess, Stabilise, Monitor and Preserve underwater archaeological site. The consortium, coordinated by the conservation department of the National Museum, was recently awarded €2.3 million for this three year project. Other research also continues to be undertaken, but mainly at a small and medium scale and often on an individual basis, sometimes to variable standards. There is currently no mechanism to integrate the process of research within a single research body/institution. Consequently there is no specific institution on a national level that is acting as the lead institution in respect of research into the Underwater Cultural Heritage, and although essential, there are no similar mechanisms to integrate maritime and terrestrial archaeological research.

In Annex 3 'International Assessment of Marine Archaeology in Denmark' Kulturstyrelsen (the Agency of Culture) sets out the intentions behind The International Evaluation on Maritime Archaeology in Denmark.

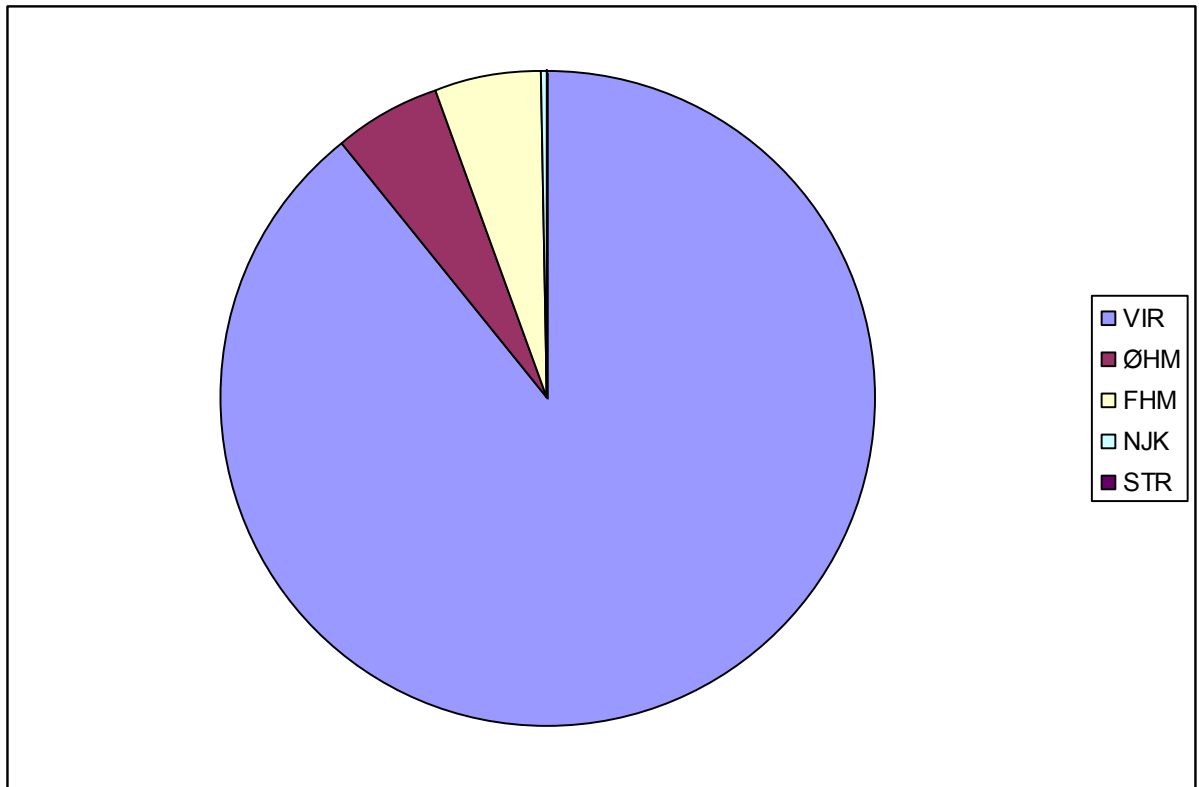
I Administration

Objective: Ensure that administration works reliably, adequately and efficiently.

I.1 Regional structure

Issues

- 1 The tables provided by Kulturstyrelsen for the years 2002 until 2011 show clearly that there are significant differences in the nature and scale of developer-funded projects. The Viking Ship Museum and the Øhavsmuseet are by far the most active stakeholders in this field. The other three museums have carried out some developer-funded contract work but not at the same scale (The Strandingsmuseum St. George beginning in January 2004, the Moesgård Museum in December 2004, and the North Jutland Coast Museum, Bangsbo in February 2005).



Relation of summarised budgets spent for underwater developer-funded contract work by the Danish museums between 2002 and 2011 (following tables provided by Kulturstyrelsen).

- 2 The other three museums are not inactive and do undertake underwater investigations, but usually not as developer-funded projects (Moesgård Museum: stone-age sites survey; North Jutland Coast Museum, Bangsbo: early-modern wrecks; Strandingsmuseum St George: historical wrecks and Stone Age finds).

- 3 The quality of contract work can be improved if individual museums make better communal use of existing capacity and expertise, which is spread unevenly across the five institutions.
- 4 There may be some advantages to replacing the current delegated regional responsibility for the management of the Underwater Cultural Heritage with one central institution with a national responsibility.

Conclusions

- 1 **In present circumstances, the relatively light load of casework in Denmark (resulting in less than c 10 projects per year) is not large enough to put undue pressure on the existing system, although there is not necessarily sufficient critical mass to secure professional management of the process at five separate institutions.**
- 2 **The regional structure promotes contacts with local divers and fishermen, leading to a better understanding of the special conditions and values of the regional underwater resources. In addition there are good contacts between the Moesgård Museum and the neighbouring archaeological institute, and between the Strandingsmuseum St George and the Maritime Archaeology Program in Esbjerg. The Øhavsmuseum have formalised cooperation with the Syddansk Universitet and The Viking Ship Museum cooperate with the universities of Copenhagen and Århus and international institutions.**
- 3 **The present devolved structure of maritime archaeology in Denmark has significant advantages in terms of local connectivity, but these may be offset by practical disadvantages related to a potential absence of critical mass and limited infrastructure in most of the regional centres.**

RECOMMENDATION I

Kulturstyrelsen should review the balance between the operational advantages and disadvantages of the present devolved structure and consider how any changes could increase effectiveness and efficiency.

1.2 Roles and Functions

Issues

- 1 The organisational landscape of Danish Underwater Cultural Heritage is very diverse and is reflected in the many stakeholders (excluding the legislative/ministerial level): Kulturstyrelsen, the National Museum, the five museums with maritime responsibilities, Contractors, and the various Danish authorities involved.
- 2 This diversity reflects the participation of a wide range of different actors each with key individual strengths, but also indicates a significant degree of fragmentation. Kulturstyrelsen has the legal responsibility for the Underwater Cultural Heritage, but does not exercise broad strategic leadership for maritime archaeology. Indeed no one organisation or individual adequately fulfils the leadership role for Underwater Cultural Heritage. This is considered to be a serious weakness in the present structure.

- 3 There are clear differences between the functions and resources (funding) of the five Regional Museums, as well as the competences and relative levels of expertise of their staff.
- 4 There was a perception during the review that sometimes some museums appear to be in competition with one another; this is counter-productive.
- 5 Kulturstyrelsen is responsible for the implementation of the legal provisions relating to Underwater Cultural Heritage (within specific parameters), and this focuses mainly on administrative aspects.
- 6 The senior underwater archaeologist at Kulturstyrelsen appears to be engaged mainly in externally funded research projects apparently without any clear connection to the day to day administrative decisions and tasks. Staff engaged in the administration of the process mainly work reactively, and have little capacity or opportunity to drive this forward proactively (either through the development of standards and guidelines, or through structured monitoring to ensure adequate quality control).
- 7 The National Museum is a state agency with an apparent obligation to uphold a maritime archaeological contingency service where there is no other candidate. The delivery of this service has been sub-contracted to the Viking Ship Museum, but the National Museum does not appear to be strongly or directly engaged with Underwater Cultural Heritage (with the possible exception of its Conservation Department) and there is little clarity and agreement about the respective roles and responsibilities of the National Museum and the Viking Ship Museum.
- 8 There are important differences between the formal documents drawn up by Kulturstyrelsen for the four regional museums (the North Jutland Coast Museum, Bangsbo, the Strandingsmuseum St George, the Moesgård Museum, and the Øhavsmuseet) and the contract between the National Museum and the Viking Ship Museum (cf Appendix 1: Contracts Regulating Territorial Responsibility for Maritime Archaeology).
- 9 Under the terms of its contract with the National Museum, the Viking Ship Museum receives payment in return for the delivery of specific services (only the execution of the tasks is transferred to the Viking Ship Museum, not the actual responsibilities), and for the maintenance of expertise in specific subjects together with defined staff capacity.
- 10 The Viking Ship Museum appears to have two main roles: 1) national (in relation to library and archives) and 2) regional (for developer-funded contract archaeology in the area not covered by the other four museums); the Viking Ship Museum is paid by the National Museum to maintain capacity to undertake this contract work whereas contract work is entirely self funded in the other four regional museums.

Conclusions

- 1 **With regard to the general practice and administration of Underwater Cultural Heritage in Denmark, there appears to be an equilibrium that seems to work fairly well at present, but there is no collective sector-wide momentum or drive to maintain or develop further the hitherto extremely high international reputation and standing of Danish Underwater archaeology.**
- 2 **The differences between the five museums result from three separate parameters: economy/finance, competence, and formal regulations (contracts).**

- 3 More consistency about the roles and funding of the five museums would reduce potential problems, and make a better (shared) use of resources in a national context.**
- 4 The differences in capacity and resources between the five museums also reflects (partially at least) significant differences in the nature and quantity of work between East (Baltic) and West (North Sea) Denmark.**
- 5 The provision of equal payment for equal work in the context of the five museums would address to some extent the present imbalance of resources between the museums.**
- 6 Denmark lacks an obvious official central institution that can act not only as a driving force to promote Danish underwater archaeology in an international context, but also is able to develop new research methods and techniques used in a national context.**
- 7 Clarity is needed about the role and function of the National Museum with regard to Underwater Cultural Heritage.**
- 8 Clarity is needed about the nature of the funding provided by the National Museum for the Viking Ship Museum and specifically what functions this should support in the future and what additional funding this might require.**
- 9 Future functions supported by additional funding could for example include the development of expertise and capacity in relevant technical fields (eg in holding and maintaining the specialised remote sensing/sonar technology and the necessary specialised staff to operate the equipment and analyse and interpret the results to the necessary high standards). This central expertise could then be deployed at the service of the other museums as required (charged against the individual project budgets). This would give all five museums effective access to the necessary technical expertise and provide a level playing field for commercially funded projects.**

RECOMMENDATION 2

Kulturstyrelsen should take on the role of the leading central/national institution for Underwater Cultural Heritage in Denmark and act to bring all the Stakeholders together in a positive and cooperative environment.

This could be achieved by engaging the other stakeholders in this process through the establishment of appropriate mechanisms eg a formal national Advisory Board or Expert Group/Panel for Underwater Cultural Heritage (which should include technical and scientific representation and possibly international experts as well).

RECOMMENDATION 3

Kulturstyrelsen should review all the museum contracts and define the responsibilities, competences, and required service levels, so that they are consistent and transparent.

(cf Annex 1: Contracts Regulating Territorial Responsibility for Maritime Archaeology). This will enable Kulturstyrelsen to ensure a more professional and coherent approach to the handling of day-to-day casework, and of future evaluations and analyses, and demonstrate that the five museums should have equal responsibilities (regardless of differences in capacity and resources).

RECOMMENDATION 4

Kulturstyrelsen should work with the National Museum to review and redefine the role of the Viking Ship Museum.

This review should include consideration of the need for additional funding so that the Viking Ship Museum can act as a national centre of expertise for specialised remote sensing/sonar technology; this will achieve better, and in the long-term more qualified results in the analysis and interpretation of geo-physical data on sites, monuments, and submerged (pre-)historic landscapes. In this way, the expertise and capacity of the Viking Ship Museum can be used more efficiently in support of the effective delivery of maritime developer-funded projects in an equal partnership with the other four regional museums.

RECOMMENDATION 5

The Viking Ship Museum should develop more formal and robust mechanisms whereby its in-house expertise can be deployed to support the four regional museums and other stakeholders.

This should include recharging services where appropriate, against individual developer-funded projects. A more structured approach to the provision of central services will contribute to better cross-fertilisation between developer-funded projects and research and dissemination.

1.3 Strategic leadership

1. Standards and guidelines

Issues

- 1 There needs to be clarification about what is expected from maritime archaeologists and museums working within developer-funded contract projects.
- 2 There appears to be a lack of a common standard in the handling of cases as each museum follows its own methodology and approaches. Diversity can encourage innovation, but as a result of this present scenario, contractors may be in a situation where a project in one area would cost more than the same type of project than in another area for no apparent or visible reason. This can undermine the positive approach of developers to the process.
- 3 Kulturstyrelsen does carry out quality evaluation of developer-funded contract projects but this is a rather informal process and will require adjustment in the future to reflect any explicit standards and guidelines that may be adopted (below).
- 4 There needs to be a general standard/framework with consistent routines in place to handle casework and ensure best practice so that maritime archaeologists and museums deliver the necessary products to consistent standards according to properly developed project plans. This is also necessary to ensure that contractors feel that there is a 'level playing field' across Denmark, regardless of the geographical location of individual projects.

Conclusions

- 1 **Setting standards and guidelines at a national level will assist in leveling out some of the apparent differences between the five regional museums (cf 1.2 above Roles and Functions).**
- 2 **Kulturstyrelsen should exercise strategic leadership by taking a clearer responsibility for setting standards in maritime archaeology.**

- 3 This can be achieved by issuing guidelines for how to design project plans for developer-funded contract archaeology, which will make future projects easier to implement.
- 4 Such guidelines could be based on the Annex to the UNESCO 2001 Convention, but should only be finalised after dialogue and consultation with all the stakeholders (including the five museums).

RECOMMENDATION 6

Kulturstyrelsen should develop standards and guidelines for Underwater Cultural Heritage, in consultation with relevant stakeholders.

RECOMMENDATION 7

Once standards and guidelines for best practice have been developed, Kulturstyrelsen and the relevant stakeholders should agree to appropriate quality control mechanisms to ensure that practice reflects the requirements of the Museum Act.

2. Long-term strategy

Issues

- 1 There is no evidence for the existence of a coherent long-term strategy for Underwater Cultural Heritage, either in the national bodies (Kulturstyrelsen or the National Museum) or in other organisations (Universities, Museums).

Conclusions

- 1 In order to ensure that public money is well spent and that all stakeholders – contractors, governmental agencies, researchers, the public – get what they are entitled to, there must be administrative tools (yardsticks) that enable the Kulturstyrelsen to follow-up individual projects and to assess on a periodic basis whether the system is working properly across the sector (cf 1.3.1 above: Standards & Quality Control).
- 2 This requires a long-term strategy with clear objectives in terms of specific deliverable *outputs* to set standards (eg in project reports) and to ensure measurable *outcomes* in terms of what is trying to be achieved.
- 3 The *outputs* and the *outcomes* need to be reviewed on a regular basis so that progress can be assessed over time.
- 4 Such a strategy is needed to maintain the hitherto very high international reputation of Maritime Archaeology and Underwater Cultural Heritage in Denmark.

RECOMMENDATION 8

Kulturstyrelsen should develop an explicit long-term strategic approach to maritime archaeology.

This will be the visible expression of the strategic leadership role that is recommended for Kulturstyrelsen.

RECOMMENDATION 9

Kulturstyrelsen should periodically assess the actual relationship between maritime archaeological casework and its links to the knowledge-base / society at large.

This needs to be an integral part of this strategic approach (potential measurable indicators are set out in Annex 2: Review Indicators).

I.4 Simple and effective administration of decision-making

I. Process

Issues

- 1 At present, the existing mechanisms appear to work quite well and most institutions involved in the management of the underwater cultural heritage are satisfied with the *status quo* (although this appeared a little surprising to the Working Group).
- 2 This may simply reflect the relatively low volumes of work (individual projects) required at present, which means that the five museums can more or less easily absorb the necessary work without undue pressure on their resources.
- 3 The sequence of the process is clear, but from the outside this appears complicated, and could perhaps be simplified.
- 4 There are differences in approach deployed by the five museums.

Conclusions

- 1 **It should be possible to construct a more streamlined and effective process for the handling of individual cases by reducing the delays inherent in the current system (these were the source of consistent criticism during the review).**
- 2 **In doing this it is important to distinguish between reactive and proactive approaches to the decisions that must be made; at a reactive level the system appears to be relatively stable, but in an active sense (using eg predictive modeling to look for new knowledge in areas of low information to inform future decisions) it is not clear whether the right decisions are actually being made.**
- 3 **It is important to ensure that areas are actively analysed for archaeological potential independently of the planning process – this could be done through predictive modeling, or through a long-term strategic approach supported by Kulturstyrelsen to encourage the museums and the universities to develop appropriate projects (cf 2.2 below Strategic Research).**
- 4 **The existing systems appear to adapt well to increasing pressure, but because of the limited amount of research that takes place in developer funded projects (cf 2.1 below: Current Research) there is limited opportunity to explore ‘blank’ areas (searching for the unknown) and to assess cases where archaeological potential is not known (but has to be supposed).**
- 5 **Because of the nature of the work flows between, on the one hand the museums and developers, and on the other hand between the museums**

and Kulturstyrelsen, it is difficult to maintain a broad overview of what is happening.

- 6 It would be useful to assess and compare the different methodologies deployed in project plans and to share and build on the different experiences and expertise held in the regional museums.

RECOMMENDATION 10

Kulturstyrelsen should work with all the stakeholders to define the key competences necessary in the five museums to deliver developer-funded projects and consider what mechanisms might be deployed to share and build staff expertise in the regional museums.

This could be through eg joint working, secondments, training etc.

RECOMMENDATION 11

Kulturstyrelsen should develop a template for all applications.

In addition to simplifying the administrative process, this will encourage more consistency and coherence across the range of developer-funded contract projects.

2. Resources (Kulturstyrelsen)

Issues

- 1 Kulturstyrelsen is understaffed even for its current functions related to underwater cultural heritage, and this has a negative effect on the smooth administration of the system.
- 2 In practice, just one person (1 Full Time Equivalent) is responsible for the evaluation of both the methodological and the scientific aspects of the work and also for monitoring all the cases sent to Kulturstyrelsen.
- 3 This loading already results in some delays to the administrative process, and to some projects, and does not allow any capacity for the production of standards and guidelines (included in existing staff work programs but never achieved).
- 4 There is very limited capacity (if any) at present to participate in strategic development planning, or to enhance the function and capabilities of the maritime archaeological sector in Denmark.
- 5 The current inability of Kulturstyrelsen to exercise a strategic leadership role is a brake on the continuing and coherent development of maritime archaeology in Denmark, and ultimately could be a backward step in terms of Denmark's international standing in marine archaeology.

Conclusions

- 1 **If the current unsatisfactory situation is to be redressed, Kulturstyrelsen must apply more internal staff resources to the function of maritime archaeology, which appear to be seriously out of step with the resources devoted in the agency to terrestrial archaeology.**

RECOMMENDATION 12

Kulturstyrelsen should reassess the relative priorities assigned to terrestrial and marine archaeology.

Consideration should be given to transferring at least 2 FTEs (Full Time Equivalents) from terrestrial to maritime functions in order to exercise the strong strategic role that is so clearly required.

3. Resources (Regional museums)

Issues

- 1 Responsibility for the administrative handling of maritime casework was transferred to the four regional museums at their own request, with no additional transfer of resources (the museums appear to have readily accepted this).
- 2 In principle, the transfer of responsibility to the museums would have resulted in the saving of resources within Kulturstyrelsen, which could then also have been transferred to the museums to offset the costs of the additional work taken on by them.
- 3 In practice, no savings were realised within Kulturstyrelsen because the volume of administrative work in the centre actually increased as a result of the increase in the volume of casework that had to be handled by Kulturstyrelsen staff under the new procedures.
- 4 All the museums possess the basic equipment necessary for maritime survey. Equipment includes highly specialised technology (eg side-scan and multi-beam sonar systems) the use of which is relatively straightforward for metal wrecks, but much less so for other elements of the Underwater Cultural Heritage (submerged prehistoric landscapes, Iron Age barriers, wooden ships etc) and in such cases should only be processed by experienced specialists; only the Viking Ship Museum has the necessary specialist staff expertise for robust interpretation and analysis of such data (cf 1.2 above: Roles and Functions).
- 5 There are clear differences in the nature and scale of developer-funded projects undertaken by the five museums. This seems to reflect not just the specific focus of the different museums, but also their geographical locations (with major construction projects in the southern and eastern part of the Danish Baltic Sea as well as in the area around Bornholm impacting on an area of concentrated wrecks and submerged stone-age sites).
- 6 The financing of most developer-funded projects budgets is based on maximum contingency costs, and according to the tables provided by Kulturstyrelsen, the budgets approved by Kulturstyrelsen do not actually get used up in practice. Usually between a quarter and one half of the allocated budget for each project remains unspent; this surplus could be utilised for research and scientific publication. This will not lead to a rise in overall budget allocations, only to a more thorough use of existing budgets (cf 2.1 below: Research Current Situation) as well as enhancing the implementation of the Valletta Convention (cf Recommendation 20 below).
- 7 The current lack of adequate resources for developer-funded contract projects restricts the ability of the museums to reap the research benefits of this work, and encourages an artificial and unhelpful distinction between commercial projects (no research) and scientific projects (research).
- 8 Although all finds from the seabed are legally owned by the State, there is lack of clarity about the implications of this in terms of long-term storage and display in the

museums and whether ownership (and therefore responsibility for the costs of conservation and storage) is transferred or not to the receiving museum. With current severe budgetary pressures, this could potentially lead to regional museums charging the State for the long term curation and storage of finds.

Conclusions

- 1 The delegation of developer-funded contract work to the four regional museums should in principle have been accompanied by a transfer of an equivalent amount of money in order to ensure that existing museum resources and capacity for research are not eaten up by these additional administrative tasks.**
- 2 Alternatively, Kulturstyrelsen could dedicate sufficient staff time and expertise to take a leading role in contributing to the design of projects from the scientific viewpoint (cf 1.3 above: Strategic leadership).**
- 3 Additional capacity in Kulturstyrelsen is also required to organise the realisation of a strategic research framework and the development of common standards, guidelines etc).**
- 4 Consideration should be given to increasing the level of available resources for developer-funded contract projects by requiring contractors to pay more per project; it may be possible at the same time to reduce the total number of developer-funded contract projects by looking at the thresholds for such work (this would ensure that the overall financial burden on developers is not raised unrealistically). In this way, operations would have the necessary resources and flexibility to go far beyond basic observation and recording, and to integrate research aspects directly in the project.**

RECOMMENDATION 13

Kulturstyrelsen and the five museums should assess the scale of current administrative costs inherent in the existing system.

This will establish whether a lift in resources may be required for the administrative costs of projects or not.

RECOMMENDATION 14

A pool of highly specialised equipment should be maintained at one centre (Viking Ship Museum?) with the necessary additional funding to maintain the relevant specialist expertise to use this equipment.

This will require the development of agreed mechanisms and protocols to ensure that the other museums have the necessary access to this equipment pool. For developer-funded contract projects, there should be a daily fixed rate for the use of this equipment (and for the analysis and interpretation of the results), which is then charged to the individual projects.

RECOMMENDATION 15

Kulturstyrelsen (with the relevant authorities and the National Museum) should initiate a review to clarify the exact conditions under which cultural property is transferred to the five museums.

As part of this review consideration should be given to the necessary safeguards and conditions to ensure that finds are properly and appropriately stored and displayed, and cannot be disposed of.

2 Research

Objective: Ensure that research results are produced commensurate with the research potential and the extent of client-funded preliminary archaeological investigations.

2.1 Current situation

Issues

- 1 The prevailing attitude towards developer-funded contract projects at present appears to be about removal of risk rather than about research and research priorities; equal weight is given to all Underwater Cultural Heritage under threat regardless of its significance (this may be derived from or necessitated by the approach embedded in the Museums Act and national heritage legislation).
- 2 Although Kulturstyrelsen and the regional museums all recognise the fundamental importance of research, current practices seem to militate against the effective integration of research values in developer-funded contract projects.
- 3 There is general acceptance of the principle that developers can only be charged for the costs of basic archaeological recording and *not* research. This impacts in particular on the post-excavation phase of such projects, which then exclude any 'research'. This situation appears to result from established practice rather than from an explicit provision of the Museum's Act.
- 4 Resolution of this issue will depend on the interpretation, in the Museums Act, of '*investigating*'/'*investigation*' which under the terms of the Valletta Convention are defined as including the need to carry out work '*in a scientific manner*' (article 3b) and to include '*a scientific summary record as well as ... the full publications and recording of the findings*' (article 6b)
- 5 There is a substantial gap between the current products of developer-funded projects, and what is necessary to underpin on-going research. This may result from 1) differences between what is produced by the museums and what the universities and other research institutions actually need; or 2) that researchers traditionally seek their material in other directions (e.g. literature and/or their own data collections) and simply overlook reports from developer-funded contract archaeology.
- 6 At present, the results of developer-funded contract work are generally not well integrated with, and contribute little to, the results of scientific research. The absence of a strong link between contract-work and the knowledge base is a major concern: it undermines an important reason for upholding the law that requires developers to finance archaeological excavations and it is no longer socially acceptable to spend money on a process which serves public policy but does not contribute to public benefit by building knowledge and understanding and making that new knowledge available to society at large.
- 7 It needs to be easier to extract knowledge, rather than raw data from developer funded project reports.
- 8 The results of developer-funded contract projects generally remain unpublished (possibly due to a lack of resources – available time and money).
- 9 Based on reports and interviews, it seems as if a positive effect occurs only when a museum's general profile (research agenda) is very close to the theme of a certain

project, and that the relevant researchers are allowed to influence the project's design.

- 10 With few exceptions, universities and other research institutions do not seem to benefit very much from the results of the archaeological investigations carried out by the museums during the last 5-10 years.
- 11 The universities and research institutions should be seriously concerned by this problem and are morally obliged to seek solutions together with the organisations undertaking developer-funded contract work (the problem is not unique to Denmark).

Conclusions

- 1 **To some extent the existing system already allows, and indeed is underpinned by the need to include research questions in developer-funded contract projects, but it needs further adjustment to make it function more effectively and as it was originally intended.**
- 2 **The standards employed in the design of developer-funded contract projects need to be improved and there needs to be a significant uplift in the overall quality of project designs; the basic structure for describing – and hence understanding – what potential a specific site may have is not good enough (structure and skills in writing text is a key factor to success in enhancing the scientific level in any academic subject).**
- 3 **There needs to be a more problem-orientated way of looking at the developer-funded projects by formulating culture-historically meaningful questions and attempting to relate observations to these questions as projects progress. What is meaningful will be decided by the existing understanding of the archaeological and historical context of each investigation; the existence of well-designed research-themes will assist this process.**
- 4 **Research issues must be included from the beginning of an investigation, not glued on afterwards 'when you know what you found'. Relevant material must of course be recorded and perhaps also collected, but there must also be a focus on what kind of knowledge is being looked for. As part of this process, sufficient flexibility must be retained to redefine the strategy and the goals of a project and to change priorities in the field as the project progresses (such changes must be discussed and agreed with relevant actors including Kulturstyrelsen, and then documented properly).**
- 5 **There needs to be a change of attitude about expectations regarding research outcomes; this will necessitate revising the definition of 'investigation' so that it includes a proper report that integrates recording outcomes with research outcomes (cf this can be included in 1.3.1 above: Standards and Guidelines).**
- 6 **In current economic circumstances more thought should perhaps be given to the need to prioritise developer-funded work and to ensure that there is always proper scientific justification for such work (rather than simply being driven by the need for legislative compliance); this can be achieved by integrating research drivers into the project designs of developer-funded contract projects at the outset.**
- 7 **There is no clarity about the legal position regarding undertaking research as part of developer-funded contracts; many (most?) archaeologists would take the position that all archaeological work is essentially about research, regardless of the origin of the financing of projects.**

- 8 It essential that the universities and other research institutions (who should be significant beneficiaries of the results of developer-funded contract archaeology) become more engaged in the research aspects of such work.
- 9 There is too little (if any) input from relevant researchers when developer-funded projects are being designed; this could be achieved through a series of small scale round-table seminars/workshops to establish constructive dialogue between the universities, research institutes, the five regional museums, and individual researchers, to illustrate best practice and to demonstrate how research drivers can be used to add value to developer-funded projects.
- 10 In addition to the straightforward presentation of data, reports of developer-funded projects *must* include proper analysis and interpretation.
- 11 Information derived from developer-funded projects must be rapidly assimilated into the Danish Sites and Monuments Record (Fund og Fortidsminder) in order to inform *both* future management decisions and the direction of future research.
- 12 There should be stronger links in the five museums between the developer-funded contract work that is undertaken, and outreach to the public (through museum displays etc on general maritime questions).
- 13 As already happens in some cases, the results of developer-funded contract work should be published more widely (possibly online?).
- 14 A percentage of the costs of developer-funded projects should be allocated to analysis and publication and to enable maritime archaeologists at the five museums to publish their important results at an international level (c 20% is an accepted minimum/norm in other countries).
- 15 Clearly there is considerable room for improvements, and *all* the actors in the maritime archaeological community (individual museums, universities, and Kulturstyrelsen) have a responsibility for making this a reality.

RECOMMENDATION 16

Kulturstyrelsen must ensure transparency and synchronisation of geographical data in GIS and ARC MAP between the five museums and Fund og Fortidsminder.

This will ensure that the data held by the museums can be accessed via Kulturstyrelsen.

RECOMMENDATION 17

In developing standards and guidelines, Kulturstyrelsen should set out a clear definition of what is expected as an outcome of developer funded projects.

This should also explore how researchers (especially in the university sector and National Museum) could be drawn into developer-funded projects at the design stage.

RECOMMENDATION 18

Kulturstyrelsen should consider initiating a national discussion about the philosophical approaches underlying the drivers for developer-funded projects (in both terrestrial and maritime contexts).

Such a discussion or debate could usefully contribute to changing prevailing attitudes about the role of research in developer-funded contract archaeology.

RECOMMENDATION 19

Kulturstyrelsen should (with the appropriate authorities) initiate a review of the existing legislation to establish a definitive position about the ability (or not) to include research in developer-funded projects.

This should include a consideration of how the law can be interpreted in a better way in order to fulfil responsibilities under the Valletta Convention (so that 'investigating' is redefined to include a fuller post-excavation procedure and more interpretative reports that can be legitimately charged to the developer).

RECOMMENDATION 20

Costs for proper scientific publication should be included in all contract costs (as required by the Valletta Convention).

Kulturstyrelsen should consider the various options that might be available to achieve this (eg a change in the law, a change in practice, whether through direct project costs, or as a fixed percentage levy to a fund administered by an Advisory Board which could make grants to suitable bodies including universities). Additional resources for research and publication could come from the unspent (contingency) portion of allocated budgets as a fixed overhead.

RECOMMENDATION 21

Kulturstyrelsen should consider establishing a series of seminars/workshops aimed at spreading best practice in developer-funded projects across the terrestrial and maritime spheres.

Seminars (maximum of two per year) should focus on topics relevant but not limited to maritime archaeology and ideally should mix maritime and terrestrial, academic and museum, and archaeological and historical perspectives etc. A project leader would need to be appointed (preferably employed by Kulturstyrelsen) for at least two years to develop such a seminar series who would also work with the quality control of project designs and reports (especially the strategic development of the necessary tools); the project leader would need to have academic credibility (Ph D) and practical experience in the museum world. A development of this nature would also provide a strong milieu which could contribute to the integration of the terrestrial and maritime archaeological communities, and, through this process, even kick start the creation of an embryonic national research strategy.

2.2 Strategic research

Issues

- 1 There is a clear requirement for a strategic research framework and a generally agreed research strategy for Underwater Cultural Heritage at a national level in order to inform (amongst other things) the appropriate responses to casework. This must not be proscriptive, and should not restrict or constrain research opportunities but rather should provide a useful framework which can help the on-going development of individual research objectives and priorities.
- 2 Such a framework must not be driven 'top down' but rather should be developed jointly by all the actors (so that there is joint ownership of the framework); it needs to grow out of the existing links between the five museums and their respective competences, the research areas, and the archaeological cases.

- 3 The strategic research framework could comprise three or four key themes eg:
 - a) Stone Age (submerged sites).
 - b) Iron Age to Early Middle Age (focus on wrecks and other complex structures).
 - c) North Sea Archaeology (methodology?)
 - d) (Post-medieval periods?).

Conclusions

- 1 **The development of a research framework and a research agenda for maritime archaeology are essential tools that will help connect the spheres of developer-funded contract archaeology and research archaeology across the whole maritime sector.**

RECOMMENDATION 22

Kulturstyrelsen should take the initiative in bringing together the universities dealing with maritime archaeology, the five museums having responsibility for maritime archaeology, the National Museum (including the conservation department) and relevant terrestrial and coastal archaeologists to discuss and develop a strategic research framework and research strategy for underwater cultural heritage in Denmark.

It may be useful to consider involving in this process some external assessors drawn from the international Underwater Cultural Heritage community to provide feedback in a European context.

RECOMMENDATION 23

An internal debate should be initiated within Danish archaeology to clarify which areas and topics have a research potential worth focusing on.

In the first instance it may be helpful to focus only one or two topics, and if successful, increase the number by adding other topics at a later stage.

2.3 Research delivery

Issues

- 1 There are no obvious coherent mechanisms for the integrated delivery of the sort of strategic-oriented research advocated here.

Conclusions

- 1 **Once there is an agreed strategic research framework in place, then it will be important to ensure that the appropriate milieu and mechanisms exist for the delivery of associated research in a national and regional context.**
- 2 **This could be achieved by entrusting a specific regional museum with the responsibility for being a national resource for a particular topic. This could be supported by funding provided by Kulturstyrelsen for particular projects (or the cost could perhaps be divided between Kulturstyrelsen, the museums, and the universities). Any such investments should be subject to appropriate guidelines and conditions and have clear objectives against which they can be carefully assessed and monitored.**

- 3 Two existing museums already have their own research profiles and resources – the Moesgård Museum and the Viking Ships Museum – which puts them in a favorable position to take responsibility for themes a) and b) above. The Strandingsmuseum St George Museum is progressing well in the development of a methodology for surveying and mapping the prehistoric maritime landscape of the North Sea region (which to date has been a clear *lacuna* in Danish maritime archaeology) and is a possible candidate for theme c) above.**
- 4 It is not necessarily axiomatic that all five museums should each exercise a national responsibility for a strategic research area, and it is not self-evident that all of the themes and subjects need to be developed at once.**

RECOMMENDATION 24

Kulturstyrelsen should initiate a discussion with all the relevant actors, and discuss with them how best to implement and deliver strategic research for maritime archaeology.

This is a key component of the strategic lead recommended for Kulturstyrelsen.

3 Networks for Underwater Cultural Heritage

Issues

- 1 Marinet provides an existing cross over point for aspects of maritime archaeology in Denmark.
- 2 To date, the network has provided little more than a relatively informal opportunity to exchange practical information and keep participants up to date with what's going on.
- 3 Marinet meetings could provide a useful opportunity for all parties not just to learn from shared experiences, but to develop their own day to day operations and business more effectively.
- 4 There is also potential for Marinet to take on more useful and important functions in terms of carrying out cooperative work between the five museums, coordinating activities and debates, contributing to the development of standards for underwater cultural heritage (through appropriate administrative mechanisms and processes) and participating in the development of a strategic research framework.
- 5 There is also no national forum for Underwater Cultural Heritage, where all the stakeholders can meet to discuss issues of common concern. Initiating the establishment of such a forum would provide Kulturstyrelsen with a very suitable opportunity to demonstrate strategic leadership.

Conclusions

- 1 **Marinet is a national forum that should bind the five museums together collectively in carrying out developer-funded contract work to common and consistent standards and to discuss practical issues, but it requires proper terms of reference.**
- 2 **Marinet should be put on a more professional basis with elected/appointed Officers for a fixed term (at least Chair and Secretary); meetings should be properly organised and regularised by issuing an advanced agenda with appropriate standing items (eg administrative aspects of developer-funded archaeology, research aspects of strategic research areas, practical issues and the taking of minutes of the meeting/actions etc).**
- 3 **A separate national forum/task force for Underwater Cultural Heritage needs to be established which includes all the stakeholders with an interest in the subject (including the National Museum and the Universities). This could evolve out of Marinet, or be established as an independent body with a proper structure and agenda (on a c five year cycle?), to discuss strategic issues and perhaps to host amongst other things, the development of a research framework/strategy, organising national seminars on a wide range of topics (cf 2.1 above: Research Current Situation; 4 below: Harmonisation), hosting an annual Underwater Cultural Heritage conference etc.**
- 4 **The establishment of such a forum could be initiated at a national event (organised or supported by Kulturstyrelsen) which could include a summary of this review, and discussions/presentations on eg what is need to improve and maintain the position of Underwater Cultural Heritage in Denmark; what are the expectations of, and what is expected from the different stakeholders etc.**

RECOMMENDATION 25

Marinet should remain a focus for cooperation between the five museums.

Kulturstyrelsen should consider encouraging and supporting the network to become a more effective mechanism for cooperation and for the five museums to engage collectively in a wider maritime network by discussing administrative matters and improvements to current processes and practical issues (who does excavations where, and with whom, and with which equipment).

RECOMMENDATION 26

Marinet should adopt terms of reference and proper working practices.

A better structure for Marinet meetings will enhance their status and possibly underpin the potential evolution of Marinet into a wider forum for maritime archaeology in Denmark.

RECOMMENDATION 27

Kulturstyrelsen should facilitate the development of a national forum for Underwater Cultural Heritage by inviting stakeholders to discuss this proposition at a key event.

Kulturstyrelsen could enable a national forum by organising meetings together with a host institution, contributing to the agenda, and providing administrative support (minute taking etc). Once a year, the meeting of the forum could include a seminar (cf 2.1 above: Research Current Situation) which would reinforce the understanding that practical matters have a close connection to theoretical issues.

4 Harmonisation with terrestrial archaeology

Issues

- 1 In principle the administrative processes applied to maritime archaeology should be harmonised with those applied to terrestrial archaeology, in order to have consistent treatment of *all* cultural heritage assets across the full range of the historic environment regardless of which environment it is situated in.
- 2 However, in practice the expertise, professional capacity, and infrastructure and resources available to maritime archaeology are much lower than those available to terrestrial archaeology; the volume of maritime archaeology being carried out as developer-funded contract projects is also significantly lower, whilst the unit cost of individual projects is likely to be much higher.
- 3 The organisation and distribution of maritime archaeology is therefore not entirely consistent with terrestrial archaeology, and reflects some of the differences between these two spheres.
- 4 Nevertheless, the maritime community is too small to be able to exist in isolation, and bonds with the wider archaeological sector in general need to be strengthened.
- 5 In November 2012, Kulturstyrelsen received 33 applications for funding of research on terrestrial archaeological subject, but none for maritime topics.

Conclusions

- 1 **The underwater cultural heritage community is not taking advantage of existing funding opportunities for research offered by Kulturstyrelsen.**
- 2 **The underwater cultural heritage community is not represented on the existing Kulturstyrelsen Advisory Board for Archaeology (Arkæologisk Råd) and apparently is not represented on the new Advisory Boards and Expert Panels that are being set up at Kulturstyrelsen as part of the implementation of the new Museums Law.**
- 3 **Improvements have been noted in the context of developer-funded terrestrial projects (merging of museums to increase capacity and expertise leading to improved quality and publication of projects).**
- 4 **Maritime archaeological research would benefit from a closer engagement with mainstream terrestrial archaeology by participating actively in debates, conferences, etc. At the same time, mainstream archaeology would benefit from a breaking down of the current over-compartmentalisation of terrestrial and maritime archaeology.**
- 5 **A series of national seminars (cf 2.1 above: Research Current Situation) would help establish a broader picture through the inclusion of researchers from wider backgrounds (including historical research).**
- 6 **Establishing a separate national journal for maritime archaeology in Denmark is not considered to be desirable, but more efforts should be made to integrate the sectors by better reporting of maritime archaeology in journals devoted to archaeology in general.**

RECOMMENDATION 28

Kulturstyrelsen should consider whether there are lessons to be learnt from analogous changes in the context of terrestrial archaeology, and how practice (if not structures) can be better aligned between terrestrial and maritime archaeology.

RECOMMENDATION 29

Maritime archaeologists should participate and engage more in general national archaeological bodies including applications to Kulturstyrelsen for research. Kulturstyrelsen could advertise the opportunity to the Maritime sector.

RECOMMENDATION 30

If a separate Advisory Board for Underwater Cultural Heritage is not possible (cf 1.2 above: Roles and Functions) then Kulturstyrelsen should include experts in Underwater Cultural Heritage in its other Advisory Boards and Expert Panels.

RECOMMENDATION 31

Kulturstyrelsen should take the initiative (in cooperation with the Directors of the five Museums, the National Museum, and the Universities) to develop a series of national seminars about the integration of research into developer-funded contract archaeology.

5 Key International Conventions for Underwater Cultural Heritage

Issues

- 1 The European Convention on The Protection of the Archaeological Heritage (revised) Valetta, 1992 defines archaeological heritage as 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*, and includes articles to promote the identification, protection, integrated conservation, financing of research and conservation, collection and dissemination of scientific information, promotion of public awareness, prevention of illicit trade, and mutual technical and scientific assistance.
- 2 The UNESCO Convention on the Protection of the Underwater Cultural Heritage (2001) is an important international instrument and the Annex to the Convention sets consistent international standards for the management of Underwater Cultural Heritage (to date 41 countries have ratified the Convention).
- 3 Denmark has signed and ratified the Valletta Convention, which came into force on 17/5/2006 but has not signed the 2001 UNESCO Convention.

Conclusions

- 1 **Both the Valletta and UNESCO Conventions are important instruments for the management of the Underwater Cultural Heritage, but their importance lies in the implementation of and adherence to the consistent and coherent standards which they set out, rather than in ratification *per se*.**

RECOMMENDATION 32

Kulturstyrelsen should review the conclusions and recommendations of this report in the context of the Valletta Convention.

This will help identify how the provisions of the Valletta Convention may assist in the more effective implementation of the Museums Act in relation to the management of Underwater Cultural Heritage in Denmark.

RECOMMENDATION 33

Kulturstyrelsen should consider carrying out an impact assessment to assess the advantages and disadvantages of signing the 2001 UNESCO Convention and to identify any changes or additions to the Museums Act and current administrative processes that would be required by doing this.

Depending on the results of this impact assessment, Kulturstyrelsen should then consider formally adopting the Annex of the UNESCO Convention as a statement of best practice (This has been done in other countries that have not signed the UNESCO Convention eg the UK).

6 Conclusion and Recommendations

All the important elements are present in Denmark: local/regional museums eager and ready to take responsibility for maritime archaeological work, Universities dealing with maritime archeology, an existing network of the regional museums involved in maritime archaeology (Marinet), a research centre of high international standing (the Viking Ship Museum), and a national agency with extremely well qualified and committed expert staff.

As a neutral actor, with specific legal and oversight responsibilities, Kulturstyrelsen should be responsible for elaborating common standards and guidelines for the execution and delivery of Underwater Cultural Heritage commercial contracts.

Kulturstyrelsen should play a central role in terms of international representation (conferences), and research, and should take the strategic lead in inspiring the five museums with responsibilities for maritime archaeology and in connecting the spheres of developer-funded contract archaeology and research archaeology by initiating the development of a research framework and research agenda for Underwater Cultural Heritage.

The results of this review, together with any actions taken forward as a result of it, should be revisited on a regular basis (at intervals of four or five years) to examine the impact (or not) of the proposed changes. This will demonstrate an on-going commitment to improving standards for Underwater Cultural Heritage in the context of the delivery of the Museums Act.

RECOMMENDATION 1

Kulturstyrelsen should review the balance between the operational advantages and disadvantages of the present devolved structure and consider how any changes could increase effectiveness and efficiency.

RECOMMENDATION 2

Kulturstyrelsen should take on the role of the leading central/national institution for Underwater Cultural Heritage in Denmark and act to bring all the Stakeholders together in a cooperative environment.

RECOMMENDATION 3

Kulturstyrelsen should review all the museum contracts and define the responsibilities, competences, and required service levels, so that they are consistent and transparent.

RECOMMENDATION 4

Kulturstyrelsen should work with the National Museum to review and redefine the role of the Viking Ship Museum.

RECOMMENDATION 5

The Viking Ship Museum should consider developing robust mechanisms whereby its in-house expertise could be deployed to support the other stakeholders.

RECOMMENDATION 6

Kulturstyrelsen should develop standards and guidelines for Underwater Cultural Heritage, in consultation with relevant stakeholders.

RECOMMENDATION 7

Once standards and guidelines for best practice have been developed, Kulturstyrelsen and the relevant stakeholders should agree appropriate quality control mechanisms to ensure that practice reflects the requirements of the Museum Act.

RECOMMENDATION 8

Kulturstyrelsen should develop an explicit long-term strategic approach to maritime archaeology.

RECOMMENDATION 9

Kulturstyrelsen should periodically assess the actual relationship between maritime archaeological casework and its links to the knowledge-base/society at large.

RECOMMENDATION 10

Kulturstyrelsen should work with all the stakeholders, to define the key competences necessary in the five museums to deliver developer funded projects and consider what mechanisms might be deployed to share and build staff expertise in the regional museums.

RECOMMENDATION 11

Kulturstyrelsen should develop a template for all applications.

RECOMMENDATION 12

Kulturstyrelsen should reassess the relative priorities assigned to terrestrial and marine archaeology.

RECOMMENDATION 13

Kulturstyrelsen and the five museums should assess the scale of current administrative costs inherent in the existing system.

RECOMMENDATION 14

A pool of highly specialised equipment should be maintained at one centre (Viking Ship Museum?) with the necessary additional funding to maintain the relevant specialist expertise to use this equipment.

RECOMMENDATION 15

Kulturstyrelsen (with the relevant authorities and the National Museum) should initiate a review to clarify the exact conditions under which cultural property is transferred to the regional museums.

RECOMMENDATION 16

Kulturstyrelsen must ensure transparency and synchronisation of geographical data in GIS and ARC MAP between the five museums and Fund og Fortidsminder.

RECOMMENDATION 17

In developing standards and guidelines, Kulturstyrelsen and the five museums should set out a clear definition of what is expected as an outcome of developer funded projects.

RECOMMENDATION 18

Kulturstyrelsen should consider initiating a national discussion about the philosophical approaches underlying the drivers for developer-funded projects (in both terrestrial and maritime contexts).

RECOMMENDATION 19

Kulturstyrelsen should (with the appropriate authorities) initiate a review of the existing legislation to establish a definitive position about the ability (or not) to include research in developer-funded projects.

RECOMMENDATION 20

Costs for proper scientific publication should be included in all contract costs (as required by the Valletta Convention).

RECOMMENDATION 21

Kulturstyrelsen should consider establishing a series of seminars/workshops aimed at spreading best practice in developer-funded projects across the terrestrial and maritime spheres.

RECOMMENDATION 22

Kulturstyrelsen should take the initiative in bringing together the universities dealing with maritime archaeology, the five museums having responsibility for maritime archaeology, the National Museum (including the conservation department) and relevant terrestrial and coastal archaeologists to discuss and develop a strategic research framework and research strategy for underwater cultural heritage in Denmark

RECOMMENDATION 23

An internal debate should be initiated within Danish archaeology to clarify which areas and topics have a research potential worth focusing on.

RECOMMENDATION 24

Kulturstyrelsen should initiate a discussion with all the relevant actors, and canvass opinions about how best to implement and deliver strategic research for maritime archaeology.

RECOMMENDATION 25

Marinet should remain a focus for cooperation between the five museums.

RECOMMENDATION 26

Marinet should adopt terms of reference and proper working practices.

RECOMMENDATION 27

Kulturstyrelsen should facilitate the development of a national forum for Underwater Cultural Heritage by inviting stakeholders to discuss this proposition at a key event.

RECOMMENDATION 28

Kulturstyrelsen should consider whether there are lessons to be learnt from analogous changes in the context of terrestrial archaeology, and how practice (if not structures) can be better aligned between terrestrial and maritime archaeology.

RECOMMENDATION 29

Maritime archaeologists should participate and engage more in general national archaeological bodies including applications to Kulturstyrelsen for research.

RECOMMENDATION 30

If a separate Advisory Board for Underwater Cultural Heritage is not possible (cf 1.2 above: Roles and Functions) then Kulturstyrelsen should include experts in Underwater Cultural Heritage in its other Advisory Boards and Expert Panels.

RECOMMENDATION 31

Kulturstyrelsen should take the initiative (in cooperation with the Directors of the five Museums, the National Museum, and the Universities) to develop a series of national seminars about the integration of research into developer-funded contract archaeology.

RECOMMENDATION 32

Kulturstyrelsen should review the conclusions and recommendations of this report in the context of the Valletta Convention.

RECOMMENDATION 33

Kulturstyrelsen should consider carrying out an impact assessment to assess the advantages and disadvantages of signing the UNESCO Convention and to identify any changes or additions to the Museum Act and current administrative processes that would be required by doing this.

7 Annex I: Contracts Regulating Territorial Responsibility for Maritime Archaeology

During the evaluation process, it became clear that client-funded maritime archaeology is performed under rather uneven conditions in Denmark. There appear to be three parameters which control this: finance / economy, competence, and formal regulation (contracts).

The state has handed over most of the operative responsibility for client-funded maritime archaeology to a number of regional museums. In this respect, the state is represented by the Kulturstyrelsen with one exception. The National Museum (which is also a state institution) has a special role with an obligation (although it is unclear how and where this is stated) to uphold a maritime archaeological contingency service where there is no other candidate to do so. However, since 2004, the National Museum has contracted the Viking Ships Museum to fulfil its operative duties in maritime archaeology.

There are important differences, though, between the formal documents drawn up by Kulturstyrelsen with the four museums (the North Jutland Coast Museum, Bangsbo, the Strandingsmuseum St George, the Moesgård Museum, and the Øhavsmuseet) and the contract between the National Museum and the Viking Ship Museum. The most important is that the document between Kulturstyrelsen and the four museums is not a proper contract. Instead, Kulturstyrelsen has approved an application from each of the four museums to be given the responsibility for maritime archaeology within a certain territory. This is a one-sided delegation, not a contract.

The document between the National Museum and the Viking Ship Museum is more a traditional contract between two parties. The National Museum has contracted the Viking Ship Museum to perform certain services for which the National Museum carries the formal responsibility. For these services, the Viking Ship Museum receives an annual payment. It is clear from the contract, though, that only the tasks are transferred, not the actual responsibility.

All discussions concerning the formal conditions for the five museums presently performing maritime archaeology should include the different nature of their responsibilities. This also has relevance for an issue that has been identified as an anomaly: that the Viking Ship Museum receives a certain amount of money each year for providing a “maritime contingency service” on behalf of the National Museum.

In addition to the judicial character of the documents that transfer the operational responsibility from the state to the five museums in question, it is equally important to explore the differences in demands between the two types of document.

The Kulturstyrelsen document – which is designed as a response to a request – states that “[the] Museum is approved as a museum with a marine archaeological area of responsibility, and that the Museum from then on is under obligation to handle ordinary marine archaeological tasks, carry out inspections, receive notifications, carry out commissioned marine archaeological surveys in connection with construction work, raw material extraction and other activities on the seabed within the area of responsibility.”

In the contract between the National Museum and the Viking Ship Museum the demands are considerably more specific:

“It has been agreed between the Viking [Ship] Museum and the National Museum that the Viking [Ship] Museum shall comply with the following:

- 1. A professional staff shall be maintained that is capable of handling archive-related case processing in connection with construction cases, harbour deepening, dumping etc. to the extent of approx. 600 hours per year. The task was taken over from the Heritage Agency of Denmark on 1 October 2009 in connection with a restructuring of the Agency's marine archaeological administration.*
- 2. Expert knowledge shall be maintained covering the areas of submarine Stone Age settlements, fishing weirs and barriers on the seabed, harbour facilities, wrecks of ships from prehistoric and medieval times, wrecks of ships from recent times and anything else that falls within the Museums Act's preservation regulations.*
- 3. A contingency service of at least two diving employees shall be maintained.*
- 4. A technical contingency service shall be maintained to ensure completion of documentation and survey tasks on the seabed.*
- 5. Inspection and survey tasks shall be carried out in connection with the securing of facilities and wrecks within territorial waters at the request of the Heritage Agency of Denmark for up to 160 hours per year, cf. Transfer Agreement of 1 November 2000 between the Forest and Nature Agency and the Heritage Agency of Denmark.*
- 6. Expert culture-historical statements shall be prepared at the request of the Heritage Agency of Denmark for up to 100 hours per year, cf. Transfer Agreement of 1 November 2000 between the Forest and Nature Agency and the Heritage Agency of Denmark.*
- 7. Commissioned preliminary marine archaeological surveys and investigations shall be carried out on behalf of clients and construction authorities paid by these.*
- 8. To the extent that the management of other tasks allows for this, VM may take the initiative to undertake preliminary marine archaeological surveys, investigations and documentation. Funds for such work can be applied for from the appropriation related to the administration of Section 28 of the Museum Act. VM shall collaborate to a relevant extent with other museums conducting marine archaeological work about the solution of such tasks.*
- 9. Scientific staff can, to the extent that the management of the other posts allows for this, publish selected investigation and research results and participate in international collaboration.”*

Regardless of the fact that the Viking Ship Museum receives an annual fee to maintain a certain standard, the contract between the National Museum and the Viking Ship Museum

clearly defines what is expected from an institution with a territorial responsibility for maritime archaeological contingency service. Although not all the aspects mentioned above are relevant outside its specific context, Kulturstyrelsen should consider the introduction of a more coherent definition of required competences and skills expected from the museums with a regional responsibility.

This could include for example:

- Capacity and competence for all phases of case processing,
- Knowledge of relevant legislation for archaeological and underwater work,
- Expert competence in maritime archaeological remains, structures and features, artefacts etc, under the protection of the Museums Act,
- Technical competence for underwater work and archaeological interpretation of geophysical data (sonar, multi-beam etc.),
- Methodological competence for conducting all relevant aspects of underwater archaeological surveys, preliminary investigations, and investigations.

Annex 2: Review Indicators

1. How many articles have appeared in the press on maritime archaeological casework?

- Discussing the actual results and relevance of projects and describing the methods and goals of maritime archaeology.
- Every project should generate at least a few articles in the press (one national and 2 local/regional?).
- The number of articles per project.

Agencies generally screen the press systematically so this information should be relatively easy to obtain.

Parallel statistics could be generated for audio-visual media.

2 How many lectures have been delivered to local historians/local societies/amateur groups/schools?

- The number of lectures delivered by maritime archaeologists on these cases.
- This is also a measure of the significance of such work to society.
- The Museums ought to be able to generate this material.
- In terms of trends over time an increasing target could be set.

3 How many contractors utilize the results of the projects that they have funded?

- In their communication: publicity folders, on their website, distributing the publication to their employees, organising an event for their employees etc.

4 How many exhibitions use information from maritime archaeological casework?

5 How many times are results of casework being used or being integrated in bachelor/master papers?

6A How many maritime archaeologists involved in this casework attend regional/national conferences on archaeology/history/heritage/conservation?

6B How many maritime archaeologists participate (actively) in such conferences with a paper/in a panel/with a poster on their work?

7A How many Danish maritime archaeologists dealing with casework attend international conferences/meetings/workshops?

7B How many Danish maritime archaeologists participate (actively) in such events with a paper/in a panel/with a poster on their work?

8 The number of articles on maritime archaeological casework in local/regional, national and international journals/books.

All the results should be compared with the number of cases.

Annex 3: International Assessment of Marine Archaeology in Denmark

By Torben Malm and Susanne Bjerknæs Petersen (Danish Agency for Culture)

1. Introduction

It is the policy of the Danish Agency for Culture to ensure a high professional level, both internally and at the museums, as well as to improve handling of the central regulatory tasks continually. This is done, among other things, through assessments. An international assessment of dry land archaeology in Denmark was carried out by the Heritage Agency of Denmark in 2009, which focused partly on user satisfaction and partly on how the area of client-paid surveys is managed in general. An important part of the assessment was to clarify financial conditions and to determine whether excavations generate research results that counterbalance the level of expenditure. The assessment included 43 museums, and as two of these museums (the *Øhavsmuseet* and Moesgaard Museum) also hold marine archaeological responsibility, this 'dry land assessment' also superficially addressed the marine archaeological aspect, albeit without entering into a thorough analysis of the subject. It was therefore a logical step – in continuation of the dry land assessment – to carry out a similar assessment of marine archaeological activities in Denmark as handled by the Danish Agency for Culture and at the five marine archaeological museums: the Viking Ship Museum, the *Øhavsmuseet*, Moesgaard Museum, the North Jutland Coastal Museum and the shipwreck museum *Strandingsmuseum St. George* (The Cultural History Museums in Holstebro Municipality).

2. Task and Purpose of the assessment

The Danish Agency for Culture's management group defined the core focus of the task as a 'service check' of the combined marine archaeological activities in Denmark, partly to ensure that the administration is reliable, adequate and efficient, and partly to assess whether research results are produced that are in reasonable proportion to the research potential and the extent of client payment. At the end of October 2011, the Danish Agency for Culture prepared an internal memo as background material for the assessment; this included proposals for focus points, but also proposals for an assessment process as well as descriptive and explanatory examples of the given conditions and the current administration (Head of office Dorte Veien Christiansen and Archaeologist, Ph.D. Anders Fischer).

3. Working Method for the Assessment

From the outset, the intention was that the assessment should be carried out by an expert, independent international working group – assisted by a group of staff from the Danish Agency for Culture – which would have the option of using various 'tools' in the process.

The first step was to inform the international assessment group of the legislative basis, the marine archaeological regulatory management and the museums' execution of the so-called commissioned marine archaeological preliminary surveys, user-paid diving surveys etc.

A questionnaire was sent to the marine archaeological museums, asking them to provide an account of research publications, equipment stock etc. The museums were also invited to participate in focus group interviews with the international assessment panel.

Other stakeholders, in this case represented by public authorities and private companies, also received questionnaires. The public authorities are the agencies, directorates and others that send cases for hearings, while the private group is made up of the companies and contractors that consider carrying out construction projects or other activities in territorial waters. The two groups were sent each their own version of the questionnaire, which focused on assessing the users' level of satisfaction when they were in contact with the Danish Agency for Culture and the marine archaeological museums, respectively. Contractors were also invited to participate in focus group interviews with the international assessment panel.

Communication between the international assessment group and the Agency has largely taken place via email, and all translation of major documents into English has been carried out by the translation agency Avanti Gruppen.

The panel has held a series of working meetings in Copenhagen; cf. section 6. Series of Meetings.

4. Assessment Panel

One of the experts who participated in the assessment of dry land archaeology in 2009 was Dr Adrian Olivier, and based on the highly competent completion of that task, and considering that Dr Olivier is also knowledgeable about marine archaeology, it was an obvious choice to ask him to head this investigative work. The Danish Agency for Culture is very pleased that Dr Olivier accepted to undertake the role of Chairman of the assessment panel.

In order to carry out the assessment, an international panel was appointed in consultation with Dr Olivier, of experts with in-depth knowledge of archaeological activities, both on land and in territorial waters; in addition, the panel members all have experience of museum management and the production of scientific reports of archaeological work. The panel was composed as follows:

Dr Adrian Olivier, London (England). Dr Olivier served as Chairman of the international assessment assisted by the following members:

Director Björn Varenus, Head of Strategy and Planning, the National Maritime Museums, Stockholm (Sweden)

Dr Marnix Pieters, Director International Activities, Flanders Heritage Agency, Brussels (Belgium)

Dr Martin Segschneider, Landesamt Schleswig-Holstein, Schleswig (Germany)

Professor Dr Friedrich Lüth, the German Archaeological Institute, Berlin Head Office, Workspace Cultural Heritage Protection and Site Management, Berlin (Germany)

Curator Lene Høst-Madsen, Chairman of the Danish Archaeological Advisory Board, Museum of Copenhagen, Copenhagen (Denmark)

The Agency appointed an internal support group consisting of Chief Consultant and Archaeologist Michael Lauenborg, Consultant and Archaeologist Susanne Bjerknæs Petersen, Consultant and Archaeologist Torben Malm and Office Trainee Pernille N. F. Nielsen. The support group served as the secretariat for the panel, and its primary task was to assist in organising meetings, preparing memos, procuring data, and in any practical way to help the panel with its work as required.

5. Working Process

The Chairman of the assessment, Dr Adrian Olivier, was contacted at the beginning of 2012 with a request that he participate in the international assessment. On 16 April 2012, the first meeting was held between Dr Olivier and the Danish Agency for Culture in Copenhagen. At the meeting, the final process for the assessment was agreed along with proposals for participants of the assessment panel who were to assist Dr Olivier. During the meeting, it was also agreed which stakeholders were to be consulted in connection with focus group interviews and questionnaire surveys.

During April, the Danish Agency for Culture prepared and sent out questionnaires to the marine archaeological museums. The questionnaire included questions about marine archaeological activities carried out at the museums between 1 October 2009 (when the Agency handed over archive control to the marine archaeological museums) and April 2012. The questions were particularly related to the museums' management of marine archaeological hearing cases, reporting on these cases, and any further processing in scientific articles. The questions also addressed the individual museum's collaboration with the Danish Agency for Culture and the other marine archaeological museums. In addition, each museum was asked to submit lists of scientific articles, books and other publications produced in the period 1 October 2009 to April 2012.

The final composition of the assessment panel was completed during April and early May. The panel received written background material for the assessment, and the members were invited to the first working group meeting. The meeting took place in Copenhagen at the Danish Agency for Culture on 21 May 2012. At the meeting, the procedure for the working group's work was established, including the collection of data from stakeholders and a plan for focus group interviews.

By the expiry of the response deadline, 23 May 2012, the Danish Agency for Culture had received the completed questionnaires from the museums along with the requested material for clarification of the answers. All materials received from the museums were forwarded to the assessment panel.

In June, the Danish Agency for Culture prepared and sent out two questionnaires, one for relevant public authorities and one for large private companies that deal with construction works and similar in territorial waters. The questions focused particularly on the

relationship and collaboration with the Danish Agency for Culture and the museums, respectively. At the same time, the large private companies were invited to participate in focus group interviews. During the summer, the Agency received responses from several public authorities, but only a few responses from the large private companies.

On 26 June 2012, focus group interviews with the five marine archaeological museums were held at the Danish Agency for Culture. The focus group interviews were held in such a way that each of the five museums had three quarters of an hour with the panel, during which the panel, in dialogue form, asked the museums to expand on the questionnaire sent out by the Agency. The panel strongly emphasised that the museum representatives should feel free to talk about any topic on their minds.

Another focus group interview was held on 22 August 2012, this time with representatives from research institutions. Museum Curator Peter Vang Petersen, the National Museum of Denmark, and Professor Thijs Maarleveld, University of Southern Denmark, participated in this interview.

A focus group interview with contractors, which was also planned to take place on 22 August 2012, was cancelled, as there was no support for it.

The assessment panel held their final meeting on 30-31 October 2012 in Roskilde at the Viking Ship Museum.

6. Meetings

Meeting 1 Danish Agency for Culture, Monday 16 April 2012

Adrian Olivier, Michael Lauenborg, Susanne B. Petersen and Torben Malm.
Meeting on content and execution of assessment.

Meeting 2 Danish Agency for Culture, Monday 21 May 2012

Adrian Olivier, Björn Varenius, Martin Segschneider, Marnix Pieters, (Lene Høst-Madsen and Friedrich Lüth were unable to attend), Michael Lauenborg, Susanne B. Petersen and Torben Malm.
The working group gathered to adjust terms of reference and content, process and working method, time schedule and expectations.

Meeting 3 Danish Agency for Culture, Monday 26 June 2012

Adrian Olivier, Björn Varenius, Martin Segschneider, Marnix Pieters, Lene Høst-Madsen, (Friedrich Lüth was unable to attend), the Viking Ship Museum, the Øhavsmuseet, Moesgaard Museum, the North Jutland Coastal Museum, Strandingsmuseum St. George (see section 8, List of Participants. Interviews with the Museums, 26 June 2012), (Michael Lauenborg was unable to attend), Susanne B. Petersen and Torben Malm.
All-day meeting with five focus group interviews. Three quarters of an hour's interview with each of the five marine archaeological museums. The museums were represented by a director or manager and by one or more marine archaeological staff members.

Meeting 4 Danish Agency for Culture, Wednesday 22 August 2012.

Adrian Olivier, Björn Varenius, Martin Segschneider, Marnix Pieters, Lene Høst-Madsen, Friedrich Lüth, Professor Dr Thijs Maarleveld and Museum Curator Peter Vang Petersen; (Michael Lauenborg was unable to attend), Susanne B. Petersen and Torben Malm.

The working group held focus group interviews.

Meeting 5 Viking Ship Museum 30 October 2012

Danish Agency for Culture, 31 October 2012.

Adrian Olivier, Björn Varenius, Martin Segschneider, Marnix Pieters, Lene Høst-Madsen, Friedrich Lüth, Michael Lauenborg, Susanne B. Petersen and Torben Malm.

The final working group meeting of the Assessment Panel.

7. Stakeholders

Museums:

The Viking Ship Museum, Roskilde
Vindeboder 12, 4000 Roskilde

Øhavsmuseet (The South Funen Archipelago Museum), Svendborg
Fruestræde 3, 5700 Svendborg

Moesgård Museum, Århus
Moesgård Allé 20, 8270 Højbjerg

Nordjyllands Kystmuseum, Bangsbo
Dr. Margrethes Vej 6, 9000 Frederikshavn

De Kulturhistoriske Museer i Holstebro Kommune, Strandingsmuseum, ST.
GEORGE
Vesterhavsgade 1, Thorsminde, 6990 Ulfborg

Researchers:

Prof. Thijs Maarleveld, Syddansk Universitet

Curator Peter Vang Petersen, Nationalmuseet

Public Agencies:

The Danish Maritime Authority repr. by Jan Anker

The Danish Coastal Authority repr. by Maja F Mikkelsen

The Danish Nature Agency, Odense, repr. by Nikolaj Holmbroe

The Danish Nature Agency repr. by Stig Helmig

The Danish Nature Agency, Roskilde, repr. by Jane Brøns

The Danish Directorate of Fisheries repr. by Stig Prüssing

Privat companies:

NIRAS A/S repr. by Jørn Jensen

Ole Askehave A/S Consultants (Raw materials industry) repr. by Ole Askehave

Nord Stream repr. by Samira Andersson

8. List of Participants. Interviews with the Museums, 26 June 2012

The Viking Ship Museum

Tinna Damgård-Sørensen, Director

Jørgen Dencker, Marine archaeologist, Head of Marine archaeological team

Morten Johansen, Marine archaeologist

Mikkel H. Thomsen, Marine archaeologist

Andreas Kallmeyer Bloch, Marine archaeologist

Anton Englert, Marine archaeologist, Ph.d., Reseach coordinator, Head of reseach team

Athena Trakadas, Marine archaeologist, Ph.d., employee in both marine archaeological team and reseach team

Øhavsmuseet, The South Funen Archipelago Museum

Peter Thor Andersen, Director

Otto Uldum, Marine archaeologist

Christian Thomsen, Curator

Moesgård Museum

Jan Skamby Madsen, Director

Lars Krants Larsen, Head of Department

Claus Skriver, Marine archaeologist

The Costal Museum of Northern Jutland

Michael Ax, Director

Jan Hammer Larsen, Marine archaeologist

Strandingsmuseum St. George (The Cultural History Museums in Holstebro Municipality)

Ingeborg Svennevig, Director

Lars Froberg Mortensen, Marine archaeologist