Rigging Materials Trials for the Conservation of HMS Victory

Clarification Questions – Issue 2

1. **What would the Test methods / conditions the products require testing to?**

   Testing will need to be against relevant British Standards. Suppliers should reference the relevant standards in their submissions. All samples are/will be made to UK/EU standards for the relevant materials and construction.

2. **Could you please let us know the details on the reporting format required?**

   This material will likely be used or referenced in future publications, and the NMRN may therefore ask the contractor to collaborate on publication of material.

3. **In regards to Section 7, paragraph 1.3 – can NMRN please confirm if there is a requirement to work at heights and/or in confined spaces as part of this contract?**

   There will be no need to conduct work at height and/or in confined spaces.

4. **Could we please have access to the trial results particularly for the coating systems chosen, and any related background information so we can understand full scope of the test requirement.**

   Results from the hull testing can be shared.

5. **We are able to perform all of the coating related testing but the work described would require blasting & paint application onto steel test plates, will coated panels be provided to us for the testing, or would be we required to cost for this additionally?**

   NMRN will prepare the required samples.

6. **In regards to the requirement - 50 year life without major maintenance is mentioned – 1000 hours exposure testing equates to 5 years natural exposure. Offshore / high corrosivity environment coatings are tested for 5000 hours, to give 25y life expectancy. In this case 50 years would require 10'000 hours, about 14 months of exposure. There is no further shortcut to performing this test. With this in mind, how many coating systems are to be tested? And for what duration of exposure?**
"Major maintenance" would be classified as the current works being undertaken, full removal of large elements of the rig. Testing against a 25y life expectancy would be suitable as there will be a programme of maintenance in place to maintain coatings in high wear areas. We are not yet at a stage where we have a short list of prospective paint samples to test, however we would aspire to limit the short list no a maximum of 8 possible products.

7. **We are planning to apply for the tender and our legal team has forwarded questions from the "New NMRN Service Contract v3.1- Example".**
   - Clause 7 Liability, Indemnity and Insurance – some parts of the clause introduce unlimited liability, which is not acceptable to us, this would have to be negotiated to include a cap on liability as well as exclude indirect losses. This clause would need negotiation and amendments prior to signing – would this be acceptable? *Agreed, the contract uploaded with this tender is merely an example for reference and does not represent the final version.*
   - Clause 7.2 Insurance requirements – currently blank, are the insurance limits those specified in the Tender Submission Document? *These are entered post-contract award, as it will be determined by the insurance levels agreed with the winning bidder.*
   - Clause 7.4 Insurance policies – We do not provide copies of policies, but can produce a letter confirming that insurance is in place. – Would this be enough? *Yes, this would be sufficient if you were successful.*
8. **Could you please clarify how many material types of ropes and paint you will require testing? It would be very important to know this number to provide accurate costings.**
   - *The NMRN are currently testing 6 types of running rigging. The standing rigging and number of paint samples are an estimate at this stage. Anticipate testing of a maximum of 4 standing rigging materials and 8 paint products.*

Question: the focus seems to be on cords/rigging and the effects these chemicals have on the cords/rigging. There is a mention of load testing in the summary.

- What load test – method? Break test to compare to manufacturers stated MBL.
- What loads are expected? [depending on the expected range different capabilities will be required]. MBL of rope varies between products. Highest value stated by manufacturer is current 2,600Kg.
- What is meant by exposure? How long and at what temperature are the cords/rigging supposed to be exposed to these chemicals? This would be something that we would look to discuss with the testers. Exposure refers to the rope coming into contact with the chemicals for a sufficient amount of time for it to remain on/in the rope fibres. This would be at normal environmental conditions.
- Will the Royal Navy be supplying the above chemicals (with relevant COSHH etc.)? Yes, but to clarify this is will be from the National Museum of the Royal Navy. Not the Royal Navy itself.

9. **In relation to Package 3, we have the following questions;**

- What method? If no method what type of specifications are expected? To be proposed by the supplier and developed in consultation with NMRN.
- What are the "Rig Conditions" that are to be replicated? The contact of the rope with itself/another rope at a single point.
- What load test – method? Break test to compare to manufacturers stated MBL.

10. **In relation to Package 4, we have the following questions;**

- Please provide detailed methods, mounting instructions, sample sizes and foreseeable forces/loading to determine capabilities. To be proposed by the supplier and developed in consultation with NMRN.