

**NATIONAL MARINE BIOLOGICAL AQC SCHEME**  
**MINUTES**

**2 December, 2008 10:30 am**

**Video Conference: Belfast, Peterborough, Perth**

Present:	T. Mackie (TM)	NIEA	(Chair)
	M. Service (MS)	AFBINI	(Epibiota Contract Manager)
	M. O'Reilly (MOR)	SEPA	(Infaunal Contract Manager)
	S. Coates (SC)	EA	(Fish Contract Manager)
	P. Addison (PA)	EA/JNCC	(Technical Secretary)
	A. Prior (AP)	EA	(Financial Manager)
	C. Milner (CM)	APEM	(Contractors Representative)
	D. Hall (DH)	Unicomarine	(Infaunal Contractor)
	K. Cooper (KC)	CEFAS	
	J. Foster-Smith	Envision	(Epibiota Contractor)
Apologies:	C. Scanlan (CS)	SEPA	– Apology due to failed vc connection to Aberdeen
	M. Robertson (MR)	FRS	– Apology as above
	L. Oliver (LO)	EA/CCW	

**1. Update on last meetings ACTIONS:**

**a) *Committee correspondence list***

- PA sent out new committee list.
- Carol Milner is now the Contractors Representative on the committee.

***ACTION:***

- ❖ PA to send out new committee email list again, and highlight that Carol should not be on the main email circulation list (as she cannot see any financial details of the NMBAQC).

**b) *Comments on CEN documents***

- SC and MOR provided comments to Sarah Peaty. No further action is required.

**c) *Benthic Invertebrates***

- MOR has received Yr13 statement of performance from DH and is in the process of sending these out to participants.
- DH has not sent details of the literature database to PA, as it is not quite ready to be advertised on the NMBAQC website.
- TM did get NIEA funding for the Nuculidae guide for Porcupine.
- All actions associated with the workshop were completed.

***ACTION:***

- ❖ DH to send PA details of the literature database for the website when it is ready.

**d) Fish**

- DH alerted SC to the mis-spelling of the six gilled shark in the identification guide.

**2. General Administration**

**a) Netherlands interest in setting up a NMBAQC system for NW Europe**

- Committee discussed the email from Herman Hummel and Pim van Avesaath to Keith Cooper (26/11/08).
- The general feeling was that a 'duplicate' scheme in NW Europe was not necessary, as a lot of the species are similar to those in the UK – therefore NMBAQC could just take on more participants from NW Europe.
- This would be financially very difficult for these guys to set up – but maybe they have EU funding.

**ACTION:**

- ❖ KC to arrange a meeting with TM, Herman Hummel and Pim van Avesaath to discuss the NMBAQC and what they are hoping to achieve. This meeting will be in early 2009, in one of the periods in January or February that they were available.

**b) Website Updates**

- PA outlined website updates to date, including the design of a new site which is now accessible to hearing and vision impaired people.

**ACTION:**

- ❖ PA to get Gavin at CEFAS to make the new website (which contains a lot of this years updates) 'live'.
- ❖ TM to forward the new website zipped file to his home email address and let PA know if it looks ok ASAP.
- ❖ DH to send PA links to the keys used at the Expert Taxonomic Workshop in November.
- ❖ ALL send PA new documents and text as they are developed.

**c) NIEA cost for converting Annual Reports 1-10 into pdf**

- TM has said that NIEA can convert all reports into pdf format, however these will be very big file sizes as pdfs will be created from scanned images of the documents, not just from an electronic file. He is considering collating the electronic versions of the different sections of these and combining them and then converting them to pdf.
- TM only has Annual Reports 4 – 10, (which have his notes in the margins). MS has Annual Reports 1 – 3 and will give them to TM.

**ACTION:**

- ❖ MS to give TM Annual Reports 1 – 3.
- ❖ MO to give his annual reports 1-10 to TM, when TM needs them.

**d) Progress on TOR to HBDSEG**

- TM has not heard from Jane Hawkrigde re HBDSEGs discussion of NMBAQC's role.

**ACTION:**

- ❖ TM to chase up Jane Hawkrige for HBDSEG's response
- ❖ AP to send TM minutes from HBDSEG meeting detailing their discussion about NMBAQC (from a few meetings ago)
- ❖ Once a response is received from HBDSEG, then committee must write a TOR.

**e) *Porcupine article – response to Peter Garwood's article***

- MOR drafted a response to Peter Garwood's Porcupine article, and got TM's comments before submitting it to Porcupine.

**ACTION:**

- ❖ MOR to inform committee of the progress of the NMBAQC letter to Porcupine.

**3. PSA**

**a) *Preliminary results of Questionnaire and other PSA reports***

- PA presented results of the questionnaire (see docs: NMBAQC PSA Questionnaire Summary Rpt-Draft.doc and Summary of answers given to PSA questionnaire –Draft.xls)
- These reports have demonstrated the many differences that exist in PSA sample collection, processing and reporting between CMA's PSA labs and private contractors PSA labs, and demonstrates the need for a workshop to be held prior to a SOP being written and fed into the Green Book.
- TM highlighted his concern that we can not currently tell the difference between chemical and biological PSA samples collected for CSEMP which are recorded in MERMAN.
- PA also presented other reports that she has been working on (Malvern Mastersizer 2000 Result Analysis Report Defined-Draft.doc; What stats and fractions are currently reported for WFD and CSEMP-Draft.doc) which are more for CMA's reference at this stage, but will be used to promote discussion about differences in PSA analysis and reporting at the workshop.

**ACTION:**

- ❖ TM to chase up whether it is possible to identify biological vs chemical PSA samples in MERMAN, and let PA know!
- ❖ PA to incorporate any comments on draft reports and have them ready for the workshop in February.

**b) *Discuss potential for a workshop (first quarter of 2009) and development of a SOP for PSA***

- The committee have agreed on the need for a 'PSA for supporting biological analysis' workshop (as proposed in PSA for Supporting Biological Analysis Workshop Proposal.doc)
- This should be run for 1.5 days (Day 1: full day, and Day 2: half day) at CEFAS Lowestoft. CEFAS will provide venue/lab space and lunch for participants (therefore no participation fee will be charged). This will be organised by Claire Mason at CEFAS.

- Claire Mason is investigating whether the workshop can be held during the week of the 9 February.
- The proposal involves inviting all key infaunal and sedimentology people from the UK.
- Some experiments will need to be done prior to the workshop to highlight the effects of differences in methodology (e.g. freezing vs not freezing samples; using hydrogen peroxide vs not; using a dispersant vs not; and, the effect of wet/dry sieving to different minimum mesh sizes). The results of these expts can then be presented to the workshop participants as evidence for which methods are best for 'PSA for supporting biological analysis'.

***ACTION:***

- ❖ PA to request a list of participants that should be invited. MS to give PA participant names in particular.
- ❖ PA to check up on the work done by Unicmarine – looking at effects of freezing vs not and hydrogen peroxide vs not.
- ❖ PA to co-ordinate CEFAS, NIEA and any other labs conducting these experiments before the workshop.

***c) Green Book Revision***

- There is pressure for NMBAQC to provide guidance on 'PSA for supporting biological analysis', but TM seems to think the deadline for the Green Book is now being stalled, so we should have time for the workshop and then provide some guidance following this.

***ACTION:***

- ❖ TM to advise John Thain (and whoever else needs to know) what the NMBAQC's plans are for working towards a workshop and SOP for 'PSA for supporting biological analysis'.
- ❖ TM to let ALL know when the Green Book revision deadline is.

**4. Standardising Taxon - ERMS (now WoRMS!) into Unicorn**

***a) Progress summary from Mark Charlesworth***

- An email sent to TM, PA and Jane Hawkrige (27/11/08) explained:
  - ERMS is now for the World, ∴ WoRMS.
  - BODC has checked the WoRMS species list against BODC, Marine Recorder and DASSH, and have offered to do the same for UNICORN.
  - Once the missing species from BODC, Marine Recorder, DASSH and UNICORN have been established, this list will be sent to WoRMS for these species to be established.
  - WoRMS will then become a recommended 'standardised list' for the UK if agreeable in MEDIN (which Mark is sure it will be).
  - BODC, Marine Recorder, DASSH and UNICORN will not replace their spp list with WoRMS, but will add additional fields so that data can be exported and imported based on the WoRMS list.
- Committee was concerned about using a 'world' species list and the potential for errors to be made in sample entries in UNICORN (e.g. an Australian decapod being entered for a site in the UK). But according to Marks email, this

would not happen, as the primary species list that is used is still the UNICORN list (and WoRMS would just be an additional field where the WoRMS code is provided).

**b) EA and NIEA funding**

- AM got EA funding for putting WoRMS onto UNICORN.
- TM has said there is no money from HBDSEG or DEFRA, but potential from the Aggregate Levy Fund.

**c) MERMAN to cover the maintenance costs?**

- TM has suggested this cost can easily be covered by each of the CMA's (incorporated into their existing maintenance costs for MERMAN). The estimated maintenance cost for WoRMS of £1000 per annum, which would equate to £200 for each CMA.

**d) Summary report of the benefits of ERMS list presented to HBDSEG**

- Email from Jane Hawkrige to TM, PA and Mark Charlesworth (01/12/08) explained that a summary report from NMBAQC is no longer necessary. But Jane would like to know what is being covered (ecological components wise) by the NMBAQC's current process as she suspects there may be a few other organisations that need to look at their databases – this needs to be fed back to HBDSEG.

**ACTION:**

- ❖ KC to investigate what marine species are covered by WoRMS and report to TM, who will then pass on this info to Jane Hawkrige.

## **5. Benthic Invertebrates**

**a) Contractor update**

- Dave Hall provided a summary of this years Benthic Invertebrate component (as detailed in: MtgRpt\_02\_12\_2008.pdf):
  - Some LR and OS from Yr14 are still to be analysed, but Yr 15 has taken priority in an attempt to not let Yr 15 reporting fall so far behind.
  - Yr 15 has had an additional 3 new joiners in the past few months, one of which is a Dutch lab (AquaSense). DH is having some problems with TNT in confirming sending parcels to AquaSense, so has not officially confirmed their participation yet.
  - Yr 15: RT35 and PS32 are completed. DH outlined the results of these – which can be found in the online reports on the NMBAQC website now.
  - LR13 is active, with 7 of the 14 sets of specimens received.
  - OS38-40 is active with some samples still outstanding past the deadline of 28/11/08.
  - MB16 is active with deadline for receipt of samples- 19/12/08.
  - RT36 and PS33 are in preparation and will be sent out in early February 2009.
  - The Expert Taxonomic workshop was successfully run in November. Feedback provided was generally very positive. Some participants were not happy about a few aspects of the course (which are detailed in workshop feedback summary 2008\_27 Nov.pdf). DH thought that the change of venue to the hotel worked out very well. Suggestions for future

workshop content has been suggested in the workshop feedback document as well. The budget for the workshop was fine (possibly even a slight profit).

- DH was asked about how much it would be for Igor Jirkov's key to be translated into English – he was quoted £10-20,000. DH thinks this quote includes substantial improvements being made to the key as well as translation.
- Nuculidae guide for Porcupine went to Julian Nunn for comment, and changes will be made.
- Hesionids could be the next guide published, the workshop version by Steve Jarvis is almost ready, which may also be for Porcupine.
- The new version of the NMBAQC Taxonomic Literature Database has incorporated 106 more pieces of literature.

***ACTION:***

- ❖ DH to chase up a quote from Igor to just translate his key to English (without the other re-working).

***b) Yr 16 plans***

- Finance Option 2 was agreed on (in last meeting) – which still involves two RT and PS tests, with the only change being MB is now created artificially. See 'Finance' section for details of pricing structure.

***c) OS - Clarification of how incorrect species id is dealt with in samples that 'pass'***

- AP raised the question: If a lab 'passes' the OS, but have mis-identified a species in their sample should they have to go back and amend this in their database (even though they passed)?
  - MOR said yes they should! MOR has written a document on amending data in the back of one of the annual reports. It was recognised if an abundance difference was picked up (although at a level at which sample still passed) it would mean that that OS sample was slightly out of step with the rest of the samples from the survey.

***ACTION:***

- ❖ MOR will try and find his document on amending data and change it into a flow chart which can be included in the PRP/TDP document.

***d) Collaboration with SeaSearch in advertising each other's workshops***

- AP met with SeaSearch, and they would be happy to exchange information about workshops/training with the NMBAQC.

***ACTION:***

- ❖ AP to give SeaSearch details of NMBAQC's 2009 events at the next SeaSearch meeting in February.
- ❖ PA to chase up advertising the Nudibranch workshop in May at Plymouth Marine Labs.

***e) PRP/TDP Reports – committee comments***

- Unicmarine's Draft PRP/TDP reports were sent to the committee for comment.

- MOR suggested these could also be adapted for the Green Book (currently they are written for WFD, so would need to be slightly modified).

**ACTION:**

- ❖ PA to re-send out to committee and get comments by 24/12!

**f) CMA's funding the production of new keys?**

- This will not be investigated until we have a TOR written!

## **6. Fish**

**a) Autumn Reverse RT update**

- This was just with the 9 EA regions and 1 SEPA lab.
- The results of the trial Spring and Autumn RTs should now be used to direct where the NMBAQC goes for the fish component.

**ACTION:**

- ❖ DH to report on the suggested direction for the NMBAQC's fish component (based on Spring and Autumn RT results).

**b) Fish Key – Progress and Logo's for the publication**

- Not enough money to print the key now, so it will just go out as a pdf – deadline March 2009. SC is talking to EA Training and Development team to see if there is £8000 they could contribute to a small print run (of 250 copies).
- Committee discussed the potential for just getting the electronic copy out there, and once labs see the product, they may come up with some funds to help with a print run.

**ACTION:**

- ❖ MS and KC to provide MS with their Agency logos ASAP.
- ❖ SC to provide PA with a copy of the guide to put onto the website

**c) Yr 16 Plans? Including Fish ID Workshop Proposal**

- See files in Fish\_ID.zip
- Workshop to be held in Millport over 2 days in April (dates to be confirmed) for 20-30 people
- TM thought the participation price for the vessel options of the workshop were too expensive, and the workshop could be done just as successfully without needing a vessel (as workshop could be lab based with participants bringing their own samples)

**ACTION:**

- ❖ SC to inform committee about a chosen date and go ahead and start to organise the workshop.

## **7. Rocky Shore Macroalgae**

**a) Review of Macroalgae RT03**

- Not done as we lost CS in the vc!

**ACTION:**

- ❖ CS to see what MPTT QA need are for rocky shore macroalgae, and use this in light of the performance of RT03 to help inform what direction the NMBAQC should take for Yr 16.

**b) MPTT QA needs and Yr 16 plans**

- See above action - CS to discuss at the MPTT meeting in December and report back to the committee, so Yr 16 plans can begin before the next NMBAQC meeting in March.

**8. Opportunistic Macroalgae**

**a) Review of Emma Wells biomass and % cover trial ringtest**

- The committee briefly discussed this document (Macroalgae Blooming Pilot Quality Control Scheme Report.doc) in the absence of CS.
- The feedback from this exercise was not very positive. Comments were mainly about the biomass exercise and included: j-cloths were not a very accurate representation of opportunistic macroalgae, and the air drying over 24hrs was quite subjective.
- This is a trial for the NMBAQC to be aware of, but nothing more needs to be done in relation to this test at this stage.

**b) Comparison of CMA's Opp Macroalgae methods for WFD**

- PA presented a spreadsheet (WFD Opp Macroalgae SOP comparison\_DRAFT.xls) comparing the original Opportunistic Macroalgae Tools paper (*Wells et al.*) to the SOPS of EA, SEPA, NIEA and EPA for WFD Opp Macroalgae.
- There aren't very many differences between each agency, but still some concerns about the possible within agency variation in some of the Opp Macroalgae methods – e.g. estimating biomass and cover in the field.

**ACTION:**

- ❖ CS will present the SOP comparison to the MPTT meeting for discussion.

**c) EA research into variation in Opp Macroalgae methods for WFD**

- PA discussed some initial findings of her research into the difference between weighing biomass in the field vs thoroughly rinsing and weighing in the lab. From one experiment (15 replicate quadrats) there was a mean weight loss of 60% for samples weighed in the lab compared to the field. This means a lot of the biomass weights used in the Opportunistic Macroalgae tool are not representative of just algae biomass – they include a lot of epibiota, shells and sediment!

**ACTION:**

- ❖ PA getting Mike Best to present this to the MPTT to see what they think!

**d) MPTT QA needs and Yr 16 plans**

- CS to discuss at the MPTT meeting in December and report back to the committee, so Yr 16 plans can begin before the next NMBAQC meeting in March.

## 9. Phytoplankton

### a) *Review of sampling methodology- discussed at MPTT?*

- JS not present at meeting. But it was discussed that CS should chase this up at the MPTT in December.
- AP discussed the EAs research into Phytoplankton study is ongoing, but a draft could be shown to the MPTT for discussion.

### **ACTION:**

- ❖ CS to follow up on whether MPTT is reviewing the Phytoplankton sampling methodology.
- ❖ AP to see if a draft of the EAs research into Phytoplankton could be presented at the MPTT meeting.

## 10. Epibiota

### a) *Video RT Update - First Round Report*

- Envision has completed a report on the performance of participants from the first ring test. This originally included recommendations for the future development of the test. MS had requested that they be taken out of the report before it was circulated and should, instead, be presented to the committee.
- Judy Foster-Smith (Envision) went through some of the main feedback from the first test (in: NMBAQC Epibiota Test 1 Report V.4 (7th October 2008).pdf):
  - The aim was to establish the ability of participants and to seek feedback to refine the test.
  - There were 21 participants from 11 organisations.
  - There was a wide level of experience of participants, ranging from no experience to 12 years of experience in video survey and analysis.
  - Most of the ring test was completed by most participants, however many did not complete the section for allocating/assigning biotopes (because of their uncertainty).
  - The results were varied, due to experience and also video equipment used for the ring test.
  - Feedback included: participants need a considerable amount of training before they should sit a ring test.
  - There were 28 recommendations in all. Many of which were minor and included comments such as: the wording of the instructions should have been clearer.
  - Participants weren't fully aware of the i.d. guides (particularly online guides) that were available to them. Envision have rectified this in their second online ring test (where i.d. guides are more obviously advertised).
  - The time take to analyse 1 minute video clips was between 10 minutes and 2 hours.
  - None of the participants found the test 'easy'.

### b) *Progress of second round ring-test*

- Judy Foster-Smith (Envision) ran the committee through the second ring test:
  - RT02 began in November, and Envision believe it is a big improvement.
  - It is an online test, which is based on testing the data gathering side of video work as opposed to the data interpretation (e.g. assigning biotopes).
  - It is shorter and simpler, with more specific guidelines.
  - Results due in before 25/12/08.

**c) *Epibiota Video Trial Ring Test – Final Workshop***

- Judy Foster-Smith (Envision) ran the committee through the workshop proposal:
  - Proposed for 13-14 May and will be able to take a max of 48 people.
  - The workshop will be free to existing participants, but there will be a fee of £75 for others interested in attending.
  - Discussion points: Data gathering vs interpretation; taxonomic level in video work; training and testing that could follow on from this exercise.

***ACTION:***

- ❖ Conservation Agencies (or their contractors) need to be made aware of the workshop and invited – PA to do this at the MMG meeting. ALL to raise this with their CA contacts.

**d) *Discuss potential for an Epibiota ringtest on NMBAQC website***

- There is capacity for a ring test to be held on the NMBAQC website and hosted/maintained by CEFAS. Cost depend on what is needed.
- A more important thing at the moment would be for the NMBAQC to point to all online references for epibiota i.d.

***ACTION:***

- ❖ PA to find out what it is that the Conservation Agencies want for an Epibiota Ringtest in 2009.
- ❖ PA to chase up all online i.d. sources from MS and Rohan Holt, and put up on the website.

**11. Next Meeting – In the week of March 9, SEPA, Riccarton Office, Edinburgh**

***ACTIONS:***

- ❖ MOR to check when there is a meeting room free on the week of 9 March