

## NE ATLANTIC MARINE BIOLOGICAL AQC SCHEME

6 February 2017. 10.00-13.40

**Attending:** Tim Mackie (TM, Department of Agriculture Environment & Rural Affairs DAERA– Marine & Fisheries Division, meeting Chair), Myles O'Reilly (MoR, SEPA, Benthic Invertebrate Contract Manager), Claire Mason (CM, CEFAS, PSA Contract Manager), Astrid Fischer (AF, SAHFOS, Technical Secretary), Paul Brazier (PB, Natural Resources Wales), Graham Phillips (GP, EA, Finance Manager), Ruth Barnich (RB, Thomson Ecology Ltd), Karina Jacobsen (KJ, Thomson Ecology Ltd), David Hall (DH, Apem Ltd), Grant Rowe (contractor's representative), Claire Young (CY, DAERA, Macroalgal Contract Manager), Keith Cooper (KC, CEFAS), Jim Ellis (JE, CEFAS, Fish Contract Manager), Adele Boyd (AB, Agro-Food and Biosciences Institute (AFBI) NI), Annika Clements (AC, AFBI-NI), Hayley Hinchin (HH, JNCC).

**Apologies:** David Johns (DJ, SAHFOS, Chair), Joe Silke (JS, Marine Institute, Phytoplankton Contract Manager), Rafael Salas (RS, MI), Lydia Finbow (LF, Apem Ltd), Paul Whomersley (PW, JNCC), Henk van Rein (HvR, JNCC), Matt Service (MS, AFBI-NI).

### 1. Meeting Actions from November 2016 meeting & minutes

#### All

- Let David J know if there is anything you would like to be discussed at the next HBDSEG meeting. **Done.**
- It should be the contract managers who send the approved documents to Astrid, not the contractor, action all contract managers to ensure this is done. **Done. Claire Y mentioned that Emma Wells tends to send out directly. Action Astrid to contact Emma to remind that reports should go via the contract manager or technical secretary first.**
- All contractors to send contract managers files in editable format (e.g. word, not pdf). **Done.**

#### Graham

- Contact business partners if NMBAQC can continue to develop UNICORN. **Action Graham to continue to make enquiries.**

#### Keith

- Find out if the bivalve guide images can be made available or if the photos are copyrighted. **Keith is trying to find the original images- Tim may be able to help. KC will then contact Ian regarding copyright. Action Tim to send bivalve growth series images to Keith. Action Keith to contact Ian regarding copyright of bivalve images.**
- Send documents that they have used to specify QA/QC requirements. **Done. Action Astrid to forward email to committee.**

#### Tim

- Send most recent list of invasive species to David H. **Tim was unsure which list this was- it is the UK TAG watch list. There is an alien species telecom meeting next week. Action Tim to send most recent UK TAG watch list of invasive species to David H.**
- Send a reminder if Patrick Collins at Queen's University would like to continue his population genetics study this year. **Action Tim to confirm with Patrick and send out reminder if the study continues this year.**
- Get together with Henk and Paul W. to discuss the possibility of an epibiota ring test and subsequent workshop. **Tim met with Henk last week but unfortunately ran out of time to discuss. A new appointment is to be made in due course. HH advised Paul W now no longer at JNCC. Action Tim to contact Henk to discuss epibiota component development.**

#### Astrid

- Send Envision material of previous ringtests to Henk, Paul W. and Tim. **Done.**

- Draft a sentence to state that all NMBAQC tests are training exercises and there is no financial gain, and as long as we undertake safeguards, it shouldn't matter that the contract manager takes part in the exercise. "NMBAQC ring test are all classed as training exercises, and there is no financial gain from these exercises. Also, contract managers are part of competent monitoring agencies and are not commercially active. It is therefore considered to be appropriate for the Contract managers to participate in these exercises. However, Contract managers who participate in the training exercises are not allowed to be involved in the selection of tenders, where there is a potential of financial gain."
- Draft a paragraph on level of QA and CMAs insisting on best practise. "The NMBAQC committee recommends that CMAs include in QA requirements for tenders (for analysis of benthic invertebrate samples) that 5% or at least 3 samples per project (whichever is higher) are externally audited. In addition the collation of a project specific reference collection is also recommended. Extra Own Samples could be audited via the NMBAQC scheme contractor, via a sibling contractor in a framework contract, or any other contractor recognised as competent by the CMA."
- Create a list of species to send out to participants, together with Myles/Tim/Graham. I've got a list of the Top100 species, but I have now included on the agenda – should we also include the most problematic taxa before we send out for discussion?

#### Paul W. / Henk

- Get together with Tim to discuss the possibility of an epibiota ring test and subsequent workshop. See Tim's actions.

#### David J

- Send the email correspondence about seabird and cetacean monitoring methods to Henk. Done.
- Get back to Mark about setting up a best practice and standards for seabird and cetacean monitoring methods. Done.

#### Myles

- Respond to contractors' queries, first circulate around committee, and then directly to contractor with a cc to Grant. Myles has responded to the queries, but without involvement of the committee. Action Myles to send the responses to Astrid for archive purposes. Post meeting note- done.

### 2. Minutes of the last meeting

Minutes of November 2016 meeting were approved.

### 3. Epibiota update

We have had an email from Ian Sotheran from ENVISION: "I was wondering if there had been any developments in the Epibiota Video component of the NMBAQC scheme. The new guidance which came out last year has made inroads into standardising analysis and hopefully the data which is produced from footage. I know from previous projects and workshops there was often a desire from contractors and agencies for more training or guidance on video analysis and I was wondering if there are any opportunities for this. From recent work, we have undertaken for CEFAS and JNCC for the UK MPAs, we feel the guidance has helped with our analysis but also feel there are elements where a wider understanding of how others approach analysis and also ideas on QA procedures maybe worth a workshop/training day.

If you and other members of the NMBAQC committee feel this is a sensible idea, could it be an agenda item at the next committee meeting? Maybe we could present some ideas for discussion? I also have some additional thoughts on a wider project to develop a readily accessible reference collection for video and stills analysis.

We have been building up an internal collection and I know CEFAS and JNCC have included this as part of recent contracts along with the deep-sea image catalogue developed by Kerry Howell at Plymouth and I was wondering if NMBAQC would have any thoughts on how to develop this and

possible funding streams available as I suspect it would be cross sector consortium project. Again, I would be happy to provide something for wider discussion if it was thought to be a sensible way forward.”

Tim mentioned that Envision has run the ring test before, but the costs involved were only covered with a grant and were too high to make the component viable. We have therefore been considering an in-house test. From the previous exercises it was clear that the majority of laboratories were quite inexperienced at the time and wanted training. Always willing to seek funding and review proposals.

Annika spoke to Ian in London. He was really keen, having done lots of archiving/cataloguing in the past, although he will have his business interest at heart. It is an area NMBAQC is keen to develop, and an archive of ring tests would be good to have. Tim has quite a few videos but is missing the supporting materials and identifications. We could use an archive of broad geographical input with supporting materials and identifications. Annika may be able to provide some nephrops survey materials.

Hayley has recently been to ICES meeting and problematic video footage (ie poor quality) was discussed. **Action Hayley to send around link to report when this comes out. Action all to look out for grants to develop this further.** (If we focus on epibiota imaging to ensure fish stocks in Wales, this may be an opportunity: <http://www.waterloofoundation.org.uk/EnvironmentMarine.html>)

**Action Henk, Tim, Annika and Hayley to liaise to take this further.**

#### **4. Phytoplankton update**

The IPI exercise for 2016 has been completed. Going forwards, the International Phytoplankton Intercomparison are going to upgrade the Proficiency Testing (PT) scheme this year to measure biovolume. It is going to be introduced in 2017 with a view to see how it works and whether it is useful or not for participants. Also, we have been talking for years about accreditation of the PT scheme under 17043 and the Marine Institute are applying this year to their national accreditation board. The 2017 exercise will be announced in March. **Action David to remind Rafael to send his update in time for meeting.**

#### **5. Priorities from HBDSEG**

Tim was tele-present at the recent HBDSEG meeting, and it was mentioned they would prefer a bullet point update from NMBAQC. The work carried out by the NMBAQC committee was praised and especially how we have embraced new components. HBDSEG are continuing to work on further indicators (e.g. cetaceans, marine birds) and hope that NMBAQC will continue to create awareness.

#### **6. Contractor’s update APEM**

##### **6.1 PSA Update**

##### **2016-17, Year 23**

##### **1. Subscriptions**

LabCode	PS60/61	PS62/63	PS-OS07/08/09
PSA_2301	1	1	-
PSA_2302	1	1	1
PSA_2303	1	1	1
PSA_2304	1	1	-
PSA_2305	1	1	-
PSA_2306	1	1	1
PSA_2307	1	1	-
PSA_2308	1	1	-
PSA_2309	1	1	1
PSA_2310	1	1	-

PSA_2311	1	1	1
PSA_2312	1	1	1
PSA_2313	1	1	1
PSA_2314	-	-	1
PSA_2315	-	-	1
PSA_2316	-	-	1
PSA_2317	-	-	1
PSA_2318	-	-	1
PSA_2319	-	-	1
PSA_2320	1	1	1
	14	14	14

## 2. 2016-2017, Year 23 Operations

All PS exercises were distributed in line with the 2016-2017 timetable (available below). The deadline for PS-OS submission was extended to increase returns. Returns and results are summarised in the table below.

Exercise	Status	Returns / Comments
PS60	Samples distributed 25/05/16 Sample deadline passed (29/07/16) Interim report issued (15/08/16) Exercise complete	Mud/Sand Test 14 out of 14 returns received
PS61	Samples distributed 25/05/16 Sample deadline passed (29/07/16) Interim report issued (15/08/16) Exercise complete	Sand/ Gravel Test 14 out of 14 returns received
PS62	Samples distributed 12/10/16 Sample deadline passed (16/12/16) Interim report issued (13/01/17) Exercise complete	Diamicton Test 14 out of 14 returns received
PS63	Samples distributed 12/10/16 Sample deadline passed (16/12/16) Interim report issued (13/01/17) Exercise complete	Gravel Test 14 out of 14 returns received
PS-OS07-09	Samples requested 25/05/16 Data submission deadline passed (08/06/16) Sample submission deadline passed (27/07/16) Deadlines extended to end Oct 16 Report deadline (24/02/2017) Exercise active	10 out of 14 lists of samples 10 out of 14 datasets received 30 out of 42 samples selected 30 out of 42 samples received 6 samples to be externally audited

### a. Issues arising

One laboratory has requested another replicate for PS62 to assess the variance in their data for this exercise.

### b. Workshop

A workshop is to be planned for October 2017. It is suggested that a questionnaire is circulated as soon as possible to gather feedback on the scheme's modules (e.g. fit for purpose, value for money, etc.) and gather topics for the workshop. An expression of interest form for the workshop will be produced with a tentative programme following analysis of the PSA questionnaire returns.

### Particle Size Component 2016-2017 Timetable (Scheme Year 23)

Module / Exercise	Event	Date
PS60 & PS61	Samples distributed	25/05/16
	Results deadline	29/07/16
	Interim reports	12/08/16
	Final report	28/10/16
PS62 & PS63	Samples distributed	12/10/16
	Results deadline	16/12/16
	Interim reports	13/01/17
	Final report	13/03/17
PS-OS07–09	Request for sample data distributed	25/05/16
	Data submission deadline for sample selection	08/06/16
	Selected samples submission deadline	27/07/16
	Interim reports	24/02/17
	Final report	31/03/17
Workshop - TBC	TBC	TBC – Oct 17

Claire Mason, David Hall and Ken Pye met up on 11<sup>th</sup> January, and a few more issues have come out. There was good participation this year, and one laboratory has requested another duplicate sample, there may be something wrong with their system, so if the issue is not resolved, a benchmark duplicate will be supplied.

One thing that was noticed is that some laboratories only use the NMBAQC methodology for the ring test, but not for their own samples. It was noted that the majority of the laboratories do not collect a big enough sample to ensure sufficient material remained for representative QA analysis.

There is a potential for a workshop in October to discuss appropriate sample size and the best way to retain samples for subsequent QA. We will send out a questionnaire beforehand. The questionnaire will consist of two parts: The first part will be feedback on the PS and PS-OS exercises, including anything that should be added to these exercises. The second part will be an expression of interest for the workshop, potential subjects for discussion and the location for the workshop.

**Action David H to send questionnaire to Astrid for circulation among participants.**

The committee queried if the laboratories are stating that they are using NMBAQC methodology? David H replied that they did, however, from the data he receives; it looks like they are not. The PSA methodology has been recently updated to say that you don't need to do 9 laser runs (ie 3 replicates x 3 runs) per sample, but this may now be misinterpreted. Some text in the document needs to be clarified; it is clear in the summary table but not in the document itself. It should also be clear in tenders that they will be assessed for using the methodology correctly and that they need to give

evidence. The procedure will be tweaked and revised after the forthcoming workshop. There will also be demonstrations of new manufacturers of PSA machinery at the workshop.

Myles asked if the forms for the PSA component could be made more 'foolproof'. Action Myles to send feedback about unclear bits of the forms to Claire M.

## 6.2 Benthic Invertebrates update

2016-17, Year 23

### 1. Subscriptions

LabCode	RT51/52	LR21	OS62/63/64
BI_2301	1	-	-
BI_2302	1	1	1
BI_2303	1	-	-
BI_2304	1	1	1
BI_2305	1	-	-
BI_2306	1	-	-
BI_2307	1	-	1
BI_2308	1	-	-
BI_2309	1	1	1
BI_2310	1	-	-
BI_2311	1	-	1
BI_2312	1	1	1
BI_2313	1	1	1
BI_2314	1	1	-
BI_2315	1	1	1
BI_2316	1	-	1
BI_2317	1	-	1
BI_2318	1	-	-
BI_2319	1	1	-
BI_2320	1	1	1
BI_2321	1	-	1
BI_2322	1	-	1
BI_2323	1	1	1
BI_2324	1 (RT52)	-	-
BI_2328	-	-	1
BI_2329	-	-	1
BI_2330	-	-	1
BI_2331	-	-	1
BI_2332	-	-	1
BI_2333	-	-	1
BI_2334	-	-	1
BI_2335	-	-	1
BI_2336	-	-	1
BI_2337	-	-	1
BI_2338	-	-	1
BI_2339	-	-	1
BI_2340	-	-	1
BI_2341	-	-	1

BI_2342	-	-	1
BI_2343	-	-	1
BI_2344	-	-	1
BI_2345	-	-	1
BI_2346	-	-	1
	<b>24</b>	<b>10</b>	<b>33</b>

## 2. 2016-2017, Year 23 Operations

Exercise	Status	Returns / Comments
<b>RT51</b>	Specimens distributed 15/06/15; Submission deadline passed 29/07/15; Interim reports issued 12/08/16; Ring Test Bulletin issued 31/10/16; Exercise complete.	General Ring Test; out of 23 returns received; two laboratories also supplied an extra set of analyst results; 3 labs did not participate; 1 lab was given an extension until 8/8/16.
<b>RT52</b>	Specimens distributed 12/10/16; Submission deadline passed 16/12/16; Interim reports issued 13/01/17; Ring test Bulletin deadline 13/03/17; Exercise in progress.	Targeted Ring Test (Bivalves); 21 out of 24 returns received; 3 labs did not participate; 3 labs were given an extension; 1 new participant added for this exercise; growth series images to be included in RTB where possible.
<b>LR21</b>	Request for specimens distributed 15/06/16; Submission deadline passed 29/07/16; Analysis / reporting deadline 03/03/16; Exercise in progress.	General; 6 out of 10 returns received; 1 lab will not participate this year; 2 reported, to date.
<b>OS62-64</b>	Samples requested 15/06/16; Data submission deadline passed 01/07/16; Sample submission deadline passed 12/08/16; Extension until 31/10/16 for 14 laboratories has passed; Interim report final deadline 03/03/17; Final report deadline 31/3/17; Exercise in progress.	28 out of 33 lists of samples received including two labs not participating this year; 28 out of 31 datasets received; 84 out of 93 samples received, including 7 samples for external audit; 24 samples analysed (+23 at reporting stage); 8 out of 31 sets reported, to date.

## 3. Outstanding issues

Remedial actions are continuing to be tracked from 2013/14 (Year 20) and are summarised at the end of this report.

The own samples from the CMAs are all in, but timings will be tight for reporting by the end of the financial year.

**Remedial Action**

**Year 20 (2013/2014)**

Labcode	OS reported	OS53		OS54		OS55	
		Score	RA	Score	RA	Score	RA
BI_2001	26 March 2015	-	-	-	-	88.889	RA outstanding
BI_2016	18 March 2015	88.213	RA completed 8/4/15	85.482	RA outstanding	-	-
BI_2017	27 March 2015	-	-	-	-	70.588	RA outstanding
BI_2019	25 March 2015	-	-	78.431	RA outstanding	78.161	RA outstanding
BI_2033	27 March 2015	43.478	RA outstanding	63.768	RA outstanding	69.333	RA outstanding
BI_2047	30 March 2015	-	-	40.000	RA completed 2/7/15	77.362	RA completed 2/7/15 - evaluated Aug 2016 - Fail, further RA required
BI_2048	30 March 2015	70.424	RA completed 2/7/15 - evaluated Aug 2016 - Fail, further RA required	89.384	RA completed 2/7/15 - evaluated Aug 2016 - Fail, further RA required	86.607	RA completed 2/7/15 - evaluated Aug 2016 - Fail, further RA required
BI_2056	30 March 2015	63.758	RA outstanding	71.795	RA outstanding	88.446	RA outstanding
BI_2058	25 March 2015	-	-	66.667	RA outstanding	-	-
BI_2059	30 March 2015	84.058	RA outstanding	-	-	85.714	RA outstanding
BI_2071	19 May 2015	15.942	RA outstanding	40.945	RA outstanding	49.505	RA outstanding

\*NB – Outstanding remedial action includes 4 CMA labs that sub-contract analysis



Year 2014/2015 (Year 21)

Lab code	OS reported	OS56		OS57		OS58	
		Score	RA	Score	RA	Score	RA
BI_2106	14 May 2015	72.607	RA outstanding	52.174	RA outstanding	-	-
BI_2118	26 May 2015	-	-	55.039	RA outstanding	-	-
BI_2121	26 May 2015	-	-	78.987	RA outstanding	89.431	RA outstanding
BI_2126	24 April 2015	89.320	RA outstanding	82.784	RA outstanding	78.008	RA outstanding
BI_2127	15 May 2015	68.803	RA completed 24/08/15 (without APEM agreement) - TO BE EVALUATED	63.106	RA completed 24/08/15 (without APEM agreement) - TO BE EVALUATED	55.738	RA completed 24/08/15 (without APEM agreement) - TO BE EVALUATED
BI_2128	19 May 2015	85.584 (from 76.43)	Specimens reviewed May 2016; RA outstanding	87.879	RA outstanding	76.471	Specimens reviewed May 2016; RA outstanding
BI_2131	24 September 2015	-	-	-	-	75.000	RA outstanding
BI_2132	26 May 2015	-	-	-	-	FAIL	RA outstanding
BI_2133	29 September 2015	83.426	RA outstanding	-	-	-	-

\*NB – Outstanding remedial action includes 5 CMA labs that sub-contract analysis (or CMA samples submitted under a contractor’s subscription)

Year 2015/2016 (Year 22)

Lab code	OS reported	OS59		OS60		OS61	
		Score	RA	Score	RA	Score	RA
BI_2203	18 December 2015	6.48	RA outstanding	0.300	RA outstanding	0	RA outstanding
BI_2205	23 March 2016	86.588	RA outstanding	-	-	-	-
BI_2213	05 January 2016	-	-	85.623	RA outstanding	85.106	RA outstanding
BI_2239	06 January 2016	72.165	RA outstanding	85.625	RA outstanding	89.971	RA outstanding

\*NB – Outstanding remedial action includes 2 CMA labs that sub-contract analysis (or CMA samples submitted under a contractor’s subscription)

### Invertebrate Component 2016-2017 Timetable (Scheme Year 23)

Module / Exercise	Event	Date
RT51 - General	Samples distributed	15/06/16
	Results deadline	29/07/16
	Interim reports	12/08/16
	Final report	28/10/16
RT52 - Targeted	Samples distributed	12/10/16
	Results deadline	16/12/16
	Interim reports	13/01/17
	Final report	13/03/17
LR21	Protocol and request for specimens distributed	15/06/16
	Specimen submission deadline	29/07/16
	Final reports	03/03/17
OS62–64	Request for sample data distributed	15/06/16
	Data submission deadline for sample selection	01/07/16
	Selected samples submission deadline	12/08/16
	Interim report final deadline	03/03/17
	Final report	31/03/17
Workshop –expert	Spionidae and Paraonidae with Vasily Radashevsky and Joao Gil, Millport Field Station, Isle of Cumbrae	11-15 <sup>th</sup> October 2016

SOPs issuing without the n/a (not applicable), but keep including n/p (not participated) & n/r (not recorded)

This issue was raised by Tim, for procurement reasons n/a can be read as ‘they should not be participating in this component’. Also, because the ring test is used to support tender submissions, laboratories often use their best taxonomist to do the test to get a better result, and the work is no longer seen as a training exercise for personal development, which it was meant to be. **Action David H and Tim to come up with agreement for terminology.**

Top 100 taxa for taxonomic discrimination protocol (TDP)- status and should we also include problematic taxa?

There are three ways to approach developing the TDP :

- The most recorded taxa
- The most problematic taxa
- Looking at specific taxonomic groups.

So far Graham has produced a list of the top 100 taxa on the basis of the number of records submitted to UNICORN. Myles has also had various discussions with David H about what was appropriate and should be included in problematic taxa. A draft TDP on groups from the last Inverts Taxonomic Workshop is planned and specific groups will be targeted at forthcoming workshops. The problem we have is when we asked Apem Ltd to make the NMBAQC exercise protocols clearer, they referred to their APEM Identification policy and some participants now feel that they are tested against the Apem Ltd protocol rather than the NMBAQC protocols. NMBAQC will have to issue a draft Taxonomic Discrimination Protocol (TDP) including our own NMBAQC Identification policy and make it open to discussion and feedback. This draft policy has to be ratified by NMBAQC, but it is important that we don't class ourselves as a taxonomic authority. The purpose of the TDP will be to meet the CMA requirement for consistency in details when recording so that datasets can be compared.  
**Action Myles, Tim and David H to have a discussion and come up with a first draft.**

## 7. Macroalgae

Component is on schedule: Ring tests have arrived at the laboratories and the samples need to be returned by next Friday.

## 8. Contractor's update Thomson Ecology

### 8.1 Fish update

#### Scheme Membership Details

#### 2016 / 2017 Participation

Laboratory Code	Fish Reverse Ring Test	Fish Ring Test
F_2301	Y	Y
F_2302	-	Y
F_2303	Y	-
F_2304	Y	-
F_2305	Y	Y
F_2306	Y	Y
F_2307	Y	-
F_2308	Y	-
F_2309	Y	Y
F_2310	Y	-
F_2311	Y	-
F_2312	-	-
F_2313	Y	-
F_2314	Y	-
F_2315	Y	-
F_2316	Y	-
F_2317	-	-
F_2318	-	Y
F_2319	-	Y
F_2320	-	Y
F_2321	Y	Y
F_2322	-	Y
F_2323	Y	Y

F_2324	Y	Y
F_2325	-	Y
F_2326	-	Y
F_2327	Y	Y
<b>Total</b>	<b>22</b>	<b>15</b>

(List correct as of 23 January 2017; four labs not participating in FRRT due to lack of fish)

### Progress on circulations

#### Scheme Year 2016/17 Fish component

Exercise / Report	Event / Date	Notes
<b>F_RRT08</b>	<p>Protocol and request for specimens distributed 05/09/16. <b>Completed.</b></p> <p>Fish boxes for sending RRT specimens prepared and distributed to participants upon request. <b>Completed.</b></p> <p>Specimen submission deadline 09/12/16. <b>Completed.</b></p> <p>Bulletin deadline 10/03/17. <b>Pending.</b></p>	<p><u>Fifteen fish taxa to be from NW European waters</u> (CSEMP where appropriate). <b>4 laboratories are not participating- 2 changed their minds and 2 did not submit data.</b></p> <p><i>Individual preliminary reports are currently prepared.</i></p>
<b>F_RT10</b>	<p>Distribution of samples 05/12/2016. <b>Completed.</b></p> <p>Results deadline 03/02/2017. <b>Pending.</b></p> <p>Bulletin deadline 17/02/17. <b>Pending.</b></p>	<p><u>General Fish Ring Test Assorted Fish Taxa (15 taxa).</u></p> <p><b>1 laboratory result is outstanding- so far no reply has been received.</b></p>
<b>Annual Report</b>	<p>Bulletin deadline 31/03/17. <b>Pending.</b></p>	<p><u>Annual Report</u> Detailing exercises and results from RRT and RT exercises.</p>

Has there been any feedback from laboratories? Karina Jacobsen has tried to follow the same protocol that Sarah Hussey had been using, which included asking for common names of species and has had some comments on this. Myles mentioned that for reports for management the common names needed to be included, and he would normally use the EA guide (Maitland & Herdson, 2014) for common names, however, there are still a few old names floating about. He suggested that when using common names (alongside the

scientific names) encouraging participants to use the common names in the EA guide. Thomson is not going to use mismatches in the common names for marking scores.

## **8.2 Cephalopod guide**

We have been given a visual key to the identification of cephalopods by Vlad Laptikhovsky from Cefas. There is currently no associated dichotomous key. Shelf water species around the UK are described but deep water species are not included, nor some very small non-commercial species nor the main Arctic species which sometimes enter the northern North Sea. As cephalopods are often caught in nets as by-catch, it was thought to be appropriate to discuss the guide under the Fish update.

The committee felt that they key would benefit from including information on the occurrence of the species (rare/common), an identification key, a taxonomic discrimination protocol (especially for damaged species). A tabular key at the start with information about what ID features are most important would be useful too. Fisherman should be encouraged to take photos or retain the species so that an expert can verify the identification if needed. The images and ID features in the guide were very well received, and certain groups of people will use a visual ID, but inclusion of a tabular and/or dichotomous key would be preferred.

The place of cephalopods in ring test was also discussed. David H has included them in the benthic invertebrate ringtest before, and Karina is also happy to include them in a specialised fish bycatch ringtest.

**Action Jim to ask Vlad if the guide in its current form can be uploaded on the NMBAQC web site.**

## **9. Zooplankton update**

Eleven laboratories have participated, 4 of which are competent monitoring agencies, 3 international laboratories and several contractors. All but one have sent in their results, and the outstanding laboratory has been given an extension until 15<sup>th</sup> February.

### **Cetacean/ Marine Birds update**

Update from Henk: “I spoke to Mark Lewis about his plans for European Seabird at Sea (ESAS) surveys and what they wanted from NMBAQC. They have an issue with contractors using different variants of the ESAS method that he and many others in Europe use. This renders their data difficult to work with and reduces its utility in wider analyses. He would like NMBAQC to accredit the ESAS method and use this to encourage the contractors to follow the guidelines. However, NMBAQC do not accredit methods: they recommend and endorse best practice approaches but do not provide an accreditation.

I gave Mark an overview of the approach taken by govt bodies and contractors alike in producing the NMBAQC epibiota guidelines. He said the ESAS method had undergone a similar process. One key difference between the two processes is in the nature of the contractor to client relationship. Many epibiota contractors work for govt bodies and, thus, follow the guidelines set out by those bodies. However, many seabird contractors work for wind farms who do not follow the govt guidelines to the extent that govt bodies would recommend - they are primarily concerned with doing what is necessary rather than what Mark would like them to.

I recommended Mark follow up his line of queries with Marine Scotland as they are the legislator and have the strongest say in 'who must do what' at sea. He wishes to integrate the ESAS guidelines with the NMBAQC but there is no pressing need at present. In time though i pointed out that having seabirds in NMBAQC remit would enrich the Scheme, as well as providing another 'tick' for the ESAS method."

Astrid mentioned the recently published report by ORCA 'The State of European Cetaceans' available online on: [http://www.orcaweb.org.uk/uploads/Our\\_Work/ORCA-The\\_State\\_of\\_European\\_Cetaceans\\_\(2006-2015\).pdf](http://www.orcaweb.org.uk/uploads/Our_Work/ORCA-The_State_of_European_Cetaceans_(2006-2015).pdf)

It would be good if the NMBAQC web site could bring all the current protocols together for easy reference. **Action Astrid to contact Mark about this.**

## **10. AOB**

### **10.1 Merman enquiry:**

"In preparation for ensuring MERMAN biology data matches with ICES we have pulled all the biology data we have out of MERMAN and mapped them to WoRMS' aphiaID. We do not have the expertise or knowledge to be able to make calls on any ambiguous names or if the SPECI should be called one name over another. Nor indeed are we in a position to identify any names the WoRMS online function were unable to map. Please could you all have a look at the file attached and provide some feedback. If you order by number (smallest first) you should see the species that need further clarification.

Please note if you would prefer the aphiaID/"Scientific\_name" to be present over any aphiaID\_accepted/"Scientific\_Name\_accepted" population then please make this clear in the file. Equally any names that we do not receive any information that we require we will be in touch with the CMA in order to solve any possible issues in MERMAN arising from these data. ICES have confirmed that data should be accepted if the name or aphiaID are accepted in WoRMS. If you feel you require a species to be entered into WoRMS then we have several ways of doing this if you are unable to do this yourselves."

The committee was of the view that data was checked at time of submission and that any further checks should be carried out by Merman on an annual basis. The problem is likely that when WORMS says the entry is ambiguous, they may be unsure what to do. A disclaimer on the web site stating that all data needs to be checked against the WORMS standardised species list first could work in the short term. However, the committee felt the updating falls in the remit of Merman, who get paid to do this. **Action Myles to call Merman and find out more, plus point them in the correct direction.**

### **10.2 Contractor query regarding problematic taxa**

*"Hi Grant,*

*Please find attached the latest version of our list of problem taxa. I would really appreciate it if you could ensure this is discussed by the NMBAQC committee. In summary:*

*We have created this preliminary version of taxa with unresolved taxonomic issues with input from a few other laboratories, and the backing of many others. Although it is*

*by no means complete, we have compiled the list in order to highlight the scale of the problem, which we believe should be addressed by the NMBAQC. We see this document as a starting point for reaching a consensus on how to ID these taxa so that all labs are applying a standard approach. The hope being that this will increase consistency in the data we produce and reduce time consuming debates over disputed identifications. We feel that this issue deserves much more attention than it is currently receiving. The ideal situation in our opinion would be to have regular meetings arranged by the NMBAQC in order for all labs to contribute to the development of a standardised approach to these problem taxa. “*

Some contractors have come up with their own list for some 20-30 taxa with unresolved taxonomic issues which they would like the NMBAQC to consider. Although the attached document looks good, it is not always taxonomically well thought out from a data consistency viewpoint. The NMBAQC committee has already started to take this in hand with proposals to start on a draft TDP (see below under Finance Section). The committee need to ensure the correct approach is taken to meet NMBAQC requirements and ensure consistency of data going forwards. Plus the process needs to be rolled out to a much bigger scale. The NMBAQC TDP document will be a living document, especially for more contentious taxon groups. **Action Myles to draft a holding response to the query providing a summary of how we intend to take this forward.**

### **10.3 Contractor query regarding duplicated audit effort for own samples**

One contractor raised an issue about availability of samples for audit in reference to the increasing requirements in some CMA contracts for 5% of samples to be externally audited. They were concerned about duplication of audit effort and mentioned that one of their projects was QA'ed twice, once for work they had done for a CMA laboratory and once for NMBAQC for their own OS-samples. The committee struggled to see the problem, and felt it was good communication from the contractor to auditors regarding sample selection for auditing should avoid any problem. The chances of duplicating audits of projects or specific samples are very low, and it is then down to the contractor to point out to NMBAQC where any samples have already been submitted for the 5% reanalysis QA for CMA requirements.

## **11. Finance Section**

Three proposals were put forward for funding through the scheme by MoR:

1. Lab Reference report – I asked Dave to draft a full multi-participant Lab Ref report which would be circulated to all providing full information on range of Lab Ref material submitted and range of taxonomic issues arising. As this would be an extra cost to the current contract we need to agree to proceed with this (and ask participant permission to use their information which will be listed under the confidential code).
2. Problematic Invertebrate Taxa – This would be part of the Taxonomic Discrimination Protocol. Dave has costed an “Identification policy difference review” document of problematic taxa arising as mismatches with APEM policy in Own Samples, Lab Refs, (and RTs). In view of recent issues raised by participants and the “problem taxa” list circulated by I believe it is important that we take a lead on this and issue an



“NMBAQC branded document” which outlines our current approach on various problem taxa and allows some feedback and comment (but not endless discussion) from participants. I think this is more urgent than the top 100 taxa for the TDP. Again as this would cost money then we need committee approval. Committee would also need to ratify this document, and potentially have some input to subsequent issues raised by participants.

3. Update of Taxonomic Literature List – current version not updated since 2012. Another extra cost to contract. We should include this within contract specification with update either annually or at end of contract period? I have received a detailed costing from Dave.

The committee agreed to fund each of these proposals in line with the cost estimates provided by Dave Hall. The first two proposals can be started straight away. The third proposal is less urgent but should be completed before the end of current inverts contract (ie March 2018).

**ACTION: MoR to inform Dave Hall and initiate the proposals and keep Graham cc-ed regarding costs.**