

NE ATLANTIC MARINE BIOLOGICAL AQC SCHEME
25 January 2016. 10.30-13.30

Attending: David Johns (DJ, Chair, SAHFOS), Tim Mackie (TM, NI EA), Myles O'Reilly (MoR, SEPA), Claire Mason (CM, CEFAS), Clare Scanlan (CS, SEPA), Astrid Fischer (AF, Technical Secretary, SAHFOS), Matthew Green (MG, Natural Resources Wales), Paul Brazier (PB, Natural Resources Wales), Graham Phillips (GP, EA, Finance Manager), Sarah Hussey (SH, Thomson Ecology Ltd), Carol Milner (CMi, Apem Ltd), Lydia Finbow (LF, Apem Ltd), David Hall (DH, Apem Ltd), Grant Rowe (contractor's representative), Amy Ridgeway (AR, JNCC), Keith Cooper (KC, CEFAS), Jim Ellis (JE, CEFAS).

Apologies: Joe Silke (JS, Marine Institute), Rafael Salas (RS, MI)

Matt Green introduced Paul Brazier, who will be stepping in as his replacement as NMBAQC representative from NRW during his gap year. Paul B works on monitoring and sediment data.

Myles wished everyone happy Burns night and a belated happy new year, which was reciprocated by all.

Meeting Actions from November meeting & minutes

All

- Send university contacts to Astrid. *Outstanding, none received.*
- Send reports for the meeting at least one working day before the actual meeting. Contractors should provide reports around one week beforehand. *Thank you everyone for sending in their reports promptly.*
- Comment on proposed macroalgae/saltmarsh workshop to Clare. *Outstanding, no comments received. Clare did receive an email from JNCC who are organising a workshop in March on habitat extent choice, which might duplicate some of the work, but only from a MSFD perspective, no WFD people seem to have been invited. However, JNCC normally work on subtidal and deep subtidal habitats, so they may not cover intertidal habitats.*
- Send comments on discrepancies paragraph to Astrid. *No comments received, everybody was happy with this, and it will now be included in the new info & application note.*

Astrid

- Send info and application note to universities. *Outstanding until new application and info note is produced.*
- Get a phytoplankton update from Rafael. *The Phytoplankton report for this year is now on our web site.*
- Action Astrid to enquire who sign the Statements of Performance for the Phytoplankton Component. *The SOP now provided by Carol indicates these are signed by Joe Silke and Rafael Salas from the Marine Institute.*
- Update the web site, including leaflet and poster, once name change has been approved by MARG. *Done.*
- Work with Myles on the year 20 and 21 overall annual reports now that benthic invertebrate component information is here. *Ongoing. Year 20 draft ready and now working on year 21 report (awaiting PSA report for year 21).*
- Email all contract managers regarding pass/fail criteria. *Done, discussion ongoing.*

Claire Mason

- Send PSA annual report with new methodology to committee. *Claire is working on this.*
- Have a discussion with Myles, Carol and David H about sample submission protocol for audit. We may wish to change the minimum level of participation and minimum number of submitted samples for the next info& participation note. *Outstanding.*

- Flag up the asbestos issue in the PSA protocol. *Claire is working on this.*

David H./Carol

- Send more details about participants' abuse in OS module to Myles. *Done.*
- Have a discussion with Myles and Claire about sample submission protocol for audit. We may wish to change the minimum level of participation and minimum number of submitted samples for the next info& participation note. *Ongoing, with a view to update the protocol for next year's submissions.*
- Send the year 21 LR data to Myles. Action David H to find out from participants if they would agree to a fuller report for this current year- if agreed- Action Myles and David H to advance LR report. *Done.*
- Investigate phenoxytol as a substitute for alcohol preservation. *Action no longer required, as TNT are not charging extra for transport of IMS samples.*

Clare S

- Discuss if the saltmarsh ring test could be an NMBAQC field test instead of a photo exercise with Tina. *Awaiting reply from Tina.*
- Look into guidance protocol and the financial viability of a Saltmarsh ring test (with EA). *Awaiting reply from Tina.*
- Further expand on the requirements where we think we may be lacking on ISO 17043 and all contract managers to further expand on this. *Ongoing.*
- Clarify: was the administrative error causing the sending of the wrong tests our error or was it the error of the Environment agency? If it was our error, are there now measures in place that this won't happen again in the future? *Post meeting note: This was an EA administrative error. The EA should have put something in place to ensure this doesn't happen again.*
- Explain further what is meant with the WFD guide for the RSL. *Post meeting note: Myles is confusing the list with the ID guide. The list is finalised, but we were thinking to update the ID guide for the RSL only, as this is what most agencies are using. There is no funding available to do updates, so it is still under consideration.*

Grant

- To follow deep sea monitoring within JNCC up with Paul Whomersley and also to find out if Craig is willing to give a presentation on this matter. *Craig is willing to have a discussion at our April NMBAQC meeting. Craig has spoken to the oil and gas extraction industry, who agree there is a definitive need for good QA. There is a lot of support for expanding the QA protocol. Dave H. said that in terms of auditing there should not be a problem, but that it should probably be run as an additional test (not included in the standard ring test). Grant has also been in contact with Amy and Paul W, it is their department that is responsible for the deep-sea monitoring, although a different department does the actual monitoring itself. Craig has got specimens for us to use, and David Hall said he may include some in the next ring test. Action David H and Grant to arrange this.*

Myles

- Talk to his colleagues to ensure that NMBAQC participation queries from SEPA get resolved internally. *Myles has informed the aquaculture department that a list of participants is now available on our web site.*
- Send his comments on QA proposal for the Regional Seabed Monitoring Programme to Keith. *Done in November.*
- Circulate information about CMAs and participants to Tim, Keith and Matt and to draft a formal response to pass/fail query together. *Myles has sent detailed responses to the*

contractor's queries and Grant has forwarded these on. Should we keep a record of these responses? Action Myles to forward response to Astrid.

- Have a discussion with Myles, Carol, David H and Claire about sample submission protocol for audit. We may wish to change the minimum level of participation and minimum number of submitted samples for the next info& participation note. *Ongoing.*
- Draft response to query from contractor regarding LR test results (value for money). *As above.*
- Work with Astrid on the year 20 and 21 overall annual reports now that benthic invertebrate component information is here. *Ongoing, a draft for year 20 has been produced and now working on year 21.*

Paul W/ Amy

- Find out who is responsible for the deep sea monitoring within JNCC. *Done, see above.*
- Catch up with Tim on what materials have already been collected for a future epibiota ring test and discuss a way forward. *Ongoing.*
- Send a few lines on what he thinks is the way forward for a future epibiota ring test. *Outstanding.*

Graham

- Look into pricing of fish component for next year. *There is scope for dropping the price a little to encourage IFCA participation next year.*
- Get the current Technical Secretary contract extended to March 2016. *This is near completion.*
- Talk to Roger Proudfoot and find out what is happening regarding fish monitoring within EA. *The EA does wider inhouse training as well as other courses (e.g. the IFM workshop). The reason for the inhouse training is to suit the flexibility needed for EA staff to attend and the reduced costs.*

Tim

- Catch up with Paul W on what materials have already been collected for a future epibiota ring test and discuss a way forward. *Ongoing.*

David J.

- Investigate what QUASIMEME will do for us and to find out if we have funding for the secretariat for next year. *Email sent to Roger Proudfoot 5th January, no reply received as yet.*

Sarah

- Remind people of deadlines for fish component. *Everyone gets an email one week before the deadline.*
- Discuss with Jim possibility of pass/fail criteria. *Done, see AOB.*

Minutes of the last meeting

November meeting minutes were approved.

Epibiota update

Since the last meeting a round of comments has been received on the new interpretation guidelines. JNCC are hoping to finalise the paper by the end of February. Joe Turner, who has been leading on the guidance up until now, will be leaving JNCC by the end of this week. Now that we have operational and interpretation guidelines, QA guidelines would seem like the next logical step. We would still need to decide on criteria for what is a pass/ fail in epibiota monitoring, and the Google Group set up for this would be a good starting point.

It was suggested to send out actual footage, ask for individuals to submit footage and supporting material, including biotope classification. The labs submitting the footage will have an advantage, as they will know what biota is there on their own patch. We could then send out a small ring test with several pieces of footage and a species list to choose from. We could look at the abundance of several key species, and whether participants can distinguish between a nephrops burrow and other openings that may look similar (e.g. openings to certain type of decapod burrows).

Tim mentioned that the feedback from the last Epibiota workshop showed that the majority of people are looking for training. The current guidelines will help, and also specifics. Rohan Holt has been really good at creating some clips which highlight species that need to be identified.

Matt Green is also happy to tell his colleagues about this. **Action Amy to speak to Paul W about organising a small photo or video test together with Committee members who have an interest in epibiota.** First gauge interest and then send invitation to ringtest. This can then be followed up with a workshop.

Phytoplankton update

This year's exercise has finished and the report is up on our web site. 89 analysts from 39 laboratories took part in this intercomparison exercise. 84 analysts returned sample results and 81 completed the online Hab quiz. There were 4 analysts who didn't pass all the enumeration exercises and a further 2 analysts that needed improvement on the HAB quiz.

Astrid went to the workshop in Denmark last year and spoke with Rafael and his supervisor. The MI is trying to form stronger international partnerships, and is in the progress of updating its Terms of Reference. For UK participants only, this would mean that the certificates could be countersigned by NMBAQC, but only if UK NMBAQC participants should wish this to happen. The MI would not be releasing any confidential information about any participants to NMBAQC unless participants in these labs would be happy with this happening.

Priorities from HBDSEG

In the last HBDSEG meeting the name change for NMBAQC was agreed from National to NE Atlantic. This has now been updated on our web site. **Action Astrid to send out the new logo name in HD.** The font used is 'TexGyreAdventor'. There were no further issues addressed in the last meeting, HBDSEG is currently focussing on the development of indicators. Queries were raised whether the development of indicators affect what QA components NMBAQC should undertake, as there are currently no QA protocols for cetacean and bird monitoring. It would be good to have better clarity on what HBDSEG expects from us, e.g. subtidal seagrass, how can there be quality control if there is no WFD protocol? **Action all to send comments to David J for the next HBDSEG meeting.** There has been no further QUASIMEME update.

**Contractor's update APEM
PSA Update**

2014-15, Year 21

1. Subscriptions

LabCode	PS52/53/54/55	PS-OS01/02/03
PSA_2101	1	1
PSA_2102	1	1
PSA_2103	1	1
PSA_2104	(1)	(1)
PSA_2105	1	1
PSA_2106	1	-
PSA_2107	1	-
PSA_2108	1	-
PSA_2109	1	-
PSA_2110	1	(1)
PSA_2111	1	-
PSA_2112	1	-
PSA_2113	1	-
PSA_2114	1	-
PSA_2115	1	-
PSA_2116	-	1
PSA_2117	-	1
PSA_2118	-	1
PSA_2119	-	1
PSA_2120	-	(1)
	14 (15)	8 (11)

Numbers in brackets indicate labs that subscribed but provided confirmation of non – participation.

2. 2014-2015, Year 21 Operations

Exercises have been distributed in line with the 2014-2015 timetable (available on the scheme website), with slightly delayed circulations of PS54 and PS55. The deadline for PS-OS submission was extended to increase returns. **12 of the 24 samples have not been received, Natural England had paid for the samples to be analysed, but the contractor had failed to hand the samples in. However, this particular contractor did hand in their own samples. For year 22 this contractor has submitted both their own and the CMA samples. A short explanation of problems will be included in the final report.**

Returns and results, to date, are summarised in the table below.

Exercise	Status	Returns / Comments
PS52	Samples distributed 15/09/14 Interim report circulated 19/12/14 Final version submitted for website Exercise complete	Mud/Sand Test 13 out of 14 returns received Excluding 1 extra multi data set
PS53	Samples distributed 15/09/14 Interim report circulated 19/12/14 Final version submitted for website Exercise complete	Diamicton Test 13 out of 14 returns received Excluding 1 extra multi data set
PS54	Samples distributed 19/12/14 Interim report circulated 10/03/15 Final version submitted for website Exercise complete	Gravel Test 13 out of 14 returns received
PS55	Samples distributed 19/12/14 Interim report circulated 10/03/15 Final version submitted for website Exercise complete	Diamicton Test 13 out of 14 returns received
PS-OS01-03	Samples requested 14/10/14 Data and sample submission deadlines passed Deadlines extended Exercise complete	8 out of 8 lists of samples 8 out of 8 datasets received 24 out of 24 samples selected 12 out of 24 samples received

a. Issues arising

The deadline for PS-OS submission was extended to encourage full participation. Twelve of the twenty-four requested samples are still outstanding (these all relate to one participant). Pass/Fail criteria and new z-score formulae are yet to be applied in interim reports, but will be trialled in the annual PSA component report.

It appears that some of the received PS-OS samples are not complete samples. PS-OS submissions require all sample components, i.e. <1mm, >1mm and laser sub-sample, if they are to be analysed by the AQC laboratory effectively so that results can be compared. *In the development of the PSA guidelines it will be explained what the OS-test is and what should be provided to the contractor, as currently some samples have been missing the laser fraction. We have added in the guidelines that the laser subsample should be enough for both analysis and for further QA purposes.*

It is important that all relevant sections of the workbooks are filled prior to submission. Correct completion will also highlight any processing or data entry errors that may have occurred, ahead of data submission. Except for minor issues, e.g. a missing value, the results and workbooks will not be altered for mistakes that have been realised by the participant after the circulation of interim reports.

The 2014/2015 annual PSA report has been sent to the contract manager (Claire Mason) for final review. **Action Claire M/ Lydia to send around year 21 annual report.**

2015-16, Year 22

1. Subscriptions

LabCode	PS56/57/58/59	PS-OS04/05/06
PSA_2201	1	-
PSA_2202	1	-
PSA_2203	1	-
PSA_2204	1	1
PSA_2205	1	-
PSA_2206	-	1
PSA_2207	-	1
PSA_2208	1	1
PSA_2209	1	-
PSA_2210	1	1
PSA_2211	1	1
PSA_2212	1	1
PSA_2213	1	1
PSA_2214	1	-
PSA_2215	1	-
PSA_2216	1	-
PSA_2217	1	-
PSA_2218	1	-
PSA_2219	-	1
	16	9

2. 2015-2016, Year 22 Operations

Exercises PS56, PS57, PS58 and PS59 have been distributed in line with the 2015-2016 timetable (available on the scheme website). The deadline for PS-OS submission has been extended to increase returns. Returns and results, to date, are summarised in the table below.

Exercise	Status	Returns / Comments
PS56	Samples distributed 13/05/15 Sample deadline 31/07/15 Interim report complete (08/09/15) Exercise complete	Mud/Sand Test 16 out of 16 returns received
PS57	Samples distributed 13/05/15 Sample deadline 31/07/15 Interim report in progress (08/09/15) Exercise complete	Gravel Test 16 out of 16 returns received
PS58	Samples to be distributed 14/10/15 Sample deadline 18/12/15 Interim Report complete (15/01/16) Exercise complete	Diamicton Test 15 out of 16 returns received 1 email of non-participation received
PS59	Samples to be distributed 14/10/15 Sample deadline 18/12/15 Interim Report complete (15/01/16) Exercise complete	Diamicton Test 15 out of 16 returns received 1 email of non-participation received
PS- OS 04- 06	Samples requested 13/05/15 Data submission deadline passed (08/06/15) Sample submission deadline passed (31/07/15) Deadlines extended Analysis in progress Exercise active	8 out of 9 lists of samples 8 out of 9 datasets received 24 out of 27 samples selected 24 out of 27 samples received

a. Issues arising

The deadline for PS-OS submission has been extended to encourage full participation. One out of nine datasets is still outstanding. 18 of the 24 samples received have been processed by the AQC lab and reports are in progress. The remaining 6 samples have been sent to the AQC lab.

Pass/Fail criteria and new z-score formulae were trialled in the annual (2014/2015) PSA component report and will be applied in the 2015/2016 interim reports. Pass/fail criteria for the PS-OS module were trialled on PS-OS 01 – 03. The criteria will need to be altered as it puts too much emphasis on the gravel fraction and could miss more subtle differences in the sand/silt/mud fraction. After discussion with Ken Pye and Claire Mason (03/12/15) the PS-OS reports will adopt a simpler comparison of selected components e.g. sieve data, laser data, correct merging. This will be reflected in the PS-OS 04 – 06 reports due on the 29/02/16. **The Feb 2016 report will help to identify where problems are occurring.**

It appears that some of the received PS-OS samples are not complete samples. PS-OS submissions require all sample components, i.e. <1mm, >1mm and laser sub-sample, if they are to be analysed by the AQC laboratory effectively so that results can be compared.

It is important that all relevant sections of the workbooks are filled prior to submission. Correct completion will also highlight any processing or data entry errors that may have occurred, ahead of data submission. Except for minor issues, e.g. a missing value, the results and workbooks will not be altered for mistakes that have been realised by the participant after the circulation of interim reports.

Kenneth Pye has suggested making a few further changes to the guidance protocol:

- The current protocol states that everyone should do three measurements on three samples. This was originally done to ensure competence. The guidance should make clear that once you get a stable measurement, you only need to do one to set up and one duplicate measurement.
- The protocol should state to ensure that people don't overload their sieves.
- Some other points regarding the QA of the OS-PSA – to ensure that participants know what is expected from them.
- Screening for Malvern lasers (model 3000 vs 2000): It is now better to set the grid at 2 mm for the laser if the laser can measure between 1 and 2 mm. Separation would still need to be done at 1 mm.

Myles mentioned it would be useful to know what machine has been used for analysis. Claire M said we could include a summary table of laser sizers used, but not per lab as that could be an identifiable feature.

Workshop

Kenneth Pye and Claire M have performed some comparison studies with muddy samples. Kenneth is keen to use dispersants on all samples, but that introduces more variability between laboratories (that is the reason why in the past we have been keen to not have any dispersant). We can use a workshop to look at the use of dispersants again. Claire M has asked Matt Green for some more samples from the 'muddy site'. As well as interlaboratory variability another issue is the comparison with historical datasets (the dispersant will change the reference conditions). Matt is going to collect the samples today and similar as the previous workshop we will have some hands-on exercises. The workshop will involve PSA people as well as biologists as it will affect everyone. The timing of the workshop is not decided yet. We need to get the new method out first, and let people use it, then the workshop will follow this up. So probably in early 2017. Matt Green hopes to be back from his work experience gap year in Spring 2017.

Asbestos

Claire has nearly finished her work on the asbestos issue, and the levels are very low. She is hoping to publish some of her findings. **Action Claire to include a piece in the PSA guidance after her paper has been published and to email around to committee.**

Pass/Fail

We are still working on the PSA pass/fail flag. In Quasimeme this is not a static flag, but an average over three years. The flag should be on sieve or laser only, not on the merge. We will possibly use a different pass/fail next year.

IQI tool

Graham enquired if there was a new workbook that was being produced? No, as a new draft may introduce new reference conditions. Claire M and Grant will have a teleconference next week to expand ranges where new data has become available, especially for coarser sediment types.

Benthic Invertebrates update**2015-16, Year 22****1. Subscriptions**

LabCode	RT49/50	LR20	OS59/60/61
BI_2201	1	1	1
BI_2202	1	-	1
BI_2203	1	-	1
BI_2204	1	1	1
BI_2205	1	1	1
BI_2206	1	-	-
BI_2207	1	1	1
BI_2208	1	-	1
BI_2209	1	-	1
BI_2210	1	1	1
BI_2211	1	1	1
BI_2212	1	-	-
BI_2213	1	-	1
BI_2214	1	1	-
BI_2215	1	-	-
BI_2216	1	-	1
BI_2217	1	-	-
BI_2218	1	-	1
BI_2219	1	1	1
BI_2220	1	-	1
BI_2221	1	-	-
BI_2222	1(RT50 only)	-	-
BI_2226	-	-	1
BI_2227	-	-	1
BI_2228	-	-	1
BI_2229	-	-	1
BI_2230	-	-	1
BI_2231	-	-	1
BI_2232	-	-	1
BI_2233	-	-	1
BI_2234	-	-	1
BI_2235	-	1	1
BI_2236	-	-	1
BI_2237	-	-	1
BI_2238	-	-	1
BI_2239	-	-	1
BI_2240	-	-	1
BI_2241	-	-	1
BI_2242	-	-	1
BI_2243	-	-	1
BI_2244	-	-	1
	22	9	34

2. 2015-2016, Year 22 Operations

Exercises have been distributed in line with the 2015-2016 timetable (available on the scheme website). All circulations have been sent out to participants; LR20 has been completed; all other exercises remain active. Returns and results are summarised in the table below.

Exercise	Status	Returns / Comments
RT49	Samples distributed 27/05/15; Submission deadline passed, 31/07/15; Interim report circulated 19/8/15; Ring Test Bulletin in progress (deadline 30/9/15) and should be ready by end of next week. If there is a problem, the deadline should be defined in the report. Action Carol to include this. Exercise active.	General Ring Test; 19 out of 21 returns received.
RT50	Samples distributed 09/10/15; Submission deadline passed, 18/12/15; Interim report circulated 7/1/16; Ring test Bulletin in progress (deadline 29/2/16); Exercise active.	Targeted (Amphipoda); 20 out of 22 returns received. Myles queried the extra possible participant. As the interim report had already been circulated, it is tricky to do this as it is unclear which laboratories talk to each other. However, the participant is keen to participate next year.
LR20	Request for specimens distributed 08/05/15; Submission deadline passed, 05/06/15; Analysis / reporting complete (deadline 6/7/15); Exercise complete.	General; 7 out of 9 returns received, to date; 7 sets of samples analysed and reported.
OS59-61	Samples requested 08/05/15; Data submission deadline passed, 05/06/15; Sample submission deadline passed, 31/07/15; Analysis / reporting in progress (deadline 29/2/15 interim reports); Final report due 31/3/16; Exercise active.	32 out of 34 lists of samples received; 32 out of 34 datasets received, to date; 91 out of 102 samples received, to date (6 not expected); 7 samples sent for external audit; 57 samples analysed to date; 18 out of 34 sets reported to date.

Myles queried if we should make the LR results more openly available? He is keen to go down this route. We could start in the next NMBAQC year. The information should be included in the info& application note. Action Carol to draft a paragraph to summarise the changes. We could also request that participants take it down to a further taxonomic level. Apem Ltd already has its inhouse Taxonomic Discrimination Protocol. David H to investigate with Steve (Apem Ltd) if we can create a taxonomic discrimination protocol database that can be circulated to participants for comments and get back to Myles. A subsequent workshop could then review this protocol, or it can be included for discussion in the expert workshop.

a. Issues arising

The deadline for data submission for some participants OS59-61 could not be met due to sampling being carried out over the summer months. It was extended for 15 participants until the end of October to allow for completion of 2015 sample by external contractors. The majority of these samples have been received, however submission of five samples are still outstanding. Six samples are not expected as no data has currently been submitted from the labs concerned despite being reminded (BI_2210 and BI_2219). This may have a knock on effect on the Annual Report but should not impact the component reporting, which should (if all samples are received by end of January 2016) still be completed by the end of March 2016.

3. Taxonomic Workshops

APEM has provisionally booked 10th – 14th October 2016 at the Dove Marine Laboratory for the 2016 Expert Workshop. We are awaiting costs from the Laboratory. We currently have Vasily Radashevsky interested in presenting an update on Spionidae, along with a number of other options.

Grant had a query from one participant:

The first involves the return of animals from Own Sample Submissions. Where animals are found in residues or where identified animals are deemed to be a mixture it would be most helpful if these animals could be returned to us separated by taxa. There have been occasions where we have had taxa identified as being a mixture then all of the animals returned to us in one vial. We could then not be sure which specimens had been disagreed with which doesn't help us learn where we have got things wrong. We think separating taxa found in residues or where identifications are a mixture is an essential requirement for people to be able to learn effectively from the QA process.

Carol has already discussed this with Myles. For large samples this would be substantial more work. The specimens are not separated for ID during analysis. Where feasible we will separate the specimens.

The second thing is that the staff here would like it if you could suggest that at some point a meeting is set up where contractors all get together to discuss issues that we have or those that come up for example in ring tests so that we can all discuss together the best way to resolve the issues so that we all move forward in the same way. This doesn't necessarily have to be a specific meeting in its own right but could be a bit of time set aside at the workshop for this sort of discussion.

This would be helped by a more expanded LR report, see above.

**Remedial Action
Year 20 (2013/2014)**

Lab code	OS reported	OS53		OS54		OS55	
		Score	RA	Score	RA	Score	RA
BI_2001	26 March 2015	100.000	None	96.066	None	88.889	RA outstanding
BI_2002	26 March 2015	85.714	Completed 2/4/15	95.000	None	99.750	None
BI_2016	18 March 2015	88.213	Completed 8/4/15	85.482	RA outstanding	99.608	None
BI_2017	27 March 2015	94.048	None	90.323	None	70.588	RA outstanding
BI_2019	25 March 2015	94.631	None	78.431	RA outstanding	78.161	RA outstanding
BI_2023	27 March 2015	80.000	Completed 29/4/15	94.286	None	94.737	None
BI_2029	25 March 2015	89.899	Completed 4/6/15	83.706	Completed 4/6/15	100.000	None
BI_2030	18 February 2015	97.436	None	95.238	None	89.916	Completed 16/7/15
BI_2033	27 March 2015	43.478	RA outstanding	63.768	RA outstanding	69.333	RA outstanding
BI_2046	18 March 2015	66.667	Completed 18/3/15	97.077	None	92.391	None
BI_2047	30 March 2015	94.118	None	40.000	Completed 2/7/15	77.362	RA outstanding
BI_2048	30 March 2015	70.424	RA outstanding	89.384	RA outstanding	86.607	RA outstanding
BI_2056	30 March 2015	63.758	RA outstanding	71.795	RA outstanding	88.446	RA outstanding
BI_2058	25 March 2015	92.308	None	66.667	RA outstanding	95.890	None
BI_2059	30 March 2015	84.058	RA outstanding	100.000	None	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

Seven samples are from CMA labs, including Natural England, Environment Agency, AFBI and Natural Resources Wales. Action David H/Carol to send details about outstanding remedial actions for Myles to chase up.

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	100.000	None
BI_2113	24 November 2015	90.909	None	88.889	RA completed 8/12/14	100.000	None
BI_2115	23 April 2015	89.283	RA completed 30/6/15	70.852	RA completed 30/6/15	100.000	None
BI_2118	26 May 2015	98.873	None	55.039	RA outstanding	94.118	None
BI_2121	26 May 2015	92.593	None	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 outstanding	63.106	RA outstanding	55.738	RA outstanding
BI_2128	19 May 2015	76.430	RA outstanding	87.879	RA outstanding	76.471	RA outstanding
BI_2131	24 September 2015	96.674	None	93.032	None	75.000	RA outstanding
BI_2132	26 May 2015	92.860	None	91.454	None	FAIL	RA outstanding
BI_2133	29 September 2015	83.426	RA outstanding	94.777	None	97.768	None
BI_2138	26 May 2015	96.104	None	88.889	RA completed 28/9/15	77.512	RA completed 28/9/15

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

Five of these are CMA samples, all of them are from the same contractor. We need to be able to share this information with the CMA owner of the data. We can translate the fails to the dataset- we need to decide on what we would want to share or publish. Action Myles and David H to have a detailed discussion about this.

Procedure for sharing CMA data supplied by non-CMA labs for their Own Samples? Can we stipulate in the OS protocol and enable these results to be shared with the CMA responsible?

Some laboratories may only have CMA samples, and if the samples are submitted as CMA samples, then the CMA should be able to know the results. However, there is an issue with this as it could mean that contractors will become more cautious with their identifications and that can cause problems when combining datasets from different contractors. We need to know the taxonomic level of identification expected for each species, and the confidence level of the identification (high- medium-low). It really depends on how the data is interpreted. David H/Carol/Myles to come up with a proposal and to trial this in the next NMBAQC year.

Also there was a Scottish ITT recently out in which the benthic data is not planned to be QA'ed by NMBAQC. Tenderers were invited to include a costed option for managing their own external AQC following the OS protocol. Action David H to send details to Myles. Post meeting note: This is a JNCC/Marine Scotland contract - It is not that NMBAQC hasn't been used, it is that additional QA is being applied to ensure that 5% of the samples gathered on the survey are quality assured and this additional QA will still conform to NMBAQC standards.

Macroalgae

1. Macroalgal blooming/seagrass % cover, Macroalgae biomass and Marine macroalgae identification ring tests have been sent out and results are due back by 15th February.
2. Macroalgae/marine angiosperms contract will be re-tendered this year, and this is under discussion. The aim is to let the new contract by July 2016. The tender will be sent out to the same list of people as before, and no problems are envisaged.
3. Macroalgal blooming/Seagrass workshop
 - a. SEPA has come up with some money to facilitate this, at least in part. Wells Marine has been contracted to
 - i. carry out further analysis on the whole ring tests datasets for % cover estimation with a view to arriving at quadrat assessment recommendations if appropriate
 - ii. comparison of SOPs to highlight any areas of difference Action Tim to chase NIEA for their standard operating procedures.
 - iii. to refine the programme for a workshop with the module manager.
 - b. It is intended to hold the workshop in early summer 2016, dates and location tbc. Action Clare / Paul B to discuss to have the workshop in Wales.
4. Saltmarsh – still to be discussed with the EA. There was not much take-up for the workshop last time, it was only SEPA. Tim said there is interest out there, especially from the natural heritage people, but they are hard to nail down.
5. ISO17043 – no further progress, but will get back to this.

Contractor's update Thomson Ecology

Fish update

2015 / 2016 Participation

Laboratory Code	Fish Reverse Ring Test	Fish Ring Test
F_2201		Y
F_2202	Y	
F_2203	Y	
F_2204	Y	
F_2205	Y	
F_2206	Y	
F_2207	Y	
F_2208	Y	
F_2209		Y
F_2210	Y	
F_2211	Y	
F_2212	Y	Y
F_2213	Y	Y
F_2214	Y	Y
F_2215	Y	
F_2216	Y	Y
F_2217	Y	
F_2218	Y	
F_2219		Y
F_2220	Y	Y
F_2221	Y	Y
F_2222		Y
F_2223	Y	
F_2224		Y
F_2225	Y	Y
F_2226	Y	Y
F_2227	Y	
F_2228		Y
F_2229		Y
F_2230	Y	
F_2231	Y	
Total	24	15

(List correct as of 20th October 2015)

Progress on circulations

Exercise / Report	Event / Date	Notes
F_RRT07	Protocol and request for specimens to be distributed 07-09-15. Completed. Specimen submission deadline 11-12-15. Completed. Bulletin deadline 11-03-16 Pending.	<u>Fifteen fish taxa to be from Northwest European waters</u> (CSEMP samples where appropriate). Only one set arrived late.
F_RT09	Distribution of samples 04-12-2015. Completed. Results deadline 05-02-2016. Pending. Bulletin deadline 12/02/16	<u>General Fish Ring Test – Assorted Fish Taxa</u> (fifteen taxa).
Annual Report	Bulletin deadline 31-03-16.	<u>Annual Report –</u> detailing exercises and results from RRT and RT exercises.

The article for the IFM quarterly magazine is due for the winter edition. **This is advertising the fish component and the exercises.**

There have been a few comments on the photographs of the exercises this year, and everyone who has provided comments was thanked. This has now been resolved by a photographic protocol.

Grading of the fish ring test was also discussed, but the idea was not to penalise people, but help to improve quality of data. The grading should not be done on the reverse ring test to avoid easily identifiable fish to be sent in. There should be an agreed set of terms e.g. 'participating' versus 'doing extremely well'. Laboratories should put measures in place to improve each year. We would want feedback from the labs to ensure we are striking the right balance and how best to grade the ringtest.

Zooplankton update

SAHFOS will be running another ring test in the next NMBAQC year, we are just getting everything together now.

AOB

ISO 17043

This is the standard about running proficiency testing schemes. There are certain areas where we don't meet the required criteria, especially regarding documentation control and how to deal with complaints. The latter will now be included in the next info and application note. **Action Clare S to look into this further.**

Year 20 and 21 annual reports

Please send all comments on the Year 20 report to Astrid by the end of the week.

Pass/fail criteria

Jim proposed that he thought it would be good to have some form of 'result' for participants in the fish ring test, as all participants would be working on comparable material. We should not have pass/fail criteria for the reverse ring test, as it could lead to some labs simply submitting easily identifiable fish.

Whilst it is important that there is some differentiation between those labs doing 'well' in the ring tests from those that are 'beginning/ developing' and from those that are doing 'badly'. Would it be possible to have a score based on some form of running average over, for example, the previous three years? This may be a better and fairer indicator than annual pass/fail criteria, and labs joining up would know they won't have their quality ranked in the short term. It should then also (hopefully) minimise year-to-year changes in the criteria they achieve

One other thing in terms of scoring is that the scoring criteria (is used for pass/fail) may be better aimed at capturing major errors (i.e. incorrect species identification). For example, if someone identified 'species X' to 'genus', they are still correct, but just not as accurate as they could have been. However, they were not incorrect. Also, if someone makes a minor typo or used a junior synonym (which can be in some reference guides) they are not incorrect in their species identification per se, just not as accurate as they could have been.

Additionally, is it better to have simple "pass/fail" criteria or would there be benefits from having other outcomes (e.g. highly competent / competent / failed / new participant)? Claire Mason added that it must also be clear what the implications of a fail flag means if we were to join up with Quasimeme. For Quasimeme, a lab is deemed a fail if it receives fails in three years' worth of ring tests. Also for them all data goes into Merman, whereas our data does not go into one joined up dataset. The participants need to know when there is a query with their data. If the flag of a dataset is not attached to it, it doesn't mean anything.

Clare Scanlan is keen to standardise this more broadly within NMBAQC, as the ring tests are broadly similar, as well as the ID tests.

In the discussion it was mentioned that the pass/ fail criteria all seemed very complicated. Also, if laboratories want to pass, they could just put their most experienced analyst on it, and the results would not reflect the laboratory as a whole.

We should have standardised and agreed levels, e.g.

<i>>90%</i>	<i>excellent</i>
<i>80%-90%</i>	<i>good</i>
<i>70%-80%</i>	<i>acceptable</i>
<i><70%</i>	<i>participated</i>

The pass/fail criteria are only valid for CSEMP datasets. However, it makes it look like we are an accreditation scheme, which we are not. We have to formulate this very carefully, e.g. 'The pass/fail criteria can be used as indicators for performance'. It should be clear that these are training exercises only.

For both the macro-algal component as well as the fish component it was discussed that it would be difficult to set a pass/fail on own samples, and therefore the pass/fail criteria had been set for the macro-algae ringtest only and Jim is keen to develop similar criteria for the Fish ring test. For the Benthic invertebrate own sample categories are used- and there is a procedure on what to do with certain results. Action Myles to look at David H. remedial action document. Action Astrid to send the remedial action document to Myles.

It was concluded that a standardised way of communicating results would be helpful for the scheme. Most exercises state on the web site these are training exercises. The pass/fail criteria should not be used for accreditation but they may be interpreted this way. Action Astrid & David J to look into.

New phone system

For the next meeting we will have a new phone system, so if you have the teleconference number as a speed dial, please note the new details:

New dial in number: 0800 073 0694

New participant code (now termed Conference code): 8719228663