

NE ATLANTIC MARINE BIOLOGICAL AQC SCHEME
Meeting Agenda – 6th of October 2020 13.00-16.00

Attendees: David Johns (DJ, MBA, Chair), Myles O'Reilly (MoR, SEPA, Benthic Invertebrate Contract Manager), Claire Taylor (CT, MBA, Technical Secretary), David Hall (DH, Benthic, Apem Ltd), Lydia McIntyre-Brown (LMB, APEM, Senior Marine Taxonomist), Hayley Hinchin (HH, JNCC, Marine Habitats Monitoring Manager), Ross Griffin (RG, Ocean Ecology, Contractors rep), Claire Mason (CM, CEFAS, PSA Contract Manager), Jim Ellis (JE, CEFAS, Senior Researcher), Graham Phillips (GP, EA, Finance Manager), Henk Van Rein (HvR, JNCC, Marine Monitoring and Evidence Manager) and Alex Calloway (AC, AFBI, Senior Scientific Officer) and Kate Borrowdale (KB, NRS, Marine Monitoring Officer) - Paul McIlwaine (PM, CEFAS, Marine Benthic Ecologist) joined when required

Apologies: Stephen Duncombe-Smith (SDS, Apem Ltd, Fish)

1. Last Meetings Actions (summarised below on the agenda)		ALL
2. Minutes of the last meeting		CT
Approval of April meeting minutes		CT
3. Epibiota QA Framework		HH/HvR
Benthic Imagery Action Plan update		
4. Phytoplankton update		RS and JS
5. Priorities to HBDSEG		DJ
6. PSA Update		LMB/CM
7. Benthic Invertebrates update		DH/MoR
8. Macroalgae		CY
9. Fish update		DH
10. Zooplankton update		DJ
11. AOB		ALL
12. Finance update - confidential		GP

1. Meeting Actions from April 2020 online meeting:

TM: to draft procurement guidance, and send around to the committee. Subgroup (MoR,AC,TM,CM) ACTION to send draft guidance to procurement teams for checking. **Action: TM thinks this has been completed but will check upon return to lab.**

CM and Tec. Sec. to meet with Cefas web developers to discuss updates and upgrade of website.

Tec. Sec. CY CM: Think about how participants area could be used with Teams/etc or website? What is needed?

Action: CM to send notes from previous meetings with Clare Ostle and CM, RG to CT arrange for follow up meeting Oct 2020 with website developer – POST MEETING NOTE, MEETING PLANNED FOR 13/10/20

CM to update PSA guidance (refinement only – no major changes to methods) and circulate to committee for comment. This will include updated specifics around laser methodology, addition of a health and safety section to

include asbestos, clarity regarding different roles of UKAS vs NMBAQC and how they supplement each other. **Action: CM to circulate notes/guidance and annex of two workshops**

CM to make document outputs from PSA workshop available? **CM** to put these together and send to CO for website. Guide for Asbestos will be made available for end of May as part of the updated NMBAQC PSA guidance (see above)
Action: CM Ongoing

CO: On-going: Update participation and timetables on website. **Action: CT to work on**

DH: Had some good feedback from [IFAQE](#), can include these in next HBDSEG update. **DH** send (done) - **CO** to include in update. **Action: DH to forward email correspondence to DJ**

DH: revise next scheme year timetable – **done**

DJ and MoR: Put together protocol/guidance for group to avoid potential conflicts of interest and increase communication. **Ongoing**

Tec. Sec. to include AOB agenda item for future meetings for groups in NMBAQC to list upcoming workshops - **done**

ACTION all to send best practices moving forward for risk assessments of field work during pandemics e.g. COVID-19. **DJ and TM:** to ask HBDSEG to co-ordinate? **This can now be removed.**

2. Approve minutes of the last meeting: Approved and DJ reminded all to review last minutes from April

RG advised the committee of the merits of using Microsoft team to track actions, alerts maybe participant's area etc.
Action: CT to investigate

3. Epibiota and Benthic Imagery Action Plan update:

HH highlighted that the Epibiota component is being underpinned through the work of **HvR** and his Benthic Imagery Action plan. **HvR** presented a series of slides to the group concerning the plan, which illustrates a series of tasks to tackle in order to improve benthic imagery data. Further information can be found at <http://www.nmbaqcs.org/scheme-components/epibiota/benthic-imagery-action-plan/>

The action plan takes recommendations from the Big Picture group which encompasses 8 stakeholders across 3 sectors – publicly funded bodies, private/consultancy and academics – there are currently 123 people involved. **JNCC** are to co-ordinate this until the end of 2020 with groups set up to tackle each task and a committee of representatives formed to steer the ship. Although funded by **DEFRA** **HvR** advised it should be self-funded as much as possible and if done so sustainably could run for many years, even moving to the International stage. **HvR** asked if **NMBAQC** could run QC checks for epibiota with a final sign off for data? Means testing/pay as you go options could also be built in for participants. The trial period begins April 2021.

Action: HvR asked for queries to be raised directly with him and he will bring up at forthcoming steering group. He will keep us posted.

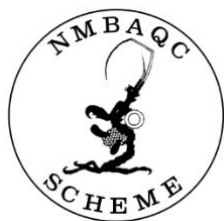
4. Phytoplankton update:

IPI cancelled for 2020 and to continue with the proficiency testing scheme from 2021 onwards.

5. Priorities to HBDSEG:

DJ advised the next **HBDSEG** meeting is scheduled for 14/10/2020 and the group would be interested in **HvR** work along with how COVID-19 has affected **NMBAQC** schemes. **Action: All to let DJ/TM know if would like anything raised at this meeting.**

6. PSA Update:



NMBAQC

NE Atlantic Marine Biological Analytical Quality Control Scheme

NMBAQC Committee Meeting

6th October 2020, Teleconference, 13:00 – 16:00

PARTICLE SIZE ANALYSIS COMPONENT PROGRESS REPORT

2020-21, Year 27

1. Subscriptions

LabCode	PS76/77	PS78/79	PS-OS19/20/21
PSA_2701	1	1	-
PSA_2702	1	1	-
PSA_2703	1	1	-
PSA_2704	1	1	-
PSA_2705	1	1	-
PSA_2706	1	1	-
PSA_2707	1	1	-
PSA_2708	1	1	-
PSA_2709	1	1	-
PSA_2710	1	1	1
PSA_2711	1	1	1
PSA_2712	1	1	1
PSA_2713	1	1	1
PSA_2714	1	1	1
PSA_2715	1	1	1
PSA_2716	1	1	1
PSA_2717	-	-	1
PSA_2718	-	-	1

PSA_2719	-	-	1
PSA_2720	-	-	1
PSA_2721	-	-	1
Total	16 (-3)	16(-3)	13(+1)
(change from last year)			

2. 2020-2021, Year 27 Operations

All circulations of PS exercises will be distributed in line with the 2020-2021 timetable (available below). Returns and results are summarised in the table below.

Exercise	Status	Returns / Comments
PS76	Samples distributed: 29/10/2020 Sample deadline: 18/12/2020 Interim reports issued: 15/01/2021 Final reports issued: 15/02/2021 Exercise in preparation	Fines Test
PS77	Samples distributed: 29/10/2020 Sample deadline: 18/12/2020 Interim reports issued: 15/01/2021 Final reports issued: 15/02/2021 Exercise in preparation	Mixed Test
PS78	Samples distributed: Sample deadline: Interim reports issued: Final reports issued: Exercise not yet started	Gravel Test
PS79	Samples distributed:	Mixed Test

	Sample deadline: Interim reports issued: Final reports issued: Exercise not yet started	
PS-OS19-21	Samples request sent: 29/10/2020 Batch 1 Data submission deadline: 13/11/2020 Sample submission deadline: 11/12/2020 Reports Issued: 26/03/2021 Exercise not yet started	

3. Issues arising

A huge thanks to Søren Pears for looking after the PSA component whilst I was on maternity leave.

The first circulation of PS samples is currently being prepared for dispatch at the end of October to be in-line with the first ring test (RT) for the Benthic Invertebrate component.

PS-OS data requests will also be sent out at the end of October, however as participants don't always have data available to send until later in the scheme year there will be two submission/reporting deadlines ("Batches") to allow participants to send data later in the year if needed.



NMBAQC

NE Atlantic Marine Biological Analytical Quality Control Scheme

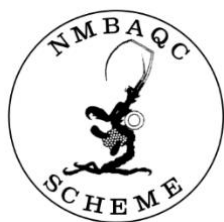
Particle Size Component 2020-2021 **Provisional** Timetable (Scheme Year 27)

Module / Exercise	Event	Date
PS76 & PS77	Samples distributed	29/10/20
	Results deadline	18/12/20
	Interim reporting deadline	15/01/21

	Final report deadline	15/02/21
PS78 & PS79	Samples distributed	10/12/20
	Results deadline	11/02/21
	Interim reporting deadline	25/02/21
	Final report deadline	19/03/21
PS-OS19–21	Request for sample data distributed	29/10/20
Batch 1	Data submission deadline for sample selection	13/11/20
	Selected samples submission deadline	11/12/20
	Interim report final deadline (for samples received before 11 Dec 2020)	26/03/21
Batch 2	Data submission deadline for sample selection	31/03/21
	Selected samples submission deadline	16/04/21
	Interim report final	30/07/21
Annual Report	Annual report deadline	27/08/21
Workshop		TBC

LmB advised that participation has been good with just 1 lab not taking part this year and similar numbers to previous years. Samples are currently being made up with the first ring test to be disseminated soon. LmB explained they were working on a new way of comparing SA profiles using an 'Unusualness Index' for future assessments. Their samples are also tested for asbestos prior to being sent. **Annual report almost finished**
– Action: LmB to send to CM

7. Benthic Invertebrates update:



NMBAQC

NE Atlantic Marine Biological Analytical Quality Control Scheme

NMBAQC Committee Meeting

6th October 2020, Teleconference, 13:00 – 16:00

BENTHIC INVERTEBRATE COMPONENT PROGRESS REPORT

2020-21, Year 27

1. Subscriptions

LabCode	RT59/60	LR25	OS74/75/76
BI_2701	1	1	1
BI_2702	1	1	1
BI_2703	1	-	1
BI_2704	1	-	1
BI_2705	1	1	-
BI_2706	1	1	-
BI_2707	1	1	-
BI_2708	1	-	1
BI_2709	1	1	-
BI_2710	1	-	1
BI_2711	1	-	1
BI_2712	1	-	1
BI_2713	1	-	-
BI_2714	1	-	-
BI_2715	1	-	-
BI_2716	1	-	-
BI_2717	1	-	-
BI_2718	1	-	-

BI_2719	1	-	-
BI_2720	1	-	-
BI_2721	1	-	-
BI_2722	1	-	-
BI_2727	-	-	1
BI_2728	-	-	1
BI_2729	-	-	1
BI_2730	-	-	1
BI_2731	-	-	1
BI_2732	-	-	1
BI_2733	-	-	1
BI_2734	-	-	1
BI_2735	-	-	1
BI_2736	-	-	1
BI_2737	-	-	1
BI_2738	-	-	1
BI_2739	-	-	1
BI_2740	-	-	1
BI_2741	-	-	1
BI_2742	-	-	1
BI_2743	-	-	1
BI_2744	-	-	1
BI_2745	-	-	1
BI_2746	-	-	1
° (change from 2019/20)	22 (-)	6 (-)	28 (-11)

2. 2020-2021, Year 27 Operations

Benthic Invertebrate exercises will be distributed in line with the 2020-2021 timetable (available below). Returns, results and exercise status details are summarised in the table below.

Exercise	Status	Returns / Comments
RT59	Specimens to be distributed 29/10/20; Submission deadline 18/12/20; Interim reports deadline 08/01/21; Ring Test Bulletin deadline 29/01/21; Exercise in preparation	General Ring Test
RT60	Specimens to be distributed 10/12/20; Submission deadline 11/02/21; Interim reports deadline 25/02/21; Ring test Bulletin deadline 19/03/21; Exercise in preparation	Targeted Ring Test – TBC
LR25	Request for specimens to be distributed 29/10/20; Submission deadline 29/01/21; Interim reports deadline 19/03/21; LR Module Summary Report deadline 26/03/21; Exercise in preparation	-
OS74 - 76	Samples to be requested 29/10/20; Data submission deadline Batch 1 13/11/20; Sample submission deadline Batch 1 11/12/20;	-

Interim report final deadline **Batch 1**
26/03/21;

Data submission deadline **Batch 2**
31/03/21;

Sample submission deadline **Batch 2**
16/04/21;

Interim report final deadline **Batch 2**
30/07/21;

OS Module Summary Report deadline
27/08/21;

Exercises in preparation

3. 2019-2020, Year 26 Operations (outgoing scheme year)

All circulations of BI exercises were distributed in line with the 2019-2020 timetable. The OS module is still active and summarised in the table below.

Exercise	Status	Returns / Comments
OS71-73	OS Module Summary Report pending; Exercises in progress	18 samples in progress (all at internal QA/reporting stage); 3 to be started.

4. Issues arising

2020/21 Timetable Revision

A revised (realistic) timetable for the OS module has been produced for the new scheme year (see below). The timetable also provides greater flexibility for the inclusion of laboratories impacted by COVID19.

Taxonomic Literature Update

An update to the 2018 Bibliography of taxonomic literature for marine and brackish water Fauna and Flora of the North East Atlantic has been posted on the scheme website.

Postal Issues

Unfortunately, one RT participant was precluded from participating in RT58 due to a change in postal restrictions. Multiple attempts were made to supply the Faroes based laboratory with RT58 specimens. For 2020/21 RT circulations this participant will receive their RT specimens in limited quantities of 4% formaldehyde solution.

COVID19

APEM will provide guidance for COVID19 secure participation in the various scheme exercise in relation to the transfer of material between laboratories.

TDP Development

TDP development in progress. Draft text to be provided to Contract Manager w/c 05/10/20 for initial review.

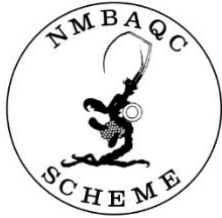
5. Taxonomic Workshops

Due to continued COVID19 restrictions the next large capacity taxonomic workshop for targeted groups will be planned for autumn 2021.

6. Outstanding issues

Own Sample remedial actions are continuing to be tracked from 2013/14 (Year 20), but only those related to the active exercises (OS 71, 72 & 73) will be presented in meeting reports; due to COVID19, participants have not been able to review their audit results/specimens. Details will be provided here only when remedial actions stated in interim reports are agreed.

[See Page 12/13 for provisional timetable](#)



NMBAQC

NE Atlantic Marine Biological Analytical Quality Control Scheme

Invertebrate Component 2020-2021 **Provisional** Timetable (Scheme Year 27)

Module / Exercise	Event	Date
RT59 - General	Samples distributed	29/10/20
	Results deadline	18/12/20
	Interim reporting deadline	08/01/21
	Final report deadline	29/01/21
RT60 - Targeted	Samples distributed	10/12/20
	Results deadline	11/02/21
	Interim reporting deadline	25/02/21
	Final report deadline	19/03/21
LR25	Protocol and request for specimens distributed	29/10/20
	Specimen submission deadline	29/01/21
	Interim reports deadline	19/03/21
	LR summary report deadline	26/03/21
OS74-76	Request for sample data distributed	29/10/20
Batch 1	Data submission deadline for sample selection	13/11/20

	Selected samples submission deadline	11/12/20
	Interim report final deadline (for samples received before 11 Dec 2020)	26/03/21
Batch 2	Data submission deadline for sample selection	31/03/21
	Selected samples submission deadline	16/04/21
	Interim report final deadline	30/07/21
	OS summary report deadline	27/08/21
Annual Report	Annual report deadline	27/08/21
Workshop – experts	Venue TBC	TBC
Workshop – beginners	TBC – subject to demand	TBC

Covid has disrupted the benthic team as staff have been diverted onto other things. The number of participants has stayed the same although samples have been down, as surveys did not run. There are 4 new participants including the UAE. The timetable has been revised and the plan is for this to be updated on the website. **Action: DH/CT to implement**

8. Macroalgae update: (post meeting note)

Aside from the contract being awarded directly to Wells Marine for 2020-21 with the intention to retender for a longer period next year the macroalgal and seagrass components have had a quiet summer. Emma had previously suggested/queried the use of some sort of online hosting of the Ring Tests, I think given that we are all working from home for the foreseeable that it's something we may have to consider, especially for labs with multiple participants. I'll follow this up with her. As yet I haven't been advised of any impact regarding sample collection/pack preparation but again I'll check in with Emma about this.

Update for HBDSEG 'The Macroalgal and Seagrass Components have been awarded directly to Wells Marine for the upcoming year. These will be retendered for a longer period in 2021. Due to Covid the use of online hosting of Ring Tests will be considered'.

9. Fish update:



NMBAQC

NE Atlantic Marine Biological Analytical Quality Control Scheme

NMBAQC Committee Meeting

6th October 2020, Teleconference, 13:00 – 16:00

FISH COMPONENT PROGRESS REPORT

2020-21, Year 27

1. Subscriptions

LabCode	F-RT14	F-RRT12
F_2701	1	1
F_2702	1	-
F_2703	1	1
F_2704	1	-
F_2705	1	-
F_2706	1	-
F_2707	1	-
F_2708	1	1
F_2709	-	1
F_2710	-	1
F_2711	-	1
F_2712	-	1
F_2713	-	1
F_2714	-	1
	8	9

2. 2020-2021, Year 27 Operations

The first circulations of Fish exercises are due to distributed in line with the 2020-2021 timetable, as summarised in the table below.

Exercise	Status	Returns / Comments
F-RT14	Specimens and images to be distributed 27/11/20; Results deadline 29/01/21; Interim reports due 19/02/21; Final report due 12/03/21 Exercise in preparation	participants. Deadlines for the submission of results can potentially be extended to accommodate CV-19 working conditions.
F-RRT12	Protocol and request for specimens distributed to 6 participants (including supply of fish postage boxes) 22/09/20, 3 remaining to be distributed by 16/10/20; Specimen submission deadline 11/12/20; Final report due 22/01/21 Exercise in progress	9 participants, 6 participants requested early distribution of protocols and fish postage boxes (sent 22/09/20). Deadlines for the submission of specimens can potentially be extended to accommodate CV-19 working conditions.

3. Issues arising

Environmentally friendly and sustainable packaging was trialled for frozen fish postage boxes for the previous F-RRT and will be used again for F-RRT12.

The distribution and analysis of an 'Image only' FRT provided lots of feedback for F-RT13. An 'Image only' FRT will not be included for F-RT14. The use of 'image only' specimens remains a potentially useful option for the inclusion of species of conservation concern and scarce species, that would otherwise be impractical to circulate. The possibility of verifying field identifications from submitted images is also a potential expansion of the F-RRT exercise.

4. Taxonomic Workshop

Currently no taxonomic workshop are planned for fish. A targeted workshop can be developed if sufficient interest is shown.

5. Outstanding issues

Fish ring test and fish reverse ring test protocols still in production. Fish component statements of performance are being reviewed; to be issued shortly. Return of fish reverse ring test specimens (F-RRT11) currently delayed due to CV-19.



NMB AQC

NE Atlantic Marine Biological Analytical Quality Control Scheme

Fish Component 2020-2021 Timetable (Scheme Year 27)

Module / Exercise	Event	Date
F-RRT12	Protocol and request for specimens distributed (including supply of fish postage boxes)	16/10/20*
	Specimen submission deadline	11/12/20
	Final report deadline	22/01/21
F-RT14	Samples (specimens & images) distributed	27/11/20
	Results deadline	29/01/21
	Interim reporting deadline	19/02/21
	Final report deadline	12/03/21
Annual Report	Annual report deadline	09/04/21
Workshop – experts	TBC – subject to demand	TBC

Workshop – beginners	TBC – subject to demand	TBC

* 6 x F-RR12 protocols and fish postage boxes sent on the 22/09/20

DH discussed Fish in the absence of Stephen Duncombe-Smith (SDS). **Action: SDS to add robust QC element.**

10. Zooplankton Update:

Call of interest to go out during early October.
 CPR staff have been collecting specimens for ring tests which will be sent out in due course.
 Aim to start tests which will be in format of enumeration/quiz and species test towards end 2020/early 2021.
 Currently investigating possibility of workshop either here at Plymouth or online to discuss results.

11. AOB: RG to provide update re contractor questions

Any forthcoming workshops to be added to agenda? **Action: Please let CT know**

RG provided the group with contractor questions and after the meeting disseminated the questions raised and answers provided. Questions and answers can be found here:

General:

Q1: Do the NMBAQC plan on developing quality assurance standards for Environment DNA (eDNA) sampling/analysis?

In terms of benthic monitoring eDNA looks likely to replace existing taxonomic methods in the near future, so I wanted to know if government agencies such as SEPA start incorporating eDNA into statutory monitoring has there been any discussions with the NMBAQC regarding how data quality will be ensured through the development of new quality assurance standards?

A: JNCC and NE are currently developing guidelines for the acquisition and storage of DNA samples from the benthic environment. The guidelines are expected to be ready by April 2021. This work has been identified as a high priority action (Action 37) from the Benthic DNA Action Plan developed by the UK Marine DNA Technical Group, one of the UK DNA Working Group’s thematic subgroups. Mike Nelson (Mike.Nelson@jncc.gov.uk) is the JNCC project manager behind the work and a good point of contact for further queries.

Action: TM to send group notes from technical work group’s last meeting.

Action: HvR to put MoR in contact with Mike Nelson at JNCC.

Q2: Although the invertebrate identification scheme works well overall, one aspect that I’d like seeing some improvements to is the ease of access to the most important and relevant keys. It is difficult to know exactly which keys are used by the assessors and for some keys, very hard to find them and use them. As these are used to assess members of the scheme, it would be useful to have them available in the participant page on the website (if Only the keys and some figures rather than the whole papers etc) with regular updates (accompanied with emails to members to inform us of the changes and that updates are available) to ensure we are all up to date with the keys but also allow consistency in the work we do as far as possible.

A: An update to the 2018 bibliography of taxonomic literature for marine and brackish water fauna and flora of the North East Atlantic was recently posted on the NMBAQC scheme website. See here: www.nmbaqcs.org/media/1800/nmbaqcliteratureupdate2020_130520.pdf

The NMBAQC scheme committee is currently considering creating NMBAQC participant working groups via Microsoft Teams which would facilitate discussion regarding taxonomic literature and keys as well as providing a platform for participants to raise any queries.

Invertebrates:

Q1: Could be an increase in sessile fauna in macrobenthic ring tests as even a small mixed sediment survey can have dozens of these taxa (particularly bryozoa and hydrozoa) and they are rare in ring tests?

A: The BI component contractor confirmed that it can include sessile taxa however noted that access to suitable material that can be evenly distributed between participants can be difficult. Participants are encouraged to donate/share material that they'd like to be shared in ring tests.

Q2: Could the macrobenthic scheme organiser could give guidance on the identification policy of solenogastres? There are identification policy differences between labs and no mention of them is made in the Review of recording and identification policy differences document.

A: The BI component contractor confirmed that an update to the policy will be made.

Next face to face meeting April 2021 – COVID-19 dependent... Action: CT to co-ordinate. Please let CT know of possible venues. Next online meeting – early 2021. CT to organise via teams