

**Workshop: 18th March 2010,
Scarborough**

**Yorkshire and Humberside
Hub Meeting 1
FULL WORKSHOP REPORT**

**For: Net Gain
By: BDOR Limited**

1. INTRODUCTION

1.1. This is the full report of the workshop held in Scarborough on 18th March 2010. This was the first meeting for this particular 'Hub', one of four that were held during late March to cover the whole of Net Gain's East coast area. Further Hub meetings will be held as work proceeds towards detailed recommendations to government for the location of Marine Conservation Zones (MCZs) in the Net Gain area.

1.2. The prime aim of the Hub approach is to enable more detailed and local knowledge and skill to be used than would be possible through one overall event for the whole stretch of coast. To that end it will be those who attend and contribute to the Hubs who will be the final decision-makers on recommended MCZs. An overall review body – the Stakeholder Advisory panel (StAP) - will consider the recommendations from the four Hubs but strictly to ensure appropriate consistency (or variation), robustness of evidence and argument; the StAP will not take decisions.

1.3. The invitee list for all the Hubs was based on guidance offered by participants at the earlier large Group Meeting, and on local knowledge gleaned by members of the Net Gain team. Because of the very demanding timetable set nationally, little notice was given to those invited to the workshop and this is likely to have affected response rates. Nevertheless the attendance was good in terms of numbers and in terms of the range of interests represented. Appendix 1 lists all attendees and those who sent apologies.

1.4. The overall format – the same for all four Hub events - was of a mix of short presentations or handouts and small group work, sometimes (not always) followed by plenary discussion or questions. Details of each session follow later but, in summary, the programme was as follows:

- ⊕ **Welcome and Introductions (to all)**
- ⊕ **Briefing on the Net Gain Project**
- ⊕ **Principles for a Successful MCZ**
- ⊕ **Understanding the Ecological Guidance**
- ⊕ **Working on Maps**
- ⊕ **Terns of reference for the Hubs**
- ⊕ **The format and membership of the StAP**
- ⊕ **Next Stages and Outstanding Points**

1.5. All except the welcome session are covered in the main sections of this report though not always – as will be explained – with material recorded in this report. All text in italics (as here) is explanation, description and commentary. Everything in plain text is as recorded during the workshop.

2. NET GAIN BRIEFING

2.1. At each Hub event there were some who had attended a Roadshow event and/or the Large Group Meeting and some who were new to the process. All the former had heard the standard briefing at least once but newcomers needed to be brought up to speed with the basics of the project, its purpose, format and so forth. Rather than repeat the presentation again, basic material was placed on tables and those who had been before were asked to help to brief the newcomers, while Net Gain staff were available to respond to any questions.

2.2. Following the group discussions, some questions were raised in plenary and recorded as follows:

- Φ Local authority representation? How come none are here?
- Φ Does the outcome precede other activity in North Sea, e.g.: wind turbines?
Needs a clear statement
- Φ Will the MCZs be reviewed after designation?
- Φ What are the objectives for each area/habitat?
- Φ Who will police it?

2.3. Some questions were answered on the spot, some during later sessions on the day and some have been answered in the full Q&A set available on the Net gain website.

3. PRINCIPLES FOR A SUCCESSFUL MCZ

3.1. During the earlier Large Group Meeting (LGM) people were asked to look ahead to imagine what might be some principles for a successful Marine Conservation Zone – ie. not just how one might be recommended (as in the current process) but how it might be designated, operated, managed and policed in the future.

3.2. A summary of the key messages from the LGM was given to groups at the start of this session and they were asked to tick any they supported, add any new one and query phrasing (and write alternatives). The text in italics overleaf is what was on the handout sheet, the comments made by the groups are in plain text; note also the ticks.

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|--|
| <p>1. <i>The process to recommend them should be open and transparent and conform fully to all relevant guidance and standards. – ✓ ✓</i></p> |
| <p>2. <i>Recommendations should be based on strong, clear and widely agreed evidence and data - ✓ ✓</i></p> <ul style="list-style-type: none">Φ Scientific basis to gather – potentialΦ Where is the science coming from?Φ <u>Evidence</u> |

| |
|---|
| <p>3. <i>Evidence should cover, on an equal basis, social and economic, as well as ecological, issues and factors - ✓</i></p> <ul style="list-style-type: none"> Φ "... on an equal basis" ? 7 Φ "... ecological issues" – what does this mean/include? Φ Needs to be clearer |
| <p>4. <i>All existing users and activities should be considered - ✓ ✓</i></p> <ul style="list-style-type: none"> Φ A lack of commercial trawlermen at this meeting – how does their view count? Φ Particular attention to impacts on livelihoods |
| <p>5. <i>All stakeholders should have an opportunity at all stages to provide information and evidence, engage in debate and be genuinely listened to - ✓</i></p> <ul style="list-style-type: none"> Φ Provide info – general discussion over-facilitated Φ "All stakeholders must have an opportunity ..." |
| <p>6. <i>Boundaries should be set for appropriately sized areas with attention paid to existing designations, overlaps with other areas and implications for areas around - ✓</i></p> <ul style="list-style-type: none"> Φ Linkage non-isolation |
| <p>7. <i>Once in place, all MCZs should be well enforced, regularly monitored and regularly reviewed - ✓</i></p> <ul style="list-style-type: none"> Φ "... MCZs must be well publicised and enforced" Φ "... MCZs should be well enforced" – agree with principle, but doubt if enforceable Φ Very large task Φ "... MCZs must be well enforced" Φ Adequately resourced |
| <p>8. <i>When areas are recommended (and then designated and managed) it must be clear how they will show positive environmental and ecological benefit and their impacts on uses and users - ✓</i></p> <ul style="list-style-type: none"> Φ The MCZ Impact Assessment and Statement of Purpose should be subject to regular review to confirm the benefits Φ Measurable Φ Tighten up |

3.3. *There was a very short feedback session at this point. A few additional points were made:*

- Φ Web place – to dump documents (PDFs) of interest to other stakeholders
- Φ Broadly agree – some "clarity" needed in wording
- Φ Largely happy, but we need the evidence

3.4. A final version of these principles, combining all comments from the four first round Hub meetings will be available as soon as possible as part of regular contact with Hub members.

4. ECOLOGICAL NETWORK GUIDANCE

4.1. This session was built on a two-part presentation by Steve Barnard from Net Gain. The nationally produced guidance is long and complex so it was decided that the best approach would be to cover a few only of the key aspects then let groups consider the points and raise questions before moving on to the second set of key issues and further group work. The Powerpoint slides used during the presentation are in Appendix 2.

4.2. The questions from each stage of the session follow below. If not given here, answers will follow as soon as possible. Some questions – e.g. the final one about 'resolution' - were answered later in the workshop.

- Φ Why are the habitats and species on the list important? We need to know how they have been chosen. What's the point we need to understand?
- Φ How do we get the data?
- Φ How do we deal with things changing naturally over time?
- Φ How do we decide what will affect habitats and what activities need to be excluded or restricted?
- Φ Are we looking at a particular whole phylum or just a species?
- Φ What about salt marshes?
- Φ How do we identify different species – e.g.: Rays?
- Φ Can the group have a list of the key people (scientists) involved in deciding the scientific basis for decisions? Ecological Network Guidance was written by NE and JNCC
- Φ How will sea users find out where the boundaries are? How to make them workable?
- Φ If only one occurrence of a habitat, does that automatically make it an MCZ?
- Φ How do you define 'naturalness' in relation to the North Sea?
- Φ Questions around navigation and enforcement

5. WORKING ON MAPS

5.1. This was an important session but difficult to record, mainly because its prime aim was simply to show Hub members what is available now and what would be available shortly, in what form, at what scale and so forth. There was, however, a 'recording' element to it but this was done by individuals noting on a form what information they and their colleagues have available about use of the seas. By definition, this information is confidential so cannot be included here.

5.2. There were, however, a number of comments made and recorded about the most appropriate ways of presenting it, as follows.

- Φ Need to simplify the maps/layers – e.g.: one legend for all existing designations
- Φ Have depth markers
- Φ Need more interpretation of FOCl, etc
- Φ Make names/legends user-friendly – no LATIN names

- Φ Colours too similar - need more definition
- Φ Make SSSIs (marine) apparent in the title
- Φ Uniformity is needed in definitions
- Φ MPA absent at Bempton

6. TERMS OF REFERENCE FOR THE HUBS

6.1. *This session was managed in a similar way to the earlier one on Principles, i.e. by giving people a first draft set of Terms of Reference and asking them to comment on them by annotating the sheet given to them. As before, the text in italics below is what was on the handout sheet, the comments made by the groups are in plain text; note also the ticks.*

1.0 Purpose

- 1.1 *To work together to recommend to the Stakeholder Advisory Panel Marine Conservation Zones that have the widest possible support and are based on the best possible evidence.*

2.0 Membership

- 2.1 *To include representatives of groups and organisations with a range of possible interests in MCZs and who are able to speak on behalf of those groups or organisations - ✓ ✓*
- 2.2 *All effort should be put into ensuring that the same people attend each Hub meeting (see 3.2 below), although substitutes can be used - ✓ ✓*
- 2.3 *As work develops to suggest specific locations for MCZs, additional representatives with relevant local interest may be invited to join - ✓ ✓*
- Φ How?
 - Φ How? Considering their background info? Not really appropriate
 - Φ "... additional **briefed** representatives ..."
- 2.4 *Where appropriate, Net Gain staff would ideally join in sessions as equal participants - ✓*
- 2.5 *At least one member from each Hub will act as a representative on the Stakeholder Advisory Panel and contribute there on behalf of all Hub members - ✓*
- Φ "At least **two** members from each Hub ..."
 - Φ Role needs clarity

3.0 Operation of Meetings

- 3.1 *Meetings (one, perhaps 2) will take place during each of the main 'iteration' stages of the national MCZ recommendation process - ✓*
- Φ Breakdown of stages useful
 - Φ 2 x meeting days: difficult for most
 - Φ Need at least two meetings before first iteration
- 3.2 *Apart from the first round, meetings will be timetabled and located as fully as possible with the agreement of Hub members - ✓*
- Φ Please provide more info on parking, access, etc: rail/public transport
 - Φ Consider holiday season – make sure central for all members. Net Gain could look at database

- Φ Find central location – not Scarborough in summer season!
- 3.3 *The meetings will be organised and run by the Stakeholder consultant team on behalf of Net Gain and Hub members. They will suggest and manage agendas based on an understanding of what the group has requested, what is necessary at that particular stage and what is feasible to cover in the agreed time - ✓ ✓*
- 3.4 *All present will contribute as fully and openly as possible (while respecting, for example, commercial confidentiality) - ✓ ✓*
- 3.5 *All will be treated as equal 'in the room' and all views will be respected - ✓ ✓*
- 3.6 *Except in particular and agreed circumstances, no comments made or noted will be attributed to any particular person or group - ✓ ✓*
- 3.7 *The facilitation team will aim to note all key points correctly. Members need to help by ensuring correctness at the time - ✓ ✓*
 - Φ As far as possible
 - Φ Facilitation could include more scientific expertise as project progresses
- 3.8 *The facilitation team (and Net Gain staff if appropriate) will do all possible to support Hub members in their role - ✓ ✓*

4.0 Communications

- 4.1 *Full reports will be made from each meeting and circulated to all participants (and any sending apologies)*
 - Φ Bulky reports, etc, could be sent out in the post as they are costly for some stakeholders to print
 - Φ More information to be provided before the Hub meetings – one week before? – so less reading in the meetings and more action
 - Φ Ensure good communication between StAP and Hubs – understand what each other is doing
- 4.2 *If additional information is requested to be included within the report after an event, it will be included but clearly differentiated as 'post event'.*
- 4.3 *Reports will be available to anybody via the project website and/or on request.*
- 4.4 *Members will be encouraged to share information, ideas etc. with others in their group or organisation and to either bring any further information or ideas to subsequent meetings or feed back directly and promptly to Net Gain.*
- 4.5 *Net Gain may produce Summaries and Press Releases on Hub events. Timescales are such that it will not be possible to share drafts of these with all Hub members but all care will be taken to respect the outcomes of the events.*
- 4.6 *It is understood that some Hub members, and/or their organisations, may wish to produce their own Press Releases. Similar care and respect for the process, for others and for confidentiality will be expected in these.*
- 4.7 *Following from 3.6 above, no Hub member will comment outside Hub events in a way that attributes views, ideas, information etc. to any individual.*
 - Φ Explain
 - Φ OPEN representation
 - Φ Not worded very well – covered in 3.6 adequately

5.0 Net Gain Overall

5.1 Although each Hub group will make its own recommendations, Net Gain and the Stakeholder Advisory Panel may raise questions and seek amendments in order to ensure appropriate consistency across the 4 areas.

5.2 It is the responsibility of the Hubs to do all possible to ensure that their recommendations are sound and supportable.

6.2. A final version of these Terms of Reference, combining all comments from the four first round Hub meetings will be available as soon as possible as part of regular contact with Hub members.

7. ROLE AND MEMBERSHIP OF THE STAP

7.1 This plenary discussion was introduced by Trevor Jameson, the independent, appointed Chairman of the Stakeholder Advisory Panel (StAP). Trevor made clear again the role of the StAP in relation to the Hubs – that the latter are the decision-making groups and described how the StAP would overview, challenge (if necessary) and bring together the recommendations from Hubs and support them when submitted to government. He also described the rationale for StAP size – making it less than 20 if possible to make it sensibly manageable, and for its membership – that it should try to represent all or as many as possible of the different sectors or interests.

7.2. This prompted a lively discussion, making it difficult to capture all points made. Only a few were noted, as follows:

- ⊕ Other divers than BSAC – e.g.: archaeological and commercial sub-aqua association
- ⊕ IFCA's and MMO's likely to have observer status
- ⊕ Heritage sector is not represented yet on StAP – could be named consultative stakeholder?
- ⊕ Cllr Godfrey Allanson – president of Cleveland & N Yorks Coastal Forum – was suggested for local authority rep - cldr.godfrey.allanson@scarborough.gov.uk

8. NEXT STAGES

8.1. Apart from highlighting the details of the next Hub meeting, this brief session was an opportunity to pick up on other points raised during the day.

8.2. As suggested, it was agreed that contact details for all Hub members would be shared around (strictly to that group). It was also decided that names of Hub members, and their organisations, (but not contact details) would be placed on the Net Gain website. There was also a suggestion about changing the sequence of meetings so that the North East Hub does not always happen first!

8.3. At the end of the session an evaluation form was handed round for people to comment on the day. The results are in Appendix 3.

PARTICIPANTS

The list below includes all invitees. We have also included those who sent apologies; they also will be receiving this report.

Net Gain Yorkshire & Humber Hub – invitees for meeting on 18th March 2010, Scarborough

| Hub member | | | Notes |
|------------|------------|------------------------------|---------------------------------------|
| First name | Surname | Sector | |
| David | Adamson | Recreation | |
| Andrew | Allard | Commercial fishing | Unable to attend this meeting |
| David | B Swift | Recreational angling | |
| Paul | Beal | Diving | Unable to attend this meeting |
| John | Beech | Coastal forums | Unable to attend this meeting |
| Helen | Bloomfield | Academic | |
| Richard | Brewer | Commercial fishing | |
| Robert | Briggs | Lobbying | |
| Emma | Brown | Natural England | |
| Daryl | Burdon | Academic | Sue Boyes deputised for this meeting |
| Foster | Cammish | Commercial fishing | Unable to attend this meeting |
| Jon | Capel | Marinet | |
| Tania | Davey | Coastal forums (Humber INCA) | Unable to attend this meeting |
| Tony | Edwards | Coastal forums (Humber INCA) | |
| Matthew | Emmerson | Commercial fishing | |
| Gillian | Flint | Other NGO (RSPB) | |
| Nick | Garside | MFA | Unable to attend this meeting |
| Mark | Greaves | Commercial fishing | Unable to attend this meeting |
| Andy | Hammon | Heritage | |
| Geoffrey | Hill | Yachting | |
| Paul | Huteson | Commercial fishing | |
| David | Jenkinson | Commercial fishing | |
| Tom | Jeynes | Ports/Harbours | Unable to attend this meeting |
| Paul | Lane | SFC | James Wood deputised for this meeting |
| Victor | Leppington | Commercial fishing | |
| Adrian | Lester | Shipping | Unable to attend this meeting |
| Dan | Major | MCA | |
| Jill | McCormick | Environment Agency | Unable to attend this meeting |
| Cliff | Morrison | Processing | |
| Robin | Neale | Recreational angling | |
| Carrie | Pillow | MCS | |
| Richard | Pockley | Commercial fishing | |
| Stephen | Pratt | Recreational angling | |
| Nigel | Proctor | Recreational angling | Unable to attend this meeting |
| David | Renwick | Councils | Unable to attend this meeting |
| Tom | Rossiter | Processing | Unable to attend this meeting |
| Dave | Screeton | Commercial fishing | |
| Graham | Singleton | Aggregates | |
| Kirsten | Smith | Wildlife Trust | |
| Alan | Stead | Commercial fishing | Unable to attend this meeting |
| Jon | Whitton | Angling charter boat | |
| Shaun | Wood | Processing | |

In addition to the invited Hub members, the following members of Net Gain staff were present:

- Φ *Jo Redhead – Project Manager*
- Φ *Steve Barnard – Stakeholder Manager*
- Φ *Chiara Polce – MCZ Planner*
- Φ *Pete Hansell – Liaison Officer*
- Φ *Trevor Jameson – StAP Chair*

Independent facilitation support was provided by:

- Φ *Steve Smith (Icarus Collective)*
- Φ *Cathy Williams (Indras Net)*

ECOLOGICAL NETWORK GUIDANCE POWERPOINT SLIDES

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| <p>Ecological Network Guidance - Part 1</p> <p>Seven key principles:</p> <ul style="list-style-type: none"> ❖ Representativity ❖ Replication ❖ Viability ❖ Adequacy ❖ Connectivity ❖ Protection ❖ Best available science |
|--|

International best practice recognises a series of design principles needed to deliver effective marine protected area networks. The Ecological Network Guidance has seven key principles – which have been derived from the Oslo and Paris Convention (OSPAR).

The interpretation of all these principles must be evidence-driven, based on best available knowledge. The evidence-based interpretations reflect current scientific understanding of the marine environment. Where existing evidence may be lacking or incomplete, international best practice can be reviewed; or alternatively ‘rules of thumb’, derived from scientific knowledge and understanding, can be developed.

For the first presentation this morning I will discuss just two of these: representativity and adequacy.

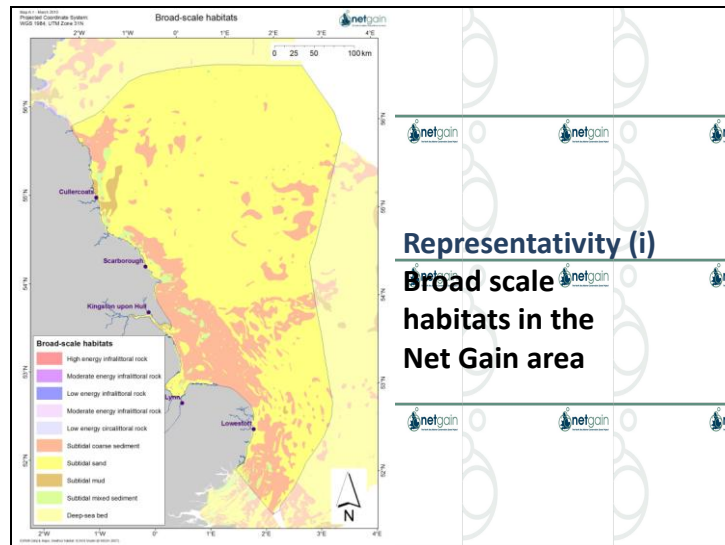
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|--|
| <p>Representativity</p> <ul style="list-style-type: none"> ❖ What does it mean? <ul style="list-style-type: none"> ○ We need to protect a little bit of everything ❖ How do we cover a wide range of habitats and species? <ul style="list-style-type: none"> i. initial focus on 23 broad-scale habitats ii. key species and habitats iii. other important areas |
|--|

The main message is that Marine Conservation Zones should represent the range of marine habitats and species through protecting all of the major habitat types and associated biological communities that are present in each of the seas in our marine area.

So, put simply, sites should be representative, protecting a little bit of everything.

There are 1000s of species and habitats present in the UK marine area. We must find a practical and biologically meaningful way of representing this wide range of species and habitats.

At the simplest level, this can be done by protecting broad-scale habitats. If a broad habitat type is protected then there will be a trickle down effect of providing protection for more specific habitats and certain groups of species. In all, some 23 broad-scale habitats have been identified for the regional projects to protect - although not all of these will be found in Net Gain's area.



Representativity (i) Broad scale habitats in the Net Gain area

The map here shows some of the broad-scale habitats within the Net Gain area. The brighter, bolder area is the Net Gain project area. Within that we have indicated a number of different broad-scale habitats, predominantly coarse sediment and sand, but also some mud mixed sediment types.

I say that this represents only 'some' of the broad-scale habitats within our area because the data we have at the moment is incomplete. Although the map shown here looks to be fairly complete at the moment we have data for only 10 of the broad-scale habitats. In general these are the 'offshore' (sub-tidal) habitats and we are waiting for information on the inshore, inter-tidal, habitats.

We do have additional finer scale detail for some the habitat types for parts of the northern area and around the Wash – but again this data is very patchy.

This means that what data we are able to show you today is incomplete, but all of Net Gain's habitat data is being updated through new contract work which is expected to be completed in April. By the time of our next meeting we should have a near complete data set to present.

| Other broad-scale habitats | |
|-----------------------------------|--|
| ❖ High energy intertidal rock | ❖ Intertidal mixed sediment |
| ❖ Moderate energy intertidal rock | ❖ Coastal saltmarsh and saline reedbeds |
| ❖ Low energy intertidal rock | ❖ Intertidal sediment dominated by aquatic angiosperms |
| ❖ Intertidal coarse sediment | ❖ Intertidal biogenic reef |
| ❖ Intertidal sand and muddy sand | ❖ Subtidal macrophyte dominated sediment |
| ❖ Intertidal mud | ❖ Subtidal biogenic reefs |

This is a list of the other broad scale habitats which we are awaiting data on – whilst it may be that we need to include some of these habitats in our MCZs, it is possible that some do not occur in our area so there would be no need to consider them in the planning process.

| Representativity (ii): Features of Conservation Importance |
|--|
| ❖ <i>Broad scale habitats</i> ✓ |
| ❖ Key species and habitats Features of Conservation Importance <ul style="list-style-type: none"> ○ FOCI => rare, threatened and declining species (x34 – incl. x3 highly mobile) and habitats (x22) |
| ❖ Where do the lists of FOCI come from? <ul style="list-style-type: none"> ○ OSPAR, BAP and Wildlife & Countryside Act |

The guidance we have says that - in addition to protecting the range of biodiversity through broad-scale habitat types - rare, threatened or declining species and habitats should be specifically protected in a Marine Protected Area network. This is because:

- some habitats or species may be more vulnerable to natural and human impacts, and therefore require special consideration;
- because they are unique in their biodiversity composition, certain discrete habitats may warrant protection; and
- not all species are closely associated with habitats, particularly pelagic species, and should be considered in their own right.

A number of Features Of Conservation Importance (or FOCI) have been identified from existing international environmental agreements and from national legislation, including

- the Initial OSPAR List of Threatened and/or Declining Species and Habitats;
- the UK List of Priority Species and Habitats (the so-called UK Biodiversity Action Plan or BAP species); and
- species listed under Schedule 5 of the Wildlife & Countryside Act (1981).

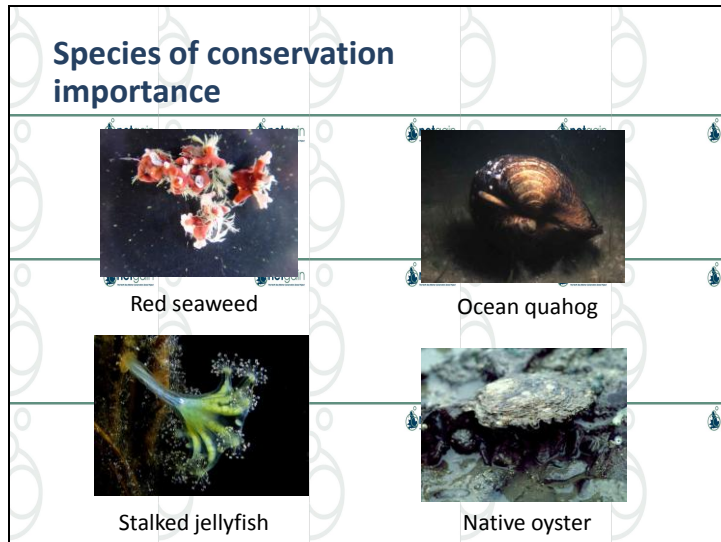
From these lists there are 22 habitats and 34 species of conservation importance that should be protected within the overall network of Marine Protected Areas.

31 of the species listed are of low or limited mobility, which means that they can be protected by protecting discrete areas of the sea. However, the guidance also lists three species of fish that should be considered – the European eel, the smelt and the undulate ray - and these three species are of course highly mobile. Whilst there is some evidence that site-based protection may be appropriate (for example where there are significant aggregations of each species) there is currently no data to support the clear identification of relevant areas in UK waters.

| What do we know we have in the Net Gain area? | |
|---|-----------------------------------|
| ❖ Blue mussel beds | ❖ Peat and clay exposures |
| ❖ Estuarine rocky habitats | ❖ <i>Sabellaria spinosa</i> reefs |
| ❖ Intertidal boulder communities | ❖ Saline lagoons |
| ❖ Intertidal mudflats | ❖ Seagrass beds |
| ❖ Littoral chalk communities | ❖ Sheltered muddy gravel |
| ❖ <i>Modiolus modiolus</i> beds | ❖ Subtidal chalk |
| ❖ Mud in deep water | ❖ Subtidal sands and gravels |
| | ❖ Tide swept channels |

This is a list of the habitats of conservation importance for which we have known records in the Net Gain area.

As I said before though, the data and maps we currently have are probably incomplete.



In addition to the habitats of conservation importance we have been provided with lists of species of conservation importance. For some of these species it may be possible to reach their targets for inclusion within a network of marine Protected Areas by protecting their habitats – in effect (although I'm not sure this is the right metaphor to use here) 'killing two birds with one stone' .

Of the species of conservation interest outlined in the guidance, we know of records for at least nine species within Net Gain's area, including one of the species of red seaweed that are on the list, the ocean quahog, one of the species of stalked jelly fish from the list, and the native oyster.

Others include:

- the common maerl
- the starlet sea anemone
- the lagoon sand shrimp
- a particular species of amphipod shrimp, and
- the crayfish or spiny lobster

There may be other species from the list given in the guidance – but as yet we do not have the data. This is an important area where your input will be extremely useful.

**Representativity (iii):
Areas of additional ecological importance**

- ❖ *Broad scale habitats* ✓
- ❖ *Key species and habitats – FOCI* ✓
- ❖ **Additional areas**
 - important spawning, or nursery & juvenile areas
 - important feeding, breeding, moulting, loafing, wintering or resting areas
 - areas of high natural biodiversity and high productivity

Finally under representativity there is a third category of area that needs to be considered when drawing up a list of representative sites.

These are important ecological areas which, either by themselves or in a network, make a disproportionately greater contribution to ecosystem function, biodiversity, or resilience than their area alone would suggest.

Areas of additional ecological importance would include, for example, important spawning or feeding grounds, or areas which display high natural biodiversity or productivity (so-called biodiversity hotspots).

It is by considering these additional areas that the network will provide protection for the highly mobile species (the three fish species I talked about a few slides back).

Adequacy

Example:
Sub-tidal mixed sediment

- protect 16-32% of the total area of habitat present

Finally in this presentation I'd like to say a few words about the second key principle - adequacy.

Adequacy refers to the overall size of the MPA network and the amount of each habitat or species that is protected within it. We need to protect enough of each habitat and species

to ensure its long-term protection. The areas that we, that you, decide to protect need to protect a sensible proportion of each feature.

To help with this the guidance provides targets for what percentage of each feature should be protected within the MPA network in order to ensure its long-term protection and, where necessary, its recovery.

For example, the guidance says that we need to protect 16-32% of the area of sub-tidal mixed sediment, and so could propose a potential MCZ within a given area of mixed sediment as shown here.

By adopting a target-based approach we have clear support for conservation decisions. Equally important is that the process of network design is made transparent and more open to stakeholder involvement.

So that's a quick run through of representativity and adequacy. Before we move on to the remaining principles I'll pass back to ----- who will lead us through a brief Q&A session.

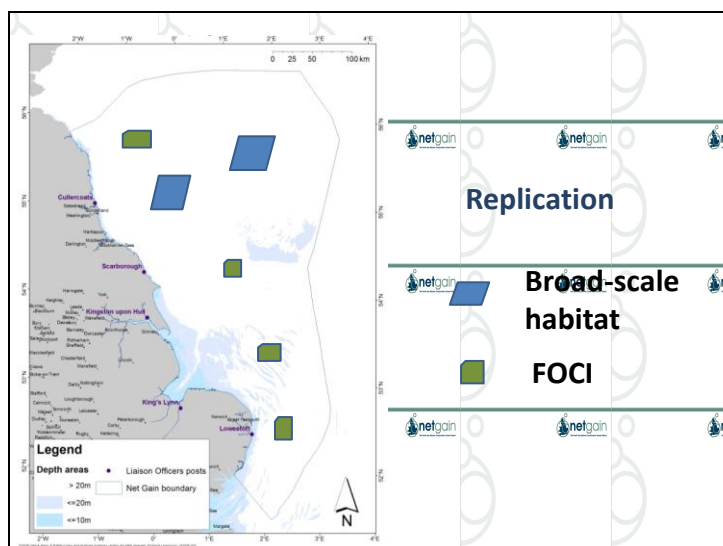


**Ecological Network
Guidance - Part 2**

Seven key principles:

- ❖ **Representativity**
- ❖ **Replication**
- ❖ **Viability**
- ❖ **Adequacy**
- ❖ **Connectivity**
- ❖ **Protection**
- ❖ **Best available science**

In the first presentation I covered representativity and adequacy – I'd like to finish off now by briefly discussing the remaining key principles outlined in the guidance for developing networks of Marine Protected Areas.



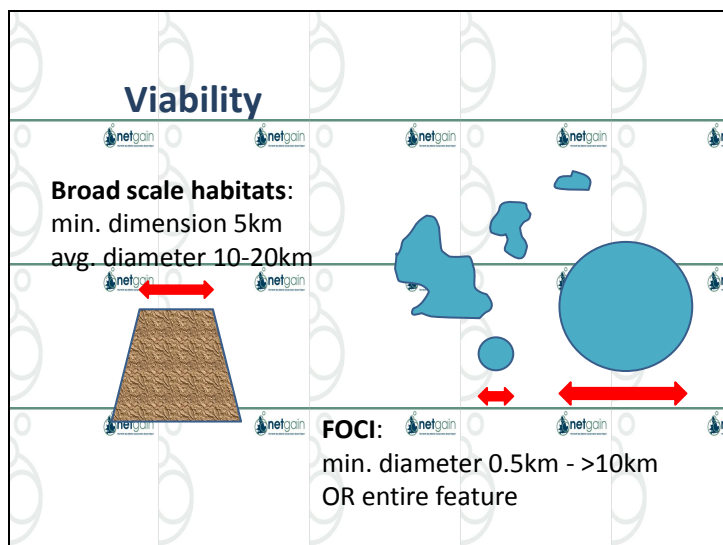
Firstly, replication.

Very simply, there should be two or more MCZ sites for each broad-scale habitat and 3 to 5 examples for each Feature of Conservation Importance in each project area.

Replication is important to safeguard against catastrophes and collapse of populations.

Replication is a form of insurance and spreads the risk of damaging events and long term changes that may negatively affect species and habitats protected by separate MPAs. It also ensures that some of the natural variation found in species' populations and habitats is captured.

Whilst we have been given minimum numbers of replicates, the final number will clearly depend on the number of options we have for each habitat and species. If there's only one example in our area then it would be hard to get two replicates.



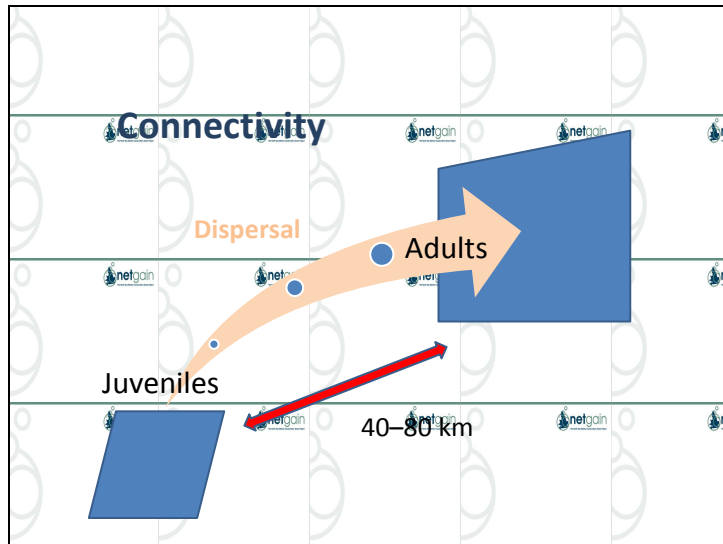
Viability should ensure each site is of sufficient size to accommodate the movements of species, thereby ensuring the sites are self-sustaining.

Many species in the sea move relatively short distances as eggs, larvae, juveniles and adults. For such species, even relatively small protected areas may be able to support self-sustaining populations that are replenished from local reproduction.

However, for more mobile species, smaller protected areas means less effective protection. Locating protected areas in places that are important to such species - such as spawning sites, nursery grounds and migration bottlenecks - could provide valuable protection to highly mobile species.

The guidance suggests that protected areas of broad-scale habitat types should be at least 5km along their shortest edge and, on average, should be 10 to 20km across.

For Features of Conservation Importance – either habitats or species – the recommended size for protected areas varies according to what particular habitat or species is being considered. The recommended sizes range from 0.5 to more than 10km across, although, for a few features, the entire area of habitat or range of particular species should be protected.



Connectivity – the network of Marine Protected Areas should seek to maximise and enhance the linkages between individual Marine Protected Areas and, at the larger scale, between the regional networks.

Connectivity enables mutual support between sites within the network – at its simplest, sites must be close enough together for larvae and adults to move between them.

For many marine species dispersal distances may be significantly larger than can be contained in one protected area. In this case it is not possible to simply identify a single area to protect the species - as the offspring/adults may disperse beyond the site's boundary with few left to replenish the local population. We need to look at creating a network of sites where each area is able to benefit others.

Protected areas must therefore be located close enough to one another to allow exchange at different life stages.

As a general guide, different examples of protected areas for a given species should be placed within 40-80km of each other.

Other considerations

- ❖ Areas with a high degree of naturalness
- ❖ Areas with scientific, educational and research interest
- ❖ Remaining principles:
 - Use of best available science
 - Protection – include reference areas (protected from disturbance)

Other considerations for sites to be included within the network are specific sites with a high degree of naturalness or areas that are important because of their scientific, educational or research interest.

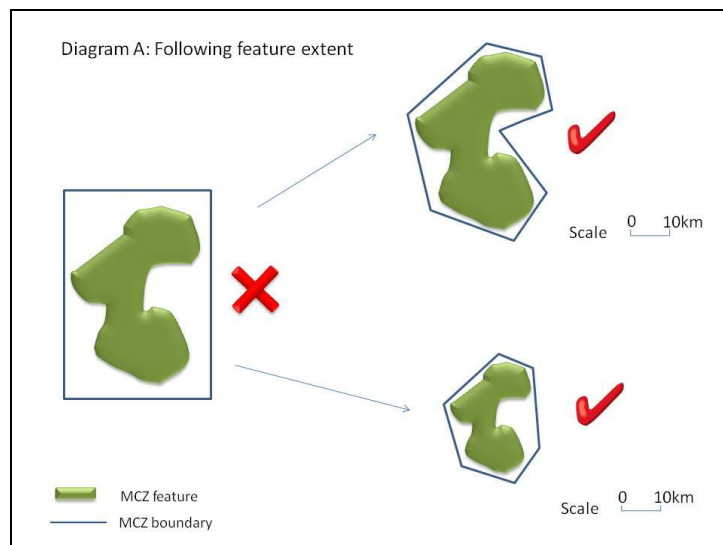
Site selection should be based on the best available science. However, this doesn't mean that patchy data (for example) would be ignored. It is more a case of making sure that, where there are more than one source of data available, the quality of what is actually used is not compromised but the best of what is available is taken forward. Lack of full scientific certainty should not be a reason for dismissing possible sites.

Also, where there is a clear link between the distribution of a particular species and a certain habitat type, there is some scope for using the existence of the habitat as a basis for site selection for species protection.

The network is likely to include a range of levels of protection for specific habitats or species from highly protected areas where no damaging activities are allowed to areas where only minimal restrictions would be needed to protect the site's features. These different levels of protection will be based on the conservation objectives for each site. However, as a basic principle it is expected that, for each species or habitat, there will be at least one example of a reference area where all extraction, deposition or human-derived disturbance has been removed or prevented.

To round off with, I'd just like to share some of the guidance on drawing boundaries around protected areas.

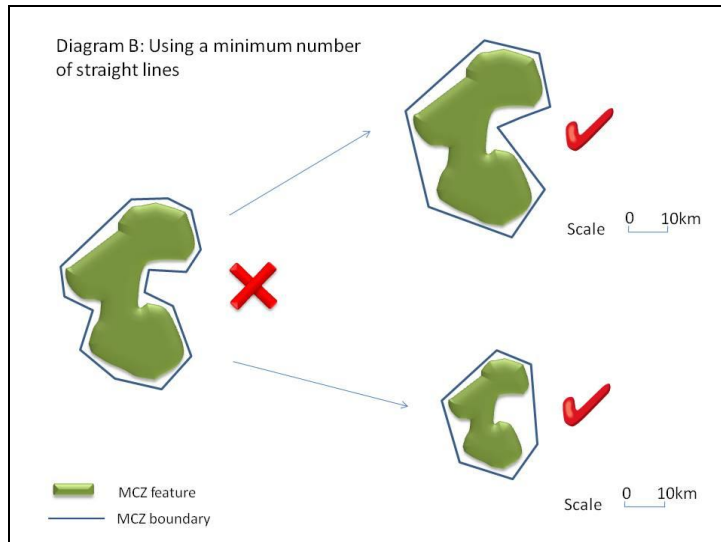
The following five slides aim to give you an idea of some of the more practical considerations you will need to take into account when recommending sites.



It is important to set the boundaries so they are easy to follow, understand, enforce etc.

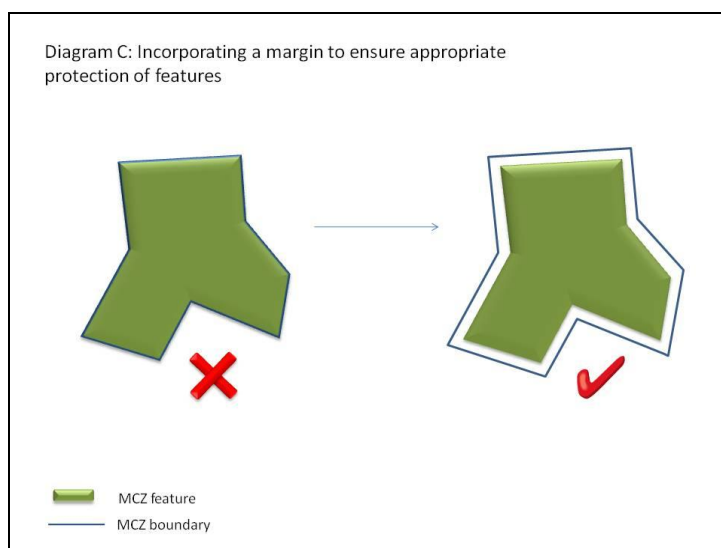
MCZ boundaries should follow feature extent (where appropriate), whilst: using a minimum number of straight lines and ensuring as compact a shape as possible.

So rather than a simple large box, it is better to 'trim' the boundary to better fit the area to be protected.

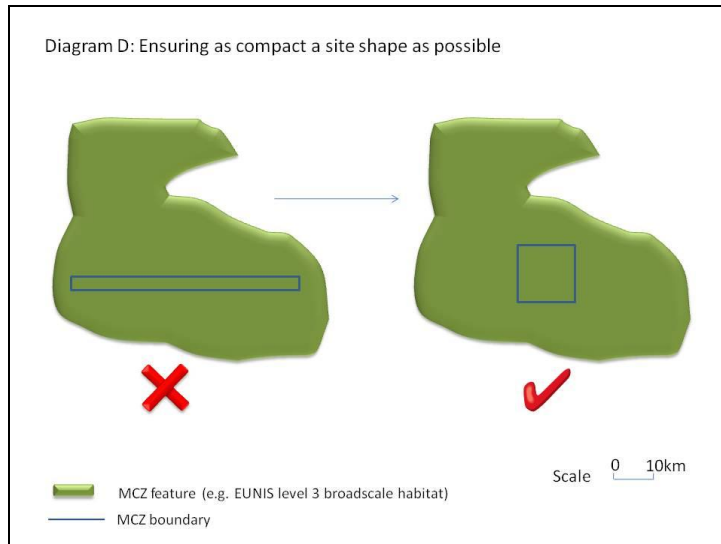


However, when doing this trimming, you need to be reasonable and not use too many short lines to try to capture ALL of the detail.

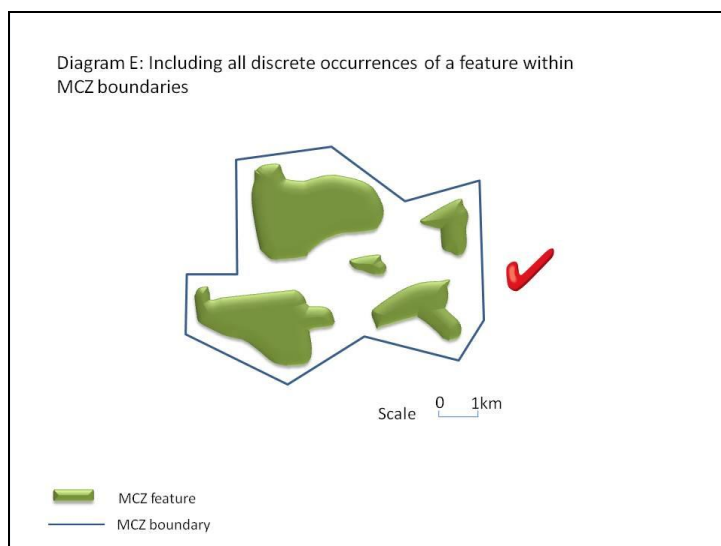
Rather than a site boundary that exactly follows the extent of a feature there should be a little bit of compromise.












To ensure better protection for some features it may be appropriate to include a buffer, or margin, when drawing the site boundary.



When selecting a site within an area of broad-scale habitat (for example, remember the guidance to protect 16-32% of sub-tidal mixed sediment) the boundary should be drawn to protect as compact a shape as possible.



Finally, where there are close but separate examples of a habitat or species that you want to protect, then consider including a number of separate examples (possibly even all of them) within the boundary of a single site.

| | | | |
|---|---|--|---|
| Ecological Network Guidance - Part 2 Seven key principles: |  |  |  |
| ❖ <i>Representativity</i> |  |  |  |
| ❖ Replication | | | |
| ❖ Viability | | | |
| ❖ <i>Adequacy</i> | | | |
| ❖ Connectivity |  |  |  |
| ❖ Protection | | | |
| ❖ Best available science | | | |

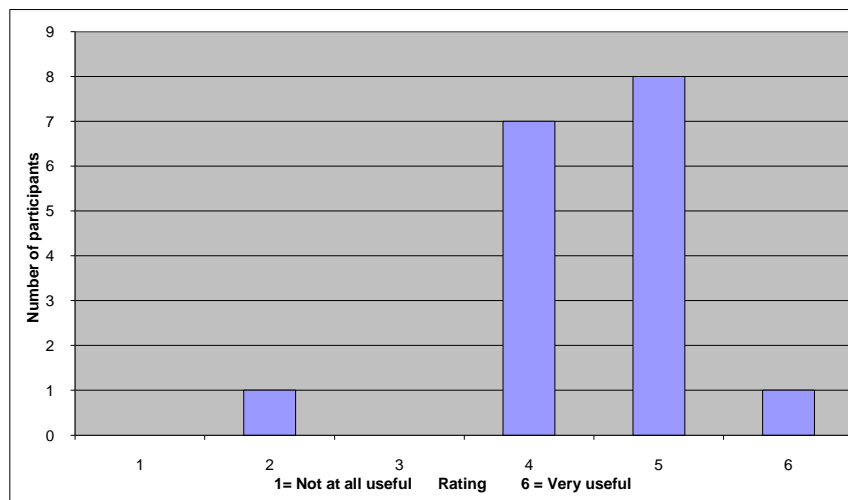
So that's the remaining principles outlined. As before, I'll pass back to Steve and Cathy who will lead us through a Q&A session.

APPENDIX 3

Summary of Feedback From Participants

All comments have been included verbatim

1. How useful overall did you find the day?



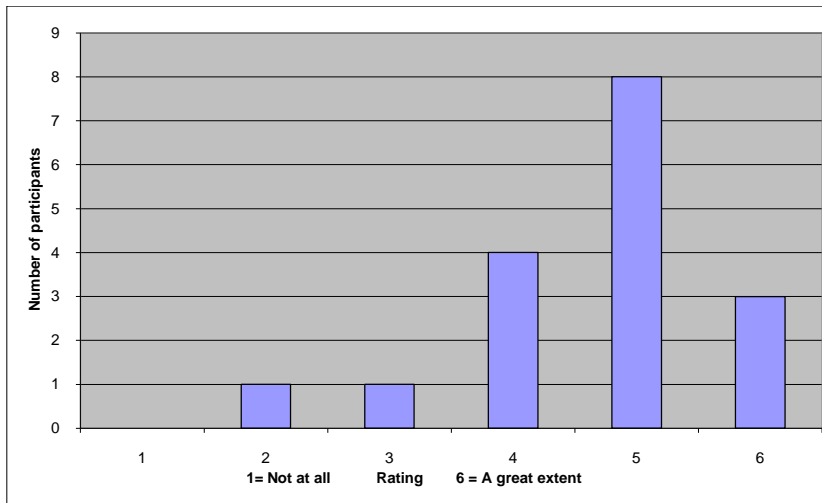
2. How much progress did we make in achieving the objectives of the day?



Comments:

- Achieved the object of the day, but not a lot of progress overall
- Need more info before meeting
- Yes, but process rather than action – I am happy with this, but think other expected more!

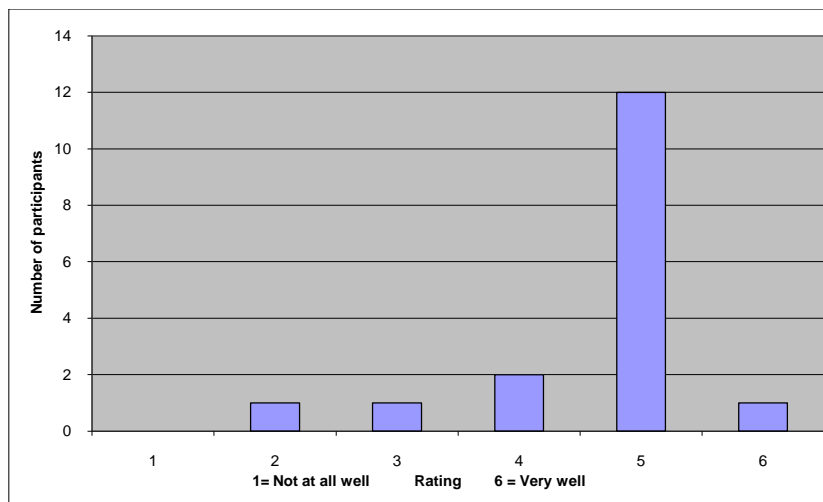
3. To what extent have you had an opportunity to engage with others and share your views?



Comments:

- Need more free time on each table
- The facilitators over-facilitated and prevented valuable conversation with other stakeholders

4. How well was the day run and facilitated?



Comments:

- Too much time spent on reviewing

5. Any other comments?

- More info up front, before the meeting
- Net Gain people at the front – not the facilitators