# Project UK Fisheries Improvements Stage One: Channel Scallops (Facilitated by the MSC)

Tuesday 9<sup>th</sup> April 2019 10.00 – 16:30 MSC, Marine House, 1 Snow Hill, London, EC1A 2DH

# **Attendees**

**AT** Adam Townley (New England Seafood)

AB Andrew Brown (MacDuff)

**BBS** Bryce Beukers-Stewart (University of York)

CP Claire Pescod (MSC) Chair

**EB** Ewen Bell (Cefas)

JP Jim Portus (SWFPO)

**IS** Iain Spear (Coombe Fish)

JH Jan Hiddink (Bangor University)

JP Jo Pollett (MSC)

JH Juliette Hatchman (MacDuff)

NdR Nathan de Rozarieux (FalFish)

**TR** Theresa Redding (Natural England)

**TH** Tim Huntington (Poseidon)

GC Gus Caslake (Seafish)

**LP** Lauren Parkhouse (IFCA)

**SN** Steve Newstead (Bangor University)

### Dial in

**HH** Helen Hunter (Defra) **FdB** Femke de Boer (SWFPA)

## **Apologies**

Estelle Brennan (Labeyrie)
Simon Dixon (MMO)
Hubert Geischen (MMO)
Kathryn Nelson (Sussex IFCA)

# Welcome and Introduction

CP welcomed to steering group and everyone in attendance introduced themselves. Minutes for the meeting have been circulated and CP checked with the group that they are happy to sign them off. All FIPs are now on FisheryProgress.org, and signed off minutes will go up as well any other FIP documentation to ensure it is all publicly available

# Actions from last meeting

JP ran through actions that came out of the last meeting

Action	Lead	Activity	Progress
NA	Poseidon/Tim	Add BMT into the AP	Done
		document	

Action 1	Ewen	Send the report to the group as soon as it is available on the Defra website and to inform the group if something additional is needed after this assessment round is complete	Update at meeting- stock assessment due in few weeks and will be available on gov website- will send link
Action 1	Bryce	Send link to report from ICES scallop WG last month	Done
Action 1	Poseidon/Tim	Update wording around stocks and remove consultation action from Y2 in Action 1	Done
Action 2/3/9/10	Juliette	Present on SICG/scallop conference at next meeting	Update at meeting
Action 2/3/9/10	Juliette	Feed back to group in SICG management plan progress at next meeting	Update at meeting
Action 4	Ewen	Produce a proposal (2 pager) for research either conducted by studentship or cefas and provide estimate of costs and timescale of project. To look at larval distribution.	Met with oceanographers – need to know budget for them to work within - existing 4km shelf wide model that can be used-quick process-previously 1km model which would take more input and research. So depends on scale we want. French paper was 2km but not enough detail. Full km good in offshore but inshore will be difficult to get the resolution needed-discuss in A4
Action 5	Bill B	Update on A5 at next meeting	Update below
Action 5	Ewen	Draft plan for sampling and look to get that resourced covering the Y2 milestone-draft out years worth of data collection scope – look at getting it up and running and resourced	

Action 6	Jim	Put together text for Femke to add to paper on Action 6 (TAC species removed from bycatch/ some ETP have TACs and there are exemptions to discard) - include discard changes in the law for TAC, elasmobranch species, and add in 5%/95% TAC new species discard laws and understand where they are relevant	Update at meeting
Action 6	All	Provide inputs/caveats for Femke's document	Done- limited feedbac
Action 7	Christina	Send latest version of skipper questions to Juliette and JH to circulate to her fishermen	Done
Action 7	Christina	Send data collected and presentation to JP to add to FIP dropbox (with update of presentation for accuracy)	Done
Action 7	Christina	Make summary of where she has got to for handover document – TH to evaluate	Done
Action 7	Ewen/Juliette	Send CM/bangor maps data collected for the stock assessment project, defining where they fish	Dredged and undredge maps
Action 7	Mike K	Circulate particle tracking model	Done
Action 8	All	Provide feedback on Gwladys SICA presentation to Jo	Done
Action 8	Jo	Circulate SICA report to group and have it signed off	Done
Action 8	Jo	Pull together paragraph on industry to explore taking forward at next meeting	
Action 8	Theresa	Get data from Devon and Severn IFCA on IVMS, and east of England trials	been in touch, report with MMO, seeing if they can get clearance to send out. Ivms data on MMO site anyway.
French	Jo	Circulate presentation	Done

French	MSC	Get in touch re: how to take forward- when to have a meeting and who would be useful to include (and develop ToR)	ToR in process
French	Jim	Circulate who is funding the established WG project and sitting in the SG	Done

Action: Ewen to send out link to stock assessment due in few weeks and will be available on gov website

Action: Ewen/Juliette to circulate dredged and undredged maps

Action: Theresa to circulate link to MMO data on East of England trials etc.

Defra update: Approached Marine Scotland for observers, MSS said this needs to be bigger than just scallops- want all fleet sectors. Concerns about UK and Scot sampling same vessel. MSS want it to be specific UK wide or won't be involved. Impasse. For this project we could work on an alternative-bespoke program just to target info for this group. MSS don't sample any Scottish vessels for scallops so shouldn't be a problem- they are involved in S2 so perhaps that will get things moving. Resource issue for MSS. Cefas need to sit down with them to understand how to solve this. Separate scallops out? Could scallop be a pilot? Sufficient data in 7e, need more in 7d. Let us know if PUKFI rep would help or just feedback next time they catch up with MSS. Cefas a bit busy at the moment! Been talking with stats team and deputy director in policy level.

## Action: Ewen to feedback on Cefas/MSS meeting on observers when it happens

CP provided a reminder of the documents the FIP uses, and that this meeting would inform the Annual Review, as this is last meeting of year two. TH has already started the Annual Review but information provided from today will feed in and we can expect to have a draft by first week in May. The review will show if the FIP is on track against the BMT, which is used to demonstrate progress. TH will ask questions today to understand the status of each milestone and may follow up for clarification in next couple of weeks.

Action: JP will set a date for a webinar to report back on the Annual Review in next couple of weeks/start of June. This will be recorded for those who cannot make it.

# Scallop conference and SICG

JH provided the group with an update on the activities of the SICG and the recent Scallop Conference at Fishmongers Hall. The group has recently commissioned Poseidon to undertake a review of the scallop sector.

Action: When the conference report is made public, JH will circulate to the group.

The Fishmongers Company approached MacDuff about collaborating on a conference, with the aim to bring together international fishery champions to present to the UK stakeholders on best practice management to inform future management of UK fisheries. JH provided a run through of the agenda content and attendees.

Brexit gives us opportunity to revisit how fishery managed and to submit new suggestions. The conference demonstrated an interest in management that had not previously been considered. After the conference there was a detailed discussion around advice on how to approach developing new management. Attendees and presenters noted that there was a lot of work still needed but encouraged by enthusiasm for management and interest in new ideas.

## Harmonisation (Tim)

Tim provided some context as to why this harmonisation exercise has been done. The Stage 2 Scallop FIP started in June 2018 using the same PUKFI model for a FIP around North Sea, West of Scotland and the Irish Sea. This FIP has just been signed off as active through SG consultation. Harmonisation has been done between Stage 1 and 2 in case anything was picked up in S2 that we need to think about for S1. Comparing both Action Plans has been a useful exercise, which did revealed some gaps. However, it is important to remember that they are different fisheries managed in different ways, and that HCRs in Channel do exist even if not formal.

Action 1- establishment of biological reference point- for biomass reference points with long time series this makes sense, but we only have one or two points so no meaningful refs for some time, which means it needs to be introduced formally.

Action 2- add evidence that the strategy is working in yr 5- show that strategy is beginning to work. Get as many above SG 80 as possible, but Scottish going for all above so much more precautionary.

What is meant by demonstrating that it is working? Show that there are mechanisms in place and that there will be triggers. Show that a system is being followed. Tim read out wording of what is required for the MSC standard- may not have been fully tested but evidence exists that it is working. S2 updated wording to clarify what actually required by MSC.

Action 5- pre scored at 80 so we didn't include need to do alternative measures

# Action: Tim to understand what needs to be added for Action 5 and 6

Action 9- consider framework post Brexit- may need to be more implicit and captured in document-prove we are thinking about Brexit and its implications

Recommendation across all FIPs- SG to consider future client group to take fishery through to assessment if choose to. Someone to take responsibility – need to build client group into FIP to take ownership and start running it towards the end and to own the Fishery Management Plan (FMP). Take over chairing from MSC and eventually be run by client group. MSC to step back in last couple of years. Could we start a revolving chair?

Only 3 years left but there is reluctance to form a client group until FIP gets to a point where it might actually be able to go to assessment. Maybe in final year? Also thinking about individual actions — someone in the group to take ownership of FMP and as the main document for the group. Make sure there is ownership beyond the FIP. May be too soon to call it client group, but still need core group that will likely be the main thread for the FIP.

MSC independent so can't take it forward to assessment but can still be involved and provide guidance on MSC tools. Formalising in last year is fine. Hopes that retailers and supply chain partners might put money into funding assessments in future, so small amount of money for each contributor rather than large lump sum.

Going forward will keep linking in with S2, perhaps Fiona could attend S1 and S2 so that the same actions are progressed across industry in UK.

#### Action: Could Fiona to come to next scallop S1 meeting for consistency

#### Annual review

What format do people want in? Another annual review table with updated BMT. Is there a way to make this document useful and get people excited about it? Summary? Bullets on key actions of FIP? Pdf? Printed docs? Tim has also added scores into Action Plan so we can easily see the progress being made.

### Action: Group to think about how the AR could be most useful to them

#### Action 1

Currently this action sits with Ewen, but might be time to transfer the lead to industry.

In terms of stock areas. Ewen displayed maps to show what Cefas are currently working for 2018. New areas for NW English Channel and N Cornwall assessment areas (out of scope of this group). Big hole is southern half of 7d. majority of fished area covered by French, but not all. That 7d south block remains best area of estimates.

Extra bed added that they would like to survey. Need to work out how to integrate with French assessment.

#### Action: Cefas - still need info from French re: level of activity in their 12nm zone.

Red area- little or no dredge activity, but industry would like underwater TV survey due to level of biomass in these areas.

New this year- b, e and f areas. Large areas. Random stratified design. Can afford to survey every 15km. Don't want to go any courser than that. Should capture rough dynamics at this level, would be great to go in more detail but resources are an issue. TV surveys 0.3 knot for 15 min tow. 140m distance. 1m field of view. Working on ways of improving data and resolution for underwater tv surveys. 1 scallop every 10 sqm so not seeing huge numbers in these zones. Uncertainty quite large at this level. Can't afford to survey each of these zones. If areas are undredged then should be at unfished virgin biomass level so shouldn't need surveying as regularly as fished areas with higher mortality, which need sampling more regularly.

Why aren't some areas dredged? More rocky/ground type. Ground not suitable for scallops. Therefore density may not be showing virgin biomass – not necessarily scallop habitat- would extrapolate data out to larger area

Biomass should be total spawning biomass that contributes to fished area. Connectivity work needs to be undertaken. MPAs also marked – could survey in those in future. TV work planned for later this year. 5 days of boat time to cover these areas. How do they choose the area? Random. But need to know whether the area has been towed before? Camera work only done in unfished areas. Dredge survey in fished areas (still randomised but 20 min at 4 knot). No VMS data in unfished areas for last 5 years, but only related to over 12m. Activity from under 12s is something we are missing. York also trying to get hold of it and might have information on. (Nephrops surveys at 0.7 knots) if tow this fast it is hard to see the scallops though.

Started doing efficiency work with cameras- prelim results 30-50% range on limit range: glue beads to scallops – if bead on there, would we see scallops? Only about 30-50% of them.

Doing some work with Cornwall IFCA re: tagged scallops to recalibrate efficiency measures. Does assessment process take into account uncertainty? Yes. When raising up biomass from dredged areas, bootstrap to get estimate on uncertainty in regions.

Bring back to milestone and AR: Year 3 – stock areas agreed for stock assessment purposes. Who needs to agree this? No disagreement about boxing up of channel into 5 regions- presented at ICES WG and not complaints. They are most appropriate body to agree – 20 people from scientific community. Meeting in October 2018. Is there an output? This will be publish on ICES website by now but won't include formal decision that yes these areas will be adopted.

# Action: Ewen to send follow up email re: agreeing the stock area boxes.

Always compromise as we can only use best available knowledge. How long is stock assessment going forward? PSB running it, one third industry funding for long standing stock assessment. Defra and Cefas intention that this should be continued fishery research program. Revisiting boundaries of dredged areas every 5 years.

Extra information needed from French re: level of exploitation, but not about stock unit. Could be add something to ToR with French on this.

#### Action: JP to add French sharing of data to ToR

Can get landings by rectangle but currently nothing after 2016. VMS data linked to scallop fishing. Area of stock assessment may not be the same as area of management. Deal with it as we progress. Harvest strategy needs to recognise stock unit areas within management.

Action lead- should it be transferred to SICG? Keep with Cefas for now as still about stock status. Defra as well? As they will be more interested in management. Decide what to do with the stock assessment next. Feeding back for Defra's thinking on how its being implemented. Industry to become partners on this action. HH confirmed Defra happy to be involved.

#### Action: Defra to become action lead, and industry into action partners

Why isn't ICES WG as stakeholder? Add them.

#### Action 2

This is about Harvest strategy- currently isn't one. SICG action plan being developed and published shortly. As part of this there are a number of different WGs – one is fishery management group who have now met twice, with objective to develop LTMP. Tim shared new FMP template. Short term group considering interim measures to stop expansion in fishery while LTMP developed. Group reports to SICG so must present to them before taken further. Looking to meet with all UK FAs to discuss- key to understanding timelines as need confirmation that these work for them. May 20<sup>th</sup> pencilled in.

Fleet structures WG first meeting yesterday. Overlap of action plan for FIP and workings of SICG. SICG and PUKFI need to think about how to better align. SICG UK wide but most formal management is in Channel so is more of a priority. SICG looking to be more transparent and has broadened membership in order to be as inclusive as possible. Looking for ways to disseminate information they discuss, and activity undertaken e.g. seafish page.

Stage 2 is currently one big SG but will think about breaking down into regions or issues e.g. environment subgroup. NWWAC covers Irish sea and they haven't mentioned scallops yet.

Not yet in position to confirm progress until meet with UKFAs and confirm timelines. Y3 action-What level of consultation? And what form of measures? Gov consultation would be different to industry consultation. Consult with industry through SICG, but if formal consultation needed that it will be up to UKFA. To be on target would need to have some idea of what harvest strategy will beshould be done in May. Blame Brexit for the delay!

#### Action 3

Target reference points to trigger management actions if necessary to respond to stock status but need to decide approach. Currently no reference points, which will be needed. Have candidate values for fMSY which is a good start. Is there any way to have a point e.g. 50% MSY- not at that stage yet. Will this be coming through SICG? At what point do you start taking management decisions. Could this be pushed towards the ICES group?

Have info now but stock surveys never used for anything. WW effort regime in channel, which doesn't allow for adaptive management. Need to replace this but currently stuck with it. Not adaptive as not based on stock status. Could you adapt within it? Want something more responsive to MSY, based on stock. Could there be a system underneath to manage?

Management must be all vessels in all areas so we do not force displacement. Or generate artificial barriers- snow drift as in Scottish. Could we use CPUE as proxy? ICES group are looking into this and how good it is relative to surveys. None of the surveys secure in long term with is always a worry. Can't get away from need of independent data but could make more use of fishery data. ICES WG doesn't get funding, just scientists getting together and coming up with ideas.

Haven't started talking about it yet. Only two years of data so uncertainty- not yet full long-term time series of data. Could start talking about it but couldn't actually do it yet. Identified that there is need to bring in others e.g. Defra into SICG WGs. Place for PUKFI to come in. Tim to join once they have an idea of approach?

Big decisions to make and understand what we think is achievable. High level risks and have to get everyone on board. What could project do to help? Funding? Science? Modelling? Always need more science and need expertise for FMP.

Can use VMS data but limited as chunk of fleet only reporting at rectangle level. Level of stock biomass gets lost. Ireland- was Ollie Tully able to get individual, anonymous tow data?

# ACTION: Tim to reach out to Ollie Tully re: data collection

Can't do much at the moment but could help SICG when they get to a point where they need it. PUKFI could look closely at conference output of HCRs in other fisheries around the world-lessons and guidance to be taken from those examples. Tap into expertise we can get.

SICG working on strategy side. Progress for general agreement, then identify which HCRs could be used on that strategy. Would be easier to harmonise current rules rather than new rules. Then link HCR to trigger points. SICG would need external expertise in WG as would start being more technical and need scientists for credible trigger points. UKFAs haven't managed it this way before so they won't have the expertise. FAs will need to be kept informed, so group is still meeting their objectives and that Defra would still follow through.

Commission options paper once there is a strategy in order to inform discussion that SICG are having and ensure the options still fit with MSC.

Action: Look for funding to commission options paper on HCR and bringing in expertise.

Make this a Y3 action as need to be realistic.

Tim told the group about working with Defra to develop GIS based support tool for policy makers for English fleets only- FIDGIT. Up and running but not public. Allows FAs to model management scenarios e.g. adding quota to non quota sp. Policy tool to inform Defra on quota decisions after Brexit, but can also look at scenarios for other fishery going forward- environmental, social and economic indicators. Needs more data in it e.g. iVMS, but the amount of data included data is increasing all the time. Good data is key.

Action: full update at next meeting and perhaps give demo (check with Defra) or webex?

#### Action 9

This follows on from action 2 and 3- if they are behind then this has a knock on effect on actions 9 and 10.

Defra should be the lead on this as talking about agreement of stock units and consultation about development management units. Closely linked to stock units. Not even talking about management so this is too ambitious.

Management areas and the management linked to them. Type of consultation will depend on management introduced, but it isn't additional work as they would have to do this for new management anyway. Lead is about reporting back to FIP and working out additional needs. Need to provide evidence that we are doing these things.

Voluntary measures? Meets MSC as long as its demonstrable that it works. Is that likely to result in conditions? Depends how robust they are. Eg SFSAG voluntary area- carrot and stick- MSC certification and removal from certification. Icelandic fishery- membership of ISF- way to put hard/firming up of voluntary condition. MSC outcome based- more about outcome than how its done, in which case SICG quite far down the line.

## Action 10

TBD action lead in Yr2. FMP- now have structure. Do SICG buy in to this? In which case can we buy into this? Yr 2 – already engaged with WG – objective for FMP for short and long term objectives. SICG should be action lead.

Action: Update Helen in more detail

# Action: Remove first part about ICES in action

Make sure FMP not developed in isolation- imbedded in wider management plan for scallop fisheries to provide greater definition within existing system. Must be coherent with existing policy.

P3 – wider fishery governance section e.g. under CFP or other fishery management measures. Or if mixed fishery management plan e.g. monkfish within this plan.

Action: Could PUKFI Poseidon time help to go through this- WG to ask for this?

Will also be relevant to other FIPs- could we do it for all of them?

This group also added a labour recommendation. Could add it into the FMP- should pull everything together. SICG could benefit for working through this template.

### Action 4

Issue around future funding for surveys – tv survey long term future not resolved (current funding is for dredge). Fully committed but need to keep resources. Undredged surveys happen less frequently than dredged surveys. Might still need to do annual surveys for now but further down the line they could be less frequent. Annual preferable as recruitment sporadic.

Need to run oceanographic model over several years to get indication of weather patterns- how many years do we do to fit the budget. Better to have something sooner than rely on PhD student who will only report in 4 years. Readymade but courser model. Cefas model already there but takes personal time to run it. Mike Kaiser model for Lyme bay from Bangor- Peter Robbins.

Dredge efficiency- trialled new tech looking at electric tagged scallops for instant read out from dredge. Need to verify that these scallops are behaving as they would naturally. In 12 months should be more info. These issues come up in stock assessments regularly, and PUKFI could help fill these gaps- larval connectivity and dredge efficiency are both key.

Yr 3- should this be deferred to Yr4 as not time critical to any others. Create summary of current gaps and fill in critical areas, which others address in future? Might end up with condition? Need some kind of conclusion on this with interim report- in a years time could we look at it then once more info available? Is that premature?

# Action: Need to add yr3 action with interim stage- starting to gather info and consider/finalise for next year

Ideally need program covering many years with lots of particles. Where can we get the money from? Need to draft ToR- what would they like to do? Proposals for filling the gaps and funding required. Ewen just needs to get on with this.

Action: Ewen to pull together timelines- send to Jo by June (just ToR) estimating minimum we can do to satisfy question. Also what would gold plated look like? Look for funding once we have this.

Cefas not the only hydrographic modellers- scope out what required. Could Bangor also do this? Southampton? Could it come out of SLA money for Cefas? Not without dropping something else. Ball park figure 30K minimum- can't do anything for less than that. Has to answer our questions. Eastern channel less of a problem. Need concept note – develop with PUKFI. SICG stock assessment board might be able to help? Ewen can prepare tender and doesn't matter if Cefas don't get awarded it. Circulate round whole group and then put out to tender.

# Action: Ewen to send this concept note for Tim to review/SICG to review and then put out to tender

Yr3 spec for project to take out to tender. SICG have submitted an FSP around this but no feedback yet. Claire Szostec also working on dredge efficiency. Could invite her to next meeting for update? Not necessarily the right type of dredge efficiency. Work more about configurations of dredge types on bar. Relevant but not necessarily for this work.

Bryce has done some research on this- dredged and dived- variable efficiency as currently working on 30-40 %, how do we make it more accurate? Only for sandy gravel.

### Action 5

Ewen fed back on observer boats. Sampling rate in 7d is low. Looking for update on what has happened since then- covered with Scottish boats. Update once there is another meeting with MSS. Doesn't solve problem that it reduces sampling rate overall if don't find additional funding.

Design and resource observer program. Is it sufficient for the project to get 'some' data, or does it have to be using observer program currently set up. Don't have to have same level of observation on going, just need to identify risks and then focus observers on the risks. Lacking strategy for observer program- currently random draw of vessels that are scalloping per quarter and then go and observe regardless of where they are fishing. If more targeted- when to put on or where, which vessel type?

7d under represented needs to be addressed- MS issue.

If want specific info about specific area then needs to be independent of DCF. Tim advised on minimum requirement. Standard is generic, but output orientated, just needs to determine primary and secondary species and then any changes which are detected. Currently only observing commercial species, not other bycatch. Will not be more data as all commercial species have to be landed but secondary species unlikely to be quota species. Doesn't specify that we need it to be an observer program.

#### Action: Tim to suggest some options that might be needed? See what S2 are doing.

Know impact of fishery on secondary species (sp without ref points taking up more that 5% of the catch). Quota species now part of 95%. Still survival exemption for ETP. Pre assessment showed landing no secondary species – wouldn't have been as have to land clean.

## Action: Need clarification on what group wants to do-tim to send round in next three weeks

Should already have design – MSC to develop funding bid for observer program. Need to understand what's needed (is observer program even the way to go?)

## Action: Find out if Gus has some work on 7d?

Full data collection should be available for primary as quota sp. Maybe there are no secondary sp? Survival exemption for rays? Still need to record bycatch. Need more information on what group is required to do under this action.

Discards should be recorded for stock assessment purposes. Will be in log book but not recorded anywhere else-text box not number box. Anecdotal. Not compiled? Has LO changed anything? Are MMO putting any resources into monitoring and control? Could be tough one to achieve- is it behind for this year? Going forward it depends on what we want to do.

## Action 6

ETP- Rhiannon's paper. Need strategy for fishery and its impact on ETP (if there is any impact). Question- is there a need for additional strategy / additional management measures in this fishery? If so then should be piloted over next year. Need to consider code of conduct? SFSAG have developed something similar.

Just a few ray species so either now have quota or legally have to throw them back. Have to quantify first or management is a waste of time. RH looked at data available and identified the scale of issue, which was small. Currently says action needed 'if necessary'- Tim's job to look at group recommendation.

Femke's paper doesn't make recommendations based on the two papers as it doesn't show it's an issue. Do not reinvent wheel- refine paper.

Action: Need to add recommendations to ETP paper. E.g. 'lets use what we already have' 'Based on info we believe that...' Femke to collate discussion at end of paper and general comments to pull together. The input from Tim and from Jim Juliette and Paul.

Might want to consider whether skippers know this and are they prepared to do it? Will need sharing with industry and training. Already encouraged skippers to record for stock purposes.

### Action: Add falfish paper

Theresa- skippers collecting reliable data- error calculator for observers vs skippers?

Action: Group pushing guides out to their members? Share info so industry are better informed on what to do with skates and rays.

Just about best practice and would be good to collect data on how much retained and discarded.

## Action: Juliette to find out rules for recording discards- is it voluntary?

Ongoing milestone to review in case more information comes to light, and FMP template should cover this and can build something in there about triggers? Identify if pilots needed, and then review future milestones.

How often do you see rays – less that 1000<sup>th</sup> of total weight caught. So would recording be a burden? First point of call should be for vessels with quota for landings.

#### Action 7

Split into three sections- habitat modelling, cameras and interviews. Cristina left Bangor in November, and Steve has only just joined so not much has progressed since the last meeting.

Habitat modelling: creating a map to show habitat sensitivity and ID areas most at risk, 56 vulnerable species found so far, presence and absence data, creating species distribution levels to show hotspots, look into collating and producing distribution models. Looking for processed data layers from Cefas. Create assessment to look at state of habitat including recoverability (sensitivity measure of recovery). Bangor developing tool which can run through data for that.

Cameras: want to get on board range of vessels to record bycatch, what is brought up and how dredging interacts with sensitive sp. Hope to gain distribution information from the video as well-groundtruth the model. Benthic species rather than rays/ETP but ETP will still probably record.

6 cameras ready to go, look back at video to identify species, and lasers will help ID size but will depend on quality of video. Having a conveyer belt would be ideal but might just be about where its possible to mount the camera. Cristina had sticking point in actually getting vessels on board. Main aim is to work with industry – could the room pass on contacts to Steve to get cameras on board. Cameras not there to be big brother, and they are independent – fishermen in control of when recording starts and stops. Trouble getting smaller inshore vessels to agree to this. Data would benefit for having different vessels and locations. Can FIP help with this?

Might be harder to get it going this year with LO. Tendering process for vessel at the moment, could camera be on there? How to share data with Bangor? Data download would need to be done. Steve available to go and speak with them. Logistical nightmare to get them all in the same place. Bangor

have to actually install the camera. Skipper could just only turn on when want to use it, would prefer regular use by same boats but would mean charging battery.

# Action: IFCA to put it out to smaller vessels, PO also to encourage, really easy info sheet that Cristina produced and was circulated- re push it.

DCS having issues getting observers on with LO as no one knows what the regs should be. Recording on conveyer will record discards. Need to get clear for skippers what the LO rules are and find a way to stop data being used by someone else. Steve happy to have a chat with skippers/ POs to figure out how to make this work. Sooner the better due to LO/quota issues.

There will be skippers out there but its just pinning them down. It's a two way process- can also show if there isn't much of an issues, or that ray not a problem.

Survey vessel doing shorter tows and not doing all major grounds so may not mimic full fishing operations- still better than nothing. At a minimum presence/absence rather than catch rates would still be good enough.

Shame Cristina left as she was just getting there with them, but now hopefully Steve isn't starting at zero.

Cornwall IFCA doing dredge work – survey level but could talk to them about camera?

#### **Action: Lauren to introduce Steve to Colin**

Skipper interviews are all done- designed to collect knowledge on habitats, data being worked up to be used to help validate models. Phone and face to face, 25 questions, 37 responses summarised and 6 more still to include. Vessels less than 10m – up to 35m.

Spatial and temporal variation, July and Sept lowest fishing activities. Oct- Dec bad weather so close to shore. Bycatch- echinoderms, determined by habitat fished. Heavily fished areas more damaged bycatch. High level of dredging scared off fish so less fish bycatch.

Action recommendations once all this is done- how it could be managed- suggestions for industry. That's the ultimate goal but need to finish work first. Provide risk based analysis of work- e.g. these are hotspot for interactions that could be managed. Come back at next meeting for another update.

EMFF funding so hard deadline here. BMT – this is the only one that was behind target before, but because it took time to get funding in place. PUKFI can try to help re collaboration.

# Action: Sussex mapping- Lauren to send link to group

New method so partly its proof of concept. Steve needs to get down to quay with skipper. Contact Mark Roberts. Good place to start, but he is not fishing in channel though. If already camera on board may be more likely to add another? At the end of post doc will need to think about pilot projects that might be needed for next milestones.

#### Action 8

SICA did not demonstrate sufficient understanding of where boats were working. Moving into yr3 looking for further research or management for ecosystem.

Level of inshore fishing, only done visually, but do have data on iVMS pilot project. Could that data be looked at? Just needs to be a greater understanding of inshore, any Devon and Severn iVMS data

done could help. Currently being rolled out by 2021. For all vessels under 12 m (8 - 12), with mobile gear only. Data is with MMO now so should be accessible.

## Action: Leave with Tim to review the paper to see if that's all required.

More than 12 ping rate is low. That's every two hours, is that sufficient to understand? No. 15 min would be better. Could be as good as three minute reporting. Would course VMS have an impact on footprint? Mike Kaiser- industry should consider as could work in favour. More frequent ping the closer you can get to look at things and analyse footprint as smaller. Until we have full management rules on MCZs to understand what's excluded from area there is no requirement for fishermen to prove they aren't in there.

Vessels with foreign crew not allowed within 12nm. Do vessels want to consider trailing pings? Can't put iVMS on vessel that might be out of cell phone range, unless it can harvest he data. Simulate increased ping rate by using GPS tracker. Need gear in gear out at the same time so can be clear of when actually fishing. But do have speed so could work out when fishing? There are trackers out there that can be purchased cheaply, and as long as its in GPS range it would record position.

Tim going to check Gwladys' report- offshore boats with limited ping rate- might need to look at alternative tech for them. In their interest to avoid prosecution. Geofencing of MPAs.

#### Action 11

UK scallop management review- independent report so is that enough? Is it done to the granularity that the FIP needs. FP yr3 requirement on external review.

Conference expanded on Poseidon report, but they didn't critique the fishery. Report did have SWAT analyses and recommendations

This report should suffice, do we need anything for yr3? Dan Hogarth might be able to help? Could a peer review have a look. Take away and discuss?

# Action: Tim to ask someone more independent for advice on this the independent review of the fishery

Harmonisation could also go towards this. FP requirement for external review- check their timeline for when they expect this?

This is quite a radical FIP- this is the first time there will be HCR- this will transform the management. Could there be external review within 5 years? Someone like STECF to have looked at it? How independent and at what level is this needed?

Action lead still needs to be defined – currently steering group.

#### Recommendation

Labour- circulate the MSC updated labour requirements – new template that all fisheries in assessment are required to complete before august. POs might need to do on behalf of vessels. If conviction happens in 2019 for offence in 2012 which date counts? What if vessel changed hands and now under different ownership?

SG wanted something to show that members do not have any issues and that there was a way to make sure anyone not complying is not in the FIP. Can be changed if needed. From NESI this is important to have this statement- its about transparency and its important.

Jo to circulate self declaration template and at next meeting group can talk about what to do with this.

## French ToR

Been circulated and will be translated to French for comments. Before this we will add in about sharing science anything else the group thinks of. Then sound out to everyone and get it finalised. Get confirmation from them that they will go ahead with FIP and understand interaction level-sitting it meetings etc. completely up to group.

Not collaborating could hold up P3. They are ahead of us in some ways already- knowledge of stock and management. We will be transparent with our stuff which may bring them up to speed. Expecting them to have same transparency as well e.g. Fishery Progress etc.

Only doing it is they have a FIP. Pascal confirmed they are doing a FIP.

#### **AOB**

Claire leaving MSC in June, but the MSC are fully committed to PUKFI and will get someone in post soon. Anyone want to stand in as chair for Yr3?

Annual reviews- next steps- Tim will be in touch for specific questions and follow up

Thanks to Claire and good luck.