A15/ER/ALL/23

Annex F Strategy and Curriculum for Capacity building

2011 IWC entanglement workshop

INTERNATIONAL
WHALING COMMISSION

Annex F

Recommended approach to capacity building and training

INTRODUCTION

The details of training will vary from country to country and depend on a number of factors including the level of knowledge of the entanglement issue, the level of government involvement, whether there are existing networks to build upon such as stranding networks, the extent of the coastline, the level of resources available etc. It is also important to recognise the primary objective(s) motivating the instigators that may include one or more of public safety, animal welfare, population level conservation, public concern, retrieval of fishing gear, conflict with fisheries, and conformity with national legislation or matters related to international trade (e.g. export of fish). That being said, the fundamentals of the training will remain the same and this document presents an outline of for training programmes, within which the details will need to be tailored to the specific cases.

For countries for which there is no existing entanglement response network, there will need to be three levels of 'training' in the broadest sense. At each stage it is essential that appropriate local stakeholders are involved.

(A) Assembly of the available information on the entanglement issue *inter alia* to provide a rational for the need for an entanglement response network and to provide a context and idea of the scope of the problem. [This will be considerable easier for those cases where a government or governments have requested assistance].

(B) Development of the structure with in which disentanglement activities will occur, including improved documentation to assist with improving *inter alia* future prevention efforts (prevention is the best solution) as well as well as to enhance disentanglement efforts.

(C) Training of a disentanglement team or teams.

(A) RATIONALE FOR NEED FOR ENTANGLEMENT RESPONSE

This primarily involves working with governments and managers. As noted above where this is driven by a request from a government or governments, this may be a relatively straightforward step; if it is driven by a conservation-related need (perhaps suggested by the IWC Scientific Committee) then it is essential that the evidence and potential solutions are provided to the relevant government in a concise and balanced manner; it is essential that governments are part of the process. One approach would be to hold a short seminar with the appropriate government officials. Where IWC member nations are involved, this could be organised in conjunction with the relevant Commissioner.

Information provided should include what is known about the local situation with regard to entanglement and examples of how such issues have been dealt with elsewhere in the world.

(B) DEVELOPMENT OF THE STRUCTURE WITHIN WHICH DISENTANGLEMENT ACTIVITIES OCCUR

Disentanglement activities cannot exist in isolation. Entanglement response requires a structure that covers all aspects from outreach and reporting to responding, verification of reports and decisions on the appropriate response including disentanglement, follow-up and documentation. Developing this requires involvement of managers, biologists (and stranding networks where these exist), fishermen and other marine users, including the coast guard and the navy, with assistance from international experts. It is important to stress the pre-eminence of human safety issues, the need to focus on achievable objectives and the need to work towards prevention. This phase will almost certainly entail at least one meeting.

This stage requires knowledge of the local entanglement situation (including species, likelihood of events, gear that might be involved, potential 'hot spots', resources that may be made available, the existing legal framework) and an overview of how experiences and structures elsewhere (including the Incident Control System approach) can assist in designing a workable and efficient local structure and all aspects of communication including dealing with the media. It is important to recognise that the entanglement issues may involve more than one country given the migratory behaviour of large whales.

(C) TRAINING DISENTANGLEMENT TEAMS

Trainers should be chosen from the accredited global network of entanglement response operations, by its members, using criteria they develop including, but not limited to: thorough knowledge of all aspects of the curricula, experience training in existing networks, experience disentangling the species involved, communication skills, availability......etc.

Trainees should be identified within the local structures developed under (B) above. There are a number of roles to be fulfilled within a disentanglement team ranging from boat handling in the presence of whales, data

recording and direct disentanglement efforts. Criteria to be considered include previous experience with whales, with small boats, with fishing gear, gear under tension, availability and likelihood of remaining with the programme for a number of years, level headedness and communication skills.

There are a number of examples of existing training programmes (e.g. from the USA and Australia) and these were reviewed and the main components are listed below. Details will of course need to be tailored to particular situations, with relevant examples provided from elsewhere and will follow the agreed Principles and Guidelines for Entanglement Response Efforts (Annex E).

Much of the background information (e.g. legal context, what is known about local entanglement issues, basic biology of local populations) is best presented by local experts. Parts 1 and 2 (of the example outline for a training course given below) could usefully be attended by others than the trainees (e.g. managers, fishermen and other stakeholders). In addition to the training itself, the trainer, in collaboration with the trainees and managers, should aim at identifying potential leaders to undertake apprenticeships with established disentangling teams (see below).

Example outline of a training course
Part 1 – Background information with emphasis on local situation and relevant examples from elsewhere
1. International (IWC) perspective

2. Safety issues – stressing that this is the over-riding concern

3. Legal issues

4. Background and biology

> 4.1. Local knowledge on entanglement events (and trends) in country - occurrence, geographical and temporal distribution, gear type/species

> 4.2. Brief summary of biology of the large whales of the region that have been or may be involved in entanglements (particularly temporal and geographical distribution, status and behaviour related to entanglement and entanglement response

> 4.3 Where, when and how do whales become entangled?

> 4.4 The importance of prevention

Part 2 – Overview of the emergency response (this should be based on agreements and approaches that will already have been developed under component (B) above. i.e. the structure within which disentanglement activities occur
5. Components of response (general overview of what it takes to respond and the components of response). The agreed decision tree (IWC/62/15, Figure one) will be used to go through the next items.

> 5.1. Outreach and reporting

> 5.2. First response

>> 5.2.1. Verification and assessment

>> 5.2.2. Tracking the animal

> 5.3. Action

>> 5.3.1. Tag

>> 5.3.2. Disentangle or monitor

> 5.4. Document and follow up

>> 5.4.1. Fate of the animal

>> 5.4.2. Tracing the gear

> 5.5. The Incident Control System (ICS) approach

6. The Network [This will be tailored to the agreed local network, thus some items may be redundant]

> 6.1. Hot spots

      6.1.1. How far apart?

      6.1.2. Resources available (e.g. stranding teams, biologists, fishermen, whalewatching operators, military)

   6.2. Rapid response team or local personnel approach

   6.3. Training and experience

      6.3.1. Criteria for selecting candidates

      6.3.2. Simulated training vs. actual experience

      6.3.2.1. Apprenticeships

   6.4. Communications

   6.5. Role of the Navy or Coast Guard

Part 3- The disentanglement training itself
7. Disentanglement Procedures

   7.1. Common misconceptions

   7.2. Assessing the situation (decision tree, including euthanasia)

      7.2.1. Condition of the animal

      7.2.2. Assessment of gear and entanglement

      7.2.3. What action is warranted given conditions (e.g. weather, time of day, resources at hand)?

   7.3. Telemetry buoys (brief informational summary)

   7.4. Freeing an anchored whale

   7.5. Controlling a free-swimming whale

      7.5.1. Attaching to the whale and assessing strength of gear and whale

      7.5.2. Attaching buoys and sea anchors

   7.6. Cutting the whale free

   7.7. Some examples (case histories), examine mistakes made

   7.8. Unsuccessful operation (discussion of euthanasia)

   7.9. New and experimental techniques (i.e. sedation)

8. Documentation and follow-up

   8.1 Debrief including mistakes

   8.2 Close-up reports (provide examples)

   8.3. Status of the whale (health and survival, limpet tags, etc.)

   8.4. Origin of the gear

9. Safety

   9.1. Safety gear (e.g. helmets, life vests, knives….etc.)

   9.2. Support vessel and communications

   9.3. Safe procedures

10. Dealing with the media

11. Examination and familiarisation with special gear (on land)

Items 1-11 will normally complete one day's training.

The second day (at least one day but ideally more) will comprise on water familiarisation with equipment and techniques training including such activities as one boat acting as whale towing rope and gear while the second

boat acts as a rescue boat, identified individuals practice attaching, controlling and cutting using specialised tools.

'Leader' apprenticeships, accreditation and levels of competence (including refresher courses and evaluations)

Clearly a 2-3 day course will not be sufficient to allow a new team to begin unsupervised disentanglement work. It is essential that part of the overall process is the identification of one or more individuals who have a medium-long-term expectation to be involved in the local effort as leaders. These should then visit established teams to gain experience of real disentanglement efforts. Both in the US and in Australia there are good examples of ways to evaluate the levels of experience (if appropriate, links to these can be included) and these will need to be developed within the local legal and administrative system and with advice from the global network of entanglement response operations via the IWC. It is important that provision is also made for refresher courses and evaluations.

Use of simulation programmes

The group was enthusiastic about the potential of the use of simulation programmes such as that being developed in Australia for aspects of training, as well as for exchanging information among teams about particular events. Of course, simulation programmes cannot replace at sea training but they can be a valuable supplement. It strongly encourages further development of the Australian programme and is happy to provide input into the types of parameters and scenarios to be incorporated.

Equipment

It is essential that trained teams are provided with the necessary equipment. Some of the equipment is standard and 'merely' requires appropriate funding. Other equipment is effectively custom-made and ways to ensure that this is made available or made locally must be developed.