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RESOLUTION 9.19
CETACEAN PASSPORT AND SEMI-CAPTIVITY GUIDELINES

The Meeting of the Parties to the Agreement on the Conservation of Cetaceans of the Black Sea, Mediterranean Sea and contiguous Atlantic area:

Recalling Resolution 5.14 on live removals of bottlenose dolphins (*Tursiops truncatus*) in the Black Sea, which asked the Black Sea Parties, in coordination with the Permanent Secretariat of the Commission on the Protection of the Black Sea against Pollution, to carry out an assessment and an inventory of all specimens of bottlenose dolphins kept in captivity by means of genetic, morphological and photographic identification methods,

Recalling Resolution 3.20 providing Guidelines for the Release of Cetaceans into the Wild and stressing that particular attention should be paid in relocating captive animals in a wild or semi-wild condition,

Concerned of possible genetic contaminations of local populations in case of escape from semi-enclosed facilities,

Considering the existing international legal frameworks asking for proper identification and internationally recognised system for identifying cetaceans kept by humans in officially accredited facilities,

Recalling Resolution 8.11 on "Cetacean Population Genetics", as well as ACCOBAMS Best Practices on Cetacean Population Genetics, which provides proper details on cetaceans' samples for genetic analyses, their preservations and technical approaches,

Taking into consideration Recommendation 16.13 of the Scientific Committee on "Semi-captivity (passport & guidelines)",

1. *Adopts* the process towards cetacean genetic passport as presented in ACCOBAMS-MOP9/2025/Inf34, especially by mandating the Secretariat, in collaboration with the Scientific Committee, to:
   - identify reference laboratories within the ACCOBAMS Agreement area capable of analysing the proposed genetic markers;
   - collaborate with the European Association of Zoos and Aquaria (EAZA) to exchange and harmonise procedures, protocols, and information on existing captive cetacean populations;
   - establish a genetic reference library using tissue samples already preserved in existing tissue banks, in order to define a baseline set of genetically characterised individuals for comparison in future analyses;
   - create a centralised database with limited access to store genetic information on characterised animals, enabling comparison and validation of future genetic passports;

2. *Recommends* that Parties:
   - adopt and follow the form proposed in Annex 1, which calls for the inclusion of genetic and other relevant individually distinct biological data, and including details on CITES permits, as well as information and laboratory results from genetic analyses, which should be performed for all the specimens to confirm their origin;

- include genetic analysis in the national procedures for the identification of cetaceans kept in aquaria and dolphinaria;
- transmit to the ACCOBAMS Secretariat the above-mentioned form, which shall be kept in a centralised repository with limited access,
- refer to the Guidelines for Best Practices during the Installation and Management of Semi-enclosed Facilities for Cetacean Species in the ACCOBAMS Area (Annex 2), as well as to the Procedural Steps for Requesting Advice from the ACCOBAMS Advisory Committee on Semi-Enclosed Facilities (Annex 3), when this kind of initiatives are prospected within their jurisdiction.

ANNEX 1

Genetic Passport Template

Individual information			
1. Name		**5. ID Type**	
2. Species	*Latin name*	**6. ID number**	
	Common name		
3. Sex	*M/F*	**7. Place of birth**	*Specify complete address*
4. Origin	*wild/zoo/other*	**8. Date of birth**	
9. Previous facilities	*a.*	*b.*	*c.*
CITES information			
10. Certificate number		**11. Date of Issue**	
12. Country of origin		**13. Permit number***	
14. Date of Issue*		**15. Country of import***	
Parents information			
Father ID details**		**Mother ID details****	
16. Name		**21. Name**	
17. Species		**22. Species**	
18. ID Type		**23. ID Type**	
19. ID number		**24. ID number**	
20. Origin		**25. Origin**	
Physical marks and features			
26. Total length (cm)		**27. Total weight (kg)**	
28. General picture from the left***			

29. General picture from the right* **			
30. General picture from the top* **			
31. Picture of the dorsal fin (from the right and from the left)* **			
32. Picture of the caudal fin (from the top)* **			
33. Morphological peculiarities on the left side** **			
a.	b.	c.	d.
e.	f.	g.	h.
34. Morphological peculiarities on the right side** **			
a.	b.	c.	d.
e.	f.	g.	h.
35. X-ray for age determination	*Y/N*		
** If imported*		**** include pictures in the form and attached originals*	
*** Include all documentation for parents*		***** Refer with different letter marks on the drawings*	
Genotype			
36. Laboratory			
37. ID of the sample in the laboratory		**38. Date of analysis**	
39. Sample description		**40. Sampling details**	
41. Species confirmation		**42. Targeted genes**	

43. Locus details	*Fragment Size*	*Primer Sequence*	
a. D08			
b. EV37			
c. KWM2			
d. KWM9			
e. KWM12			
f. MK6			
g. MK8			
h. MK9			
i. Ttr04			
j10. Ttr11			
k. Ttr19			
l.Ttr58			
m. Ttr63			
n. TexVet05			
o. TexVet07			
p.			
q.			
r.			

Explanatory Notes for Genetic Passport Template:

Individual information

1. Name: Official name or identifier of the individual cetacean.
2. Species: Scientific (Latin) and common name of the species.
3. Sex: Indicate Male (M) or Female (F).
4. Origin: Specify if the animal was born in the wild, in a zoo, or other facility.
5. ID Type: Type of identification used (e.g., microchip, tag).
6. ID Number: Unique identifier corresponding to the ID Type.
7. Place of Birth: Full address of the birth location.
8. Date of Birth: Use standard format (DD/MM/YYYY).
9. Previous Facilities: List up the last three facilities where the animal was previously kept in captivity.

CITES information

10. Certificate Number: Number of the CITES certificate for the specimen.
11. Date of Issue: Date when the CITES certificate was issued. Use standard format (DD/MM/YYYY).
12. Country of Origin: Country where the animal originated.
13. Permit Number (if imported): Number of the import permit.
14. Date of Issue (if imported): Date of the import permit. Use standard format (DD/MM/YYYY).
15. Country of Import (if imported): Country where the animal was imported.

Parents information

16. Father's Name: Name of the father.
17. Father's Species: Scientific (Latin) and common name of the species.
18. Father's ID Type: Type of identification used for the father.
19. Father's ID Number: Unique identifier for the father.
20. Father's Origin: Specify if the father was born in the wild, in a zoo, or other facility.
21. Mother's Name: Name of the mother.
22. Mother's Species: Scientific (Latin) and common name of the species.
23. Mother's ID Type: Type of identification used for the mother.
24. Mother's ID Number: Unique identifier for the mother.
25. Mother's Origin: Specify if the mother was born in the wild, in a zoo, or other facility.

Physical marks and features

26. Total Length (cm): Measure in cm from the tip of the rostrum to the central tail.
27. Total Weight (kg): weight in kg.
28. General Picture Left: Provide clear photo from the left view.
29. General Picture Right: Provide clear photo from the right view.
30. General Picture Top: Provide clear photo from the top view.
31. Picture of the dorsal fin: Provide clear photo of the dorsal fin from the right side and from the left side.
32. Picture of the caudal Fin: Provide clear photo of the caudal fin from the top view.
33. Morphological peculiarities on the left side: Describe, and illustrate with photo if relevant, any scars, abnormalities, or injuries on the left side.
34. Morphological peculiarities on the right side: Describe, and illustrate with photo if relevant, any scars, abnormalities, or injuries on the right side.
35. X-ray for age determination: Indicate whether an X-ray was used to estimate the age of the cetacean. Mark **Y** for Yes or **N** for No.

Genotype

36. Accredited laboratory: Name of the lab performing genetic analysis.
37. ID of the sample in the laboratory: Internal lab identifier for the sample.
38. Date of Analysis: Date when the genetic analysis was performed. Use standard format (DD/MM/YYYY).
39. Sample Description: Type of sample (e.g., blood, swab, tissue).
40. Sampling Details: Date of the sampling (use standard format DD/MM/YYYY), method used for sampling, preservation technique, and sampler's name.
41. Species Confirmation: Result of genetic species verification.
42. Targeted Genes: Genes analysed for identification.
43. Locus Details: For each genetic marker (e.g., D08, EV37), provide fragment size and primer sequence. Add other genetic markers if needed.

ANNEX 2

Guidelines for Best Practices During the Installation and Management of Semi-enclosed Facilities for Cetacean Species in the ACCOBAMS Area

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1. BACKGROUND

Semi-captivity of cetaceans has been an issue considered for several years by ACCOBAMS, which was addressed in particular in two reports: “Taking of cetaceans, dolphinaria and quasi-dolphinaria: a legal analysis relating to ACCOBAMS Parties” (ACCOBAMS-MOP7/2019/Inf 09); and “Scientific perspective on ‘potential marine semi-enclosed facilities’ in the ACCOBAMS Area” (ACCOBAMS-MOP8/2022/Inf52).

Based on the recommendations of the latter, the Eighth Meeting of the Parties to ACCOBAMS (MOP8) agreed that the Scientific Committee should establish an Advisory Committee on semi-enclosed facilities to provide guidance to interested Parties in relation to all questions related to semi-enclosed facilities. At its Fifteenth meeting held on 10-11 May 2023 in Tunis, the ACCOBAMS Scientific Committee adopted Terms of Reference for an ACCOBAMS Advisory Committee on semi-enclosed facilities (ACCOBAMS-SC15/2023/Doc17). The present document, drafted by the members of this Advisory Committee, has been largely adapted from de document *Standards for Cetacean Sanctuaries* adopted by The Global Federation of Animal Sanctuaries (GFAS) and released in June 2023, taking into account the ACCOBAMS framework.

A few initiatives have been made public, which aim at providing increasingly necessary facilities posing an alternative to dolphinaria and marine parks, by creating the so-called cetacean sanctuaries or refuges. In an ACCOBAMS’ context it is suggested to use the latter term ***refuge***, to avoid confusion with concepts of marine protected areas. For example, the “Pelagos Sanctuary for Mediterranean whales and dolphins”, a well-known protected area in the Mediterranean, has a completely different nature and goal than dolphin refuges. Hence, tentatively, hereafter Semi-enclosed Facilities for Cetacean Species will be referred as refuge/s.

It must be emphasised that a true refuge intends to approximate a natural cetacean habitat to the fullest extent possible while promoting diverse, natural behaviours and relationships amongst the cetaceans. The welfare of cetaceans takes priority over all other considerations, including visitors, caregivers, scientists and donors. Cetacean refuges, as do traditional dolphinaria and marine parks, must provide human care essential for animal health and safety.

Finally, the recent application should be noted of the EU Directive 2016/429 on transmissible animal diseases and amending and repealing certain acts in the area of animal health, also named ‘Animal Health Law’ (AHL) and the Regulation 2035/2019 supplementing Regulation (EU) 2016/429 of the European Parliament and of the Council as regards rules for establishments keeping terrestrial animals and hatcheries, and the traceability of certain kept terrestrial animals and hatching apply to potential cetacean refuges.

These legal frameworks dealing with diseases transmission in all the animals kept under human care, including terrestrial and aquatic wild animals, should be applied by EU members and candidate Countries. This legal framework provides a well-defined legal classification for all the facilities keeping animals, including those maintaining wild animals in a confined establishment. All the member states will adopt differently the classification of the different establishments and, in case of proposal of a dolphin refuge, this national classification should be considered as a legal reference.

2. CETACEAN HOUSING

2.1. General considerations

The habitat and living conditions consider hygiene and the species' physiological, psychological, and social needs. This includes consideration of outdoor and temporary/short-term indoor space, vertical and horizontal space, and diversity and complexity of space.
Policies and procedures are in place such that personnel can enter and exit enclosures without risk of the animals escaping, and can shift animals as appropriate between and out of enclosures prior to entering the enclosure. Facility design takes into account caregiver-animal safety and ease of maintaining a positive relationship.

Animals are provided access to as many areas of the enclosures as possible at all times, except during facility maintenance activities, unless security or welfare concerns dictate otherwise. All enclosures are constructed without creating 'dead ends' to allow for freedom of movement of subordinate individuals.

Animals are provided with regular access to outdoor space with sufficient room to engage in natural behaviours and designed to promote species-specific wellbeing. Access is ideally given daily, with consideration to weather and animals' individual needs (e.g., animals in quarantine or isolation, or being observed for medical reasons, may be kept indoors), and species-specific risks.

The habitats include an acoustic monitoring system and provide appropriate visual and acoustic barriers and physical distance from the public/human activity, where necessary. Exposure to high-intensity sounds or noises are avoided. Appliances or machines in the vicinity of the enclosure that produce such noise in the animals' hearing range are insulated as much as possible.

The habitat provides security from predators and unauthorized human access. 24-hour systems are in place to minimize the risks of theft, malicious damage or harm to animals. This may include staff on site, security guards, security cameras, alarm systems, etc. Moreover, in addition to the primary permeable perimeter on the ocean side, a secondary permeable barrier should be considered to prevent direct human access and to serve as secondary containment should an animal escape.

Enclosures have enough area (see Housing section below) per animal to accommodate natural individual and group behaviours/activities. Enclosures provide enough area for individuals to be spatially dispersed from one another according to the individual preference or in the event of social conflict.

Quarantine facilities have appropriate housing and design features for treatment of injured or ill animals. Healthy animals admitted to quarantine have as large an enclosure as possible to help maintain natural locomotion and behaviours. Features of the quarantine facilities should comply with EU Zoo Directive 1999/22/CE and EAZA guidelines for marine mammals kept under human care.

Enclosures are designed to allow for safe cleaning. Any products used for cleaning the enclosure and other features (e.g., foot baths, cleaning products for food buckets and enrichment items) should be reviewed by attending veterinarian for use with the species housed.

A regular program of refuge maintenance is in place. Any enclosure in need of repair, or any defect that may cause harm to animals, is immediately repaired or replaced. If that is not an option, the animals are relocated to an alternative secure enclosure.

All gates and walkways are constructed of materials which minimize any injury to the animals due to shape, sharp or rough surfaces and/or those which would create additional noise in the environment.

If enclosures use netting for walls or floors, the netting is appropriate for the species. If enclosures use netting or another form of barrier for "walls" the distance between the top of the wall and any walkway above or adjacent to it is only a few centimetres wide to minimize the possibility that an animal gets entangled or trapped.

2.2. Housing

1. Many factors influence the minimum space required for animals, including natural species-specific behaviours, health needs, and social groupings.
2. For cases where mixed-species housing is foreseen, enclosure dimensions can be adjusted accordingly so that the space reflects that required for multiple species if housed separately.
3. The refuge's area should be at least equivalent to the average daily swim performed in the wild for the species being housed. Moreover, enclosures should provide enough space to allow the animals to move horizontally in a straight line for at least 10+ tail strokes. The determination of average daily swim distance should be based on the best available science as determined by consultation with experts on conspecifics in the wild and current available scientific literature, at the time the refuge is designed. The process used to determine the average daily swim distance should be documented and verifiable. The latest *Standards and Guidelines for the management of aquatic mammals under human care* by European Association for Aquatic Mammals (EAAM), for bottlenose dolphins, propose a minimum pool surface area of 550 m^2 and a pool volume of 2,000m^3, for 1-6 animals (adding 75 m^2 and a 300m^3 per additional animal. These values should be considered as an absolute minimum. In the context of a modern and newly created dolphin refuge, we should expect facilities considerably larger.
4. The refuge's depth should be equal to or greater than the typical dive depth in a near- shore environment for the species being housed, for at least one-third of the overall space. If the typical dive depth is not known for the species being housed, then, at a minimum, a depth equal to or greater than 3 times the body length of the resident species should be used. The determination of typical dive depth in a near-shore environment should be based on the best available science. The process of expert consultation and literature review used to determine the typical dive depth of conspecifics in the wild in a near-shore environment should be documented and verifiable.
5. The refuge should contain variable depths and range in natural topography.
6. The water volume provided should allow for the animal(s) to dive and spend the majority of their time below the water surface.
7. Animals requiring treatment for illness or injury are housed in enclosures that allow for appropriate treatment and ease of care.
8. Cetacean Refuge sites must possess the requirements to ensure the well-being of the animals on the basis of their ecology, behaviour and physiology. For example, a potentially feasible site may be either in a sheltered, shallow and semi-enclosed body of marine water such as a small bay or fjord, or in a coastal lagoon, where appropriate enclosures can be fenced.

9. Enclosed areas need to be as protected as possible from severe weather, and have easy access for personnel to care for the animals in all weathers.
10. To ensure that the refuge animals can experience acoustic connectivity to their environment, the refuge should have at least a portion of its perimeter defined by an acoustically permeable barrier (e.g., an enclosed bay may be defined by land on three sides but defined by net at the opening of the bay, thus allowing acoustic connectivity).
11. The shape of the refuge perimeter does not disrupt the swimming pattern of the animals in a harmful way or allow any animals to be cornered.
12. Experts in captive cetacean behaviour should be consulted to ensure that netting or other containment material is designed to minimize risk to the refuge residents. The permeable barrier should include design features that prevent cetaceans from getting trapped under any floating walkways or entangled due to 'bagging' (i.e., slack in a net caused by water movement), in any cables, floats, edges or anchoring systems. The mesh size and gauge for the permeable barrier is appropriate for containing the animals without risk of entanglement, and suitable for excluding wild species or allowing them to pass through without risk of entanglement).
13. A comprehensive list of local species known to be present in the area of the refuge should be compiled and used to inform the decision on mesh size and gauge.
14. Netting should be constructed to maintain its integrity (i.e., mesh size and gauge) throughout the required duration of the enclosure, be able to be effectively cleaned and maintained while in place, and to minimize abrasion or other potential risks to the refuge cetaceans or wild species in the area. Double netting should be considered as a basic measure to prevent dolphin escapes.
15. The anchoring system for the perimeter and any associated structures should be robust enough to withstand normal weather patterns for the region (as determined by marine engineers).
16. The barriers should be inspected and maintained at regular intervals to avoid the accumulation of biological fouling, which could compromise the integrity of the barrier over time by creating significant drag. Maintenance may be preventative and include components such as algae and/or marine debris control booms.
17. Barriers and enclosures are inspected routinely for signs of breach.
18. The refuge staff should have the capacity to repair permeable barriers on-site in an emergency situation and replace them when necessary.
19. The structure that the permeable barrier hangs from should not pose a risk to the animals being housed or wild species and be well marked.
20. A marine vessel 'no-go' zone should be established and clearly marked around the perimeter of the refuge to ensure that the animals cannot be accessed by the public via water.
21. The refuge design should allow for continuous monitoring of the animals throughout the entire refuge, both visually and acoustically to minimize blind spots. This may include a network of underwater and above-water cameras and hydrophones.
22. Maintenance of operational data archives (e.g., video recordings, acoustic recordings) will be necessary.

2.3. Gates

1. Animal holding areas (i.e., separation areas and larger refuge areas) should be equipped with gates to allow for the movement of animals between areas when needed.
2. Gates should be appropriately sized to the species held in the refuge and designed to allow for animals' normal swimming while traveling through. Moreover, caregivers must be able to have a clear view of enclosures and animals while operating the doors.

3. Gates and doors are constructed of appropriate materials and designed to ensure safety of animals and humans and to remain functional under all circumstances.
4. The refuge should have tools available on-site to guide animals to a specific location (e.g., herding and crowding nets).

2.4. Shelter and Shade

1. Ideally, refuges are located where water depth is sufficient to filter the majority of light, to protect residents from overexposure to UV light simply by spending more time at or near the bottom of the enclosure(s). Non-reflective enclosure substrate is encouraged to protect animals from overexposure to UV light.
2. Areas of shelter from the sun should be provided for the animals where water depth may not be sufficient to filter the majority of light, such as with medical or quarantine pools.

2.5. Sanitation

1. The refuge must be designed based on a carefully planned 'carrying capacity', which should be documented in a plan created prior to moving any animals into it. This means that, based on site-specific hydrology and physical features, as well as anticipated waste production per animal (calculated for each individual based on species, surrounding water temperature and daily food intake), there is a limit to how many animals can be housed at the refuge without negatively impacting (nutrient and bacterial loading) the surrounding environment.
2. Once animals are residing in the refuge, impact should be monitored with regular (annual at a minimum, in addition to every time a new animal is introduced) sediment and water column sampling. All sampling records should be archived.
3. Monitoring protocols should be in place for animal feedings so that food waste within the refuge itself is kept to a minimum and not concentrated in a single area (e.g., underwater cameras at the location of remote food deployment devices).
4. Protocols should be in place to remove food not consumed by refuge animals.
5. Each enclosure/separation area has dedicated equipment and tools to prevent cross contamination. When resources restrict the ability to have dedicated tools, tools are disinfected between enclosures to prevent the spread of parasites and disease.
6. Adequate protocols must be in place to dispose of waste, including food waste and human waste/trash so that it does not accumulate on-site in a way that negatively impacts the local environment or area in which the animals are residing.
7. Quarantine facilities must be designed in order to be properly sanitized: surfaces should be easily cleanable and disinfected with round corners, smooth edges and proper water filtration systems.

2.6. Environment

1. The refuge should be located in a climate appropriate to the animals being housed (i.e., seasonal fluctuations, maximum storm cycles, and days of sunshine per year should all be within the normal range for the species in the wild)
2. The temperature should be within an acceptable range for the species housed. Allowance is made to accommodate individual animals unable to tolerate temperatures above or below the usual range of comfort for the species. Housing of geriatric, juvenile, and/or ill animals may not be appropriate for some refuges and will require case- by-case review. In case, proper facilities for these categories should be projected with the capability of controlling temperatures.

3. Water temperature should be within the thermoneutral range for the species. Records of daily water temperature should be maintained along with water quality data.
4. A hydrological study of the area should be obtained prior to construction of the refuge and should be kept on record.
5. The refuge area should have adequate flushing, ensuring that there is not harmful (to the refuge animals or surrounding ecosystem) nutrient accumulation from waste material in the vicinity of the refuge. If natural tidal flushing is not adequate pumps, paddles or sprayers can be used to increase flushing.
6. The water current and dynamics of the site should not be strong enough to threaten the integrity of the netted perimeter, anchoring system, or associated structures.
7. Water quality in the area should have adequate dissolved oxygen, minimum turbidity appropriate for the ecosystem and resident species, minimal contaminant and pollution levels, as well as locally appropriate and resident species appropriate nutrient, pH and salinity levels. Water quality should be monitored for temperature, salinity, pH, pathogens daily, weekly for pollutants, and records of results should be archived. Parameters should comply with any governmental or permitting agency mandates and consistent with bathing water quality regulations.
8. The refuge should be located in an area protected from large sources of acoustic pollution (e.g., not directly next to a shipping lane, not near a military testing site). Low level acoustic pollution (e.g., recreational boaters) should be limited, either by selecting a site that is more remote and thus not exposed to heavy activity, or by creating and enforcing a no-go zone around the refuge that limits acoustic pollution to a level that does not interfere with the animal's daily activity. The impacts of acoustic stimuli should be monitored using passive acoustic monitoring coupled with behavioural observations of the animals.
9. If the refuge overlaps with habitat for sensitive or protected flora or fauna, protocols should be in place to ensure that normal refuge activities do not negatively impact those sensitive species. As stated above, a double fence should prevent any escape or intrusion. Additionally, a contingency plan for any incidental exit or entrance should be prepared.
10. Supplemental lighting is provided as needed to ensure adequate light for caregivers to observe animals, clean enclosures and perform related animal care tasks. Light pollution from artificial lights should be minimized along the shoreline of the refuge.

3. NUTRITION REQUIREMENTS

3.1. Hydration

1. Fresh clean water must be available in sufficient quantity at all times to all individuals via high quality food and supplemental hydration when required.
2. Fish quality and water content are kept at the highest possible level to maintain appropriate water absorption during feeds.
3. If hydration supplementation is deemed necessary, hydration should be achieved via established methods, utilizing the least invasive methods whenever possible, under the supervision and direction of the attending veterinarian.
4. Hydration should be monitored utilizing regular voluntary blood sampling, examination of eyes, mucous membranes and skin.
5. Water used for hydration should be at room temperature (temperature of the food prep area or comfortable indoor temperature) when administered (unless providing ice cubes is the method utilized).

6. Potable water sources should be tested for quality and contaminants annually at a minimum (more frequently in location with annual variations in water quality) and whenever there is a change to the water system or reason for concern (such as an animal exhibiting a medical concern for an unknown reason).

3.2. Diet

1. A balanced and healthy diet is provided appropriately based on the needs of each animal, following veterinary instructions for special needs.
2. A veterinarian or qualified veterinary nutritionist periodically reviews all aspects of the animals' diets at the refuge and makes adjustments to individual diets with consideration of species, age, life stage, size and condition. The calories in foods used as enrichment are considered when planning the overall diet.
3. Diets of individual animals (including vitamin supplementation) are of a quality, quantity and variety to match the physiological and psychological state of the individual as it changes over time, with consideration for the age, life stage, species, condition, size and health of the individual.
4. The refuge utilizes a feeding procedure that ensures each individual receives adequate nutrition regardless of status in social groups, such as routine observation of feeding activity. Each animal's daily dietary needs are available to animal care staff.
5. Daily food consumption and other behaviours are monitored and, if any changes are detected, immediately reported.
6. Feed types should remain varied as appropriate for each species to ensure that the animals are able to easily adapt to changes in food availability.
7. Protocol should be implemented for testing the quality of each lot of food. Food quality is continually monitored. Food safety and quality should meet criteria for human consumption included in current national regulations. If not already adopted by the food suppliers, who should provide detailed information, protocols should include analysis of calories, nutritional components, lipid oxidation, histamines and peroxides, contamination, and microbiology sampling such as enterobacteria, salmonella, and mesophilic aerobes.
8. Social status must not negatively impact food quantity for any individual animal (e.g., dominant animals taking more food than subordinate animals and thus certain animals not receiving their required daily intake).
9. If animals are believed to be consuming live food items from the habitat, similar food items should be collected and sampled to assess nutritional content, as well as screened for contaminants and toxicity.
10. Prior to offering vitamins or other supplements, the individual animal's health and condition, as well as the diet, are reviewed by the veterinarian or a nutritionist experienced in the species' care.
11. Species-appropriate supplements should be utilized to support each animal's nutritional needs and compensate for the nutrient loss due to the feed freezing and thawing process.
12. To the extent possible, food should be sourced from local fisheries using environmentally friendly and sustainable methods (but this effort should not compromise the nutritional needs of the animals by dictating type or quantity of feed). A dedicated program involving local fishermen could be implemented considering local fish species, in order to adapt the dolphins to more natural conditions.
13. Any diet changes, based on weight and condition of the animal, food consumption, activity level and other medical or behavioural considerations, should be made or approved by the veterinarian or other qualified personnel, with any adjustments made to the entire diet to ensure continued nutritional balance.

3.3. Food Presentation and Feeding Techniques

1. The feeding schedule should make every effort possible to mimic the frequency and timing of feeding patterns in the wild for each species.
2. Records for each feed, including the type of food, amount consumed, supplements and medications given, and behaviors' during feeding should be kept.
3. Feeding in multiple locations can encourage wider utilization of the refuge area and helps to ensure that low-ranking individuals have adequate access to food.
4. Feeding stations are able to be monitored effectively both above and below the water, so that food intake can be monitored and uneaten food does not accumulate in any location
5. A variety of feeding techniques and locations should be offered to encourage more diverse feeding behaviours (e.g., remote feeders, enrichment devices, and, when appropriate, live food)
6. All methods used to encourage engagement with enriching feeding methods should be based on positive reinforcement.

3.4. Food Storage and Handling

1. Food processing and storage should be done in dedicated kitchen and rooms build according the national regulation for human consumptions: walls and floors should be easily cleanable with round edges and corners; the surface materials have to be easily cleaned with water and routine disinfectants at the working surface; the room should have enough light to ensure proper evaluation of the food and dirty areas; the working areas should have proper drinkable water supply and drainage for cleaning; windows and doors should be equipped with mosquito nets to avoid entrance of flies and other insects; a pest control and cleaning programs should be adopted and routinely implemented.
2. Food is stored, handled and prepared in an appropriate manner to retain nutritional value, freshness, and prevent its deterioration, invasive species or other forms of contamination.
3. Frozen fish or other frozen food should be stored in freezers that are maintained at a maximum temperature of -18°C. A recording system for temperature control should be adopted.
4. Items frozen for use are dated and labelled, and no frozen items are thawed and refrozen. A freezer register should be adopted.
5. Frozen food items should be stored in a sanitary freezer, away from the walls, elevated off the floors and away from the condenser/fans of the freezer to allow for proper air circulation within the freezer.
6. Thawed fish/food should be stored in a refrigerator or kept on ice to maintain a temperature no greater than 4°C, used within 12 hours of thawing to minimize bacterial overgrowth, and clearly labelled with the time of thawing.
7. Food items requiring refrigeration are stored in a clean, dry refrigerator, and/or ordered at regular intervals in amounts that can be used prior to spoilage.
8. Products are dated and expired food as well as bags damaged by pests are discarded.
9. Two to three months' worth of food availability should be ensured at all times.
10. During its handling, food is protected against deterioration, mold, and/or contamination by insects, birds, rodents or other animals.
11. Food preparation surfaces are thoroughly cleaned and disinfected between uses and personnel wash hands thoroughly prior to handling food. Wearing gloves during food preparation is recommended.
12. Staff should avoid handling food while sick.

13. Thawing should take place in a refrigerator. If this is not possible or food is still frozen, clean, cold, running salt water can be used. If salt water is not available, thawing with potable, running fresh water may be considered, assuming the area/water is clean and post-thaw refrigeration remains prompt.
14. Food handling protocols should be plainly visible in the food preparation and storage areas.

4. VETERINARY CARE

4.1. Veterinary Program Personnel

1. The refuge's veterinary medical program is developed and carried out under the supervision of a licensed and experienced cetacean veterinarian and with adequate support personnel.
2. Refuges unable to maintain a full-time veterinarian have access to a part-time veterinarian with suitable training and experience for the animals housed.
3. The refuge has properly trained and qualified professional and supporting personnel as necessary to implement: (1) husbandry (caregivers) and (2) technical support (veterinary technicians, or individuals trained at the refuge).
4. One or more personnel is trained and designated to deal with emergencies until a veterinarian arrives or is reached. According to national legislation and under the direction of the veterinarian, he or she should be able to, perform basic first aid, assess animals, administer prescribed medications and treatments, be responsible for administration of post-surgical care, and be skilled in maintaining appropriate medical records.
5. Refuges have the appropriate number of personnel, including veterinarians and veterinary technicians or assistants, to meet these standards for all animals in their care 24/7, with consideration given to the number of animals, number of enclosures and/or social groups, and individual medical conditions or needs (e.g., a large number of geriatric or elderly animals, known disabilities or conditions, etc.).
6. The attending veterinarian(s) must be comfortable conferring with other marine mammal veterinarians/specialists as needed for complex cases.

4.2. Veterinary on-site Capabilities (laboratory & diagnostics)

1. The refuge has on-site and/or off-site capabilities for pathology, surgery, and other veterinary procedures and treatments, and any on-site facilities are appropriately maintained. If it does not have an on-site veterinary facility, or only a partially outfitted facility, it has an arrangement with a nearby veterinary practice for off-site treatment as needed.
2. On-site and/or off-site facilities and services include the following:
3. Diagnostic capabilities including cytology, microbiology, parasitology, complete blood count, blood chemistry, urinalysis, serology, radiology, ultrasound, endoscopy and other appropriate laboratory procedures.
4. Necropsy capabilities include capacity for collection of tissues for histopathology.
5. Medical treatment facilities that are clean, have adequate lighting and ventilation, can be easily cleaned and disinfected, and with access to appropriate anaesthetic and emergency equipment.
6. Drugs should be acquired managed and stored according to existing legal framework.
7. Medical treatment equipment is maintained in good working order and is on a program of routine preventive maintenance.
8. Only a licensed veterinarian or veterinary nurse can perform all medical procedures using best practices and protocols for the species.

9. Protocols, guidelines and best practices should be recognised as international standard and they should be approved by a scientific and ethical committee.
10. Veterinarians and support personnel are compassionate and knowledgeable about the humane aspects of animal treatment, including the proper use of anaesthetics, analgesics, and tranquilizers.
11. Basic physical capture and restraint equipment to facilitate medical treatment is available at the refuge and there is the possibility to rapidly isolate an animal in a way that allows veterinary or care staff to access an animal in the event it is medically or otherwise necessary (slide outs are acceptable in most situations, but the refuge should be equipped with a medical lift or medical pool area with hydraulic lift floor that can facilitate safe access to an animal unable to or unwilling to slide out).
12. Medical lifts should be appropriately sized to the species held, designed to remain functional under all circumstances (e.g., be easily connected to a back-up power sources in the event of a power outage), and maintained in good working order.
13. The ability to weigh each animal should be incorporated into the design of the refuge so that every cetacean resident can be effectively weighed (including those in quarantine).
14. Necropsies on any deceased animals, will be done at a separate facility. If on-site, this area should be physically separated from live animal holding areas and daily care facilities such as food storage, as well as from other medical areas used to treat live animals.
15. Removal of cetacean remains from the refuge should follow all applicable levels of regulations.
16. A detailed report of necropsy results must be archived at the facility. Cause of death and contributing factors for each animal that dies at the facility should be reviewed. Any appropriate changes to husbandry protocols, facilities, and/or medical care should be diligently incorporated based on the findings.

4.3. Preventative Medicine Program

1. The veterinary medical program includes long term preventative medical protocols and disease surveillance and containment procedures and is developed and carried out under the supervision of a licensed veterinarian with training or experience in providing medical care for the species housed at the refuge, and who is aware of any specific health issues of the individual animals.
2. Preventive medicine protocol will address the following:
    - regularly scheduled physical examinations/health assessments and blood analysis
    - behavioural assessments
    - quarantine procedures
    - parasite surveillance and control
    - immunization
    - contraception if not regulated with social group management
    - infectious disease screening
    - dental prophylaxis
    - periodic reviews of diets and monitoring of feed intake
    - applicable species-specific husbandry needs
    - routine water quality screening
3. Daily health checks of each animal should include (but are not limited to):
    - Observing physical appearance
    - Assessing activity level
    - Monitoring behaviour and eating habits
    - Nature and frequency of respirations

4. Animals are immunized as recommended by the attending veterinarian, using currently recommended procedures and products as appropriate for the country, species and individual. When animals are immunized on-site by refuge personnel, the type, serial number, and source of the product are recorded in the individual animal's medical record.
5. Each animal should receive at least one comprehensive medical exam annually. This is a minimum standard for preventative medicine and should be exceeded when conditions warrant.
6. A comprehensive medical exam should include:
    - Morphometrics (including body build index and/or weight)
    - Body condition exam consistent with any applicable scoring system (including skin, eyes, teeth, genital opening, anus, blowhole, mentation and responsiveness, buoyancy, overall symmetry, etc.)
    - Dental examination
    - Blood sampling (routine haematology and serum chemistry, hormone and additional analysis as indicated)
    - Blowhole cytology and microbiology, including antibiotic resistance, and evaluation of respiratory system health
    - Endoscopy or gastric wash and collection of gut microbiome data
    - Fecal sampling (cytology, parasitology, and bacterial culture, possibly including microbiomics, proteomics and metabolomics)
    - Pathogen screening (tailored to the specific pathogens of concern for the region, species, and individual history)
    - Diagnostic sonography
7. Each animal is weighed annually at a minimum, either during a routine physical or through the use of a built-in scale integrated into slide-outs, to monitor for signs of illness and to determine dosages for pharmaceuticals and chemical anaesthetics.

4.4. Quarantine and Isolation Care and Facilities

1. The refuge should have separation areas for separation of animals not in need of full medical quarantine (e.g., animals in need of separation due to behavioural considerations, separating females from males during fertile periods, or animals being isolated prior to introduction to the larger refuge area). A separation area may have shared water with the larger refuge area (simple netted separation).
2. The refuge should have a medical quarantine facility with adequate capacity to prevent pathogen transmission between hosted cetaceans, and between refuge cetaceans and wild populations (e.g., double netting).
3. Quarantine areas may be shaded or indoors if deemed necessary for animal care or necessary to meet applicable regulation requirements.
4. A medical quarantine facility must have the ability to do full examination and treatment of the animals under care: the quarantine pool should have the physical features as suggested by EAZA and EU Directive 1999/22/CE including easily cleanable surface with round edges and corners; controlled water supply and management with a disinfectant dosage system; a pump system able to change rapidly the entire water body; the ability to manage rapidly water depth through a lifting floor or by a rapid draining system which allow a rapid intervention on the animal
5. All utensils, equipment, supplies, and outer clothing used in quarantine are restricted to that area. Where this is not possible, items that the refuge does not have duplicates of and which cannot be restricted to quarantine areas must be thoroughly cleaned and disinfected prior to being moved to or from quarantine areas, and movement between areas should be minimized.

6. Protective clothing, boots and footbaths are used by all staff entering the quarantine area or areas containing quarantined animals. Quarantine clothing is not removed from the quarantine area, except in a sealed container for cleaning. Footbaths are changed regularly.
7. Caregivers are equipped with appropriate personal protective equipment such as masks, face shields, disposable examination gloves, boots, Tyvek-type suits or sleeves, when cleaning or handling anything with which the quarantine animals come into contact.
8. Water from the medical quarantine area should be filtered or treated and disposed of in a safe area away from the habitats of the other refuge animals.
9. Waste or biological material from medically quarantined animals should be treated as biologically hazardous material and disposed of accordingly.
10. Clearly visible signs indicating areas of quarantine are displayed as needed, with particular consideration for placement at entry/access points.
11. A detailed risk assessment must be completed for each new animal introduced to the refuge. The risk assessment should identify any potential threats to the health of the current refuge animals, new animals, and the local ecosystem, as well as outline planned steps to mitigate those threats. The likelihood and consequences for each identified threat should be considered.
12. All new arrivals to the refuge from captive facilities should undergo a health evaluation and be pre-screened for transmissible pathogens, including serological examinations, prior to transport and kept isolated after pre-screening from those that are not being transferred to the refuge.
13. Prolonged isolation of an animal either in a medical quarantine area or a separation area should be avoided (see Well-being and Handling of Cetaceans section).
14. During quarantine of incoming animals, the following procedures should be performed as applicable: examination, vaccination as appropriate, clinical and laboratory tests, treatment for external and internal parasites as needed, evaluation of psychological well- being, verification of identification.
15. An enrichment program is in place for quarantined animals.
16. Animals that die in quarantine receive a complete post-mortem examination including histopathology.

4.5. Breeding Policy and Contraception (no intentional breeding of animals in lifetime care)

1. Group management rather than medical contraception should be preferred to prevent breeding and avoid reproduction.
2. In case it is not possible, contraception programs are appropriate for the species and, as determined by the veterinarian, prioritise the most effective and minimally invasive methods.
3. Moving pregnant females should be avoided. In the event that a pregnant individual is brought to the refuge, appropriate habitat for birthing and caring for an unweaned calf should be provided to the mother-calf pair.
4. If animals arrive at the facility pregnant, the refuge provides necessary care as determined by the veterinarian. Neonates are only removed from the mother for hand-rearing if there is a threat to the life of the new-born or mother.
5. Males should not be housed with pregnant females, prepartum or postpartum females.

4.6. Zoonotic Disease Control Program

1. The personnel and refuge veterinarian are knowledgeable about zoonotic diseases that may affect animals at the refuge, and implement appropriate policies and procedures as needed to mitigate risk and deal with any exposures that occur.

2. The refuge has emergency procedures and a defined process to avoid transmission of all potential or emerging diseases through bites, scratches, body fluids, direct contact with animals and other means.
3. Personnel have adequate training to understand the potential risk of disease transmission, including potential sources of disease, modes of disease transmission, and clinical signs associated with disease, and are encouraged to contact their own health care provider if they experience any unusual symptoms after working with cetaceans. All personnel are informed when a zoonotic disease occurs at the refuge and relevant personnel are trained in how to safely care for animals with disease.
4. Personnel should periodically be checked according to the national worker safety legislation. They should declare any contact with domestic, wild or livestock animals in order to prevent any contact and implement proper screenings.
5. When a reportable disease is identified, all local, state/province, and national regulatory officials are contacted, as required.
6. A complete necropsy, including histopathology and microbiology, has to be performed on deceased animals known or suspected to carry zoonotic disease within 24 hours of death.
7. All areas in which personnel have direct contact with animals have hand-washing facilities available in the immediate vicinity (or an equivalent; e.g., bactericidal hand wipes).
8. Food consumption by personnel does not occur in the immediate area of animal contact.

4.7. Euthanasia

1. The veterinarian is the only person responsible for recommending and performing humane euthanasia, according to the national existing laws. Euthanasia is in the best interest of the individual animal and is only used as a final option, and is not used as a management tool (such as a means to create space for more animals).
2. Acceptable reasons for euthanasia include:
    - incurable medical/behavioural health status that is likely to cause unmanageable pain or suffering;
    - medical/behavioural health status where available treatment will cause unmanageable pain/suffering, or it will not be effective in restoring the animal to an acceptable quality of life;
    - medical/behavioural health where treatment is beyond the normal community standards of monetary expenditure and would cause an excessive burden on the refuge resources, and no other facility/placement provides a reasonable alternative option;
    - the process of aging has resulted in an unacceptable quality of life;
    - in the event of presenting an infectious disease risk to some or all of the residents;
    - in the event of presenting a high risk of harming themselves, other animals and/or humans.
    - Euthanasia should be adopted after the evaluation of an ethical committee.
3. The decision whether or not to separate (both visually and acoustically) the animal being euthanized from the other animals should be made by the attending veterinarian and the animal care staff.
4. A complete post-mortem examination including histopathology should be performed to confirm the underlying medical reason for euthanasia.

4.8. Biosafety and biosecurity

1. A refuge may be also dedicated to wild animal rehabilitation. If that is the case, any rehabilitation area should be physically separated and different personnel and equipment should be used.
2. Any wild animals entering the refuge deemed to be non-releasable, should undergo a strict quarantine and health check including all the known diseases listed for cetaceans (virological, microbiological, parasitological and mycological) including serological evaluation. Exams should include investigations of blood, serum, blow, mouth scrubs, faeces and should be performed using both cultural and the more advanced techniques as virome and microbiome approach. Antimicrobial resistance should be tested.
3. A complete and throughout plan considering biosafety should be implemented. The plan should include the hazard analysis, critical control point management and a contingency plan in order to identify possible risks, the severity of risks and possible mitigations to prevent or solution to be adopted.
4. The plan should include the evaluation of pathogens entrance considering water and food supplies, pests' control, personnel and equipment contamination, wild or domestic animals' entrance, animals' admittance and medical controls, quarantine procedures. Additionally, the plan should consider the data coming from the epidemiological situation in the area for all relevant and reportable diseases.
5. The plan should also consider waste and food remains management; water output monitoring including viruses, bacteria and protozoa; procedures for water output treatment.
6. The plan should include all the programs implemented for monitoring animals' and personnel health, water quality and food safety, disinfection and cleaning process for different areas and facilities, water output management and treatment; integrity of fences, gates and separation. The plan should also state all technologies implemented and frequency of the procedures to ensure its regular and consistent implementation.
7. Biosafety measures include also the contingency plans to avoid any incidental entrance of wild animals, incidental exit of the kept animals and entrance of external person or monitor of volunteer damages.
8. The plans should include checklists forms, reporting systems and traceability of all the processes.

5. WELFARE AND HANDLING OF ANIMALS

5.1. Physical Welfare

1. Animals should be routinely monitored by qualified personnel to ensure their physical well-being (i.e., nutritional, physical and social conditions) and any unusual activity should be reported and recorded, with appropriate timely response.
2. The physical environment of the refuge should allow for a wide range of behaviours, including those related to the majority of cetacean species daily activity in the wild (see Cetacean Housing section). The refuge should allow for the animals to spend the majority of their time oriented to the underwater environment, while allowing for the animals to rest (stationary or swimming), interact with a stimulating natural environment, and to interact with any objects provisioned for enrichment. If possible, with consideration for provisioned food, animals should be allowed to forage for prey.
3. Animals should be able to visually and physically distance themselves from one another, as well as humans such as care staff outside of interactions necessary to provide for the health and well-being of the animals.

4. Physical abuse, deprivation of food, and other forms of negative reinforcement or punishment-based training are never used to train, shift or otherwise care for animals and will be considered as animal abuse according to the national legislation.

5.2. Social Housing and Group Management

1. Animals are grouped so that they are compatible, with consideration to their natural social groupings and individual history, and with the safety of animals and refuge personnel in mind.
2. Animals are housed so that:
    - those in the same enclosure are compatible;
    - they are not housed near animals that interfere with their health or cause them physical or psychological discomfort;
    - there is appropriate space between individuals within and between social groupings and to allow for temporary voluntary isolation from others;
    - no individual endures constant harassment or suffers physical injury, nor do social behaviour prevent any individual from maintaining proper nutrition and hydration.
3. Solitary housing is generally reserved for situations including but not limited to: quarantine; medical assessment and/or care; lack of appropriate social partners or social tension resulting in disruption to the social group, physical aggression leading to injuries, and anticipated birth. Ideally and when appropriate, individuals in solitary housing should have access to visual and auditory access to conspecifics as well as regular caregiver interaction.
4. Staff have an understanding of the natural history and normal behaviour of the species in the wild and are regularly assessing compatibility among individuals through ongoing behavioural and health monitoring and assessments.
5. If multiple species (not recommended) are present at the refuge, species are integrated or separated based on the well-being of the animals (e.g., no direct mixing of predator and prey species).
6. If applicable and appropriate for the species, every effort should be made to keep mother- calf pairs in the same groupings.
7. Introduction of any new animal to a social group is done safely and according to techniques appropriate for each species, under the direction of designated personnel.

5.3. Behavioural/Psychological Well-Being

1. Schedules should be structured around the needs of the animals and, accordingly, individualized welfare plans prepared and approved jointly by veterinarian and animal care staff, are in place to enhance well-being. Their implementation is documented and archived.
2. The behavioural choices of the animals should be monitored through non-invasive methods, documented and archived to ensure that the monitoring and review of long-term data of each individual is informing decisions impacting their well-being.
3. The animal care staff should be trained to identify, address and minimize stereotypic or harmful behaviours (including the ability to interpret data).
4. Individualized protocols to reduce/eliminate stereotypic or harmful behaviours should be developed and approved jointly by the veterinarian and animal care staff, and results documented and archived.
5. There should be a positive reinforcement training program in place to maintain voluntary participation in animal care and veterinary procedures that support health and welfare goals. The animal care staff should be

provided the tools and resources needed to safely and successfully implement the positive reinforcement training protocols.

6. The refuge should provide staff with training on animal welfare and assessment methods. This training should be regularly updated to incorporate currently available information.
7. Animal welfare should be assessed at a regularly established interval, and additionally as needed, including when significant changes occur, such as the addition (or removal) of animals, major environmental changes (e.g., weather events), and location changes. Results from welfare assessments should be documented, archived, available for review and should directly inform action plans created by animal care staff.
8. Although the refuge environment should provide the appropriate physical and mental stimulation for the animals, there may be situations that necessitate additional opportunities, which are to be provided by staff. Whenever possible, engagement with the natural environment as a source of enrichment should be encouraged over artificial enrichment techniques.
9. All enrichment opportunities should be evaluated and adjusted as necessary for each animal's well-being and should be safe for both the resident animals and any wild flora or fauna that may be exposed.
10. If enrichment sources include human interaction with trained staff, the interaction should be limited by the interest level of the animals and should be non-disruptive to other animals in the vicinity.
11. Emphasis should be placed on underwater enrichment sources rather than surface-level enrichment sources to encourage behavioural patterns normally seen in the wild.
12. The refuge has an enrichment program that promotes species-appropriate behavioural opportunities at all times (including periods of quarantine and isolation) and ensures the animals' psychological well-being. An appropriate program may include the following:
    - Structural enrichment - Enclosure design and furniture that add complexity to the environment and promote species-specific behaviour.
    - Object enrichment - Objects that encourage inspection and manipulation and promote species-specific behaviour.
    - Food enrichment - Varying food choices and food presentation, including the use of puzzles that increase food procurement time.
    - Social enrichment - Affiliative interactions between caregivers and animals may be appropriate in some instances.
13. All animal care personnel are trained to recognise species-specific behaviour, abnormal behaviour and clinical signs of illness, and a plan to address the concerns is developed.

5.4. Animal-Caregiver Relationships

1. Positive relationships between animals and caregivers must be maintained. However, to the extent possible, the most important relationships for each cetacean should be relationships with other cetaceans. Relationships between cetaceans and staff should be encouraged to be secondary and exist in support of meeting the animal's social and health needs in more species appropriate ways (i.e., cetacean to cetacean).
2. Where possible, new caregivers accompany a trusted caregiver until the animal becomes comfortable with the new individual.
3. Where possible and appropriate, animals become familiar with the veterinary staff, allowing close observation.
4. Relationships between staff and the animals are evaluated at a pre-established regular interval and additionally when needed. Accordingly, changes are made to staff assignments when staff and animal relationships are found to be disruptive to the animals.

5.5. Handling and Restraint

1. Any necessary handling and restraint must be done safely and appropriately, with minimal distress to animals, and personnel are trained in species-specific safe handling techniques/practices.
2. Protocols for species-appropriate handling and restraint methods should be developed, while tools and resources needed for safe handling and restraint should be available on- site and maintained in good working order. These will include, at least, appropriately sized stretchers, medical lift(s) and netting.
3. There should be protocols in place for managing animals should they not be near an area designed for handling and restraint in the event of an emergency (e.g., a cetacean in deep water a distance away from a medical lift or a netted bottom).
4. Animals being handled or restrained should be closely monitored by qualified staff (cetacean veterinarians and/or highly trained animal care staff) for signs of stress both during and after the handling or restraint.
5. Handling for veterinary care is done as expeditiously and carefully as possible in a manner that does not cause trauma, overheating, excessive cooling, physical harm, or unnecessary discomfort, and minimizes physical and psychological stress as much as possible.
6. Chemical capture is performed only by a licensed veterinarian and only when other methods are not possible due to the significant risks of sedating free-swimming cetaceans. Specific anaesthetic protocols, including record-keeping, are followed. Emergency resuscitation drugs and equipment (oxygen, on-demand PPV, etc.) must be on-hand during any sedation event.
7. Chemical capture is not used when multiple animals are in an enclosure except in an emergency situation. In such cases, all possible precautions are taken to prevent danger to personnel, all animals in the enclosure, and the animal being sedated.

5.6. Cetacean Transport (conducted only when strictly necessary – being transported to the refuge)

1. Ideally, the refuge location should be easily accessible and well connected. Reaching the site should be easy through roads in good conditions to facilitate the arrival of heavy vehicles delivering materials, animals and, occasional visitors. The presence of an airport within a <100 km radius will also be an asset. In any case, cetacean transport should be conducted only when necessary (e.g., being transported to the refuge).
2. A comprehensive plan that addresses every process step is established and communicated to all involved parties prior to any transport. Authority, roles and responsibilities are clear to all.
3. Health examinations are conducted prior to an animal's arrival at the refuge or prior to transfer to another facility. These examinations may include a complete physical exam with attention to parasite checks, necessary vaccinations, and completion of any tests required by regulations of the receiving state/province or country.
4. Candidates for transport should be medically and behaviourally evaluated prior to transport, and criteria should be established on an individual basis to ensure that the animal being transported is fit for transport (mentally, emotionally, and physically) and in appropriate condition for the receiving location (e.g., free from uncontrolled transmissible pathogens).
5. Health certificates and any required transport permits accompany the animal when being transported interstate or internationally.
6. Capture, restraint, and transportation methods consider the animal's temperament and behaviour in order to minimize injury and distress.

7. Equipment suitable for lifting, cradling (where applicable) and transportation of animals kept within the refuge is maintained in good condition and readily available. Transport containers and vehicles are cleaned after use.
8. All transport equipment should be appropriately fitted to the animal being transported and maintained in excellent condition and meet appropriate animal welfare standards. This equipment includes but is not limited to:
    - Stretchers
    - Cradles
    - Emergency medical/veterinary equipment
    - Monitoring equipment
    - Care equipment (e.g., spray bottles, sheets, A&D ointment)
    - Lifting equipment (e.g., cranes, lifting cables, taglines)
    - Communication equipment
9. When possible, animals should be conditioned to the possible stressors of transport, such as stretcher and cradle training.
10. All transport team must include members who have previous cetacean transport experience and all members should be trained on the transport procedure and aware of their individual roles within it
11. Transport routes should be predetermined and secured (e.g., security escort agreements in place, local municipalities informed) prior to transport.
12. Contingencies should be established for all parts of the transport and alternative arrangements should be available on standby during the transport.
13. The transportation route should be selected based on the welfare of the animal being transported, taking into consideration duration, method of transport, and safety.
14. The cetacean should be carefully monitored (respirations, heart rate, temperature, signs of distress or agitation) throughout the transport by trained staff.
15. Sources of physiological and psychological stress should be mitigated. Methods should be employed to: maintain optimal temperature (cooling/warming), mitigate positional stress (padding, positioners), minimize noise, bright light and movement around the animal, and keep individuals with familiar cohorts.
16. If the transport method uses a water-filled transport box, water temperature should be maintained in a species-appropriate range throughout transport.
17. An appropriate supply of emergency food (based on species, individual eating habits, and routine duration/logistics) should be transported with the cetacean.
18. A qualified cetacean veterinarian must be present throughout the transport.
19. All animals taken outside the refuge are kept securely at all times and managed in such a way that the animal is under control and not likely to suffer distress, cause injury or transmit or contract disease.

6. ECONOMICS; CONSIDERATIONS ON LONG-TERM SUSTAINABILITY AND OPERATIONAL COSTS

1. The refuge will host cetacean primarily originating from the captivity industry and, whenever needed and possible, dolphins that have been rescued after stranding. Therefore, a cetacean refuge should be considered a permanent accommodation for all animals deemed to be unfit for release. Since these will be long-lived marine mammals, in many cases needing housing for a few decades, the long-term economic sustainability of this facility must be assured to every possible extent. A business plan should be developed and proposed considering all the costs and revenues.

2. In this document it is not possible to tailor a generic economic sustainability plan for a cetacean refuge model because this plan may vary largely depending on a number of variables (e.g., country, authorities involved, geography). In any case, commitment of long-term support from local, national, regional and international authorities is essential.
3. Additional possible sources of funding may include and are not limited to, among others, the following:
    - Private Donations from individuals, NGOs and foundations interested in marine conservation and animal welfare.
    - Corporate Sponsorships through partnerships with businesses interested in marine conservation and animal welfare.
    - Admission Charges from visitors and educational groups. Specialized tours focusing on education and conservation may be also an option.
    - Membership Programs: Annual memberships offering benefits to regular supporters.
    - Merchandising and educational materials (can be extended through an online store).
    - Collaborative Programs: Joint initiatives with universities, research institutions, and NGOs.
    - Application to different funding programs and calls
4. Considering the variability of funding, a clear document stating the organisation of the management of the refugee, including the different institutional bodies involved, should be clarified.

7. EDUCATION & OUTREACH

An effective educational program and outreach strategy can significantly enhance the impact a of a cetacean refuge. By engaging the public, raising awareness, and fostering a connection between people and marine life, the refuge can build strong support for its conservation efforts and ensure long-term sustainability.

7.1. Education and research program development

1. Potential for an education/interpretation centre with multimedia resources providing information on the biology of the animals, their conservation needs as well as the rationale dictating the need for cetacean refuges.
2. Well-defined research proposals for non-invasive and unobtrusive respectful scientific research should be considered. These should be carefully reviewed by both, a scientific and an ethics committee, in collaboration with the refuge team. Priority should be given to the welfare of the animals hosted in the refuge and all proposals should include a protocol for the monitoring of the animals before, during and after the study/experiment is conducted. If any animal shows signs of distress when exposed to the research-related activities (directly or indirectly) the activity must be immediately interrupted.
3. Research and educational programs should be aimed to enhance conservation and welfare of the animals in the wild.

7.2. Public engagement

1. The refuge may allow, under certain conditions, the presence of visitors (see economics section). Dolphin observation will be encouraged by using remote technologies (e.g., webcams, advantaged land-observation points). Educational programs will be conducted to inform the public about the implications and

consequences of captivity as well as promoting research programs on the rehabilitation and, when possible, the release of dolphins at sea.

2. Volunteer Programs and Paid volunteer opportunities may be considered for individuals interested in contributing to and working at the refuge.

7.3. Communication channels

1. By developing and implementing a well-rounded communication strategy, a cetacean refuge will be able to effectively promote its mission, engage with the community, and provide new opportunities for funding and collaborations (not only with potential sponsors but also, for instance, with research and conservation organisations). Key messages at the epicentre of the communication strategy must be very clear. Some to be considered may be:
   - Cetacean behaviour and ecology
   - Importance of Cetaceans (e.g., ecological, cultural, and economic significance)
   - Refuge's role
   - Cetacean conservation (threats, conservation strategies…)
   - How to help: steps for people to support the sanctuary (donations, volunteering, citizen science…).
2. Some communication channels to be considered are:
   - Website: Create a dedicated website with regular updates, articles, and educational resources.
   - Social media: Use platforms like Facebook, Twitter, Instagram, and YouTube to share engaging content, such as videos, infographics, and stories.
   - Email Newsletters: Send regular updates to subscribers about news, events, and ways to get involved. Share compelling stories of individual cetaceans, success stories from the refuge, as well as profiles and/or testimonials of volunteers and staff.
   - Press Releases: Distribute press releases to media outlets to announce important news and events.
   - Community Events: Host events such as beach clean-ups, educational workshops, and guided tours of the refuge.
   - Partnerships: Collaborate with schools, universities, and other organisations to reach broader audiences.
   - Key metrics such as website traffic, social media engagement, email open rates, event attendance, and media coverage should be regularly evaluated (quarterly?) to get feedback on communication initiatives and their success.
   - Feedback from visitors, volunteers, and partners also important to assess the effectiveness of communication efforts.
   - Act accordingly and make adjustments to the strategy to improve outreach and engagement, as necessary.

ANNEX 3

Note on Procedural Steps for Requesting Advice from the ACCOBAMS Advisory Committee on Semi-Enclosed Facilities

The following procedure should help in refining future advisory processes and ensure alignment with conservation common objectives.

Step 1. The ACCOBAMS Party seeking advice on issues related to semi-enclosed facilities for cetacean species in the ACCOBAMS Area is invited to firstly read carefully the Guidelines for Best Practices During the Installation and Management of Semi-enclosed Facilities for Cetacean Species in the ACCOBAMS Area.

If after reading those guidelines the ACCOBAMS Party feels the need to ask for further advise, it is requested that it produces a concept note to present the initiative/project for which advise is being requested (e.g., dolphin refuge).

The concept note should include:
Background and context.
Specific questions or guidance sought.
Relevant supporting documents, including national legal background and scientific data.

Step 2. Submission of the concept note to the ACCOBAMS Secretariat by e-mail.

Step 3. The ACCOBAMS Secretariat will review the request for completeness and relevance, will acknowledge receiving the above-mentioned message (Step 2) and, if duly completed, will forward it to the Advisory Committee on semi-enclosed facilities (AC).

Step 4. The Chairman of the AC receives the e-mail with the concept note and, after confirming that at this stage no other information is needed, this concept note will be shared with the rest of the AC members and convene a meeting, if needed, depending on urgency.

Step 5. The AC, after internal consultation, will share its opinion with ACCOBAMS SC. It may also be the case that additional information or clarification from the submitting Party is requested by either AC or SC.

Step 6. Once a response has been formulated, it is sent to the requesting Party, via the Secretariat.

Step 7. The Party will implement recommendations and/or seek further clarification, if needed.

Step 8. Within one month after receiving a response from the Secretariat, the Party seeking advice should provide feedback to AC on how the advice is meant to be implemented and establish a calendar for providing a brief report on it.