

AEWA EUROPEAN GOOSE MANAGEMENT PLATFORM



**WORKSHOP FOR THE REVISION OF THE INTERNATIONAL SINGLE
SPECIES MANAGEMENT PLAN
FOR THE SVALBARD POPULATION OF THE
PINK-FOOTED GOOSE**

8-9 October, Levanger, Norway



**DRAFT FORMAT AND GUIDELINES FOR AEWA INTERNATIONAL SINGLE AND
MULTI-SPECIES MANAGEMENT PLANS**



8th SESSION OF THE MEETING OF THE PARTIES
26 – 30 September 2022, Budapest, Hungary

“Strengthening Flyway Conservation in a Changing World”

**DRAFT FORMAT AND GUIDELINES FOR AEWA INTERNATIONAL SINGLE AND
MULTI-SPECIES MANAGEMENT PLANS**

Introduction

Following the decisions of the 6th and the 7th Sessions of the Meeting of the Parties to AEWA (MOP6 and MOP7), the AEWA Technical Committee was tasked to develop a format for International Single and Multi-species Management Plans, according to the provisions outlined in the AEWA Action Plan (paragraph 4.3.4) and in line with target 2.4 of the AEWA Strategic Plan 2019-2027.

In the previous triennium, International Single Species Management Plans (ISSMPs) have been developed for the Barnacle Goose and for the Northwest/Southwest European population of the Greylag Goose and were adopted at the 7th Session of the Meeting of the Parties to AEWA (MOP7).

In order to provide for a standardised format and process for the future, this proposed format for International Single and Multi-Species Management Plans follows the same logic and structure as the Barnacle Goose and Greylag Goose management plans.

The format and accompanying guidelines were approved for submission to MOP8 by the Technical and Standing Committees at their 16th meeting on the 25-29 January 2021 and 16th meeting on 4-6 May 2021, respectively.

Action Requested from the Meeting of the Parties

The Meeting of the Parties is requested to review the draft format and guidelines for AEWA International Single and Multi-Species Management Plans and to adopt it for further use.

**DRAFT FORMAT AND GUIDELINES FOR
AEWA INTERNATIONAL SINGLE AND
MULTI-SPECIES MANAGEMENT PLANS**

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Introduction to the AEWA International Single and Multi-species Management Plan Format

AEWA International Species Action and Management Plans remain one of most vital and practical tools under the Agreement for the coordinated international conservation and sustainable use of migratory waterbirds. These Plans represent the quintessence of AEWA: cooperation across flyways for a common defined goal.

In response to the AEWA Action Plan (paragraph 4.3.4), “*Parties shall cooperate with a view to developing Species Management Plans for populations which cause significant damage, in particular to crops and fisheries*”. Further, according to target 2.4 of the AEWA Strategic Plan 2019-2027 “*adaptive harvest management¹ regimes should be developed and effectively implemented at flyway level in the framework of Species Action or Management Plans for all prioritised declining quarry populations and ‘conflict’ species²*”.

Following the requests from MOP6 and MOP7, the AEWA Technical Committee was tasked to develop a format for International Single and Multi-species Management Plans.

According to the AEWA provisions mentioned above, there are **two** types of management plans that can be developed, depending on the following objectives:

A) Population recovery objective

According to paragraph 2.1.2 of the AEWA Action Plan, *Parties shall regulate the taking of birds and eggs of all populations listed in Column B of Table 1. The object of such legal measures shall be to maintain or contribute to the restoration of those populations to a favourable conservation status and to ensure, on the basis of the best available knowledge of population dynamics, that any taking or other use is sustainable.* Some of the Column-B-listed populations are in a long- and/or short-term decline and will require recovery to a Favourable Conservation Status.

For species/populations in need of a management plan with a **population recovery objective**, the format for International Single and Multi-Species Action Plans shall be applied.

B) Population management objective

Species/populations that have an increasing impact for example on economic activities and natural ecosystems and that are giving reason for concern to Parties, can be subject to the development of a management plan with a population management objective. To deliver effective resolutions, solving such flyway-wide human-wildlife conflicts on international, and through national to regional and local levels, international coordination, structured decision-making, as well as coordinated interventions are necessary.

Plans with a **population management objective** shall follow the format presented in this document. This format follows as examples the International Single Species Management Plans for the Barnacle and for the Greylag Goose, adopted at MOP7. If and when Multi-Species management plans are developed, the format might have to be adapted accordingly.

¹ **Adaptive harvest management** is the periodic process of setting hunting regulations based on a system of population and habitat monitoring, harvest-level recording, data analysis and defining regulatory options.

² These are species for which significant conflicts with, for example, agriculture or fisheries have been identified in part of the Agreement Area.

The first phase in the management process is the development of the management plan. In a second phase, the implementation phase, Adaptive Flyway Management Programmes (AFMPs) shall be developed with the purpose to establish an agreement amongst Range States on the implementation of those activities in the management plan that require coordination at the population and/or Management Unit (MU) level.

This document consists of four parts: the format itself in **section A**, a detailed guidance regarding the facilitation of AEWA management planning processes and the completion of the format outlined in **section B** as well as a template for an Adaptive Flyway Management Programme (AFMP) in **section C** and its corresponding guidance in **section D**. It is hoped that this format, including its guidance, will serve to further strengthen the development of International Species Management Plans under the Agreement and subsequently also assist in strengthening the level of implementation of adopted AEWA Plans.

It should be noted, however, that action and management planning under AEWA remains an evolving process as the Agreement bodies, as well as all involved partners, continue to learn and introduce improvements over time. As our experience grows, further changes to the format and guidance captured here may be required over time.

A. Format

Overview:

*This section lays out the actual **FORMAT**, according to which AEWA International Species Management Plans shall be developed. This format groups the content to be included under the following **THIRTEEN** headings:*

- *Front Cover*
- *Inside Front Cover*
- *Contents*
- *List of Acronyms and Abbreviations*
- *Key Terms*
- *1 - Basic Data*
- *2 - Framework for Action*
- *Annex 1 – Biological Assessment*
- *Annex 2 – Problem Analysis*
- *Annex 3 – Projection of Population size and Harvest Rates (if applicable)*
- *Annex 4 – Legal Status and Implications for Population Management*
- *Annex 5 – Delineation of Management Units (if applicable)*
- *Annex 6 - References*

Section B. ‘Management Planning Guidelines’, contains further information and guidance on how each section of this Format is to be completed, including guidance on the facilitation of species management-planning processes under the Agreement.

Front Cover

- Logos [AEWA and other MEAs or other international frameworks that adopted the Plan];
- International Single Species or Multi-Species Management Plan for the [insert: species’ English name - also mention for which sub-species or population if relevant];

- Species [*insert: scientific name of the species*];
- Date [*insert the date when the Plan was adopted*];
- Portrait/picture of the species;
- Prepared by [*List of the organisations leading on the compilation of the plan*];
- Prepared and printed with financial support from [*List the donors supporting the planning process and compilation of the plan*];
- Logos [*Logos of the organisations leading on the compilation of the plan, as well as donors*];

Inside Front Cover

- Adopting Frameworks
- donors supporting the planning process;
- Organisations leading on the compilation of the plan
- Compiled by [*List main compilers including affiliations*];
- List any Workshops that have been undertaken for the development of the Plan [*Include name of the workshop, dates, location and provide links to the participant list, if available*];
- List of contributors and/or Range States that have either provided data or commented on the plan (names / countries and/or organisations);
- Date of adoption (and number of edition if not the first edition);
- Lifespan and Review of the Plan;
- Milestones in the preparation of the Plan;
- Name and contact details of the official AEWA International Species Working/Expert Group or other existing Species Working Group(s) (if applicable) including the following text: “*Please send any additional information or comments regarding this [Management] Plan to the [Working/Expert] Group, email: [xxx].*”, or specify another more appropriate contact, including an email address.
- Photo cover credit
- Recommended citation, including ISBN, if applicable.

Contents

- Add a complete contents list for the main sections and sub-sections of the plan.

List of Acronyms and Abbreviations

- Add a table spelling out the main acronyms and abbreviations.

Key Terms

- Add a table describing and explaining the key terms and definitions that are used in the plan.

Introduction

- One short paragraph outlining a justification for the International Species Management Plan.

1 – BASIC DATA³

- Species and populations covered by the Plan;
- List and map of Principal Range States /Annual distribution and main migration routes;
- If applicable: list of potential Survey Range States as well as potential Range States hosting breeding and/or non-breeding numbers below 1% of the biogeographic population threshold as identified during the management-planning process;
- If applicable: Add Management Units⁴
- Global, Regional and sub-regional Red List status;
- International legal status (as applicable, with regard to geographic range of the species/population in question):
 - AEWa Table 1 status
 - CMS
 - CITES
 - Bern Convention
 - EU Birds Directive
 - Others, if applicable

2 – FRAMEWORK FOR ACTION

- **Introduction:**
Mandate and Justification for the production of the plan
Problem statement (described in the Annexes of the plan)
- **Goal**
The overall goal of the management plan is to *maintain the population in a favourable conservation status while taking into account ecological, economic and recreational interests*
- **Favourable Reference Values:**
Favourable Reference Values (FRVs) for all [insert number of populations covered by Management Plan] populations (and their respective management units, if deemed applicable) shall be defined during the development of the Management Plan and agreed on amongst the Principal Range States. In case this should not be possible, the FRVs shall be elaborated during the implementation phase (Adaptive Flyway Management Programmes – see **section c**) of the Management Plan within its first full cycle of implementation.
- **Fundamental Objectives**
List and explanation of the fundamental objectives.
- **Means Objectives**
List and explanation of the means objectives.

³ The Basic Data shall be limited to 1-2 pages.

⁴ Management Units (MUs) are functionally differentiated population segments, i.e. having somewhere different seasonal distribution (although may overlap during certain stages of the annual cycle), exhibiting distinct demographic processes and showing somewhat reduced exchange with other segments of the flyway population.

- **Process Objectives**
List and explanation of the process objectives.
- **Action framework table** showing the **fundamental objectives, means and process objectives**, and associated **actions** with their priorities, timescales and organisations responsible for implementing them.

Table xx. Framework for Action

Fundamental Objectives	Means/Process objectives	Action	Priority⁵	Time scale	Organisations responsible
	1.	1.1 Description of action Applicable to: [insert range states]			
		1.2. Description of action Applicable to: [insert range states]			
	2.	2.1. Description of action Applicable to: [insert range states]			

- **Adaptive Flyway Management Programmes**
In case required, Adaptive Flyway Management Programmes (AFMP) shall be developed with the purpose to establish an agreement amongst Range States on the implementation of those activities that require coordination at the population and/or Management Unit (MU) level. AFMPs shall be developed once the Management Plan is adopted. A template and a corresponding guidance for the development of the AFMP is provided in **section C** and **section D** of this document.

Annex 1. BIOLOGICAL ASSESSMENT⁶

- Distribution throughout the annual cycle;
- Habitat requirements;
- Survival and productivity;
- Population size and trends for each geographic population, including by country provided in Table xx.

⁵ *Essential*: the sustainability of the management cannot be guaranteed without the action, *High*: actions that guarantee achieving the means objective, *Medium*: actions that contribute to achieving the means objective, *Low*: explorative actions that are unlikely to achieving the means objective in the life-time of the management plan.

⁶ The Biological Assessment shall be ideally limited to 1-3 pages in length (excluding table 2).

Table xx. *Population size and trends by Range State*

Range State	Breeding numbers (individuals or pairs)	Quality of data	Year(s) of the estimate	Breeding population trend in the last 10 years (or 3 generations)	Quality of data	Maximum size of migrating or non-breeding populations in the last 10 years (or 3 generations)	Quality of data	Year(s) of the estimate
<i>Country 1</i>								
<i>Country 2</i>								
Overall								

Annex 2: PROBLEM ANALYSIS

- Preliminary objectives based on the mandate, consultation with stakeholders and review of the literature
- Problems related to the objectives, including their spatial extent and magnitude
- Relation between the problems and the state of the population
- Factors influencing the state of the population
- Review of the management measures applied and their effectiveness

Annex 3: PROJECTION OF POPULATION SIZE (IN CASE OF “NO ACTION”)

- Growth rate using population counts or other suitable models
- Predicted population trajectories for 12 years

Annex 4. LEGAL STATUS AND IMPLICATIONS FOR POPULATION MANAGEMENT

- Provide detail on the international legal status (as applicable, with regard to geographic range of the species/population in question):
 - AEWAs
 - CMS
 - CITES
 - Bern Convention
 - EU Birds Directive
 - Others, if applicable

Annex 5. DELINEATION OF MANAGEMENT UNITS

- Describe and add evidence for the delineation of proposed Management Units for the species/population, based on the concept of MUs described in the guidance **section B**.
- Provide Maps outlining the Management Units and list Range States for each MU.

Annex 6. REFERENCES

- List of the most relevant literature used for the preparation of the Management Plan.

B. Management-Planning Guidelines

Overview:

This section ‘B. Management-Planning Guidelines’ provides guidance to support planners and compilers in the development and drafting of AEWA International Species Management Plans following the AEWA format outlined above and provides explanatory notes for each section.

These guidelines are intended to support planners in developing the following types of Plans using the AEWA format:

- *International Single Species Management Plans (ISSMP),*
- *International Multi-Species Management Plans (IMSMP).*

In addition, this section also provides guidance related to the facilitation of management-planning processes under AEWA, which are carried out in cooperation with the UNEP/AEWA Secretariat.

1. AEWA Management-Planning Process

1.1. Introduction

In addition to the format for AEWA International Species Management Plans as outlined above, this chapter also runs through the main steps of the actual management-planning process itself, which is carried out by the selected lead compiler(s) or drafting team, in close cooperation with the UNEP/AEWA Secretariat.

AEWA International Species Management Plans are adopted by the Meeting of the AEWA Parties. But before a Plan reaches the stage of being presented for adoption, it should undergo a long development process beginning with the prioritisation of the species/population in question for a management planning by the AEWA Technical Committee and ends with an internationally negotiated Plan ready for presentation to the AEWA governing bodies and adoption by the Parties.

The management-planning process as described below has been developed under the Agreement in an effort to **ensure a transparent process that includes all relevant stakeholders and brings together the best available scientific knowledge**. Both elements – the transparent and inclusive process, as well as working on the basis of best

available science – are crucial steps for enabling the subsequent implementation of International Species Management Plans once adopted.

It should be noted that management-planning under AEWA remains an evolving process as the Agreement bodies as well as all involved partners continue to learn and introduce improvements over time. As these are international, consultative processes mainly depend on the availability of external funding, the exact timetables etc. will also vary from case to case. The main steps as well as the roles and responsibilities of each of the various actors in the process, however, remain the same.

As this guidance is geared, in particular towards potential International Species Management Plan compilers and/or drafting teams, the **THIRTEEN** essential steps requiring their involvement are highlighted throughout the process below.

1.2.Facilitation of Management-Planning Processes under AEWA

1.2.1. Establishing the Process

Following the mandate received from the Meeting of the Parties on the development of Management Plans for species/population, the UNEP/AEWA Secretariat liaises with the various stakeholders to see which plans can be developed within which timeframe. The successful development of new plans is dependent on many factors such as the support of range state governments and the availability of species' experts. Sufficient long-term resources - both in the form of personnel time of experts and funding - are key. The capacity of the Secretariat to organise, fundraise for and to run the process within a given time is also a crucial factor.

Nearly all management planning processes under AEWA require fundraising efforts by the Secretariat. The main costs are linked to the personnel time needed for the actual compilation of the draft Management Plan and to the management planning workshop to which all relevant range states are invited. First steps to establish the management plan development process are therefore to secure the commitment by the Range States and stakeholders to fund and implement the process. The second step is to identify a chief compiler/compiling organisation.

In the case of financial support from a government, the Secretariat usually requires a letter from the respective government, with a) a request to the Secretariat to initiate the management-planning process and b) a commitment to fund the process (i.e. provide resources for the drafting of the plan and for the management-planning workshop as well as for possible printing/translation of the plan if desired). Depending on the type of arrangement with the compiler (hired consultant or pro-bono) the Secretariat signs a contract or more informal agreement outlining the work to be delivered as well as the timeframe.

The Secretariat also informs and liaises with possible other relevant multi-lateral agreements and other legal frameworks on the development of new Management Plans under the AEWA process, such as the Convention on Migratory Species (CMS), the Bern Convention and the European Commission.

COMPILER STEP 1: Discussions between the UNEP/AEWA Secretariat and potential organizations/lead experts to assess their willingness/availability to act as lead compiler for a mandated Management Plan. Contract or more informal agreement signed depending on arrangement.

1.2.2. Management-planning Workshops

A crucial component in ensuring the early involvement of all range states and possible other relevant stakeholders in any management planning process, is the organisation of an inter-governmental workshop.

Once a lead compiler/compiling organisation as well as sufficient funding have been secured the Secretariat therefore convenes a planning workshop to which all Principal Range States (regardless of whether they are a Contracting Party to AEWA or not) as well as possible additional international experts for the species are invited. A letter is sent to the respective AEWA Focal Points and Contact Points inviting them to send one government representative charged with the implementation of AEWA as well as one national expert on the species in question to the workshop. This allows for national policy considerations as well as biological, conservation and sustainable use aspects to be reflected in the Plan at an early stage. The active involvement of range state governments is particularly important, as they will be responsible for the implementation of the Management Plan after adoption.

Based on contacts provided by the lead compiler/compiling organisation, the Secretariat may recommend the attendance of known national species experts in the workshop invitation letter. This, however, is merely a recommendation and the final decision on who participates in the workshop lies with the respective government. In addition, invitations are sent to the organisations represented in the AEWA Technical Committee. Moreover, the Secretariat may also invite international stakeholder representatives to participate in the management planning process.

The agenda for the workshops is prepared by the Secretariat, the lead compiler and the host government, if applicable. As a starting point, a biological assessment as well as an initial problem analysis should also be prepared before the workshop. The facilitation of the workshop is carried out by the Secretariat and/or another international expert of species management-planning in cooperation with the lead compiler. Workshops may include an introductory presentation on the international status of the species followed by brief presentations by the national representatives on the current status, main problems, and/or use of the species in their country. This is usually followed by a session on the validation of the biological assessment and problem analysis and discussions of the framework for action (objectives, results and activities with their associated indicators as well as knowledge gaps). Discussions are also held on possible urgent activities that may need to be implemented immediately before a formal adoption of the Plan.

It should be noted that Species Management Plans are international frameworks for the coordinated management and conservation of species/populations – not scientific papers for peer-review. Although Management Plans should include the best scientific knowledge available at the time of development, gaps in scientific knowledge should not be seen as a reason for delaying the development and subsequent adoption of a Plan. Instead, such knowledge gaps and assumptions made in the absence of hard data should be duly noted in the Plan and activities to close such gaps in cooperation amongst all relevant range states should be added.

COMPILER - STEP 2: Provide the Secretariat with a list of known species experts (name, affiliation, email address) from each Principal Range State, to be included in the workshop invitations.

COMPILER - STEP 3: Undertake, before the workshop, desk research and data collation of the latest available information relevant for the Annexes 1-5 of the Plan (as appropriate). Consider the need to develop and disseminate a questionnaire to all Principal Range States (via the Secretariat) to gather more information, for example on national status and trends as well as magnitude of damage.

COMPILER STEP 4: Produce, before the workshop, the draft biological assessment, demographic analysis and problem analysis. If possible, harvest data, derogation killing, effectiveness of non-lethal measures and a quantification of the damage caused by the population, should be collated in advance. Send drafts to all invited workshop participants. This information should include the draft texts for the Annexes.

COMPILER STEP 5: Carry out the management-planning workshop in cooperation with the Secretariat and possible other partners covering: a review of the collected data and draft texts; a validation of the problem analysis; agreement on the geographic scope as well as the goal, objectives, results, actions and corresponding timelines and responsibilities.

1.2.3. Consultations of the draft Management Plan

After the management-planning workshop the lead compiler has the task of drafting the Management Plan based on the workshop outcomes in cooperation with the Secretariat. Depending on the time available, this usually takes between two and four months. This first draft is then circulated to the workshop participants as well as those government representatives and national experts that were invited but not able to attend. This first consultation round is meant to ensure that all the necessary substantive details as well as actions for the species are reflected as discussed at the workshop. Following the feedback from the workshop participants, the lead compiler prepares a new draft which is submitted by the Secretariat to the AEWA Technical Committee for comments.

A revised draft is then again prepared by the lead compiler and submitted by the Secretariat to all Focal Points and Contact Points in the relevant Range States for official government consultation. The timeframe for the official consultation is ideally three months. Within the framework of the official consultation the Focal Points and Contact Points are expected to circulate the draft to all relevant national bodies and stakeholders for comments in accordance with their respective established national procedures and to submit the consolidated national comments to the Secretariat by the given deadline. If no comments are submitted by the deadline, the Secretariat assumes that Range States are in agreement with the Plan. Possible extensions of the deadline for submitting national comments can be requested of the Secretariat.

The Secretariat is responsible for the overall final editing (both language and layout) of the draft plan. In order to avoid unnecessary delays throughout the drafting process, this task is usually carried out towards the end of the consultation process.

COMPILER STEP 6: Prepare first draft of the Management Plan in consultation with Secretariat and send out for consultation to workshop invitees.

COMPILER- STEP 7: Incorporate comments from consultation, produce a second draft and provide to the Secretariat for submission to the AEWA Technical Committee.

COMPILER STEP- 8: Incorporate comments from AEWA Technical Committee and provide a third draft to the Secretariat for the official consultation with the Range State governments.

1.2.4. Review by the AEWA bodies and adoption

Following the formal national consultation, a final draft is prepared and submitted to the Technical Committee and, following their consent, to the Standing Committee for approval for submission to the next Meeting of the Parties. Following the positive recommendations from both the Technical and the Standing Committee, the Meeting of the Parties is then requested to adopt the Plan at its next session.

Following the adoption of new Action and Management Plans by the Meeting of the Parties, the Secretariat prepares final versions of the Plans, and publishes them on the AEWA website. Only Plans for which additional funding has been made available are printed. Once Plans are available in their final form the Secretariat informs all Focal Points and Contact Points in the relevant range states.

COMPILER STEP - 9: Incorporate comments from the official Range State consultation and submit the draft Plan – through the Secretariat - for official endorsement by the AEWA Technical and Standing Committees and subsequent adoption by the AEWA Meeting of the Parties.

Table I: The various main steps of the AEWA Action/Management Planning Process. Note that no action/management planning process is the same and that both the facilitation and the timetable may be adapted by the Secretariat depending, in particular, on the resources available as well as the meeting schedules of the AEWA governing bodies.

Action/Management Planning Process under AEWA	
STEPS	LEAD & MAIN PLAYERS
Mandate for development of species management plan	Meeting of the Parties
Start and facilitation of the management planning process (i.e. identifying a lead compiler or drafting team; sourcing funding for compilation and workshop etc.)	AEWA Secretariat
Inter-governmental workshop for all principal range states and relevant stakeholders	AEWA Secretariat together with lead compiler/drafting team and possible host government, National Focal points and Contact Points
Workshop participants provide comments on 1 st draft	Lead compiler, AEWA Secretariat, workshop participants
AEWA Technical Committee provides technical evaluation/clearance on 2 nd draft	Lead compiler, AEWA Secretariat, AEWA Technical Committee

Formal government consultation of 3 rd draft with all species range states	Lead compiler, AEWA Secretariat, National Focal Points and Contact Points
4 th draft is submitted to the AEWA Technical Committee for sign-off before approval by the Parties	AEWA Technical Committee
Final draft is submitted to the AEWA Standing Committee for approval for submission to the Meeting of the Parties	AEWA Standing Committee
Final consulted draft is adopted at the next Session of the Meeting of the Parties	Meeting of the Parties
Final Action/Management Plan is prepared by the Secretariat together with the chief compiler and published online (printed only if funding is available). Link to (or copy of) the plan is sent to all Focal Points and Contact points in the relevant range states with the invitation to implement the plan.	AEWA Secretariat

2. Management Plan Format - *Guidance*

2.1. Introduction

This section provides additional instructions and guidance directed particularly at compilers or drafting teams on the use of the AEWA International Species Management Plan Format outlined above in section A. Wherever possible, concrete wording samples are also provided as further guidance, but it should be noted that these merely serve as examples to illustrate the logical linkages between the various parts of the format and are not necessarily meant to be transposed verbatim into each AEWA Management Plan.

2.2. Front Cover

Apply format as outlined above on page 4.

2.3. Inside Front Cover

Apply format as outlined above on page 5.

- The **lifespan** of the Management Plan is generally set at 12 years from the date of its adoption. The rationale behind this time span is pragmatic. Official adoption and endorsement of Management Plans often takes from several months to more than a year, and the implementation of some measures may require even longer periods (*e.g.* legislation and policy changes, implementation of large projects, etc). There is also a trade-off between the time and effort needed to update the plans and that needed to implement them. Therefore, a longer period than the initially intended 3-5 years is deemed necessary.
- **Milestones in the production** of the Plan shall include details of any workshops held, dates of each draft, dates of approval by the AEWA Technical Committee, notes on special opinions or dissent from Contracting Parties, date of adoption by AEWA MOP as well as any additional international Agreements or Conventions, if applicable.

2.4. Introduction

Include one short paragraph outlining the justification for the Species Management Plan in question (max 3-4 sentences). Reference could be made to the trend of the species/population and the potential damage the species is causing, in particular, to crops and fisheries.

2.5. Basic Data

Apply format as outlined above on page 6, limit to maximum 1-2 pages.

- **Guidance regarding the definition of Range States in Management Plans and subsequent obligations of AEWA Contracting Parties:**

Each Contracting Party to AEWA is equally responsible under the Agreement for all the AEWA species/populations they host as per the obligations set out in the AEWA legal text. All the countries which host a specific species (whether in small or large numbers) are considered **Range States** for that species.

The identification of **Principal Range States** in AEWA Management Plans, is an approach used to prioritise coordinated international management efforts to those countries considered to be crucial for ensuring the favourable conservation status of the species/population in question or those countries that experience considerable human-wildlife conflict with the population. Various approaches are used in the existing AEWA Action and Management Plans to determine the geographic scope and the Principal Range States which carry the major responsibility for the implementation of the respective plans. Principal Range States are the countries that will be invited to participate in inter-governmental AEWA International Species Working Groups to coordinate implementation following the adoption of Management Plans and will also be requested to report specifically on progress made on Management Plan implementation.

An initial assessment of the Principal Range States for a new species for which a Management Plan is being prepared, is carried out by the Lead Compiler in the very beginning of the management-planning process together with the UNEP/AEWA Secretariat and supported by the Technical Committee, as necessary.

It should be noted that, under no circumstances does the identification of Principal Range States in AEWA International Species Management Plans, diminish the legal obligations of potential remaining Range States which are Contracting Parties to AEWA to equally ensure the favourable conservation status of the species/populations in question.

- **Guidance on defining the Management Plan Spatial Scope for Species with a Wide Geographical Range:**

As recognised by the AEWA Technical Committee, for Management Plans covering species populations with a wide geographic distribution, relatively high numbers and/or different sub-species, a more differentiated approach may be necessary, in order to limit the scope of the plan so that urgent activities for implementation remain focused on the most important Range States.

In such Plans, **Principal Range States** are defined as Range States which regularly support a set percentage (between 1 and 5% of the biogeographic population) breeding and/or non-breeding numbers of the species/subspecies and ideally not exceeding 20 countries.

In addition to the Principal Range States, two additional Range State categories are suggested to be introduced to such Management Plans, as necessary:

- **Survey Range States**
Survey Range States are defined as known Range States as well as potential Range States hosting breeding and/or non-breeding numbers below 1% of the biogeographic population threshold as identified during the management-planning process;
- **Consultation Range States**
Range States which host breeding and/or non-breeding numbers below the set percentage threshold (between 1 and 5% of the biogeographic population). Following consultation, these Range States may choose to be considered as a Principal Range State in the context of Management Plan implementation.

The guidance approved by the Technical Committee at its 12th Meeting in March 2015 with respect to the definition of Range States in Action Plans, was presented to the 6th Session of the Meeting of the AEWA Parties in 2015 for information in document AEWA/MOP6.33 [“Criteria for Prioritising AEWA Populations for Action and Management Planning and for the Revision and Retirement of Action Plans as well as Guidance on the Definition of Principal Range States in Action Plans”](#). The same guidance shall apply for Management Plans.

- *Table 2: European Union Member States shall use the data from the latest Article 12 reporting unless more up-to-date data are available.*

2.6. Framework for Action

2.6.1. Introduction

This is the core part of the plan – it spells out its goal, favourable reference values, fundamental objectives, their direction of change, means and process objectives. The actions necessary to achieve these fundamental objectives, along with their priority ratings, timescales and implementing organisations are also presented here.

Standardisation of terminology is necessary in order to maintain coherence between different plans and to help implementation, evaluation and revision. The following terminology is considered to be the most appropriate for the Plans covered by this Format and ensuing Guidance.

2.6.2. Goal

- This is the **overall long-term aim** to which the Plan will contribute but will not achieve within its timespan.
- The goal can be formulated as follows:

Example:

“Maintain the population in a Favourable Conservation Status while taking into account ecological, economic and recreational interests”.

2.6.3. Favourable Reference Values

- Establishing favourable reference values for each population covered by the Management Plan, as well as for the management units thereof (if applicable), is a crucial step as it provides the reference for assessing whether a population is in a favourable conservation status as per the legal requirements of AEWA. Numerical target thresholds will also allow for better monitoring of progress towards the Management Plan goal.
- The approach for establishing the favourable reference values will need to be agreed amongst the respective Range States for each population, as it will vary depending on the distribution of the population during its annual cycle and the data available for the species. Favourable reference values for AEWA-listed populations will be established in accordance with the CMS definition of Favourable Conservation Status which has four criteria (population dynamic, range, habitat and historical levels) and the population is considered to be in unfavourable status if it does not meet any of the criteria or its future prospects are negative. More detailed guidance on the interpretation and establishment of favourable reference values is under development by the AEWA Technical Committee building on existing work under other relevant international frameworks⁷.
- Establishing favourable reference values for migratory waterbird populations is time consuming and it usually requires establishment of national favourable reference values by Range States (at least by the identified Principal Range States). In some cases, it may not be possible to be carried out within the regular management-planning process itself. If this is the case, the standard text providing the mandate to establish favourable reference values should be included in the Management Plan as per the format above. Note that management units will most likely only be established for populations subject to Adaptive Harvest Management Programmes. The reference to management units can therefore be omitted for populations which are not foreseen to be subject to adaptive management.
- Should it, however, be possible to establish the favourable reference values before the adoption of the Management Plan these could be included directly into the Plan itself already during the drafting phase, directly under the Management Plan Goal.

2.6.4. Objectives

The Management plans shall follow the principles of Structured Decision Making (SDM, Gregory et al 2012), which recognises that management plans should strike a balance between multiple fundamental objectives. The identified fundamental objectives can be achieved through various means and process objective. One means objective may contribute to several fundamental objectives. **Objectives should be SMART (Specific, Measurable, Achievable, Realistic, Time-bound).**

Fundamental Objectives

Fundamental objectives shall be based on stakeholder's perspectives expressed at e.g. a management planning workshop. Fundamental objectives do not need to be shared by all stakeholders; they express what is important for certain interest groups. Following the standards of structured decision-making they are

⁷ In the interim, Management Plan compilers are advised to follow the key concepts and approaches presented in the explanatory notes and guidelines under the EU Habitats Directive Article 17. [DG Environment. \(2017\). Reporting under Article 17 of the Habitats Directive: Explanatory notes and guidelines for the period 2013-2018. Brussels: European Commission.](#)

presented with a direction of change although it is recognised that these directions may conflict with one another. The plan and its associated programmes aim to resolve trade-offs between them.

Fundamental objectives can be a selection of the following:

- I. Maintain the population at a satisfactory level⁸
- II. Minimise agricultural damage and conflicts
- III. Minimise the risk to public health and air safety
- IV. Minimise the risk to other flora and fauna
- V. Maximise ecosystems goods and services
- VI. Minimise costs of management
- VII. Provide hunting opportunities that are consistent with maintaining the population at a satisfactory level
- VIII. Others

Means Objectives

Means objectives represent ways to achieve the fundamental objectives. For example, means objectives could be formulated in the following way:

1. A network of safe key sites is maintained and managed throughout the population's range
2. Birds are kept away from sensitive areas [with respect to economic damages]
3. Conflicts and risks in sensitive areas are managed
4. The population is kept between agreed minimum and maximum targets
5. Other

Process Objectives

The process objectives complement the means objectives (expressing ways to run the process to realistically achieve the objectives). They can be formulated in the following way:

- A) Knowledge is available to support shared population management
- B) Experience and expertise are shared
- C) Acceptance of management is increased
- D) Relevant international legislation is harmonised
- E) Sufficient Resources are secured on long-term basis

2.6.5. Action framework table

The Action framework table should show the fundamental, means and process objectives, **and associated actions with their priorities, timescales and organisations responsible for implementing them.**

- Actions are implemented, in order to achieve the means and process objectives. Justification for each action should be self-evident from the way it is formulated.
- A priority for each action should be stated (Essential, High, Medium, Low), using the following priority ranking process and the results of the management-planning workshop:

⁸ Satisfactory means in this context a population level that satisfies the requirements of Article II (1) of AEWA, Article 2 of the Bern Convention, and Article 2 of the Birds Directive, as applicable.

- Essential: the sustainability of the management cannot be guaranteed without the action.
 - High: actions that guarantee achieving the means objective.
 - Medium: actions that contribute to achieving the means objective.
 - Low: explorative actions that are unlikely to achieving the means objective in the lifetime of the management plan.
- Deciding on the priority order of actions: To avoid overloading stakeholders with a large number of actions, the Management Plan should include actions that are **necessary to achieve the related fundamental, means and/or process objective** and that are **technically, socially and financially feasible**. Proposed actions should be assessed for feasibility and prioritised at the planning workshop based on their expected contribution to the goal of the Management Plan.
 - **Time scales** should be attached to each Action using the following scale:
 - Immediate launched within the next year.
 - Short: launched within the next 3 years.
 - Medium: launched within the next 5 years.
 - Long: launched within the next >5 years.
 - Ongoing: currently being implemented and should continue
 - Rolling to be implemented perpetually (any action above from immediate to ongoing can be also qualified as rolling)

EXAMPLE Table 1. Example framework for action including the fundamental objectives, corresponding means and process objectives and associated actions.

<i>Fundamental objective</i>	<i>Means/Process objectives</i>	<i>Actions</i>	<i>Priority</i>	<i>Time scale</i>	<i>Organisations responsible</i>
I. Maintain the population at a satisfactory level	1. A network of safe key sites is maintained and managed throughout the population's range	1.1 Provide adequate protection and management to key sites of international importance under Article 4(2) of the Birds Directive in the EU and other relevant instruments in other Range States throughout the range of the population and maintain them in good ecological status	Essential	Short/Rolling	National authorities
II. Maximise ecosystem goods and services		1.3 Promote goose-based ecotourism at selected key sites			
III. Provide hunting opportunities that are consistent with maintaining the population at a satisfactory level					

2.7. Annex 1: Biological Assessment

As mentioned above within the Format, this Annex should ideally be kept to **1-3 pages**, excluding the national population estimates provided in a Table.

2.7.1. Distribution throughout the annual cycle

- Very brief description and map of distribution and movements, including info on timing and location of breeding, spring migration and moulting etc.

2.7.2. Habitat requirements

- Very brief description of the habitat used by the species during breeding (including nest site) and non-breeding habitats, feeding habitats and diet.

2.7.3. Survival and productivity

- Brief summary of available information on generation length, age of first breeding, clutch size, productivity, survival of the age classes (adult, juvenile, chick, nest) and factors affecting them.

2.7.4. Population size and trend

- Ideally for each biogeographic population the current population estimate as well as historical and recent trends in population size and range (breeding, wintering, migration) should be provided.
- National estimates should be provided in a Table.

2.8. Annex 2: Problem Analysis

In case of management plans, the role of the problem analysis is to support the decision-making by (i) identifying preliminary objectives based on the mandate, consultation with stakeholders and review of the literature, (ii) identify the problems related to the objectives, (iii) if and how these problems are related to the state of the population and (iv) what factors are influencing the state of the population. In this context, any factors that limit the achievement of a management objective can be considered as a problem. Management objectives are usually linked to the status of the population and to the ecosystem services (recreational, provisioning, etc.) and disservices (damages and risks to air safety, public health or to other flora and fauna). For example, minimising damage to agriculture might be one of the preliminary objectives. The problem analysis than should look at where and how much agriculture damage the population is causing and why.

The problem analysis should describe the spatial extent and magnitude of the problem based on the available evidence. It can also generate conceptual models that illustrate the casual relationship between factors and outcomes, which can lead to the identification of potential intervention points and generate alternative management strategies in the planning phase.

It is also useful to critically review the effectiveness of management measures already applied and identify what limits their effectiveness.

An assessment of the effectiveness of management measures should be provided in a table format with information provided by the national delegates that participated in the management planning workshop.

For this purpose, the following scoring system could be used by the delegates during the workshop:

0: Unknown;

1: The measure does not mitigate the problem;

2: The measure could possibly help to mitigate the problem;

3: The measure mitigates the problem;

4: The measure completely resolves the problem;

n.a.: Not applicable

The results of this exercise can be provided in an overview table, reflecting the Range States scores against each management measure.

2.9. Annex 3 - Projection of Population Size at Different Survival Rates

2.9.1. Population analysis

The purpose of this section is to inform the decision-makers of what can be expected if no action is taken.

Thus, in this section, the following should be explored a) the potential growth of the population/s for the coming 12 years under a scenario in which no further management measures are taken to control the populations. The consequences of alternative management scenarios on the fundamental objectives will be assessed as part of the impact models as part of the Adaptive Flyway Management Programmes (see section C).

2.10. Annex 4: Legal Status

In this section a description and analysis should be provided on the international legal status of the species/population and the implications for management (as applicable, with regard to geographic range of the species/population in question). The following international legal instruments could be taken into consideration:

- AEWa
- CMS
- CITES
- Bern Convention
- EU Birds Directive
- Others, if applicable

2.11. Annex 5: Delineation of Management Units

Bijlsma et al (2019)⁹ defines management units (MUs) as functionally independent population segments, i.e. exhibiting distinct demographic processes and showing reduced exchange (migration/dispersal) rates over a few

⁹ Bijlsma, R. J., Agrillo, E., Attorre, F., Boitani, L., Brunner, A., Evans, P., ... & Langhout, W. (2019). Defining and applying the concept of Favourable Reference Values for species habitats under the EU Birds and Habitats Directives: examples of setting favourable reference values (No. 2929). Wageningen Environmental Research.

generations. MUs can be characterised by genetic markers, life history parameters, distribution, behaviour, movements (i.e. connectivity) and possibly morphology, and are appropriate short-term targets for conservation.

If applicable, in this section MUs can be defined, based on the best available scientific information. An example for the delineation of MUs can be found in the ISSMP for the Greylag Goose (NW/SW European Population)¹⁰.

However, if deemed necessary, the MUs can also be revised during the development of the Adaptive Flyway Management Programmes (see section C).

Managing a flyway population according to MUs will require 1) sufficient scientific knowledge about the geographic and temporal extent and overlap of MUs, 2) demographics, harvest, including killing under derogation and sizes of MUs, 3) flexible hunting regulations in the Range States to allow for seasonal regulation of shooting, including closure, at the relevant geographic scale 4) Long-term commitment by the respective Range States of each MU to provide resources. Costs for MU-specific management tend to be more elevated compared to flyway level population management (particularly with respect to the monitoring work needed).

2.12. Annex 6: References

The reference list, in alphabetical order following the format given below, should contain only the key documents referred to in the International Species Management Plan text, not general literature on the species. Titles of journals should be given in full.

Ideally, information from peer-reviewed sources should be preferred over “grey literature” and personal contributions or comments. This will enhance the credibility and objectivity of the Management Plan.

However, not all information needed for Management Plans is officially published. In such cases compilers should judge the available information carefully and responsibly and clearly indicate that the sources used are such in the Management Plan text itself. Much valuable information is, for example, now available through the National Reports provided by Range States to meetings of the various AEWA International Single Species Working Groups.

Information stored in institutional databases should also be included in the list of references, with indication of the source and date of access to the database.

Examples:

Alexander DJ (2000) A review of avian influenza in different bird species. *Vet Microbiol* 74:3–13. doi: 10.1016/S0378-1135(00)00160-7.

Allen CR, Garmestani AS (2015) *Adaptive Management of Social-Ecological Systems*. Springer Netherlands. DOI 10.1007/978-94-017-9682-8.

BirdLife International. 2000. *Threatened Birds of the World*. Spain and Cambridge, U.K.

¹⁰ Powolny, T., Jensen, G.H., Nagy, S., Czajkowski, A., Fox, A.D., Lewis, M., Madsen, J. (Compilers) 2018. AEWA International Single Species Management Plan for the Greylag Goose (*Anser anser*) - Northwest/Southwest European population. AEWA Technical Series No. 71. Bonn, Germany.

Busche G (1991) Nonnengans. In: Busche G (ed) Vogelwelt Schleswig-Holsteins Volume 3. Wachholtz, Neumünster, Germany, pp 89–100.

Cabot D (1988) Irish expedition to north-east Greenland 1987. Barnacle Books, Dublin.

C. Adaptive Flyway Management Programme (AFMP)

Overview:

*This section lays out the actual **FORMAT**, according to which Adaptive Flyway Management Programmes (AFMPs) are to be developed.*

Main body of the AFMP:

1. Introduction

Description on the purpose and scope of the AFMP.

2. Definition of Management Units (MUs)

This section includes a detailed description of the management units (in case they differ to the management units agreed in the management plan).

3. Definition of Favourable Reference Values (FRVs)

The FRVs for the species will be included in this section

4. Population targets above the FRVs

Population targets are set above the FRVs for agreed MUs based on an Multicriteria decision analysis (MCDA) process.

5. Cumulative impact of derogations and legal hunting

If required, this section will include an assessment of the cumulative impact of derogations and hunting on the development of the population, the likelihood of serious damage to agriculture and risk to air safety and to other flora and fauna and the non-lethal measures taken to prevent damage/risk, as well as the effectiveness of these. If necessary, this section will propose a coordination of the derogation measures between Range States to avoid risk to the population and to enhance effectiveness of the measures.

6. Monitoring indicators and programmes

Clear and effective monitoring indicators and programmes are identified to measure that the management objectives are met.

7. Protocols for the iterative phase (decision making, monitoring and assessment)

Management actions are evaluated systematically and adapted accordingly for improved management. The detailed protocols will be added as an Annex to the AFMP.

The following sections **can** be added as Annexes to the AFMP, as applicable:

Annex 1. MU-specific workplans

Annual MU-specific workplans that can be reviewed periodically.

Annex 2. National Overview

- a. Characterisation of the spatial and temporal extent and trends of damage to agriculture and of risks to human health and air safety as well as to other flora and fauna that can be attributed to the population/MU in question, including predicted future changes in these;
- b. A description of the methods applied in the past assessments [*for the need for derogations*] for each country and recommendations for the development of future guidelines for assessments;
- c. Description of the methods applied or tested to prevent damages and to reduce risks, their effectiveness and sufficiency to tackle the problem;
- d. Understanding of the link between population level and damages or risk;
- e. List of SPAs and other protected areas designated for the species/population;
- f. Management of the species and the damage inside and outside SPAs;
- g. Tackling damage prevention inside and outside SPAs (accommodation areas, derogations, etc.).

Annex 3. Population Models

This section shall include population models to assess the cumulative impact of derogations and hunting, to inform decisions.

Annex 4. Impact Models

This section shall include models that will assess the predicted outcomes of defined management actions (e.g. effect of derogations) on the fundamental objectives set in the ISSMP/IMSMP.

Annex 5. Protocols for the iterative phase (decision making, monitoring and assessment)

Protocols for the iterative phase shall be presented in this section, in order to systematically evaluate management actions and adapt them accordingly for improved management.

D. Guidance for the development of an Adaptive Flyway Management Programme (AFMP)

If required from a management perspective, population-specific Adaptive Flyway Management Programmes (AFMPs) shall be developed to complement the management plan. The purpose of the AFMPs is to establish an agreement amongst Range States on the strategic goal and objectives of the conservation and management of the species. AFMPs shall be revised periodically. Therefore, implementation details or issues that may require revision in the future, such as Favourable Reference Values (FRVs), indicators, any co-ordinated adjustment of the populations to a particular level at an appropriate spatial scale (if this is necessary at all, following an assessment of the presence of legitimate grounds and the availability of suitable alternatives) and tasks related to the actions agreed in the management plan shall be elaborated in the AFMPs.

Main body of the AFMP:

1. Introduction

This section should provide a description on the mandate, the purpose and scope of the AFMP. The period which the AFMP will cover should also be mentioned here.

2. Definition of Management Units (MUs)

Management Units (MUs) should be defined as functionally differentiated population segments, i.e. having somewhat different seasonal distribution (although may overlap during certain stages of the annual cycle), exhibiting distinct demographic processes and showing somewhat reduced exchange with other segments of the flyway population.

An example on the definition of MUs can be found in the AFMP for the Greylag Goose.¹¹

This section should include a detailed description of the MUs (in case they differ to the management units agreed in the management plan). A map outlining the MUs can also be added.

3. Definition of Favourable Reference Values (FRVs)

Favourable Reference Values (FRVs), i.e. Favourable Reference Population (FRP), Range (FRR) and Habitat (FRH), are to be defined for the species/population in the framework of developing the ISSMP and are necessary to define population targets. Should it, however, not be possible to establish the FRVs as part of the Management Plan, these could be included into the AFMP under this section.

More information on setting FRVs can be found in the Greylag Goose management planning process¹² and in a briefing document developed by the European Commission¹³.

4. Population targets above the FRVs

Population targets are set above the FRVs for agreed MUs based on an Multicriteria decision analysis (MCDA) process.

The purpose of the MCDA is to combine scientific information with social objectives and help decision makers to attain a preferred decision alternative. MCDA explicitly recognises multiple management objectives and inherent trade-offs and relies on decision makers to determine the relative importance of objectives.

An example on how MCDA is applied in practice, in this case for the Greylag Goose, can be found in Annex 3 of the Greylag Goose Adaptive Flyway Management Programme.¹⁴

Population targets for the management shall be defined above the Favourable Reference Population at a level that balances amongst various and sometimes conflicting fundamental objectives using the MCDA. The

¹²https://egmp.aewa.info/sites/default/files/meeting_files/information_documents/AEWA_EGM_IWG5_Inf_5_10_Defining_FRVs_for_GG.pdf

¹³https://egmp.aewa.info/sites/default/files/meeting_files/information_documents/AEWA_EGM_EWG5_Inf_5_12_EC_FRV_Briefing.pdf

^{10, 14} https://egmp.aewa.info/sites/default/files/meeting_files/documents/AEWA_EGM_IWG_5_14_AFMP_GG_Rev.1.pdf

Favourable Reference Values defined in this process should not be taken as management targets. They should be regarded only as the starting point above which management targets are to be set.

5. Cumulative impact of derogations and legal hunting

If required, this section can include an assessment of the cumulative impact of derogations and hunting on the development of the population, the likelihood of serious damage to agriculture and risk to air safety and to other flora and fauna and the non-lethal measures taken to prevent damage/risk, as well as the effectiveness of these. If necessary, this section can propose a coordination of the derogation measures between Range States to avoid risk to the population and to enhance effectiveness of the measures.

6. Monitoring indicators and programmes

The AFMP shall include indicators to measure the progress towards the Fundamental Objectives of the management plan and to design a monitoring programme to collect the data for these indicators. Detailed indicator factsheets can be developed, describing the rationale of the indicator selection, a more detailed definition of the indicator and the methodology of data collection, data flow, indicator calculation, gap filling and methodological uncertainties.

An example of an indicator fact sheet can be found in Annex 6 of the AFMP for the Greylag Goose.¹⁵

7. Protocols for the iterative phase (decision making, monitoring and assessment)

Management actions are evaluated systematically and adapted accordingly for improved management. Detailed protocols shall be developed as part of the AFMP to systematically evaluate management actions, refine models and adapt them accordingly for improved management. If necessary, these protocols can be further described in an Annex to the AFMP.

The following sections **can** be added as Annexes to the AFMP, as applicable:

Annex 1. MU-specific workplans

If MUs are defined, annual MU-specific workplans can be developed and reviewed periodically. These workplans can include specific actions which implement the objectives outlined in the management plan. Action can be specified by Range State, Stakeholder or a specific Task Force (e.g. in case it is a crosscutting issue).

The timescale in combination with the priorities set in the management plan can be used to phase the implementation of actions. Thus, the most important would be to implement Essential actions that have an Immediate timing, followed by High priority with Immediate timing, etc.

Annex 2. National Overview

Care must be taken to ensure that the management actions recommended by AFMPs are not inconsistent with the legal obligations prescribed by relevant international instruments. For example, the AFMP has the potential to, inter alia, assist Range States in assessing the need for derogations from the provisions of Article 5 of the Birds Directive (and, to the extent that they are relevant, the protections prescribed by the Bern Convention and AEWA) and in coordinating the implementation of their derogation schemes. Each AFMP

¹⁵ https://egmp.aewa.info/sites/default/files/meeting_files/documents/AEWA_EGM_IWG_5_14_AFMP_GG_Rev.1.pdf

should therefore contain information that is relevant for assessing the need for derogations at Range State level. This should include:

1. Characterisation of the spatial and temporal extent and trends of damage to agriculture and of risks to human health and air safety as well as to other flora and fauna that can be attributed to the population/MU in question, including predicted future changes in these;
2. A description of the methods applied in the past assessments [*for the need for derogations*] for each country and recommendations for the development of future guidelines for assessments;
3. Description of the methods applied or tested to prevent damages and to reduce risks, their effectiveness and sufficiency to tackle the problem;
4. Understanding of the link between population level and damages or risk;
5. List of SPAs and other protected areas designated for the species/population;
6. Management of the species and the damage inside and outside SPAs;
7. Tackling damage prevention inside and outside SPAs (accommodation areas, derogations, etc.).

It should be noted that this activity may require securing additional capacity and funding.

Annex 3. Population Models

This section shall include population models to assess the cumulative impact of derogations and hunting, to inform decisions.

Annex 4. Impact Models

This section shall include models that will assess the predicted outcomes of defined management actions (e.g. effect of derogations) on the fundamental objectives set in the ISSMP/IMSMP. For example, they could investigate if there is a relationship between goose abundances and the amount of damage caused by the species to agricultural crops, risks to air safety or other sensitive flora and fauna.

Annex 5. Protocols for the iterative phase (decision making, monitoring and assessment)

Detailed protocols for the iterative phase can be presented in this section, in order to systematically evaluate management actions and adapt them accordingly for improved management.