NOTIFICATION AUX PARTIES

No. 2025/100 Genève, le 19 août 2025

CONCERNE :

UNION EUROPÉENNE

Invitation à des réunions en ligne pour un retour et un échange d'informations sur le projet d'orientations de l'UE pour l'évaluation des incidences des importations de bois dans l'UE sur la récolte

1. La présente notification est publiée à la demande de l'Union européenne (UE) et de ses États membres.

2. L'UE et ses États membres invitent les parties à la CITES et les parties prenantes à des réunions en ligne afin d'examiner le projet d'orientations de l'UE pour l'évaluation des incidences sur la récolte des importations dans l'UE d'espèces du bois inscrites à la CITES (voir **annexe I**, seulement en anglais). Une fois finalisées, ces lignes directrices seront appliquées par les autorités scientifiques des États membres de l'UE lors de la formulation de l'Avis de commerce non préjudiciable (ACNP) pour les importations des espèces de bois répertoriées dans la CITES.

3. La CITES est mise en œuvre dans l'UE au moyen des règlements de l'UE sur le commerce des espèces sauvages (RCES)[1], qui prévoient **des mesures nationales plus strictes** (article XIV, paragraphe 1, de la Convention). Ces mesures comprennent des exigences supplémentaires en matière de permis d'importation pour les espèces inscrites à l'annexe B du RCES de l'UE (contenant des espèces inscrites à l'annexe II et certaines espèces supplémentaires). Conformément au RCES de l'UE, l'autorité scientifique de l'État membre d'importation de l'UE doit élaborer à un ACNP sur les importations d'espèces de l'annexe B. L'objectif de ces ACNP est de veiller à ce que « l'introduction dans la Communauté ne nuirait pas à l'état de conservation de l'espèce ou à l'étendue du territoire occupé par la population concernée de l'espèce » [article 4, paragraphe 2, point a), du règlement (CE) n° 338/97 du Conseil]

4. Le présent projet d'orientations pour l'évaluation des incidences sur la récolte des importations de bois des espèces inscrites à la CITES dans l'UE est le résultat d'un vaste processus de développement, comprenant des discussions au sein du groupe d'examen scientifique de l'UE, une analyse des réponses et des retours d'information reçus, notamment par l'intermédiaire du PC26 Doc. 18, Notification No. 2023/102, Notif-2024-138, PC27-Inf-10 et l'évènement parallèle

[1] *Règlement (CE) n° 338/97 du Conseil, règlement (CE) n° 865/2006 de la Commission , règlement d'exécution (UE) n° 792/2012 de la Commission*.

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« Évaluation des importations de bois CITES dans l'Union européenne – État d'avancement et discussion des critères d'évaluation au titre des règlements de l'UE sur le commerce des espèces sauvages » à la vingt-septième session du Comité pour les plantes à Genève.

5. L'UE et ses États membres accordent une grande importance aux **commentaires et avis actuels et futurs des États de l'aire de répartition et des parties prenantes**. Les discussions et les échanges avec les États de l'aire de répartition et les parties prenantes constituent donc un élément important de notre processus d'examen. Quatre réunions seront organisées afin de présenter et de discuter le projet de lignes directrices, qui intègre les commentaires issus des échanges précédents :

   - Mercredi 10 septembre 2025 :
     - Pour la région Asie et la région Océanie: 8 h 30 – 10 h 30 (CEST)
     - Pour la région Amérique centrale, Amérique du Sud et Caraïbes : 16 h 30 – 18 h 30 (CEST)
   - Jeudi 11 septembre 2025
     - Pour la région Afrique : 11h00 – 13h00 (CEST)

   Les participants des parties à la CITES sont invités à s'inscrire aux réunions de leur région respective en envoyant un message à ENV-CITES@ec.europa.eu **avant le 27 août 2025**.

6. Le processus de révision en cours comprend également des commentaires issus des discussions et des **échanges avec des experts en foresterie et en écologie forestière**. **L'annexe II** (seulement en Anglais) présente un aperçu détaillé des commentaires reçus qui ont été intégrés dans la version provisoire actuelle des lignes directrices au cours du processus de révision. Une réunion avec des experts en sylviculture et en écologie forestière aura lieu le **jeudi 11 septembre 2025, de 15 h 00 à 17 h 00** (CEST). Les experts intéressés à participer à la réunion sont priés de contacter l'UE à l'adresse env-cites@ec.europa.eu **avant le 27 août 2025**.

7. Une fois que les commentaires supplémentaires issus des réunions auront été pris en considération, les critères d'évaluation définitifs pour les importations de bois dans l'UE seront communiqués par le biais d'une notification CITES. Une période transitoire d'au moins 12 mois sera mise en place avant que les autorités scientifiques des États membres de l'UE ne commencent à appliquer les nouveaux critères.

Draft: *Guidance evaluating area-based harvest impacts for timber imports into the EU*

Introduction

This evaluation guidance document aims to support EU Member States Scientific Authorities to access applications for timber imports specifically where non-detriment findings are required for timbers originating from wild source and assisted productions (source code W and Y). Assisted production sources can vary (level of propagation, planting or human intervention), for applications where silvicultural measures, such as enrichment planting, has taken place in previous cutting cycles and current harvest takes place in regenerating forests the following guidance will apply under Article 4(2) of EU Regulation 338/97[2]. It is the responsibility of the EU Member States Scientific Authorities to apply the regulations. This document aims to provide guidance and is not a mandatory requirement for EU authorities.

The purpose of this guidance is to:

1. Provide guidance to EU MS authorities in the process of making NDFs for timber imports based on the most recent state of knowledge and discussions from the SRG and to provide a prioritization on what is considered as most important and applicable aspects and thresholds that form part of the usual steps for preparing an NDF.
2. State clearly the information required by EU authorities to make timber NDFs and outline standardized communication (e.g. requests for information) to export countries that enables export countries' authorities and traders to develop a clear common understanding picture of what EU authorities evaluate in this regard.
3. Facilitate discussions within the SRG on timber imports and be a reference for discussions and for possible considerations on scientific evidence that may allow for deviations.

The evaluation guidance could be updated and changed, due to opinions of the SRG based on science. Any update or change of this guidance, excluding necessary and unavoidable case-by-case decisions, will be communicated in advance to CITES parties and stakeholders.

Underlying assumptions on receipt of an import application

We assume that the harvest and trade is legal and that any CITES quotas will be respected and met, and that the import of timber is compliant with the EUDR (once in effect). However, any additional offtakes affecting the harvested population, such as additional uses/ harvest other than timber (e.g.

[2] „The import permit may be issued only (...) when the competent scientific authority, after examining available data and considering any opinion from the Scientific Review Group, is of the opinion that the introduction into the Community would not have a harmful effect on the conservation status of the species or on the extent of the territory occupied by the relevant population of the species, taking account of the current or anticipated level of trade. (...)"

collected seeds or bark) should be included in any calculation that deals with the future development of the harvest population.

In case a SA of the importing country has any legality doubts the import request is to be handed back to the MA of the importing country to first clarify the legality of the import.

The task of the Scientific Authority in this context is laid down in Article 4 (2) a in COUNCIL REGULATION (EC) No 338/97 (please refer to the respective translation relevant to your State):

> *"the competent scientific authority, after examining available data and considering any opinion from the Scientific Review Group, is of the opinion that the introduction into the Community would not have a harmful effect on the conservation status of the species or on the extent of the territory occupied by the relevant population of the species, taking account of the current or anticipated level of trade. This opinion shall be valid for subsequent imports as long as the abovementioned aspects have not changed significantly; …"*

Imports from a species-country combination that is under a "SRG-Referral" have to be referred always and agreed upon within the EU SRG on a case-by-case basis. The results of such discussions are to be considered by the importing EU MS as the opinion of the SRG, in some cases discussions may result in a positive or negative SRG opinion. Species that are "Under Tracking" or that do not have any specific SRG opinion are not discussed within the SRG unless an EU MS brings the specific import request to the SRG for discussion for wider expertise and input. Import decisions on species-country combinations or species-FMU (Forest Management Unit) combinations that deviate from relevant positive or negative opinion need the agreement of the SRG. Changes of such SRG opinions can only be made by the SRG. Further information and guidance on the SRG opinions and working methods can be found in the SRG guidelines.[3]

When applying article 4 (2) of (EC) no. 338/97 and evaluating timber imports from long lived tree species, the following common understanding is considered: To evaluate possible harmful effects on conservation status and on occupied territory of the respective population, substantial amounts of data would be necessary on the entire species as well as the affected population, to address its overall distribution and the threats (incl. land use changes, illegal logging in protected areas, influence of climate change, domestic trade, …). For most CITES listed species imported into the EU, such species-specific data with the required level of detail to fulfil the task of elaborating an evaluation that is in line with the above described legal duties are not available, neither on the level of the species' full distribution, nor on regional or national scale.

Within the EU we can only access this at the level of the harvest area and determine that a specific harvesting regime in a specific area has no detrimental effect on the population concerned and is, potentially, based on robust and effective monitoring, which is carried out in the affected forest. Monitoring could confirm that a harvesting regime, that has been applied for decades and is still applied today, supports stable sustainable population sizes at the same or similar level as at the beginning of the harvest regime. In cases where such detailed monitoring is available, it should be requested and used. However, such detailed monitoring is not far advanced within many exporting

[3] **Reference guide**

countries. The lack of monitoring is the reason for considering projections for the development of the population under a certain harvest regime into the future, as applied through the criteria of the SRG.

In the absence of the necessary detailed monitoring information as described above and to avoid making unduly use of the pre-cautionary assumptions that all relevant but unknown factors would be in the worst possible shape, the reference area the EU will refer to for NDFs for trees is the forest management unit (FMU)[4]. This is in line with the recommendations of Module 10 on tree species of the International expert workshop on NDF in 2023 in Nairobi (CITES 2024).

Sustainable forest management (SFM) is defined by the Food and Agriculture Organization of the United Nations (2024) *"as the sustainable use and conservation of forests with the aim of maintaining and enhancing multiple forest values through human interventions […]"*. Maintaining timber tree species as key forest value requires an understanding in this evaluation guidance that only as much wood or timber of the concerning species is felled/negatively affected as can grow back through natural regeneration and recruitment. FAO specifies further that *"people are at the centre of SFM because it aims to contribute to society's diverse needs in perpetuity"*.

When SFM is applied the detailed information is available at the forest management unit level (FMU) and is usually accompanied by a forest management plan (FMP) that includes and is based on species-specific inventory data (Food and Agriculture Organization of the United Nations and EFI 2018; FAO 1998). This means that relevant data is available and collected and can be made available to an EU MS to assist with the formality in making an NDF as required by EU Regulations. Species-specific inventory data in forest management plans of an FMU is usually the best available data on species level. Therefore, if the species is maintained in the FMU more or less at the level it has been inventoried it can be assumed that a) unknown factors outside the FMU (e.g. land use change, illegal logging) may be of less importance for the specific import evaluation and b) the extent of the territory occupied will not be compromised by the requested trade. Import applications will therefore be evaluated within the EU at the FMU level. In the case where the described detailed information on FMU level (FMPs, AOPs, species-specific inventory data) is not available, a much more complex assessment (applying the precautionary approach for those aspects not known) is necessary. This variety of complexity associated with individual assessments without detailed information on FMU level is not described in this guidance.

The key question to be addressed is whether the managed population of the species within the FMU is maintained at the current level over time and projected to be maintained after the harvest at a level consistent with its capacity to sustain a viable population in the future.

As part of a wider process to elaborate CITES NDF guidance an International NDF expert workshop was held in Nairobi in 2023 (CITES 2024), which outlined the 9-Steps-NDF-Guidance for timber species (Wolf *et al.* 2024) as being internationally recognised and recommended to be used for timber NDFs (Module 10). The 'Guidance evaluating area-based harvest impacts for timber imports into the EU' addresses specifically step 6 of the 9-steps NDF-Guidance for timber species.

[4] An area of forest for which an approved Forest Management Plan (FMP) is in operation, which may consist of several subdivisions, such as a block (a specified locality), compartments or a felling series (FAO 1998)

Precautionary principle

The evaluation guidance allows to assess whether Article 4 (2) a in COUNCIL REGULATION (EC) No 338/97 is met, by breaking down the requirements of Article 4 (2) a into key criteria. This allows to limit the application of the precautionary principle to key aspects of a particular criterion. The lack of relevant information or of sufficient detail and accuracy of key aspects results in a negative assessment without the need to further evaluate the import request, or, in some cases, to the necessity of particularly strict compliance with other requirements and aspects of a sustainable forest/species management that might alleviate the increased risk. This evaluation guidance contributes to limit the application of the precautionary principle to clearly defined aspects relevant for the assessed criteria.

Proportionate principle

The proportionate principle is incorporated as well, as the evaluation guidance, gives several options to continue with the evaluation even if ideal criteria are not met (see below the conditional yes).

Structure of the harvest impact evaluation guidance

In this evaluation guidance each step includes a decision key to determine whether the required information is available in the necessary form and/or the criterion is fulfilled. As an easy-to-apply format **key questions** point out the required quality that shall be addressed in the response. A short **guidance** text gives relevant background information. Then, different options are available for answering the key question. These options encompass three types of answers and in some cases an additional note:

- **Yes:** indicates that requirements are fully met and that the question can be answered with a clear yes. Evaluation of following key questions can be continued. Answering to all decision keys / key questions in sequence with Yes would result in a positive overall evaluation / NDF.
- **Conditional yes:** indicates that the key question can only be answered with a yes because other, clearly specified, criteria are met. If this is the case, the evaluation of following decision keys / key questions can be continued, leaving the possibility to come out at the end with an overall positive evaluation / NDF.
- **No:** the key question can clearly be answered with a no if the criterion is not met. This leads to a negative NDF.

The following set of decision keys is meant to be followed in the suggested order. All criteria / decision keys must be passed to be compliant with this guidance logic for the evaluation of whether the harvest of the subject species does "…not have a harmful effect on the conservation status of the species or on the extent of the territory occupied by the relevant population of the species…" (Art. 2 a) Council Regulation (EU) 338/97). This principle is particularly important for the sequence of Yes-options of the decision keys, respectively, because the logic of the evaluation guidance implies that evaluating criteria later in the sequence is to a considerable degree conditional on positive (i.e. Yes) responses to questions / criteria earlier in the sequence. The order of steps is also set in order to avoid unnecessary work in cases where it would become clear very early in the process that, due to negative responses to key questions, no further assessment was necessary.

Step-wise evaluation guidance

Information availability

List of information that is required for an assessment

- Long-term forest management plan for the FMU
- Inventory data on FMU level
- Corresponding harvesting plan (Annual Operation Plan - AOP) for the respective annual cutting area / Annual Allowable Cut (AAC)
- Inventory data on AAC level
- Annual harvest / felling permit
- Official approval documents of the long-term forest management plan and the corresponding annual harvesting plan (AOP)
- Extra documents, if necessary, such as the official document that is necessary for each additional year an AAC remains open for harvest

Key question 1: Is sufficient information available to enable evaluating whether the species can be maintained in the area over time (FAO has defined such systems as Sustainable Forest Management) in its current range?

Guidance: Specific information about the harvest area is required to enable evaluating whether the harvest impact does "…not have a harmful effect on the conservation status of the species or on the extent of the territory occupied by the relevant population of the species…" (Art. 2.a) of EU Council Regulation 338/97).

Central information requirements include the location of the origin of the wood (i.e. from which harvest area/AAC), the management plan of that area, the annual operating plans (AOP) of the harvest area that refers to the annual allowable cut[5] (AAC), inventory data of the harvest area (FMU + AOP) and how the inventory was carried out (if the design/methodology is not set by law and/or if such a methodology is not provided in the FMU management plan), as well as official approval documents and the annual harvest/ felling permit.

Management plan (FMU)

Guidance: The management plan on FMU level is required as this is the scale where most detailed information is available and which lays down which kind of management is planned to be applied and

[5] The Annual Allowable Cut (AAC) is the annual amount of timber that can be harvested on a sustainable basis within a defined forest area.

accepted by the respective forest authorities of the country of origin. A full management plan needs to be validated and accepted by a competent authority of the country of origin and should include detailed information about the management of the forest unit, the method applied for the inventory as well as details about the harvest scheme (e.g. harvest rate, left seed trees, etc.). Any amendments to the forest management applied need to be confirmed and validated by a competent authority in the corresponding country. The implementation of suggested changes must be visible and confirmable through the annual harvest plan and the harvest permit. Past irregularities must be considered in the evaluation.

- **Yes:** Availability of full and validated management plan
- **Conditional yes:** Availability of the most important information that usually can be found in a management plan, but in another form than a management plan, validated by a competent authority of the country of origin → further evaluation/continue with the guidance
- **No:** A validated management plan is not available. It has to be assumed that there is no controlled management in place and that the entire resource will be harvested → negative NDF

Note: While the FMU / forestry concession level is deemed the appropriate scale for evaluating the sustainability of timber exploitation, data on the forest management for other scales (i.e. exceeding the FMU level, such as province, region, or entire countries) may, in exceptional cases, also be used as a basis for the evaluation. However, such cases would only comply with overall requirements for evaluations of sustainability if the management documents explicitly mention and include the harvest area as well as approved obligations to implement the described management of the larger area to the specified harvest location(s) without any deviation. Additionally, such deviations from the regular scale of evaluation would only be admissible if it is possible to justify this scientifically, and if a justification is provided for why the FMU was not used in case it was available. Any of such exceptional cases should be discussed in the SRG.

Inventory data (FMU)

Guidance: The availability of inventory data is essential for the evaluation of the harvest impact. It provides an overview of the resource available, the structure of the population and allows projections of the population after harvest took place. Ideally the data (number of stems or the basal area[6] per hectare or sampling area or harvest area) is given per diameter at breast height (DBH) class, at minimum in diameter classes of 10 cm – widths and starting at minimum with 20 cm DBH. In case of a minimum cutting diameter below 30 cm the inventory data must encompass at least one diameter classes below the minimum cutting diameter. The data can be given as stems/ha, or number of stems/sampling area. A sound and well-reported inventory also includes detailed information on when the inventory was conducted, ideally with specific dates, and about the inventoried area, applied methods and, if applicable, statistical errors of the sampling results. It is worthwhile, and in some cases crucial, to evaluate this information with regard to the reliability and precision of the inventory results.

[6] Basal area describes the area occupied by the cross-section of tree trunks and stems at breast height (130cm from the ground). (Faber-Langendoen and Gentry 1991)

- **Yes:** Inventory data is available in appropriate quality (see above) → further evaluation/continue with the guidance
- **Conditional yes:** Inventory data is available, but not in best detail (e.g. bigger diameter classes than 10 cm, only bar charts indicate the population demography and specific numbers are missing, inventory data are only available for DBH > 30 cm, doubtful or unknown inventory methods) → further evaluation, but interpretation of the available data under the precautionary principle (interpretation of the data by assuming the worst possible manifestation of the variable(s))
- **No**: Inventory data is missing and no strong science-based evidence on sustainable logging is available → negative NDF

Note: In exceptional cases, species-specific inventory data of sufficient accuracy and detail on other scales could also be used as a basis for evaluation in case that the inventory unambiguously included the actual harvest area(s), i.e. if explicitly documented. Such an exception shall only be applied if it is possible to justify this scientifically (e.g. that conditions of the overall inventory represent conditions of the actual harvest area). Additionally, if data on FMU level is available, this data has at least to be considered in comparison to the corresponding higher scale. Any of such exceptional cases should be discussed in the SRG.

Annual harvest plan/Annual operating plan (AOP)

Guidance: The availability of an annual harvest plan for the AAC area is essential, to verify the application of key parameters set in the forest management plan on FMU level, to adequately consider the presence of sufficient seed trees per hectare, and to check quota compliance.

- **Yes:** Harvest plan or annual operating plan is available, or the most important information that usually can be found in a harvest plan is available in another form. The documents or information are validated by a competent authority of the country of origin → further evaluation/continue with the guidance
- **No:** Harvest plan or annual operating plan is not available, as well as no comparable information is available and there is no justification for the proportionate principle (e.g. harvest rate above 50%, effective fruiting diameter (EFD)[7] is less than 20 cm below the minimum cutting diameter) → negative NDF

Inventory data (AAC)

Guidance: In many cases the inventory made on AAC level is a 100% inventory (census) of stems equal to or above the minimum exploitable diameter (MED), ideally indicated as stems per diameter classes. Only in a few cases, also lower diameter classes are considered in the inventory on AAC level. The AAC level inventories are of special importance to guarantee the presence of sufficient harvestable trees to supply the permitted harvest volume or quota, and the presence of sufficient seed trees. Similar to the inventory on FMU level, a sound and well-reported inventory also includes information on when the inventory was conducted, ideally with specific dates, and about the applied methods and statistical

[7] The effective fruiting diameter (EFD) is an estimate of the diameter at which at least 50% of the trees in the population produce seeds suitable for germination (ATIBT 2022).

errors of the sampling results. If this information is available, it is worthwhile, and in some cases crucial, to evaluate this information with regard to the reliability and precision of the inventory results.

- **Yes:** Inventory data is available → further evaluation/continue with the guidance
- **Conditional yes:** No inventory data is available, but there is strong science-based evidence for the target species, which will be noted in the NDF, that the consideration of the proportionate principle is acceptable, e.g. harvest rate below 50% or EFD is more than 20 cm below the minimum cutting diameter → further evaluation/continue with the guidance
- **No:** No inventory data and no justification for the proportionate principle -> negative NDF

Harvest permit (AAC)

Guidance: The harvest permit is required in this evaluation guidance for export countries where the requirement for a harvest permit before logging is set by law. The harvest permit regularly includes an indication about the species-specific permitted harvest volumes. This allows to compare quotas and harvest rates given in the Management plan on FMU level and the annual operating plan on AAC level with the species-specific harvest volumes indicated in the harvest permit.

- **Yes:** Harvest permit is available -> further evaluation/continue with the guidance
- **Conditional yes:** No harvest permit is available and we are not aware that in the country of origin such documents exist, but a validated AOP exists that defines the harvest rate, if below 100%, and/or the annual allowable cut volume → further evaluation/continue with the guidance
- **No:** No harvest permit or species-specific permitted harvest volumes are available although the laws in the country of origin prescribe a harvesting permit or species-specific permitted harvesting quantities → negative NDF, because it has to be assumed that in fact more trees or timber volume than planned have been approved to be harvested. The import request is handed back to the MA of the importing country to first clarify the legality of the import.

Additional useful information (not mandatory)

National NDF

Additional useful and supporting information may be found in NDFs determined by the exporting country for the target species (e.g. regarding quota calculations, legal set quotas, maximum harvest rates (MHR), recovery indices, transformation/conversion rates, minimum cutting diameters, density thresholds and biological information on the species). The country of origin may be contacted and asked whether it is possible to provide such NDFs or similar information. In cases where relevant information on the management of the species deviates from management plans and other specific documents (see above), a consultation with the country on whether management information in the NDF is in fact applied in relevant FMUs is advisable too.

1.6.2 Available supporting data and information for imports from certified forests

For certified forests, additional information and detailed documentation may be available depending on the audit reporting and certification scheme as well as the country of origin of the harvested timber and country-specific certification schemes. This data may, for example, include post-harvest monitoring data, more detailed inventory data (e.g. for different harvest blocks covering several AAC

plots, geo-referenced inventory data, raw inventory data, ...) or other relevant species-specific data or information on the management. These data could provide additional information for the assessment of the respective timber import according to this evaluation guidance, if made available by the certification body, the logging operator and/or traders.

General effects on the harvest area: the threat of land use change and deforestation

Key question 2: Is the land where the harvest took place intended to remain as forest?

Guidance: While the EUDR includes timber in general and does not discriminate between species, the EU Council Regulation 338/97 is on endangered species. The consideration of Article 4 (2) a of the EU Council Regulation 338/97 requires to also consider future possible trade and the competent scientific authority must be of the opinion that the import does "…not have a harmful effect on the conservation status of the species or on the extent of the territory occupied by the relevant population of the species…". Land use change doubtlessly affects the extent of the territory occupied. The compliance with the EUDR has to be in place but noting that confirming this is not the competence of CITES Scientific or Management Authorities (but close cooperation with the national authority responsible for the implementation of EUDR is encouraged). Nevertheless, even if the harvest area meets the EUDR specifications, the risk of future land use change associated with the harvest or with other factors must be considered. The land use of the harvested area is often determined by the definition of land ownership. Timber from areas which, due to their land use definition, do not explicitly limit its use to forests can only be imported if the forested area is meant to remain forest.

This permanency of forest land use and/or preclusion of land use change may also be assured through e.g., an officially confirmed commitment of long-term land use as forested land or a confirmed long-term forest management plan.

- **Yes:** The land tenure is by law or a contract destined to remain forest → further evaluation/continue with the guidance
- **Yes:** While land tenure does not necessarily foresee the maintenance of the forest, additional documents (official declaration/commitment accepted by a competent authority of the country of origin or long-term management plan) foresee to maintain the forest → further evaluation/continue with the guidance
- **No:** Land use change is evident or cannot be excluded or official documents mention the change of land-use → negative NDF as it is known or has to be assumed that the territory occupied by the respective population will be reduced.

Note: In case the land use change (both past or future) only concerns negligible parts of the target harvested population (not to be mistaken for the entire species range) and this is backed-up by validated information that this fact does "…not have a harmful effect on the conservation status of the species or on the extent of the territory occupied by the relevant population of the species…" import may be assessed as being non-detrimental if other sustainability criteria are met.

Validation and identification of key parameters on FMU and AAC level

Firstly, this chapter serves to validate whether the exported volume(s) (or volumes if more than one shipment is imported into the EU; see3.1) stay within or surpasses the set annual FMU/concession quota, and whether the harvest permit and/or the values in the AOP are in line with that quota. Secondly, this chapter serves to identify the applicable conditions relevant for the harvest impact evaluation of the next chapter. Key parameters for the latter are the minimum exploitable diameter (MED) or minimum cutting diameter (MCD) and the harvest rate or harvest percentage. Quotas as well as these parameters are indicated in different documents, typically in the FMP, AOP, harvest permit, national NDF. The relevant documents as well as the included information vary between countries of origin and must be identified for each case. Usually, the quotas, harvest rates and the set MED/MCD correspond between the different documents. In case of deviating between the values of the same quota or parameter in different documents it is important to identify, which of the values shall be applied. This is indicated in the following chapters. The validation and possible outcomes regarding the general pre-condition whether sufficient trees occur in the annual harvest area is addressed in chapter 3.4.

As already mentioned in the box regarding the "Underlying assumptions on receipt of an import application" in case this validation and identification of the general conditions results in any legality doubts the import request is to be handed back to the MA of the importing country to first clarify the legality of the import.

Quota validation

Key question 3.1: Are the annual quotas[8] within the permitted range?

Guidance: Export permits usually indicate annual national quotas, which are set by the countries of origin, as well as their consumption. Specified annual harvest quotas are usually developed and described in the FMP on the FMU level and in the AOP on the AAC level, both are validated by a competent authority. Quotas from single FMUs are often compiled in the national NDF or other legal documents. National NDFs usually describe how the national quotas are calculated, which can be important information for the evaluation process. It is important to consider that the harvest permit issued by a competent authority is often only a rough estimate of what is to be cut at maximum and thereby often an overestimate of the actual harvest, meaning that actual offtakes are lower than the permitted volumes. However, without an official document of a competent authority confirming a lower harvest than the permitted volumes the precautionary approach is applied and it is assumed that the permitted volumes were harvested.

Usually, FMU/concession quotas are set in volumes (m^3) referring to roundwood equivalent (RWE) volumes[9]. For traded logs this guidance recommends to assume that the volumes given on the CITES

[8] Annual quotas encompass national export quotas, national export quotas on FMU, annual harvest quotas for a specific FMU level (e.g. set in the national NDF) and harvest quotas for specific annual allowable cut (AAC) areas (e.g. set in the national NDF and/or set by the AOP and/or by the harvest permit). Without specifications these quotas are set roundwood equivalents in m^3.

[9] One m^3 roundwood equivalent expresses the amount of roundwood needed to produce a m^3 of a certain wood product. By expressing consumption in m^3 roundwood equivalents, volumes of products

documents correspond to RWE. All other trade terms require the conversion of the imported volume (e.g. sawn wood, veneer, etc.) to the corresponding RWE. Therefore, sawn wood and veneer as well as wood that is reported in kg or m² must be converted to RWEs. This requires the consideration of an adequate conversion rate. In most cases a conversion rate is mentioned in the FMP of the FMU or in the national NDF (if available). If the management plan does not mention or justify the applied conversion rate, Annex II lists examples of species-specific and location specific conversion rates as well as the publication of forest product conversion factor of the Food and Agriculture Organization of the United Nations *et al.* (2020) that should be considered. In case a conversion rate indicated in the management plan is much higher than the example rates given in Annex I, science-based justification of this higher conversion rate is required.

. Species-country combinations for which the SRG determined a tracking of import evaluation decisions are tracked separately in terms of harvest quota compliance. If the quota is surpassed by the specific import volume, the import request is refused and referred back to the Management Authority for legality reasons, indicating the surpassed quota (i.e. the annual harvest permit for the FMU) as justification for the rejection.

with different properties such as sawn wood and panels or different measurement units such as m³ (sawn wood) and (metric) tonne (mt) (paper and board) can be summed together.

Responses 3.1:

- **Yes:** The annual FMU/concession quota[10] for the origin of the timber that shall be imported is not surpassed and corresponds to the maximum harvest volume and/or to the maximum number of trees permitted to be harvested indicated in the AOP and/or in the harvest permit as well as the AOP indicates that sufficient trees are occurring in the AAC area under the consideration of potentially applied maximum harvest rates to cover the demand of the volume or number of trees to be harvested → further evaluation/continue with the guidance
- **Yes:** If no FMU/concession quota is defined the maximum harvest volume and/or the maximum number of trees permitted to be harvested is indicated in the AOP and/or in the harvest permit for the origin of the timber that shall be imported. If in that case the indicated volume or number of harvestable trees in the AAC area is not surpassed under the consideration of potentially applied maximum harvest rates (see also 3.2) to cover the demand of the volume or number of trees to be harvested → further evaluation/continue with the guidance
- **No:** The annual FMU/concession quota or the annual harvest quota or maximum permitted harvest volume or the maximum number of trees permitted to be harvested (as indicated in the AOP or in the harvest permit, if there is no concession quota defined) for the origin of the timber that shall be imported is surpassed and/or the AOP indicates that insufficient trees are occurring in the AAC area under the consideration of potentially applied maximum harvest rates to cover the demand of the volume or number of trees to be harvested → negative NDF, the application is referred back to the Management Authority to further deal with that application

Validation of the harvest rate/harvest percentage[11]

Key question 3.2: Are the harvest rates in the forest management plan (FMP) on FMU level and the ones in the annual operating plan and/or the ones in the harvest permit identical?

Guidance: Maximum harvest rates[12] (MHR) are either set by national law or are developed and described in the FMP on the FMU level and indicate the maximum percentage of the available trees of a species above the minimum cutting diameter (MCD) that are allowed to be harvested and/or the maximum percentage of the available volume of a species above the MCD that is allowed to be harvested. The applied harvest rate at AAC level is usually validated in the AOP, and/or the harvest permit represents another possible document for the validation. The harvest rate may deviate between the FMP, the AOP and the harvest permit. Therefore, it also has to be validated whether the harvest rate mentioned in the general forest management plan, in the AOP and in the harvest permit

[10] Indicated either in the CITES export document or on the CITES website as National FMU CITES export quota or in the national NDF

[11] The harvest rate or the harvest percentage if used in general indicate the maximum or effective percentage of the number of trees above the MCD that are allowed to be harvested and/or the maximum or effective percentage of the available volume of a species above the MCD that is allowed to be harvested

[12] The maximum harvest rate prescribes the maximum percentage of trees of a species above the minimum cutting diameter (MCD) that are allowed to be harvested and/or the maximum percentage of the available volume of a species above the MCD that is allowed to be harvested.

are corresponding or whether discrepancies may be identified. If no maximum harvest rate is indicated in the management plan it must be assumed that all trees above the MCD are harvested, which means that the maximum harvest rate is at 100%.

If the indicated maximum harvest rate at AAC level, either according to the confirmed AOP or according to harvest volume indicated in the harvest permit, differs from the harvest rate specified in the FMP at FMU level and/or to the relevant NDF of the country of origin, the precautionary principle must be applied and therefore the highest harvest rate from all documents is to be considered for the evaluation of all other parameters at FMU and AAC level. A lower harvest rate than the highest indicated in one of the documents (precautionary principle) can only be considered if this value is specifically and separately confirmed by a competent authority in the country of origin (e.g. by the national CITES authorities).

Responses 3.2:

- **Yes:** The maximum harvest rate indicated in the Forest Management Plan (FMP) on FMU level and the applied harvest rate on AAC level (either indicated as harvest rate in the harvest plan or apparent through the maximum harvest volume in the harvest permit) are identical → further evaluation/continue with the guidance
- **Conditional yes:** The maximum harvest rate indicated in the Forest Management Plan (FMP) on FMU level and the applied harvest rate on AAC level (either indicated as harvest rate in the harvest plan or apparent through the maximum harvest volume in the harvest permit) are not identical → further evaluation/continue with guidance but for precautionary reasons the higher harvest rate is applied for the evaluation of all the other parameters (incl. on FMU-level)
- **Conditional yes:** The harvest rate indicated in the FMP at FMU level is lower than the harvest rate indicated at AAC level, but a competent authority in the country of origin certifies that the higher harvest rate at AAC level is not applied and that the actual harvest rather corresponds to the harvest rate mentioned in the FMP at FMU level → further evaluation/continue with the guidance applying the harvest rate at FMU level
- **NO:** The indicated harvest rate in the FMP at FMU level or in the AOP or in the harvest permit is below the legally defined maximum harvest rate → negative NDF, the application is referred back to the Management Authority to further deal with that application

Note: In the case of an indicated harvest rate that is above the legally defined maximum harvest rate the SA of the exporting country may be contacted. For the consideration of maximum harvest rates in the calculation of the RI% in chapter (4.2.3) only maximum harvests rates that are equal or below the legal maximum harvest rate can be considered and a direct application is only possible for maximum harvest rates that indicate the percentage of the number of trees above the minimum cutting diameter permitted for harvest. Volumetric maximum harvest rates are usually not exchangeable to maximum harvest rates that are referred to the number of trees above the MCD. A consideration of volumetric harvest rates for the calculation of the recovery index must apply the precautionary approach by increasing the indicated volumetric harvest rate (assuming that more is harvested in relation to the number of trees) under consideration of the size class distribution above the MCD. If the population demography shows many trees in high diameter classes above the MCD the indicated volumetric harvest rate must be increased to a higher extent than for a population demography that only has trees in a few diameter classes above the minimum cutting diameter. Only if the population

demography shows that there are only trees in one diameter class above the MCD then the volumetric harvest rate corresponds to the harvest rate that is related to the number of trees.

Validation of the MED/MCD

Key question 3.3: Is the species-specific minimum cutting diameter (MCD) above or equal to the legal minimum exploitable diameter (MED) and are they defined values in the forest management plan (FMP) on FMU level and the one in the annual operating plan and/or the ones in the harvest permit identical?

Guidance: Minimum exploitable diameters (MED) are set by national law, additionally minimum cutting diameters (MCD) might be developed and described in the FMP on the FMU level. The applied minimum cutting diameter at AAC level is usually validated in the AOP, and/or in the harvest permit. The MCD may deviate between the FMP, the AOP and the harvest permit. Therefore, it also has to be validated whether the MCD mentioned in the general forest management plan, in the AOP and in the harvest permit are corresponding or whether discrepancies may be identified. If no MCD is indicated in the management plan it must be assumed that the MED is applied for harvest.

Responses 3.3:

- **Yes:** The species-specific MCD corresponds across all relevant documents and is above the legal MED → further evaluation/continue with the guidance
- **Conditional yes:** The species-specific MCD in the harvest permit and/or in the AOP is above the MCD specified in the FMP on FMU level, additional safeguards are required: the lower MCD of the FMP must be applied for the calculation of the recovery index → further evaluation/continue with the guidance
- **Conditional yes:** The species-specific MCD in the harvest permit and/or in the AOP is below the MCD specified in the FMP on FMU level, additional safeguards are required: the lowest MCD of any of the documents must be applied for the calculation of the recovery index → further evaluation/continue with the guidance
- **No:** The indicated species-specific MCD is in one of the documents below the legal minimum exploitable diameter → negative NDF, the application is referred back to the Management Authority to further deal with that application

Note: In the case of an indicated MCD that is below the legally defined minimum exploitable diameter the SA of the exporting country may be contacted.

Validation of occurrence of sufficient nr. of trees for harvest at AAC level

Key question 3.4: Are there a sufficient number of trees above the MCD occurring at the AAC level to cover the maximum harvest volume, if applicable, given the stated maximum harvest rate?

Guidance: To be able to export a certain amount of timber it must be assured that in the corresponding AAC area sufficient trees occurred to cover the demand indicated in the corresponding harvest permit or in the national NDF or in the FMP. This can be validated through the AOP plan that usually includes the inventory data on AAC level.

Responses 3.4:

- **Yes:** At AAC level occurs a sufficient number of trees above the MCD to cover the maximum harvest volume under consideration of the indicated maximum harvest rate → further evaluation/continue with the guidance
- **No:** At AAC level occurs an insufficient number of trees above the MCD to cover the maximum harvest volume under consideration of the indicated maximum harvest rate or even no trees above the MCD → negative NDF, the application is referred back to the Management Authority to further deal with that application

Note: In case of discrepancies or if according to AOP no trees at all occur in the AAC area it is recommended to contact the scientific authority of the country of origin to ask for clarification.

Evaluation of harvest impacts

It is common in forestry that more than one parameter is required when evaluating harvest impacts. This has been confirmed by responses to CITES Notification 2023/102 and by forestry experts in discussion with the SRG. Therefore, species-specific harvest impacts require the consideration of several site- and species-specific factors. The following combination of site-specific and species-specific criteria addresses important aspects of this requirement. Evaluating the ecological sustainability and the harvest impacts is essential to ensure that the import does "…not have a harmful effect on the conservation status of the species or on the extent of the territory occupied by the relevant population of the species…" (Art. 4 (2) a) Council Regulation 338/97), ensuring that the population of the concerning species is maintained.

Preamble on data accuracy

In each evaluation of harvest impacts a general limiting factor is the data quality, especially regarding inventory data, which is highly dependent on the methodology and sampling design., but also on capacities of inventory staff.

Additionally, botanical inaccuracies (Lacerda and Nimmo 2010) and poor sampling methods or insufficient sampling intensities may lead to results that require a precautionary approach regarding the data interpretation. The appropriate choice of statistical estimators for target values and, if applicable, for statistical errors (ATIBT 2022) has a high influence on the inventory results and their confidence levels too.

Therefore, possible methodological inaccuracies and data with low confidence level (including the lack of error reporting) require a precautionary interpretation of the results. Management plans should aim to indicate statistical sampling errors whenever possible. In some cases where methodological flaws are obvious or likely, the provision of statistical errors of inventory results may become necessary to evaluate the information and should be requested from the importer, harvest operator or country of origin' CITES authorities. Interpretation of all results should consider the precautionary principle in favour of the target species.

This evaluation guidance does not explicitly integrate a compulsory consideration of a species-specific risk categorization but addresses the needs for species of different risk categories by interlinking the different criteria to assure sufficient safeguards where needed. Low risk species will more easily fulfil

the criteria by their ecological profiles, which will also lead to positive assessments (see also explanation in 4.1).

General species-specific risk

An NDF is a risk assessment and depends on the particular risks that apply to a species, a specific harvest area and management regime, resulting in different NDFs. However, taking into account that information necessary for a species-specific risk categorisation is often incomplete, the development of this evaluation guidance is based on the EU Scientific Authorities' experience in assessing sustainability risks in forest management and of timber harvests. This means that, in cases where all criteria of the evaluation guidance are fully met (= "Yes") and no additional species-specific concerns have been raised by the SRG, individual risks of species are considered to be addressed in the assessment of the harvest impact criteria. However, when specific risks are known to exist for individual species/situations stricter assessments may be necessary and should be considered by the importing Scientific Authority and documented.

In Annex II, see a list of examples of risks which can be considered in the assessments.

Evaluation on FMU level → based on FMP and management inventory data

Population demography

The population diameter (class) distribution per area is the base for any harvest impact evaluation. A minimum density of trees in the FMU in general (i.e. sufficient availability of trees) is a pre-condition for any harvest and the presence of sufficient numbers of trees in small diameter classes is an indicator for regeneration capacity in the long-term. Both aspects, population demography and population density, are crucial for assessing whether the harvest of a particular species does "…not have a harmful effect on the conservation status of the species or on the extent of the territory occupied by the relevant population of the species…" (Art. 4 (2) a) Council Regulation (EU) 338/97). Considering possible data accuracy issues as explained in the preamble on data accuracy the precautionary principle should be applied.

Analysing the population demography may serve several purposes, including:

a) the identification of the regeneration capacity[13] (e.g. through the presence of trees in small diameter classes).
b) indications of species-specific light requirements, which may give a more comprehensive understanding of ecological requirements and hence regeneration capacities of the target species.
c) the identification whether certain diameter classes contain no or very few individuals in relation to the diameter classes directly below or above, as an indication of a precarious population demography, or of insufficient sampling in the inventory

[13] In this document regeneration capacity is the capacity of a tree species that allows to sustain itself through production of sufficient seeds or shoots, the growth and survival of seedlings, saplings and shoots that replace harvested or dead large and mature tree species

d) the identification of the possible successional stage and/or possible signs of past logging or other disturbances events (e.g. hurricanes, fires, etc.)

There are three major types of population demographic structures that can typically be identified:

- **Type I**: An **inverse J-shaped curve** may indicate a population demography with high regeneration capacity
- **Type II**: **Irregular numbers of individuals among classes** may indicate a disturbed population demography, poor sampling or low population density, but may also be a hint that flowering, and reproduction occurs only every several years or only in special years. In any case, special attention has to be given to the applied inventory methods, its precision and to the smaller diameter classes to assess the regeneration capacity.
- **Type III**: A **bell-shaped curve** and absence of individuals or very few individuals in small diameter classes may indicate a low regeneration capacity and/or a high species-specific light demand (light-demanding species) in the context of a late succession stage of the forest.

Note: The ability of certain tree species for vegetative reproduction, including successful re-sprouting after harvest can only be considered for regeneration capacity if there is sound scientific evidence and knowledge of the degree to which it successfully contributes to the regeneration of the population. Silvicultural measures such as enrichment planting can also contribute to the survival of the population, although the success of these measures is not guaranteed from the outset. Such information should include species-specific data of survival rates and annual growth rates as well as data about fructification of sprouts.

Key question 4.2.1: Does the regeneration capacity and population density allow for the overall maintenance of the population across all diameter classes after harvest?

Guidance: The inventory data allow to estimate the average number of trees per hectare above 20 cm DBH for the inventoried area (the sampling frame) within the FMU level. Usually, trees are recorded from 10 or 20 cm minimum diameter at breast height (DBH) onwards. The average density of trees per hectare above 20 cm DBH before harvest gives an idea about the abundance of a species, although this number does not cover whether a species is homogenously or heterogeneously distributed throughout the area. According to Schulze *et al.* (2008) tree densities should be averaged over larger areas, due to the high site-specific variabilities and therefore recommend FMUs as an appropriate scale for local rarity. Schulze *et al.* (2008) recommend a density threshold of 10 stems > 20 cm per 100 ha as an absolute minimum threshold for any harvest, which corresponds to 0.1 stems/ha for trees > 20 cm before harvest. However, population densities between 0.05 stems/ha and 0.1 stems/ha (i.e. the currently applied minimum threshold of 0.05 stems/ha) will remain acceptable in combination with additional safeguards, that assure that an absolute minimum of seed trees (trees above the EFD) is retained directly after harvest. In this regard, the SRG considers that at least 0.04 seed trees/ha should be retained.

If a population shows diameter classes with no individuals or very few individuals in one diameter class in comparison to the adjoining (bigger) classes this may indicate a disturbed population demography, a biased or poor sampling, a low overall population density, or a flowering and reproduction that occurs only every several years or only in special years (e.g. some specialized species require a disturbance to induce reproduction). In such cases additional safeguards are required to justify the sustainability of any harvest, as considered in the responses below.

- **Yes:** An inverse J-shaped curve (Type I) indicates a good regeneration capacity and the population density is above 0.1 stems/ha for trees > 20 cm → further evaluation/continue with the guidance
- **Conditional yes:** An inverse J-shaped curve (Type I) indicates a good regeneration capacity and the population density is between 0.05 stems/ha and 0.1 stems/ha of trees > 20 cm: Additional safeguards are required: **(1)** retention of min. 0.04 trees/ha above the EFD (see explanation in 4.2.2.2) after harvest → further evaluation/continue with the guidance
- **Conditional yes:** An irregular number of individuals among diameter classes (Type II) indicates a limited regeneration, biased sampling or a very low population density. Checking of potential reasons and additional and complementary safeguards are required to justify a possibly positive evaluation. These include: **(1)** a population density above 0.1 stems/ha for trees > 20 cm, **(2)** a minimum cutting diameter (MCD) that is at least 20 cm above the EFD (4.2.2.1), **(3)** a retention of sufficient seed trees on FMU level (4.2.2.2), as well as **(4)** a 100% recovery index (4.2.3) → further evaluation/continue with the guidance
- **Conditional yes:** A bell-shaped curve (Type III) indicates a very limited regeneration capacity: Additional and complementary safeguards are required to justify a possibly positive evaluation: These include: **(1)** a population density is above 0.1 stems/ha for trees > 20 cm, **(2)** an MCD that is 20 cm above the EFD (4.2.2.1), **(3)** a retention of sufficient seed trees above the EFD on FMU level (4.2.2.2), as well as **(4)** a 100% recovery index (4.2.3) → further evaluation/continue with the guidance
- **No:** The DBH distribution shows an irregular number of individuals across classes or a bell-shaped curve with several diameter classes (> 2 diameter classes) between the lowest and highest diameter class showing no individuals per diameter class and safeguards as described above are not in place or cannot mitigate the very unfavourable population demography → negative NDF
- **No:** Population density is below 0.05 trees/ha for trees > 20 cm → negative NDF, as this is indicating that even with additional safeguards the harvest will be detrimental

Note: In case there is strong science-based evidence that even with a population demography that shows severe deficiencies (missing classes or low densities), the population stability on the harvest site is guaranteed the assessment can be continued → further evaluation/continue with the guidance

Reproductive capacity

The reproductive capacity in relation to the period of the cutting cycle depends on several factors, such as the species-specific minimum and effective fruiting diameter, actual fruiting events that trees have after reaching the effective fruiting diameter and before cutting (which refers to the minimum cutting diameter), as well as the number of seed trees retained. There are two ways that are applied in forest management plans to address the issue: (1) by setting a minimum cutting diameter that allows to retain a certain part of the population (trees below the minimum cutting diameter) that already contributes to the reproduction by fructification, and (2) by retaining a certain minimum number of seed trees or a certain minimum percentage of seed trees, which is usually addressed by setting an overall maximum harvest rate or by defining a certain minimum number of seed trees per area that have to be maintained.

Species-specific minimum cutting diameter (MCD/MED)

Key question 4.2.2.1: Is the minimum cutting diameter (MCD/MED) set at a DBH that allows sufficient potential for reproduction?

Guidance: Determining the minimum exploitable diameter (MED) or the minimum cutting diameter (MCD) in relation and with sufficient interval to the effective fruiting diameter (EFD)[14] is a measure to retain a minimum number of seed trees in the harvest area of the FMU. Retaining seed trees in a harvested area is essential to enable the continued generative regeneration without disruption and is therefore a precondition for the compensation of the effects (direct and over time) of harvest. The ATIBT (2022) recommends, among others, that the species-specific minimum cutting diameter (MCD) should not be below the species-specific effective fruiting diameter (EFD). As the median diameter of trees producing more than 50 % of the seedlings in the population (calculated on the basis of genetic studies) is usually 20 cm larger than the effective fruiting diameter (ATIBT 2022), we consider an EFD that is 20 cm or more below the MCD a good safeguard for a positive threshold for preserving sufficient seed trees. A list of species-specific effective fruiting diameters for some of the CITES listed species imported to the EU can be found in Annex III. However, the EFD is often unknown and the only available information is the minimum fruiting diameter[15] (MFD), which is always below the EFD. Tree species that grow to bigger sizes (> 60 cm) might either have a higher growth rate or have a very long life-cycle. Therefore, it can be assumed that these species show a higher difference between the DBH of the MFD and the EFD in comparison to tree species that only grow to diameter classes up to 60 cm DBH. Hence, in cases of species for which the EFD is unknown, it is for precautionary reasons assumed that the EFD is at least 20 cm above the MFD for trees that grow to sizes above 60 cm DBH, and 10 cm above the MFD for tree species that only grow to smaller diameter classes up to 60 cm DBH unless scientific evidence indicates differently. If neither the EFD nor the MFD is known on species level there are two possible ways forward: (1) one of the two parameters may be known for species of the same or a closely related genus and serve as an estimation, (2) in case not even this information is available the MFD is assumed to be 70 cm for trees that grow to sizes above 60-120 cm and 30 cm for trees that are usually known to grow to sizes up to 60 cm.

Mostly, fecundity of trees increases with age and DBH. However, according to Qiu *et al.* (2021) 64% of 428 tropical tree species show an eventual decline of fecundity with size, highlighting the importance of the conservation of seed trees in medium size classes. If the MCD is less than 20 cm above the EFD the conservation of seed trees in the medium size classes may be reduced without additional safeguards that mitigate this risk, the sustainability of any harvest may not be reasonable. A population demography with an inverse J-curve represents a mitigation, as it indicates that the preserved size classes of seed trees below the MCD are higher in number than the size class directly above the MCD. In combination with the preservation of more than 1 seed tree/ha, a minimum density of seed trees, or with 30% of retained seed trees, the regeneration potential of the population is likely to be maintained. A 100% recovery index for old-growth forests[16] for species for which the MCD is set equal

[14] The effective fruiting diameter (EFD) is an estimate of the diameter at which at least 50% of the trees in the population produce seeds suitable for germination (ATIBT 2022).
[15] The minimum fruiting diameter (MFD) is the smallest diameter observed for a tree to produce ripe fruits (Ouédraogo *et al.* 2018).
[16] Old-growth forest is defined as forest without logging in at least the past 100 years

to the EFD guarantees the stock recovery potential as an additional mitigation it. In combination with the inverse J-curve of the population demography it assures that in relatively short time after harvest the first trees will grow above the effective fruiting diameter.

- **Yes:** The MCD is 20 cm or more above the EFD → further evaluation/continue with the guidance
- **Conditional yes:** The MCD is up to 20 cm above the EFD. Additional and complementary safeguards are required. These include: **(1)** the species shows a population demography with an inverse J-curve (4.2.1), **(2)** more than 1 seed tree/ha is retained or more than 30% of seed trees are retained on FMU level (4.2.4) → further evaluation/continue with the guidance
- **Conditional yes:** The MCD is equal to the EFD (EFD = MCD), additional and complementary, stronger safeguards than for the previous case are required. These include: **(1)** the species shows a population demography with an inverse J-curve (4.2.1), **(2)** more than 1 seed tree/ha is retained or more than 30% seed trees are retained on FMU level (4.2.4)), and **(3)** a 100% recovery index is met for old-growth forests (4.2.3)
- **No:** The MCD is below the EFD → negative NDF, as this is indicating that even with additional safeguards the harvest will be detrimental

Seed trees[17] retained on FMU level

Key question 4.2.2.2: Are enough seed trees on FMU level maintained for regeneration directly after the harvest?

Guidance: According to Jennings *et al*. (2001) a pragmatic approach is to set the minimum density for seed trees that are pollinated by small insects at **1 tree/ha** or 50 individuals in a 50 ha natural breeding unit. The application of this criterion serves as a precautionary threshold for all cases and is supported by Sist *et al.* (2003). However, a conditional continuation of the assessment concerns cases in which a lower density of seed trees could still allow for sufficient regeneration.

- **Yes:** > 1 seed tree/ha above the EFD directly after harvest → further evaluation/continue with guidance chapter 4.2.3
- **Conditional yes:** < 1 tree/ha above the EFD is retained directly after harvest → continuation with the following percentual retention rules according to the species risk

Guidance for conditional Yes: If the pragmatic approach of more than 1 seed tree/ha is not met, it is necessary to give a clear indication on remaining potentials of generative reproduction. One possibility is the combination of sufficient RI% and percentual densities of the retained seed trees in order to provide meaningful projections of the regeneration capacity of respective species in the respective FMU. Evaluating the retention of reproductive trees therefore adds to the overall assessment of whether the harvest impact does "…not have a harmful effect on the conservation status of the species or on the extent of the territory occupied by the relevant population of the species…" (Art. 4 (2) a) Council Regulation (EU) 338/97).

In this sense, Freitas and Pinard (2008) suggest a calculated weighted approach based on ecological attributes to determine what percentage of seed trees (in their publication a seed tree has a DBH > 45

[17] Seed trees are in this context defined as trees above the effective fruiting diameter.

cm) between 10% and 30% should be retained for each species. For this evaluation guidance their approach was modified and instead of the consideration of specific ecological attributes the percentual retention is related to the fulfilment of the criteria in this evaluation guidance, such as demography, density, MCD in comparison to EFD and RI%. The approach is additionally combined with a threshold of at least 0.04 seed trees/ha as the minimum density of retained seed trees after harvest.

In accordance with the recommendation by ATIBT (2022) and similar to the study of Freitas and Pinard (2008), a seed tree retention of at least 10% as threshold for all species under all circumstances is applied in this evaluation guidance, representing the absolute minimum that must be met at any rate. However, as CITES-listed species are protected by international law due to their risk imposed by trade it is considered that a threshold of more than 30% of retained seed trees is generally to be applied as threshold. For populations with a density between 0.1 trees/ha and 0.05 trees/ha, a retention of at least 0.04 trees/ha above the EFD is an additional requisite (see explanation under 4.2.1). A lower (staggered) percentage than 30% of retained seed trees may only be applied under the precautionary principle and additional safeguards and in combination with the retention of a at least 0.04 trees/ha above the EFD.

- **Yes:** > 30 % of trees above the EFD are retained → further evaluation/continue with the guidance
- **Conditional yes:** > 20 % of seed trees are retained, but under precautionary principle, additional safeguards are required: **(1)** the population demography shows an inversed J-curve (4.2.1), **(2)** the MCD must be at least 20 cm above the EFD (4.2.2), and **(3)** a 100% RI for old-growth forests applies so that more seed trees are recruited in the near future → positive NDF
- **Conditional yes: ≥** 10% of seed trees are retained, but under precautionary principle, additional safeguards are required: **(1)** a minimum density of 0.04 stems/ha > EFD are retained, **(2)** the population demography shows an inversed J-curve (4.2.1), **(3)** the MCD must be at least 20 cm above the EFD (4.2.2), and **(4)** a 100% RI for old-growth forests applies so that more seed trees are recruited in the near future → further evaluation/continue with the guidance
- **No:** < 10 % of seed trees are retained→ negative NDF

Note: In case that a scientific authority or the SRG concludes that a certain species underlies a particular high risk, stricter criteria may be applied.

Species-specific stock recovery potential (Recovery Index)

Key question 4.2.3: Do local management parameters and the site-specific demography allow for stock recovery of the target species within one management cycle?

Guidance: In old-growth forests[18] the population demography is a result of a century long accumulation of old trees. Therefore, a recovery of 100% is considered to be difficult to reach in old-growth forests for whichever harvest is applied. The ATIBT (2022) recommends a 100% recovery index on the forest stand level for a group of commercial species only from the 2nd cutting cycle onwards. However, as CITES is species based and the EU Regulation 338/97 require the evaluation of harvest impacts on the particular harvested species. The need for species-specific approaches is also highlighted by Putz *et al.* (2022) in the sense that any management should ensure a species-specific stable and resilient population of the target species in the future. It is therefore important to differentiate between the acceptable species-specific impacts in an old-growth forest vs. in a regenerating forest[19]. Lower recovery indices are only acceptable in case the **logging coefficient** (number of harvested trees/number of trees > 20 cm) is below 10%. In case any "conditional yes" was applied in the previous chapters (4.2.2) on the reproductive capacity, lower recovery indices shall not be accepted.

Question: Does harvest take place in an old-growth forest?

Guidance: Timber harvest in old-growth forests and transition to managed forests will necessarily change the population demography and spatial distribution of harvested tree species to a certain extent (Putz *et al.* 2022). As CITES-listed species are protected species, a species-specific 75% recovery index (meaning a reduction of the harvestable stock of 25%) for the first harvest in an old-growth forest and a species-specific 100% recovery index (meaning full recovery of the harvestable stock) for the 2nd and following harvest cycles is suggested to be acceptable by this evaluation guidance. These thresholds aim to prevent continuous reduction of the population as an effect of sequential harvest cycles and thus are precondition to positively evaluate that the harvest impact does "… not have a harmful effect on the conservation status of the species or on the extent of the territory occupied by the relevant population of the species…" (Art. 4 (2) a) Council Regulation (EU) 338/97).

The information provided, e.g. in the management plan or in the inventory, may indicate whether past logging activities took place, or not. Site- and species-specific population demography can provide complementary information. Species-specific population demography patterns that are expected to be found in old-growth forests are **listed in Annex IV** (only to be used as complementary information to existing information in the management plans regarding past logging activities in the harvest area).

- The management plan indicates that no past logging activities took place in the FMU and the population demography shows no signs of previous logging activities → apply a **75% RI%** and follow the instructions for a RI% in an old-growth forest
- The management plan does either indicate that the harvest area has been commercially exploited in the past (100 years) or a previous harvest cannot be ruled

[18] Old-growth forest is defined as forest without logging in at least the past 100 years
[19] Regenerating forest is defined as forest with logging in the past 100 years.

out with certainty by evaluating the population demography → apply a **100% RI%** and follow the instructions for a RI% in a regenerating forest

Often management plans indicate a RI%, and it is recommended that importing SA verify this value by re-calculating the RI% using the available inventory data. However, there are many different methods for calculating the recovery index (e.g. matrix calculation, Usher model, recovery indexes based on the basal area or other yield projections, such as stand table projection methods, cohort modelling, tree-level models or process-based models). The one used in the management plan will be the one that will be checked whether it has correctly been applied. In such cases we recommend a first quick plausibility check by applying the universally accepted adapted formula of Durrieu de Madron *et al.* (1998) for stand table projections as implemented in the RI% re-calculation tool developed by the PTWG. Only in cases where this check leads to a result below the threshold value, the method specified in the management plan must be applied to check whether the RI% is above the threshold value with the specified calculation method. As part of the application of other scientifically sound methods reasons for the differences in results should be identified and at least all relevant parameters of the formula of Durrieu de Madron *et al.* (1998) should equally be considered or be specified to a higher level of accuracy. In the cases where no recovery index is calculated this evaluation guidance suggests to also apply the adapted formula of Durrieu de Madron *et al.* (1998).

The RI% shall be evaluated under the following understanding:

Old-growth forests[20]Error! Bookmark not defined.

- **Yes:** RI% ≥ 75 % → further evaluation/continue with the guidance
- **Conditional yes:** RI% between 50% and 75%, but strong science-based evidence suggests that a species-specific recovery is guaranteed, at minimum by the following conditions: **(1)** the logging coefficient is < 10%, **(2)** the species shows a good demography (inverse J-shaped curve), **(3)** the species has a high post-harvest density of seed trees (> 1 seed tree/ha) as well as **(4)** an EFD that is 20 cm above the MCD → further evaluation/continue with the guidance
- **No:** RI% < 75% and not all of the conditions described above ("conditional yes") are fulfilled → negative NDF

Regenerating forests[2119]

- **Yes:** RI% ≥ 100% → further evaluation/continue with the guidance
- **Conditional yes**: RI% between 75% and 100%, but strong science-based evidence suggests that a species-specific recovery is guaranteed, at minimum by the following conditions: **(1)** the logging coefficient is < 10%, **(2)** the species shows a good demography (inverse J-shaped curve), **(3)** the species has a high post-harvest density of seed trees (> 1 seed tree/ha) as well as **(4)** an EFD that is 20 cm above the MCD → further evaluation/continue with the guidance
- **No:** RI% < 100% and not all of the conditions described above ("conditional yes") are fulfilled → negative NDF

[20] Old-growth forest is defined as forest without logging in at least the past 100 years
[21] Regenerating forest is defined as forest with logging in the past 100 years.

Note: For the application of the relevant variables for the calculation of the recovery index please consider maximum harvest rates if clearly indicated as well as the results from chapter 3. A maximum volumetric harvest rate can only be applied if also the values per diameter class are used in volumes and if the growth rate is indicated as a species-specific increment of volume per year.

Abbreviations

AAC	*Annual Allowable Cut* is is the annual amount of timber that can be harvested on a sustainable basis within a defined forest area. (French: assiette annuelle de coupe (AAC) / Spanish: corta annual permisible (COP) *Annual Allowable Cut Area* (Annual logging area – ALA) - sub-area of a logging title that is usually open for exploitation for one year (French: Assiette annuelle de coupe/ Spanish: UPA - Unidad de producción annual / UCA – unidad de corta anual). A logging title usually consists of as many AACs as the duration of the logging cycle. Often the abbreviation AAC is used to describe both, the area and the volume (see above).
AOP	Annual Operational Plan for the AAC (Spanish: Plan Operativo Annual Forestal (POAF) / French: Plan annuel d'operatión (PAO)).
Basal area	Basal area describes the area occupied by the cross-section of tree trunks and stems at breast height (130cm from the ground). (Faber-Langendoen and Gentry 1991)
CF	Communal Forest (French: forêts communales – Fcle) in a Forest that is meant to remain forest (permanent forest domain).
CoF	Community Forest (French: forêts Communautaires) in a forest prone to land use change (non-permanent forest domain).
DBH	Diameter at Breast Height (= 1.30 m, sometimes 1.50 m, from the ground; French: diamètre à hauteur de poitrine (DHP)).
EFD	Effective Fruiting Diameter is an estimate of the diameter at which at least 50% of the trees in the population produce seeds suitable for germination (ATIBT 2022).
HR	Harvest rate or harvest percentage if used in general indicate the maximum or effective percentage of the number of trees above the MCD that are allowed to be harvested and/or the maximum or effective percentage of the available volume of a species above the MCD that is allowed to be harvested.
FMP	General *Forest Management Plan* for the entire Forest Management Unit of the entire Concession (Spanish: Plan General de Manejo Florestal – PGMF).
FMU	Commercial *Forest Management Unit* or Consession – (French: unités forestière d´aménagement (UFA)) : An area of forest for which an approved. Forest Management Plan is in operation, or any subdivision of it, such as a block (a specified locality) or a felling series. (FAO 1998).
logging coefficient	indicates in this guidance the relation of the number of harvested trees to the number of trees > 20 cm DBH

MCD	Minimum Cutting (logging/harvest) Diameter (French: diamètre minimum d'abattage (DMA)), set in the management plan and might be above the MED.
MED	Minimum Exploitable Diameter (French: diamètre minimum d'exploitable (DME)); often set by law.
MFD	Minimum Fruiting Diameter or diameter at reproduction is the smallest diameter observed for a tree to produce ripe fruits (Ouédraogo et al. 2018).
MHR	Maximum Harvest Rate or maximum harvest percentage (French: Taux prélèvement max (%)) prescribes the maximum percentage of trees of a species above the minimum cutting diameter (MCD) that are allowed to be harvested and/or the maximum percentage of the available volume of a species above the MCD that is allowed to be harvested.
NDF	Non-Detriment Finding
Old-growth forest	Old-growth forest is defined as forest without logging in at least the past 100 years
Regenerating forest	Regenerating forest is defined as forest with logging in the past 100 years.
Regeneration capacity	is the capacity of a tree species that allows to sustain itself through production of sufficient seeds or shoots, the growth and survival of seedlings, saplings and shoots that replace harvested or dead large and mature tree species
%RI	Recovery Index in %, indicates the percentual species-specific recovery of the harvestable stock
RWE	One m^3 roundwood equivalent expresses the amount of roundwood needed to produce a m^3 of a certain wood product. By expressing consumption in m^3 roundwood equivalents, volumes of products with different properties such as sawn wood and panels or different measurement units such as m^3 (sawn wood) and (metric) tonne (mt) (paper and board) can be summed together.
Seed trees	Seed trees are in this guidance defined as trees above the effective fruiting diameter.
SRG	Scientific Review Group of the European Commission
Quota	Annual quotas encompass national export quotas, national export quotas on FMU level, annual harvest quotas for a specific FMU (e.g. set in the national NDF), and harvest quotas for specific annual allowable cut (AAC) areas. Without specifications these quotas are set roundwood equivalents in m^3.

ANNEX I – Species/country dependent conversion factors and minimum exploitable diameters for commonly imported timber species to the EU

ANNEX II: Species-specific risk categorization

To evaluate harvest impacts, regeneration of the harvested population is one of the key parameters. Besides the mostly quantitative data from inventories and management provisions, several biological features of a species / population and overall context conditions may be relevant to assess the regeneration potential. These include, but are not limited to, factors such as population genetics, distribution patterns, sexual system, seed production, seed dispersal, diaspore bank, germination and establishment of seedlings and saplings, fruiting frequency and efficiency and the recruitment of small trees that exceed the minimum exploitable diameter.

Before evaluating the harvest impact assessment in the decision keys, a general species-specific risk categorization should be carried out to determine the ecological profiles and the resulting risk of the species. This allows to determine necessary precautionary requirements, e.g. the relative quantity of seed trees to be retained (in accordance with Fredericksen *et al.* (2001) and/or the weighted approach of Freitas and Pinard (2008)). Highlighting two bold and simple examples, gregarious species would have to be evaluated differently than common and homogenously distributed species; and light demanding species cannot be treated equally to species that can easily recruit tree individuals in close-canopy conditions.

The categorization of the species-specific risk is not a straightforward task and is to a considerable degree up to the professional judgment of the expert in charge. Relevant characteristics that should be considered (in case the information is available) for the identification of the risk category are listed in below in order to break down the complexity of assessing the overall risk and to structure the multitude of possible risk factors. However, this is not an extensive list and the order does not represent the importance of factors. Also, it is not always necessary and meaningful to evaluate all single factors, and information to evaluate some factors may not always be available or unambiguously clear for the context of assessing the risk level. Some factors are interconnected and risk factors may positively correlate. The risk assessment for other factors could even be working in opposed direction for some species and their specific features and contexts. Further on, some species features may be a high-risk factor and a low-risk factor at the same time (e.g. selfing-capacity implies a capacity to regenerate without cross-pollination, but on the other hand may bear the genetic risks of inbreeding). Such possible inconsistencies between risk factors and/or data limitations may make the risk categorisation complex and it is up the judgement of the responsible expert in charge and the specific context to adequately categorize the overall risk for the species under consideration.

Many CITES-listed species show ecological profiles that indicate challenges for species regeneration, which may lead to a higher risk categorization and necessary safeguards for their exploitation. The listed indicators are example indicators, deviations and/or the consideration of additional indicators are possible and may be justified. Categorization of species might change according to the current state of scientific knowledge as well as according to the site-specific population demography and overall context.

The following list covers some of the relevant characteristics, that allow a species-specific risk categorization:

- Functional groups: long-lived light-demanding, shade-tolerant, short-lived light-demanding (pioneer species), other

- Pollinator type/strategies: wind pollination, insect pollination, other animal pollination (e.g. birds, bats)
- Seed dispersal mode: animal, gravity, water, ballistic, gyration, fire
- Sexual system: e.g. monoecious vs. dioecious
- Selfing capacity/selfing rate
- Spatial distribution pattern: irregular and clustered distribution, scattered distribution, homogenous distribution
- Fruiting frequency and efficiency: less than once a year, and/or low seed set, and/or low seed viability; once a year, medium seed set per mother tree, medium seed viability; more than once a year, high seed production, good seed viability
- Effective Fruiting Events
- Conservation concern: red list listings (category, old listing, population trend), rarity of the species (< 0.1 tree/ha)
- Populations genetics: variation, homozygosity, inbreeding
- Distribution of seed trees across diameter classes after harvest
- Level of trade/Market demand: High market prices, high traded volume (in RWE) in comparison to the population size in the harvest area (quota or total Volume > MCD in AAC); medium market prices, medium traded volume (RWE) in comparison to the population size in the harvest area (quota or total Volume > MCD in AAC); low market prices, medium traded volume (RWE) in comparison to the population size in the harvest area (quota or total Volume > MCD in AAC).

ANNEX III – Site-specific effective fructification diameters, growth rates, re-sprouting capacity

Species	Distribution pattern: Heterogenous vs. homogenous	Minimum fruiting diameter (DBH)	Effective fruiting diameter (DBH)	Growth rates	Re-sprouting capacity	Conversion rate	Source
Afzelia bipindensis							
Aniba rosaeodora							
Bulnesia sarmientoi							
Cedrela odorata							
Dalbergia cearensis							
Dalbergia cochinchinensis							
Dalbergia frutescens							
Dalbergia latifolia							
Dalbergia melanoxylon							
Dalbergia retusa							
Dalbergia sissoo							

Dalbergia stevensonii							
Dalbergia tucurensis							
Dipteryx spp.							
Dipteryx ferrea							
Gonystylus spp.							
Guaiacum coulteri							
Guaiacum sanctum							
Guibourtia demeusei							
Guibourtia tessmannii							
Handroanthus impetiginosus							
Handroanthus serratifolius							
Khaya anthotheca							
Khaya ivorensis							
Paubrasilia echinata							
Pericopsis elata							
Pterocarpus erinaceus							
Swietenia macrophylla							

Swietenia mahagoni							

ANNEX IV: Species-specific population demography patterns in old-growth forests

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Feedback to Forestry experts and FAQs

Evaluation for timber imports of CITES-listed timber species on Appendix II/Annex B into the EU

According to Council Regulation (EC) No. 338/97 import permits of any species listed on Annex B (which includes all species listed on CITES Appendix II except those, which are listed in Annex A) may i.a. only be granted when "the competent scientific authority, after examining available data and considering any opinion from the Scientific Review Group, is of the opinion that the introduction into the Community would not have a harmful effect on the conservation status of the species or on the extent of the territory occupied by the relevant population of the species, taking account of the current or anticipated level of trade. This opinion shall be valid for subsequent imports as long as the abovementioned aspects have not changed significantly; ... (Article IV 2a)" This task is also referred to as an import-NDF. In order to harmonise the implementation of the Regulation in the EU, the Scientific Review Group (SRG) has discussed and developed criteria for the evaluation of timber imports. The basis for the development of timber criteria are the obligations set by the above-mentioned regulation, documents and guidances accepted by the CITES community, scientific knowledge and practical considerations. In the process of developing these criteria the SRG being a body of the EU communicated and discussed the criteria internally and internationally via a PC-Document, Notifications, Inf-Docs, Side Events and bilateral meetings. In 2023 and 2024 the SRG conducted meetings with forestry experts. The SRG is very grateful for any feedback received because it helped shaping the criteria it has selected to be recommended for application within the SRG and by Member States Scientific Authorities. To make the feedback received by forestry experts and the way it influenced the criteria transparent, this section is listing feedback and whether and how it was implemented.

1st meeting (online) with 14 forestry experts on 17.11.2023

Basis for this meeting has been a preliminary set of parameters that was considered to be useful by the SRG: recovery index, population structure, seed trees, density (trees/ha) and which has been brought to the attention of the experts. With regard to the recovery index a threshold of 100% was considered to be necessary at the latest from the second cutting cycle onwards. Feedback received on these suggestions was varying from full consent to partial criticism. This section deals with contra arguments or additional suggestions only to make the decisions taken more transparent and does not focus on support received, which of course was equally helpful in the process.

Experts' critique or additional suggestions

On the recovery index (RI):

(1) RI is not a robust indicator for assessing threats to trees because in management plans (MPs) RIs are computed using national standards (e.g., the minimum cutting diameter - MCD), and since MCD varies between countries, these are inappropriate for calculating RI[22].

(2) RI is not a robust indicator for assessing threats to trees because the RI is an economic concept rather than a biological one, because it only considers marketable individuals[23].

(3) RI is not a robust indicator for assessing threats to trees because the RI can vary according to forest types and scale.

$$\text{Harvesting percent} = \frac{\text{harvested volume}}{\text{initial volume}} * 100,$$

$$\text{Recovery time} = \frac{\text{initial volume} - \text{residual volume}}{\text{volume increment}}$$

Gräfe et al., 2020

(4) The RI considers annual growth. It is very difficult to identify/gather data on individual tree growth. The perfect dataset would comprise diameter distribution of each tree species before logging, stem distribution maps in the harvest areas, species diameter, and trees' social distribution in the harvest area. The PTWG should consider if focussing on one species or all tree species in the harvest area, since it could be possible to have a good recovery rate for the whole forest/the more resilient species, while at the same time losing the most-valued commercial tree species. In the Durrieu de Madron and Forni formula of (1997) there are unknown parameters (e.g., estimated mortality rate and growth rate), and anticipating/estimating these parameters is a key issue in recovery rates. For sustainability studies, the Gräfe et al. (2020) formula could be used as it gives a good proxy for recovery times:

(5) There is agreement with targeting management plans but disagreement with using a formula of RI when assessing import permits. While there is agreement with setting targets that depend on RI it was noted that it is complicated for foresters to set management parameters that will exactly meet a certain %RI. The PTWG was invited to suggest that the SRG gives producers some

[22] Example: the MCD for Pericopis elata is 60cm in Congo and 90cm in Cameroon; we could observe the same RI under consideration of the species-specific parameters (annual growth rate, annual mortality rate and logging damages) but the impact on the population and seed trees is very different (impacted population: 35% in Congo, 6% in Cameroon; impacted seed trees: 37% in Congo, 7% in Cameroon).

[23] For the same density of trees/ha and a MCD of 80cm with a cutting cycle of 30 years but for two species with different growth rates, result in different recovery rates (RI) that not necessarily show whether the species in question has a high regeneration rate (pioneer species), but a low RI or has a low regeneration rate (non-pioneer species), but a high RI.

freedom to adapt this to their own local conditions, and to keep in mind the bigger picture while preparing an NDF.

(6) Recalling the specific wording of the Convention text the criteria to be considered should be species focused (i.e., focussing on a single species' population and not on communities of different species or ecosystems). Conservation of a community or ecosystem does not always ensure the maintenance of a particular species – so criteria must be population based.

(7) It is impossible to reach 100% RI for light-demanding species in natural forests. This can be achieved considering species consortiums, for example in EU oak and beech forests: 100% RI can be achieved considering both species collectively, but not at the individual species level without considering planting techniques. In Central Africa, all commercial species are light-demanding, and their presence is linked to human activities (often producing few seedlings, hence giving a bell-shaped population curve). Their densities, without human logging activities (which open canopies, increasing light levels and thereby increasing the potential of dormant seeds to sprout) would decrease; in addition, the forest composition/dynamic changes, including the currently existing balance of the species, would shift without human intervention. Only shade-tolerant species are likely to be able to have a natural recovery rate (i.e., without any silviculture) of 100%. Statistical uncertainties, such as standard errors and confidence intervals can be found in inventory data, underpinning to question a 100% RI.

(8) As growth rates may differ between diameter classes it is advisable to make use of them when calculating the recovery rate. Especially for lower size classes this might be very useful.

Consideration of the SRG:

On (1) the SRG agrees and will address this issue by calculating the RI itself applying values applicable to the individual forest management unit (FMU) or – if that is not possible to the annual harvest area. The SRG also agrees that the RI as stand-alone criterium is not suitable and therefore has to be accompanied by additional parameters (including population structure, seed trees, densities and other risk factors).

On (2) the SRG agrees that the original idea of the RI was economic. The goal was to understand how many harvestable trees would remain for the next harvest after one cutting cycle applying the management chosen (minimum cutting diameter). However, this doesn't mean that it does not tell about the development of the population. The SRG disagrees that only trees which can be commercialised are being looked at because the calculation necessarily includes all stems below the minimum cutting diameter applied, which will grow into the harvestable size classes within a cutting cycle. All, but one parameter (minimum diameter from which harvest may occur) are biological parameters (population structure, growth rate, mortality). In addition, it becomes even more an ecological concept in case the effective fruiting diameter is close or even equal to the minimum cutting diameter applied. Different growth rates of different species are being considered when calculating the RI as the species-specific growth rate is integral part of the calculation. In case site specific growth rates for individual species are available these will be applied.

On (3) the SRG agrees that scale and individual forests have different population structures and densities of individual tree species and therefor vary considerably when it comes to the calculation of the RI. However, the individual structure and resource availability as well as growth parameters (in case they are known) are considered in the calculation of the RI. It is therefore not a problem, that forests differ from each other when applying the RI. The scale might be problematic, especially when managed forest units are very small. However, applying an adequate threshold the RI in such cases will definitely support the maintenance of the population.

On (4) the SRG is explicitly open how to calculate the RI, be it via volume or via number of individuals. The application of the volume-based formula will as well be based on proxies when calculating volumes of the forest stands. The scientific source mentioned in the comment applied estimated average growth rates und natural mortality as is done in the proposed formula by Durrieu de Madron and Forni (1997). It is therefore not obvious, why this way of calculating the prospect of the stand would be more precise. As with the originally proposed RI-formula it would necessarily need additional consideration of seed trees and population structure at the time of the inventory and potentially after logging. Both aspects are not visible when calculating volumes of entire stands. In any case, both the Convention and the EU-Regulation makes it mandatory to investigate on the species level. See also suggestion (6).

On (5) the SRG understands that individual circumstances need to be considered. Therefore, and while setting general criteria it has included possibilities to deviate if well justified. Regarding the bigger picture it is not clear what that is referring to. If it is about the scale, please check on (10), if it is on the question of species versus forest please refer to (4).

On (6) the SRG agrees (see also (4).

On (7) the SRG agrees that especially for light-demanding species a specific management would be necessary to ensure the maintenance of the population stable over the long run. However, as much of the argumentation is based on one CITES-listed species, namely *Pericopsis elata*, the believe that its current densities can only be explained by human intervention (e.g. slash and burn) has been falsified by Luambua et al. (2024). It is therefore that the SRG is of the opinion that interpretation of the nature of current stocks is limited. So, unless it is known that current high densities are within plantations it is assumed that the current density has to be considered to be the target value for future developments. At least maintaining the population at the same level as before excludes that present harvest could be the reason for reduction of the populations size and the extend of its territory.

On (8) the SRG agrees and accepts calculations which make use of size specific growth patterns (e.g. matrix model). However, even (site-specific) average values are often not available. In case size-class-specific growth rates are used the robustness of these values needs to be understood by the SRG by checking the underlying investigation or publication.

On the lack of follow-up inventories/monitoring:

(9) RI is a good criterion if all data are available. Data need to be gathered before and after harvesting, also for a longer period after harvesting (providing that concession holders have the resources to do so). The key challenge is the lack of follow-up inventories after logging. Governments often ensure that the concession cube is 'closed' i.e., no one can go in after logging has finished and steel timber, but there may not always be follow-up inventories.

Consideration of the SRG:

On (9): The SRG agrees that monitoring would be the best tool to prove that a certain management/harvest applied over decades has no detrimental effect on the population concerned. The lack of such monitoring is the reason for considering projections for the development of the population under a certain harvest regime into the future, as applied through the criteria of the SRG. The SRG has added this aspect to the guidance.

On the scale of NDF:

(10) The PTWG should consider working at different scales: for regional/global scale, the technique developed for the *IUCN Libreville Workshop* held in December 2022 to identify threatened species was recommended. The Convention determines that considerations should be made throughout the species' range: concessions of 2000 hectares, for example, probably do not qualify as the appropriate scale at which to calculate RI.

(11) For national/concession scale, it was recommended to focus on endangered species and to adapt the MCD for species with poor/slow regeneration in order to maintain enough seed trees in the wild to allow gene flow.

Consideration of the SRG:

On (10): In line with the International Expert Workshop on CITES-NDF in Nairobi in December 2023 and the subsequent published module 10 which states that "Based on SFM principles and practices discussed in section 2 above, to the extent possible NDF development should be considered at FMU level based on key components of species inventory; management plan; monitoring and tracking" (CITES-NDF Module 10) the SRG is of the opinion that the level at which NDF should be made for timber producing trees is the FMU. The SRG agrees that in line with the Convention the monitoring of trade done by Scientific Authorities should ensure that the species role in the ecosystem will be maintained throughout its range. However, the interpretation of this Article IV 3 by the SRG is different. If the species role in the ecosystem has to be maintained throughout it's range it has not to be compromised at any scale. Regarding the right scale for calculating the RI we refer to (3).

On (11): The CITES Convention has got it's set of criteria laid down in Res. 9.24. The SRG is not of the opinion that new criteria should be applied to those species which are listed and therefor protected due to the application of these criteria and agreement of the Parties to the Convention to that end. The same applies to the criteria laid down in Council Regulation (EC) No 338/97.

On seed trees:

(12) It was suggested to consider minimum and maximum cutting diameters which if set correctly would allow maintenance of seed trees. These parameters could be used to check if the logging is sustainable.

Consideration of the SRG:

On (12): The SRG considers this approach to be useful, when assessing whether sufficient seed trees would remain after logging has taken place. It is not considered to be a comprehensive stand-alone parameter to fulfil the requirements of Article IV 2 a. It is also rather rare that management includes such measures (especially a maximum cutting diameter is rather rarely applied) and therefor unrealistic that it can be used in general or in the majority of cases.

On Sylvicultural measures:

(13) The PWTG was also invited to consider enrichment planting techniques (number of individuals planted/number logged), as used in the EFA-reforest project in Cameroon.

Consideration of the SRG:

On (13): The SRG agrees that sylvicultural measures, such as enrichment planting, have to be considered when making NDF. Enrichment planting is therefore included in the set of criteria of the SRG. However, it is well known that enrichment planting needs a lot of maintenance if trees should survive and grow into considerable size classes (Bartholomew et al. 2024; Schwartz et al. 2013). Therefore, any consideration should be done very carefully and on likeliness or even proof of species-specific success.

On species role in the ecosystem:

(14) Recalling the specific wording of the Convention text the criteria to be considered should be consistent with the species' role in the ecosystem: i.e., CITES is concerned with the role of that species within its ecosystem rather than its conservation status or avoiding vulnerability. When it comes to the role of a tree species, the size of the individual is extremely important – one emergent tree has a greater impact on the structure and ecology of a forest than millions of seedlings. The basal area criterion of a species in a management unit could be used as a sub-criterion to address the role of a species in its ecosystem.

Consideration of the SRG:

On (14): The SRG agrees with this argument. It can therefore additionally be helpful to look at the RI as it gives an impression of how many trees from a certain size class onwards will be available after one cutting cycle. However, two aspects limit the above made suggestion: a) information on the basal area is often not available, b) when making import-NDF into the EU the EU applies

stricter domestic measures. Therefore, the criteria to be looked at in this case are given by Article IV 2a of EU-Regulation 338/97.

On other uses of tree species than timber:

(15) Valuable tree species often have other uses at national and local levels, such as the leaves, stems, branches etc. for fuelwood and fodder, and that the harvest of these parts could have a very important impact on growth rate.

Consideration of the SRG:

On (15): The SRG agrees with this argument. However, often, when forests are given under tenure ship to forest companies this kind of uses is prohibited or restricted to subsistence. In any case, if it is known that considerable amounts of bark or seeds are being harvested these uses should be recognised in the criteria of the SRG.

On illegal trade:

(16) It was suggested to consider the illegal logging of trees from a plot.

Consideration of the SRG:

On (16): The SRG agrees that illegal logging has to be included in any NDF and so it is the case for any NDF which is conducted within the EU. However, as illegal trade is usually not in the files, it is hard to know and even harder to be quantified.

On land tenure:

(17) Information on land tenure is needed and, where disputed, there is high risk of losing high valuable trees. The PWTG and the SRG were commended for the streamlined approach taken (to look at concession level), noting that the overarching approach also minimises unfair treatment of any producer country.

Consideration of the SRG:

On (17): The SRG agrees that land tenure is an important aspect to be considered. Especially where land tenure includes the right to change the type of land use (e.g. from forest to agriculture). This case is integrated in the criteria of the SRG. However, there is no information available to the SRG that allows to standardise land tenure into risk levels. Therefore, this kind of information would have to be considered when respective unsustainable practices are known.

On sources of information:

(18) Collection of good management practices/management plans from country of origin and stakeholders would be essential for data gathering.

Consideration of the SRG:

On (18): The SRG agrees with this suggestion. It therefore in general considers management plans from the respective FMU of import requests to be of highest importance (as well as annual operation plans and inventory data if not included in the aforementioned plans).

2nd meeting (online) with 10 forestry experts on 07.05.2024

Based on the suggestions received at the first meeting the SRG had further developed a set of criteria laid down in a decision tree. They addressed inter alia the request not to concentrate on RI alone and to include options to deviate in order to address the diversity of forests and management systems in this world. The new suggestion comprised of the following chapters and key questions:

1. Information availability (is the timber coming from a sustainably managed forest?),

2. General impacts on the harvest area (Is the land where the harvest took place intended to remain as forest?)

3. Quota validation and harvest rate validation on FMU and AAC level (Are the annual quotas within the range of the permitted volumes? and Are the harvest rates in the forest management plan on FMU level and the ones in the annual operating plan and/or the ones in the harvest permit identical?)

4. Evaluation on FMU level (Does the regeneration capacity and population density allow for the overall maintenance of the population across all diameter classes after harvest? Will sufficient numbers of fruiting trees remain after harvest to regenerate the population? Do local management parameters and the site-specific demography allow for stock recovery of the target species within one management cycle? Are enough seed trees on FMU level maintained for regeneration directly after the harvest?

5. Additional voluntary extra evaluation on AAC level (Is the retained percentage of seed trees at AAC level directly after harvest high enough to preserve regeneration capacity and future genetic integrity of the managed population based on species-specific ecological profiles?

Feedback received on these further elaborated suggestions was a general acknowledgement of improvements. This section deals with contra arguments or additional suggestions only to make the decisions taken more transparent and does not focus on support received, which of course was equally helpful in the process.

On Chapter 1, 2 and 3 there was general agreement or at least no specific criticism.
On Chapter 4 the evaluation of harvest impact was considered too complicated and to contain some errors/misunderstandings by some experts. Instead of a decision tree using exclusive criteria, a global analysis was suggested. Number (1), (3)-(7) below specify this statement:

On the Forest Management Unit (FMU) as a basis for the evaluation:

(1) The FMU is not always the most suitable assessment area, as relatively genetically homogenous populations often have wider distributions than the FMU area (contradicting the statement on page 2 of the decision tree). Additionally, FMUs are only defined in moist tropical forest and are not used for savanna tree species.

(2) The FMU as the relevant scale of evaluation is acceptable for reasons of practicality regarding the limited data often available.

(3) Using the FMU makes sense from a management perspective, but population wise it is not applicable to all species, e.g. trees growing in clusters are more closely related, creating a risk that remaining seed trees may be inbred and compromise genetic variability and long-term sustainability.

(4) FMUs stated not to be good indicators for genetic diversity, and not to be applicable to some species: e.g. *Afzelia africana* occurring in savannahs woodlands/ off forest reserves where allegedly no management plans are in place, but which would have harvesting plans if they are to be harvested. Also, on gregarious (clustered) species, the best way of calculating the number of stems to be harvested is the annual 100% inventories, required to be produced by law in many African countries. Regarding the population structure, FMU scale is considered too small an area for assessment. However, often FMU-level information is the only information available. It is possible that for some areas FMU data could be compared with FAO or World Bank sponsored inventories of areas beyond FMU boundaries to obtain samples of population structures in wider areas.

Consideration of the SRG:

On (1, 2): The SRG agrees that the size of the FMU might not always cover the range of one distinctive population. However, it is agreed amongst population scientists that genetically distinct populations are not defined and systematic genetic investigations in plant populations revealed that depending on the spatial scale applied different numbers and spatial distribution of populations (groups of individuals with certain similarities) can be identified even within identical data sets. Therefore, and due to the lack of detailed information on genetic diversity of most if not all of the timber species concerned in this case the FMU is still considered to be the best proxy to individual populations. Additionally, and in line with (2) it is a very practical approach and also in accordance with consideration by FAO and CITES as mentioned in the consideration on (10) of the 1st expert meeting. The SRG therefore continues with assessing at the level of the FMU.

On (3): The SRG agrees that the level of the FMU has its very practical advantages and also refers to the considerations on (1, 2). The SRG also agrees that the risk of inbreeding is realistic. However, as stated above on (1,2) the information on this is widely lacking. In consequence the maintenance of the population at the original level when starting the harvest operation as well as minimum densities of seed trees is considered to be the best available criteria to address the risk of inbreeding.

On (4): The SRG refers to responses (1) and (2) above. The SRG adds that deviations from the criteria are possible if scientifically well justified. Comparison with structural data from other sources might be useful but it is not understood how this information would influence the assessment of the harvest of the population concerned by trade that is being applied for.

On the comparison of harvest rates at FMU versus Annual Allowable Cut (AAC):

(5) This is considered to be irrelevant for gregarious species, e.g. *Triplochiton scleroxylon* in Cameroon which is not homogenously distributed and therefore having a harvest rate that varies depending on the harvest area.

(6) Use of AAC could create bias simply to non-uniform distributions.

Consideration of the SRG:

On (5, 6): The SRG notes that the given example species is neither CITES-listed nor on the Annexes of the respective EU-Regulation. However, it agrees that the applicability of FMU-data to the annual harvest area (if the specific management considers such a spatial differentiation at all) has its limitations for several reasons (one being the distribution pattern of the species another one being the different ways of inventorying in the FMU and in the AAC). The SRG therefore considers data on AAC-level not for the calculation of the RI if data on FMU-level is available. The SRG notes that calculating the RI on AAC-level is often not possible because the inventories on AAC-level often only start with harvestable size classes. However, the SRG is of the opinion that the availability of harvestable individuals (Example: The FMU-inventory gives an average density for a gregariously distributed species but in the specific AAC not a single tree of a harvestable size is available. In such cases exports against this AAC would not be justified.).

On the Risk analysis (table, page 11):

(7) The risk analysis is overly complicated and contains some misinterpreted parameters incl. monoecious versus bisexual species, insect artificially separated from animal pollination, the use of 0.1 trees/ha density threshold, and inclusion of low genetic variation as a criterion. Careful weighting of these parameters is needed, e.g. *Aucoumea klaineana* is long-lived, light-demanding, dioecious, highly traded, insect pollinated, has irregular fruiting and clustered distribution so would appear high risk from the table, but is low risk in actuality.

(8) Risk categorisation is a good idea but could get complicated in practice. The criteria must be adaptable to different continental ecoregions and regularly updated over time.

Consideration of the SRG:

On (7): The SRG agrees that the risk analysis is complex (as is ecology). It is also not possible to make the judgement fully reproducible. As *Aucoumea klaineana* is not a CITES-listed species the SRG has no experience with this species. However, the risk categorisation is only applied for

justifications of deviations from the general set of criteria. Regarding the threshold of the minimum population density 0.1 trees/ha, see response to (9).

On (8): The SRG agrees that conditions of ecoregions have to be considered as well as many other more or less individual conditions that might apply to certain situations or not. The SRG never the less believes that the trade in species exposed to certain high risks should be assessed with more care than those species where such risks are not expected. Referring to the response to (7) above the SRG specifies certain risk parameters that are relevant to certain deviations within the evaluation guidance and leaves it to the individual Scientific Officers judgement whether such a risk is applicable or not. The table offers a set of general example indicators that might be applied.

On the Population demography (pg. 12-13):

(9) The population structure curve indicates light-requirement rather than regeneration capacity; colonising species with high regeneration capacity have bell-shaped curves in mature forests and logging can facilitate regeneration of such species along roads/in logging gaps; enrichment planting should be considered when a species does not have a reverse J-shaped curve; the 0.1 stem/ha density threshold proposed by Schulze *et al*. (2008) is only valid for Amazonian forests and cannot be generalised – furthermore, it is not definitive for Amazonian timbers as Vinson et al. (2015a)/ (Vinson et al. 2015b) proposed 0.03 stem/ha. A 0.03 stem/ha density threshold has also been proposed for Central African timbers (Daïnou et al. 2016).

(10) Some countries lack extensive inventories and producing these could create an additional burden.

Consideration of the SRG:

On (9): The SRG agrees that the demography might leave space for interpretation. The explanation has therefore been rephrased to leave more space for deviations. However, it is clear to the SRG that a population with a reverse j-shaped curve has got the full potential for regeneration right at the time of harvest while the bell-shaped curve does potentially not (depending of course from which size class onwards in that curve the harvest takes place). In case the bell-shaped curve is the result of rare disturbance events on large scale any substantial reduction of the population will not improve it's potential to react to such a disturbance event when it occurs. So, applying the rules of likeliness and for precautionary reasons the caution in such cases is well justified. The SRG agrees that logging activities as well as sylvicultural measures may foster regeneration. However, whether or not this is the case in reality is debatable and matter of certain circumstances and the level of maintenance. The impact of such activities is therefore unpredictable without any scientifically proven evidence for their success rate.

The SRG agrees that for minimum densities there are different values suggested by different authors. Very low densities inherit the risk of isolating individuals and cutting the geneflow of populations. The SRG notes that the above cited Vinson et al (2015) did not calculate a scientific sound minimum threshold for trees in the Amazonian forests but quoted the normative Brazilian

threshold for rare species. For precautionary reasons the SRG has decided to choose 0,1 trees per ha as an acceptable value. However, densities between 0.05 and 0.1 trees/ha are considered acceptable in the guidance if additional safeguards are met. Any further reduced value would have to be individually and scientifically justified as to why harvest in such cases is considered not to be harmful and how the risk is reduced by a specific management.

On (10): The SRG considers sustainable forest management to be precondition for trade in CITES-listed timber species. The FAO has defined criteria for any sustainable forest management. One of them being the existence of a meaningful management plan including information on inventories. The latter are the only means to understand the available stock and to assess the impact of any harvest. For more details please also refer to CITES-NDF Module 10, prepared and agreed at the International Expert Workshop on CITES-NDF in Nairobi in December 2023.

On the Minimum cutting diameter (pg. 13-14):

(11) The considerations of the draft decision tree are based on values that are not scientifically validated (e.g. number of seed trees/ha, high/medium/low risk). Additionally, enrichment planting should be considered when the minimum cutting diameter (MCD) is close to the effective fruiting diameter (EFD).

(12) Minimum cutting diameter (allowing maintenance of seed trees) is a good criterion, especially when reviewed together with the retention of parent seed trees; however, its implementation was noted to be challenging.

Consideration of the SRG:

On (11): The SRG disagrees with this thesis. In fact, the basic thresholds are taken from scientific publications. The SRG agrees that unfortunately until today the understanding of tropical forests and the impact of logging in these forests on species and their population is rather poor. Harvesting takes place without scientific evidence proving that specific species will survive this management. The timber criteria are set-up, based on scientific validated values and where these are lacking applying the precautionary approach to ensure that the species concerned and the trade of specimens into the EU has no negative effect on their conservation status nor on the extent of their territory. The timber criteria are meant to be guidance and it is explicitly possible to deviate. However, deviation should be scientifically justified.

On (12): The SRG agrees that the minimum cutting diameter is a very important figure in cases where it is implemented in the management of the species. The minimum cutting diameter is incorporated in the timber criteria.

On the Recovery index (RI) (pg. 14-15):

(13) The RI of 100% as recommended by DYNAFAC was not intended to apply to individual species but to a group of species harvested as a whole. The recommended minimum species-level RI was

50% for the second cutting cycle. Both thresholds were the result of a compromise based on economic and social aspects. It is also important to consider the logging coefficient (number stems logged / number inventoried) when calculating recovery rate; management plan values are unreliable as they often omit this coefficient.

(14) Acceptance of several different recovery index calculation methods is positive.

(15) There is a problem when, after each cutting cycle, the 50% of the number of individual trees in the next logging cycle will decrease, and to ensure sustainability. Therefore, the 100% threshold should be applied to all species, especially for important economic species, in their second and third cutting cycles. It was also noted that for some species, such as Sapele / *Entandrophragma cylindricum*, the 100% RI can never be reached.

Consideration of the SRG:

On (13): The SRG is aware of the fact that the species-specific threshold recommended within the publication of DYNAFAC is different from what the SRG has chosen. However, we also acknowledge that the original idea was to have a target value for an economic indicator for the level of exploitation and potential for a follow-up harvest rather than for an ecological indicator. As already explained before all parameters used in the formula by Durrieu de Madron and Forni (1997) which is often used to calculate the RI are all but one (which is about the number of trees harvested) of biological nature. It is therefore well justified to make use of them when predicting the future development of the species population above the minimum cutting diameter. The SRG has inherited the suggestion to include the logging coefficient into the timber criteria as it is agreed that under certain circumstances the recovery index can be quite negative, still the remaining population is in better shape than the same population harvested with a lower minimum cutting diameter, resulting in both, a higher RI and less individuals above the harvestable size. The SRG considers values in management plans in general not to be unreliable. If that was the case a predictable sustainable forest management would not be possible.

On (14): Other ways than the application of the formula by Durrieu de Madron and Forni (1997) to predict the future development of the stand are accepted as well by the SRG (see also 14).

On (15): The SRG is in line with this threshold proposed for any subsequent cutting cycle. The SRG notes that despite efforts to list *Entandophragma* spp. in the past it is not a CITES-listed species. The SRG would be concerned if the consequence of harvest of this species was necessarily a depletion of the population.

On Seed trees (and enrichment planting) (pg. 16-17):

(16) Seed trees are not necessarily to be considered as a separate criterion as the MCD already integrates seed tree conservation. Adding 20 cm above the EFD will allow preservation of ~50% of seed trees. When the number of seed trees is too low, enrichment planting should be considered.

(17) An additional criterion for seed trees appears redundant, as seed trees are included in MCD calculations.

(18) Enrichment planting should be encouraged in harvesting areas, and not at FMU level, and should be assessed whether it is successful for the species concerned. One caveat to consider with enrichment planting is that the percentage or the presence of a species is linked to the specific logging company that is working "today" in a FMU, but could stop their work "tomorrow" and lead to an incorrect assessment.

Consideration of the SRG:

On (16 - 18): The SRG agrees that there might be cases, where the effective fruiting diameter and the minimum cutting diameter correspond well. In such cases seed trees could be covered when applying the RI looking at the situation after one cutting cycle. This condition does not apply to all situations across the world. In addition, the situation immediately after harvest (leading to a reduced supply of seeds over several years/decades) as well as a minimum density of seed trees are not covered by the RI. It is not understood by the SRG why adding 20 cm to the effective fruiting diameter (EFD) to come to the minimum cutting diameter (MCD) has to result necessarily in retention of 50% of seed trees. This is highly dependent on the population demography and if there are very few trees between the EFD and the MCD this might not apply. However, such a management is definitely reducing risks dramatically and has a high potential to lead to positive assessments by the SRG because the timber criteria are sensitive to this and assessments applying it will consider this fact well. Regarding the consideration of enrichment planting the SRG agrees in principal but understands that the success of such sylvicultural measures varies al lot and is not guaranteed (Bartholomew et al. 2024; Schwartz et al. 2013 - see also (18) above and comment (13) of the SRG of the first meeting with experts). Regarding the unclear persistence of a certain management over time the SRG agrees in principal. However, the SRG believes that there is no appropriate alternative to the assumption that a certain management will be carried out for the period foreseen in the management plan. At least there is an acceptable level of likelihood for that.

General comments on the Decision Tree drafted by the SRG:

(19) The decision tree suggested by the SRG will be used as part of a wider series of checks for import applications, as there are already national NDFs for several species.

(20) The decision tree may not be the best format for the guidance, as it gives the same 'weight' to each criterion and considers each separately rather than holistically (e.g. population demography and stem distribution could indicate a high risk without taking into account other aspects).

(21) How will the decision tree be made applicable to species from different tropical regions outside of Central Africa, where forest management is different, inventories are at different scales, logging rotations are shorter/longer?

(22) It is important to understand the differing dynamics of tropical vs temperate forests incl. at the genetic level – the decision tree will need more input from experts on tropical forestry incl. range States to have a more comprehensive discussion and ensure sufficient consultation. Suggested that the topic should be re-opened at the Plants Committee in July.

(23) The document has not considered the requirements of smallholders, who often use simplified Forest Management Plans – allowances should be made for this.

(24) From a trade perspective, traceability and transparency are key. How will the decision tree factor in the risk of laundering/illegal trade, particularly if the timber is transformed in a third country?

(25) Certification schemes could be integrated in the Decision tree, since e.g. FSC/PEFC certified logging companies are externally audited and document enrichment planting (number of planted / logged trees); also, timber coming from a certified area is likely to originate from a sustainably managed forest.

Consideration of the SRG:

On (19): The timber criteria of the SRG, once finalised, are intended to be the recommended guidance by the SRG for making import NDF by EU-Member States. A duplication or series of import NDF is not foreseen. National NDF by range states are mandatory for exports of CITES-listed species and are conducted against the respective national rules implementing CITES in the respective range state. Import-NDF by EU-Member States are done on the basis of Council Regulation (EC) No. 338/97 (implementing CITES in the EU) and therefore not a duplication of what is done in the range states.

On (20): The timber criteria are structured in an order which enables Scientific Authorities to come to a decision at an early stage, if certain conditions are not met. It comprises of several aspects which are all equally important (= holistic approach) when determining the sustainability of the trade concerned. It is therefore on purpose that the main criteria are not suggested to be weighed differently. However, it is possible to deviate, if there is scientific evidence to do so.

On (21): The SRG is discussing timber imports from other parts of Africa as well as Central- and South-America and the Caribbean and Asia since long. The timber criteria are applicable to any tropical forest. For individual cases it leaves explicit possibility to deviate, if there is scientific evidence to do so.

On (22): The SRG clarifies that the basis of the timber criteria are scientific publications from tropical forests. Not a single publication on temperate forests was used. The SRG agrees that further expertise from range states and from experts should be considered and if necessary the timber criteria be adapted. Discussing this issue at the PC is not wanted by the PC. The EU tried to trigger this discussion with DOC 18 at PC 26. There was no will to start such a discussion at all by Parties and the PC did not even take note. Due to this strong expression of unwillingness to discuss sustainability criteria for timber it is unlikely, that the EU will bring-up this topic again.

On (23): The SRG agrees that for smallholders the level of information available might be different from large-scale FMU. As stated in the timber criteria, the general assumption is, that if the species is maintained within the manged area at a level not substantially reducing its population size and – structure, any unknown or roughly estimated status of the species outside this area does not have to be considered. In any case, the timber criteria allow for deviations, in case they are scientifically justified.

On (24): The SRG agrees that traceability and transparency are key elements if laundering should be avoided. While the volume of illegal trade has to be considered in addition to what is being harvested legally the legality-check of the trade involved is not part of the task of the Scientific Authority. The SRG considers, unless there is strong evidence that timber is shifted between FMU or even fed-in from outside, that the conditions described in the management plans and respective inventories are reality. The SRG has no mandate nor interest to verify in the field. Timber transformed in third countries is tracked back to the originating FMU. The SRG points to the fact that often CITES-listed timber species are annotated and that transformation may lead to the exemption of the respective specimens from CITES/ Council Regulation (EC) No. 338/97.

On (25): The SRG agrees that information from certification schemes can be helpful in the assessments and has integrated this aspect into the timber criteria.

Fruiting diameter, pollination dispersal, minimum density and seed retention were also briefly discussed; peer review articles on these elements are now integrated into the guidance for timber imports into the EU.

FAQs

- Questions extracted from Feedback
- Questions the EU wants to response in own interest for clarification

Q: Why is the EU making NDF for import of CITES-listed species?

A: In line with Article XIV, Paragraph 1 of CITES the EU has chosen stricter domestic measures. According to Council Regulation (EC) No. 338/97 import permits of any species listed on Annex B (which includes all species listed on CITES Appendix II except those, which are listed in Annex A) may i.a. only be granted when “the competent scientific authority, after examining available data and considering any opinion from the Scientific Review Group, is of the opinion that the introduction into the Community would not have a harmful effect on the conservation status of the species or on the extent of the territory occupied by the relevant population of the species, taking account of the current or anticipated level of trade. This opinion shall be valid for subsequent imports as long as the abovementioned aspects have not changed significantly; … (Article IV 2a)”

Q: Why does the EU challenge NDF for exports of CITES-listed species issued by range states?

A: The EU does not challenge NDF made by range states. The EU has got its legal obligation to conduct NDF in cases of imports of species listed on Annex B according to Council Regulation (EC) No. 338/97. The EU and its Member States follow the laws and conduct NDFs according to their legal duty.

Q: Why is the EU sometimes challenging timber-imports of CITES-listed species obviously traded respecting the laws of the country of origin?

A: The EU does appreciate the fact, that specimens in trade were not obtained in contradiction to national laws of the exporting state which according to Article IV 2b of CITES is precondition for any export permit. Following the laws does not necessarily comprise that trade is not detrimental. This is acknowledged by the Convention through the additional Article IV 2a for any export. Due to stricter domestic measures applied in the EU this also applies to any import of species listed on Annex B of Council Regulation (EC) No. 338/97.

Q: How does the EU conduct import NDF not being in the country where the harvest took place?

A: The EU relies on information from the countries of origin (e.g. management plans, scientific papers, experts' views, etc.). NDF of exporting countries are also generally considered to be desk studies and don't necessarily involve conducting investigation at harvest sites by the respective Scientific Authority (compare also module 1 of the CITES NDF-project).

Q: Are the timber criteria of the SRG legally binding?

A: Legally binding for all Member States of the EU is Council Regulation (EC) No. 338/97. With regard to the task of Scientific Authorities in cases of imports of species listed in Annex B please look at Article IV 2a. The timber criteria agreed by the SRG are meant to be non-binding guidance for Member States.

Q: What is the basis for the timber criteria suggested by the EU?

A: The timber criteria are based on Council Regulation (EC) No. 338/97, CITES, Resolutions and guidelines accepted by the CITES parties (incl. Res. 16.7 (Re. CoP 17), CITES-NDF-Project, 9-Steps NDF-Guidance for timber species, scientific papers, experts' views).

Q: In a nutshell: which are the key questions to be answered when conducting import-NDF by EU-Scientific Authorities?

A: Do I have enough information? Is the area the timber is coming from meant to stay forest? Is there a quota or any other kind of restriction of volume in place and if so, is it respected? What is the species-specific risk? Is there enough regeneration and reproduction potential of the harvested stand to compensate for the harvested individuals?

Q: What happens, if the assessment by an EU-Member State leads to a negative advice to the respective Management Authority?

A: In case an import application is rejected by a Member State this information will be shared with the Commission and all other Member States (Article 6 of Council Regulation (EC) No. 338/97).

The SRG will discuss any other conclusion that can be drawn from this decision, including whether a general opinion is warranted. In the latter case the SRG will inform the Range State concerned about this decision. In the case no general opinion is warranted by the SRG, the responsible SA of the Member State informs the respective SA of the range state about the rejection of the import application.

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