



Forest Stewardship Council®



Frequently Asked Questions on the Advice Note for Motion 65

V1-3

11 July 2018



Title:	Frequently Asked Questions on the Advice Note for the Motion 65
Approval body:	Motion 65 Steering Committee
Contact for comments:	FSC International Center - Policy and Standards Unit - Charles-de-Gaulle-Str. 5 53113 Bonn, Germany  +49-(0)228-36766-0  +49-(0)228-36766-30  p.miettinen@fsc.org cc: d.franco@fsc.org

© 2017 Forest Stewardship Council, A.C. All rights reserved.

No part of this work covered by the publisher's copyright may be reproduced or copied in any form or by any means (graphic, electronic or mechanical, including photocopying, recording, recording taping, or information retrieval systems) without the written permission of the publisher.

Printed copies of this document are for reference only. Please refer to the electronic copy on the FSC website (ic.fsc.org) to ensure you are referring to the latest version.

Frequently Asked Questions on the Advice Note for the Motion 65

The Forest Stewardship Council® (FSC) is an independent, not for profit, non-government organization established to support environmentally appropriate, socially beneficial, and economically viable management of the world's forests.

FSC's vision is where the world's forests meet the social, ecological, and economic rights and needs of the present generation without compromising those of future generations.

A Objective

The objective of this document is to provide certificate holders and certification bodies instruction for complying with the Advice Note for Motion 65.

B Scope

These Frequently Asked Questions (FAQ) apply to the Management Units overlapping with the Intact Forest Landscapes (IFL) presented in Global Forest Watch (GFW) maps (<http://www.globalforestwatch.org>).

IFLs exist in Angola, Argentina, Australia, Belize, Bhutan, Bolivia, Brazil, Brunei, Cambodia, Cameroon, Canada, Central African Republic, Chile, China, Colombia, Congo DRC, Costa Rica, Cote d'Ivoire, Dominican Rep, Ecuador, Equatorial Guinea, Ethiopia, Finland, French Guiana, Gabon, Georgia, Guatemala, Guyana, Honduras, India, Indonesia, Japan, Kazakhstan, Laos, Liberia, Madagascar, Malaysia, Mexico, Mongolia, Myanmar, New Zealand, Nicaragua, Nigeria, Norway, Panama, Papua N Guinea, Paraguay, Peru, Philippines, Repl. Congo, Russia, Solomon Islands, Suriname, Sweden, Tanzania, Thailand, Uganda, United States, Venezuela and Vietnam.

C Expiry

This FAQ document will expire in each country once the National Forest Stewardship Standard or Interim National Standard becomes effective.

D Version history

V 1-0 Approved by the Motion 65 Steering Committee at 21 March 2017

V 1-1 Answer to Logging moratoria in Russia revised at 30 March 2017 and approved by SC at 6th April 2017

V 1-2 Answer to Brazilian case added at 19 April 2017 and approved by the SC at 9 May 2017

V 1-3 Update to GFW IFL maps reflecting the situation at 1 January 2017; rewording the fire answer, and introducing the Annex 1 on the IFL methodology were added by 10 July 2018 and approved by the SC at 11th July 2018

List of contents

- (1) Why there was no transition period to allow CH's and CB's time to prepare for the Advice Note requirements?
- (2) How does the Advice Note differ from Motion 65?
- (3) Do the recommendations presented in the News room regarding FPIC apply to all IFL countries?
- (4) To which extent the Advice Note requires FPIC to be addressed in the identification of IFLs?
- (5) Reverse rule – Are forestry operations prior to 1.1.2017 covered by the Advice Note?
- (6) What about IFL boundaries and baselines?
- (7) How is the maximum 20 % harvesting in the IFL's to be calculated?
- (8) Brazilian case: Can the whole forest property area be taken into account even if it will be increasingly certified year by year ?
- (9) What are the instructions for road building (Advice Note Clause 1.2)?
- (10) How are the logging moratoria considered in the Russian context?
- (11) What happens if an IFL area is reduced below 50,000 ha within the FMU?
- (12) What is the relation of the Advice Note to the Russian NFSS, which already has indicators for IFL?
- (13) Does the Advice Note replace some Indicators of a NFSS's?
- (14) Are more detailed specifications regarding GFW maps permitted?
- (15) Should Indigenous cultural landscapes be addressed through this Advice Note?
- (16) Where do we find the Global Forest Watch Criteria to identify IFL?
- (17) Does the Advice Note require additional conformity assessment audits?
- (18) What are the consequences of non-conformance to the Advice Note?

Annex 1 IFL methodology <http://www.intactforests.org/method.html>

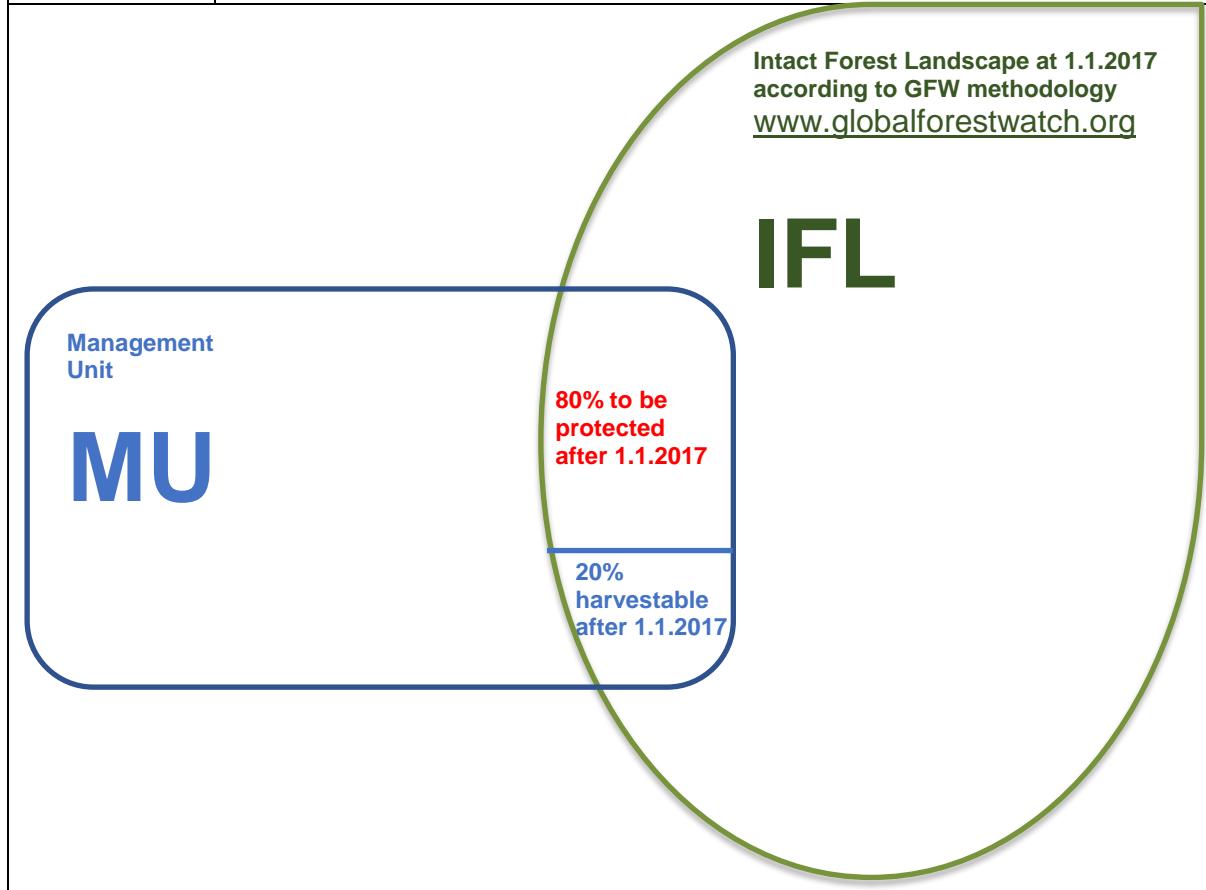
FAQ 1	
Question	Why there was no transition period to allow CH's and CB's time to prepare for the Advice Note requirements?
Answer	<p>Advice Notes generally do not have transition periods. In this case, Motion 65 was formally adopted at the 2014 FSC General Assembly and the default Indicator for the 80% protection of IFLs with the cut-off date of 31 Dec 2016 was well-known. In addition, there was a Public Consultation in October – December 2016, prior to release of the first draft of the Advice Note. IFLs were also incorporated into HCV Category 2 by another Motion, also adopted at the 2014 General Assembly.</p> <p>IFLs were also explicitly introduced to HCV category 2 by another Motion in 2014, though they should have been understood to be a subset of “large landscape level ecosystems”, even before that.</p>

FAQ 2	
Question	How does the Advice Note differ from Motion 65?
Answer	<p>There are two major differences between the Advice Note and Motion 65:</p> <ul style="list-style-type: none"> (i) The Advice Note introduces a <u>temporary</u> 80% protection (i.e., impacts are limited to 20% of an IFL) until country-specific NFSS and IFS are developed (ii) Motion 65 establishes a mandate on the FSC Secretariat (International Center) to undertake specific, binding actions. The Advice Note is the mechanism by which the FSC Secretariat specifies to certificate holders and certification bodies the provisional actions necessary to implement Motion 65 prior to.

FAQ 3	
Question	Do the recommendations presented in the News room regarding FPIC apply to all IFL countries?
Answer	The recommendations in the News room are not normative. They are targeted to standard developers, first of all, in Brazil, Canada, Congo Basin and Russia, because of the wide-scale overlap of FSC certified concessions with IFLs in those countries. If there are still other countries in a similar situation (Peru, for example), similar efforts would be helpful.

FAQ 4	
Question	To which extent the Advice Note requires FPIC to be addressed in the identification of IFLs?
Answer	The forest operations that occur on IFLs have to comply with FSC P&C and particularly with the FPIC requirements presented in the current National Forest Stewardship Standard.

FAQ 5	Reverse rule – Are forestry operations prior to 1.1.2017 covered by the Advice Note?
Question	The Advice Note became effective on 1st of January 2017. Does that mean, that CB's use the "reverse rule" when responding to the Advice Note, as CH's were not necessarily aware and likely not using GFW maps prior to 1.1.2017 for their operations? Are there associated legal issues?
Answer	No, the "reverse rule" will not apply for the Advice Note. Only the operations after 1.1.2017 count for calculating the 20% share of IFLs that can still be harvested within the Management Unit



FAQ 6	What about IFL boundaries and baselines?
Question	<p>The Advice Note proposes the year of the latest update of the GFW IFL maps as the baseline. For Russia, it is 2013. At the same time, the team of GFW partners in Russia (WWF, Transparent World, with participation of Greenpeace and others) is working on amendments to such maps. The reason is that the Russian NFSS standard requires that boundaries of IFL's and management regimes of IFL's will be discussed and agreed with stakeholders (in the context of so called logging moratoria). At present, 46 of the 48 valid CH's in Russia have agreed with stakeholders (mainly NGO's) on the boundaries of IFL's for each concession, based on latest satellite data. The list of moratoria agreements (with boundaries) is available of hcvf.ru web-site (http://hcvf.ru/ru/moratorium), which serves as the official reference site for NFSS in Russia. The maps used for hcvf.ru web-site are identical with the GFW maps, as GFW was the customer of these maps. These maps contain the latest amendments, based on updates, relative to the newest moratoria agreements or other assessments of IFL circumstances conducted by stakeholders. In practical terms, that means that baselines of IFL maps are specific for CH's with IFL's. Some concessions have baselines for 2013, some for 2014 and 2015, and the latest – for 2016. Thus, <u>can the baselines be set-up individually for different concessions on a local level? If yes, can SDG Russia provide the list of baseline years for CH's with IFL's in Russia?</u></p>
Answer	<p>The Advice Note refers to www.globalforestwatch.org or a more recent IFL inventory using the same methodology as the eligible data source. In the Russian context, the boundaries given at http://hcvf.ru/ru/moratorium meet the eligibility criteria and that information source can be used individually for different concessions on a local level.</p>

FAQ 7	How is the maximum 20 % harvesting in the IFL's to be calculated?
Question	<p>How is the maximum 20 % harvesting in the IFL's to be calculated?</p> <ul style="list-style-type: none"> a) Is it just a sum of square of cuts and roads, or should it be measured using the same methodology as IFLs were mapped? b) Shall we calculate human caused burned areas as degradation of IFL's? c) What method can be used to calculate percentage of harvesting: CH's harvesting plans, logging reports and maps, satellite data? d) What is the preferable source of information? e) Do we have a methodology of assessment?
Answer	<ul style="list-style-type: none"> a) The calculation of the maximum 20 % industrial activity (including harvesting, road building and other operations) is conducted using the same methodology as IFLs were mapped b) Yes, Areas affected by stand-replacing wildfires during the last 30–70 years - if located in the vicinity of infrastructure or developed areas, are excluded from the IFL (Potapov et al., 2008; 2009) c) CH's harvesting plans, operational plans, logging reports and maps, satellite data and field inspections are suitable sources for calculating the percentages. Only those operations that have been conducted after 1.1.2017 are included in the percentage

	<p>calculation. Planned operations, which are not yet implemented, do not count.</p> <ul style="list-style-type: none"> d) Up-to-date Earth Observation data with good resolution (if available), combined with field inspections are preferable sources of information. e) The methodology of assessment should not differ significantly from regular certification audits of forest management operations.
--	--

FAQ 8	Brazilian case: Can the whole forest property area be taken into account even if it will be increasingly certified year by year ?
Question	How is the maximum 20 % harvesting in the IFL's to be calculated in the case where a large forest property is located inside the IFL and only part of it is certified ? The FSC certification is based on annually updated FM plan, which add newly inventoried areas to the harvesting and FSC certification. There are no forest inventories taken and no forest management plan exists for the non-certified part of the forest property (see the drawing below).
Answer	The area harvested after 1.1.2017 shall not exceed 20 % of the remaining IFL area within the forest property, including the non-certified part.

FAQ 9	What are the instructions for road building (Advice Note Clause 1.2)?
Question	Advice Note Clause 1.2 states that "PSU is developing further instructions on road building in IFLs." – Which are those instructions?
Answer	<p>HCV Technical Working Group has formulated following International Generic Indicator for regulating fragmentation caused by road building and other industrial activities</p> <p>9.2.7 Management strategies allow limited industrial activity* within core areas* only if all effects of industrial activity* including fragmentation*:</p> <ul style="list-style-type: none"> 1) Is restricted to a very limited portion of the core area*; 2) Does not reduce the core area* below 50,000 ha, and 3) Will produce clear, substantial, additional, long-term conservation and social benefits. <p>Definition for fragmentation:</p> <p>Fragmentation is the process of dividing habitats into smaller patches, which results in the loss of original habitat, loss in connectivity, reduction in patch size, and increasing isolation of patches. Fragmentation is considered to be one of the single most important factors leading to loss of native species, especially in forested landscapes, and one of the primary causes of the present extinction crisis. In reference to Intact</p>

	Forest Landscapes, the fragmentation of concern is understood to be that caused by human industrial activities. (SOURCE: Adapted from: Gerald E. Heilman, Jr. James R. Stritholt Nicholas C. Slosser Dominick A. Dellasala, BioScience (2002) 52 (5): 411-422.)
--	---

FAQ 10	How are the logging moratoria considered in the Russian context?
Question	The Advice Note does not take into consideration of logging moratoria, signed by CH's and stakeholders. These moratoria are legally valid and introduce different thresholds than the Advice Note. All FM systems of the CH's are based on moratoria figures. Even Greenpeace Russia is in favor of continuing with logging moratoria for the time being. How should the existing logging moratoria, as required by the Russian NFSS, be estimated within the transition period?
Answer	In Russia, the Certification Bodies can use a valid moratorium agreement registered in http://hcvf.ru/ as a verifier of conformity with the Advice Note.

FAQ 11	What happens if an IFL area is reduced below 50,000 ha within the FMU?
Question	<p>To clarify Advice Note Clause 1.2: "...do not reduce any IFLs below the 50,000 ha threshold in the landscape ", in this context, would the IFL include potential areas both inside and outside the MU?</p> <ul style="list-style-type: none"> • IFL gross area = 100,000 ha out of which <ul style="list-style-type: none"> Inside the MU = 50,100 ha Outside the MU = 49,900 ha • Certificate Holder wishes to harvest 200 ha inside the MU • If done, IFL area inside the MU = 50,100 ha – 200 ha = 49,900 ha • New gross area of IFL = 100,000 ha – 200 ha = 99,800 ha <p>In this case, would the Certificate Holder be in compliance with the IFL Advice Note since the total area of the IFL is still 99,800 ha or would they be in non-compliance since the area inside the MU is now below 50,000 ha? (Still, the CH harvested less than 20% of the IFL area inside the MU)</p>
Answer	<p>Answer: The wording of the Advice Note is formulated to assure that patches of IFLs do not shrink below the 50,000 ha threshold, even if only a part of the IFL is inside the MU</p> <p>In this case, the company is allowed to harvest even much more than the intended 200 hectares inside the MU, as it does not exceed the 20% share of the IFL within the MU (upper limit for affected area would be $0.2 \times 50,100 \text{ ha} = 10\,020 \text{ ha}$) and the overall size of the IFL <i>in the landscape</i> does not decrease below 50,000 hectares.</p> <p>Also, the Advice Note does not retrospectively affect situations, where the area of IFL inside the MU was reduced below 50 000 hectares in compliance with NFSS before 01/01/2017.</p> <p>NOTE: The remaining IFL in the management unit must still be regarded and protected as IFL, even if the area within the management unit is reduced below 50,000 ha</p>

Scenario 2:

IFL Gross area = 50 000 ha of which
 Inside the MU = 20 000 ha
 Outside the MU = 30 000 ha

The Organization wishes to harvest 200 ha inside the MU
 If done, IFL area inside the MU = 19 800 ha
 New gross intact area = 49 800

Is the Organization responsible to ensure the IFL area does not fall below 50,000 even though most of the area is outside of the MU?

Answer: Yes, the Organization is responsible to ensure the IFL area does not fall below 50,000 due to the operations that The Organization conducts within the MU, even though most of the area is outside of the MU. The Organization is not allowed to harvest 200 ha in this case, particularly taking into account that the IFL status is lost in a distance of 1 km from the edge of the harvested site.

It is acknowledged that The Organization cannot take responsibility of the operations carried out by other land users outside the MU. The national Standard Development Group may introduce more elaborated long-term solutions to the NFSS to maintain HCV2 areas, which will replace the Advice Note once the NFSS becomes effective.

Scenario 3:

IFL Gross area = 50 000 ha of which
 Inside the MU = 20 000 ha
 Outside the MU = 30 000 ha

Non-certified company harvests 1 000 ha outside the MU
New gross intact area = 49 000 ha

Do the restrictions on harvesting of the intact area still apply to the IFL even after the area has been reduced below 50,000 by a non-certified harvester outside the MU?

PSU Answer: No, In this case the area has lost its status as IFL and the M65 Advice Note does not apply.

Scenario 4:

IFL Gross area = 51 000 ha of which
 Inside the MU = 3 000 ha
 Outside the MU = 48 000 ha

Certified company harvests 1 000 ha inside the MU

How are the restrictions to be interpreted in this case where the Organization harvests more than 20% of the small portion of the IFL that exists in the MU?

Answer: Harvesting of 1 000 ha inside the MU is not acceptable in this case for two reasons:

	<ul style="list-style-type: none"> - The Organization has exceeded the 20% share of IFL within the MU <p>The IFL Gross area has shrunk below 50 000 ha, because the IFL status is lost in 1 km distance outside the edge of the harvested area</p>
--	---

FAQ 12	What is the relation of the Advice Note to the Russian NFSS, which already has indicators for IFL?
Question	Does the Advice Note overrule the requirements of the existing IFL Indicators in Principle 9 of the current NFSS for Russia?
Answer	<p>The current Russian NFSS differs from the other P&C V-4 based national standards as it already contains Indicators for IFLs.</p> <p>The Advice Note and the Russian NFSS are two separate documents. The certification bodies will have to undertake a conformity assessment to both of them, as specified in FSC-STD-20-007 V3-0 Forest Management Evaluations:</p> <p>8.3 Each non-conformity against Indicators of the applicable Forest Stewardship Standard shall be evaluated to determine whether it constitutes a minor or major non-conformity at the level of the associated FSC Criterion.</p> <p>8.4 Each non-conformity against other applicable certification requirements shall be evaluated to determine whether it constitutes a minor or major non-conformity at the level of the individual requirement.</p> <p>The M65 Advice Note introduces these "other applicable certification requirements" and if they are more demanding than the existing NFSS, they will temporarily supersede the NFSS.</p>

FAQ 13	
Question	Does the Advice Note replace some Indicators of a NFSS's?
Answer	No, the Advice Note does not replace any parts of a NFSS. It is a parallel normative document to a NFSS. The full set of Indicators in the NFSS remain in effect.

FAQ 14	Are more detailed specifications regarding GFW maps permitted?
Question	<p>Item 1.3 of the Advice Note states: Global Forest Watch IFL maps www.globalforestwatch.org, or a more recent inventory using the same methodology, such as Global Forest Watch Canada, shall be used in all regions as a baseline. FSC Canada wishes to provide the opportunity for Organizations to identify IFLs using Best Available Information. In response to input from Canada's forest industry and other stakeholders that the identification of IFLs should be as accurate as possible, FSC Canada has undertaken an exercise (in collaboration with a number of industry partners and with input from other stakeholders) to identify technical specifications that may be used in the identification of IFLs. We hope to provide Organizations with the option of using this method in Canada's full standard. Is this acceptable and consistent with the requirements of Item 1.3.2.</p>

Answer	Advice Note for Motion 65 and the latest version of International Generic Indicators for Motion 65 are consistent in requiring the same methodology as has been used for developing the Global Forest Watch IFL maps. The methodology can be further refined, but not altered, to generate more detailed specifications.
--------	--

FAQ 15	Should Icl:s be addressed through this Advice Note?
Question	Please confirm that no actions are necessary to address Icl:s through this Advice note.
Answer	The Advice Note provides a definition for Indigenous cultural landscapes, but no actions are necessary to address Icl:s through this Advice note.

FAQ 16	Where do we find the Global Forest Watch Criteria to identify IFL?
Question	If we want to apply the same methodology as GFW (as state in 1.3 of the Advice note) to update our map, we need this information.
Answer	Description of the methodology is available in Annex 1

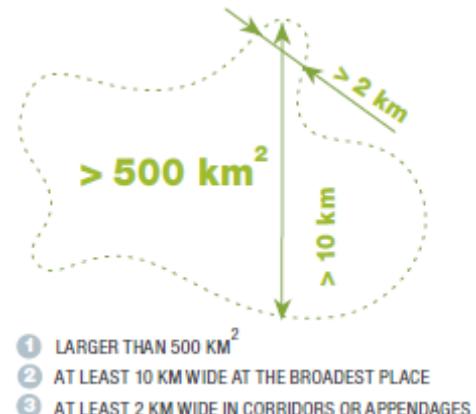
FAQ 17	
Question	Does the Advice Note require additional conformity assessment audits?
Answer	The Advice Note itself does not require additional audits. However, if Corrective Action Requests are raised, additional visits (audits) for closing the CARs may be needed.

FAQ 18	What are the consequences of non-conformance to the Advice Note?
Question	For example, a CB audits a company in November 2017 and finds that the certificate holder has harvested in an IFL after January 2017, resulting in a cumulative impact of more than 20% of the IFLs on the Management Unit, or resulting in reducing the area of the IFL below 50,000ha in the landscape? In this and similar cases, the damage has already happened. What is the appropriate action to take against the certificate holder? Major CAR, Minor CAR, Suspension, Termination?
Answer	<p>(i) In cases where the thresholds have been clearly exceeded and the activities result in significant long term damage (e.g., clear-cut harvesting, permanent road construction), the CB shall terminate the certificate, immediately.</p> <p>(ii) If the thresholds have been exceeded only marginally (for example, 21% of IFL is harvested within the MU or a temporary road track is fragmenting the IFL below 50,000ha) CB shall raise a Major CAR, requiring the certificate holder to immediately stop any further damage to the IFL. The CB can give a maximum of 3 months' time for the CH to undertake corrective action, which could include a binding Action Plan designed together with the affected stakeholders to compensate for the damage (for example, re-vegetating and blocking roads to restore IFL status, or restoring Indigenous Cultural Landscapes). In such cases, the corrective action requests shall be sent to PSU for assessment and feedback.</p>

	<p>Full implementation of activities to compensate for the damage may take longer than the three month timeline for conformance. However, within these three months, the certificate holder will need to demonstrate measurable actions and progress in the implementation of the compensatory activities.</p> <p>(iii) In general, the corrective actions should aim at decreasing possible harvesting levels in the IFLs, in order to prevent surpassing the 20% threshold, prior to the NFSS coming into effect.</p>
--	---

IFL Methodology (Source: <http://www.intactforests.org/method.html>)

The IFL Methodology was proposed by Greenpeace in 2001 as an approach for mapping and monitoring the extent of forest degradation. The essence of the approach is to establish the boundaries of large undeveloped forest areas, or Intact Forest Landscapes (IFL), and to provide timely monitoring of forest conversion and degradation within them. The IFLs are defined as large unbroken expanses of natural ecosystems in the zone of current forest landscapes extent without signs of significant human activity. For the global IFL analyses, the following criteria were used: (1) minimum area of 50,000 hectares; (2) minimum IFL patch width of 10 km; and (3) minimum corridor/appendage width of 2 km. The criteria were chosen to insure that IFL patch core areas are large enough to provide refuge for wide-ranging animal species.



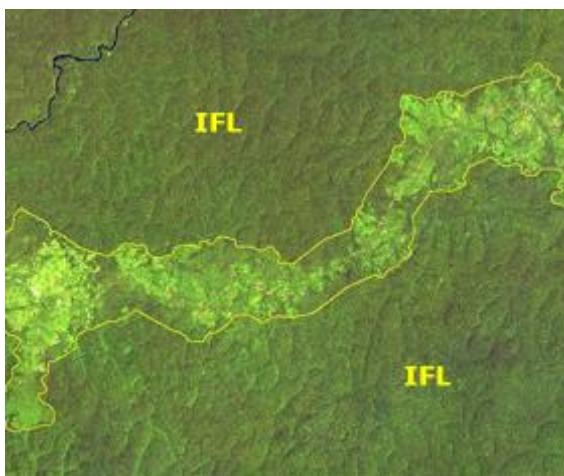
Medium resolution satellite data were used to map areas affected by alteration or conversion (clearing, logging, infrastructure development, etc.). Medium spatial resolution images from Landsat TM circa year 1990 and ETM+ circa year 2000 were used as the primary data source for year 2000 IFL mapping. The Landsat images were obtained from the GeoCover Landsat Orthorectified image collection (provided by GLCF and USGS). Both sets of 1990 and 2000 Landsat TM/ETM+ images were used simultaneously to improve the quality of interpretation. While the year 2000 images made it possible to detect the most recent disturbances, the older images allowed us to detect older disturbances, whose traces have become less evident with time. This was especially important in tropical forests, where the evidence of human influence disappears much faster than in temperate and boreal forests. Existing road and settlement maps and high spatial resolution imagery available through Google Earth interface were used to aid interpretation.

(see also: <http://www.intactforests.org/pdf.publications/IFL.Methodology.infographics.pdf>)

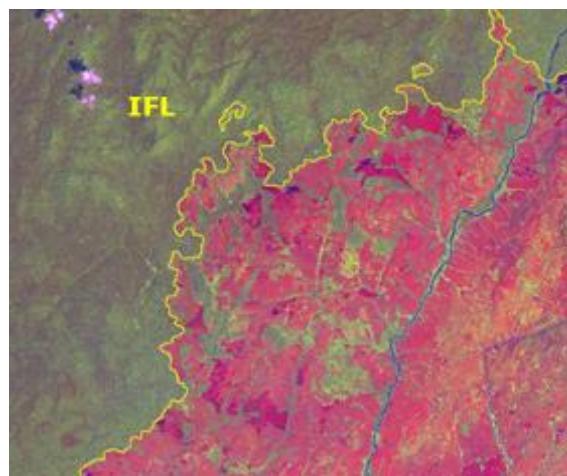
The IFL mapping approach is based on ‘inverse logic’, i.e. on mapping the opposite of intactness: altered and fragmented forest areas. The image analysis was conducted through expert-based visual interpretation, using Geographic Information System (GIS) overlays of medium spatial resolution satellite images with additional thematic and topographic map layers. The purpose is to detect evidence of significant human-caused alteration and fragmentation. To assess fragmentation, all developed areas were excluded and all infrastructure and settlements were buffered by 1 km. Patches without evidence of development, if large enough, are classified as IFL. The IFL Mapping Team produced and provides regular updates of the global IFL map which shows the boundary between unaltered forest landscapes (where most components, including species and site diversity, dynamics and ecological functions remain intact) and altered or fragmented forests (where some level of timber extraction, species composition change, anthropogenic fragmentation and/or alteration of ecosystem dynamics has taken place). The IFL methodology represents a practical, rapid, and cost-effective approach for assessing forest intactness, alteration and degradation at the global and regional scales.

IFL Monitoring

The IFL re-assessment and global map update can be used to measure and differentiate rates of forest alteration and degradation across a landscape. To perform the update we use the same criteria, source data, and methods as in the baseline year 2000 assessment. The work is conducted through expert-based visual interpretation of medium spatial resolution satellite imagery, and could proceed much more quickly than the initial IFL baseline mapping because only areas within already identified IFLs needed to be assessed (no gain in intactness is assumed to be possible). For the year 2013 update the cloud-free mosaic of Landsat data provided by University of Maryland were used as a source data. Combining IFL degradation maps with gross forest cover loss results (e.g. Hansen et al., 2013) may be used to differentiate causes of IFL degradation.



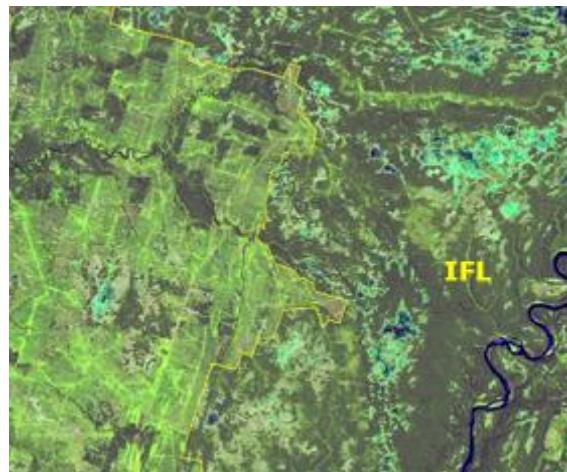
Democratic Republic of the Congo. Settlements, agriculture areas and buffered area along the road have been excluded.



Democratic Republic of the Congo. Savanna grazing areas affected by annual human induced fires have been excluded.

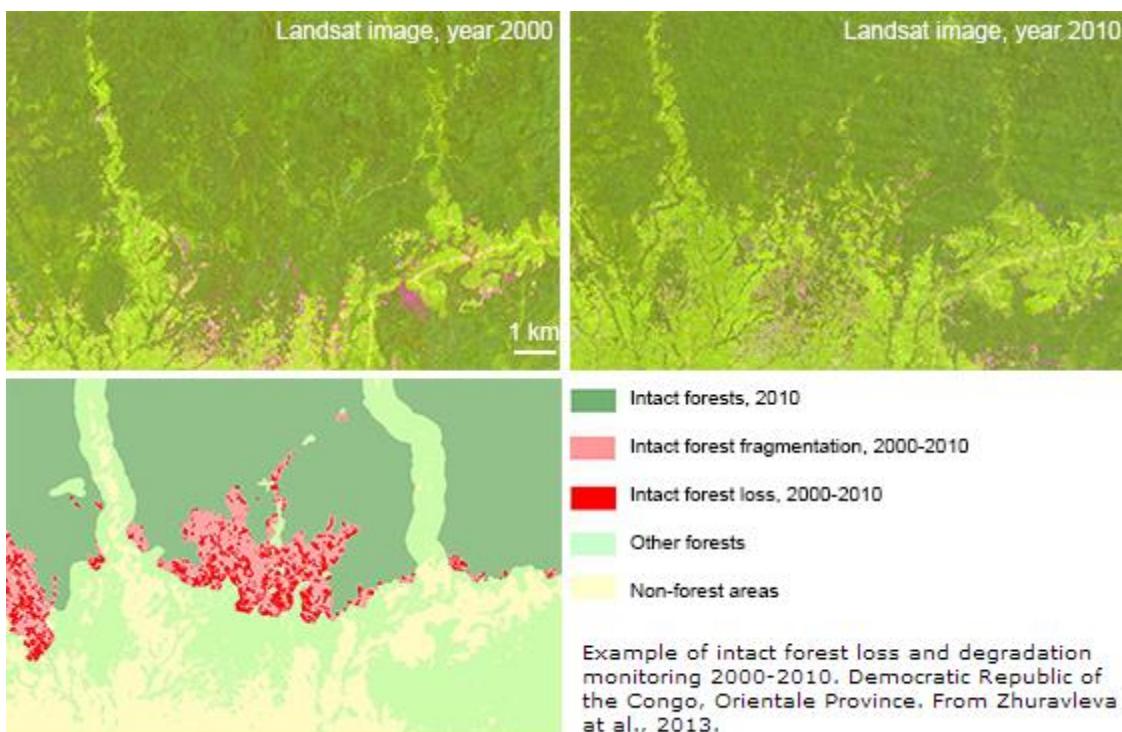


Papua - New Guinea. Logging concession area have been excluded.



Northern European Russia. Clearcuts have been excluded.

Examples of IFL boundaries (yellow line) mapped on Landsat ETM+ images



References:

- P. Potapov, A. Yaroshenko, S. Turubanova, M. Dubinin, L. Laestadius, C. Thies, D. Aksenov, A. Egorov, Y. Yesipova, I. Glushkov, M. Karpachevskiy, A. Kostikova, A. Manisha, E. Tsybikova, and I. Zhuravleva. (2008) Mapping the world's intact forest landscapes by remote sensing. *Ecology and Society* 13(2): 51
- I. Zhuravleva, S. Turubanova, P. Potapov, M. Hansen, A. Tyukavina, S. Minnemeyer, N. Laporte, S. Goetz, F. Verbelen and C. Thies (2013) Satellite-based primary forest degradation assessment in the Democratic Republic of the Congo, 2000–2010. *Environmental Research Letters* 8: 024034



Forest Stewardship Council®

ic.fsc.org

FSC International Center GmbH
Charles-de-Gaulle-Strasse 5 · 53113 Bonn · Germany

