Forest Carbon Partnership Facility (FCPF) ER-PD TAP REVIEW of the Democratic Republic of Congo

I. General Approach of the Review

The present TAP report is based on an assessment process that started with the review of DRC's first draft ER-PD, dated October 6, 2015. On November 4, 2015, the TAP transmitted its first observations to the DRC ER-PD team and the FMT, containing, under each criterion of the TAP template, a number of questions and observations that asked for clarification and precision for the TAP team to fulfil its mandate of preparing a fully informed technical assessment of the Draft ER-PD to the Carbon Fund. In a number of telephone conferences, e-mail exchanges and two face-to-face missions - the first on methodological issues in Zurich on 5-7 November 2015 and the second on the broader ER-PD approach in Kinshasa on 8 –12 December 2015 - the TAP team could make itself a better understanding of the approaches and issues of the proposed ER-Program. The DRC ER-PD team was given the option to improve the ER-PD, to enhance the clarity of the document and to provide additional information on a number of questions by the TAP. The present TAP report, dated Feb. 7, 2016 contains the TAP's full assessment of the Emission Reduction Program Document (ER-PD) for the Maï Ndombe Province of DRC and is based on DRC's advanced Draft ER-PD, dated Jan. 15, 2016.

Each TAP member revised the parts of the ER-PD that have been in accordance to his professional experience in relation to the criteria and indicators of the Carbon Fund Methodological Framework (https://www.forestcarbonpartnership.org/carbon-fund-methodological-framework). Teleconferences and e-mail exchanges were held to clarify doubts and divergence of opinions. The coordinator organized and supplemented where necessary the comments of other TAP members and did the final editing of the text. Those indicators that did not completely meet the requirements, according to the opinion of at least one of the TAP experts, were qualified as *not met*.

Date of Current Final Review Draft: 7 February 2016

Name of reviewers in alphabetic order:

Juergen Blaser (policy and forestry issues; coordinator of TAP); Guy Patrice Dkamela (local development); Harrison Ochieng Kojwang (safeguards); Till Neeff (methodological framework); Martijn Wilder supported by Gaby Kabue Kayombo (legal issues).

Summary Assessment of the Quality and Completeness of the ER-PD:

The DRC has prepared an ambitious ER-PD document for a relatively large jurisdictional area (2 ½ times the surface of Costa Rica) that could become a model of large-scale REDD+ programs in the DRC and the Congo Basin overall. The DRC ER-PD team has worked systematically and put together an impressive amount of information, in the ER-PD document itself and in the various additional documents provided to the TAP. The draft document, with its extended annexes, dated 15 January 2016, is well written, clearly presented, and illustrative and generally addresses the criteria for an overall assessment by the TAP.

Yes/No score based on the assessment of the criteria and indicators

II. Level of Ambition \rightarrow Criteria 1 – 2, including issues relating to legal aspects

YES

The DRC ERPD is a Program implemented at a jurisdictional level in the Maï-Ndombe province and serves as a pilot for green growth in the DRC and the Congo Basin overall. It constitutes an innovative large-scale program that is integrated in DRC's national REDD+ strategy framework. Aligned with the investments of Forest Investment Program (FIP) and Congo Basin Forest Fund (CBFF), the Maï-Ndombe Emission Reductions Program includes a balanced combination of enabling activities (strengthening governance, capacity building, local level land-use planning, addressing the issues of securing land tenure) and sectorial activities (community-based forestry and agroforestry, reduced impact logging, forest conservation) in a wall-to-wall land-use carbon approach over an area of 123,000 km2 (12.3 m ha) covered by 76% of natural tropical forests and 14% of savannah area located in the immediate economic zone of influence of the mega-city Kinshasa. The program represents a partnership to secure a long-term public, community and private commitment to reducing deforestation and increasing land-use carbon sinks. It provides financing for delivering results-based payments for emission reductions, combined with the support of poverty reduction, sustainable development, forest management and biodiversity conservation at scale.

The proposed ER program has a high level of ambition in terms of demonstrating the potential of a full implementation and of a variety of interventions of the national REDD+ strategy. The ERPD well describes the overall approach and sufficiently presents the link to the latest recent development at the national level (e.g. INDC submission by DRC and DRC/CAFI involvement on REDD+ implementation).

Overall, the TAP is satisfied with the description of the general institutional arrangements at jurisdictional level, including the link to national level. More information and precision is needed on the development of local institutions, in particular on organizational arrangements at the community level and a vision on how through a step by step process the institutions will be strengthened and become operational. Given that the jurisdictional entity is actually a newly created Province (1 January 2016), the ER-PD should be quite clear on the particular opportunities and challenges that are relevant to implementing a comprehensive ER-Program under such circumstances.

As the ER-PD clearly demonstrates, many of the issues relating to the ability of the DRC to transfer the Emissions Reductions under the proposed Maï-Ndombe Emission Reductions Program are closely interrelated. For a better understanding of those interrelated issues that link to the legal framework, including land tenure, ERs and community consultation, the TAP attached to its report a short annex document (Legal issues relating to land tenure, ERs and community consultation).

III. Carbon Accounting

23 x YES

III (a) Scope and methods > Criteria 3 - 6

13 x NO

- III (b) Uncertainties → Criteria 7 9
- III (c) Reference Level → Criteria 10 13
- III (d) Reference Level, Monitoring & Reporting on Emission Reductions -> Criteria 14-16
- III (e) Accounting for Displacement (leakage) → Criterion 17
- III (f) Accounting for Reversals → Criteria 18 21

III (g) Accounting for ERs → Criteria 22 - 23

The ER-PD presents a well thought through and detailed approach to carbon quantification. During the technical assessment, the TAP noticed that model estimates have improved and most accurate and scientifically sound information has been developed and presented in the January 15 ER-PD draft.

Nonetheless, the indicator-by-indicator assessment by the TAP reveals a number of issues where the measurement approach could to be improved to fully meet the standards of the Methodological Framework (MF). These issues include:

- Establish consistency in methodologies between reference level and programme monitoring (indicator 14.1). This could be achieved by changing the proposed methodology for ER-Programme monitoring to be in line with the approach for reference level setting. The link to the national MRV system, however, still needs to be maintained.
- The approach to using emission factors is not fully spatially explicit (criterion 22). The derivation of emission factors needs to take into account the spatial configuration of deforestation and forest degradation. Alternatively, the appropriate conservativeness discounts could be applied for forest degradation.
- The ER-PD needs to be stricter in assessing reversal risks (indicators 18.1 and 18.2).
- A more robust procedure for collecting complex datasets in logging concessions needs to be proposed (indicator 8.1). A process for third party verification of concessionaires' reports could to be designed that include supporting primary field measurements.
- The approach for documenting and quantifying the adjustment needs to be revisited (indicator 13.3).

The TAP recommends that the DRC provides clearer and more transparent information on the measurement approaches. The ER-PD should aggregate summary estimates differently to report emission estimates by the five REDD+ activities and not only by its own sub-areas (as per indicator 3.1). It should provide detailed information on the exclusion of certain pools and gases (as per indicator 4.2). Better explanations of the strategy to mitigate displacement risks are required (indicator 17.2). And most information also needs to be made publicly available (indicators 6.1 and 6.2).

The TAP notes, that, regardless of how much effort is undertaken, the ER-PD reflects the difficulties that REDD+ programme development generally faces in midst of emerging national REDD+ strategies. Fully aware of the complexity that is implied in general terms, the TAP notes that the ER-PD is not built on IPCC methodologies (as requested by the MF, indicator 5.1) and its data will not be consistent with the national GHG inventory (indicator 10.3).

The developers of the ER-PD took practical decisions at a time when the national approach to the measurement of REDD+ was just emerging. Thus, carbon accounting in the ER-Program for the Maï-Ndombe is based on project-level methodological approaches that deviate from the approaches for national GHG inventories.

The carbon accounting approach was structured based on an existing legacy project in Maï-Ndombe

and its methods provided the general design for the ER-PD. This makes the accounting approach for the jurisdictional area unique. It is therefore not necessarily a model to be applied in other circumstances and countries. IV. Safeguards Actions undertaken to meet WB and Cancun Safeguards → Criteria 24-26 5 x YES 1 x NO A transparent system for periodically sharing consistent information on safeguards and non-carbon aspects has been developed at national level and an early operational stage is functional with the completion of the SESA process, the work of the platform MOABI and the adoption of the Environmental and Social Management Framework (ESMF). The DRC has also defined its national and social environmental standards. The ER-PD clearly makes reference that SESA and ESMF will also be applied at jurisdictional level. Project developers are subject to compliance with ESMF and national social and environmental standards. The challenge for the ER-PD will be the implementation on the ground and applying an effective monitoring system in the jurisdictional area. Under 'Implementation Arrangements', the document states that each project has to identify and document the key social and environmental risks (to be lodged with a National Registry), which should apply the national framework on social and environmental assessments for REDD+ which will need to be approved by the National Technical Committee on REDD+. Table 10 in Chapter 5 which contains stakeholder comments on the ERPD makes clear reference to safeguard issues, as are Figures 4 and 5 in the same chapter. While the TAP notes that framework documents on the identification, description, implementation and monitoring of safeguards exist, what remains are practical analyses and steps on safeguards that specifically address the mitigation options that have been described in Chapter 4 of the ER-PD in the specific context of the Maï-Ndombe province. V. Sustainable Program Design and Implementation YES V. (a) Drivers and Land Resource Tenure Assessment → Criteria 27-28 V. (b) Benefit sharing → Criteria 29 – 33 V. (c) Non-Carbon Benefits → Criteria 34 – 35 The Program Design is innovative and representative to experiment on a larger jurisdictional area that should finally inform a country-wide REDD+ approach. The drivers of deforestation and forest degradation are well identified and the linkages between the direct and indirect factors are clearly presented. The agents behind the drivers and the concerned land categories are defined along with the opportunities for enhancement of forest carbon stocks. The measures and approaches to address deforestation and degradation are identified and are visibly articulated with the National REDD+ strategy. However, activities related to some drivers need to be reviewed (for example, it is a tall order to address the population increase given the proposed

The projected participatory approach to land-use planning is well designed and includes steps that can lead to secured investment in the ERP. However, the TAP recommends to clearly link the

interventions).

jurisdictional level land-use planning with the land tenure and land-use planning reforms at the national level (to be funded by CAFI), as the national reforms will adopt policies that also apply at the provincial level. Also, participatory mapping appears as an effective tool for land-use planning at local level, but it would help minimize conflicts and contested community maps if carried out with functional standards agreed among stakeholders in DRC.

The overall institutional arrangement to implement the program seems to be adequate, but there is a challenge as to making the whole casting work effective, given the current low level of capacities. Thus, the TAP recommends <u>a step by step implementation</u> and steady learning process in respect to the institutional arrangement.

A comprehensive overview of the land tenure arrangements in the ER Program area is presented in the ER-PD. Given this background, however, it will require particular attention during implementation to ensure effective implementation of the ER program, probably relying on a complete set of contracts - concluded with relevant stakeholders concerning participation/the sharing of ER proceeds.

Though an effort of information sharing and consultation is visible prior to the design of this version of the ER-PD, an in-depth interaction is still needed in order to build a common understanding and consensus with stakeholders at the grass-root level and develop an advanced and more fine-tuned safeguard plan and an effective information sharing system.

Similarly, effort of consultation helped the ER-PD team to adopt key principles for benefit sharing and propose a preliminary benefit sharing plan. There is a need to move forward with the remaining activities and further consultation in order to finalize the Benefit Sharing Plan which provides clarity on issues at stake and on monitoring provisions. The fact that the principle of free, prior and informed consent (FPIC) is already mentioned shows that the team is on good track. In the TAP's view, the challenge is to find ways to contextualize it to the jurisdictional area of Maï-Ndombe.

Priority Non-Carbon Benefits are identified and described. The TAP however concludes that the socio-cultural criteria for such benefits (culturally appropriate, and gender, inter-generational inclusivity, etc.) need to be better justified, following consultations above mentioned. It would also be worthwhile to provide criteria for socio-economic characteristics (e.g. potential employment figures, expected income growth, number of households that could benefit, etc.). Similarly, some key biodiversity indicators for tracking them could be identified.

VI. ER Program Transactions

Yes

- VI (a) ERPA Signing Authority and Transfer of Title To ERs → Criterion 36
- VI (b) Data Management and ER Transaction Registries → Criteria 37 38
- VI (c) Non-Carbon Benefits → Criteria 34 35

Ministry of Environment, Nature Conservation and Sustainable Development (*MECNDD*) is the designated Government authority for the domestic and the international transfer of emission reduction credits (AM 2012 and *Ordonnance présidentielle n°15/015 du 21 mars 2015*). Participation and emission reduction arrangements will be concluded between the Ministry and relevant stakeholders (who may become either direct credit claimants or receive shares). The TAP notes that the central government will sign the ER-PA with the Carbon Fund, not the regional government. The allocation of responsibilities and carbon revenues between the central government and the regional

government will be laid down in an intra-administrative agreement. The TAP further notes that indigenous communities are recognized stakeholders under AM 2012.

The TAP comments that the overall criteria under the Program Transactions are met. In its analysis, the TAP notes that many of the issues relating to the ability of the DRC to transfer the Emissions Reductions under the proposed Maï-Ndombe Emission Reductions Program (indicator 28.3 and 36.1 and 36.2); the assessment of land and resource tenure regimes (indicator 28.1); preventing double counting (C23); and project data management system are all closely interrelated. They require an understanding of the approach DRC has proposed to address the underlying legal issues around the ownership of carbon, the legal nature of ERs and the laws and systems establish to deal with these matters under the specific ER-Program.

While there remains some uncertainty around the relationship between the constitutional rights of the State and the rights of community groups, as well as about the legal nature of ERs, the DRC has developed a substantive approach to managing REDD+.

The DRC has in place a REDD+ regulation that governs the development of REDD+ projects and regulates the issuance of ERs. Under the REDD+ Regulation 2012, the central government has made it clear that it holds the role of coordinator for the country's (national) REDD+ activities and, in that role, defines management elements and functions for REDD+ programs and projects developed underneath the national REDD+ governance level. It will be solely responsible for dealing with the FCPF. The DRC has made it a pre-condition for the right of the project proponent to commercialize REDD+ carbon credits under the REDD+ Regulation 2012 that any creation, sale and benefits of any ERs are all underpinned by agreements with all interested stakeholders. The conclusion of partnership contracts between the government (represented by MECNDD) is – together with the adoption of an accord between the project proponent and local and indigenous communities – deemed a pre-condition for the right of the project proponent to commercialize REDD+ carbon credits. If such agreements are not in place those ERs are not included in the program.

On the institutional side (MRV), the TAP recognizes that AM 2012 defines a REDD+ registry to track all REDD+ activities and nominates the Ministry of Environment, Nature Conservation and Tourism as the relevant registry authority. This National Registry of the DRC's national REDD+ program is currently in design and will be operational mid-2016. Once a project has been approved through the 2102 REDD+ Regulation, it will then be formerly registered on the National Registry of the DRC's national REDD+ program. Any generated Emission Reductions (ERs) once measured and verified will then be issued as domestic Emission Reduction Credits (ERCs) exclusively through the National REDD+ Registry.

Not only will all these measures avoid conflicts but when taken together with the other measures above, they indicate the extent to which the State has consulted with Stakeholders and confirm the ability of the State to transfer the ERs under the FCPF ER-PA and avoid double counting.

SUMMARY SCORE and overall comment:

The ER Program aims at implementing DRC's green development vision at scale by providing alternatives to deforestation and rewarding performance to address the challenges of climate change, poverty reduction, natural resource conservation and protection of biodiversity. The ER-PD proposes novel ideas of how to develop a REDD+ program at a wider jurisdictional level (Maï Ndombe Province), an area carefully chosen to be representative for the forested regions of the country. Thus, the Government of DRC views the Maï-Ndombe Emission Reductions (ER) Program as a first step in implementing the country's national REDD+ strategy.

The proposed programs and strategies include mechanisms that are directed towards the main drivers of deforestation and forest degradation, and also towards enhancing sinks through reforestation and agroforestry development and sustainably managing existing forests, as identified in the ER-PD. While overall the ER-PD is well formulated and comprehensive, there are a number of challenges that still need to be thoroughly considered when putting the ER-Program in place. These relate to the still weak institutional environment in the Province that need to be continuously strengthened, to a number of methodological questions of carbon quantification, and some issues relating to long-term arrangements, including safeguard issues relating to the particular jurisdictional area, benefit sharing arrangement, grievance mechanism and continuous clarification on legal aspects.

Based on the methodological framework (MF), the TAP assessed a total of 78 criteria and indicators 53 criteria or indicators are <u>met (yes)</u> and 16 are <u>not met (no)</u> at the current stage; 9 indicators has been classified under do <u>not apply (n/a)</u> to the current assessment.

Ind 1.1	yes	Ind 9.2	yes	Ind 16.1		Ind 25.1	Yes	Ind 34.2	no
Ind 1.2	yes	Ind 9.3	N/A	Ind 17.1	yes	Ind 25.2	N/A	Ind 35.1	yes
Ind 2.1	yes	Ind 10.1	yes	Ind 17.2	no	Ind 26.1	Yes	Ind 35.2	N/A
Ind 3.1	no	Ind 10.2	yes	Ind 17.3	N/A	Ind 26.2	Yes	Ind 36.1	yes
Ind 3.2	yes	Ind 10.3	no	Ind 17.4	N/A	Ind 26.3	Yes	Ind 36.2	yes
Ind 3.3	yes	Ind 11.1	yes	Ind 18.1	no	Ind 27.1	Yes	Ind 36.3	yes
Ind 4.1	yes	Ind 11.2	yes	Ind 18.2	no	Ind 27.2	Yes	Ind 37.1	yes
Ind 4.2	no	Ind 12.1	yes	Ind 19.1	yes	Ind 28.1	Yes	Ind 37.2	yes
Ind 5.1	no	Ind 13.1	yes	Ind 20.1	N/A	Ind 28.2	Yes	Ind 37.3	yes
Ind 6.1	no*	Ind 13.2	yes	Ind 20.2	N/A	Ind 28.3	Yes	Ind 37.4	yes
Ind 6.2	no*	Ind 13.3	no	Ind 21.1	yes	C29	Yes	Ind 38.1	no
Ind 7.1	yes	Ind 13.4	yes	Ind 21.2	N/A	Ind 30.1	Yes	Ind 38.2	yes
Ind 7.2	yes	Ind 14.1	no	C 22	no	Ind 31.1	Yes	Ind 38.3	N/A
Ind 8.1	no	Ind 14.2	yes	C 23	yes	Ind 32.1	Yes	Ind 38.4	yes
Ind 8.2	yes	Ind 14.3	yes	Ind 24.1	yes	Ind 33.1	Yes		
Ind 9.1	yes	Ind 15.1	yes	Ind 24.2	no	Ind 34.1	Yes		

^{*}can be turned easily in a "yes" if the methodological elements are made available at the website.

PART 2 OF TAP REVIEW: DETAILED ASSESSMENT

C. 1 The proposed ER Program is ambitious, demonstrating the potential of the full implementation of the variety of interventions of the national REDD+ strategy, and is implemented at a jurisdictional scale or programmatic scale.

Ind. 1.1 The ER Program Measures aim to address a significant portion of forest-related emissions and removals

YES

[Ambition and strategic rationale for the ER Program – 2.2]

Yes, the ER Program Measures aim to address a significant portion of forest-related emissions and removals.

The ER-PD program intends to reduce emissions by close to 30 Million tons of CO2 equivalents. This corresponds to about 5.6% of the forest-related emissions for Maï-Ndombe province within the accounting scope. Overall, the strategy to achieve the goal is well designed and based on the country-wide multi-year analysis during the REDD+ readiness phase.

However, the ER-Program measures <u>are ambitious</u> considering the proposed multi-sectoral approach, its coverage of different eco-zones (tropical moist forest; savanna) and the socio-economic challenges that characterise the jurisdictional area (existing communities, migration, population pressure and economic pressure), which as an additional challenge of being a province located in the vicinity of the mega-city Kinshasa. Also, the current rather weak institutional environment (Maï Ndombe is a very newly created province with yet not well developed public structures and strategies) asks for careful approaches that include institution building, creation of administrative and legal capacities and political commitment for the "green economy" approach. The experience of an existing VCS project (conservation concession) in the jurisdictional area can be considered as an asset. Another asset is the planned partnership with private sector companies (though small in number, size and impact for the time being).

Considering the potentials and risks included in implementing the proposed ER Program Measures, it will be important that during the first two years of implementation the ER Program some piloting activities are conducted to better explore the feasible approaches and eventually re-orientate the strategic measures to reach the defined aims, if required.

The TAP concludes further that an important part of the ER Program strategy will depend of the effective involvement of a variety of stakeholders, including the new state authorities, local community leaders and of the private sector (forest companies, agricultural companies, and others). Clear steps towards concretization and sustainable approaches that include considerable socio-economic investment beyond carbon financing have been proposed through the various additional components that accompany the ER-Program.

Ind. 1.2 The ER Program is ambitious, uses new or enhanced ER Program Measures to reduce Emissions or enhance removals, is undertaken at a jurisdictional scale and/or takes a programmatic approach (i.e., involves multiple land areas, landowners or managers within one or several jurisdictions), and reflects a variety of interventions from the national REDD+ strategy in a coordinated manner.

YES

[Ambition and strategic rationale for the ER Program – 2.2, 2.3]

Yes, the ER Program is ambitious and reflects the national REDD+ strategy in a coordinated manner.

The Mai Ndombe Province covers an area of 12.3 million hectares, out of which 9.8 million hectares are forests. Thus a main focus is on reducing deforestation mainly due to shifting cultivation and forest degradation (including fuelwood extraction, illegal logging and unsustainable harvesting). A lot of emphasis is given to valuate savanna land through agricultural production (both small scale and commercial), though the TAP team is yet not entirely convinced that the

quality of soil and current use patterns will allow to develop the ambitious removal program. Taking into account the ambition to work with local communities, particularly in the field of fuelwood extraction, sustainable agroforestry and fuelwood plantation as well as in the development of SME, the ER program, as outlined already under Ind. 1, is considered as ambitious, particularly to manage the numerous contract needed and the monitoring system to put in place to manage results-based payments. The program can built on the experience of a VCS project but adds considerable new features to correspond to the challenges in a wider jurisdictional level. While the experience from the VCS project is valid, there will be new challenges to take into consideration due to the simple size of the area to monitor.

The program is focused on a single province, however with the intention to be nationally oriented. It involves multiple land owner types, and reflects a high variety of interventions of the REDD+ strategy. The TAP strongly recommend to address the current capacities of the public institutions involved through the development support provided by other donors, particularly to support monitoring, the development of legal texts and their enforcement, also including benefit sharing and questions relating to reversal. This element needs to be particularly taken care of when putting in place the institutional setting of the ER-Monitoring program.

C. 2 The Accounting Area matches a government- designated area that is of significant scale

Ind. 2.1 The Accounting Area is of significant scale and aligns with one or more jurisdictions; or a national-government-designated area (e.g., ecoregion) or areas.

YES

[Accounting Area of the ER Program – 3.1]

Yes, the Accounting Area is of significant scale and aligns with an entire jurisdictional area.

The Maï-Ndombe accounting area has been carefully chosen based on a number of criteria, including of being a transitional zone between the natural forest area of the Congo basin and adjacent climatic savannah. The province extents over 12.8 m ha land area out of which 8.8 m ha of primary-type forests, 1 m ha secondary forests and 1.8 m ha of (tree) savannah. It is close to Kinshasa and thus presents major issues in respect to deforestation and forest degradation, but also opportunities for sustainable land-use approaches and development of commodity value chains for the important Kinshasa market with more than 10 million potential customers for agricultural and forest products.

The ER Program coincides with the creation of the Maï-Ndombe as a new province and its governmental and institutional structures (the province is currently governed by a Special Commissioner). This constellation is both, an opportunity and a risk to align the development priorities of the province with the measures offered by the ER-program.

The main economic activities in the new province are closely related to the exploitation of the expansion of agricultural areas and the exploitation of forest resources. A variety of land tenure, concession arrangements (both forest concession as well as agricultural crop/livestock concessions covering 30% of the total land), and considerable part of traditional land use for subsistence and small-scale agriculture characterize the land use. Population growth and migration are important socio-economic factors that affect land use. In the area a significant number of developmental activities are already in place, including REDD+ initiatives (WWC/VCA conservation concession; Novacel agroforestry expansion, large-scale forest concessions, investments of the FIP/World Bank and major forest conservation programs, e.g. by WWF.

The Maï-Ndombe jurisdictional area allows DRC to experiment REDD+ on larger scale, combining a variety of eco zones, drivers of DD and pilot mitigation approaches that should allow upscaling the experience at wider country level.

The proposed REDD+ measures are proven, though not very innovative (e.g. Novacel approach to combine Acacia with manioc planting; savannah reforestation with acacia and eucalypts). Another proposed approach that the TAP critically assessed is the concept of "conservation concessions" and the proposed expansion of such concessions and their permanence. Conservation concessions are not productive forest management areas giving in license for timber or

NTFP, nor legally gazetted forest protected area. However, DRC uses the concept of conservation concessions as an immediate strategy in the ER-Program to give value to existing forests and thus provide means for local development in a context of growing forest destruction. Once the economic and regulative context is improved, it is expected that conservation concession are either converted into sustainably managed production forests for timber and/or NTFPs, or, alternatively into protected areas with valuating ecotourism and biodiversity. The approach is used in a particular project area of a VCS project in the jurisdictional area (Wildlife Works REDD+ project Maï-Ndombe over 300,000 ha).

C. 3 The ER Program can choose which sources and sinks associated with any of the REDD+ Activities will be accounted for, measured, and reported, and included in the ER Program Reference Level. At a minimum, ER Programs must account for emissions from deforestation. Emissions from forest degradation also should be accounted for where such emissions are significant.

Ind. 3.1 The ER Program identifies which anthropogenic sources and sinks associated with any of the REDD+ Activities will be accounted for in the ER Program

NO

[Description of Sources and Sinks selected – 8.1]

No, the ER-PD does not identify sources and sinks according to the REDD+ activities.

The ER-PD divides the ER programme area into three sub-areas and all quantitative estimates provided are broken down according to these. The sub-areas cannot be easily matched to the REDD+ activities (the names of sub-areas are somewhat misleading because they suggest that this match is indeed straightforward).

Matching sub-areas to REDD+ activities may deliver the following result:

- Sub-area "unplanned deforestation (UNDEF) and unplanned degradation (UNDEG)" includes potentially all five REDD+ activities (FL->NF and FL->FL and NF->FL),
- Sub-area "planned forest degradation" (PDEG) includes forest degradation, conservation of forest carbon stocks and the sustainable management of(natural) forests (FL->FL),
- Sub-area "afforestation / reforestation" (A/R) includes enhancement of forest carbon stocks (NF->FL).

The ER-PD uses sub-areas with very different carbon accounting approaches that mix REDD+ activities. The ER-PD does not contain emission or removal estimates according to the REDD+ activities. However, the ER-PD applies its definitions consistently, as far as can be judged.

In conclusion, the DRC ER-PD uses own definitions (which according to section 7 largely stem from underlying CDM and VCS methodologies), but differ from the IPCC definitions or the REDD+ activities. This does not introduce a lack of accuracy in itself, but it introduces a lack of comparability and of transparency.

Ind. 3.2 The ER Program accounts for emissions from deforestation. [Description of Sources and Sinks selected -8.1]

YES

Yes, the ER Programme accounts for emissions from deforestation.

In section 7.2 and 8.1, the ER-PD subdivides the accounting area in three sub-areas ("land-use strata");

- Unplanned deforestation and forest degradation (UNDEF / UNDEG), featuring shiftingagriculture, sedentary agriculture, fuelwood collection, charcoal production, illegal logging and other forest clearing activities;
- Planned degradation (PDEG), from legally authorized / planned industrial timber harvesting (which also includes sustained yield forest management; and
- Afforestation / Reforestation of previously non-forested land (A/R).

For each sub-area, it identifies sources or sinks to be accounted for. One of the three sub-areas relates to

deforestation and emissions from deforestation are accounted for there.

Ind. 3.3 Emissions from forest degradation are accounted for where such emissions are more than 10% of total forest-related emissions in the Accounting Area, during the Reference Period and during the Term of the ER-PA. These emissions are estimated using the best available data (including proxy activities or data).

YES

[Description of Sources and Sinks selected – 8.1]

Yes, the ER Programme accounts for emissions from degradation.

According to section 7.2 and 8.1, emissions from forest degradation are included.

For each land-use sub-area, the ER-PD identifies one or two REDD+ activities and associated sources or sinks to be accounted for. The sub-area on "unplanned deforestation / degradation" and the sub-area on "planned degradation" both account for forest degradation.

Compared to the ER-PIN, the ER-PD has made a greater focus on forest degradation. Therefore, the ER-PD's reference level is considerably higher than the reference level presented in the ER-PIN (pre-adjustment - ER-PD: 102.4m tCO2e/yr versus ER-PIN: 25m tCO2e/yr). The difference is largely due to (i) the additional inclusion of unplanned degradation in the ER-PD and (ii) the use of a new data source for estimating unplanned deforestation in the ER-PD.

The ER-PD proposes a reference level of 48.7m tCO2e /yr for unplanned degradation that had not been included in the ER-PIN. This new emission source account for most of the difference in reference level emissions between ER-PIN and ER-PD.

The ER-PD proposes a reference level of 53m tCO2e /yr for unplanned deforestation, while the ER-PIN had only 19.3m tCO2e /yr for the same source. The difference is largely because of different activity data for deforestation. The ER-PIN had used estimates published by the University of Maryland with a deforestation rate of 0.34% for the DRC as a whole. The ER-PD, in turn, proposes a point sampling approach to estimate Maï-Ndombe's deforestation rate at 1.12%.

It therefore can be concluded that the different reference levels between ER-PIN and ER-PD can be easily explained by looking at the underlying data and their scope. It can also be concluded that emissions estimates from deforestation are highly sensitive to the choice of activity data source. (This is part of the reason why indicator 14.1 requests consistency, and is currently assessed as "NO".)

C. 4 The ER Program should account for, measure and report, and include in the ER Program Reference Level, significant carbon pools and greenhouse gases, except where their exclusion would underestimate total emission reductions.

Ind. 4.1 The ER Program accounts for all Carbon Pools and greenhouse gases that are significant within the Accounting Area, both for Reference Level setting and Measurement, Monitoring and reporting (MMR).

YES

[Description of Carbon Pools and greenhouse gases selected – 8.2]

Yes, the ER-PD proposes a set of carbon pools and GHGs to be included or excluded. Regarding the question of significance, see indicator 4.2.

In section 8.2 the ER-PD proposes a set of carbon pools (separately for the sub-areas) and GHGs to be included or excluded. These conform to the list provided in the methodological framework. The ER-PD introduces a higher level of detail, e.g. by breaking the deadwood carbon pool into sub-pools.

Deviating from the methodological framework, the ER-PD also proposes to quantify harvested wood products for one sub-area (planned degradation, PDEG) since the planned activities are expected to lead to lower carbon accumulation

under the programme than under the reference level. The deviation from the methodological framework is necessary in order to avoid an overestimation of emission reductions.

The set of carbon pools is different between sub-areas because the sources and sinks to be accounted for also differ.

Ind. 4.2 Carbon Pools and greenhouse gases may be excluded if:

NO

- I. Emissions associated with excluded Carbon Pools and greenhouse gases are collectively estimated to amount to less than 10% of total forest-related emissions in the Accounting Area during the Reference Period; or
- II. The ER Program can demonstrate that excluding such Carbon Pools and greenhouse gases would underestimate total emission reductions.

[Description of Carbon Pools and greenhouse gases selected – 8.2]

No, the information provided on carbon pools and GHGs does not allow the TAP to ascertain full compliance with the indicator.

Compliance with item (i) cannot be ascertained because the ER-PD does not quantify excluded pools and GHGs. Compliance with item (ii) cannot be ascertained because the ER-PD does not set out to "demonstrate" underestimation.

In section 8.1, the ER-PD proposes to exclude:

- Litter carbon pool across all sub-areas because of both insignificance and conservativeness;
- Soil-organic carbon pool across all sub-areas because of insignificance or conservativeness;
- Deadwood as carbon pool in one sub-area because of conservativeness (providing an explanation that seems
 to relate to degradation only, but seems not to cover the full scope of the emissions and removals included in
 the sub-area);
- The greenhouse-gases CH4 and N2O because of conservativeness.

A demonstration of such insignificance and conservativeness should rely on literature or primary data. Currently, the ER-PD simply alleges insignificance and conservativeness without providing evidence.

It should also be noted that the exclusion based on significance is only applicable to a collective estimation as per the indicator, but cannot be applied to the pools individually.

Here goes one example where proposed conservativeness is not obvious:

■ The IPCC 2006 guidelines rely on stock-change factors to quantify carbon-stock changes in soil-organic carbon upon land-use change. For example, the land-use stock-change factor for improved grasslands in the tropical zone with no additional inputs amounts to 1.0 x 1.17 x 1.0 > 1 (Table 6.2, IPCC 2006 guidelines). In forests, however, the default stock-change factor is 1 (page 6.36, IPCC 2006 guidelines). This implies that there would be a significant increase in soil-organic carbon upon conversion from forest land to this specific type of grasslands.

Here also goes one example of an incorrect evidence:

■ In this context, the ER-PD also makes reference to CDM EB75, Annex 32, paragraph 18, section 8.3.2. In fact, the document referred to does not provide general applicable guidance on soil-organic carbon, but it is simply one example of project methodology whose applicability to the ER-PD is not obvious.

In conclusion, information provided in the ER-PD does not provide assurance that emissions associated with pools are accurately estimated. The TAP has no reason to question the conservativeness of the proposed set of carbon pools. In fact, some of the exclusions are obviously conservative (e.g., regarding N2O and CH4). But the TAP is pointing out that the ER-PD is not yet fully transparent on the reasons for excluding certain carbon pools. Here, additional information should be provided.

C. 5 The ER Program uses the most recent Intergovernmental Panel on Climate Change (IPCC) guidance and guidelines, as adopted or encouraged by the Conference of the Parties as a basis for estimating forest-related greenhouse gas emissions by sources and removals by sinks.

Ind. 5.1 The ER Program identifies the IPCC methods used to estimate emissions and removals for Reference Level setting and Measurement, Monitoring and reporting (MMR).

NO

[Description of method used for calculating the average annual historical emissions over the Reference Period – 8.3]

[Measurement, monitoring and reporting approach for estimating emissions occurring under the ER Program within the Accounting Area—9.1]

No, the ER-PD does not identify IPCC methods used for GHG estimation (as requested under this Indicator). The TAP, however, is aware that strict application of the 2006 IPCC GL for REDD+ is not undertaken also in other contexts and other countries.

In section 7.2, the ER-PD notes that it uses IPCC methods "as a basis" (as per the wording of criterion 5). This is interpreted to mean that ER-PD "methods should follow the guidance provided by the IPCC ..., but ... must not necessarily employ exactly the same ... equations". The ER-PD does, however, not explain how its methods follow the IPCC guidance. For doing this, it would be necessary to follow indicator 5.1 that requests to identify IPCC methods used, potentially without making reference to individual equations.

Section 7.2 also describes that the approaches for estimating emissions for the reference level and under the ER Program are based on a mixture of methodologies from the CDM, the VCS and other sources. The ER-PD states that these are "compatible with the 2006 IPCC Guidelines", but there is no explanation provided.

The ER-PD does not identify the IPCC methods used. There are no detailed references to the 2006 IPCC guidelines, nor is it shown that methodologies are equivalent. <u>Some examples</u> for important differences of ER-PD methods to IPCC methods include the following:

- The IPCC 2006 guidelines quantify emissions based on an observation of land use (e.g., emissions in a forest class or emissions in forest converted to cropland), it does not focus on land-use change processes (e.g., emissions from deforestation, removals from reforestation, etc.). The ER-PD's methodology focuses on land-use change processes at least for some of its sub-areas. For example, the ER-PD proposes monitoring the activities of logging companies, roads, skid-trails etc.
- The IPCC 2006 guidelines rely on a 20-year time frame for defining conversion classes, this is particularly relevant for tier 2 and tier 3 methods. This means that upon deforestation not all carbon is released at once, but attaining a new equilibrium takes a longer time frame of 20 years. The ER-PD for unplanned deforestation / forest degradation works with annual changes and does not consider a longer time horizon, let alone 20 years. Using a tier 1 assumption, the IPCC allows doing this, in principle too, but even there the IPCC recommends tracking land use conversion through time, rather than only looking at annual changes.
- The IPCC 2006 guidelines propose an approach 2/3 to land representation (that indicator 14.2 refers to) and that relies on organizing observed changes into a land-use change matrix. The ER-PD does not show such a land-use change matrix. Related to this, it does not show estimates for the five REDD+ activities that could be extracted from such a land-use change matrix (see indicator 3.1). Instead, the ER-PD breaks down all calculations according to a set of sub-areas and also reports calculation results accordingly.
- The IPCC 2006 guidelines break down quantification and reporting by GHG, land-use subcategories, by emissions and removals and by carbon pools. The ER-PD groups these together and final results of calculations do not allow to extract, for example, 'CO2 emissions from forestland remaining forest land in above-ground

biomass', but only broad aggregates are available.

It is important to note that incomplete compliance with the IPCC guidelines is not limited to the ER-PD, but occurs in the REDD+ context more generally. For example, several of the REDD+ reference level submissions to the UNFCCC include elements that are not strictly in line with the IPCC guidelines, e.g., regarding the 20-year time frame and regarding the matching of REDD+ activities to land-use subcategories.

In conclusion, the fact that the ER-PD uses other methods than IPCC methods does not necessarily introduce error or uncertainty into estimation. It does, however, create a lack of comparability with other emission reduction programs or international REDD+ that may rely on such IPCC methods. It also introduces a lack of consistency with other efforts of the DRC, such as the national GHG inventory that may rely on IPCC methods. It also introduces a lack of transparency since only broad aggregates are reported.

C. 6 Key data and methods that are sufficiently detailed to enable the reconstruction of the Reference Level, and the reported emissions and removals (e.g., data, methods and assumptions), are documented and made publicly available online. In cases where the country's or ER Program's policies exempt sources of information from being publicly disclosed or shared, the information should be made available to independent reviewers and a rationale is provided for not making these data publicly available. In these cases, reasonable efforts should be made to make summary data publicly available to enable reconstruction.

Ind. 6.1 The following methodological steps are made publicly available	Ind. 6.1	The following	methodological	steps are made	publicly available
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I. Forest definition;

NO

- II. Definition of classes of forests, (e.g., degraded forest; natural forest; plantation), if applicable;
- III. Choice of activity data, and pre-processing and processing methods;
- IV. Choice of emission factors and description of their development;
- V. Estimation of emissions and removals, including accounting approach;
- VI. Disaggregation of emissions by sources and removal by sinks;
- VII. Estimation of accuracy, precision, and/or confidence level, as applicable;
- VIII. Discussion of key uncertainties;
 - IX. Rationale for adjusting emissions, if applicable;
 - X. Methods and assumptions associated with adjusting emissions, if applicable.

[Forest definition used in the construction of the Reference Level 9.2]

[Description of method used for calculating the average annual historical emissions over the Reference Period 8.3] [Activity data & emission factors used for calculating the average annual historical emissions over the Ref. Period 8.3] [Measurement, monitoring and reporting approach for estimating emissions occurring under the ER Program within the Accounting Area 9.1]

No, it cannot be confirmed that these methodological steps are publicly available.

The Draft ER-PD dated January 15 does not provide information about making such information publicly available. An omission to make information public ally available could be interpreted as a lack of transparency. It is expected that the ER-PD will be publically available early enough so that interested stakeholders can comment on methodological approaches in a relatively early stage.

Ind 6.2 For the following spatial information, maps and/or synthesized data are displayed publicly, and reasonable efforts are made to explain how these were derived from the underlying spatial and other data, and to make key data sets or analyses publicly available:

NO

- I. Accounting Area
- II. Activity data (e.g., forest-cover change or transitions between forest categories)
- III. Emission factors
- IV. Average annual emissions over the Reference Period
- V. Adjusted emissions

Any spatial data used to adjust emissions, if applicable.

[Forest definition used in the construction of the Reference Level 9.2]

[Description of method used for calculating the average annual historical emissions over the Reference Period 8.3] [Activity data & emission factors used for calculating the average annual historical emissions over the Ref. Period 8.3] [Measurement, monitoring and reporting approach for estimating emissions occurring under the ER Program within the Accounting Area 9.1]

No, up to early February 2016, it could not be confirmed that these methodological steps have been made available to the public.

For transparency reasons this would be of upmost importance. In the Zurich exchange meeting it was agreed that the DRC ER-PD team will compile all relevant information, maps, and synthesized data and publish them on the FCPF website as soon as possible.

C.7 Sources of uncertainty are systematically identified and assessed in Reference Level setting and Measurement, Monitoring and reporting

Ind 7.1 All assumptions and sources of uncertainty associated with activity data, emission factors and calculation methods that contribute to the uncertainty of the estimates of emissions and removals are identified.

YES

[Activity data and emission factors used for calculating the average annual historical emissions over the Reference Period 8.3]

[Measurement, monitoring and reporting approach for estimating emissions occurring under the ER Program within the Accounting Area 9.1]

[Identification and assessment of sources of uncertainty 13.1]

Yes, the emission estimates' sources of error are systematically identified although some more error sources can be identified.

Section 13.1 assesses error sources systematically and discusses for each of the ER-PD's sub-areas both sampling errors, model errors, measurement errors and other error sources. The calculations then propagate these separate error sources and aggregate to overall error values. The data tables in annexes 21-24 include specific error values applied.

The ER-PD carries out an uncertainty analysis of the reference level, but not of emission reductions. This is acceptable but an analysis of uncertainties in emission reductions needs to be carried out once monitoring results are available. Only for the afforestation / reforestation sub-area there is a description of a planned approach available to assess error of monitoring results. In the TAP's view, however, this planned approach is overly simplistic because it only considers sampling error; this needs to be upgraded later when monitoring results are available.

The total aggregate error estimate for the reference level amounts to 37%. This seems to be a reasonable estimate

given the high detail and the high quality of activity data and emission factors available.

Because of its large relative importance, this 37% overall error estimate largely reflects the 38% error in the unplanned deforestation / forest degradation sub-area, for which the ER-PD contains a convincing uncertainty analysis. The uncertainty analysis for the other sub-areas is almost irrelevant because the total aggregate error will always fall into the methodological framework's 30%-60% bracket, leading to an 8% penalty as per its criterion 22.

The uncertainty analysis for the planned degradation sub-area is less convincing. The aggregate error is estimated at a surprisingly low 6%, which, in the view of the TAP, is an underestimate. Much higher error would be expected given the variability of forests (e.g.in biomass and standing timber), the variety of logging practices between "conventional logging" and companies that apply RIL/SFM standards and the number of highly uncertain variables involved.

The 6% are based on detailed error estimates from 43 individual input variables in 20 concessions and the approach taken to error propagation seems correctly applied, as far as can be judged. The error estimates for individual input parameters, however, seem too small. For example, it seems questionable whether estimates of harvesting volumes only have 1% error. Furthermore, it seems questionable whether the width of roads can be determined with error of only a few centimetres in the variable environment.

However, given the small amounts of emissions from planned degradation and given the methodological framework's 30%-60% bracket in criterion 22, these estimates do not have any major consequences overall.

The systematic assessment of errors could be complemented by other potential error sources, e.g.:

- Indicator 12.1: The use of incoherent definition in different parts of the ER-PD bares the risk of introducing systematic error.
- Indicator 14.2: Omitting spatial detail on activity and emission factors in estimating the reference level for unplanned deforestation and degradation (UNDEF/UNDEG) introduces error because it cannot be assumed that forests have the same biomass density regardless of the location.

Ind 7.2 The sources of uncertainty identified in Indicator 7.1: are assessed for their relative contribution to the overall uncertainty of the emissions and removals.

[Identification and assessment of sources of uncertainty 13.3]

YES

Yes, the ER-PD contains information on the relative contribution of individual error sources to the overall uncertainty.

Section 13.3 and annexes 32-33 provide details on the error sources. These are the data that then are propagated to estimate aggregate error. For unplanned deforestation and degradation (UNDEG/UNDEF) as well as for planned degradation (PDEG), error sources are broken down for the most important activity data and emission factors and also for the most important sources and sinks.

A more detailed sensitivity analysis is conducted for the planned degradation (PDEG) sub-area to quantify the relative contribution to the overall uncertainty. Ideally, such an analysis would be conducted for the other two sub-areas too.

For afforestation / reforestation (A/R) full information cannot yet be made available since the sub-area does not occur in the reference level. The information currently provided on error quantification in A/R is misleading because it only includes sampling error. It should be removed and a full uncertainty analysis be developed at the time of programme monitoring.

C 8 The ER Program, to the extent feasible, follows a process of managing and reducing uncertainty of activity data and emission factors used in Reference Level setting and Measurement, Monitoring and reporting.

Ind 8.1 Systematic errors are minimized through the implementation of a consistent and comprehensive set of standard operating procedures, including a set of quality assessment and quality control processes that work within the local circumstances of the ER Program.

NO

[Activity data and emission factors used for calculating the average annual historical emissions over the Reference Period, 13.2]

[Measurement, monitoring and reporting approach for estimating emissions occurring under the ER Program within the Accounting Area]

No, it cannot be confirmed that the ER-PD contains a comprehensive set of standard operating procedures that would allow for minimizing systematic error.

(i) Unplanned deforestation and forest degradation (UNDEF/UNDEG) sub-area:

For activity data collection to establish the reference level for the unplanned deforestation and forest degradation (UNDEF/UNDEG) sub-area, the ER-PD describes detailed procedures that are designed to reduce systematic errors. Detailed data correction procedures were also applied to further reduce error. Although these are not documented in the ER-PD or elsewhere, during the technical review details were provided by the DRC team and allowed a sufficient review.

The procedures to be applied for collection of activity data to monitor the unplanned deforestation and forest degradation (UNDEF/UNDEG) sub-area, conversely, are currently not well defined. Section 10.1 provides some limited information that is insufficient to conclude on high quality of data.

(ii) Planned degradation (PDEG) sub-area:

It was difficult for the TAP to assess the planned degradation (PDEG) sub-area as only few details have been provided in the ER-PD on data handling. Having reliable procedures for quality assessment and quality control is particularly important for planned degradation because the necessary data are highly complex and, according to section 13.3, rely on as many as 43 parameters, which need to be measured at the level of up to 20 individual concessions, largely by the concessionaires themselves. With such a large number of parameters measured by so many different parties, doubtful estimates could easily go unnoticed.

For the reference level, according to section 13.2, the most important process for quality assurance seems to have been (ad-hoc) plausibility checking, which, in the TAP's view, may not suffice given the complexity of the dataset. Other options for quality assurance would have included, for example, independent re-measurements and cross checking against other data sources.

Although section 13 does not point this out, section 10.1 explains that for program monitoring re-measurement is indeed planned. There are no procedures described on the likely intensity of such re-measurement or on the process for resolving any discrepancies.

Given the complexity of the dataset and given concerns about conflicts of interest it may be advisable to entrust an independent party with data collection rather than relying on concessionaires' self-reporting. Conflicts of interest could conceivably occur because, as section 16 lays out, the proposed scheme for benefit distribution is based, among other things, on how these concessionaires report about their own management practices. There is an incentive for concessionaires to underreport logging and logging damages that may introduce systematic error. Section 10.1 explains that concessionaires are, "as part of an independent quality control, subject to verification by the ER Program and if required through a third party". A third party verification approach may, if stringently implemented, go a long way towards ensuring high quality of data. But this is currently not clearly defined.

(iii) Afforestation / reforestation (A/R) sub-area:

For the afforestation / reforestation (A/R) sub-area, the reference level does not require any work with data and quality assurance and quality control were consequently not necessary either. Section 13.2 explains that data handling procedures for monitoring programme success are laid down in a dedicated manual that also includes procedures for quality assessment and quality control.

In summary, there are concerns about the data quality regarding the monitoring of unplanned deforestation / degradation (UNDEF/UNDEG) as well as regarding both reference level setting and programme monitoring for planned degradation (PDEG). The proposed processes for data collection, quality control and quality assurance do not convincingly reduce the risk of systematic errors.

Ind 8.2 Random errors and other uncertainties are minimized to the extent practical based on the assessment of their relative contribution to the overall uncertainty of the emissions and removals.

YES

[Activity data and emission factors used for calculating the average annual historical emissions over the Reference Period 10, 13]

[Measurement, monitoring and reporting approach for estimating emissions occurring under the ER Program within the Accounting Area 9.1]

[Identification and assessment of sources of uncertainty 13.1]

Yes, the ER-PD proposes several planned improvements to data collection approaches with a view on reducing errors.

The ER-PD contains detailed information on the error of individual activity data items or emission factors, which would allow to prioritizing data collection. While this information largely relies on relative uncertainty estimates, for the planned degradation (PDEG) sub-area, there is also a sensitivity analysis conducted that quantifies contribution to the total error.

The information provided will allow for focusing data collection efforts on the activity data and emission factors with highest uncertainty. For example, Table 40 in section 13.3 would lead to conclude that efforts should be dedicated to improving activity data collection on regrowth. For example, information provided in annex 33 would lead to conclude that monitoring protocols for log landings, logging slash and residual stand damage need urgent improvement.

Although the ER-PD does not provide details on a process for prioritizing data collection, it was clarified during the technical assessment that this is indeed planned. For example, in planned degradation (PDEG) the single largest contributor to total error is the emission factor on residual stand damage. The ER-PD explains that the "factor will be updated based on a local model", which would hopefully have less error. The ER-PD should explain a more structured process for making such improvements. Section 13.2 leads to expect that once operational the programme "will develop standard operating procedures to consequently reduce major uncertainties".

C 9 Uncertainty of activity data and emission factors used in Reference Level setting and Measurement, Monitoring and reporting is quantified in a consistent way, so that the estimation of emissions, removals and Emission Reductions is comparable among ER Programs

Ind 9.1 Uncertainty associated with activity data and emission factors is quantified using accepted international standards, for example by providing accuracy, confidence interval, distribution of error, and propagation of error. Where errors in data and methods are considered large as defined in IPCC Guidelines, Monte Carlo methods (numerical simulations) should be used to estimate uncertainty

YES

[Activity data and emission factors used for calculating the average annual historical emissions over the Reference Period 13.1]

[Measurement, monitoring and reporting approach for estimating emissions occurring under the ER Program within the Accounting Area 9.1]

Yes, uncertainties associated with activity data and emission factors are quantified using accepted international standards.

The ER-PD shows confidence intervals and standard errors. It also relies on error propagation techniques. The issue of simulation techniques is discussed under indicator 9.2, below

Ind 9.2 Uncertainty of the estimate of Emission Reductions is quantified using Monte Carlo methods. Underlying sources of error in data and methods for integrated measurements of deforestation, forest degradation and enhancements (e.g., as in a national forest inventory) are combined into a single combined uncertainty estimate and are reported at the two-tailed 90% confidence level

YES

[Quantification of uncertainty in Reference Level setting 13.2]

Yes, the ER-PD uses best practices for quantifying uncertainties.

It does not use Monte-Carlo methods, but relies on error propagation techniques, which are also commonly used methods for assessing error. This is the reason that the TAP assesses this indicator as fulfilled, although the indicator specifically asks for simulation techniques. The use of error propagation techniques should be deemed equally acceptable as approaches using Monte Carlo simulations. The IPCC recognizes both these techniques as best practices.

The ER-PD combines underlying sources of error into single combined uncertainty estimates at the 90% confidence level.

The ER-PD currently carries out an uncertainty analysis of the reference level, but not yet of emission reductions. This is acceptable and an analysis of uncertainties in emission reductions needs to be carried out once monitoring results are available.

Ind 9.3 Uncertainty of Emissions Reductions associated with deforestation, forest degradation and enhancements are reported separately if measured through separate (i.e., non-integrated) approaches and when degradation is estimated using proxy data.

N/A

[Quantification of uncertainty in Reference Level setting 13.2]

The indicator is not applicable because such separate, non-integrated approaches are not applied.

Instead, the ER-PD reports emissions and associated uncertainties according to its sub-areas. Under indicator 3.1 it is pointed out that the sub-areas typically integrate several REDD+ activities.

The current ER-PD carried out an uncertainty analysis of emissions of the reference level, but not yet of emission reductions. This is acceptable and an analysis of uncertainties in emission reductions needs to be carried out once monitoring results are available.

C 10 The development of the Reference Level is informed by the development of a Forest Reference Emission Level or Forest Reference Level for the UNFCCC

Ind 10.1 The Reference Level is expressed in tons of carbon dioxide equivalent per year

[Estimated Reference Level 9.7]

YES

Yes, the reference level is expressed in tons of carbon dioxide equivalent per year.

Section 9.7 provides this information. A table has been presented containing in detail the ER program's Reference Emission Level based on the average historical emissions in the Program area over the historic reference period from 2004 to 2014.

Ind 10.2 The ER Program explains how the development of the Reference Level can inform or is informed by the development of a national Forest Reference Emission Level or Forest Reference Level, and explains the relationship between the Reference Level and any intended submission of a Forest Reference Emission Level or Forest Reference Level to the UNFCCC

YES

[Relation between the Reference Level, the development of a FREL/FRL for the UNFCCC and the country's existing or emerging greenhouse gas inventory 9.8]

Yes, ER-PD section 9.8 provides details on how the ER-PD reference level and the forthcoming UNFCCC national reference level for REDD+ inform each other.

The DRC is currently establishing its national reference level for REDD+ which is envisaged to be submitted to the UNFCCC in September 2016.

Section 9.8 also includes details on how land cover classes match to each other. This also includes details on exchange of data between teams working on both reference levels. Ultimately, the UNFCCC reference level will, for Maï-Ndombe, rely on the same activity data as the ER-PD reference level.

Regarding emission factors, the ER-PD points out that decisions on the use of emission factors for the UNFCCC reference level are still pending but that the possible use of the ER-PD's LIDAR-based emission factors will be evaluated.

Ind 10.3 The ER Program explains what steps are intended in order for the Reference Level to achieve consistency with the country's existing or emerging greenhouse gas inventory

NO

[Relation between the Reference Level, the development of a FREL/FRL for the UNFCCC and the country's existing or emerging greenhouse gas inventory 9.6]

No, the ER-PD does not explain steps to achieve consistency with the country's GHG inventory. Although section 9.8 has a title that leads to expect such information, it is not actually available.

In conclusion, this omission will lead to a lack of consistency with the national GHG inventory and hence also to a lack of comparability with other initiatives. It cannot be concluded, however, that the ER-PD's estimate are not accurate.

C 11 A Reference Period is defined

Ind 11.1 The end-date for the Reference Period is the most recent date prior to 2013 for which forest-cover data is available to enable IPCC Approach 3. An alternative end-date could be allowed only with convincing justification, e.g., to maintain consistency of dates with a Forest Reference Emission Level or Forest Reference Level, other relevant REDD+ programs, national communications, national ER program or climate change strategy

YES

[Reference Period 9.1]

Yes, the ER-PD complies with indicator 11.1.

Albeit the proposed end-date for the reference period is 2014, which is not prior 2013, section 9.1 provides a convincing justification. The proposed end-date is consistent with the end-date of the UNFCCC reference level. The indicator 11.1 makes explicit reference to "consistency of dates with a Forest Reference Emission Level or Forest Reference Level" as an acceptable justification of an alternative end-date.

Incidentally, beyond the end-date that indicator 11.1 is concerned with, the start-date of the reference period is also

consistent between the programme area and the UNFCCC reference level. Section 9.8 describes the approach whereby the Maï-Ndombe reference level informs the UNFCCC reference level through use of sample plot data. It clarifies that "the result of the assessment will be the area estimates by class of Maï-Ndombe area in the National Reference Emission Level". The upshot of this procedure is that, although the UNFCCC national REDD+ reference level will rely on reference period 2000-2014 overall, it will, for Maï-Ndombe, be calculated using activity data 2004-2014.

Ind 11.2 The start-date for the Reference Period is about 10 years before the end-date. An alternative start-date could be allowed only with convincing justification as in Indicator 11.1, and is not more than 15 years before the end-date.

YES

[Reference Period 9.1]

Yes, the ER-PD proposes start date 2004, which is 10 years before the end-date.

C 12 The forest definition used for the ER Program follows available guidance from UNFCCC decision 12/CP.17

Ind 12.1 The definition of forest used in the construction of the Reference Level is specified. If there is a difference between the definition of forest used in the national greenhouse gas inventory or in reporting to other international organizations (including an Forest Reference Emission Level or Forest Reference Level to the UNFCCC) and the definition used in the construction of the Reference Level, then the ER Program explains how and why the forest definition used in the Reference Level was chosen.

YES

[Forest definition used in the construction of the Reference Level 9.2]

Yes, section 9.2 specifies the definition of forest used in the construction of the reference level.

The TAP concludes that overall, the proposed forest definition is consistent with the CDM forest definition reported to the UNFCCC.

Although the ER-PD does not point this out, the proposed forest definition also happens to be consistent with the definition used in the recently published forest-cover assessment with FAO's support that is likely to underlie the UNFCCC reference level (doctober 2008.. The latter makes reference to official regulation resolution 5094/CAB/MIN/ECNVT/JEB/08 from 22 October 2008.

However, the TAP has doubts about the wording chosen for some of the definitions to describe ER activities, e.g. "Planned degradation" (PDEG), a term introduced in VCS methodology, is not a common-sense term in international forestry (e.g. in harmonization processes of definitions used by UNFCCC, CBD, UNFF/FAO and ITTO). Planned degradation (meaning in VCS terminology that programme operators would plan and implement timber extraction if it was not for carbon benefits that allow forest protection) is in the TAP's view a very narrow concept of natural forest (carbon) management and a term that can lead to basic misunderstanding and confusion.

In the TAP's view, the ER-PD should describe more precisely some other aspects:

• The ER-PD does not include a discussion about how the forest definition relates to the forest definition employed in the GHG inventory. An important parameter for defining land categories under the IPCC 2006 guidelines is the time frame of conversion. Most categories rely on a 20-year conversion time frame, during which emissions and removals occur. For example, soil-carbon takes a long time to reach equilibrium after change, tree growth during recovery after disturbance also spans across decades and emissions from decomposition of deadwood also occur across a year-long time frame. The ER-PD does not specify such time

- frames for changes; it mostly looks at a snapshot of land cover during the inventory year only.
- The ER Program area includes much rotational/swidden agriculture/shifting cultivation. Using a land-cover based definition together with a current tree height threshold will result in somewhat arbitrary distinction between cropland and forest land. Some current fallows will be classified as forests and other current, more recent fallows will be classified as cropland.
- It cannot be confirmed that the most important sources of activity data for ER Program monitoring actually use the forest definition. For unplanned deforestation and degradation (UNDEF/UNDEG), the proposed approach for ER Program monitoring uses the Global Forest Watch data as point of departure, which has a pixel size of 250,000 m2. Only for verification purposes, it also uses satellite images with a minimum mapping unit of 8,100 m2, which is still considerably larger than the minimum forest area of 5,000 m2. (The ER-PD incorrectly specifies this is 810 m2.)
- It cannot be confirmed that the most important sources of activity data for reference level setting actually use the forest definition. For neither unplanned deforestation and degradation (UNDEF/UNDEG), nor "planned degradation" (PDEG), nor afforestation / reforestation (A/R), the proposed approach for reference level setting includes a step for checking on the size of areas involved.

The use of incoherent definition in different parts of the ER-PD introduces systematic error. This has been discussed under the indicators for criteria 7-9, above.

C 13 The Reference Level does not exceed the average annual historical emissions over the Reference Period. For a limited set of ER Programs, the Reference Level may be adjusted upward by a limited amount above average annual historical emissions. For any ER Program, the Reference Level may be adjusted downward.

Ind 13.1 The Reference Level does not exceed the average annual historical emissions over the Reference Period, unless the ER Program meets the eligibility requirements in Indicator 13.2. If the available data from the National Forest Monitoring System used in the construction of the Reference Level shows a clear downward trend, this should be taken into account in the construction of the Reference Level

YES

[Average annual historical emissions over the Reference Period 9.6, 13.2]

Yes, the reference level is based on the average annual historical emissions over the reference period. The available data do not show a clear downward trend.

Ind 13.2 The Reference Level may be adjusted upward above average annual historical emissions if the ER Program can demonstrate to the satisfaction of the Carbon Fund that the following eligibility requirements are met:

YES

(i)Long-term historical deforestation has been minimal across the entirety of the country, and the country has high forest cover (country or jurisdictional area);

(ii)National circumstances have changed such that rates of deforestation and forest degradation during the historical Reference Period likely underestimate future rates of deforestation and forest degradation during the Term of the ERPA.

[Explanation and justification of proposed upward or downward adjustment to the average annual historical emissions over the Reference Period, Quantification of the proposed upward or downward adjustment to the average annual historical emissions over the Reference Period 9.6].

Yes, the ER-PD complies with the two eligibility criteria.

Regarding (i) – High forest cover/low deforestation:

In the exchange with the TAP, the DRC team explained to have received an implicit prior acceptance from the Carbon Fund Participants on the status of the DRC as meeting the criterion that "historical deforestation has been minimal across the entirety of the country, and the country has high forest cover". This relies on comments received on the ER-PIN where the eligibility of the DRC was not, *per se*, called into question. Rather, the Carbon Fund Participants instructed the DRC to "elaborate in detail and provide complete documentation on all the proposed upwards adjustments. This should demonstrate that all adjustments are based on predictions of acceleration in trends beyond those already present in the reference period. (MF Indicator 13.3)". The Carbon Fund Participants based their assessment among other considerations on the following information provided in the ER-PIN: "Hansen et al 2013 reports a deforestation rate for the DRC of approximately 0.34% during the 2000-2010 period. Other prominent studies indicate similar, if not higher results, including 0.35% by Tyukavina et al, 2013."

In the wording of the indicator, "entirety" is understood to refer to the country as a whole as opposed to sub-areas within the country or, specifically, to the ER Program area. It is therefore immaterial that section 9.3 reports annual deforestation rates as high as 1.12% for the programme area. For DRC as a whole, current best estimates of annual deforestation rates amount to around 0.30% in 1990 to 2010, according to direct communication with FAO about a recent government publication with FAO support (<a href="http://www.unredd.net/index.php?view=download&alias=15014-protocole-methodologique-et-resultats-de-lanalyse-de-changement-du-couvert-forestier-1990-2010-de-la-republique-democratique-du-congo&category slug=reference-levels-96&option=com_docman<emid=134).

Regarding (ii) — change in national circumstances and underestimation of future rates of deforestation and forest degradation:

The ER-PD section 9.6 shows an upward trend of historical rates of unplanned deforestation and forest degradation (UNDEF/UNDEG). This is strong evidence of a change in national circumstances. Such higher rates of deforestation and forest degradation are present only towards the end of the reference period. The historical average also draws on the early years of the reference period. It therefore likely underestimates future rates of deforestation and forest degradation.

The ER-PD section 9.6 explains the observed upward trend of historical rates of unplanned deforestation and forest degradation (UNDEF/UNDEG) is due to a change in national circumstances. These national circumstances consist of a shifting interplay between several economic, institutional and demographic factors. It also points out that it was not possible to establish a quantitative link between observed rates of deforestation and forest degradation and common datasets to measure such economic and demographic factors. Nonetheless, the general line of reasoning is convincing to the TAP and much detail and analysis are provided on observed trends.

For planned degradation (PDEG), the ER-PD does not show an upward trend of logging activity during the reference period. According to data contained in the ER-PD's calculation tables, planned degradation is stable and logging activities in concessions had highest intensity levels in 2006-2009. The ER-PD argues that a change in national circumstances is nonetheless occurring and section 9.6 points to "current efforts to improve forest sector governance with the support of international partners". There is reference made to reforms in forest management planning and control, but no convincing explanation is provided as to why these would increase logging activities.

More generally, the TAP does not see a need for justifying the adjustment need separately for the ER-PD's sub-areas. The reasoning provided on unplanned deforestation and forest degradation is overall convincing regarding the whole programme. Furthermore, in the TAP's view, there is no need to create a separate argument for the "planned degradation" (PDEG) sub-area.

Ind 13.3 For countries meeting the eligibility requirements in Indicator 13.2, a Reference Level could be adjusted above the average historical emission rate over the Reference Period. Such an adjustment is credibly justified on the basis of expected emissions that would result from documented changes in ER Program circumstances, evident before the end-date of the Reference Period, but the effects of which were not fully reflected in the average annual historical emissions during the Reference Period. Proposed adjustments may be rejected for reasons including, but not limited to:

NO

i. The basis for adjustments is not documented; or ii. Adjustments are not quantifiable.

[Explanation and justification of proposed upward or downward adjustment to the average annual historical emissions over the Reference Period, Quantification of the proposed upward or downward adjustment to the average annual historical emissions over the Reference Period 9.6]

No, the ER-PD's approach to documenting and quantifying the adjustment is not entirely convincing and needs additional thoughts.

The ER-PD proposes complex approaches to quantify adjustments that are based on a projection of emissions during the reference period. For projecting emissions, the ER-PD relies on a regression model for unplanned deforestation and forest degradation (UNDEF/UNDEG) and on information contained in forest management plans for "planned degradation" (PDEG). These models are both complex and not fully convincing. In the view of the TAP, much simpler approaches should be considered. More generally, the TAP does not see a need for quantifying adjustments separately for the ER-PD's sub-areas, but an argument could simpler be built for the programme as a whole.

<u>Unplanned deforestation and forest degradation (UNDEF/UNDEG)</u>

For unplanned deforestation and forest degradation, the ER-PD proposes to base the documentation and quantification of the adjustment on a regression model. Using data across the reference period, historical rates of deforestation were regressed against a range of economic and demographic variables. The model is meant to be used during the programme period to quantify adjustment according to observed changes in the economic and demographic variables.

The TAP is not fully convinced by the proposal to use a regression model for quantifying an adjustment. The proposed model does not include variables that directly correspond to the identified key factors of change in national circumstances (see indicator 13.2, above: demography, economy, institutions). It is particularly puzzling that the model includes a negative factor for rural population, although population growth (both rural through migrants and urban) had been identified as an underlying cause of deforestation. Moreover, the model does not actually refer to both deforestation and forest degradation but to deforestation only. In addition, it is unclear to which extent there are data used those refer to Maï-Ndombe or to the national level. There is no approach proposed to deal with the inherent uncertainties for calculating adjustments during the programme period. More generally, in the TAP's view it is highly doubtful that a simple regression model could accurately reflect the complexity of the dynamic circumstances for forest change.

The TAP encourages the ER-PD team to propose a simpler approach to quantifying an adjustment. In the view of the TAP, it is hard to see how a regression model can provide an accurate description of the complexities of forest-cover change and the proposed approach bares the risk to create no more than an illusion of scientifically accurate estimation. Simple ratio calculations may provide an equally convincing basis for adjustment and would acknowledge the difficulties inherent in quantifying and predicting forest-cover change dynamics.

Planned degradation (PDEG)

For "planned degradation", the ER-PD proposes to base quantification of adjustments on planned logging quotas as per the forest management plans as a proxy for likely activity levels. The ER-PD also calls the reliability of these management plans into question and calls them, in part, "unrealistic". It points out that during the reference period only 5-25% of allowable harvests took place and that forest management plans propose logging volumes of as much 4-times of historical rates. The TAP therefore questions the proposal to base the quantification of adjustment on these management plans.

As with unplanned deforestation and forest degradation (UNDEF/UNDEG), the TAP encourages seeking a simple and robust approach to quantifying an adjustment. In doing so, a need for building separate approaches for the ER-PD's

sub-areas is not obvious.

Ind 13.4 An adjustment of the Reference Level above the average annual historical emissions during the Reference Period may not exceed 0.1%/year of Carbon Stocks

YES

[Explanation and justification of proposed upward or downward adjustment to the average annual historical emissions over the Reference Period, Quantification of the proposed upward or downward adjustment to the average annual historical emissions over the Reference Period 9.6]

Yes, the ER-PD makes clear provisions for limiting the adjustment to 0.1% per year of the carbon stocks.

Section 9.6 explains how the total carbon stocks and the adjustment cap were calculated. The area estimates and carbon densities used are consistent with those used in other parts of the ER-PD.

C 14 Robust Forest Monitoring Systems provide data and information that are transparent, consistent over time, and are suitable for measuring, reporting and verifying emissions by sources and removals by sinks, as determined by following Criterion 3 within the proposed Accounting Area

Ind 14.1 The ER Program monitors emissions by sources and removals by sinks included in the ER Program's scope (Indicator 3.1) using the same methods or demonstrably equivalent methods to those used to set the Reference Level.

NO

[Measurement, monitoring and reporting approach for estimating emissions occurring under the ER Program within the Accounting Area 10.1]

No, it cannot yet be confirmed that proposed methods for reference level setting and programme monitoring are the same or demonstrably equivalent. The assessment compares section 9 against section 10.

(i) Unplanned deforestation and degradation (UNDEF/UNDEG):

The ER-PD proposes an entirely different approach for quantifying area of unplanned deforestation and degradation between the reference level and programme monitoring. For the reference level, activity data were calculated using visual sampling of a time series of historical satellite images using bespoke GIS software and using a team of national experts. For the ER Program monitoring, activity data will be derived from a semi-automatic change assessment approach delivering wall-to-wall results. It is proposed to use the information by the Global Forest Watch as a point of departure and to use other satellite images for verification purposes.

Significant concerns could be raised against the likely consistency of approaches, including:

- Pixel sizes and mapping units involved are rather different ranging from effectively 0 for the reference level's sampling approach, over 5000 m2 for the DRC's forest definition, to 25 ha for Global Forest Watch.
- The ER-PD's description on the identification of degradation is not specific. Forest degradation is notoriously difficult to assess using remote sensing (which may be one of the reasons why the reference level relies on the visual interpretation of a time-series of historical satellite images) and the ER-PD does not explain how the programme plans to achieve this using semi-automated interpretation of satellite images.
- The breakdown of forest-cover changes is different between reference level and programme monitoring. The reference level considers also two kinds of deforestation, two kinds of regrowth, next to forest degradation. Proposed programme monitoring considers only one kind of deforestation and one kind of degradation. Using different stratification of areas also introduces a lack of clarity on how the application of emission factors is comparable.

In section 10.1, the ER-PD proposes to "validate the consistency of MRV approaches with the REL approaches" at a later stage through applying both methods for reporting on the first verification approach. This suggestion does not actually

provide methodological clarity, but amounts to postponing a difficult discussion about the monitoring approach that needs to be handled before programme approval.

(ii) Planned degradation (PDEG) (i.e. reduced impact logging):

The ER-PD's proposed approaches for reference level setting and programme monitoring are not identical, in particular, regarding the collection of activity data. For example:

- The annual timber harvesting area is a key activity data item. For the reference level it is derived through a three-step procedure relying on GIS layers from company reporting, supplementary GIS work and use of averages as a fall back. But for the ER Program monitoring, the annual timber harvesting area is derived from company reporting (without need for GIS layers) and supplementary GIS work and use of averages are not considered.
- There are several data items that relate to reduced impact logging, e.g. the width of forest access roads and damages of timber harvesting activities to remaining forest stands, etc. For the reference level, independent studies have been used to collect these data. For the ER Program monitoring, much data will be collected through company self-reporting. This difference is significant because companies may have incentives to underreport collateral timber harvesting damages. Although the ER-PD makes some references to review and verification procedures, it does not define these to the detail necessary.

(iii) Afforestation / reforestation (A/R):

Consistency between ER programme monitoring and the reference level of afforestation / reforestation cannot sensibly be assessed. For the reference level, the ER-PD points out that such afforestation / reforestation activities do not take place and that no removals need to be considered.

In conclusion, there is a lack of consistency between proposed methods for reference level setting and programme monitoring. In the TAP's view, such lack of consistency bares a risk to introduce a lack of accuracy into estimation.

Ind 14.2 Activity data are determined periodically, at least twice during the Term of the ERPA, and allow for ERs to be estimated from the beginning of the Term of the ERPA. Deforestation is determined using IPCC Approach 3. Other sinks and sources such as degradation may be determined using indirect methods such as survey data, proxies derived from landscape ecology, or statistical data on timber harvesting and regrowth if no direct methods are available

YES

[Measurement, monitoring and reporting approach for estimating emissions occurring under the ER Program within the Accounting Area 9.1]

Yes, activity data are determined and will allow for calculating emissions periodically, and deforestation is determined using approach 3 to land representation with other methods being used for other sinks and sources. The ER-PD proposes time intervals for collection activity data items in annexes 28, 29 and 30. These allow for calculating results annually.

More generally, however, the ER-PD's approach to land representation does not in all aspects follow the good practice proposed by the IPCC. The ER-PD does not propose a standard land use / land cover change matrix, including the breakdown of the sub-areas and also of the stratification applied within those sub-areas. The IPCC approaches 2 and 3 fundamentally rely on such a matrix.

The IPCC also proposes to link spatially-explicit activity data to other spatially explicit data sources (notably emission factors), which is not undertaken. This omission introduces error, which is discussed under the indicators for criteria 7-9, above. Compliance with the IPCC guidelines is also discussed under indicator 5.1, above.

(Section 10.3 proposes an approach based on "overlaying the JICA land use / land cover map of Bandundu with the LiDAR biomass map". This approach would differ significantly from the reference level that did not use the LiDAR map for unplanned deforestation and degradation (UNDEF/UNDEG), but relied on emission factors calculated from simple

averages of LiDAR data. It is believed that this is imprecision in language rather than an actual proposed methodology.)

(i) Reference level and programme monitoring of deforestation (occurring only in the unplanned deforestation and degradation (UNDEG/UNDEF) sub-area)

For its <u>programme monitoring of deforestation</u>, the <u>ER-PD proposes to rely on wall-to-wall satellite imagery</u>. This corresponds to IPCC's approach 3 to land representation because it is spatially explicit. The assessment of indicator 14.1, above, raises concerns against this methodological choice. While different from programme monitoring, the approach for quantifying deforestation under the reference level can also be considered to correspond to IPCC's approach 3 to land representation because it also tracks change according to exact spatial locations.

Although the proposed approach to determining deforestation is spatially explicit, other aspects of the methodology do not actually build on the spatial detail. For example, the same estimates of forest carbon stocks are applied for the entire sub-area on unplanned deforestation and unplanned forest degradation, although there would be a carbon map available that would allow for spatially differentiating. Rather than using this carbon map, the ER-PD proposes to work with simple averages forest carbon stocks.

The methodological choice to work with simple averages rather than the readily available carbon map is difficult to understand. Indeed for unplanned deforestation and degradation (UNDEG/UNDEF), the ER-PD proposes to use simple average emission factors, although the estimation for the sub-area of planned deforestation (PDEG) does, indeed, rely on the carbon map. During the technical assessment it was clarified that the sampling approach does not produce a map of deforestation (or forest degradation) and therefore cannot easily be overlaid with a carbon map. Other options for using the carbon map were not explored in detail. Neglecting the spatial heterogeneity of forest biomass stocks and using simple average carbon stocks introduces systematic error into the estimates, which is discussed under the indicators for criteria 7-9, above.

(ii) Reference level and programme monitoring of degradation (occurring in the unplanned deforestation and degradation (UNDEG/UNDEF) sub-area and the planned degradation (PDEG) sub-area)

The approach taken to land representation in quantifying emissions from degradation is chiefly relevant for application of the conservativeness factors in criterion 22. In the ER-PD, for forest degradation, mixed methods are applied.

Planned forest degradation (PDEG), will be determined through visual delineation of forest infrastructure in a GIS next to data about harvesting volumes. This is a mixture between a direct measurement and an "indirect method" as it also relies on "statistical data on timber harvesting" (as per the indicator).

For the reference level, unplanned degradation (part of the UNDEF/UNDEG sub-area) is determined using the same approach as for unplanned deforestation, relying on direct area measurements for both the reference level and the proposed monitoring approach. Although the activity data are thus spatial explicit, the ER-PD proposes to omit this spatial detail and to use broad average emission factors instead. This undoes the advantages of having spatially explicit activity data available.

The proposed approach for programme monitoring is entirely different. The assessment of indicator 14.1, above, raises important concerns against it.

Ind 14.3 Emission factors or the methods to determine them are the same for Reference Level setting and for Monitoring, or are demonstrably equivalent. IPCC Tier 2 or higher methods are used to establish emission factors, and the uncertainty for each emission factor is documented. IPCC Tier 1 methods may be considered in exceptional cases

YES

[Measurement, monitoring and reporting approach for estimating emissions occurring under the ER Program within the Accounting Area 10.1]

Yes, the emission factors are the same for the reference level and the ER programme monitoring, some tier 2 methods are used and uncertainties are documented.

Where sensible reference level and the ER programme monitoring use the same emission factors. This would not make sense, for example, for a residual stand damage factor. Reduced impact logging aims to reduce residual stand damage and a different emission factor must be used for programme monitoring than for the reference level.

The ER-PD proposes to use some tier 2 emission factors. Most importantly, tier 2 emission factors are proposed for the forest carbon stocks that are based on LiDAR measurements for unplanned deforestation and degradation (UNDEF/UNDEG) and on ground measurements for afforestation / reforestation (A/R). Beyond this, a mixture of tier levels is used as is common practice in most inventories, including also many tier 1 default values.

Although the ER-PD contains only limited information about how some of the most important emission factors were calculated, full information was provided during the technical assessment.

- For forest carbon stocks in the unplanned deforestation and degradation (UNDEF/UNDEG) sub-area, forest
 carbon stock estimates are not actually based on the LiDAR map (as some text in section 9 may lead to assume),
 but they are based on direct averaging of biomass estimates at LiDAR sample points.
- For planned degradation (PDEG), however, forest carbon stock estimates are based on the LiDAR map.
- The methodology for planned degradation relies on a residual damage factor that was calculated using work published by FAO in 1995. Newer references however are available(CIRAD; Sist et al.; big tree initiative, work of Putz et al).
- The methodology for "planned degradation" relies on a biomass expansion factor that was derived from an equation by the GOFC-GOLD and forest inventory data available.

For "planned degradation" (PDEG), the high degree of methodological complexity with 43 individual parameters at the level of 20 concessions made it difficult to check all emission factors and recreate all calculations step by step. Nonetheless, the most important emission factors were evaluated in detail, relating to biomass expansion and to residual stand damage (see above).

In addition to this, cross-checking aggregate results against published values in literature provided confidence in the robustness of the ER-PD's emission factors and its reference level emissions in concessions. For example, Pearson et al. wrote in 2014 in Environmental Research Letters about "Carbon Emission from Tropical Forest Degradation Caused by Logging" and provided estimates of emissions per m3 of extracted timber from residual damage, timber itself and logging infrastructure. The ER-PD estimates are on the higher end but fall within the range of values provided (logging infrastructure at 2.50 tCO2e per m3 extracted timber falls within 0.88-3.63, extracted logs at 1.00 tCO2e per m3 extracted timber falls within 0.92 to 1.39, residual stand damage at 4.70 tCO2e per m3 extracted timber comes very close to a range of 1.83-4.62 tCO2e per m3 extracted timber).

The parameter tables in the ER-PD's annexes list uncertainty levels for the individual emission factors. The uncertainty analysis is discussed under the indicators for criteria 7-9.

C 15 ER Programs apply technical specifications of the National Forest Monitoring System where possible

Ind 15.1 ER Programs articulate how the Forest Monitoring System fits into the existing or emerging National Forest Monitoring System, and provides a rationale for alternative technical design where applicable.

YES

[Relation and consistency with the National Forest Monitoring System 10.3]

Yes, ER-PD section 10.3 provides information on how the ER-PD programme monitoring and the national forest monitoring system relate to each other.

For activity data of unplanned deforestation and unplanned forest degradation, there are details provided on how land cover classes match each other. The ER-PD also points out that programme monitoring will rely on a very similar methodological approach of wall-to-wall monitoring using semi-automated classification of satellite imagery. (The

assessment of indicator 14.1, above, raises concerns against this methodological choice, arguing that the approach is not sufficiently detailed to measure deforestation and forest degradation.)

Although section 10.3 does not address emission factors, it may be pointed out that decisions on the use of emission factors for the national forest monitoring systems are still pending. Section 9.8 clarified that the possible use of the LIDAR-based emission factors will be evaluated at least for the UNFCCC reference level.

Although section 10.3 does not address planned degradation and afforestation / reforestation, the proposed approaches for ER Program monitoring are clearly different from the national forest monitoring system. These amply rely on field data collection. Section 10.3 does not provide a rationale for this choice, but it may be presumed to relate with a need for higher detail in activity data and emission factors than the national forest monitoring system can possibly include.

Concerns related to the consistency of methods with the IPCC guidelines are discussed above under indicator 5.1.

C 16 Community participation in Monitoring and reporting is encouraged and used where appropriate

Ind 16.1 The ER Program demonstrates that it has explored opportunities for community participation in monitoring and reporting, e.g., of ER Program Measures, activity data, emission factors, safeguards and Non-Carbon Benefits, and encourages such community participation where appropriate

YES

[Measurement, monitoring and reporting approach for estimating emissions occurring under the ER Program within the Accounting Area 10.1, 10.3]

Yes, ER-PD describes opportunities for community participation in monitoring and reporting, but focused on a specific set of ER activities.

Section 10.1 points out that communities are involved in defining the boundaries of afforestation/reforestation activities and that these boundaries are an important parameter. In this regard it is understood that within such communities, an FPIC approach has been conducted that confirms the change of land use (non-forest to forest) within the community.

No specific opportunities for community participation in monitoring and reporting have been described for unplanned deforestation and planned forest degradation. Also, no reference is given to a possible community monitoring of socio-economic benefits of non-carbon benefits (e.g. NTFPs gathering in timber and conservation concession). Company/community monitoring could be a meaningful approach to imply in tier 2 monitoring (figure 11).

Community participation in monitoring and reporting is envisaged through community-based MRV schemes that are focused on one type of ER activities, i.e. afforestation/reforestation. Involving communities in the monitoring using the window of their contribution to the ERP provides at least two opportunities to community: 1) to engage communities in a learning process that can help better appraise their activities and contribution to the program; 2) confront their knowledge system to the metric MRV and create a common understanding of the proxy measurements and payments.

The TAP noted that the current scope of community participation in MRV is limited as FS2 and FH3 suggest that communities will also be responsible for carrying out conservation and sustainable management of community forests. Some more reflections on community-based MRV could be added in the ER-PD and could include: i) all potential ER activities to be conducted by communities, ii) the basis for measuring performance, ii) their inclusion in the overall structure of the ER Program's MRV system. A broader community-based MRV will imply an incremental learning process; the presentation of the vision and steps for such a process could be a meaningful addition in the overall MRV approach.

C 17 The ER Program is designed and implemented to prevent and minimize potential displacement

Ind 17.1 Deforestation and degradation drivers that may be impacted by the proposed ER Program measures are identified, and their associated risk for displacement is assessed, as well as possible risk mitigation strategies. This assessment categorizes Displacement risks as high, medium or low.

YES

[Identification of risk of Displacement 11.1]

Yes, deforestation and degradation drivers are identified and assessed for risks, and risk mitigation strategies are proposed.

Section 11.1 identifies a set of 5 drivers and assesses displacement risk. In the TAP's view they are well identified. Also, the agents concerned are, in general terms, correctly identified. Shifting cultivation, charcoal production, savannah burning and industrial logging are categorized in the ER-PD as low risk of leakage and artisanal logging as an activity with medium level risk. No high-risk activity is identified.

Ind 17.2 The ER Program has in place an effective strategy to mitigate and/or minimize, to the extent possible, potential Displacement, prioritizing key sources of Displacement risk.

No

[ER Program design features to prevent and minimize potential Displacement 11.2]

No, compliance with indicator 17.2 cannot be confirmed by the TAP. Only scant information is provided about risk management strategies. There is also no prioritization undertaken.

The ER-PD proposes using a VCS tool for analysing potential displacement. There is no obvious benefit in using the VCS tool to assess compliance with the methodological framework. It would be more transparent to simply structure information according to the requirements of the indicators. Also, the identification of a leakage discount factor is not part of the methodological framework and cannot function in lieu of complying with its indicators.

Chapter 11.1 lists risk management strategies, however, only in an overly brief and concise form. A total of 9 sentences are provided to describe risk management strategies for the 5 drivers, which is not in all cases sufficient to convince of likely effectiveness. Preliminarily, some observations may be made:

- Regarding shifting cultivation, the key argument is that production levels are not compromised. Indeed, there is also a programme to support agroforestry systems and improve productivity. This is a convincing argument but could to be specified more.
- Regarding charcoaling, it is proposed to produce 400,000 tonnes of charcoal over 10 years to make up for lost production. There is no information provided on what this estimate is based on, and on the level of the current charcoal production.
- Regarding savannah burning, there is no risk mitigation strategy laid out.
- Regarding artisanal logging, it is proposed to reforest 6,400 ha to mitigate for lost wood production. The ER-PD
 does not, however, clarify whether this addresses the needs of the group of non-homogenous people in the
 artisanal logging. There are also doubts about the timeframe by when the tree plantings with valuable
 hardwood species would actually produce timber.
- Regarding industrial timber harvesting, the key argument is that production levels would not be affected since
 companies would apply reduced impact logging, eventually even considering forest management certification.
 This is a convincing argument but could to be specified more.

The ER-PD does not undertake a prioritization among key sources of displacement risk for laying out risk mitigation

strategies.				
In conclusion, the ER-PD's description of strategies for addressing displacement risks is overly brief inappropriate VCS guidance. It cannot presently be judged that the ER Program appropriately addresses drisks; the ER-PD is insufficiently transparent on this issue.				
Ind 17.3 By the time of verification, the ER Program has implemented its strategy to mitigate and/or minimize potential Displacement	N/A			
Not applicable at this stage				
Ind 17.4 ER Programs are also invited to report on changes in major drivers in the ER Accounting Area, any Displacement risks associated with those drivers, and any lessons from the ER Programs' efforts to mitigate potential Displacement	N/A			
Not applicable at this stage				
C 18 The ER Program is designed and implemented to prevent and minimize the risk of reversals and address the long-term sustainability of ERs				
Ind 18.1 The ER Program has undertaken an assessment of the anthropogenic and natural risk of reversals that might affect ERs during the Term of the ERPA and has assessed, as feasible, the potential	No			

No, in the TAP's view, the ER-PD does not undertake a satisfactory risk assessment.

risk of reversals after the end of the Term of the ERPA

[Identification of risk of Reversals 12.1]

The ER-PD section 12.1 assesses risks of reversals. A systematic assessment is undertaken using VCS guidance http://www.v-c-s.org/sites/v-c-s.org/files/JNR%20Non%20Permanence%20Risk%20Tool%2C%20v3.0 0.pdf. It relies on political and governance risks, program design and strategy, carbon rights and use of carbon revenues, funding risks and natural risks (four anthropogenic and one natural risk category).

No

For comparison purposes, the TAP looked at the non-permanence assessment, which was also undertaken for the validated and verified VCS project of Maï-Ndombe (Wildlife Works). Being a project at a much smaller scale (less than 400,000 ha), it used a different version of this risk assessment tool and came to an overall risk rating of 25%, which was validated by DNV. (see www.vcsprojectdatabase.org/#/project_details/934c). In this regard it is important to note that the risk tool per se is different to the one used for the proposed Maï-Ndombe ER Program so they are not strictly comparable.

The ER-PD does not address the time frame in discussing reversal risks. It also does not address reversal risks beyond the term of the ER-PA. Even if such an assessment may be difficult or possibly not easily feasible, the ER-PD should at least address the issue. This is important also in light of indicator 18.2.

In the TAP's view, the ER-PD's proposed risk ratings need to be revisited; the TAP proposes to particularly reassess:

Political & governance risk:

- (c) The TAP questions the proposed risk rating and propose rating 0. On page 72, section 6.1 points out that "the provincial government of Maï-Ndombe is the main responsible of the program success". A steering committee is also in the process of being established but does not yet has terms of reference.
- (d) Disagree on proposed risk rating, and propose rating 0. There is no demonstration undertaken that Maï-Ndombe's provincial government is working for REDD+ to improve their governance environment on standard

indicators (transparency, rule of law, accountability, etc.). During the technical assessment, an Economic Governance Matrix was explained. Although such a matrix evidences political commitment, it does not evidence a better governance environment.

Program design and strategy:

- (b) The TAP questions the proposed risk rating and propose rating 0. The ER-PD points out that the programme aims to reduce the amount of (illegal) logging, which will lead to lower commodity production. Although the ER-PD proposes to produce charcoal at the same level through tree planting and assisted natural regeneration, it is hard to see how this can be achieved during the very brief term for implementing the ER-PD.
- (f) The TAP questions the proposed risk rating and propose rating 0. The ER-PD point to readiness funding received from FCPF and UN-REDD but does not explain how this funding addresses reversal risk specifically.

Carbon rights and use of carbon revenues:

(c) The TAP questions the proposed risk rating and propose rating 0. The ER-PD points to some ongoing work to clarify carbon ownership. But there are no details provided on the larger context of right to lands, territories and resources.

Funding risk:

• (e) The TAP questions the proposed risk rating and propose rating 0. The ER-PD points to the FCPF engagement. But a partnership with the private sector to diversify funding sources is not described.

The TAP concludes thus that the individual risk assessments need to be carefully reviewed. The ER-PD might otherwise underestimate risks and, consequently, overestimate long-term emission reductions.

Ind 18.2 The ER Program demonstrates how effective ER Program design and implementation will mitigate significant risks of Reversals identified in the assessment to the extent possible, and will address the sustainability of ERs, both during the Term of the ERPA, and beyond the Term of the ERPA

No

[ER Program design features to prevent and mitigate Reversals 12.2]

No, the ER-PD does not demonstrate how effective ER programme design and implementation will mitigate significant reversal risks. The section 12.2 points to section 11.1 that address risks of displacement and not reversal risks.

Section 12.1 undertakes, among other things, a risk assessment according to programme design and strategy. It also points to several mitigating factors where programme design mitigates reversal risks. These should be explained further and also cover the sustainability of carbon reductions beyond the term of the ER-PA.

It cannot be concluded that the ER programme's risk mitigation strategy is inadequate, but the ER-PD does not currently transparently explain it.

C 19 The ER Program accounts for Reversals from ERs that have been transferred to the Carbon Fund during the Term of the ERPA

Ind 19.1 During the Term of the ERPA, the ER Program accounts for Reversals from ERs using one of the following options:

YES

Option 1: The ER Program has in place a Reversal management mechanism (e.g., buffer reserve or insurance) that is substantially equivalent to the Reversal risk mitigation assurance provided by the 'ER Program CF Buffer' approach referred to in option 2 below, appropriate for the ER Program's assessed level of risk, which in the event of a Reversal during the Term of the ERPA will be used to fully cover such Reversals.

 Option 2: ERs from the ER Program are deposited in an ER Program-specific buffer, managed by the Carbon Fund (ER Program CF Buffer), and based on a Reversal risk assessment. ERs deposited in the ER Program CF Buffer (Buffer ERs) will not be transferred to the Carbon Fund. In the event that a Reversal event occurs during the Term of the ERPA, an amount of Buffer ERs will be cancelled from the ER Pro 	
[Reversal management mechanism, Selection of Reversal management mechanism 12.3]	
Yes, the ER-PD proposes to use the VCS registry system and its reversal management mechanism (option 1), acceptable.	which is
C 20 The ER Program, building on its arrangements put in place during the readiness phase and during the the ERPA, will have in place a robust Reversal management mechanism to address the risk of Reversals afterm of the ERPA	
Ind 20.1 At the latest 1 year before the end of the Term of the ERPA, the ER Program will have in place a robust Reversal management mechanism or another specified approach that addresses the risk of Reversals beyond the Term of the ERPA	N/A
Not applicable at this stage	ı
Ind 20.2 If the ER Program has selected option 2 under Indicator 19.1, all or a portion of the Buffer ERs of the ER Program, subject to a Carbon Fund review of the Methodological Framework and a decision of the parties to the ERPA in 2019, will be transferred to the mechanism identified in Indicator 20.1 at the end of the Term of the ERPA. If the ER Program fails to meet the requirements of Indicator 20.1, all remaining Buffer ERs in the ER Program CF Buffer will be cancelled	N/A
Not applicable at this stage	
C 21 The ER Program monitors and reports major emissions that could lead to reversals of ERs transferred Carbon Fund during the Term of the ERPA	to the
Ind 21.1 The ER Program Monitoring Plan and Monitoring system are technically capable of identifying Reversals	YES
[Monitoring and reporting of major emissions that could lead to Reversals of ERs 12.4]	
Yes, the proposed ER programme monitoring plan should be capable of identifying reversals.	
Sections 10.1 and 12.4 point out that the ER Program monitoring includes a wall-to-wall monitoring acrosub-areas of deforestation and forest degradation. It also includes use of data from Global Forest Watch of basis. Reversals would be observable as unforeseen deforestation or forest degradation in the monitoring data from Global Forest Watch of the control of th	n a weekly
Ind 21.2. The ER Program reports to the Carbon Fund within 90 calendar days after becoming aware of any emissions in the Accounting Area or changes in ER Program circumstances that, in the reasonable opinion of the ER Program, could lead to Reversals of previously transferred ERs by the next Monitoring event. The ER Program explains how the potential Reversals would be addressed by additional ER Program Measures or by the Reversal management mechanism described in Indicator 19.1.	N/A
Not applicable at this stage	
C 22 Net ERs are calculated by the following steps:	

- 1. Subtract the reported and verified emissions and removals from the Reference Level
- 2. Set aside a number of ERs from the result of step 1, above, in a buffer reserve. This amount reflects the level of uncertainty associated with the estimation of ERs during the Term of the ERPA. The amount set aside in the buffer reserve is determined using the conservativeness factors for deforestation listed in the MF. For estimated emissions reductions associated with degradation, the same conservativeness factors may be applied if spatially explicit activity data (IPCC Approach 3) and high-quality emission factors (IPCC Tier 2) are used. Otherwise, for proxy-based approaches, apply a general conservativeness factor of 15% for forest degradation Emission Reductions.
- 3. Set aside a number of ERs in the ER Program CF Buffer or other reversal management mechanism created or used by an ER Program to address Reversals

[Ex-ante estimation of the Emission Reductions 14.3]

No

No, compliance with criterion 22 cannot be confirmed.

The ER-PD proposes to calculate emission reductions according to the indicator's three steps for an ex-ante estimate of emission reductions (reported and verified emissions are not yet available). But the conservativeness factor is not correctly applied.

The approach to reference level estimation of unplanned deforestation and degradation (UNDEG/UNDEF) is not spatially explicit. The indicator14.2lays out that spatially detailed emission factors and activity would in principle be available. But nonetheless, the ER-PD proposes to omit spatial detail and use broad averages. According to the methodological framework, a conservativeness factor of 15% would need to be applied to emission reductions from forest degradation if making this methodological choice.

It is concluded that the currently proposed approach for establishing estimates would overestimate emission reductions.

(The ER-PD proposes a completely different set of approaches for reference level setting and programme monitoring for planned degradation (PDEG). It also proposed a different approach to programme monitoring of such unplanned degradation that is reason for concern based on other grounds under indicator 14.1.)

C 23 To prevent double-counting, ERs generated under the ER Program shall not be counted or compensated for more than once. Any reported and verified ERs generated under the ER Program and sold and/or transferred to the Carbon Fund shall not be sold, offered or otherwise used or reported a second time by the ER Program Entity. Any reported and verified ERs generated under the ER Program that have been sold and/or transferred, offered or otherwise used or reported once by the ER Program Entity shall not be sold and transferred to the Carbon Fund

(i) [Participation under other GHG initiatives 14.1]

YES

Yes, overall measures are undertaken to prevent double-accounting. See also answers to the 4 questions by the TAP in the matrix delivered and proposed to be integrated in the reviewed ER-PD document.

As outlined throughout the ER-PD and in detail in **Figure 15 of the ER-PD (15 Jan 2016)** the DRC has established a REDD+ Regulation, which is supported by a National Registry and a requirement that for any ERs to be sold they must be the subject of a contractual arrangement with all stakeholders and the government. Importantly, the contracts will always include exclusivity and no-compete clause concerning the REDD+ activities and their exclusive eligibility under the national REDD+ program (or the REDD+ project in question); this clause strictly adheres to the rules on "double-counting".

This framework will prevent double-counting, ERs generated under the ER Program shall not be counted or compensated for more than once. In addition, the proposed framework allows that Project holders may freely transfer ERCs issued to them, under a sales agreement, conversion (from domestic ERCs into e.g. Verified Carbon Units) or other. Project holders will still be permitted to seek issuance of international credits, but all international credits will need to be converted from domestic credits.

On issue which requires clarification is where ERCs are for example converted to Verified Carbon Units there needs to be some explanation as to how this is accounted for and excluded from the arrangement with the FCPF.

(ii) [Data management and Registry systems to avoid multiple claims to ERs 19.2]

YES

As outlined in section 19.2 of the ER-PD and in detail in Figure 15 of the ER-PD of 15 Jan.2016, the DRC has established a National Registry of the DRC's national REDD+ program. This Registry will control the issuance of all ERs within the project area and only projects that have been approved through this process and which have entered into contracts with the Government and all affected stakeholders will be included in the program and benefit from the sale of ERs to the FCPF. In this regard the proposed system will avoid any double counting.

C 24 The ER Program meets the World Bank social and environmental safeguards and promotes and supports the safeguards included in UNFCCC guidance related to REDD+

Ind 24.1 The ER Program demonstrates through its design and implementation how it meets relevant World Bank social and environmental safeguards, and promotes and supports the safeguards included in UNFCCC guidance related to REDD+, by paying particular attention to Decision 1/CP.16 and its Appendix I as adopted by the UNFCCC

YES

[Description of how the ER Program meets the World Bank social and environmental safeguards and promotes and supports the safeguards included in UNFCCC guidance related to REDD+ 15.1]

Yes, the ER-PD demonstrates that it can meet relevant WB SESAs.

The DRC has a social and environmental assessment framework for its National REDD+ Program. It was validated by the World Bank in May 2015 at national level. What will be challenging in the framework of the ER-PD implementation is to implement the safeguards on the ground. In the ER-PD, which is based on a jurisdictional area, the national framework should be clearly contextualized to address the social and environmental risks relevant to it.

Under section 6.1 on Institutional Arrangements and Implementation Figure 3 illustrates the role of Independent Mandated Observers who will work with the National REDD+ Secretariat. The functions will include:

Monitoring of emission reductions and monitoring of safeguards and co-benefits

Ensuring proper application of environmental and social management frameworks including complaints

In the same section under M and E, clear reference is made to Independent Mandated Observers whose role in conjunction with the National REDD+ Secretariat will be

To verify information on the implementation of safeguards

Compile information from local OCS (whatever that means) for players in deforestation and degradation, which implicitly includes logging companies

Furthermore a local NGO, known as Forest Governance Observer is reportedly working on a methodology for independent monitoring based on its experience with FLEGT Process and will use a combined OI FLEGT – OIREDD methodology in that regards

Section 12.4 of the ERPD also makes reference on the monitoring and reporting of major emissions that could lead to reversals of ERs but is not detailed as to how. In this regard, section 6 is much clearer.

Ind 24.2 Safeguards Plans address social and environmental issues and include related risk mitigation measures identified during the national readiness process, e.g., in the SESA process and the ESMF, that are relevant for the specific ER Program context (e.g., land tenure issues), taking into account relevant existing institutional and regulatory frameworks. The Safeguards Plans are prepared concurrently with the ER Program Document, and are publicly disclosed in a manner and language appropriate for the affected stakeholders

NO

[Description of how the ER Program meets the World Bank social and environmental safeguards and promotes and supports the safeguards included in UNFCCC guidance related to REDD+ 15.1]

No; while overall, the safeguard plan has been provided in general terms, there is a need to be more precise to clearly address the particular social and environmental issues characteristic for the Province and to propose adequate risk mitigation measures.

The TAP noted that all activities identified in the Maï-Ndombe ER strategy are aligned with the national REDD+ strategy. The national strategy has been built taking into account the SESA and ESMF. In general terms, the risk and mitigation measures of the proposed activities have been identified in the national safeguard approach (and also in the FIP project safeguard documents). With respect to safeguards in the ER-PD, the TAP expected that under each of the themes within the context of Maï-Ndombe (agriculture, energy, forestry and their sub-themes illustrated in tables 5,

and sectoral key activities in table AS1, AS2, AH1 etc), safeguard issues associated with each are clearly identified and described. However, likely social and environmental risks associated with or relevant to the themes have only been generally spelt out and described in the current ER-PD under Annex 12. This gives a good overview but still remains general. In the TAP's view, Annex 12 should be part of the main text in Chapter 15 for ease of checking and reference and to provide the needed context. This is considered important since it will help to build a monitoring matrix that can be easily visualized and used to track progress on safeguards.

Further comments on the Matrix in Annex 12 are as follows:

- i. The risks as reported reflect mainly the perceptions of local stakeholders; it would be commendable to complement the assessment with aspects from rural sociologists and ecologists.
- ii. The risks should be clearer categorized as social or environmental
- iii. Since the interventions themselves are not clearly articulated in Chapter 4, the risks and proposed mitigation measures are still quite general.

Examples from Annex 12 Table:

- Under AH1 on Supporting Agricultural Value Chains the risk which has been identified suggests that the Intervention has not been thought out since value chains should only be supported where an economic viability has been shown.
- Under Item FS4 on Afforestation / Reforestation, an important mitigation factor would be support for Capacity and Organizational Development of Community Level Governance Structures (Forest Management Committees, Participatory Inventory Programmes and Procedures etc.). These have not been mentioned. In addition an important empowerment aspect of 'value added' processing of forest products is missing, as is the creation and support for community-private partnerships in the establishment, running and benefit sharing in natural forest management, and afforestation / reforestation programmes.

C 25 Information is provided on how the ER Program meets the World Bank social and environmental safeguards and addresses and respects the safeguards included in UNFCCC guidance related to REDD+, during ER Program implementation

Ind 25.1 Appropriate monitoring arrangements for safeguards referred to in Criterion 24 are included in the Safeguards Plans

YES

[Description of arrangements to provide information on safeguards during ER Program implementation 15.2 and 6.1]

Yes, overall, appropriate monitoring arrangements for safeguards at various levels are described.

These arrangements include an overall description of data collection at local levels, reporting, technical supervision, validation and independent observation. The TAP notes that targeted capacity building has taken place. The ER-PD also states that monitoring arrangements for safeguards will also be included in the safeguard plan of the provincial ER-Program.

The TAP recommends nevertheless making the safeguard sections in ER-PD more explicit in order to better contextualizing the social and environmental issues and conditions in the Maï-Ndombe jurisdictional area. The TAP further recommends to complete information on Indigenous People (Pygmies communities), namely their sedentarization (p.28) and marginalization and contestation of their rights (p.167). It is planned that will be part of the consultative platforms in the ER-Program; safeguards provisions need to specify their involvement as minority group among the dominant groups is provided (see also comments under Ind. 28.2).

Ind 25.2 During ER Program implementation, information on the implementation of Safeguards Plans is included in an annex to each ER monitoring report and interim progress report. This information is publicly disclosed, and the ER Program is encouraged to make this information available to relevant stakeholders. This information is also made available as an input to the national systems for providing information on how safeguards are addressed and respected (SIS)11 required by the UNFCCC guidance related to REDD+, as appropriate.

N/A

Not applicable at this stage

C 26 An appropriate Feedback and Grievance Redress Mechanism (FGRM) developed during the Readiness phase or otherwise exist(s), building on existing institutions, regulatory frameworks, mechanisms and capacity

Ind 26.1 An assessment of existing FGRM, including any applicable customary FGRMs, is conducted and is made public. The FGRM applicable to the ER Program demonstrates the following:

YES

- i) Legitimacy, accessibility, predictability, fairness, rights compatibility, transparency, and capability to address a range of grievances, including those related to benefit-sharing arrangements for the ER Program;
- ii) Access to adequate expertise and resources for the operation of the FGRM

[Description of the Feedback and Grievance Redress Mechanism (FGRM) in place and possible actions to improve it 15.3]

Yes, an FGRM is conducted and will be made public (including through capacity building) over the coming months.

Feedback and Grievance Redress Mechanism have already been proposed in the safeguard process and a particular ongoing study will further precise procedures and define guidelines at national and subnational level (p.163 ff). A framework for addressing grievances has been described and illustrated in Figure 13 and the section has recognized that failure to comply with social and environmental standards is strongly linked to grievances and complaints.

The document also states that communities and IPs will be informed of their rights and the set procedures for addressing complaints.

The TAP recommends an independent body in which the government is represented but is not dominant or the principle player. For the TAP, the existence of such an independent entity, functioning at last for the first couple of years of ERPA implementation, is crucial for a successful FGRM.

Ind 26.2 The description of FGRM procedures, included in the Benefit-Sharing Plan and/or relevant Safeguards Plans, specifies the process to be followed to receive, screen, address, monitor, and report feedback on, grievances or concerns submitted by affected stakeholders. As relevant, the Benefit-Sharing Plan and/or relevant Safeguards Plans and/or ER Program Document describe the relationship among FGRM(s) at the local, ER Program, and national levels

YES

[Description of the Feedback and Grievance Redress Mechanism (FGRM) in place and possible actions to improve it 15.3]

Yes, the ER-PD makes necessary provision to fulfill the requirements in respect to FGRM in safeguard plans and benefit sharing plan.

The ERPD has made provisions for, and recognizes the need for feedback and even requires complaints and grievances to be recorded and tracked in a central registry, what is still missing are early indications of emerging or potential complaints that the proposed programme components is facing or will most likely face.

Also there is a need to further explain the FGRM procedures as they relate to the benefit sharing plan and the feedback mechanisms to them as well as the grievances and complaint arrangements.

Ind 26.3 If found necessary in the assessment mentioned in Indicator 26.1, a plan is developed to improve the FGRM

YES

[Description of the Feedback and Grievance Redress Mechanism (FGRM) in place and possible actions to improve it 15.3]

Yes, a study is underway to improve the FGRM process (results yet not available to the TAP).

In this regard the text is reasonably clear. A study has been engaged since fall 2015 that looks at such plan at national level based on existing experience in the country and elsewhere. First results are expected in early 2016.

C 27 The ER Program describes how the ER Program addresses key drivers of deforestation and degradation

Ind 27.1 The ER Program identifies the key drivers of deforestation and degradation, and potentially opportunities for forest enhancement

YES

[Analysis of drivers and underlying causes of deforestation and forest degradation, and existing activities that can lead to conservation or enhancement of forest carbon stocks 4.1]

Yes, the ER Program identifies well the key drivers of DD and the opportunities for enhancing sinks.

The drivers are well identified and the linkages between the direct and indirect factors are clearly presented. Table 4 (p33) goes further to present a concise summary of the drivers, the agents behind and the concerned land categories. This summary highlights the prominent role of local communities and artisanal loggers in deforestation and degradation activities in the program area. Also, existing activities that provide opportunities for conservation and enhancement of forest carbon stocks are identified and listed in the document.

Key challenging barriers to REDD+ activities are identified and the reforms envisaged in the National investment plan, to be funded by the Central Africa Forest Initiative (CAFI), are presented as the principal levers of these barriers.

The ERPD acknowledges that immigration might become a major driver in the future, however in order to get a clear picture on its magnitude a study of the immigration to Mai-Ndombe from the vicinity areas need to be carried out. The TAP agrees with this idea and encourages the ERP to consider this activity as an urgent task that will guide the program design, taking into consideration the fact that the dynamism of the migrants would position them as more active agents of deforestation and degradation.

Ind 27.2 The ER Program identifies currently planned ER Program Measures and how they address the key drivers identified in Indicator 27.1, and the entities that would undertake them

YES

[Description and justification of the planned actions and interventions under the ER Program that will lead to emission reductions and/or removals 4.3]

[Institutional and implementation arrangements 6.1]

Yes, a comprehensive presentation of the measures and approaches to address key drivers and opportunities is visible in the ERPD.

The measures proposed in the ER-PA are clearly articulated with the National REDD+ strategy. The approach which aims at creating a 'green development virtuous circle' is based on a multi-sectorial strategy that combines sectorial activities and enabling activities; a program that incentivizes agents towards performance; and an innovative financing framework. The linkages between the sectorial activities (relevant to agriculture, energy and forest management and

conservation), their corresponding enabling activities and the overall enabling activities relevant to governance, demography, land-use planning and land tenure are clearly established and summarized in Table 5 (p42).

The TAP draws attention on the fact that the link between the population increase and the corresponding activity (support to family planning) cannot be straightforward, as mastering population growth involves addressing number of factors such as literacy rate (formal education) and religious or customary perceptions. Activities that target population growth should therefore have multiple dimensions. Also, understanding the scope of migration in the program area seems to be important for addressing this issue.

The design of the participatory process for land-use planning includes key interesting steps that might lead to secured investment in the ERP, these are: awareness raising, community structuring, participatory mapping and establishment of sustainable development plans (SDP) at the various implementation levels. It would be worth to clearly link these activities carried out at the jurisdictional level with the land tenure and land-use planning reforms at the national level (to be funded by CAFI), as the national reforms will adopt policies that apply at the provincial level. The TAP also recognizes that participatory mapping is an effective tool for land-use planning at local level, but we are of the opinion that functional standards agreed among stakeholders in DRC are still missing and would be useful to minimize conflicts and contestation of outcomes (community maps). Currently different organizations are working on participatory mapping in Maï-Ndombe and their methodological approaches differ in some way. It is understood by the TAP that a harmonization workshop to approach a certain harmonization of standards is being planned for early 2016.

The overall institutional arrangement (figures 2 to 5, p.44, p.71, p.76, p.77) seems to be adequate, though a little bit complex with multilevel institutions and entities. At the bottom level, linkages between ERP entity with the supporting technical partners and state agencies are clearly shown, as well as with the agents that have the direct responsibility to reduce emissions and increase uptake (companies, cooperatives, conservation concessions, forest concessions, sustainable development committees (CLD), farmers' organizations, etc.). Responsibilities pertaining to ER activities and monitoring performance indicators are also emphasized. An additional note on local institutions in the program area provides clarity on their expected functions.

However, the TAP emphasizes that the question of capacities (human, technical, organizational) is key for the various institutions to work:

- (i) the newly created Provincial Government will have to deal with the complex issue of implementing the world's first large ER Program;
- (ii) there is a need for community's bodies and entities to be effective and mature enough before signing contracts;
- (iii) the option of creating consortia or clusters of adjacent community concessions would imply putting in place stronger and effective bodies to manage such concessions. Therefore, the ERPD team needs to consider the risks associated to the overall institutional set-up as there is a clear link between their capacities, effectiveness/sustainability and the delivery of reduces emissions and increase uptake; and
- (iv) the entrance of forest companies into the carbon regime framework challenges forest companies to adopt and comply with higher forest management standards (not only reduced-impact-logging) and full compliance to forest law enforcement and governance procedures. To strengthen internalization of such higher management requirements, FH2 activities need to be complement by targeted support for forest planning units and capacity building.

C 28 The ER Program has undertaken and made publicly available an assessment of the land and resource tenure regimes present in the Accounting Area

Ind 28.1 The ER Program reviews the assessment of land and resource tenure regimes carried out during the readiness phase at the national level (i.e., SESA) and, if necessary, supplements this assessment by undertaking an additional assessment of any issues related to land and resource tenure regimes in the

Yes

Accounting Area that are critical to the successful implementation of the ER Program, including:

- I. The range of land and resource tenure rights (including legal and customary rights of use, access, management, ownership, exclusion, etc.) and categories of rights-holders present in the Accounting Area (including Indigenous Peoples and other relevant communities);
- II. The legal status of such rights, and any significant ambiguities or gaps in the applicable legal framework, including as pertains to the rights under customary law;
- III. Areas within the Accounting Area that are subject to significant conflicts or disputes related to contested or competing claims or rights, and if critical to the successful implementation of the ER Program, how such conflicts or disputes have been or are proposed to be addressed; and
- IV. Any potential impacts of the ER Program on existing land and resource tenure in the Accounting Area.

The ER Program demonstrates that the additional assessment has been conducted in a consultative, transparent and participatory manner, reflecting inputs from relevant stakeholders

[Description of land tenure systems, analysis of laws and regulatory framework 4.4 and 4.5, stakeholder consultation process 5.1]

Yes, the land tenure and access issues are well laid out.

Section 4.4 and 4.5 of the ER-PD outline the tenure arrangement's and key legislation for DRC.

The TAP notes that a number of a number of studies exist on land tenure and access to resources in DRC (4.4), with a particular focus on REDD+. The program zone, the province of Maï-Ndombe was closely assessed with respect to land tenure aspects as part of the project for improved management of forest landscapes (PIMFL) funded by the FIP. Furthermore, independent assessments were conducted by the various REDD+ initiatives implemented in the program zone. The legal assessments were complemented with statistical samples (in the former district of Mai-Ndombe; sample of 400 households), collected in the context of the BioCarbon Fund+ mission of November 2014, and on-the-ground surveys made by the Provincial Ministry of Agriculture (2011) in the 4 territories of Plateau District. In doing so this analysis:

- I. Identifies the **general** range of land and resource tenure rights (including legal and customary rights of use, access, management, ownership, exclusion, etc.) and categories of rights-holders present in the Accounting Area (including Indigenous Peoples and other relevant communities). In this regard, it is unclear to the TAP to what extent all the **specific** land and resource tenure rights have been assessed (as no more than a sample may be feasible). However, in the TAPs view, as only areas that are subject to the REDD+ contractual arrangements with all relevant landholders (including Indigenous Peoples and other relevant communities) will be included in the ER Program, this should not be a major issue.
- II. Outlines the legal basis of such rights, and any significant ambiguities or gaps in the applicable legal framework, including as it pertains to the rights under customary law. However, as indicated in the Annex 1 of this TAP review, the ER-PD could benefit from additional commentary on the potential conflict between state rights and customary rights under the Constitution.
- III. Only provides limited discussion of land conflicts. However, the TAP also noted that there is detailed discussion of the approach proposed to avoid any conflicts over ERs being the contracting approach under the REDD+ regulation as discussed in C23 above and in detail in Annex 1.
- IV. Addresses any potential impacts of the ER Program on existing land and resource tenure in the Accounting Area through the REDD+ regulation contracting regulation and the benefit sharing plan. In that regarded inclusion is only by agreement.

Finally, section 5 outlines in detail the extent of the stakeholder engagement. It notes that consultation and information in the design phase of the Mai Ndombe ER Program has taken place at multiple levels.

In the TAP's view, the issues that still may require clarification are how the REDD+ Regulation contracts will be enforced in practice and how will **emphyteutic 25-year lease for NR concessions**, be they forest timber concessions or conservation concessions be sued for managing carbon ownership and if so how is it granted, removed, secured-and its rewarded for permanence.

Ind 28.2 The ER Program explains how the relevant issues identified in the above assessment have been or will be taken into consideration in the design and implementation of the ER Program, and in the relevant Safeguards Plan(s). If the ER Program involves activities that are contingent on establishing legally recognized rights to lands and territories that Indigenous Peoples have traditionally owned or customarily used or occupied, the relevant Safeguards Plan sets forth an action plan for the legal recognition of such ownership, occupation, or usage. Beyond what is required for the successful implementation of the ER Program, the ER Program is encouraged to show how it can contribute to progress towards clarifying land and resource tenure in the Accounting Area, where relevant.

YES

[Assessment of land and resource tenure in the Accounting Area 4.4]

[Description and justification of the planned actions and interventions under the ER Program that will lead to emission reductions and/or removals 4.3]

Yes, overall, but could be more developed as outlined beneath.

Sections 5.1 and 5.2 present the information and consultation during the design phase of the ERPD and highlight the coming consultation and communication campaign in the program area. It is clear from this description that the specific Safeguards Plan for Maï-Ndombe program is still to be developed. However, one could have expected to see more development on the approach to solutions on some of the land tenure challenges identified in Section 4.4.

- (1) For instance, one of the missing issues among the challenges related to land tenure is the case of Indigenous communities ("Pygmies") as there is a specific requirement for an assessment of their land tenure situation. Because Indigenous communities fall under a specific international legal regime (See UNDRIP), some developments should at least be made on the specific problems they might have with land tenure in the program area and the appropriate approach to handle those problems or presentation of relevant safeguards to follow.
- (2) The question of access to land by the "newcomers" (migrants) might become a bigger challenge for the program and also needs more development on how to approach it in the future. It is a tough question that needs innovative solutions which could be legal and socio-political. For example, Prof. Kalambay Lumpungu had proposed an inclusive legal approach to defining communities in DRC which considers criteria such as kinship, matrimonial relations, adoption (e.g. integration of migrants as member of the community), allegiance, etc. (see Kalambay Lumpungu, G., 1999. Droit civil: Régime foncier et immobilier, Vol II, Editions universitaires africaines/Presses universitaires du Congo, Kinshasa.).

As for communication and information sharing, elements of the strategy highlighted on page 67 are 'community radio', 'liaison workers' and 'regular consultation'. From the discussion the TAP had with the ER-PD team in Kinshasa (in December 2015), we noted that four thematic posters were also used as part of this strategy. The TAP contends that the capacity of communities to deal with/absorb new type of information (dynamic and flow of information) is a key constraint. So, the functionality and effectiveness of the coverage of the villages by liaison workers and community radios might not be enough to guaranty the expected impact, as it is not likely that a liaison worker will be available at any time for any village or every household has a radio transistor. The TAP therefore suggests reviewing the current communication system in order to identify and address such weaknesses. Introducing tools such as the solid-state digital player with hand wind power could be a way to improve the system.

Ind 28.3 The ER Program provides a description of the implications of the land and resource regime

Yes

assessment for the ER Program Entity's ability to transfer Title to ERs to the Carbon Fund [Transfer of Title to ERs 18.2]

Yes, the ER Program provides this information. See also C23 and Annex 1.

The ER-PD addresses any potential impacts of the ER Program on existing land and resource tenure in the Accounting Area through the REDD+ contracting regulation and the benefit sharing plan. In that regard, inclusion of a party in the program is only by agreement.

Furthermore, under the REDD + Regulation 2012, the DRC central government has made it clear that it holds the role of coordinator for the country's (national) REDD+ activities and, in that role, defines management elements and functions for REDD+ programs and projects developed underneath the national REDD+ governance level. It will be solely responsible for dealing with the FCPF.

While the actual legal basis of the power to transfer to ERs to the Carbon Fund ultimately requires the DRC to have the clear legal title to the ERs, there does remain some uncertainty about the legal nature of ERs. Also, some uncertainty over conflicting rights of the State to own ERs remains, as well as those rights of communities and private landholders. However, as noted in Chapter 18.2 of the ER-PD, under C23 and Annex 1, the Government has been developing the legal and governance frameworks for REDD+, the focus being the Ministerial Regulation on REDD+ Project Authorization ("REDD+ Regulation 2012"). As noted above in order to resolve this conflict, the DRC has made it a deemed pre-condition for the right of the project proponent to commercialize REDD+ carbon credits under the REDD Regulation 2012 that any creation, sale and benefits of any ERs are all underpinned by agreements with all interested stakeholders. The conclusion of partnership contracts ("contrats de partenariat") between the government (represented by the MECNDD), which – together with the adoption of an accord between the project proponent and local and indigenous communities – is deemed a pre-condition for the right of the project proponent to commercialize REDD+ carbon credits. If such agreements are not in place those ERs are not included in the program.

It is this agreement between all parties that will therefore provide the legal basis for the ER Program Entity's being the DRC to transfer Title to ERs to the Carbon Fund.

C 29 The ER Program provides a description of the benefit-sharing arrangements for the ER Program, including information specified in Indicator 30.1, to the extent known at the time.

Description of benefit-sharing arrangements [16.1 in ER-PD of 15 Jan. 2016]

YES

Yes, section 16 of the ER-PD of 15 Jan. sets out a clear description of arrangements for benefit-sharing, including REDD+ benefits, REDD+ beneficiaries, benefit-sharing sub-contracts, benefit-sharing principles and the indicative sharing plan (Table 46 p.172).

C 30 The Benefit Sharing Plan will elaborate on the benefit-sharing arrangements for Monetary and Non-Monetary Benefits, building on the description in the ER Program Document, and taking into account the importance of managing expectations among potential beneficiaries

Ind 30.1 The Benefit-Sharing Plan is made publicly available prior to ERPA signature, at least as an advanced draft, and is disclosed in a form, manner and language understandable to the affected stakeholders for the ER Program12. The Benefit-Sharing Plan contains the following information:

YES

The categories of potential Beneficiaries, describing their eligibility to receive potential Monetary and Non-Monetary Benefits under the ER Program and the types and scale of such potential Monetary and Non-Monetary Benefits that may be received. Such Monetary and Non-Monetary Benefits should be culturally appropriate and gender and inter-generationally inclusive. The identification of such potential Beneficiaries takes into account emission reduction strategies to effectively address drivers

of net emissions, anticipated implementers and geographical distribution of those strategies, land and resource tenure rights (including legal and customary rights of use, access, management, ownership, etc. identified in the assessments carried out under Criterion 28), and Title to ERs, among other considerations.

Criteria, processes, and timelines for the distribution of Monetary and Non-Monetary Benefits.

Monitoring provisions for the implementation of the Benefit-Sharing Plan, including, as appropriate, an opportunity for participation in the monitoring and/or validation process by the Beneficiaries themselves

[Description of benefit-sharing arrangements 16.1]

Yes, the ER-PD of 15 Jan. provides that Benefit-sharing plan will be publically available as an annex to the ERPA and signed with the Carbon Fund. At this stage, however, the benefit-sharing plan for the ER-Program is still to be developed.

The ER-PD indicates the principles and preliminary plan with indications on distribution rules, potential beneficiaries and monitoring. Types of carbon benefit and the forms it may take are clearly identified. The basis for the measurement of performance (emission reduction credits and proxy for carbon performance) is also indicated. Eligibility criteria beneficiaries include stakeholders with direct and indirect influence (positive or negative) influence on forest cover. The historical role of indigenous people is particularly recognized and includes them among the beneficiaries. Principles for the distribution and the sales of ERC are outlined, as well as some general principles which provide, inter alia, that Indigenous will receive benefit for their historical responsibility. The ERP has taken the commitment to incorporate the rights and needs of IP into the planning of benefit. Such an approach is relevant for involving IP in the program and helps address their marginalized situation. The next steps will have to address the appropriateness of such benefits (with regard to their needs, culture, gender and inter-generational inclusivity), which refers the need to develop safeguards already addressed (see Ind.28.2).

The contractual arrangements chart (figure 14, p.169) provides a comprehensive presentation of the different types of contracts: Carbon-related contracts will engage projects holders while the wide range of other stakeholders will have implementation contracts. However, as already highlighted under Ind. 27.2, the challenges for putting in place functional and effective institutions in the program area are still ahead. Some key institutional issues (e.g. legitimacy of representatives, equity) are linked to benefit-sharing and might have implication for the effectiveness of benefit sharing and sustainability of the institutions over time. They might also be linked to the effectiveness of actions to be carried out.

The TAP encourages the ERPD team to move forward with the remaining activities and consultation in order to finalize the Benefit Sharing Plan and provide clarity on monitoring provisions.

C 31 The benefit-sharing arrangements are designed in a consultative, transparent, and participatory manner appropriate to the country context. This process is informed by and builds upon the national readiness process, including the SESA, and taking into account existing benefit-sharing arrangements, where appropriate

Ind 31.1 The Benefit-Sharing Plan is prepared as part of the consultative, transparent and participatory process for the ER Program, and reflects inputs by relevant stakeholders, including broad community support by affected Indigenous Peoples. The Benefit-Sharing Plan is designed to facilitate the delivery and sharing of Monetary and Non-Monetary Benefits that promote successful ER Program implementation. The Benefit-Sharing Plan is disclosed in a form, manner and language understandable to the affected stakeholders of the ER Program

YES

[Description of stakeholder consultation process 5.1]

[Summary of the process of designing the benefit-sharing arrangements 16.2]

Yes, as far as it can be assessed for now, the benefit sharing program will be disclosed to be subject to a consultative, transparent and participatory process.

As the Benefit Sharing Plan is an official annex to the ERPA, it will have to be disclosed in a form, manner and language understandable to the affected stakeholders of the ER Program. The question is if the entire plan will be disclosed, including e.g. the US\$ figures as shown in Table 47. It is presumable that the indicative sharing plan will be subject of intensive discussion (e.g. 15% of the entire budget for one single conservation concession).

It should also be noted that those involved in the discussion are representatives of stakeholders and that there is a need to tap more on the core groups in villages of the program area.

The TAP suggests to further consult with stakeholders in the program area, using effective methods as suggested under Ind.28.2, before finalizing the benefit sharing plan. Given the subtleties involved, it is necessary to take the appropriate time and use the language understandable to reach a common understanding with communities whose majorities are non-literate.

The TAP further comments, in general terms of communication and information sharing the following:

The variety of beneficiaries also asks for a variety of communication tools to be used to share the information on benefit sharing. At local level, the ER-PD recommends community radios but nothing is said about the capacities of communities to deal with/absorb such new type of communication tools. Also, the impact, functionality and effectiveness of the coverage of the villages by relays and community radios need to be clearly assessed (not only in respect to communication on benefit sharing, but in a general context).

C 32 The implementation of the Benefit-Sharing Plan is transparent

Ind 32.1 Information on the implementation of the Benefit-Sharing Plan is annexed to each ER Program monitoring report and interim progress report and is made publicly available [16.1]

YES

Yes, such monitoring reporting and progress reporting are proposed.

The ERPD provides the following as indications on commitment for transparency:

The transparency of the profit-sharing contracts and the principle of free, prior and informed consent (FPIC) will apply to agreements between the government and nested projects, sub-contracts between the latter and local communities on condition of the validity of the principal, and to proxy payments with the private sector or local communities through local performance agencies.

The specification procedure for the forest concessions comes closest to the application of a FPIC procedure in the use of land, with all private sector players receiving proxy payments having to comply in order to negotiate benefit sharing subcontracts with the CLPAs. These agreements will be required to identify and state the location of the beneficiaries, activities or measures being financed, as well as a disbursement schedule.

C 33 The benefit-sharing arrangement for the ER Program reflects the legal context

Ind 33.1 The design and implementation of the Benefit-Sharing Plan comply with relevant applicable laws, including national laws and any legally binding national obligations under relevant international laws

YES

[Description of the legal context of the benefit-sharing arrangements 16.3]

Xx Yes, the benefit-sharing arrangement for the ER Program overall reflects the legal context.

The competence of the Ministry of Environment and Sustainable Development (MECNDD) to enter into (i) an ERPA, and (ii) implementation agreements with stakeholders to make the benefit sharing plan legally binding on the ground, is expressed in the Ministerial Order No 4/2012 (the *Arreté d'homologation*) as well as in the *Ordonnance présidentielle n°15/015 du 21 mars 2015 fixant les attributions des ministères (remplace l'ordonnance n°12/008 du 11 juin 2012).*

Some issues should be further explored when preparing the final benefit sharing program as an official Annex to the ERPA:

- The proposition to share part of the benefits between indigenous people, the State and the Jurisdiction is an important element in the benefit sharing mechanism. The MECNDD has to safeguard the formulation of appropriate contractual terms to prepare informed and balanced negotiations with the communities concerned. Indigenous communities are protected by law at various levels, including the Constitution; this protection extends to civil law protection against interference with access rights and rights of use and to a claim, recognized by law, for compensation (unjust enrichment, gestion d'affaire), should they be subjected to a new REDD+ regime that would limit any of their legal positions. This statement is not meant to ignore that in practice, indigenous communities in DRC have often not been treated in accordance with the law and rightful claims have been withheld without legal justification. The ER-program, in any case, needs to diligently address the prevailing rights of indigenous communities and must provide for a compensation package, in line with the law;
- It could be further explored if the benefit sharing arrangements could also follow from or be built upon the model of contract so as to keep the consistency and coherence of the whole system. The program entity should to the extent possible work with the same contractual models (*mutatis mutandis*), e.g. structured according to I. Parties, II. Context and Process, III. Commitments, IV. Benefit Sharing, V. Implementation, VI. Final Provisions, using model clauses for each. xx

C 34 Non-Carbon Benefits are integral to the ER Program

Ind 34.1 The ER Program outlines potential Non-Carbon Benefits, identifies priority Non-Carbon Benefits, and describes how the ER Program will generate and/or enhance such priority Non-Carbon Benefits. Such priority Non-Carbon Benefits should be culturally appropriate, and gender and intergenerationally inclusive, as relevant

YES

[Outline of potential Non-Carbon Benefits and identification of Priority Non-Carbon Benefits 17.1 in the reviewed ER-PD of 15 January 2016]

Yes, the program has identified a number of non-carbon benefits.

Sub-Section 17.1 outlines:

- increase income for household (due to higher yields and diversification of the sources of agricultural revenue and new jobs) and for private sector (with carbon benefits acting as an investment lever which loosens the constraints on access to capital and cash flow);
- socioeconomic investments (such as infrastructures, from the initial investments and tax revenues);
- the strengthening of governance (recognition and security of rights, participatory and transparent planning of investment, strengthening the rule of law, widely use of FPIC, improvement of business climate and restoration of trust with state services);
- Environmental Co-benefits (maintenance of biodiversity, maintenance of soil quality and fertility). These cobenefits clearly figure among the key objectives of the program for 2020 and relevant monitoring indicators

are presented in Annex 4. Also, the ER-PD presents how such co-benefits will be generated through the implementation of sectorial activities and enabling activities.

However, there is neither a development with regard to the required characteristics (culturally appropriate, and gender and inter-generationally inclusive), nor a justification of whether these characteristics are relevant for the identified co-benefits. The TAP thus recommends strengthening the ER-PD document by clearly identifying the various social groups or categories in the program area and presenting the roles/interests of those sub-groups in relation to the key co-benefits. The use of units such as 'households' and 'small farmers' does not highlight the gender and intergenerational dimensions, thereby preventing the perception of the cultural appropriateness of the co-benefits for these sub-groups. Also, another shortcoming in the presentation of co-benefits among the key objectives for 2020 is the lack of baseline and clear targets for each co-benefit.

Ind 34.2 Stakeholder engagement processes carried out for the ER Program design and for the readiness phase inform the identification of such priority Non-Carbon Benefits

NO

[Description of stakeholder consultation process 5.1]

The output of the stakeholder engagement process (Table 10, pp. 67-69 and Annex 6, pp.195-197) does not clearly present priority non-carbon benefits as a product of interaction with stakeholders. What is missing is how the decision on those benefits was made.

C 35 The ER Program indicates how information on the generation and/or enhancement of priority Non-Carbon Benefits will be provided during ER Program implementation, as feasible.

Ind 35.1 The ER Program proposes an approach utilizing methods available at the time to collect and provide information on priority Non-Carbon Benefits, including, e.g., possibly using proxy indicators. If relevant, this approach also may use information drawn from or contributed as an input to the SIS

YES

[Approach for providing information on Priority Non-Carbon Benefits 17.2]

Yes, a general approach to provide information on priority non-carbon benefits has been made, though not in any detail.

Non-carbon benefits are proposed to be part of an integrated approach to monitoring REDD+ safeguards. The tools include communication of the national REDD+ registry, MOABI as an independent communication platform and the monitoring report of the national environment and social standards.

Nonetheless, more detailed information on non-carbon benefit proxies could be given. As already stated in the first review of the TAP, income generation is a key non-carbon benefit, as is biodiversity. Some calculation could be done and integrated in the ER-PD. Thus, more detail on socio-economic data such as potential employment figures, expected income growth, number of households that could directly benefit would be useful because the activities have been identified. These data could serve as a baseline.

Overall, biodiversity proxies and soil fertility indictors have been mentioned as useful. And will be tracked within the context of a Jurisdictional Level MRV. Also, in respect to agroforestry, soil fertility indicators could be of use. As proposed, the non- carbon benefit will be tracked trough the National social and environmental standards.

Ind 35.2 Information on generation and/or enhancement of priority Non-Carbon Benefits will be provided in a separate annex to each ER Program monitoring report and interim progress report, and will be made publicly available

N/A

Not applicable at this stage

C 36 The ER Program Entity demonstrates its authority to enter into an ERPA and its ability to transfer Title to ERs to the Carbon Fund

Ind 36.1 The ER Program Entity demonstrates its authority to enter into an ERPA with the Carbon Fund prior to the start of ERPA negotiations, either through:

YES

- i. Reference to an existing legal and regulatory framework stipulating such authority; and/or
- ii. In the form of a letter from the relevant overarching governmental authority (e.g., the presidency, chancellery, etc.) or from the relevant governmental body authorized to confirm such authority.

[Authorization of the ER Program 18.1]

The MECNDD is the designated Government authority for both the domestic and the international transfer of emission reduction credits (see AM 2012 and *Ordonnance présidentielle* n°15/015 du 21 mars 2015). Participation and emission reduction (proceeds) arrangements will be concluded between the Ministry and relevant stakeholders (who may become either direct credit claimants or receive shares in the proceeds). Note that the central government will sign the ERPA with the Carbon Fund, not the regional government. The allocation of responsibilities and carbon revenues between the central government and the regional government will be laid down in an intra-administrative agreement. Also note that indigenous communities are recognized stakeholders under AM 2012.

The TAP outlined its further more detailed analysis in Ind. 28.3 and the Annex 1. While the actual legal basis of the power to transfer to ERs to the Carbon Fund ultimately requires the DRC to have the clear legal title to the ERs, in the TAP's view, there does remain some uncertainty about the legal nature of ERs and the ability of the State to claim ownership where community rights also exist and which therefore may result in conflicting rights of the State to own ERs and those of communities and private landholders. However, as noted in Ind 18.2, C23 and Annex 1, the Government has been developing the legal and governance frameworks for REDD+, the focus being the Ministerial Regulation on REDD+ Project Authorization ("REDD+ Regulation 2012"). As noted above in order to resolve this conflict DRC has made it a deemed pre-condition for the right of the project proponent to commercialize REDD+ carbon credits under the REDD Regulation 2012 that any creation, sale and benefits of any ERs are all underpinned by agreements with all interested stakeholders.

The conclusion of partnership contracts ("contrats de partenariat") between the government (represented by the MECNDD), which – together with the adoption of an accord between the project proponent and local and indigenous communities – is deemed a pre-condition for the right of the project proponent to commercialize REDD+ carbon credits. If such agreements are not in place, those ERs are not included in the program.

It is this agreement between all parties that will therefore provide the legal basis for the ER Program Entity's being the DRC to transfer Title to ERs to the Carbon Fund.

Ind 36.2 The ER Program Entity demonstrates its ability to transfer to the Carbon Fund Title to ERs, while respecting the land and resource tenure rights of the potential rights-holders, including Indigenous Peoples (i.e., those holding legal and customary rights, as identified by the assessment conducted under Criterion 28), in the Accounting Area. The ability to transfer Title to ERs may be demonstrated through various means, including reference to existing legal and regulatory frameworks, sub-arrangements with potential land and resource tenure rights-holders (including those holding legal and customary rights, as identified by the assessments conducted under Criterion 28), and benefit-sharing arrangements under the Benefit-Sharing Plan

YES

[Transfer of Title to ERs 18.2]	
This is dealt with detailed Analysis in 28.3, 36.1 and Annex 1.	
Ind 36.3 The ER Program Entity demonstrates its ability to transfer Title to ERs prior to ERPA signature, or at the latest, at the time of transfer of ERs to the Carbon Fund. If this ability to transfer Title to ERs is still unclear or contested at the time of transfer of ERs, an amount of ERs proportional to the Accounting Area where title is unclear or contested shall not be sold or transferred to the Carbon Fund [Transfer of Title to ERs 17.2]	YES

This is dealt with detailed Analysis in 28.3, 36.1 and Annex 1.

C 37 Based on national needs and circumstances, the ER Program works with the host country to select an appropriate arrangement to avoid having multiple claims to an ER Title.

Ind 37.1 Based on national needs and circumstances, the ER Program host country has made a decision whether to maintain its own comprehensive national REDD+ Program and Projects Data Management System, or instead to use a centralized REDD+ Programs and Projects Data Management System managed by a third party on its behalf. In either case of a country's use of a third party centralized REDD+ Programs and Projects Data Management System, or a country's own national REDD+ Programs and Projects Data Management System, the indicators below apply

YES

[Data management and Registry systems to avoid multiple claims to ERs 18.2]

Yes, the ER-PD deals with the issues relating to multiple claims to an ER Title; this is dealt with detailed analysis in Indicators 28.3, 36.1 and Annex 1.

DRC is establishing a National Registry of the DRC's national REDD+ program. This Registry is currently in design and will be operational mid-2016. Once a project has been approved through the 2102 REDD+ Regulation, it will then be formerly registered on the National REDD+ Registry of National Registry of the DRC's national REDD+ program. Any generated Emission Reductions (ERs) once measured and verified will then be issued as domestic Emission Reduction Credits (ERCs) exclusively through the National REDD+ Registry.

Registry accounts will be created for all authorized project holder as well as the government (with specific sub-accounts for regions/ jurisdictional programs). It should be noted that:

- i. More specifically in each Maï-Ndombe program monitoring report, ERCs generated will be allocated transparently to the different project holders according to their performance against their specific REL. All the remaining Emission Reduction Credit generated will be considered as the result of upfront investment as FIP provides and other relevant investment activities, developmental support activities and policies in the area and will be owned by the government of DRC (for selling or UNFCCC and other reporting purposes).
- ii. Project holders may freely transfer ERCs issued to them, under a sales agreement, conversion (from domestic ERCs into e.g. Verified Carbon Units) or other. Project holders will still be permitted to seek issuance of international credits, but all international credits will need to be converted from domestic credits. [In other sections the ER-PD on Principles in the distribution of Emission Reduction Creditstates "The ERCs are allocated to the ER-Program entity (DRC government) and also to holders of projects who signed carbon-related contracts with the government (through homologation regulation)." It is thus yet not fully clear to the TAP if this is entirely consistent with the process above].

Ind 37.2 A national REDD+ Programs and Projects Data Management System or a third party centralized REDD+ Programs and Projects Data Management System needs to provide the attributes of ER Programs, including:	YES
i. The entity that has Title to ERs produced;ii. Geographical boundaries of the ER Program or project;iii. Scope of REDD+ activities and Carbon Pools; andiv. The Reference Level used.	
An ER Program for the Carbon Fund should report its activities and estimated ERs in a manner that conforms to the relevant FCPF Methodological Framework C&Is	
[Data management and Registry systems to avoid multiple claims to ERs 18.2]	
This dealt above in Indicator 37.1 and Annex 1. But still under final development.	
Ind 37.3 The information contained in a national or centralized REDD+ Programs and Projects Data Management System is available to the public via the internet in the national official language of the host country (other means may be considered as required).	YES
[Data management and Registry systems to avoid multiple claims to ERs 19.2]	
This dealt above in Indicator 37.1 and Annex 1. But still under final development.	
Ind 37.4 Administrative procedures are defined for the operations of a national or centralized REDD+ Programs and Projects Data Management System; and an audit of the operations is carried out by an independent third party periodically, as agreed with the Carbon Fund	YES
[Data management and Registry systems to avoid multiple claims to ERs 18.2]	
This dealt above in Indicator 37.1 and Annex 1. But still under final development.	
C 38 Based on national needs and circumstances, ER Program host country selects an appropriate arrange ensure that any ERs from REDD+ activities under the ER Program are not generated more than once; and ERs from REDD+ activities under the ER Program sold and transferred to the Carbon Fund are not used agentity for sale, public relations, compliance or any other purpose	that any
Ind 38.1 Based on national needs and circumstances, the ER Program host country has made a decision whether to maintain its own national ER transaction registry, or instead to use a centralized ER transaction registry managed by a third party on its behalf	NO
[Data management and Registry systems to avoid multiple claims to ERs 18.2]	
Based on the information available the TAP concludes that this element is yet not sufficiently explained in t text. More information is needed to assess this indicator. But the system itself is dealt above in Ind 37.1 and But still under final development.	
Ind 38.2 The national or centralized ER transaction registry reports ERs for the Carbon Fund using the accounting methods and definitions described above in the MF	
[Data management and Registry systems to avoid multiple claims to ERs 19.2]	YES
L	1

Yes, the work to develop a centralized ER transaction registry is under way, though yet not completed.

The ER Program will be included in the National Registry of the DRC's national REDD+ program which will allow tracking and monitoring of ERs generated. However the Registry is still in the design phase and is supposed to be operational in mid-2016. In addition, the ER-Program will open a VCS registry account. Protocols for sharing information between National Registry and VCS Registry will be developed.

Ind 38.3 An independent audit report certifying that the national or centralized ER transaction registry performs required functions is made public.

N/A

[Data management and Registry systems to avoid multiple claims to ERs 19.2]

Not yet in place – cannot be assessed

Ind 38.4 Operational guidance exists, or is in advanced stage of preparation, that clarifies the roles and responsibilities of entities involved in the national or centralized ER transaction registry, as well as rules for operation of the registry.

YES

[Data management and Registry systems to avoid multiple claims to ERs 19.2]

Yes, operational guidelines are in a relatively advanced stage of preparation, though yet not existing.

As outlined in the ER-PD, the Maï-Ndombe ER-Program will be included in the National Registry of the DRC's national REDD+ program. As noted above this Registry is currently in design and will be operational by-mid 2016. As the registry and VCS implementation develops it will be necessary to get confirmation that implementation is being undertaken as described. An administrative procedure linked with the homologation regulation exists and is currently being revised to address recent development in REDD+. For an overview of the process, see Table 15 on p.181.

Annex 1 to the TAP review: An expansion of issues relating to indicators 28.3, 36.1 and 36.2

Many of the issues relating to the ability of the DRC to transfer the Emissions Reductions under the FCPF ER-PA (indicator 28.3 and 36.1 and 36.2); an assessment of land and resource tenure regimes C 28.1; preventing double counting C23; and projects data management system are all interrelated. In addition they require a thorough understanding of the approach DRC has proposed to address the underlying legal issues around the ownership of carbon, the legal nature of ERs and the laws and systems establish to deal with these matters under the specific Mai-Ndombe Emission Reductions Program. For this reason, the present Annex has been developed.

General introduction to legal contexts and ER-Programs in forestry

As a matter of first principle, in any REDD+ framework that attempts to create and then allocate or transfer emission reductions, the legal basis of these arrangements needs to be understood. This is complicated by the fact that in very few countries only, the existing legal systems have been adapted or developed to accommodate REDD+ and principles relating to concepts such as emissions reductions. In the majority of the future REDD+ countries, however, an analysis of the extent to which the current legal framework and regulation can accommodate REDD+ is a crucial requirement.

While carbon and non-carbon benefits can be easily identified, they are relatively new concepts whose value and legal definition continues to be developed. However, to date, the focus has almost entirely been on carbon benefits (generically termed **emission reductions or ERs**) with carbon benefits seen as outcomes from REDD+ that can play a role in the financing of REDD+ activities similar to the way in which Certified Emission Reductions (CERs) have assisted in

financing Clean Development Mechanism (CDM) Projects under the Kyoto Protocol or through the delivery of such services in return for donor funds such as development aid targeted at REDD+.

The ability of carbon and non-carbon benefits to be a source of finance requires clear legal definition of what such benefits are and who has the legal right to the value that flows from such activity. Such rights have to be developed through reviewing legal systems and establishing new regulations. As a land-based activity, this is directly influenced by issues of land tenure and resource (use) rights. In this respect it is important to separate the following:

- The actual physical benefit (carbon or non-carbon) that arises from a REDD+ activity namely the direct preservation of terrestrial carbon, being the carbon-benefit of physical carbon dioxide stored (sequestered) in the (five) carbon pools for the purposes of climate mitigation and indirectly adaptation and broader benefits such as preserving biodiversity values, watershed preservation, community capital and poverty alleviation.
- The assignment of a legal form to that actual carbon or non-carbon physical benefit measured by way of a set of criteria. This usually manifests itself as a unit, right or credit under either a legal framework or under a contract measured in tons of CO2e and arises from the carbon sequestration or forest carbon activity having met the specific criteria under the legislative frameworks or contract that issues the relevant legal form;
- The legal character of those carbon units, carbon rights, carbon credits or emission reductions being a property right or a security which again will be determined by regulation or common law; and
- The actual legal ownership of the carbon or non-carbon benefit and the units, carbon rights, carbon credits or emission reductions created therefrom, which may not always necessarily align.

In a number of countries, to support REDD+ and other forest carbon activities, legal frameworks to define and legally recognise carbon benefits exist or are being developed, resulting in a variety of different approaches to formalise such benefits into a legal form such as a carbon unit, carbon right, carbon credit or emission reduction, particularly in the context of a national emissions trading scheme where a value can then be ascribed to such units. To date, it is only the concept of a carbon-benefit that has been the subject of more formal legal development primarily in the context of carbon rights under domestic forest carbon frameworks or the CDM regimes (not REDD+). This has especially been the case in Australia and New Zealand where carbon benefits are formally recognised under the law and project activities that generate carbon benefits are provided with formal legal rights to that sequestered carbon. For example, under the Australian Carbon Credits (Carbon Farming Initiative) Act 2011 (Cth), it will be an Australian Carbon Credit Unit (ACCU), under the New Zealand Emissions Trading Scheme (NZ ETS) they are New Zealand Units and under the Californian ETS forestry based offsets are California carbon allowances (CCAs) and California compliance offsets (CCOs).

Furthermore, these same laws also allocate ownership of the carbon unit and underlying carbon sequestration. In some countries that have established forest based carbon schemes ownership, the carbon benefits is clearly identified in the law. For example, in Australia it is the landholder who has the right to develop forest carbon activity on their land and own the carbon benefit (although this may be transferred to a third party). In this regard, <u>ownership</u>, if clear and unencumbered, confers on the holder rights to the benefits received from the REDD+ activity.

In the absence of any specific early law project activity in the REDD+ area, determining the nature of the carbon benefit and carbon ownership, a review of the legal system is required to determine to what extent it can accommodate concepts of forest carbon and its ownership by looking at recognition through constitutional provisions; recognition under existing common law or civil law frameworks associated with property rights; recognition under contractual law; and recognition through separate legislative provisions. Depending upon the legal basis for defining and recognising the carbon benefit arising, ownership of that "carbon right" may fall to one of a number of persons, including *inter alia* the government, a landholder, a traditional forest user, or a third party, such as a concession holder.

The presumption has generally been that the owner of the land owns the forest and then owns the carbon and non-carbon benefits, although this becomes more complex where the landholder has allocated ownership of the trees to a third party. Furthermore, identifying the actual owner may not always be clear and many of the persons with primary

access to, or occupation of, forest areas often lack clearly defined rights of ownership or use. By way of example, such problems are common in the Brazilian Amazon, as in many other tropical countries. E.g. in Cambodia, state control over land and natural resources prevails, with the state able to grant concessions to private companies to access and use those resources. Those concessions often conflict with rights granted to customary users under the Forestry Law 2002. Whilst steps have been taken to facilitate community rights to forest resources (through the Community Forestry subdecree of 2003), those rights are still only for defined periods (15 year renewable agreements). Similarly, in PNG where the vast majority of land is held under customary ownership, the state retains legal control over the acquisition and allocation of certain rights that are associated with large-scale resource development. Traditionally, this has involved the granting of forestry concessions to third parties, but is expected to extend to the granting of carbon rights, when they are legislated for. Despite provisions in the Constitution enshrining customary landholder rights to participate in negotiations related to (and to withhold consent for) the grant of forestry concession, this process is often subverted.

Finally, private developers of REDD+ projects have also entered into private contracts (Emission Reduction Purchase Agreements) under which they simply define the Emission Reductions in the contract and use whatever terminology they deem appropriate and obtain warranties that ownership is held and can be passed. This may be under schemes such as the VCS as has initially been the case with some DRC projects which are being rolled into the program (e.g. The Mai Ndombe conservation concession of Wildlife Works.).

The specific DRC Situation- as provided for in the ER-PD

The ER-PD provides detailed analysis of the steps the DRC has gone to in order to establish a comprehensive legal framework to support REDD+ and in addressing the requirement of the FCPF methodological framework.

As a starting point, the DRC Constitution of the Republic, grants to the Congolese State the sovereignty on any Congolese natural resources. The Constitution also grants to the Congolese State the right to regulate the enjoyment of its resources through legal mechanisms (article 9 of the Constitution, 16 February 2016). While the Constitution does not explicitly refer to carbon rights or ERs, it is argued that as carbon rights qualify as natural resources, they are considered as property of the state. This is further reinforced by Forest Code (Act, 2002), Land Law (Act, 1973 as amended to-date) and the ability of the DRC to then allocate and regulate ownership of such natural resources through legal frameworks.

However, the Constitution also recognises that <u>local communities have collective customary rights of ownership</u> / occupancy / possession of land and forests. These rights are also provided for in the Land Act and Forest Code. As such, the State's sovereignty/ownership rights on private land are combined with the customary land and/or forestry rights, both collective and individual, of local communities. To elaborate further land rights of local communities are regulated in the Land Law of 1973 particularly in articles 387, 388 and 389. Lands occupied by the local communities are those the communities used for their habitation, crops and operation in whatsoever manner, on an individually or collectively basis, in compliance with local customs and usages. Land rights for local communities are also granted by article 22 of the forest code, which stipulates "A local community may, upon request, obtain forest concessions in part or in full of forests out of forests legally held under the custom". These rights may be exercised collectively or individually by the local communities. In such way, the sovereign law of the State will be exercised with the individual and collective law of the local communities.

In this regard, it would appear then that where carbon exists in a forest the underlying ownership will fall to the State unless such forest is community land to which custom will apply. This creates a potential conflict and commentary such as that by GLOBE notes that:

The dualistic structure of land and forest tenure chosen by the DRC gives local communities a joint claim on land and forests alongside the State. Thus, in the context of modern land governance, as described above, any REDD+ project or initiative will require the State to issue a title in favour of the project developer, by virtue of its sovereign/ownership rights. However, any issuance of a land or forest title in view of REDD+ or for any other purpose will require the local community with a customary

claim on the land or forest to consent to its transfer. These are the fundamental implications of the dual system that is a feature of the tenure system of the DRC.

In this respect the ER-PD would benefit some from additional commentary on the potential conflict here. Section 4.4 and 4.5 do address this to some extent where it is noted:

The Congolese land tenure regime has evolved on the basis of two constitutional guarantees: a public (state) guarantee of permanent sovereignty over the country's lands, waters and forests (recognized under the current constitution, which dates from 2006, in article 9), on the one hand, and the private property guarantee, which includes individual property as well as collective property, established in accordance with statutory law or custom (article 34 of the 2006 Constitution), on the other hand. Within these constitutional guarantees, Congolese law defines and recognizes different property titles over movable and immovable objects as well as distinct resource tenure regimes. Article 1 of the Congolese Property Law ("Regime général des biens, régime foncier et immoblier et régime des suretés" of 1973, hereinafter "Régime foncier" or "RF") lists the different types of rights in rem ("droits réels"), outline the tenure arrangement's and key legislation for DRC.

As noted above, while the Constitution does not explicitly refer to carbon rights or ERs, it is argued that as carbon rights qualify as natural resources and the arguments above then assess who has the right to exploit such natural resources, i.e. the State. However, this analysis does not first consider what the legal nature of carbon or emission reductions is per se. The ER-PD uses a range of terms to refer to the concept of emissions reductions from carbon credits to ERs, to ERCs (ERs issued by the national DRC registry) to VCUs.

The notion of ERs is not explicitly referenced in the country's legislation, except recently in the context of administrative procedural law laid down in Ministerial REDD+ Regulation No 4 of 2012 (see below). The ER-PD notes that applying general principles of DRC law, the separate rights are (i) the right to emission reductions as *obligatio*, i.e. the legally binding commitment of the seller to transfer carbon units issued within a dedicated registry for REDD activities and outputs as defined under the ERPA to the buyer, and to refrain indefinitely from creating, selling or transferring any carbon units issued with respect to such activities and outputs; (ii) the legal concept of a right to emission reductions as a right or *ius in rem*; and (iii) arrangements under DRC public and administrative law (administrative agreements) aimed at conservation measures in general, and the implementation of REDD+ and the sharing of benefits, in particular.

In this context (i) relates to actual REDD+ units issued by the DRC through its registry as domestic ERCs. Here the project proponents will have legal title to the ERCs that are issued but it is then a requirement that a contract is entered with the central government who then sells the ERs and that the stakeholders concerned will abstain from marketing the REDD+ activities to third parties. It is noted that the Regulation distinguishes "emission reductions" and "carbon credits", the latter implying a validation process under an international standard. It is also noted that the Regulation is confined to procedural matters; it does not create particular 'carbon rights', and it does not provide a legal basis for implementation.

However, this must be distinguished from (ii) which is a *right in rem* in effect the right to the actual carbon physically sequestered which underlies the ERC issued via the registry. A *right in rem*, in order to be recognized under DRC law, would need to fulfil the requirements of *rights in rem* ("droits reels") as defined by DRC property law (article 1 RF), namely ownership or dominium ("propriété"), permanent concession ("concession perpetuelle", long-term lease, "droit d'emphytéose") and forestry concessions (defined as 'right in rem sui generis'). These rights share as common feature that they represent an inherent claim to a particular object (whether movable or immovable) and that they give an absolute or restricted right of use. From the point of view of DRC law, emission reductions are neither considered an object – they lack the physical form – nor a forest product nor do they indicate a particular form of usage. Rather, they represent the result of an effort and an achievement. They may be the result of a concrete set of land and area-related actions (e.g. reforestation of a particular stretch of land) or they may be created through activities further removed from particular lots of land such as the introduction of certain policy measures with an impact on country- or jurisdiction-wide deforestation. It therefore follows that DRC's law does not recognize a right to emission reductions as a *ius in rem* (definition of ius in rem, see under https://en.wikipedia.org/wiki/lus in re).

Finally, here are some remarks in relation to (iii) Decree 11/27 of 20 May 2011on the issuance of forest conservation concessions. So-called *forest conservation concessions* are given out by the MECNDD; they confer on the concession holder the "right to utilize the forest for the *valorisation* of environmental services, at the exclusion of all extractive activities" (Article 3, italics added). "Environmental services" are defined as "the sum of activities giving rise to goods or services that serve to measure, avoid, limit, reduce to a minimum, or correct any encroachment on the environment" (ibid.). Whether REDD+ and the participation in REDD+ activities are covered by Decree 11/27 has not yet been finally established, and no case law is available. Following a conservative approach, the REDD+ program will assume that forest conservation concessions do include the right to engage in REDD+ and confer an exclusive right to valorise emission reductions and receive REDD+ credits for the area under (conservation) concession. The matter will be addressed through contract between the MECNDD and the concession holder.

This analysis therefore raises a number of issues. What is the legal nature of an ER? Who owns it? And how can a conflict between the right of a private landholder or community who may arguably have the "right" to the underlying carbon sequestered against the government who is claiming legal title be resolved? This is a complex issue in general terms in a developing country legal context, and may be difficult to resolve at all with a clear outcome. As such, the DRC plans to overcome theses uncertainties by establishing a formal process for having REDD+ projects approved, included in the Maï-Ndombe Program and making it a formal requirement of selling ERCs that a contract is signed (see below).

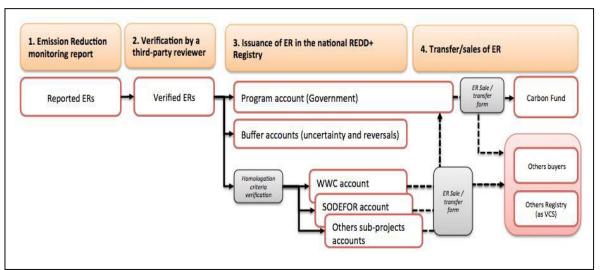
In summary, the current legal framework arrangements are provided in the DRC:

- Section 4.4 of the ER-PD draft of January 15 notes that a number of a number of studies exist on land tenure and access to resources in DRC, with a particular focus on REDD+. The program zone, the province of Maï-Ndombe, was thoroughly assessed with respect to land tenure aspects as part of the project for improved management of forest landscapes (PIMFL) funded by the FIP. Furthermore, independent assessments were conducted by the various REDD+ initiatives implemented in the program zone. The legal assessments were complemented with statistical samples (covering the former district of Maï-Ndombe with a sample of 400 households), collected in the context of the BioCarbon Fund+ mission of November 2014. Also, on-the-ground surveys have been conducted by the Provincial Ministry of Agriculture (Bandundu) (2011) in the 4 territories of the Plateau District.
- The DRC central government has made it clear that it holds the role of coordinator for the country's (national) REDD+ activities and, in that role, defines management elements and functions for REDD+ programs and projects developed underneath the national REDD+ governance level (jurisdictional level). In doing so the Government has been developing the legal and governance frameworks for REDD+, the focus being the Ministerial Regulation on REDD+ Project Authorization ("REDD+ Regulation 2012").
- The REDD+ Regulation 2012 creates a framework that will regulate all new nested projects and provide for the issuance of ERs and ERCs through a REDD+ Program established under the Verified Carbon Standard's (VCS) Jurisdictional Nested REDD+ (JNR) framework. In this regard to undertake any REDD+ project and to generate ERs that are endorsed at law all parties must follow this law. In summary, this framework establishes a domestic carbon process for obtaining approval to develop REDD+ projects and for the validation of project activities and the issuance of DRC-specific REDD+ credits. The Regulation describes the process for project holders legal personalities, land tenure holders or others, whether public or private to inscribe their activities in the national REDD+ program, to have it validated against an "international" standard, as approved by the DRC government (see Annex V of the Regulation), and to receive direct access to ERCs issued and nested within the national scheme for back to-back commercialization. Authorization follows a 3-step cycle:
 - (1) approval (approbation, article 11) by the "permanent Commission", created under the authority of the registrar (the Ministry in charge of the environment);
 - (2) the execution of a "partnership contract" between the registrar and the project holder (contrat de partenariat, the model is included in Annex IV) on stakeholder involvement, benefit sharing and rules for the valorisation of the "environmental services" reflected by the project (article 15); and

(3) positive external validation, which is conditional for the coming into force of the partnership contract (article 18). The validator verifies the existence of, among others, the partnership contract as well as the conclusion of an agreement between the project holder and affected local communities and/or indigenous people, assesses the project design description (PDD) against the requirement of an international standard, and examines the results and impact of the stakeholder consultation (article 18). The validator, after confirming that the project requirements are met, transmits the validation report to the registrar, which authenticates and publishes the report. Publication has the effect of project authorization and grants the right to the project holder to commercialize ERCs issued for the project independently (article 20).

It is noted that the authorization process is mandatory for all project holders whether private or public, except the regions, which hold genuine constitutional rights and legislative powers and are not directly bound by the Ministerial Regulation in question.

The DRC is also establishing a National Registry of the DRC's national REDD+ program. This Registry is currently in design and will be operational mid-2016. Once a project has been approved through the 2102 REDD+ Regulation it will then be formerly registered on the National REDD+ Registry of National Registry of the DRC's national REDD+ program. Any generated Emission Reductions (ERs) once measured and verified will then be issued as domestic Emission Reduction Credits (ERCs) exclusively through the National REDD+ Registry.



- Registry accounts will be created for all authorized project holder as well as the government (with specific sub-accounts for regions/ jurisdictional programs). It should be noted that:
 - i. More specifically in each Maï-Ndombe program monitoring report, ERCs generated will be allocated transparently to the different project holders according to their performance against their specific REL. All the remaining Emission Reduction Credit generated will be considered as the result of upfront investment as FIP and others relevant activities and policies in the area and will be owned by the government of DRC (for selling or UNFCCC reporting purposes).
 - ii. Project holders may freely transfer ERCs issued to them, under a sales agreement, conversion (from domestic ERCs into e.g. Verified Carbon Units) or other. Project holders will still be permitted to seek issuance of international credits, but all international credits will need to be converted from domestic credits. [In other sections the ER-PD on *Principles in the distribution of Emission Reduction Credits*tates "The ERCs are allocated to the ER-Program entity (DRC government) and also to holders of projects who signed carbon-related contracts with the government (through homologation regulation)." It is unclear if this is entirely consistent with the process above].
 - iii. The financing of the program requires up-front investments in order to launch the enabling activities that are essential to the success of the program, but also to invest in sectoral activities until these activities

start to generate carbon and non-carbon benefits. The sectoral activities presented above are all directly linked to the emission reductions generated. Most of these activities will be included in a Payment for Environmental Services Contract with the operators and communities. These contracts will be paid on the basis of carbon performance or according to simplified indicators approximating the carbon performance (proxy indicators). At the outset of the program, contracts will be signed with certain operators and communities already committed and structured under existing pilot initiatives. These contracts will be honoured in the first few years through the initial investments, such as those of the FIP, and thereafter by the redistribution of REDD+ revenues when carbon emissions are measured and audited and Carbon Fund payments can be accessed. Even though the present structure of the strategy divides the activities into enabling and sectoral pillars, the strategy for intervention in local communities will be fully integrated; (i) the communities will be supported in the preparation of a participatory mapping and a local development of natural resources management plan; (ii) this step will form the basis for the definition of the suitable sectoral activities (agroforestry, perennial crops and assisted natural regeneration) at the village level; (iv) the sectoral activities will be deployed through contracts combining investment and result-based payments; (v) the results-based contracts will provide a guarantee that the communities are indeed reducing deforestation on their and (the investments will be linked in part to observance of the land management plan).

The Maï-Ndombe program will recognize the prior agreements linked with forest carbon valorisation signed by the government and subcontracts that are attached to it. It is the case of the ERA project, which signed an agreement in 2011 with the government and now held by Wildlife Works. Benefit-sharing principles with the government and communities settled in this agreement will be respected. However an alignment of the Reference Level with the program will be negotiated in order to ensure a balance between the need to align the project and program baseline but also to recognize the important private investment made by the project now.

In conclusion this framework is relatively advanced and sets out a new process in DRC or developing REDD+ projects. However, as outlined above some uncertainty about the legal nature of ERs remains and some uncertainty over conflicting rights of the State to own ERs and those of communities and private landholders remains. Therefore, as noted above in order to resolve this conflict, DRC has made it a deemed a pre-condition for the right of the project proponent to commercialize REDD+ carbon credits under the REDD Regulation 2012 that any creation, sale and benefits of any ERs are all underpinned by agreements with all interested stakeholders. The conclusion of partnership contracts ("contrats de partenariat") between the government (represented by MECNDD), which – together with the adoption of an accord between the project proponent and local and indigenous communities – is deemed a pre-condition for the right of the project proponent to commercialize REDD+ carbon credits. If such agreements are not in place those ERs are not included in the program. Not only does this avoid conflicts but when taken together with the other measures it confirms the extent to which the State has consulted with stakeholders and confirms the ability of the State to transfer the ERs under the FCPF ER-PA and avoid double counting.

This approach is reinforced in the benefit sharing section which provides the contractual setting for the Maï-Ndombe Program supporting the envisaged ERPA with the Carbon Fund of the FCPF rests on two distinct sub- ERPA pillars:

i. Carbon-related contracts (with project holders). These are model "partnership contracts" concluded under the REDD Regulation with projects within the *Maï-Ndombe* Program. The contracts identify project and direct ERC holdings, set methodological and standard rules for project implementation and define the modalities for REDD+ benefit-sharing between the central government, the provinces, local communities and others; take into account the application of the domestic standard, domestic issuance, and consolidated benefit-sharing approaches with stakeholders on the basis of the principle of voluntary participation (see below: "Implementation contracts") rather than government imposed REDD+ action. The contracts can specify that all or certain portions of ERCs allocated to project holders should be transferred to the government or to any other authorized entity for

commercialization purposes. The contracts are concluded between the project holders and the central government (i.e. the MECNDD).

ii. Implementation contracts (with stakeholders, which are not project holders). These contracts are for conclusion between the government or the project holders and a wide range of stakeholders – defined in the Regulation as "any natural or legal person, local communities, indigenous people, authorities, village associations and non-governmental bodies (recognized by the law) which may be affected directly or indirectly by the project" in order to achieve the approval of all relevant parties to secure implementation of the planned REDD+ activities. The contracts specify the tasks and activities as well as indicators (e.g. deforestation /reforestation targets), but they are formally disconnected from the carbon-related contracts and do not imply the allocation, sale or transfer of ERCs. The contracts may lay down the rules for compensation (fixed or as a % of the ERC proceeds) and they may include rules on risk sharing. Their execution and implementation is strictu sensu not linked to the carbon performance of the project or program or the issuance and transfer of ERCs. Importantly, the contracts will always include exclusivity and no-competition clause for the REDD+ activities and their exclusive eligibility under the national REDD+ program; this clause strictly adheres to the rules on "double-counting".

Finally, this approach is reinforced in that the program intends to recognize the historical role of **indigenous peoples** in sustainably managing forest resources and help to reverse the dynamics of their marginalization in the current forest management systems applied today (including timber management and managing goods and services by third parties). Frequent marginalization in local governance bodies and the low level of recognition of their traditional hunting and gathering rights calls for a differentiated consideration of their needs. In the context of ERs this is achieved by:

The general approach of REDD+ implementation in the assessment area and elsewhere will be based on voluntary participation of stakeholders, rather than on command-and-control-driven measures. This said the enforcement of existing rules of protection and limitation of use will be part of the country's REDD+ policy (and a key contribution of government entities). This includes strict application of the perpetual protection status. Illegally deforested land must not be legalized ex-post through the granting of formalized titles. In its role as sovereign owner of the land and the resources, the government will also provide for long-term planning, and it will work towards a more restrictive and sustainable use of future timber and other exploitative concessions.

Beyond enforcement and long-term planning, the relevant legal instrument of implementation will consist in bilateral and multilateral contracts between the government, a REDD+ program holder (such as the province of Maï-Ngombe) or a project holder and the various stakeholders – be them concession holders, local communities, indigenous people, village association, not-for-profit organizations, etc. The contracts will specify options for participation, targets, activities and follow-up, valorization priorities, if any (see sub-chapter above), as well as rules for benefit-sharing. The contracts will also include an exclusivity and no-compete clause concerning the REDD+ activities and their exclusive eligibility under the national REDD+ program (or the REDD+ project in question); this clause will strictly adhere to the rules on "double-counting", which are an integral part of the national REDD+ program, in general, and the contractual obligations under any ERPA, in particular.

Finally, a number of challenges remain unsolved and need to be tackled in implementing an ER-Program, including:

- Further conduct reflexion on the rights of the State under the Constitution and its relationship with the rights of communities and how the two are reconciled.
- The ER-PD notes that project holders may freely transfer ERCs issued to them, under a sales agreement, conversion (from domestic ERCs into e.g. Verified Carbon Units) or other and that project holders will still be permitted to seek issuance of international credits, but all international credits will need to be converted from domestic credits. How does this work with the requirement to have all emissions reductions issued via the registry and then a contract entered in to with the Government to sell the ERs.