Country	DRC
Methodological Framework Criteria / Indicators	Indicator 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. ***Indicator 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.*

Clarification request / Question by ER Program:

Based on the provision in indicator 11.1 that an alternative end-date could be allowed, the ER Program in DRC would like to use an end-date of 2014. The question to the Carbon Fund Participants is therefore if in the case of DRC an end-date later than 2013 is allowed based on the justification provided below.

Justification provided by ER Program:

1. For the construction of its Reference Level, DRC is planning to stratify the Accounting Area. One of the proposed strata is Unplanned Deforestation. For the calculation of the reference emission level for the unplanned deforestation stratum (REL UNDEF), DRC will be using a systematic sampling approach consistent with IPCC Approach 3, to capture data covering multiple years during the historical reference period. The sampling approach incorporates multiple individual, spatially decoupled samples of deforestation measurements throughout time, ultimately yielding a granular estimate of overall Land-use / Land-cover change through time.

2. The sampling approach used to calculate the unplanned deforestation reference emission level (REL UNDEF) requires imagery which is as close to the ER-Program active dates as possible. The algorithm assumes an historical rate that reflects the deforestation trend(s) immediately preceding the ER-Program active dates, to actively avoid any anomalous events that could conceivably occur between the historical reference period and the project start date. In the case of the Mai Ndombe ER-Program, the Program start date has been defined as January 1, 2014. It follows that the calculation for the REL should be performed using imagery as close to the actual implementation of Program activities as possible. By utilizing an historical reference period that is defined immediately temporally adjacent to the ER-Program active period, the historical deforestation rates that are calculated using the REL calculation can be assumed to continue with no interruption or anomalous deviation from the historical trend in the same area for which the rates were calculated. The optimal historical reference period are therefore defined as 2004-2014, according to Indicators 11.1 (using an alternate end-date) and 11.2 (assuming a 10 year historical reference period).

3. The aforementioned REL UNDEF calculation exercise includes an intensive training session in which the analysts learn to recognize land cover types in the Congo Basin ecosystem. In order to do this, the exercise requires the temporal pairing of high-resolution imagery with Landsat, thereby allowing the analysts to validate their Land Cover classification assumptions for a “training year”, which in the case of the Mai Ndombe Program was defined as present-day. We were thus able to utilize Google Earth and Bing Maps and the free high-resolution imagery within both of those tools to compare to the final image year in the historical reference period. Although it is possible to view some historical high-resolution imagery in Google Earth and Bing Maps, by far the most prevalent

and highest quality high-resolution imagery exists for present day, and the REL exercise was therefore built to utilize 2014-2015 imagery, paired with Landsat imagery for the same period as the "training year", which also doubles as the final year for the historical reference period. This training year is an essential piece of the REL exercise; if the historical reference period was defined with an end-date that did not correspond with present-day high-resolution imagery available for free within both Google Earth and Bing Maps, such high-resolution imagery would need to be purchased. This large expense was purposely avoided during the design of the REL exercise by aligning the Program start-date and the historical reference period end-date (and hence freely available high-resolution imagery).

4. The Methodological Framework does not present justification for the requirement to define the historical reference period for all ER-Programs as the "most recent date prior to 2013". This particular rule is time-dependent. If an ER-Program start date was 2018, an historical reference period that ended in 2013 would not be appropriate, because it would be based on a trend that ended a full 5 years prior to the implementation of Program activities. We therefore suggest that the rules for defining the historical reference period be dependent on Program start-date (e.g. "the historical reference period end-date shall be no more than one year earlier or later than the Program start-date" or something similar). A temporally "hard-coded" rule like that which currently exists under Indicator 11.1 is potentially too restrictive and only works if the ER-Program starts on or around the year 2013. Even at this juncture, this Indicator is becoming temporally obsolete. The Mai Ndombe ER-Program therefore assumes an historical reference period that ends at the same time the Program officially begins, thus eliminating a gap between the historical deforestation trend that informs benefit distribution and the distribution of benefits within the active ER-Program. We therefore request that the MF consider allowing the Mai Ndombe ER-Program to use this alternate definition of 2004-2014 for its historical reference period.

Country	DRC
Methodological Framework Criteria / Indicators	Criterion 11: A Reference Period is defined Criterion13: 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
Clarification request / Question by ER Program:	
DRC would like to account for emissions from planned degradation PDEG), which is mainly caused by industrial logging. The MF requires a reference period and that the reference level does not exceed the average annual historical emissions. DRC would however like to pursue a different approach to calculating the PDEG REL. As such, DRC would like to enquire whether or not (interim) forest management plans (plan d'amenagement, plan de gestion), which define logging quotas based on intensive field inventories (carried out by third parties) as stipulated by the forest code and associated technical guidance (guide opérationnel) could be used for the REL for planned degradation.	
Justification provided by ER Program:	
Industrial timber harvesting in DRC today has however changed significantly compared to 10-20 years ago with the introduction of new forestry policies and guidelines. As such historical data is unlikely to accurately reflect future emissions from industrial logging (In fact, historical emissions may be higher). Further, historical data availability is poor and not centrally available, i.e. data would to be compiled from individual company records. If available at all, such records would not be digitally available, making this	

process very time consuming. Further, as taxation and other fees are – among other things - based on the volume of harvested timber, such records may not accurately reflect the actual volume harvested in the past. Alternatively, values such as historical logging intensity (m^3/ha harvested) could be based on regional studies. But again it is questionable to what extent values from such studies would accurately reflect today logging practices.

The industrial logging sector in DRC has undergone a significant reform over the past 2 decades.
Planned degradation (industrial logging) is a legally sanctioned economic activity in the DRC which requires substantial amounts of planning and thus documentation to be provided to the government of the DRC from which accurate estimates of future emissions from planned degradation can be derived (forest inventories and management plans).
Consequently, the DRC government would like to propose to not base REL calculations for planned degradation on historical data analysis alone but rather on these planning documents. This approach would also minimize – if not make completely redundant – the need for an adjustment factor, as forest management plans set clear limits for timber quantities to be extracted. The DRC government is confident that forest inventory data and forest management plans would allow a more accurate estimation of emissions from industrial logging during the program period than historical records.
Management inventories are statistically sound inventories with a sampling intensity of approx 1%. Trees of all species, with a DBH above 10 cm are inventoried. These inventories are carried out in line with the DRC forest regulations („Guide Opérationnel"), and have to be submitted for approval to the forest administration. It has been shown (FORAFAMA Project, State of the Forest 2008) that these inventories can be used to assess forest biomass and thus above ground forest carbon stocks. To date, forest management inventory data is available for 1.8 million hectares in Maï-Ndombe. These forest inventories are technically supported and supervised by qualified third parties.

As management plans are not yet available for all industrial logging concessions active in Mai Ndombe, the DRC government proposes the following tiered REL approach for PDEG:

1. Where full management plans (plan d'amenagement) are available, these plans should be used for calculating the concession specific REL. Based on forest inventory data, forest management plans define an annual allowable cut (AAC; possibilité annuelle brute). Consequently, if a company complies with the law, then the AAC represents the maximum annual REL. Usually the AAC is never completey exhausted. Reasons for this are for example:
    - A certain percentage of trees usually cannot be extracted profitably due to species or qualities
    - Logistical limitations (availability of staff, machinery, logging roads/skid trails)
    - Lower market demand

    Consequently, a factor often refered to as 'AAC used', expressed as a percentage of the AAC, is derived from recent historical records to arrive at a more realistic baseline emission estimate.

2. Where only interim management plans (plan de gestion) are available, these plans should be used to calculate (interim) baseline emissions. Once interim management plans are replaced by full management plans, baseline emissions would be corrected based on the full management plan. Baseline emissions based on interim management plans should be subject to a higher buffer withholding to cover uncertainties and provide incentives to develop a full management plan.

3. Where neither 1 nor 2 are currently available, historical records of the concession license holder from the reference period together with information on the concession area (new inventory data) to estimate future emissions.

4. Where neither 1 nor 2 are available and no historical records exist or where historical records are deemed inaccurate, the calculation of a ‚common practices scenario', e.g. by using a cross-company or cross-concession average emission factor to estimate future emissions.

It is the DRC government's opinion that this approach will provide the best possible estimate of emissions from planned degradation (industrial logging) during the ERP period; and it is also a step towards satisfying the request/concern raised by the FCPF Carbon Fund participants to *[…] Document in more detail assumptions, methodology and data for emission calculations from planned degradation in concession areas […].*