VCS VERIFIED CARBON STANDARD
A Global Benchmark for Carbon

VCS SCOPING PAPER

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Jurisdictional and Nested REDD Initiative: Second Advisory Committee Meeting Scoping Paper

1. Summary

1.1. Introduction

The following is a summary of the key issues that will be addressed within a new set of VCS rules, requirements, and guidelines on "Jurisdictional and Nested REDD". A more comprehensive list of issues is set out below. "Current thinking", as described in this draft may evolve significantly and this summary should not be considered final guidance.

1.2. Scope and Scale

What level of implementation is most appropriate for the Jurisdictional and Nested REDD initiative?

The draft considers three scales at which credits may be issued: National Jurisdiction, Subnational Jurisdiction, and Project Level. Crediting could occur simultaneously at these different scales. For example, a subnational jurisdictional scheme could be implemented as part of a national scheme or as a stand-alone option. If operating within a national scheme, Rules and Requirements (R&R) would stipulate what is needed for Verified Carbon Units (VCUs) to be issued to subnational jurisdictions, including R&R to prevent double counting, leakage, etc. Similarly, project level implementation and crediting could occur within a jurisdictional scheme. Likewise, R&R would set out what needs to be taken into account if such projects are located within a jurisdiction that is also receiving credits.

What should be the scope of activities included in a jurisdictional REDD+ crediting scheme?

The UNFCCC concept of REDD+ includes reducing emissions from deforestation, reducing emissions from forest degradation, conservation of forest carbon stocks, sustainable management of forest, and enhancement of forest carbon stocks. VCS project R&R currently includes REDD, Improved Forest Management (IFM), and Afforestation, Reforestation, Revegetation (ARR). Which activities should be eligible for VCS jurisdictional crediting? Once chosen, what are the implications for issues such as baseline development, MRV, and

leakage? How should a jurisdiction manage pre-existing or nested projects that may have an incompatible scope?

Current thinking: The rules should allow for a wide scope of forest-related activities. Jurisdictions should be able to choose the scope of their baselines, including over time a progression of e.g. RED to REDD to REDD+. If a project is proposed with the same activity (or set of activities) as the Jurisdictional Baseline, the new jurisdictional R&R would apply. If the project is a different activity (e.g. reforestation under a RED Jurisdictional Baseline) then VCS project based rules would apply to the reforestation project.

What pools and GHGs should be included?

VCS currently recognizes: above and below ground biomass, dead wood, litter, soil carbon, and wood products as pools for forest carbon projects, and normally accounts for: fossil fuel emissions, fertilizer emissions, non-CO2 biomass burning emissions, emissions from manure management, and non-CO2 emissions from wetlands/flooded lands. How should various pools and GHG gases be treated under a jurisdictional scheme? Should a project be required to follow the same pools and GHGs accounted for in the Jurisdictional Baseline? Can a project add a pool (such as soil carbon) where it is not included in the Jurisdictional Baseline?

Current thinking: A project would, at a minimum, be required to include the pools and GHGs accounted for at the jurisdictional level. Projects may be able to add pools or GHGs; however, provisions need to be considered to ensure this option does not produce inconsistencies between jurisdictional and project-level baseline or MRV leading to non-conservative estimates. As an alternative, projects could be required to account for all significant emissions, but be limited in the baseline to emissions accounted at the jurisdictional level to ensure consistent results.

Should activity-based or land-based accounting be used?

LULUCF under the Kyoto Protocol and AFOLU in the VCS are accounted for based on specific activities. The alternative approach is land-based accounting, whereby all emissions and removals occurring within a landscape unit are accounted regardless of the activity that caused them.

Current thinking: To maintain activity-based accounting in the near term. As a Jurisdictional Baselines develop and move towards complete accounting for REDD+ this may in practice convert into land-based accounting.

How should a "jurisdiction" be defined?

Should a jurisdiction be based on administrative units, ecosystems, or other divisions? Should a minimum size or level of government (e.g. based on control over forest regulations) apply?

Current thinking: Governments should determine a jurisdiction's boundary based on national/jurisdictional circumstances. R&R, minimum requirements, and/or guidance could be provided to determine jurisdictional boundaries, ensure transparency, elaborate criteria and processes used to establish boundaries, and to avoid overlaps with other jurisdictions.

1.3. Baseline Issues

How is a Jurisdictional Baseline determined?

Should jurisdictional baselines: i) be based on the historic rates of deforestation, ii) take into account projected rates of deforestation, iii) take into account a jurisdiction's own efforts to

reduce emissions; iv) be set as a crediting baseline that is below the BAU baseline? Should the VCS set R&R or guidelines on the accuracy of the information included in the baseline? Who should be consulted by the jurisdiction (or developer) in the development of the baseline?

Current thinking: Jurisdictional baseline determination is an inherently political issue, and should therefore allow for flexibility. However, the VCS can promote common approaches based on best-practices. Baseline development will likely need to follow a mixture of *de minimus* R&R, accompanied by guidelines that may cover: who proposes baselines, who is consulted, how to calculate historic rates, how to predict future rates, how to balance/treat historic and projected rates, how to ensure consistency at different scales and levels of detail (e.g. minimum vs. all relevant carbon pools, accuracy of carbon stock estimates), use of IPCC GPG and appropriate tiers, and overall transparency.

Who is responsible for updating the baseline and what is the scope and timing of the update?

Current thinking: The update should occur every [10] years. The scope of the update should include a full re-analysis and follow similar development and approval procedures as initial baseline development. Finally, consideration could be given to updating based on triggers, e.g. commodity price changes or other relevant factors.

How are smaller scale baselines incorporated ("nested") within larger scale baselines?

Current thinking: If a smaller scale baseline includes the same activities, pools, and carbon stock estimates as the larger scale baseline, the smaller scale baseline should be consistent with the larger scale baseline, and the accumulation of smaller scale baselines should be consistent with the larger baseline. If, however, a smaller scale baseline contains additional activities, pools, or GHGs, the relevant jurisdictional authority will need to approve this new baseline to ensure consistency and conservative results.

How should VCS manage additionality at the jurisdictional and nested project level?

Current thinking: If the Jurisdictional Baseline is spatially explicit then projects using this baseline would not need to demonstrate further project additionality; otherwise, project specific additionality may be required. Additionality at the jurisdictional level would be taken into account when the baseline is being developed.

1.4. Monitoring, Reporting and Verification (MRV) and Crediting

What MRV is required, who is required to undertake it, and how often should it be done?

Current thinking: R&R will require MRV to take place at least at the level at which credits are issued. Monitoring and GHG estimation specifications may include resolution, frequency, accuracy and precision. MRV requirements at the jurisdictional level are likely to be less stringent than requirements imposed for project-level MRV. MRV should be required at least every 5 years, with options to conduct MRV more frequently if desired.

How will crediting work?

Credits could be allocated in different ways under a jurisdictional approach. Jurisdictions could receive credits, sell them, and distribute the proceeds to smaller jurisdictions and projects. Or, they could distribute credits and allow smaller jurisdictions and projects to sell the credits themselves. Different scales (national, subnational and project) can also receive credits directly.

Current thinking: It is up to the jurisdictional government to determine which crediting options will apply within the jurisdiction, though some R&R or guidelines may need to be developed depending on the crediting option chosen.

Additional issues around crediting that require input include:

- **How to avoid double counting:** A number of types of double counting will need to be addressed. These include double counting at: (i) project level from overlapping projects multiple sale of the same credit; (ii) at the project and jurisdictional level, where projects and jurisdictions count the same reduction; and (iii) at the jurisdictional level from double counting actions that generate credits and other "own actions" that are not meant to create credits..
- **Whether distinct "Jurisdictional VCUs" should be developed**: Should a separate designation, such as "**jVCU**" be considered, and what are the market implications?

1.5. Other Accounting Issues: Leakage, Underperformance, Reversals, Force Majeure

How should VCS manage leakage within, and outside, a credited jurisdiction?

Current thinking: Options to manage external leakage include: (i) do not account for leakage in the case of national, and possibly subnational jurisdictions; (ii) require leakage belts to monitor and account for leakage within a country; (iii) deduct a certain percentage off VCUs; (iv) allow for leakage sharing agreements between jurisdictions where leakage may occur. Leakage may also occur within a jurisdiction. Possible options jurisdictions could use to address this include: (i) requiring project level leakage assessments; (ii) deducting a percentage from project level emission reductions based on a risk assessment; or (iii) collecting a leakage tax. VCS's role could be to require transparency and provide good practice guidance rather than R&R.

What are options to manage underperformance?

Underperformance occurs when (i) actual emissions in the jurisdiction are greater than the baseline; (ii) there are more emission reductions claimed by projects within a Jurisdictional Crediting Scheme than generated at the jurisdictional level; or (iii) projects within a jurisdiction fail to reduce emissions.

Current thinking: R&R to address underperformance is needed, but flexibility is also important to allow jurisdictions to determine the option they will adopt. Options may include: (i) a jurisdiction level buffer account used when projects or jurisdictions underperform; (ii) buffer accounts for project level credits separate from the jurisdictional buffer credits; (iii) allowing a jurisdiction to "borrow" against future performance; (iii) holding underperforming projects or jurisdictions liable to purchase replacement VCUs from the market or provide other compensation; or (iv) insurance products.

How should natural disturbances/force majeure be defined and accounted for?

Current thinking: If VCUs had already been issued for protection of forest affected by a force majeure event, an equivalent amount of VCUs should be deducted from a buffer account as emitted due to the event . As the forest regenerates, new VCUs are put back into the buffer account. If the damage was on forest that would not yet have been deforested in the baseline scenario (i.e. no VCUs had been issued for that specific patch of forest), then either the baseline would need to be updated (as the reversal event would have occurred in both the project and baseline case). How this may affect baseline renewals in the future needs further analysis, as does a precise definition of "force majeure".

Additional issues requiring input include reversals occur when, relative to the baseline, stocks are lower at the time of monitoring than previously recorded (and there has been a credit issuance in the past). This will need to be addressed (potentially using tools/mechanisms, such as buffer pools and/or insurance).

1.6. Other Issues

Should the VCS consider how social safeguards and benefit sharing is to occur?

Current thinking: Jurisdictional governments should be allowed to develop and register benefit sharing arrangements they have developed. The VCS should focus on accounting for emission reductions and removals and allow other specialized standards, such as the Climate, Community & Biodiversity Alliance standard, to be applied alongside the VCS.

Who has the authority to propose and approve jurisdictional boundaries, baselines, and crediting schemes?

Current thinking: The domestic political and legal implications of applying various ways to make these decisions, and the appropriate level of government to provide "approval" will vary from country to country. VCS R&R will need to be sufficiently flexible to accommodate these various circumstances. For baseline development, R&R will likely require stakeholder and public consultation, as well as approval from the jurisdictional and national government.

Should existing activities be grandfathered in and/or given any priority?

Current thinking: Addressing this issue needs to balance sovereign and jurisdictional interests and authority over activities while providing certainty to early developers of projects or subnational Jurisdictional Crediting Schemes. Providing certainty to early movers could be achieved through either prioritizing crediting to early movers (i.e. crediting early movers first) or using buffer accounts to guarantee crediting to early movers. Additional guidance may also be needed to manage existing projects whose boundaries straddle two or more jurisdictions.

Additional issues requiring input include:

- **Domestic legal issues,** including carbon rights in non-project areas within a jurisdiction that receives VCUs (e.g. ownership of credits associated with government policies), how rights to credits from government policies relate to rights to project credits where the areas overlap, and rights to own and transfer credits.
- **Registry requirements** to operationalize registration of Jurisdictional Baselines and Crediting Schemes.

1.7. Glossary

Baseline: The term "Baseline" is used herein as a general term to refer to concepts such as the rate of deforestation, degradation, the location of deforestation, or changes in carbon stock and GHG emissions, that may be expected to occur in a "business as usual" (BAU) scenario. Specific differentiations between e.g. a project specific baseline and jurisdictional reference emission level may be warranted in the future, but are not included in this document for simplicity.

Good Practice Guidelines (GPG) or Guidelines: Guidelines are non-binding recommendations or suggestions that accompany the VCS. Compliance with guidelines is not assessed as part of a determination whether or not VCUs are to be issued or not, but rather are provided to assist the interpretation and understanding of Rules and Requirements, or as good practice guidance.

Internal Allocation Program: This refers to a domestic program that distributes benefits generated by a Jurisdictional Crediting Scheme. These benefits are distributed by the authority managing the internal allocation program and could include VCUs or other benefits.

Jurisdictional Baseline: This refers to a baseline that has a broader scale than an individual project and may cover a region, state, province, district or country. The exact definition of what is considered a "jurisdiction" is discussed below. A distinction is sometimes made between a "subnational jurisdictional baseline" and a "national jurisdictional baseline" to differentiate these two basic scales of Jurisdictional Baselines.

Jurisdictional Crediting Scheme: This is a scheme that complies with R&R that will result in VCUs being issued at the jurisdictional level. It may also include an *Internal Allocation Program.* As with *Jurisdictional Baselines*, a distinction is sometimes made between subnational and national *Jurisdictional Crediting Schemes*.

Rules and Requirements
Jurisdictional and Nested REDD Initiative (JNRI): The abbreviation NJRI or "Initiative" will be used to refer to this VCS initiative.

Rules and Requirements (R&R): Rules and Requirements are part of the VCS that need to be adhered to or met in order for VCUs to be issued.

Verified Carbon Standard (VCS): The Verified Carbon Standard (formerly the Voluntary Carbon Standard). See www.v-c-s.org.

Verified Carbon Standard Association (VCSA): The VCSA oversees all aspects of the VCS program.

Verified Carbon Unit (VCU): The VCU is the accounting/crediting unit issued under the VCS. One VCU represents one tCO_2e reduction or removal.

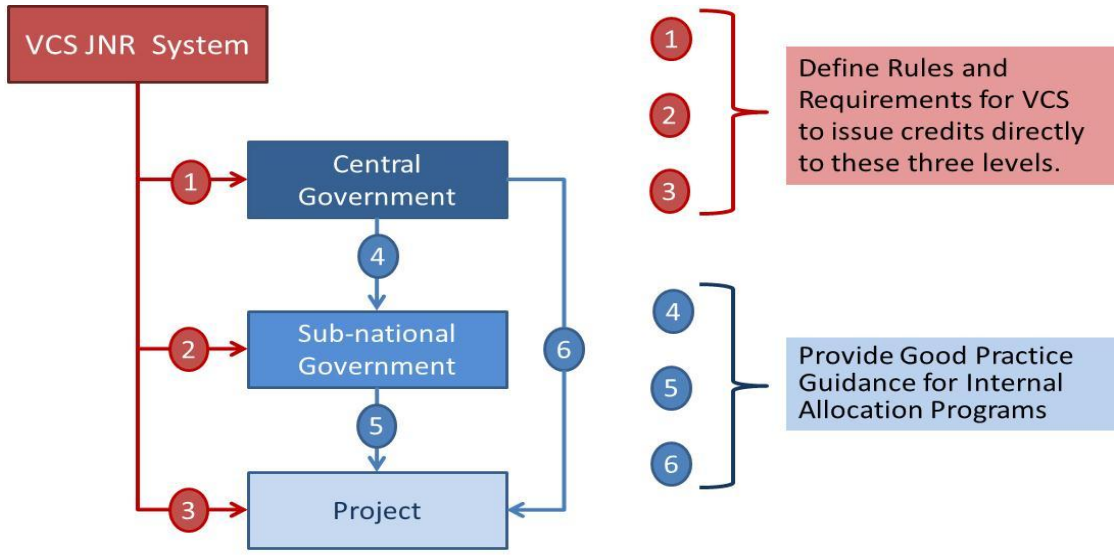
2. Structure and Format of the new Jurisdictional and Nested REDD VCS

Issue: Operationalizing jurisdictional and nested REDD can be complex. There are a number of inter-related issues that need to be addressed. Organizing these issues in a coherent manner is important to reduce complexity wherever possible and ensure the final VCS text is user friendly. There are a number of different ways the work could be organized.

Current thinking: Figure 1 below illustrates the three scales/levels at which credits may be directly issued, including – 1) national; 2) sub-national; and/or 3) project. VCS Rules and Requirements (R&R) would be developed for issuing VCUs at these scales. It is important to note that these three scales are not mutually exclusive. For example, VCUs could in theory be issued simultaneously at all three levels in a single country by aVCS registry (the red lines in Figure 1).Jurisdictions could also determine within their own Internal Allocation Programs how these VCUs (or other credits or benefits) are (re)allocated within their jurisdiction (the blue lines in Figure 1). Complying with the R&R would be mandatory in order for VCUs to be created and issued for a Jurisdictional Crediting Scheme or a project nested within such a scheme that received VCUs directly from a VCS registry. Certain issues that are part of a Jurisdictional Crediting Scheme (such as developing a Jurisdictional Baseline) may be accompanied by additional GPG that would not need to be strictly adhered to as a pre-condition to VCU

issuance. The guidelines would also cover aspects that are more political or do not affect the overall environmental integrity of the system, such as any Internal Allocation Program.

Figure 1: Crediting scales



Note: There are additional arrows going in the opposite direction (related to buffers and - possibly - leakage) that may need to be considered.

Related to the question of crediting scale is the issue of the scale of the baseline and MRV upon which crediting is based. For example, a project may be issued credits based on a project specific baseline and MRV that is carried out at the project level, but there may also be some MRV carried out at the sub-national jurisdictional level, or national level that is factored into estimating project level credits.

To accommodate these multiple options but also avoid excessive complexity within the system, jurisdictions and/or activities seeking crediting would start following the R&R for issuing VCUs at the largest applicable crediting scale. If crediting was also sought at smaller scales, additional R&R would need to be followed for VCUs to be issued at the smaller scale. Grandfathering in smaller scales as a country progresses from project to subnational to national jurisdictional crediting and MRV will also need to be considered. This would result in Rules and Requirements (and associated guidelines) being structured hierarchically along the following lines:

1. ***VCS Rules and Requirements for directly crediting national Jurisdictional Crediting Schemes***
   This would include R&R to issue VCUs associated with national emission reductions/removals. The R&R would cover issues such as aspects of baseline setting, MRV, permanence, grandfathered projects/subnational schemes etc.

2. ***VCS Rules and Requirements for directly crediting subnational Jurisdictional Crediting Schemes***

This scale is applicable as part of a national scheme or as a stand-alone option.

a. Operating within a national Jurisdictional Crediting Scheme

R&R would stipulate what is needed for VCUs to be issued to the subnational jurisdictions in addition to the national level. This may include R&R to prevent double counting between the subnational and national schemes, leakage, MRV, grandfathering etc.

b. Operating independently

The R&R would likely look very similar to those covering national Jurisdictional Crediting Schemes (option **1** above). Additional details or options may be included, such as if crediting of the subnational jurisdiction is linked to national level baselines or MRV (without national level crediting).There may be additional variations on this option, such as where the subnational Jurisdictional Crediting Scheme operates within a national baseline that does not amount to a national Jurisdictional Crediting Scheme.

3. VCS Rules and Requirements for directly crediting projects

A VCS registry could issue VCUs to projects that are within a VCS jurisdictional scheme or as standalone projects.

a. Operating within a Jurisdictional Crediting Scheme

As with option **2a**, R&R would set out what needs to be taken into account to issue VCUs to projects if such projects are located within a jurisdiction that is also receiving credits at the broader scale. This may include subnational and/or national Jurisdictional Crediting Schemes.

b. Operating independently as standalone projects

The R&R for project level crediting on their own are already included in the existing project-based VCS. Additional R&R would need to set out to issue VCUs to projects in cases where there is a Jurisdictional Baseline. This may include a Jurisdictional Baseline that is or is not accompanied by MRV (without jurisdictional crediting).

The large number of issues that need to be addressed to operationalize jurisdictional and nested REDD will be addressed by the VCS within this overarching structure. For simplicity, the crediting options mentioned here will be simply referred to as **Options 1, 2a, 2b, 3a and 3b**.

3. Scope and Accounting

3.1. Scope: REDD, IFM, ARR

Issue: The UNFCCC concept of REDD+ includes i) reducing emissions from deforestation; ii) reducing emissions from forest degradation; iii) conservation of forest carbon stocks; iv) sustainable management of forest; and v) enhancement of forest carbon stocks. The VCS currently deals with these (with the exception of conserving forest carbon stocks not under threat) across three project categories:

1. Reduced Emissions from Deforestation and Forest Degradation (REDD), which covers conversion of native or natural forests (including degraded forest) to non-forest land, and the reduction of forest degradation (including illegal logging).

2. Improved Forest Management (IFM), which covers activities that reduce emissions or increase carbon stocks on forest lands legally sanctioned to be managed for wood production.
3. Afforestation, Reforestation and Revegetation (ARR), the second R of which covers revegetation not qualifying as forest (which may or may not fall under the "+" side of REDD+).

Should all activities be eligible for jurisdictional crediting? What are the baseline, MRV, leakage, or other implications of including or excluding various forest-related activities in the new standard? Should the Initiative use the current VCS project categories or something new? If new categories are used for JNRI would this create scope incompatibilities with nested projects (since they are defined as REDD, IFM or ARR)? How do other issues such as i) "temporarily un-stocked" lands, or ii) natural regeneration and assisted natural regeneration (including planting) after natural disturbances get treated?

Current thinking: The rules, requirements and guidelines should allow for the full scope of forest activities. However, choosing the scope is most relevant when establishing Jurisdictional Baselines. Jurisdictions should be able to choose the scope of their Jurisdictional Baselines, and a progression of e.g. RED to REDD to REDD+ should be allowed. If a project is proposed that is of the same activity as the Jurisdictional Baseline, the new jurisdictional R&R would apply. If the project is of a different activity (e.g. an IFM project in an area under a RED Jurisdictional Baseline) then the current VCS project based rules would apply to the project. This reflects the approach taken to date by the VCS for AFOLU projects in Annex I countries, whereby activities that fall under Article 3.4 accounting of the Kyoto Protocol are permitted under the VCS where the country has not elected to account for the activities under Article 3.4 and therefore there are no double counting issues. Additional thinking is needed on how to address projects(or other activities) that combine multiple activities in a jurisdiction that has a narrower baseline (e.g. a project that reduces deforestation and degradation, and include some regeneration occurring in a jurisdiction that has a deforestation baseline only.)

3.2. Scope: Pools and GHGs included

Issue: The following pools can be accounted for in VCS forest carbon project categories: i) above ground biomass; ii) below ground biomass; iii) dead wood; iv) litter; v) soil carbon; and vi) wood products. The VCS requires projects implemented on peatlands to follow additional Peat Rewetting and Conservation (PRC) requirements, to address specific hydrological issues and the addition of the (usually very significant) soil carbon pool. The following GHGs are also normally (in project situations) accounted for: i) fossil fuel emissions; ii) fertilizer emissions; iii) non-CO2 biomass burning emissions; iv) emissions from manure management; and v) non-CO2 emissions from wetlands/flooded lands.

How should this current list of pools and GHG gases be treated in the current Initiative? Can/should fossil fuel, fertilized and manure applications be tracked at the jurisdictional scale? Should a project be required to follow the pools and GHGs accounted for in the Jurisdictional Baseline? Can a project add a pool (such as soil carbon) where it is not included in the Jurisdictional Baseline?

Current thinking: A project would at a minimum follow the pools and GHGs accounted for at the jurisdictional level, but may be able to update the jurisdictional data based on better (higher tier) project-specific data (e.g. more accurate carbon stock estimates for a particular pool or data for additional pools). Implications of this, such as adding pools (e.g. soil/peat), jurisdictional "approval" of project specific data, update of the registered jurisdictional data, and principles of conservativeness need to be considered further to ensure this option does not

produce undesirable results such as inconsistencies between jurisdictional and project-level baseline and MRV. As an alternative, projects could be required to account for all significant with-project emissions but be limited in the baseline to emissions accounted at jurisdictional level to ensure conservative results.

3.3. Activity vs. landscape accounting

Issue: AFOLU accounting under the Kyoto Protocol and the VCS is currently categorized based on specific activities – i.e. emissions/removals from the defined activity (such as reforestation or deforestation) are accounted for. If there are emissions or removals within a landscape that are due to activities outside the defined activities, these emissions or removals are simply not included. For example, if only the activity of deforestation is tracked, emissions from degradation may occur but not be accounted for. Similarly, deforestation may be reduced but emissions could be leaked as degradation. The alternative approach to activity-based accounting is landscape based accounting, whereby all emissions and removals occurring within a landscape unit are accounted regardless of the activity that caused them. Such "landscape" accounting could even include emissions from non-forest land management activities like agriculture – covered under the VCS project category Agricultural Land Management (ALM). For jurisdictional accounting, should the VCS continue with activity based approaches (as used by projects), or move to landscape accounting?

Current thinking: Landscape-based accounting can be significantly more onerous and difficult than activity based accounting and there is no experience in developing baselines with landscape-based accounting. Therefore it probably makes sense for the current activity-based accounting approach to be maintained at least in the near term. As a Jurisdictional Baseline develops and moves towards complete accounting for REDD+ this may in practice convert into landscape accounting, but this should not be a requirement.

4. Scale: Defining boundaries

4.1. Boundary of Jurisdictional Baselines and VCUs crediting

Issue: How should a "jurisdiction" be defined for a Jurisdictional Baseline and a Jurisdictional Crediting Scheme? Should this be based on administrative units, or ecosystems or other divisions? If defined as an administrative unit, should a state or province be the smallest administrative unit? What about a district, department or county within a larger state/province? Should a minimum size threshold or a minimum level of government control over forest regulations in that administrative unit apply?

Current thinking: Governments should be able to determine jurisdictional definitions based on what makes sense in their country or jurisdiction. Some guidance could be provided on e.g. administrative control over the forest in that jurisdiction, legal authority to allow for the issuance of VCUs, or minimum area requirements. R&Rs could specify minimum requirements related to:

1. Determining jurisdictional boundaries (e.g., administrative control over relevant forest and land-use policies)
2. Transparency or further criteria and processes used by the government to establish the boundary;
3. Filling gaps and avoiding overlaps with other in-country jurisdictions;
4. How boundaries will be geographically defined and registered (e.g. shape files, GPS coordinates).

Further input is needed on additional technical issues such as whether R&R are needed for managing leakage if a jurisdiction falls below a certain minimum size (absolute and/or relative) and grandfathering projects or smaller scale jurisdictions.

5. Baseline Issues

5.1. Jurisdictional Baseline development: Part 1 – how to calculate the baseline

Issue: How is the baseline determined? Should the Jurisdictional Baseline i) be based on the historic rates of deforestation, ii) take into account projected rates of deforestation, iii) take into account a jurisdiction's own efforts to reduce emissions (potentially as part of the projected rates); or iv) be set as a crediting baseline that is below the BAU baseline. How are political and technical considerations weighed in a Jurisdictional Baseline? Will allocation of parts of the Jurisdictional Baseline to smaller jurisdictions and project areas be accepted? If yes, should VCS provide GPG for such allocation schemes? Should the VCS set R&R or guidelines on the accuracy of the information included in the baseline? Who should be consulted by the jurisdiction (or developer) in the development of the baseline?

Current thinking: Jurisdiction wide baseline determination is an inherently political issue. However, the VCS can promote common approaches based on technical and other best-practices. Baseline development will likely need to follow a mixture of *de minimus* R&R that are accompanied by additional good practice guidelines. The set of R&R and guidance should allow flexibility in developing a baseline, and may cover issues such as who proposes a Jurisdictional Baseline to the VCS for validation and registration, who is consulted within the country and/or the jurisdiction, how to calculate historic rates, how to predict future rates (e.g. identification of drivers, demographics, government policies etc.), how to balance/treat historic and projected rates, use of IPCC GPG and appropriate tiers, overall transparency in the data used and development process etc. Use of a reference area should be avoided if possible.

5.2. Jurisdictional Baseline development: Part 2 – scope of the baseline

Issue: What should be included in a Jurisdictional Baseline? This could include i) rate of the activity or forest area change(e.g. deforestation, degradation, forest management), ii) rate plus location of change, or iii) rate plus location combined with carbon stock estimates to produce emission estimates. Which activities, carbon pools and GHG sources should be included? Note, this is related to Section 3- Scope. It also relates to Section 5.5 below on how the Jurisdictional Baseline is used for nesting.

Current thinking: Different types of Jurisdictional Baselines are possible – those that are used to estimate VCUs and those that partially complete and cannot be used to estimate VCUs. If the Jurisdictional Baseline is being used as part of a Jurisdictional Crediting Scheme to estimate emission reductions or removals to generate credits it will have different R&R compared to when the Jurisdictional Baseline is being developed but is inadequate to estimate VCUs. These two types of baselines may need to be differentiated in the R&R.

If the Jurisdictional Baseline is not used to estimate VCUs at the scale of the Jurisdiction a range of options should be permitted. These include i) rate of the activity; ii) rate of the activity plus location; iii) rate plus location plus stocks; iv) rate plus location plus stocks plus stock changes. If stock estimates are included, a hierarchical approach should be used in defining strata and selecting carbon pools. For example, the region may encompass X broad strata and the project area may include two of these X strata (X1 and X2). Project proponents could have

the option to further stratify X1 and X2 in n substrata (X1a, X1b… X1n, etc.). The project proponent may also be free to include further carbon pools. Allowing jurisdictional reference numbers that only include details on rate, or rate and location, or rate and carbon stocks will not be sufficient for jurisdictional crediting (as this would not be sufficient to estimate baseline emissions).

5.3. Jurisdictional Baseline approval

Issue: Who has the authority to propose a Jurisdictional Baseline? Who or how is a Jurisdictional Baseline approved? This includes approval within the jurisdiction plus any acceptance by the VCS. How is this approval carried out (e.g. third party or internal)? What criteria are used to make a determination on approval or not? Should the approval process include a public comment period? Should an additional stakeholder consultation process be required for approval?

Current thinking: R&R will likely include stakeholder and public consultation in the baseline development process, making additional public consultation at the approval stage unnecessary. Third-party approval may be required if VCUs are to be issued against the baseline. The scope of third party approval may be limited to checking that the processes and data used to create the baseline meet the R&R, rather than providing a detailed review and opinion on the "correctness" of the baseline. The jurisdictional and national government should also approve the baseline prior to registration.

Potential options for the third-party approval include:

1. Apply the current VCS methodology approval procedures *mutatis mutandis* to a Jurisdictional Baseline scenario (which requires assessment by two accredited validation/verification bodies (VVB).
2. Require assessment by a single accredited VVB.
3. Create a new peer review process consisting of independent experts modeled on the UNFCCC expert review team concept for Annex I national inventories.

5.4. Updating Jurisdictional Baselines

Issue: Who is responsible for updating the Jurisdictional Baseline, what is the scope of the update (e.g. how often, what is updated), and what are the consequences if this does not happen?

Current thinking: The update should occur every 10 years. The scope of the update should include a full reanalysis of rate and location and a review of carbon stocks if the baseline is used to calculate VCUs.

If a baseline is not updated after 10 years, registered projects that are using the Jurisdictional Baseline may continue to use the Jurisdictional Baseline for a grace period of [18 months] after the baseline expiration. After the grace period expires, projects will need to develop and register a project specific baseline pursuant to VCS rules for AFOLU projects, if the Jurisdictional Baseline has still not been renewed.

Updates to the baseline should follow similar development and approval procedures as initial baseline development.

5.5. Using a Jurisdictional Baseline for nesting and crediting

Issue: The main issue here is how to incorporate ("nest") smaller scale baselines within a larger scale baseline (e.g., project within a Jurisdictional Baseline, or subnational Jurisdictional Baseline within a national Jurisdictional Baseline). This general issue creates a number of sub-issues:

i) How is nesting done if the larger scale baseline is not adequate to calculate VCUs, but the smaller scale baseline is (e.g. nesting a subnational Jurisdictional Crediting Scheme within a national Jurisdictional Baseline)?

ii) What are the implications of developing larger scale baselines in areas that already have registered baselines (e.g. do existing baselines get grandfathered?).

iii) How are smaller scale baselines developed within larger scale baselines (e.g. does the smaller scale baseline have to take the existing registered data of the larger scale baseline?)

These issues also relate to issues with crediting:

iv) How credit issuance works at different scales (e.g. how to ensure the sum total of credits issued at the smaller scales do not exceed emission reductions or removals achieved at the higher scale or, if they do, what mechanism should be in place to maintain environmental integrity (buffer credits, etc.)).

v) Whether or not existing activities should be given any priority (e.g. if existing projects are grandfathered, are there any assurances that they will receive credits, and if so, for how long?).

Current thinking on issue i): Jurisdictional Baselines should be able to be registered even if they are inadequate to calculate emission reductions or removals. A smaller scale baseline that is able to be used to estimate the number of VCUs generated should be required to use the data in the larger scale baseline, and supplement this with additional information for crediting.

Current thinking on issue ii): Existing registered baselines may be grandfathered for a certain number of years or until the existing registered baseline is due to be renewed. (i.e. 10 years after it was created, irrespective of when the national baseline superseded it). Further consideration of the advantages and disadvantages of this approach is needed, including whether or not to give special consideration if a smaller scale baseline is renewed within a close time period to the start of a larger scale baseline.

*Current thinking on issue iii):*If the smaller scale baseline has the same activity scope, pools, and carbon stock estimates as the larger scale baseline, the smaller scale baseline should be consistent with the larger scale baseline (i.e. cut from the registered baseline), or the accumulation of smaller scale baselines needs to be consistent with the national baseline. If the smaller scale baseline contains additional activities (e.g. moving from RED to REDD), the relevant jurisdictional government will need to approve this new baseline and the regular VCS R&R for developing Jurisdictional Baselines will need to be applied. If the only changes to the larger scale baseline are to add pools or better carbon stock estimates than the national baseline other R&R may need to be developed.

Current thinking on issue iv): This is addressed in Section 10.2 on Underperformance.

Current thinking on issue v): Addressing this issue needs to balance sovereign interests and authority over activities occurring within their jurisdictions and providing certainty to early developers of projects or subnational Jurisdictional Crediting Schemes. Providing certainty to early movers could be achieved through either prioritizing crediting to early movers (i.e.

crediting early movers first) or using buffer accounts to guarantee crediting to early movers (this is discussed more in Section 10.2 on Underperformance).

5.6. Projects straddling jurisdictional accounting schemes

Issue: How to deal with an existing and registered VCS REDD project whose project boundary straddles a jurisdiction (i.e. some of the project falls within a jurisdiction, and some falls outside it)? One may have a Jurisdictional Crediting Scheme and the other not, etc. This is relevant to existing and new projects.

Current thinking: A series of options and the pros and cons of each option needs to be developed. This may include excluding some areas from a Jurisdictional Baseline or Jurisdictional Crediting Scheme, requiring projects that straddle a jurisdiction to be split into two separate projects etc.

6. Additionality

6.1. Project additionality in Jurisdictional Crediting Schemes (**Option 3a**)

Issue: How is additionality assured at the jurisdictional and nested project level?

Current thinking: The governmental agency managing the Jurisdictional Crediting Scheme may determine what, if any, further project additionality is required. Good practice guidance may indicate that in principle once the Jurisdictional Baseline is set, projects are able to use this baseline without having to demonstrate separate additionality.

6.2. Project additionality when using Jurisdictional Baselines (**Option 3b**)

Issue: To what extent do projects that use a Jurisdictional Baseline have to demonstrate additionality?

Current thinking: If the Jurisdictional Baseline is spatially explicit then projects using this baseline would not need to demonstrate further project additionality. Where a baseline (or components of a baseline) are not spatially explicit in the Jurisdictional Baseline (e.g. ARR and potentially IFM) then project specific additionality will be required.

7. Monitoring, Reporting and Verification (MRV)

7.1. MRV with Jurisdictional Crediting Schemes (**Options 1, 2a, 2b, 3a**)

Issue: What is required, who is required to undertake it, and how often should it be done?

Current thinking: R&R will require MRV to take place at least at the level at which credits are issued. Depending on the Jurisdictional Crediting Scheme, MRV may also be considered at larger scales – for example if there is a larger scale Jurisdictional Baseline that has been registered but is not used to generate VCUs. This will likely consist of R&R for **Options 2a** and **3a**, but only good practice guidance and some R&R if MRV at larger scales is used in **Option 2b**. MRV requirements at the jurisdictional level are likely to be less stringent than

requirements imposed for project-level MRV (as seen in Annex 1 accounting). MRV should be required at least every 5 years, with options to conduct more frequently if desired.

7.2. MRV of jurisdictional emissions where there is a Jurisdictional Baseline at larger scales (**Options2b** and**3b**)

Issue: What is required, who is required to undertake it, and how often should it be done?

Current thinking: There are two methods of dealing with MRV; i) R&R will not require ongoing MRV of the larger jurisdiction as credits will not be issued for the larger jurisdiction. MRV for the purpose of credit issuance will be done in accordance with the R&R required for crediting at the relevant scale. For example, if there is a national Jurisdictional Baseline but subnational Jurisdictional Crediting Scheme, MRV is only carried out for the subnational Jurisdictional Crediting Scheme and not for the whole country. Similarly projects operating in a Jurisdictional Baseline will need to follow project level MRV pursuant to the VCS AFOLU project standard; or ii) good practice guidance combined with some R&R may allow MRV to be carried out across the larger scale jurisdiction to account for leakage within the larger scale jurisdiction.

8. Leakage

8.1. Leakage outside a jurisdiction with crediting (**Option 1**, **2a**, **2b**)

Issue: Leakage from a credited jurisdiction may impact areas outside the jurisdiction; either within the country or internationally. Compliance markets may require addressing market-shifting leakage (either nationally or internationally), such as the regulations currently being debated in the California Air Resources Board proposed cap-and-trade system.

Current thinking: Options for further consideration under each crediting option include:

1. Do not account for international leakage (**Options 1, 2a, 2b**).
2. Do not account for national leakage outside the subnational jurisdiction (**Options 2a, 2b**).
3. Require jurisdictional leakage belts to monitor and account for leakage outside the jurisdiction, but still within a country (**Options 2a, 2b**).
4. Deduct a certain percentage from jurisdictional VCUs to account for external leakage within a country (**Options 2a, 2b**).
5. Allow for leakage sharing agreements between jurisdictions where leakage may occur (**Options 2a, 2b**).

8.2. Project leakage within jurisdictional crediting (**Option 3a**)

Issue: Project level leakage can occur within a crediting jurisdiction, as leakage from projects may impact performance in non-project areas. If projects are rewarded based on their performance, in order to ensure projects are not over-credited, project level leakage will still need to be taken into consideration.

Current thinking: The jurisdiction should determine how projects must account for leakage, so the VCS will likely set out good practice guidance rather than R&R. Options that could be considered include:

1. Require current VCS project level leakage assessments; or
2. Deduct a percentage from recorded project level emission reductions to account for leakage within the jurisdiction.

3. Collect a leakage tax.
4. Other to be identified.

If VCUs are being issued directly to projects within a Jurisdictional Crediting Scheme the jurisdiction's rules on addressing leakage would need to be described and made public on the VCS registry, in the project documents and/or the registered information on the Jurisdictional Crediting Scheme. If the jurisdiction does not determine how projects must account for leakage, standard VCS R&R for project-level leakage shall apply (similar to **Option 3b**).

8.3. Project leakage when there is no jurisdictional crediting (**Option 3b**)

Issue: Project level leakage can occur and needs to be accounted for.

Current thinking: As with MRV for projects nested in Jurisdictional Baselines without jurisdictional crediting, there are two options: i) If there is no jurisdictional MRV, leakage will still need to be addressed at the project level as per current VCS rules for AFOLU projects. Rules on overlapping leakage belts may need to be developed; ii) if there is jurisdictional MRV, similar options as Section 8.2 could be considered.

9. Crediting

A number of crediting issues are discussed in Section 2 and throughout the sections above. This section focuses on additional crediting issues not directly tied to the above issues, along with issues related to developing and registering Jurisdictional Crediting Schemes.

9.1. VCU issuance (all **Options**)

Issue: Should the GHG reductions or removals that are generated at the jurisdictional scale be issued the same type of VCU as the existing project based VCUs? Should a separate designation such as jVCU be used for these credits? What are the market, registry, or other implications of this?

Current thinking: Advantages and disadvantages of issuing VCUs or other units needs to be explored.

9.2. Developing Jurisdictional Crediting Schemes and Internal Allocation Programs

Issue: Under a subnational approach to REDD+ there are different ways in which credits can be allocated. One possibility would be for jurisdictions to receive credits initially. They could then sell the credits themselves and distribute the proceeds from the sale to smaller jurisdictions and projects, or distribute credits and allow smaller jurisdictions and projects to sell the credits themselves. This would be set out in an Internal Allocation Program. This is captured in **Options 4**, **5**, and **6**. Another possibility is for jurisdictions and projects to be directly credited by the VCSA at the same time such as in **Option 1,2, and 3**.

How should a Jurisdictional Crediting Scheme and Internal Allocation Program be developed, including who should be consulted, when, and how? This could include project developers, government, independent experts, and local stakeholders such as indigenous peoples and local communities.

Current thinking: It is up to the jurisdictional government to determine which crediting options will apply within the jurisdiction, though some R&R may need to be developed for

grandfathering in existing projects or jurisdictions as the Jurisdictional Baseline and crediting scale increases. GPGs will provide suggestions and options on Jurisdictional Crediting Schemes and Internal Allocation Programs (**Options 1**, **2a**, and **2b** when not combined with **Option 3a**).

9.3. Approval and registration of a Jurisdictional Crediting Scheme

Issue: How is a jurisdictional crediting scheme approved and registered under the VCS? How is this approval carried out? What criteria are used to make a determination to approve or not? Should the approval process include a public comment period or other stakeholder consultation process?

Current thinking: A Jurisdictional Crediting Scheme needs to follow the R&R for the relevant scale that VCUs are issued. For example, if VCUs are issued for a national Jurisdictional Crediting Scheme the R&R for crediting in **Option 1** need to be followed. If smaller scales are also credited, the R&R for these lower scales also need to be followed for the crediting scheme to be registered. Good practice guidelines will be developed for jurisdictions that chose to limit VCU issuance to **Options 1**, **2a** or **2b**, which may be accompanied by some procedural R&R related to developing the jurisdictional scheme. Potential options for the approval process (such as who approves and how) need to be developed. The approval procedures created for Jurisdictional Baselines may also be applicable to Jurisdictional Crediting Schemes.

9.4. Timing (all **Options**)

Issue: If a jurisdiction allows VCU issuance at a scale smaller than largest jurisdictional crediting scale in the country (e.g. combining options **1**, **2a**, and **3a**; or options **2b** and **3a**), the timing of credit issuance needs to be considered to avoid unfair advantages being given to smaller scaled crediting that completes their MRV before the larger scale (i.e. if all subnational jurisdictions credits are "taken" by projects conducting MRV before the jurisdiction for the same time period). Harmonizing the timing of credit issuance (e.g. around discrete vintages) is also important for effectively reconciling underperformance between scales (discussed below).

Current thinking: Synchronize MRV and/or VCU issuance at pre-determined time intervals. R&R could allow some flexibility for jurisdictions to nominate the time interval they will use within a range. Additional options may need to be considered, particularly for grandfathered projects or jurisdictions.

9.5. Double counting (all **Options**)

Issue: Double counting can take place at different levels: i) at the project level (**Options 3a** and **3b**): double counting of emission reductions or removals from different overlapping projects and/or sale of the same emission reduction or removal to multiple buyers(e.g. a non-VCS project is developed alongside a VCS project); ii) at the project and jurisdictional level (**Options 2a** or **2b** combined with **3a**), where projects and/or policies/programs count the same reduction (this is especially relevant where there is a VCS jurisdictional program and non-VCS projects); and iii) at the jurisdictional level (**Options 1**, **2a** and **2b**): double counting of emission reductions or removals between policies and jurisdictional REDD+ actions (e.g. NAMAs or other initiatives).

Current thinking: Further analysis of the issue and options to address it is required, in part based on which entity (jurisdictions or projects) may have claim to the emissions reductions

generated within a specific geography or from a specific activity.Point iii) may be addressed when the baseline is being developed.

10. Underperformance, reversals, force majeure

10.1. Project underperformance or reversal without jurisdictional crediting (**Option 3b**)

This should be addressed pursuant to existing VCS rules for projects.

10.2. Underperformance in Jurisdictional Crediting Schemes (**Option 1**, **2a**, **2b**, **3a**)

Issue: Underperformance can occur when i) actual emissions in the jurisdiction are greater than the baseline; ii) when there are more emission reductions claimed by projects within a Jurisdictional Crediting Scheme than generated at the jurisdictional level; and iii) projects within a jurisdiction fail to reduce emissions.

Current thinking: R&R to address underperformance will be needed, but some flexibility will also be important to allow jurisdictions determine the specific option their jurisdiction will adopt to meet the R&R. The options contained in the R&R may include a jurisdiction level buffer account whereby a percentage of VCUs generated at the jurisdictional and/or project level could be transferred to the buffer account to be used where projects or jurisdictions underperform. The buffer account could be managed at the VCS level and pool reductions across some/all jurisdictional programs, or be specific to the jurisdiction (managed by the jurisdiction or a third party). Underperformance of the jurisdiction may require re-assessing the jurisdiction's baseline.

Additional options that may be considered for **Option 3a** include:

1. A buffer account for project level credits separate from the jurisdictional buffer credits. This could be drawn upon by successful projects if there is jurisdictional underperformance. Similarly if a project underperforms to the detriment of the jurisdiction as a whole, the jurisdiction may compensate itself from this buffer.
2. Where jurisdictions underperform, allow a jurisdiction to "borrow" against future jurisdictional performance for [2] years in order to credit successful projects.
3. Where project underperforms, a jurisdiction may hold underperforming project(s) liable to purchase replacement VCUs from the market or provide other compensation to the jurisdiction. The reverse may also be an option for project recourse against jurisdictions, if a jurisdiction was willing to assume this liability to provide additional security to project developers.
4. Insurance products for under performance. This could include insurance held by a project against jurisdiction-wide under performance, or insurance held by the jurisdiction against project level under performance.

Similar considerations could be applied to **Options 1**, **2a** and **2b**, with reference to "subnational jurisdiction" rather than "project" and "national jurisdiction" rather than "jurisdiction".

10.3. Reversals in Jurisdictional Crediting Schemes

Issue: Reversals occur when, relative to the baseline, stocks are lower at the time of monitoring than previously recorded. This is still a permanence/performance issue, because at that point there are more credits issued than stocks on the ground. This will need to be

addressed in Jurisdictional Crediting Schemes (potentially using some of the tools/mechanisms mentioned above in the Underperformance section, including buffer pools and/or insurance). Is a distinction between intentional and unintentional reversals possible and/or desirable, in terms of appropriate remedies and whom they affect (e.g. project proponent, government, buffer pool)?

Current thinking: Options to address this need to be developed.

10.4. Force majeure

Issue: Natural disturbances (e.g. hurricanes) may damage a forest where VCUs have been issued. How should these emissions be treated? How should force majeure be defined? How should force majeure be factored into underperformance, reversals, and future baseline revisions?

Current thinking: If the activity had protected the specific patch of forest that was damaged due to force majeure (i.e. that specific patch would have been deforested in the baseline, so VCUs had already been issued for it), an equivalent amount of VCUs should be deducted from the buffer account. As the forest regenerates, new VCUs are put back into the buffer account. If the damage was on forest that would not yet have been deforested in the baseline scenario (i.e. no VCUs had been issued for that specific patch of forest), then either the baseline would need to be updated (as the reversal event would have occurred in both the project and baseline case). How this may affect baseline renewals in the future needs further analysis.

11. Other issues

11.1. Safeguards and benefit sharing

Issue: Should the VCS state how social safeguards and benefit sharing is to occur?

Current thinking: Jurisdictional governments should be allowed to develop and register any benefit sharing arrangements they deem appropriate. However, the VCS should focus on accounting for emission reductions and removals and allow other specialized standards such as the Climate, Community & Biodiversity Alliance (CCBA) standards – whether project (e.g. CCBS) or jurisdictional (e.g. REDD+ Social & Environmental Standards) – be applied alongside the VCS standard in order to safeguard appropriate benefit sharing.

11.2. Legal issues

Issue: There are a number of legal issues that arise, such as treatment of carbon rights in non-project areas within a jurisdiction that receives VCUs and rights to transfer credits (in addition to ownership rights).

Current thinking: Legal issues will be jurisdiction specific, but additional research and advice is needed on this point to produce sufficiently general R&R and guidelines.

11.3. Registries

Issue: What are the registry requirements to operationalize i) registration of Jurisdictional Baselines and ii) Jurisdictional Crediting Schemes? Should jurisdictions with crediting schemes

be required to establish a jurisdictional registry? Should the VCS project database or VCS registries provide a centralized registry service? How should project credit registries "talk" to jurisdictional registries, when not integrated?

Current thinking: Additional input is needed on this point.

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Annex 1: Background on Nesting

The nested approach or "nesting" is generally understood as an accounting, management and incentive system established to simultaneously enable REDD+ activities led by various actors working at national and subnational levels. It provides a means for the integration of offsets generated from individual projects within larger national or sub-national REDD+ frameworks. The notion of a nested approach to REDD+ was first introduced by Pedroni et al. in 2005 as a way to promote the direct engagement of the private sector in project activities "nested" within a national accounting system. Key assumptions of the nested approach as initially proposed were (i) the use of market-based instruments as a tool to deploy REDD finance; (ii) direct crediting of project-level activities; and (iii) the detachment of national level performance from project-level crediting. The concept of nesting has evolved since then however, gaining different formulations from the various experts grappling with the issue of integrated accounting systems for REDD+ and private sector investment.

Nesting approaches necessarily entail a more complex accounting system for REDD+. Any nesting approach will include accounting and monitoring of emissions at multiple scales: national, regional/provincial and at project level. All these scales must eventually be reconciled to ensure that applicable reference levels add-up and that emission reductions are not double counted. Operationalizing this requires considering a range of issues across scales including i) baseline development and integration; ii) MRV; iii) leakage; and iv) underperformance and reversals.

There are a number of papers that explore various aspects of nesting in more detail. A selection is listed below. A comparative analysis has been conducted on these (and other) papers as part of the preparation of this Scoping Paper and will be provided to the Expert Groups as additional background material. The secretariat can provide the Advisory Committee members electronic copes of any of the papers and the comparative analysis if needed.

- Boyd, W., *Options Paper – Regulatory Design Options for Subnational REDD Mechanisms*, University of Colorado Law School (2010).

- Cortez, R., et al. *A Nested Approach to REDD+: Structuring effective and transparent incentive mechanisms for REDD+ implementation at multiple scale,* The Nature Conservancy and Baker & McKenzie (2010)

- De Gryze, S., and Durschinger, L., *An integrated REDD Offset Program (IREDD) for Nesting Projects under Jurisdictional Accounting,* Terra Global Capital, version 2.0 (2010).

- O'Sullivan, R., Streck, C., Pearson, T., Brown, S. and Gilbert, A. (2010) *Engaging the Private Sector in the Potential Generation of Carbon Credits from REDD+; An Analysis of Issues*, Report to the UK Department for International Development (DFID)

- Pedroni, L. et al., *Creating incentives for avoiding further deforestation: the nested approach*, Climate Policy (2009).

- Pedroni L. et al, *A Nested Approach to REDD+: How could it be implemented?* In "Pathways for Implementing REDD+", UNEP RISOE Centre (2010).