

**Meeting:** International Public Sector Accounting Standards Board

**Meeting Location:** Virtual Meeting

**Meeting Date:** March 16–19 and 23, 2021

## Agenda Item 6

For:

- ☐ Approval  
☒ Discussion  
☐ Information

### NATURAL RESOURCES

<b>Project summary</b>	The objective of the Natural Resources project is to research and address issues relating to the potential recognition and measurement of natural resources.	
<b>Task Force members</b>	<ul style="list-style-type: none"> <li>• Lindy Bodewig, IPSASB Member (Task Force Chair)</li> <li>• Adrienne Cheasty, IPSASB Member</li> <li>• Neema Kiure-Mssusa, IPSASB Member</li> <li>• Hironobu Takahashi, EY Japan</li> <li>• Patricia Siqueira Varela, IPSASB Member</li> <li>• Marc Wermuth, IPSASB Member</li> </ul>	
<b>Meeting objectives</b>	<b>Topic</b>	<b>Agenda Item</b>
<b>Project management</b>	<a href="#">Natural Resources: Project Roadmap</a>	<a href="#">6.1.1</a>
	<a href="#">Instructions up to Previous Meeting</a>	<a href="#">6.1.2</a>
	<a href="#">Decisions up to Previous Meeting</a>	<a href="#">6.1.3</a>
<b>Decisions required at this meeting</b>	<a href="#">Accounting for the Costs of Activities Relating to Subsoil Resources</a>	<a href="#">6.2.1</a>
	<a href="#">Revisions to the Introduction, Chapters 1-2, and Appendix A of the [Draft] Consultation Paper</a>	<a href="#">6.2.2</a>
	<a href="#">Approach to Develop Chapter 3 on Living Resources</a>	<a href="#">6.2.3</a>
	<a href="#">Proposed Description and Scope of Living Resources</a>	<a href="#">6.2.4</a>
	<a href="#">Control of Living Resources</a>	<a href="#">6.2.5</a>
	<a href="#">Measurement of Living Resources</a>	<a href="#">6.2.6</a>
<b>Other supporting items</b>	<a href="#">Extract from the [Draft] Natural Resources Consultation Paper: Introduction, Chapters 1-3, and Appendix A</a>	<a href="#">6.3.1</a>

**NATURAL RESOURCES:  
PROJECT ROADMAP**

<b>Meeting</b>	<b>Completed Actions or Discussions / Planned Actions or Discussions:</b>
March 2020	1. Approval of Natural Resources project brief
June 2021	1. Phase 1: Development of comprehensive Consultation Paper (CP) covering Subsoil Resources, Living Resources, and Water
September 2021	1. Approval of Phase 1 CP
March 2022	1. CP comment period (four months ending January 2022)
December 2022	1. Phase 2: Development of Exposure Draft (ED) covering one topic from the comprehensive CP
March 2023	1. Approval of Phase 2 ED
September 2023	1. ED comment period (four months ending July 2023)
March 2024	1. Review of responses to Phase 2 ED
June 2024	1. Approval of Phase 2 Final Standard: Subsoil Resources

## INSTRUCTIONS UP TO PREVIOUS MEETING

Meeting	Instruction	Actioned
December 2020	1. Amend the example timeline on sovereign powers to clarify the principles and reflect the feedback from the CAG regarding the underlying resources and revenue recognition.	1. Added to Appendix A of the draft CP. Also see Agenda Paper 6.2.2.
December 2020	2. Amend the CP to capture the IPSASB's discussions on project scope and the decision to not provide guidance on broader public finance management issues, sustainability, and intergenerational equity.	2. Revised the introduction of the draft CP. Also see Agenda Paper 6.2.2.
December 2020	3. Develop a roadmap to clarify and illustrate where the Natural Resource project fits and to explain how it links with other IPSASB pronouncements.	3. Added to chapter 2 of the draft CP. Also see Agenda Paper 6.2.2.
December 2020	4. Clarify the analyses on: <ul style="list-style-type: none"> <li>○ Whether unextracted subsoil resources are a resource, as defined in the Conceptual Framework;</li> <li>○ Whether an entity can demonstrate control over unextracted subsoil resources; and</li> <li>○ Whether unextracted subsoil resources can be reliably measured. Present the updated analyses to the IPSASB in March 2021.</li> </ul>	4. Amended chapter 2 of the draft CP. Also see Agenda Paper 6.2.2
December 2020	5. Develop an analysis on the potential incorporation of IFRS 6, Exploration for and Evaluation of Mineral Resources, into IPSAS literature and reconsider the Preliminary View on whether exploration, evaluation, development, and extraction activities are relevant to the public sector.	5. See Agenda Paper 6.2.1.

## Agenda Item 6.1.2

September 2020	<ol style="list-style-type: none"> <li>Regarding sovereign powers: <ul style="list-style-type: none"> <li>Clarify the distinction between the ability to issue licenses and the transaction of issuing licenses, and include more detailed consideration of when an asset could exist and be recognized</li> <li>Include more detailed analysis of measurement considerations;</li> <li>Use language that is consistent with other IPSASB projects;</li> <li>Cross-reference to discussion of a similar issue in the Social Benefits project; and</li> <li>Include an analysis sovereign powers, possibly in the Appendix to the CP.</li> </ul> </li> </ol>	<ol style="list-style-type: none"> <li>Added to Appendix A of the draft CP. Also see Agenda Paper 6.2.2.</li> </ol>
September 2020	<ol style="list-style-type: none"> <li>Regarding the informal survey: <ul style="list-style-type: none"> <li>Expand introduction to provide more information regarding the purpose of the survey as well as information on surface and subsurface rights;</li> <li>Add question regarding the current public sector accounting practices for unextracted subsoil resources in the jurisdiction;</li> <li>Postpone the deadline to October 30, 2020; and</li> <li>In addition to IPSASB members and technical advisors, circulate the survey to key jurisdictions where natural resources are significant.</li> </ul> </li> </ol>	<ol style="list-style-type: none"> <li>The survey was revised and distributed to IPSASB members, technical advisors, and other key jurisdictions where natural resources are significant on September 24, 2020. The responses to the survey have been incorporated into Chapter 2 of the [draft] Natural Resources Consultation Paper.</li> </ol>

## Agenda Item 6.1.2

September 2020	<p>3. Regarding the draft consultation paper:</p> <ul style="list-style-type: none"><li>○ Revise the draft introduction and chapter 1 for comments from IPSASB members;</li><li>○ In the analysis of sovereign powers, distinguish between sovereign powers in their own right from activities arising from the use of sovereign powers, and expand on the discussion of control and when an item can be recognized as an element;</li><li>○ Expand on the application of existing IPSAS guidance on costs (potential cash outflows)</li></ul>	<p>3. See revised draft CP and Agenda Paper 6.2.2.</p>
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## DECISIONS UP TO PREVIOUS MEETING

Meeting	Decision	BC Reference
December 2020	1. Subject to the instructions from December 2020, the IPSASB agreed that the example timeline reflected the IPSASB's decision on sovereign powers from September 2020 and should be incorporated into the draft CP.	1. The example timeline has been included in Appendix A of the draft CP.
December 2020	2. The IPSASB decided that unextracted subsoil resources can be considered resources in the context of the IPSASB's Conceptual Framework.	2. The discussion has been included in chapter 2 of the draft CP.
September 2020	1. The IPSASB decided that a government's sovereign power, in and of itself, does not meet the criteria for recognition as an asset.	1. Analysis has been included in Appendix A of the draft CP.
September 2020	2. The IPSASB approved the distribution of the subsoil resources legal framework survey to IPSASB members, technical advisors, and other individuals as identified by the staff.	2. The findings from the survey have been incorporated into Chapter 2 of the draft CP.
September 2020	3. Subject to instructions provided at the meeting, no major changes were proposed for the overall structure of the draft CP.	3. BC to be included in draft ED.
March 2020	1. Approved Natural Resources – Project Brief and Outline, subject to editorial and drafting changes as noted in instructions to staff. Initial focus should be on scoping, and a broad description can be developed later in the project.	1. BC to be included in draft ED.

## **Accounting for the Costs of Activities Relating to Subsoil Resources**

### **Question**

1. Should guidance on the accounting for costs of activities relating to subsoil resources be incorporated into IPSAS? If so, how should the guidance be incorporated?

### **Recommendation**

2. The Natural Resource Task Force (Task Force) recommends the IPSASB to:
  - (a) Adopt IFRS 6, *Exploration for and Evaluation of Mineral Resources*, and continue to monitor the developments relating to exploration and evaluation expenditures at the International Accounting Standards Board (IASB);
  - (b) Adopt the IASB's guidance on development costs as well as the guidance from IFRIC 20, *Stripping Costs in the Production Phase of a Surface Mine*; and
  - (c) For the guidance noted in (a) and (b) above, locate the guidance outside the potential standard on Natural Resources, either as a separate new IPSAS or via a direct reference to IFRS 6 in an existing standard such as IPSAS 1, *Presentation of Financial Statements*.

### **Background**

3. In the private sector, the accounting guidance on these costs is provided in IFRS 6, *Exploration for and Evaluation of Mineral Resources* (IFRS 6), and IFRIC 20, *Stripping Costs in the Production Phase of a Surface Mine* (IFRIC 20).
4. IFRS 6 provides guidance on the expenditures incurred for exploration and evaluation (E&E) of mineral resources. These expenditures include costs incurred after an entity has obtained the legal right to explore a specific area and before the technical feasibility and commercial viability of extracting mineral resources are demonstrable.<sup>1</sup> For expenditures which are in scope, IFRS 6 provides entities with the accounting policy choice to recognize the expenditures as expenses as incurred or to capitalize as an asset. For expenditures capitalized as an asset, IFRS 6 also requires an entity to assess for impairment when facts and circumstances suggest that the carrying amount of the asset may exceed its recoverable amount.
5. In addition, paragraph 10 of IFRS 6 states that guidance on the recognition of assts arising from the development of mineral resources is provided by the IASB's Conceptual Framework for Financial Reporting (IASB Framework) and IAS 38, *Intangible Assets* (IAS 38). Paragraph BC27 of IFRS 6 further explains that paragraph 57 of IAS 38, which sets out the asset recognition criteria for development costs, should be followed to develop an accounting policy for development activities. These recognition criteria are already incorporated into paragraph 55 of IPSAS 31, *Intangible Assets* (IPSAS 31).
6. IFRIC 20 provides guidance on the recognition and measurement of costs incurred to remove surface waste materials during the development and production phases of a mine. The removal of waste materials (also known as "stripping") could benefit an entity by either resulting in the production of

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<sup>1</sup> IFRS 6.5.

ore inventory or provide better access to deeper levels of material that contains ore. IFRIC 20 notes that to the extent that the removal of surface materials results in the production of inventory, the costs incurred shall be accounted for using the principles from IAS 2, *Inventories*. For removal activities which result in improved access to ore, the costs are recognized as a non-current “stripping activity asset,” if certain criteria on probable future economic benefits, identifiable improvements in access to ore, and reliable measurement are met.

7. As the above guidance could be applicable to exploration, evaluation, and development activities carried out by public sector entities, the IPSASB agreed in the Project Brief to consider if and how IFRS 6 and IFRIC 20 should be incorporated into IPSAS, either as a part of the Natural Resources project or as a separate project which specifically relates to accounting for exploration, evaluation, and development activities.<sup>2</sup> The following paper addresses these considerations.

### Analysis

#### *Consideration of IFRS 6*

8. In considering whether the guidance from IFRS 6 should be adopted within IPSAS, it is important to consider the issues raised during the development of the standard, as well as the current developments at the IASB. The key points from IASB’s activities were as follows:
  - (a) To allow for capitalization of E&E expenditures, IFRS 6 includes a specific exemption from considering the concepts from IFRSs on similar issues or the IASB Framework. A number of IASB members expressed concerns that such an exemption may result in the appropriate recognition of assets if the IASB Framework had been considered;
  - (b) In July 2020, the IASB staff noted that it would be difficult to demonstrate that the expected future economic benefits attributable to E&E expenditures would flow to the entity before establishing technical feasibility and commercial viability. Therefore, the IASB staff concluded that E&E expenditures would likely be expensed under IAS 16, *Property, Plant and Equipment* (IAS 16) or IAS 38, if IFRS 6 did not exist; and
  - (c) In October 2020, the IASB staff presented research findings that there was some evidence that entities of comparable size in the same industry tended to apply similar accounting policy choices. The IASB staff also received feedback from financial statement preparers and users that this comparability was extremely valuable in their decision-making.

A more detailed summary of the IASB’s activities can be found in [Appendix A](#) of this paper.

9. The Task Force has drawn the following observations from the summary:
  - (a) Given the similarities between the IASB Framework and the IPSASB’s Framework for General Purpose Financial Reporting by Public Sector Entities (IPSASB Framework), it is likely that the recognition of E&E expenditures as an asset would require some form of exemption from the full application of the IPSASB Framework;
  - (b) As IPSAS 17, *Property, Plant, and Equipment* (IPSAS 17), and IPSAS 31 were largely drawn from IAS 16 and IAS 38, without adopting IFRS 6 into IPSAS, E&E expenditures would likely also be expensed under IPSAS. This is because it would be difficult to support that the future

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<sup>2</sup> Project Brief paragraph 5.12.



economic benefits of E&E expenditures would flow to the entity prior to establishing technical feasibility and commercial viability; and

- (c) Regardless of the technical merits of IFRS 6, the IASB staff's research indicates that the IFRS 6 resulted in relevant information which is valued by both preparers and users of the financial statements.
10. The Task Force recommends adoption of IFRS 6 for the following reasons:
- (a) **Gap in Literature.** In the approved project brief for the Natural Resources Project, the IPSASB noted that the governments in a number of resource-rich jurisdictions have entered into production sharing or co-production agreements with private companies, and that the use of these agreements are expected to become more prevalent in the future. Such agreements may fall within the scope of IPSAS 37, *Joint Arrangements*. As a result, there is a valid expectation that the public sector entity's accounting for E&E expenditures would be consistent with the accounting treatment in the private companies' financial statements;
  - (b) **Useful information.** As shown by the IASB's research paper from October 2020, the policy choice to either capitalize or expense E&E expenditures resulted in information which was considered valuable by preparers and users of the financial statements. The Task Force is of the view that adoption of IFRS 6 would also result in information that is valuable to both preparers and users of public sector financial statements; and
  - (c) **Alignment with IFRS.** The IPSASB previously noted in Theme B of its Strategy and Work Plan 2019-2023 that maintaining alignment with IFRS is in the public interest. Conceptually, there are no public sector specific differences for E&E transactions, so it would be reasonable to build off best practices in private sector reporting to develop a standard to fill a gap in IPSAS literature. Practically, aligning with IFRS 6 would also allow the IPSASB and its staff to better use its resources to address issues which are most pressing to the public sector.
11. The Task Force recognizes that the IASB is currently considering whether to commence a project to replace or amend IFRS 6 but noted that no decisions have been made at this time and that the IASB is not planning to start the decision-making process until Q2 of 2021. As a result, the Task Force also recommends the IPSASB continue to monitor developments on this topic.

*Consideration of Development Costs and IFRIC 20*

12. Consistent with paragraph 10(a), the Task Force noted that the governments in a number of resource-rich jurisdictions have entered into production sharing or co-production agreements with private companies. As a result, guidance on development and stripping costs will be useful to public sector entities.
13. The IFRS guidance supporting the capitalization of development costs is based on the principles in the IASB Framework and IAS 38, while the guidance supporting the capitalization of production costs and costs from stripping activities is based on the principles in IAS 2 and IAS 16. These principles are similar to the ones in the IPSASB Framework, IPSAS 12, *Inventories* (IPSAS 12), IPSAS 17, and IPSAS 31.

14. Therefore, it could be argued that under IPSAS, development costs could be capitalized as an internally generated intangible asset if these costs meet the capitalization criteria in IPSAS 31.<sup>3</sup> Similarly, production and stripping costs could be capitalized as an asset if they meet the capitalization criteria in IPSAS 12<sup>4</sup> and IPSAS 17.<sup>5</sup> As these principles are already part of the IPSASB's suite of standards, it would be relatively straight forward to apply IPSAS 12 and IPSAS 17 to production and stripping activities and IPSAS 31 to the expenditures incurred in the development of a subsoil resources.
15. As a result, the Task Force recommends adoption of the guidance on development costs and stripping activities to IPSAS.

*Placement of Guidance*

16. The Task Force noted that the exploration, evaluation, development, and extraction activities carried out by an entity are inherently separate from the underlying resources that the entity is attempting to find and extract. The guidance on natural resources proposed in the IPSASB's Consultation Paper deals with the accounting for tangible, naturally occurring resources, including subsoil resources, living resources, and water. In contrast, the guidance on related activities deals with the accounting for the costs of exploring, evaluating, developing an area that potentially has these natural resources, as well as the costs of extracting these resources. Because the underlying resources and the related activities are different items, their accounting guidance should be in different standards.
17. In addition, the underlying resources and the costs of activities are subject to different levels of measurement uncertainty, which further supports that they are separate items. Unlike the underlying resources, the initial measurement of exploration, evaluation, development, and extraction expenditures involves little to no measurement uncertainty, as these expenditures will be measured based on actual costs incurred.
18. As a result, the Task Force recommends the adoption of guidance relating to exploration, evaluation, development, and extraction expenditures separately from any potential standard on natural resources. Once the IPSASB has confirmed if it agrees with this recommendation, the Task Force will consider whether the guidance will be incorporated via a separate new standalone proposed standard or by a direct reference to IFRS 6 within an existing standard such as IPSAS 1, *Presentation of Financial Statements*.

**Decision Required**

19. Does the IPSASB agree with the Task Force and Staff's recommendation?

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<sup>3</sup> IPSAS 31, paragraph 55 states: "An intangible asset arising from development... shall be recognized if, and only if, an entity can demonstrate all of the following: (a) The technical feasibility of completing the intangible asset so that it will be available for use or sale; (b) Its intention to complete the intangible asset and use or sell it; (c) Its ability to use or sell the intangible asset; (d) How the intangible asset will generate probable future economic benefits or service potential. Among other things, the entity can demonstrate the existence of a market for the output or the intangible asset or the intangible asset itself or, if it is to be used internally, the usefulness of the intangible asset; (e) The availability of adequate technical, financial and other resources to complete the development and to use or sell the intangible asset; and (f) Its ability to measure reliably the expenditure attributable to the intangible asset during its development."

<sup>4</sup> IPSAS 12, paragraph 18 states: "The cost of inventories shall comprise all costs of purchase, costs of conversion, and other costs incurred in bringing the inventories to their present location and condition."

<sup>5</sup> IPSAS 17, paragraph 14 states: "The cost of an item of property, plant, and equipment shall be recognized as an asset if, and only if: (a) It is probable that future economic benefits or service potential associated with the item will flow to the entity; and (b) The cost or fair value of the item can be measured reliably."

## **Appendix A – Summary of IFRS 6-Related Issues Raised by the IASB**

### *December 2004 – Issues Discussed during the Development of IFRS 6*

1. IFRS 6 was developed with a specific exemption from the hierarchy criteria in IAS 8, *Accounting Policies, Changes in Accounting Estimates and Errors* (IAS 8), which requires the consideration of requirements in IFRSs dealing with similar and related issues, as well as concepts from the IASB Framework. This exemption was necessary to support the capitalization of E&E expenditures. The IASB explained in paragraph BC17 of IFRS 6 that this exemption, along with the policy choice to capitalize or expense E&E expenditures, were put in place to allow an entity to transition to IFRS with minimal disruptions, as there was a wide variety of accounting practices used by the IASB's constituents prior to the adoption of IFRS.
2. In the dissenting opinions of IFRS 6, a number of IASB members disagreed with the exemption, as they were of the view that the lack of consideration of the IASB Framework may result in the inappropriate recognition of assets. In response, the final version of IFRS 6 contains an explicit requirement to comply with IAS 8.10, which requires the development and application of accounting policies that result in information that is relevant and reliable.<sup>6</sup>
3. In addition, a number of the IASB's constituents similarly disagreed with the proposed standard and noted that allowing existing accounting practices to continue may result in inappropriate recognition of assets. These respondents noted that E&E expenditures should be within the scope of IAS 16, *Property, Plant and Equipment* (IAS 16) and IAS 38. In response to these concerns, the IASB noted that while they were similarly concerned with inappropriate asset recognition, they were also concerned that accounting for these expenditures within IAS 38 may result in an overstatement of expenses.

### *July 2020 – Applying IAS 16 and IAS 38 to Exploration and Evaluation Expenditures*

4. At the July 2020 meeting, the IASB staff presented a paper which analyzed the potential accounting for E&E expenditures under IAS 16 and IAS 38 without considering the requirements in IFRS 6. In the paper, the IASB staff concluded that E&E expenditures would likely be expensed under IAS 16 or IAS 38, as in most cases, it would be difficult to demonstrate that the expected future economic benefits attributable to the expenditures would flow to the entity.<sup>7</sup>

### *October 2020 – Accounting Policies Developed Applying IFRS 6*

5. At their October 2020 meeting, the IASB discussed research findings regarding the accounting policies developed by entities applying IFRS 6. The IASB intends to decide at a future meeting whether to replace or amend IFRS 6, but no decisions have been made as of the writing of this issue paper in January 2021.
6. The IASB staff noted that although there is some evidence that larger entities tended to expense E&E expenditures, in general, there was a wide variety of accounting policies applied in their sample of financial statements. However, the IASB staff also noted that the flexibility from the policy choice to capitalize or expense costs led to consistency within groups of entities of comparable size in the same industry.

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<sup>6</sup> IFRS 6, paragraphs BC19 and DO2.

<sup>7</sup> IASB July 2020 Meeting, Agenda Paper 19A.

7. In addition, in their outreach activities, the IASB staff received feedback from financial statement preparers and users, who noted that this comparability was extremely valuable in their decision-making.

## **Revisions to the Introduction, Chapters 1-2, and Appendix A of the [Draft] Consultation Paper**

### **Question**

1. Does the IPSASB agree with the changes made to the [draft] Natural Resources Consultation Paper (CP) to address the instructions from the December 2020 IPSASB Meeting?

### **Recommendation**

2. The Natural Resources Task Force (Task Force) has reviewed the actions to address the instructions and the amendments are summarized in paragraphs 5-8 below.

### **Background**

3. At the December 2020 IPSASB meeting, the IPSASB instructed the staff to:<sup>8</sup>
  - (a) Amend the example timeline on sovereign powers to clarify the principles and reflect the feedback from the CAG regarding the underlying resources and revenue recognition;
  - (b) Amend the CP to capture the IPSASB's discussions on project scope and the decision to not provide guidance on broader public finance management issues, sustainability, and intergenerational equity;
  - (c) Develop a roadmap to clarify and illustrate where the Natural Resource project fits and to explain how it links with other IPSASB pronouncements; and
  - (d) Clarify the analyses on:
    - (i) Whether unextracted subsoil resources are a resource, as defined in the Conceptual Framework;
    - (ii) Whether an entity can demonstrate control over unextracted subsoil resources; and
    - (iii) Whether unextracted subsoil resources can be reliably measured. Present the updated analyses to the IPSASB in March 2021.
4. The following paper addresses instructions (a)-(d) above. The Task Force addressed instruction (e) in Agenda Item 6.2.1.

### **Analysis**

#### *Example Timeline on Sovereign Powers – Instruction (a)*

5. The staff and Task Force incorporated the example timeline from December 2020 into Appendix A of the [draft] CP. To address feedback from the CAG and IPSASB, the example was amended to:
  - (a) Clarify that it is meant to explain the IPSASB's previous decision regarding sovereign powers and does not address the recognition of the underlying resources or revenue recognition; and
  - (b) Remove the detailed discussion on revenue recognition from the example.

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<sup>8</sup> The instruction on analyzing the potential incorporation of IFRS 6 was addressed in Agenda Item 6.2.1.

*Clarification of Project Scope and Public Finance Management Issues – Instruction (b)*

6. Paragraph 8 of the [draft] CP was amended to explicitly clarify that the CP will not provide guidance on the broader public finance management issues.

*Natural Resources Roadmap – Instruction (c)*

7. Staff noted that this instruction was in the context of subsoil resources and added paragraphs 2.3-2.5 to the CP. The addition uses a diagram of the main stages of a typical mining process as an example to illustrate how the accounting impact from the various aspects fit around the issues discussed in the CP. As shown in the additional paragraphs and the diagram, many of the activities relating to subsoil resources, such as sale and purchase of licenses, development of the mine site, and extraction and sale of the resources, would already be addressed by existing IPSAS. Also as shown in the diagram, the underlying tangible subsoil resources, which is the subject matter of the CP, currently has no guidance under IPSAS or IFRS.

*Other Clarifications – Instruction (d)*

8. The following sections in the CP were amended to clarify issues on whether a subsoil resource is a resource, as well as the control and measurement of subsoil resources:
  - (a) Paragraphs 2.10-2.11 of the CP were expanded to clarify the consideration of whether subsoil resources can meet the definition of a resource in the IPSASB Conceptual Framework. The expanded discussion focuses on the item's service potential or its ability to generate economic benefits, which is consistent with the definition of a resource in paragraph 5.7 of the IPSASB Conceptual Framework;
  - (b) Paragraphs 2.12-2.25 of the CP were amended to expand the analysis of control. At the December 2020 meeting, a constituent noted that, in their view, an entity can never have control over an unextracted subsoil resource because it does not have ready physical access to the resource (as it is underground). As the previous conclusion that it is possible to have control in some circumstance was based on an informal survey, the Task Force thought it would be prudent to include this alternative in the CP and ask constituents for their views. As a result, this option was included in paragraph 2.20, and the previous Preliminary View on whether unextracted subsoil resources meet the definition of an asset was replaced with Specific Matter for Comment 1 – Chapter 2; and
  - (c) Paragraphs 2.26-2.37 were expanded to clarify why unextracted subsoil resources cannot be reliably measured. The Task Force reaffirmed the view that unextracted subsoil resources cannot be reliably measured because it is not possible to reliably quantify the amount of subsoil resources in the ground prior to their extraction. This is largely due to the fact that the geological models used to approximate the quantity of resources or reserves are estimates that can materially change based on slight changes in information or how results are interpreted. The CP was amended to explain the use and limitations of these geological models.

**Decision Required**

9. Does the IPSASB agree with the Task Force's recommended amendments?

## **Approach to Develop Chapter 3 on Living Resources**

### **Question**

1. The IPSASB is asked if they agree with the approach used to develop chapter 3 on Living Resources of [draft] Natural Resources Consultation Paper (CP), attached in [Agenda Item 6.3.1](#).

### **Recommendation**

2. Staff recommend the approach used to develop chapter 3 of the [draft] CP.

### **Background**

3. Staff developed chapter 3:
  - (a) Based on Discussion Paper (DP) 10, *Accounting for Living and Non-Living Resources* issued by the South African Accounting Standards Board (ASB); and
  - (b) Revised the text for terminology differences and alignment with the IPSASB Conceptual Framework as well as the overall scope and approach of the natural resources project.

### **Analysis**

4. Chapter 3 sets out preliminary views on the accounting for living resources. Staff developed the chapter based on Discussion Paper (DP) 10, *Accounting for Living and Non-Living Resources* issued by the South African Accounting Standards Board (ASB) in July 2014 because:
  - (a) It is the only source<sup>9</sup> of public sector and private sector accounting guidance for living resources in their natural state<sup>10</sup>;
  - (b) South African Generally Recognized Accounting Practice Standards consider IPSAS as a primary source when developing guidance, and The *Conceptual Framework for General Purpose Financial Reporting* issued by the ASB is based on The *Conceptual Framework for General Purpose Financial Reporting by Public Sector Entities* (the IPSASB Conceptual Framework) issued by the IPSASB; and
  - (c) DP 10 has a conceptually consistent view on the descriptions of natural resources<sup>11</sup> as set out in Chapter 1 of the [draft] CP and living resources as proposed in chapter 3.
5. For the reasons set out in paragraphs 4(a)-4(c) above, staff believe it is a resource-efficient approach to use the DP as a starting point in developing chapter 3.
6. The concepts taken from DP 10 were then revised by the Natural Resources Task Force (Task Force) and staff for terminology differences and alignment with the IPSASB Conceptual Framework.
7. As a result of the approach followed in paragraphs 4-6, chapter 3 includes an introduction and a more detailed description of living resources compared to chapter 2 (the chapter on subsoil resources).

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<sup>9</sup> Staff have not identified any other sources of public and private sector accounting guidance for living resources that are in their natural state.

<sup>10</sup> Discussion Paper (DP) 10, *Accounting for Living and Non-Living Resources* led to the development of the final pronouncement, GRAP 110, *Living and Non-Living Resources*, issued in March 2017.

<sup>11</sup> Paragraph 2.7 of Discussion Paper 10 states that “in proposing definitions for living and non-living resources consideration has been given to the meaning of “natural”. The term “natural” is defined as “existing in or formed by nature”. If a living animal or plant is taken away from its natural environment, or removed from it, then it could be argued that the animal or plant no longer exists in “nature” and would fall outside the scope of this Discussion Paper”.

## Agenda Item 6.2.3

This was because the Task Force and staff felt that the discussion of unextracted subsoil resources in chapter 2 is commonly understood to refer to minerals, ore and fossil fuel deposits within the earth while the delineation between living resources and other biological resources warranted a more detailed discussion.

### **Decision Required**

8. Does the IPSASB agree with the approach used by the staff to develop chapter 3?



## **Proposed Description and Scope of Living Resources in Chapter 3**

### **Question**

1. The IPSASB is asked to agree with the proposed description of living resources and the resulting impact on the scope of chapter 3.

### **Recommendation**

2. The Natural Resources Task Force (Task Force) and staff recommend that:
  - (a) Living resources should be described as living organisms that occur naturally and remain in their natural state; and
  - (b) Based on the above description of living resources, if a living organism is removed from its natural environment, that animal or plant would fall outside the scope of this chapter on living resources.

### **Background**

3. Based on the discussion in [Agenda Item 6.2.3](#), the Task Force and staff felt that the delineation between living resources and other biological assets warranted a more robust description. After formulating the description, the Task Force and staff noted that certain items which are commonly thought of as living resources may fall out of scope of the [draft] Natural Resources Consultation Paper ([draft] CP) if they were no longer in their natural state.
4. The following paper explains the proposed description of living resources and how this description impacts the scope of chapter 3.

### **Analysis**

#### *Proposed Description of Living Resources*

5. Consistent with the decision to develop a description of natural resources, the Task Force and staff developed a description for living resources to provide a way to determine, what is, and what is not, within the scope of chapter 3.
6. To develop the description of living resources, the Task Force and staff:
  - (a) **Obtained an understanding of living resources in various literature.** The Task Force and staff analyzed the broad definitions/descriptions of living resources in the financial reporting guidance of National Standard Setters including Discussion Paper (DP) 10, *Accounting for Living and Non-Living Resources*, Government Finance Statistics Manual and other relevant literature; and
  - (b) **Formulated a description for living resources.** The proposed description of living resources is limited to animals and plants in their natural state consistent with the description of the natural resources in chapter 1. The Task Force and staff noted that living resources should be described as organisms (animals or plants) that:

- (i) Are resources<sup>12</sup> as described in the IPSASB's Conceptual Framework;
- (ii) Occur naturally; and
- (iii) Remain in their natural state—i.e., have not been subjected to human intervention.

*Proposed Scope of Living Resources*

- 7. Based on the proposed description in paragraph 6(b), certain living organisms would be excluded from the scope of the [draft] CP if they have been subjected to human intervention because they do not satisfy the description of living resources. To clarify the scoping outcome of applying the proposed description and clearly communicate relevant IPSAS guidance for constituents, the Task Force and staff recommend inclusion in the [draft] CP, a discussion on the accounting for biological resources which are not considered in chapter 3.
- 8. In addition, in response to the IPSASB's instruction in December 2020, a visual "roadmap" to clarify how living resources fit with any existing IPSAS has been included. This analysis is presented in paragraph 3.17 and the accompanying flowchart in the [draft] CP.

**Decision Required**

- 9. Does the IPSASB agree with the Task Force and staff recommended living resources description and the proposed scope of chapter 3?

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<sup>12</sup> According to the Conceptual Framework, a resource is an item with service potential or the ability to generate economic benefits.

## **Control of Living Resources**

### **Question**

1. Does the IPSASB agree that an entity can control a living resource when certain control indicators are met, and that the controlled living resource can still remain in its natural state?

### **Recommendation**

2. The Natural Resources Task Force (Task Force) and staff recommend:
  - (a) An entity can demonstrate control over a living resource if the following control indicators are met:
    - (i) The entity manages the condition of the living resource;
    - (ii) The entity has the ability to restrict the movement and/or access to the living resource; and
    - (iii) The entity has the ability to direct the use of the living resource.
  - (b) However, the degree of human intervention from the above indicators cannot be so significant that the resource is no longer in its natural state. Where there is significant degree of human intervention, control may exist, but the resource is no longer within the scope of the [draft] Natural Resources Consultation Paper (CP). In these situations, the resource may be accounted for under other existing IPSAS depending on its use.

### **Background**

3. Task Force and staff discussed the control guidance and control indicators in paragraphs 5.11<sup>13</sup> and 5.12<sup>14</sup> of *The Conceptual Framework for General Purpose Financial Reporting by Public Sector Entities* (the Conceptual Framework) and developed control indicators to consider if an entity controls a living resource. These indicators are listed in paragraph 7 below.
4. However, if the description of a natural resource from chapter 1 of the [draft] CP was strictly applied, it could be argued that a living resource that is controlled may no longer be in its natural state, and thus no longer within the scope of the [draft] CP. Under this view, items that are considered living resources cannot be controlled and therefore cannot be recognized as assets. The following paper considers the issue of whether a living resource can be controlled by an entity and still remain in its natural state.

### **Analysis**

5. Paragraphs 3.18-3.52 of the [draft] CP set out the analysis performed to determine whether living resources can be recognized as an asset under IPSAS. The analysis was structured in line with the asset recognition criteria from the paragraph 6.2 of the Conceptual Framework and focused on the following considerations:

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<sup>13</sup> Paragraph 5.11 of the IPSASB Conceptual Framework states that an entity controls the resource if it has the ability to use the resource, or direct other parties on its use, or prevent other parties from using the resource so as to derive service potential or economic benefits embodied in the resource in the achievement of its service delivery or other objectives.

<sup>14</sup> Paragraph 5.12 of the IPSASB Conceptual Framework states that the indicators of control include: (a) Legal ownership; (b) Access to the resource, or the ability to deny or restrict others to access the resource; (c) The means to ensure that the resource is used to achieve its objectives; or (d) The existence of enforceable right to service potential or the ability to generate economic benefits arising from the resource.

- (a) Can living resources satisfy the definition of an element, in this case an asset? (See paragraphs 3.18-3.45 of the [draft] CP; and
  - (b) Can living resources be measurable in a way that achieves the qualitative characteristics and takes account of constraints on information in the general purpose financial reports (GPFRs)? (See paragraphs 3.46-3.50 of the [draft] CP.
6. Task Force and staff considered how control of living resources should be determined in paragraphs 3.24-3.41 of the [draft] CP and noted that determining whether an entity has control over a living resource may be difficult, because in certain instances:
- (a) These resources often increase or decrease as a result of a natural event;
  - (b) These resources are also frequently exposed to certain natural elements; and
  - (c) These resources may roam freely.
7. Despite these difficulties, the Task Force and staff agreed that paragraphs 5.11 and 5.12 of the Conceptual Framework can be applied to living resources to show when an entity controls a living resource. Tailoring the indicators from the Conceptual Framework to living resources, the Task Force and staff propose that control can be demonstrated if the entity:
- (a) Manages the condition of the living resource by intervening in its nutrition, health, reproduction, and environment;
  - (b) Is able to restrict the movement and/or access to the living resource through the use of enclosures or access to a reservation; and
  - (c) Is able to direct the use of the living resource.
8. However, if one were to apply the general description of natural resources in chapter 1 of the [draft] CP, one could argue that management of a resource, restricting the resource's movement and/or access to the resource, or directing the use of the resource are all considered human intervention, which would then take the resource out of its natural state. Under this view, the resource in question would no longer be a natural resource within the scope of the [draft] CP. Such a resource would instead be within the scope of IPSAS 12, *Inventories*, IPSAS 17, *Property, Plant, and Equipment*, or IPSAS 27, *Agriculture*, depending on the actions undertaken by the entity and the purpose or use of the resource.
9. Based on the above discussion, two possible views on control of living resources emerged:
- (a) **Option 1 – Control of a Living Resource is Possible:** It is possible for a living resource to be controlled by an entity if an entity meets the indicators in paragraph 7. However, in addition to meeting the control indicators, an entity would also need to apply judgment and consider whether the degree of human intervention is so significant that the resource is no longer a natural resource. Only living resources which are controlled and have not been subjected to a significant degree of human intervention remain within the scope of the [draft] CP; or
  - (b) **Option 2 – Living Resources Cannot be Controlled:** It is *not* possible for a living resource to be controlled by an entity because meeting any of the indicators of control in paragraph 7 would take the resource out of its natural state. Under this view, living resources cannot meet the definition of an asset and cannot be recognized in the financial statements under IPSAS.

## Agenda Item 6.2.5

If an entity can demonstrate that the control indicators are met, the resource could be accounted for under other existing IPSAS, as noted in paragraph 8.

10. Task Force and staff agreed that Option 1 was appropriate, and paragraphs 3.24-3.41 of the [draft] CP were drafted based on this view.

### **Decision Required**

11. Does the IPSASB agree with the Task Force's recommendations?

## **Measurement of Living Resources**

### **Questions**

1. Does the IPSASB agree:
  - (a) Living resources can be reliably measured;
  - (b) The chapter on living resources should focus on the measurement objective; and
  - (c) There is a rebuttable presumption that living resources are primarily held for their operational capacity.

### **Recommendations**

2. The Natural Resources Task Force (Task Force) and staff recommend that:
  - (a) Unlike subsoil resources, certain living resources can be reliably measured because they may be quantified;
  - (b) The chapter on living resources should only consider the measurement objective of living resources; and
  - (c) In determining the measurement objective, a rebuttable presumption exists that living resources are primarily held for their operational capacity.

### **Background**

3. The Task Force and staff concluded that:
  - (a) Living resources can be measured in a way that achieves the qualitative characteristics and takes account of constraints in the GPFRs because their quantities and price can be reasonably estimated; and
  - (b) The [draft] Natural Resources Consultation Paper ([draft] CP) should focus on the measurement objective for living resources and consider the appropriate measurement basis as a later phase in the project.

### **Analysis**

#### *Living Resources can be Reliably Measured*

4. The Task Force and staff considered whether living resources can be measured in a way that achieves the qualitative characteristics and consider the constraints in the GPFRs. (See paragraphs 3.46-3.50 of the [draft] CP).
5. Certain living resources are above ground and easily observable. As a result, unlike subsoil resources, certain living resources are quantifiable. Therefore, it may be possible to reliably estimate the economic benefits or service potential embodied by living resources because the value applied to the living resources needs to factor the estimated quantities of living resources.

#### *Approach to Consider the Measurement Objective*

6. As discussed in paragraphs 4-5, the Task Force and staff concluded living resources can be reliably measured. The next step was to determine the measurement bases applicable to living resources.

7. When developing the chapter on living resources, the Task Force and staff reflected on which measurement bases guidance should be applied for living resources because:
  - (a) The current Conceptual Framework's<sup>15</sup> measurement requirements are being updated. These updates are in the process of being exposed in ED 76, *Conceptual Framework, Chapter 7, Measurement Update* and ED 77, *Measurement*<sup>16</sup>. It is clear through the measurement project that the conceptual thinking on measurement has evolved; and
  - (b) It might not be appropriate to apply the measurement bases proposed in ED 76 and ED 77 as they are in the process of being exposed and not yet final.
8. Therefore, the Task Force and staff agreed that chapter 3 should only consider the measurement objective of living resources. Consideration of the appropriate measurement basis that reflects the measurement objective for living resources should be revisited after the proposals in ED 76 and ED 77 are finalized.

*Measurement Objective of Living Resources*

9. The key factor in selection of a measurement basis is the measurement objective; in particular, whether an asset is primarily held for its operational or financial capacity.
10. The Task Force and staff noted that in most situations, living resources are held for their operational capacity and not their financial capacity.<sup>17</sup> This is because living resources described in chapter 3 are primarily held in their natural state for preservation and stewardship purposes and are not expected to be held to generate future cash flows through use or sale.

**Decision Required**

11. Does the IPSASB agree with the Task Force and staff recommendations?

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<sup>15</sup> According to the 2014 Conceptual Framework, the measurement bases for assets are (a) Historical cost; and (b) Four current value measurement bases that include (i) Market value; (ii) Replacement cost; (iii) Net selling price; and (iv) Value in use. Various IPSAS also outline guidance on fair value as a measurement basis.

<sup>16</sup> ED 76, *Conceptual Framework, Chapter 7, Measurement Update* proposes to delete market value, replacement cost and net selling price as measurement bases for assets and proposes to include fair value and current service value as measurement bases for assets in the Conceptual Framework.

<sup>17</sup> When an asset is held for operational capacity, such asset is held to support the entity's ability to deliver services in future periods. When an asset is held for financial capacity, the asset is primarily held to generate future cash flows through use or sale to support the entity's capacity to fund its activities.

**Extract from the [Draft] Natural Resources Consultation Paper: Introduction, Chapters 1-3, and Appendix A**

1. The IPSASB Staff has included the introduction, Chapters 1-3, and Appendix A from the [draft] Natural Resources Consultation Paper. This version reflects the Natural Resources Task Force's detailed review of the [draft] Consultation Paper. As the IPSASB had previously reviewed the introduction, Chapters 1-2, and Appendix A (as an issues paper) at the December 2020 meeting, the revisions made to these sections since December 2020 have been highlighted in tracked changes.



Consultation Paper  
[October] 2021  
*Comments due: [January 31, 2022]*

## Natural Resources

This document was developed and approved by the International Public Sector Accounting Standards Board® (IPSASB®).

The objective of the IPSASB is to serve the public interest by setting high-quality public sector accounting standards and by facilitating the adoption and implementation of these, thereby enhancing the quality and consistency of practice throughout the world and strengthening the transparency and accountability of public sector finances.

In meeting this objective, the IPSASB sets IPSAS™ and Recommended Practice Guidelines (RPGs) for use by public sector entities, including national, regional, and local governments, and related governmental agencies.

IPSAS relate to the general purpose financial statements (financial statements) and are authoritative. RPGs are pronouncements that provide guidance on good practice in preparing general purpose financial reports (GPFRs) that are not financial statements. Unlike IPSAS RPGs do not establish requirements. Currently all pronouncements relating to GPFRs that are not financial statements are RPGs. RPGs do not provide guidance on the level of assurance (if any) to which information should be subjected.

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## REQUEST FOR COMMENTS

This Consultation Paper, *Natural Resources*, was developed and approved by the International Public Sector Accounting Standards Board® (IPSASB®).

The proposals in this Consultation Paper may be modified in light of comments received before being issued in final form. **Comments are requested by [MMM DD, YEAR].**

Respondents are asked to submit their comments electronically through the IPSASB website, using the “[Submit a Comment](#)” link. Please submit comments in both a PDF and Word file. Also, please note that first-time users must register to use this feature. All comments will be considered a matter of public record and will ultimately be posted on the website. This publication may be downloaded from the IPSASB website: [www.ipsasb.org](http://www.ipsasb.org). The approved text is published in the English language.

## Guide for Respondents

The IPSASB welcomes comments on all of the matters discussed in this Consultation Paper, including all Preliminary Views and Specific Matters for Comment. Comments are most helpful if they indicate the specific paragraph or group of paragraphs to which they relate and contain a clear rationale.

The Preliminary Views and Specific Matters for Comment in this Consultation Paper are provided below. Paragraph numbers identify the location of the Preliminary View or Specific Matter for Comment in the text.

### Preliminary View 1—Chapter X (following paragraph X)

The IPSASB’s Preliminary View...

Do you agree with the IPSASB’s Preliminary View?

If not, please provide your reasons, the list, and why.

### Preliminary View X—Chapter X (following paragraph X)

The IPSASB’s Preliminary View...

Do you agree with the IPSASB’s Preliminary View?

If not, please provide your reasons, and state what guidance should be included, and why.

# NATURAL RESOURCES

## CONTENT

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	Page
Guide for Respondents .....	3
Introduction and Project Overview .....	6
Why is this Project Being Undertaken? .....	6
What is the Scope of This Project? .....	7
Approach Taken in this Consultation Paper .....	8
Consideration of the IPSASB's Conceptual Framework .....	9
Consideration of Other Existing IPSASB Guidance .....	11
National Public Sector Accounting Guidance .....	13
Consideration of Government Finance Statistics and System of National Accounts .....	13
Private Sector Practices [To consider if details should be moved to subsoil resources chapter] .....	15
Chapter 1: General Description of Natural Resources .....	18
Definitions from Other Sources .....	18
Proposed General Description of Natural Resources .....	19
Application of the General Description to Resources within the Scope of the CP .....	20
Potential Natural Resources which are not within Scope of the CP .....	20
Chapter 2: Subsoil Resources .....	21
Description of Subsoil Resources .....	21
Clarification of what is Considered a "Subsoil Resource" .....	21
Application of the Asset Recognition Criteria to Subsoil Resources .....	24
Recognition of the Costs of Activities Related to Subsoil Resources .....	34
Measurement and Potential Disclosures .....	34
Chapter 3: Living Resources .....	35
Introduction .....	35
Describing Living Resources .....	36
Interaction of Living Resources with Existing IPSAS Guidance .....	38
Recognition of a Living Resource as an Asset .....	40
Consideration of whether Living Resources are Measurable .....	44
Conclusion on the Recognition of a Living Resource as an Asset .....	45
Measurement Considerations .....	45

## NATURAL RESOURCES

Chapter 4: Water .....	47
Introduction .....	47
Recognition .....	47
Measurement .....	47
Chapter 5: Other Considerations .....	48
Consistency with Current IPSAS .....	48
Consideration of Whether Current IPSAS Adequately Address Derecognition if Natural Resources are Recognized as Assets .....	48
Disclosure Considerations for Natural Resources which do not Meet the Asset Recognition Criteria .....	48
Other Issues .....	48
Appendix A: Recognition of a Government's Sovereign Power to Issue Licenses as an Asset .....	49
Background .....	49
Example .....	49
Appendix B: Placeholder .....	52

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## Introduction and Project Overview

### Why is this Project Being Undertaken?

1. In 2018, the IPSASB issued its Strategy Consultation and requested comments on the proposed Strategy and Work Plan. Based on the responses from constituents and initial research, the IPSASB added the natural resources project to its 2019-2023 Work Plan.
2. The key reasons for adding the project were as follows:
  - (a) Significance of Natural Resources - Based on preliminary research, the IPSASB noted that natural resources account for a significant proportion of economic resources in many jurisdictions.<sup>1</sup> Therefore, the recognition of natural resources as assets could lead to information regarding the financial position of a public sector entity which is more faithfully representative of the underlying economic reality, particularly in jurisdictions with resource-based and resource-rich economies.
  - (b) Need for Guidance - Based on responses to the strategy consultation, the IPSASB noted a lack of guidance over the accounting of natural resources, as respondents were concerned that there is a gap in the IPSASB's accounting guidance on the recognition, measurement, disclosure, and presentation of natural resources.
  - (c) Lack of Information for Decision Making - Some constituents noted that governments often have little idea of the monetary value of natural resources until after they are exploited (i.e., extracted, harvested, or utilized), and that the rights to access such resources are normally granted beforehand to third parties who then profit from their extraction, harvest or utilization~~exploitation~~. As a result of the lack of information, governments are perceived as being incentivized to sell as much natural resources as possible, often without regard to financial, environmental, sustainability<sup>2</sup> or intergenerational fairness, because the resulting revenues are recognized with little or no offsetting expenses. Therefore, from a public interest perspective, the recognition—or, if recognition in the financial statements is not possible, reporting more general reporting—of natural resources is an important issue, as ~~the identification and quantification of information about~~ these resources prior to their extraction or other use should inform policy decisions.
  - (d) Priority for Policies on Long-Term Environmental Sustainability - In light of the growing concern for climate change, many governments and public sector entities are prioritizing sustainable management of the natural environment in the development of their policies. While this project does not directly address environmental sustainability or climate change, the development of an accounting standard for the recognition and measurement of some natural resources will provide better information that can be used to inform public financial management decisions and policy making.
3. To address the concerns raised by constituents, the objective of the natural resources project is to develop IPSAS guidance relating to the accounting—i.e., the recognition, measurement,

<sup>1</sup> The IMF October 2018 Fiscal Monitor highlighted that for the 31 countries included in the report, natural resource economic assets were equal to 38% of Gross Domestic Product.

<sup>2</sup> In the context of this paragraph, sustainability refers to balancing between environmental protection and economic development. This is a different concept from fiscal sustainability as described in RPG 1, *Reporting on the Long-term Sustainability of an Entity's Finances*.

presentation, and disclosure—of natural resources prior to their ~~exploitation~~~~extraction, cultivation or harvest~~.

### What is the Scope of This Project?

4. This project focuses on the accounting for tangible, naturally occurring resources, including subsoil resources, living resources, and water in their natural state.

5. Other resources such as air and the electromagnetic spectrum may be considered natural resources in other contexts. ~~However, these other resources but~~ have been excluded from this project, as the issues raised by constituents relate to the right to access these resources rather than the recognition and measurement of the underlying resources. ~~For a more detailed discussion of which items are included within the scope of this project, refer to Chapter 1 of this Consultation Paper (CP).~~

(a) ~~While it is common for some governments to sell air rights for the purposes of air travel or infrastructure development, these rights embody the ability to legally access the airspace in the jurisdiction, rather than exploiting the underlying air itself. In other words, the use of the airspace for air travel depends on legal and technological limitations rather than consumption of the underlying air. The accounting for these rights would more appropriately fall within the scope of IPSAS 31, Intangible Assets.~~

(b) ~~The electromagnetic spectrum includes visible light, microwaves, and radio waves, which can be used for telecommunication purposes. It is common for governments to control the commercial use of the spectrum in its jurisdiction through licenses and similar mechanisms. Like air rights, these spectrum licenses relate to the legal right to access the spectrum, and any related accounting issues would more appropriately fall within the scope of IPSAS 31. In addition, the spectrum is uniquely different from other resources in that it does not have tangible form and the limits on its use arise from the related telecommunications technology rather than limits on consumption of the spectrum itself.~~

5.6. In addition, the accounting for land is also excluded from the project, as land is already within the scope of IPSAS 17, *Property, Plant and Equipment*. Furthermore, a government's sovereign power to issue ~~exploration~~ licenses is excluded, as ~~the exercise of sovereign powers can facilitate transactions which can result in the recognition of an asset, but such an asset would arise from the transaction itself rather than from the sovereign power. This is further~~ explained in Appendix A: Recognition of a Government's Sovereign Power to Issue Licenses of this CP.

6.7. During the IPSASB's preliminary outreach, constituents advocated for a broader sustainable management model driven by accounting requirements for subsoil resources. ~~While this model was specific to subsoil resources, the points raised are applicable for all natural resources in scope of this project.~~ The aim of the model is to ensure long-term sustainability ~~the management model~~ of such resources to preserve intergenerational equity for citizens. Such a model includes the following key principles:

(a) The state is the custodian for all natural resources ~~and are~~ is responsible for their management on behalf of the people. For non-regenerative natural resources such as subsoil resources, the state is also responsible for ~~stewardship and~~ conservation of the resource for the benefit of future generations;

- (b) The state should ensure that ~~Require selling~~ mineral resources are sold at a price that is considered fair~~zero-loss~~;
- (c) The state should ~~r~~Require ~~the~~ proceeds from the sale of mineral resources or mineral resource rights to be placed in some form of management or investment structure, which then ~~could be managed, and distribute~~ any resulting investment income ~~could be distributed~~ to citizens—for example, investing the sale proceeds in a trust fund then distributing the income from the fund to citizens as a dividend; and
- (d) The state should ~~n~~ot presenting the proceeds from sale as “revenue” in the financial statements, in order to change the perception that the sale of natural resources results in windfall gains for the government.

7.8. ~~While the IPSASB agrees that maintaining intergenerational equity is an important public policy decision for all natural resources. However, It should be noted that~~ points (a)-(c) in the above model addresses public finance management policies rather than accounting guidance. The IPSASB acknowledges that maintaining sustainability and intergenerational equity, as well as addressing public finance management issues are important. However, since these issues do not directly relate to accounting for natural resources, this CP will not provide guidance on these broader public finance management issues. The focus of this CP is to propose preliminary views based on the IPSASB's Conceptual Framework for General Purpose Financial Reporting by Public Sector Entities (Conceptual Framework) on the accounting of natural resources. These views could result in information which will be useful in formulating and implementing these public finance management policies.

### Approach Taken in this Consultation Paper

8.9. The first chapter of the CP focuses on a general description of what is considered a natural resource in the context of this project. This chapter also further articulates the project's scope.

10. Chapters 2-4 of the CP outline the IPSASB's PVs on the recognition and measurement of the natural resources which are within the scope of this project. The PVs are: formulated

(a) Formulated primarily from the application of the recognition criteria and measurement principles from the ~~IPSASB's Conceptual Framework for General Purpose Financial Reporting by Public Sector Entities (Conceptual Framework);~~

(b) and ~~i~~ informed by existing IPSASB guidance over broader General Purpose Financial Reports (GPFR) such as the Recommended Practice Guidelines (RPGs); and, as well as

~~(c)~~ (c) Consider the natural resources-related practices in various countries, including any national public sector accounting guidance developed and in the private sector.

9.11. For each of the in-scope natural resources, this CP first focuses on determining when a natural resource meets the criteria to be recognized as an asset. This analysis is performed by applying the definition of an asset and the recognition criteria as set out in paragraphs 5.6 to 5.13 of the Conceptual Framework. The recognition analysis also considers factors which are specific to each natural resource. For example, the analysis of the recognition of subsoil resources as an asset considers jurisdictional laws and regulations and whether the resources can be controlled by an entity in the context of the applicable legal framework.

10.12. [If the IPSASB reaches a PV that an in-scope natural resource can be recognized as an asset, the next step is to consider the measurement principles, as set out in chapter 7 of the Conceptual



Framework, to formulate PVs on which measurement bases most appropriately reflect a natural resource's operational capacity or financial capacity or the cost of related services. **[To be revisited once full CP has been drafted.]** For example, a government entity may derive value from a subsoil resource by selling the underlying mineral reserves or by selling licenses to a private sector entity, who will then develop and extract the resource. These different approaches to the realization of the value inherent in the subsoil resource could result in the selection of different measurement bases. The measurement analysis also includes the consideration of factors such as the availability of the information required to determine a measurement basis, the cost of obtaining such information, as well as the reliability of this information.

**14.13.** For instances where the IPSASB reaches a PV that a certain in-scope natural resource did not meet the recognition criteria, the CP does not discuss measurement of the natural resource, as there would be no asset to measure. However, certain information relating to measurement may be considered in the discussion of disclosures of unrecognized natural resources.

**14.14.** The last chapter of the CP focuses on overarching issues which may apply to all three in-scope natural resources. These include the consistency of PVs with existing IPSAS, as well as other current IPSASB projects such as the Conceptual Framework – Limited Scope Update project and the Measurement project. ~~For in-scope natural resources which the IPSASB preliminarily concluded cannot be recognized as assets, c~~Chapter 5 will also considers ~~PVs over~~ the disclosure of ~~these in-scope natural~~ resources.

### Consideration of the IPSASB's Conceptual Framework

**14.15.** ~~While not authoritative, t~~he IPSASB's Conceptual Framework provides principles to be used in developing IPSAS. The definitions, recognition criteria, and measurement principles in the Conceptual Framework forms the basis for our development of the IPSASB's PVs on natural resources in Chapters 2-5 of this CP.

#### Recognition

**14.16.** For an entity to recognize a natural resource as an asset for financial reporting purposes, the natural resource must meet the recognition criteria in 6.2 of the Conceptual Framework, which states:

“The recognition criteria [the criteria that must be satisfied in order for an element to be recognized in the financial statements] are that:

- An item satisfies the definition of an element; and
- Can be measured in a way that achieves the qualitative characteristics and takes account of constraints on information in GPFs.”

**14.17.** The definition of an asset is set out in paragraph 5.6 of the Conceptual Framework. That is, to be recognized as an asset, the natural resource must be a *resource presently controlled* by the entity as a result of a *past event*.

**14.18.** A resource ~~is defined as~~ an item with service potential or the ability to generate economic benefits. The Conceptual Framework explains that physical form is not a necessary condition of a resource, and that the service potential or ability to generate economic benefits can arise directly from the resource itself or from the rights to use the resource.<sup>3</sup> Service potential is the capacity to provide services that contribute to achieving the entity's objectives without necessarily generating net cash

<sup>3</sup> [Conceptual Framework, paragraph 5.7.](#)

inflows. Economic benefits can include the generation of cash inflows or reductions in cash outflows in the form of cost savings or synergies. For the natural resources which are within the scope of this project, there is very little question that these items are resources once they have been ~~exploited~~extracted or harvested:

~~(f)~~(d) Extracted subsoil resources can generate economic benefits through sale or service potential through their use in construction, the manufacture of goods, or combusted for the generation of energy;

~~(g)~~(e) Living resources can generate economic benefits as they can be harvested for a wide variety of uses including consumption, manufacturing of textiles, as well as energy generation. The preservation of living resources can also provide service potential for future generations (e.g., rain forests which are preserved and allowed to remain in their natural state can provide service potential through the absorption of carbon from the atmosphere); and

~~(h)~~(f) Water is required to sustain life and thus inherently has value. The preservation and, depending on water quality, treatment of ~~potable~~ water can lead to the generation of economic benefits through sale or provide service potential through its use.

However, the key question for consideration in the CP is whether these items can be considered controlled resources while they are still in their natural state. Therefore, the analysis over recognition in chapters 2-4 of the CP focuses on whether an entity can control the resource *prior to* ~~exploitation~~extraction or harvest and whether control resulted from a past event.

**17.19.** Control of a resource entails the ability of the entity to use the resource (or direct other parties on its use) so as to derive the benefit of the service potential or economic benefits embodied in the resources in the achievement of its service delivery or other objectives.<sup>4</sup> This ability to use the resource is often supplemented by the ability to deny or restrict the access of others to that resource.<sup>5</sup> For natural resources, whether an entity presently controls the resource will depend on factors such as ownership, the ability to access the resource, including consideration of laws and regulations which may prevent an entity from accessing the resource, as well as whether the entity has enforceable rights to the service potential or the ability to generate economic benefits from the resource.

**18.20.** In addition, the analysis will also consider whether control of the resource arose from a past event. Unlike other items which are recognized as assets, it is often rare for an entity to have gained control of the natural resources through acquisition or development, or even by way of assignment in legislation, as this project is dealing with natural resources prior to their ~~exploitation~~extraction, cultivation or harvest (i.e., prior to human intervention). Therefore, the analysis in chapters 2-4 will consider the best way to define past events as they are relevant to natural resources. For example, consideration will be given to whether control arose through the exercise of sovereign powers, as suggested in paragraph 5.13 of the Conceptual Framework.

Measurement ~~[To be revised to use consistent wording with Measurement and revised Conceptual Framework, once finalized.]~~

**19.21.** The objective of the measurement principles in the Conceptual Framework is to select measurement bases that most fairly reflect the cost of services, operational capacity and financial

<sup>4</sup> Conceptual Framework (2014), paragraph 5.11.

<sup>5</sup> Conceptual Framework (2014), paragraph BC5.12.

capacity of the entity in a manner that is useful in holding the entity to account, and for decision-making purposes.<sup>6</sup> The selection of a measurement basis also includes an evaluation of the constraints ~~and availability~~ of information in general purpose financial reports.

20-22. For the natural resources within the scope of this project, chapters 2-4 of the CP will consider what measurement bases are the most appropriate and whether it is feasible for an entity to obtain the information necessary to estimate these measurement bases using the measurement techniques available.

### Consideration of Other Existing IPSASB Guidance

21-23. While the objective of this project is to develop an IPSAS that directly addresses the recognition, measurement, presentation and disclosure of natural resources, other parts of IPSASB's existing guidance may be applicable and will be incorporated into the detailed analysis in chapters 2-5 of this CP. At a high level, the other sources of guidance that may be applicable to natural resources are as follows:

#### *IPSAS that are Indirectly Related to Natural Resources*

22-24. IPSAS 17 is applicable to the capital assets acquired or constructed to explore, evaluate, or develop natural resources, while IPSAS 31, *Intangible Assets*, is applicable to resource-related intangible assets such as exploration licenses acquired by an entity.<sup>7</sup> IPSAS 32, *Service Concession Arrangement: Grantor*, is also applicable to certain arrangements where an unrelated entity is ~~exploiting~~developing or extracting natural resources on behalf of a public sector entity. In addition, IPSAS 12, *Inventories*, is applicable to ~~extracted~~exploited natural resources while resources whose biological transformation is actively managed falls within the scope of IPSAS 27, *Agriculture*. However, it should be noted that these three standards do not explicitly apply to the underlying natural resources prior to their ~~exploitation~~extraction, cultivation, or harvest.

23-25. IPSAS 19, *Provisions, Contingent Liabilities and Contingent Assets*, is applicable to provisions and contingent liabilities which arise as a result of a public sector entity's legislation, policies or decisions regarding natural resources. For example, a government may announce plans to decommission or rehabilitate unused mines or open pits. As another example, a government may provide funding to farmers or public sector landowners to preserve their properties in their natural state. Depending on the details of the announcement and how such plans are communicated to third parties, certain announcements may result in constructive obligations which would require recognition in the financial statements.

24-26. IPSAS 21, *Impairment of Non-Cash-Generating Assets*, and IPSAS 26, *Impairment of Cash-Generating Assets*, provide guidance on the recognition, and if applicable reversal, of impairment losses, as well as related disclosures. If natural resources are to be recognized as assets, these standards will provide guidance on the consideration of impairment for these assets.

#### *IPSASB Guidance in Development*

25-27. Certain draft standards and current IPSASB projects may also impact the IPSASB's PVs and should be considered. For example, the views on measurement of natural resources will need to

<sup>6</sup> Conceptual Framework (2014), paragraph 7.2.

<sup>7</sup> The IPSASB has issued an ED 78, *Property, Plant, and Equipment*, which includes proposals to replace IPSAS 17, *Property, Plant, and Equipment*, with a standard that includes additional guidance on measurement, infrastructure, and heritage assets. See [\[INSERT LINK\]](#) for more details.

be consistent with any new guidance developed in the IPSASB's Measurement project or its limited scope update of the Conceptual Framework. The proposed guidance on revenue and other IPSASB projects in development may also be relevant if the IPSASB concludes that certain natural resources should be recognized as assets. **[Consider if revisions/more details needed once Measurement ED and amendments to Conceptual Framework have been approved by the IPSASB.]**

#### *Recommended Practice Guidelines*

**26-28.** The existing RPGs could be applicable to natural resources in a public sector entity's GPFR as follows:

- (a) RPG 1, *Reporting on the Long-term Sustainability of an Entity's Finances*, provides recommendations on the reporting of long-term fiscal sustainability of a public sector entity's finances. If a public sector entity's current policies and decisions regarding natural resources are expected to impact the entity's projected future inflows and outflows, RPG 1 will be relevant to the broader disclosures regarding how natural resources are expected to impact a public sector entity's long-term fiscal sustainability;
- (b) RPG 2, *Financial Statement Discussion and Analysis*, provides guidance on the preparation and presentation of a public sector entity's financial statement discussion and analysis, which is an explanation of the significant items, transactions and events presented in the entity's financial statements and the factors that influenced them. RPG 2 requires the financial statement discussion and analysis to include a discussion of the principal risks and uncertainties that could affect the entity's financial statements, how these risks and uncertainties relate to the entity's objectives and strategies, as well as an explanation of how these risks are managed. If natural resources have a significant impact on a public sector entity's financial position, financial performance and cash flows, RPG 2 will require an explanation of how these resources impacted the financial statements, as well as a discussion of the risks and uncertainties relating to these resources;
- (c) RPG 3, *Reporting Service Performance Information*, provides guidance on the reporting of service performance information in a public sector entity's GPFRs. Service performance information is information on the services that the entity provides, the entity's service performance objectives, and the extent of its achievement of these objectives. If the services performed by an entity relate to natural resources—for example, the management of licences for exploration and development of subsoil resources—RPG 3 would require the discussion of how the natural resources are impacting its services.

#### *Other Non-Authoritative IPSASB Guidance*

**27-29.** While the objective of this project is to develop one or more IPSAS on the recognition, measurement, presentation, and disclosure of natural resources, the topic of environmental management more generally, and climate change in particular, often comes to mind when contemplating the [exploitation, extraction or other use](#) of natural resources. In response to a number of queries regarding which existing IPSASB guidance are relevant to the broader general purpose financial reporting on climate change, the IPSASB staff developed a Staff Q&A document highlighting the IPSAS and RPGs which could be relevant to climate change. This document can

be found at: <https://www.ifac.org/system/files/publications/files/IPSASB-Staff-QA-Climate-Change-Relevant-Guidance.pdf>.

### National Public Sector Accounting Guidance

- ~~28.30.~~ The Standard of Generally Recognized Accounting Practice 110, *Living and Non-Living Resources* (GRAP 110) issued by the South African Accounting Standards Board classified natural resources into living and non-living resources. Under GRAP 110, non-living resources other than land are not recognized as assets, and the disclosure of information such as the nature and type of non-living resources, any related liabilities or contingent liabilities, and the amount of compensation received for the disposition of any non-living resources, are required.
- ~~29.31.~~ For living resources, GRAP 110 sets out the criteria that must be met for a living resource to be recognized as an asset and requires living resource assets to be initially measured at cost, which includes the cost of acquisition and any costs directly attributable to bringing the living resource to the location and condition necessary for it to be capable of operating in its intended manner. Subsequent to initial recognition, an entity may choose to measure living resource assets at costs or fair value using a revaluation model if fair value can be reliably measured.
- ~~30.32.~~ In the United States, the Federal Accounting Standards Advisory Board (FASAB) issues standards and guidance for the United States federal government and component entities. In Statement of Federal Financial Accounting Standards 38, *Accounting for Federal Oil and Gas Resources* (SFFAS 38), and Technical Bulletin 2011-1, *Accounting for Federal Natural Resources Other than Oil and Gas*, the FASAB requires federal government entities to report the present value of estimated royalties from proved oil and gas reserves and certain non-renewable resources in the entities' Required Supplementary Information, which are schedules that are outside the general purpose financial statements.
- ~~34.33.~~ In addition, the Australian Water Accounting Standards Board developed a set of standards on the recognition, quantification, presentation, and disclosure of water volumes in the jurisdiction. The South African government has also implemented a similar set of standards to monitor and track water. However, neither of these standards relate to financial reporting, as these standards are used to produce reports which track water volume levels and flows for management purposes.

### Consideration of Government Finance Statistics and System of National Accounts

- ~~32.34.~~ Government Finance Statistics (GFS) and System of National Accounts (SNA) reporting are used by governments to produce financial information for macroeconomic analysis and evaluation of fiscal policy, especially the performance of the general government sector and the broader public sector of an economy.<sup>8</sup> Meanwhile, financial statements produced using IPSAS are used for accountability and to support decision making.
- ~~33.35.~~ While the information produced from GFS, SNA and IPSAS are used for different purposes, the statistical and financial reporting information have considerable overlap in that they are both based on financial accrual information, and they both pertain to a government's assets, liabilities, revenue, expenses and cash flows. As a result, significant benefits, such as a reduction in preparation time, effort and costs, can be achieved from using a single integrated financial information system to generate IPSAS financial statements, as well as SNA and GFS reports.

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<sup>8</sup> GFSM (2014), paragraph 1.2.

34.36. Where possible, the IPSASB have made efforts to harmonize the recently developed IPSAS with GFS and SNA by aligning various IPSAS requirements with statistical reporting guidelines, or by providing IPSAS accounting policy options which are consistent with statistical reporting guidance. Where such harmonization is not possible, the supplementary guidance is developed to ensure that differences can be understood and managed.<sup>9</sup>

35.37. In developing the PVs on recognition and measurement of the in-scope natural resources, it will be important to consider the existing GFS and SNA guidance on recognition and measurement, and whether it is possible to develop harmonized guidance that is consistent with the IPSASB conceptual framework.

### *Recognition*

36.38. With respect to natural resources, the 2014 version of the Government Finance Statistics Manual (GFSM (2014)) has an established definition for natural resources as well as requirements relating to the recognition of natural resources.<sup>10</sup> GFSM (2014) paragraph 90 states:

“Nonproduced assets consist of tangible, naturally occurring assets—natural resources—over which ownership rights are enforced. Natural resources comprise land, mineral and energy resources, and other naturally occurring assets. If ownership rights have not or cannot be enforced over naturally occurring resources, then they are not economic assets.”

37.39. Paragraph 7.5 of GFSM (2014) states that natural resources are only recognized in macroeconomic statistics if such resources have a legal owner, either on an individual or collective basis.

38.40. The 2008 version of the System of National Accounts (SNA (2008)) also contains guidance on the recognition of natural resources in the context of what naturally occurring resources fall within the asset boundary of the SNA from those that do not. Paragraphs 10.167 and 10.168 of the SNA (2008) state:

“In the first place, it must be noted that the accounts and balance sheets of the SNA are compiled for institutional units or groups of units and can only refer to the values of assets that belong to the units in question. Only those natural occurring resources over which ownership rights have been established and are effectively enforced can therefore qualify as economic assets and be recorded in balance sheets. They do not necessarily have to be owned by individual units, and may be owned collectively by groups of units or by governments on behalf of entire communities. Certain naturally occurring resources, however, may be such that it is not feasible to establish ownership over them: for example, air, or the oceans. In addition, there may be others that cannot be treated as economic assets because they do not actually belong to any particular units. These include not only those whose existence is unknown but also those, including uncultivated forests, that may be known to exist but remain so remote or inaccessible that, in practice, they are not under the effective control of any units.

Secondly, in order to comply with the general definition of an economic asset, natural assets must not only be owned but must also be capable of bringing economic benefits to their owners, given the technology, scientific knowledge, economic

<sup>9</sup> See paragraph 23 of Process for Considering GFS Reporting Guidelines During Development of IPSASs for more details: <https://www.ifac.org/system/files/publications/files/IPSASB-GFS-Policy-Paper.pdf>

<sup>10</sup> The 2008 version of the System of National Accounts (SNA), another statistical accounting framework that is similar to GFS but used by different jurisdictions, has a similar definition. SNA 13.44-13.51 states, “Natural resources consist of natural occurring resources such as land, water resources, uncultivated forest and deposits of minerals that have an economic value.”



infrastructure, available resources and set of relative prices prevailing on the dates to which the balance sheet relates or expected to do so in the near future. Thus, known deposits of minerals that are not commercially exploitable in the foreseeable future are not included in the balance sheets of the SNA, even though they may possibly become commercially exploitable at a later date as a result of major, unforeseen advances in technology or major changes in relative prices.”

**39.41.** Based on the above, it appears that the recognition criteria under GFS (2014) and SNA (2008) both emphasize economic ownership rights, which are based on the consideration of risks and rewards. In contrast, under IPSAS, a resource is only recognized if it meets the definition of an asset—i.e., the reporting entity controls the resource as a result of a past event. Consideration of risks and rewards can be an indicator of control but is not necessary in all situations. While the consideration of control versus risks and rewards appears to be different, some in the statistical community are of the view that the substance of the various recognition criteria were not meant to be significantly divergent.<sup>11</sup> As a result, the analysis of recognition in chapters 2-5 of this CP will include consideration of whether it is possible to have recognition proposals which are in line with the IPSASB’s conceptual framework and aligned with the statistical accounting frameworks.

### *Measurement*

**40.42.** Paragraph 7.20 of the GFSM (2014) generally requires assets and liabilities to be measured at current value. ~~In addition, p~~ Paragraphs 7.98, 7.101, and 7.102 of GFSM (2014) specifically require subsoil resources (referred to as mineral and energy resources in the GFSM), living resources (referred to as noncultivated biological resources), and water to be valued at the present value of expected net future returns. For subsoil resources, the paragraph 7.98 also states that if the ownership of subsoil assets changes frequently, it may be possible to value the resource based on market prices.

**41.43.** Under IPSAS, the initial measurement of assets is often based on current value, as measures such as fair value reflect the operational or financial capacity of an asset at the time of acquisition. However, the subsequent measurement of assets under IPSAS varies by assets, as the individual IPSAS have differing requirements for subsequent measurement. In certain IPSAS, such as IPSAS 17 the standard provides an accounting policy choice to measure assets at historical cost or fair value subsequent to initial recognition. Therefore, unlike recognition, there appears to be the potential to formulate PVs which may align with GFS. This potential will be analyzed in more detail in chapters 2-4 where the measurement of each in-scope natural resource is considered.

### **Private Sector Practices [To consider if details should be moved to subsoil resources chapter]**

**42.44.** In developing a potential standard on the recognition and measurement of natural resources, the practices dealing with natural resources in the private sector will also be considered in this CP.

**43.45.** In the private sector, the underlying natural resources are typically not directly accounted for under International Financial Reporting Standards (IFRS). The generally accepted view in the private sector is that the high degree of uncertainty and subjectivity over both the existence and the amount of the natural resource prior to their ~~exploitation~~~~extraction or harvest~~ prevent the entity from recognizing these resources as assets. In contrast to the private sector, a public sector entity such as a government may be able to generate economic benefits by selling exploration rights, and the

<sup>11</sup> The issue of the differences in recognition criteria was discussed in the Workshop of the IMF, IPSASB, Eurostat and OECD, which took place on May 20-22, 2020.

value of these rights do not always directly relate to the existence of mineral resources. [In many cases, the value of these rights is driven by speculation regarding the existence of mineral resources.](#) Many countries also have a legal framework which would support the view that natural resources belong to the state. Therefore, in some cases, a public sector entity may have a lower degree of uncertainty over a natural resource's ability to generate economic benefits. The question of whether an asset can be recognized for the sovereign right to sell exploration rights will be analyzed in detail in chapter 2 of this CP.

**44.46.** Under IFRS, there are accounting requirements for items or transactions which indirectly relate to the underlying natural resources:

- (a) In situations where a developed property with natural resources or a property with potential resources is acquired, IFRS 3, *Business Combinations*, requires the recognition of the property at fair value. The recognized fair value is based on the estimated quantities of resources valued at long-term commodity prices at the time of acquisition [and supported by the amount of consideration exchanged in the business combination](#). While these estimates are periodically updated, these updates are only used for impairment and depletion purposes, and are not used for revaluation of the asset [or to recognize any new assets. This is because, absent the exchange of consideration, the resource and reserve estimates are not sufficiently reliable to support revaluation or recognition of an asset. See paragraphs 2.26-2.37 for more details](#);
- (b) Expenditures related to the exploration and evaluation of a property with potential natural resources are accounted for using IFRS 6, *Exploration for and Evaluation of Mineral Resources*<sup>12</sup>, which provides entities with an accounting policy choice to recognize these expenditures as an asset or expense as they are incurred. IFRS 6 also refers to the IASB's Conceptual Framework for Financial Reporting (IASB's Conceptual Framework) as well as IAS 38, *Intangible Assets*, for guidance on the recognition of assets arising from the development of resources;
- (c) IFRIC 20, *Stripping Costs in the Production Phase of a Surface Mine*, provides guidance on the recognition and measurement of costs incurred to remove surface materials during the development and production phases of a mine; and
- (d) Similar to the IPSASs as discussed in paragraphs 24-26 above, IAS 16, *Property, Plant and Equipment*, IAS 38, *Intangible Assets*, IAS 2, *Inventories*, IAS 41, *Agriculture*, IAS 37, *Provisions, Contingent Liabilities and Contingent Assets*, and IAS 36, *Impairment of Assets*, provide guidance on items or transactions which indirectly relate to natural resources.

**45.47.** In addition to the above accounting practices, many jurisdictions require the disclosure of information relating to natural resources in their broader GPFRs. For example, while the specific requirements of each jurisdiction can vary broadly, the following information is typically required in the regulatory filings of mining entities in the private sector<sup>13</sup>:

- (a) An estimate of reserves and resources, as prepared by a qualified person (e.g., a professional geologist). Reserves are quantities of minerals estimated with a high level of geological confidence while resources are estimates at lower levels of geological confidence;

<sup>12</sup> It should be noted that IFRS 6 defines mineral resources to include minerals, as well as oil, natural gas and similar non-regenerative resources.

<sup>13</sup> Based on requirements from National Instrument 51-102 for Canadian mining companies.



## NATURAL RESOURCES

- (b) Technical reports which include an assessment of whether ~~exploitation~~ extraction of the natural resource will be feasible. Technical reports are required to be filed upon first-time reporting in the jurisdiction or upon a material change (as defined by regulation in each jurisdiction) in reserves or resources; and
- (c) In cases where not enough information is available to formulate an estimate of reserves, a preliminary economic assessment which contains an estimate of resources and discusses the potential viability of a project.

## Chapter 1: General Description of Natural Resources

- 1.1. [At the current stage of the Natural Resources project, only a general description, rather than a finalized definition, of natural resources will be proposed in this CP, as this general description is subject to change. A formal definition of natural resources may be developed later in the project based on constituent feedback and once the IPSASB has formulated more PVs. [Section to be updated subject to the development of chapters 2-5.]]

### Definitions from Other Sources

- 1.2. To develop a general description, this CP draws from definitions of natural resources in more general, non-technical sources such as the plain English definition as well as definitions from economic texts. This CP also draws from more narrow statistical accounting frameworks such as the GFS (2004) and SNA (2008), as well as specific accounting frameworks such as the Standards of Generally Recognized Accounting Practice from South Africa (South African GRAP).

#### *Plain English Definition*

- 1.3. The current plain English definition on Wikipedia combines the definitions from the Oxford and Student dictionaries with those from investorwords.com and yourdictionary.com. Wikipedia notes that natural resources are resources, or items with service potential or the ability to generate economic benefits, that exist without actions of humankind and includes all valued characteristics such as magnetic, gravitational, electrical properties and forces, etc. On earth, natural resources include sunlight, atmosphere, water, land, including all minerals along with all vegetation, crops and animal life that naturally subsists upon or within the identified characteristics and substances.<sup>14</sup>

#### *Definition from Economic Literature*

- 1.4. One economic text describes natural resources as follows:<sup>15</sup>
- “Natural resources, such as forests and commercially exploitable fisheries, and environmental attributes such as air quality, are valuable assets in that they yield flow of services to the people. Public policies and the actions of individuals and firms can lead to changes in these service flows, thereby creating benefits and costs.”

#### *Definitions from Statistical Accounting Frameworks*

- 1.5. The statistical accounting guidance in GFS and SNA currently define natural resources as follows:
- (a) Paragraph 7.90 of GFSM (2014) notes that natural resources comprise of land, mineral and energy resources, and other naturally occurring assets; and
  - (b) Paragraphs 13.44-13.51 of SNA (2008) states that natural resources consist of naturally occurring resources such as land, water resources, uncultivated forests and deposits of minerals that have an economic value.

#### *South African GRAP*

- 1.6. GRAP 110 does not define natural resources, but the standard defines living and non-living resources as follows<sup>16</sup>:

<sup>14</sup> [https://en.wikipedia.org/wiki/Natural\\_resource](https://en.wikipedia.org/wiki/Natural_resource); retrieved September 2020.

<sup>15</sup> Freeman III, A. M., Herriges, J. A., & Kling, C. L. (2014). The Measurement environmental and resources value: theory and methods (3rd ed.). Oxon: Taylor & Francis, page 2.

<sup>16</sup> The definitions of living and non-living resources are found in paragraph 8 of GRAP 110.

“Living resources are those resources that undergo biological transformation...” and

“Non-living resources are those resources, other than living resources, that occur naturally and have not been extracted.”

1.7. Paragraph 10 of GRAP 110 further states:

“At the point of extraction, non-living resources such as water, minerals, oils and gas and other non-regenerative resources, no longer occur in their natural state and do not meet the definition of a non-living resource.”

#### *FASAB Definition*

1.8. The FASAB's Technical Bulletin 2011-1 does not define natural resources generally, but Federal Natural Resources are defined as follows<sup>17</sup>:

“Federal natural resources are resources that occur in nature (including nonrenewable and renewable natural resources) and meet all of the following criteria: (a) the federal government may exercise sovereign rights over the resources with respect to exploration and exploitation; (b) the federal government has the authority to derive revenues from the resources for its use; and, (c) the resources are contained on federal lands or the federal government substantially manages and/or controls the resources.”

#### **Proposed General Description of Natural Resources**

1.9. Based on the key aspects that are common among the above definitions, a natural resource can be generally described as an item which has the following attributes:

- (a) Is a resource as described in the IPSASB's Conceptual Framework<sup>18</sup>;
- (b) Is naturally occurring; and
- (c) Remain in its natural state—i.e., without human intervention.

1.10. Resources whose growth or transformation is being actively managed are no longer in their natural state. For example, water that has been collected in a constructed reservoir and treated to ensure a certain level of quality or vegetation that has been fertilized are no longer considered natural resources.

1.11. These attributes will be useful in setting boundaries for what items are included or excluded from the project. The first attribute is important as it aligns the general description of natural resources with the objective of the project. That is, if the item is not a resource, it will not be possible for the item to be recognized as an asset, so there would be no need to analyze its recognition or measurement in the financial statements. The second and third attributes both reinforce the notion that this project only considers resources prior to their exploitationextraction, cultivation, or harvest. This delineation is important as items which have been exploitedextracted, cultivated, or harvested would fall within the scope of existing IPSAS such as IPSAS 12, *Inventories*, whereas resources for which their biological transformation is actively managed fall within the scope of IPSAS 27, *Agriculture*.

1.12. It should be noted that the description of natural resources from economic literature points to the fact that natural resources embody economic benefits or service potential, which is consistent with

<sup>17</sup> FASAB Technical Bulletin 2011-1, Appendix C.

<sup>18</sup> See discussion in paragraph 18 of the introduction.

the definitions from plain English, statistical accounting, and South African GRAP. However, it also points to the fact that a natural resource may lead to potential economic outflows and the creation of costs. During the IPSASB staff's preliminary outreach activities, a number of constituents also suggested to consider the issue of costs in the CP, in particular the costs of exploration, evaluation, and extraction. Although the costs of activities related to natural resources do not strictly fall in line with the above description of natural resources, chapter 2 of this CP considers the recognition of the costs of related activities in the context of subsoil resources. For other natural resource-related costs which do not result in the potential recognition of an asset, such potential outflows are addressed by IPSAS 19 as noted in paragraph 25..

### Application of the General Description to Resources within the Scope of the CP

- 1.13. The in-scope natural resources—subsoil resources, living resources, and water—fit within the above general description of natural resources when they meet the three attributes. As noted in paragraph 18 of the introduction, subsoil resources, living resources and water can all be considered resources. These items also meet the second and third attributes, as only the unexploited resources—i.e., unextracted subsoil resources and water, or uncultivated and unharvested living resources—, are considered in this project. Once extracted or once the transformation of the resource is managed~~exploited~~, these resources would be considered inventories or biological assets and agricultural produce.

### Potential Natural Resources which are not within Scope of the CP

- 1.14. As noted in the introduction, ~~other~~ items such as air and electromagnetic spectrum could be considered natural resources in other contexts, and these other resources do indeed also fit into the above attributes. However, as explained in paragraph 5, these items will not be covered in this project since they raise additional issues which will require further study.:
- ~~(a) While it is common for some governments to sell air rights for the purposes of air travel or infrastructure development, these rights embody the ability to legally access the airspace in the jurisdiction, rather than extracting the underlying air itself. The accounting for these rights would more appropriately fall within the scope of IPSAS 31, *Intangible Assets*.~~
  - ~~(a) The electromagnetic spectrum is the range of naturally occurring radiation that includes visible light, microwaves, and radio waves. Certain ranges of the spectrum can be used for telecommunication purposes, and it is common for a government to control the commercial use of the spectrum in its jurisdiction through licenses and similar mechanisms. Like air rights, these spectrum licenses relate to the legal right to access the spectrum, and any related accounting issues would more appropriately fall within the scope of IPSAS 31. In addition, the spectrum is uniquely different from other resources in that it does not have tangible form and the limits on its use arise from the related telecommunications technology rather than limits on consumption of the spectrum itself.~~
- 1.15. ~~Although air and electromagnetic spectrum are excluded from this project, depending on the project outcome and subject to consultations on its strategy and work plan, the IPSASB may initiate a separate project to address these items in the future.~~

## Chapter 2: Subsoil Resources

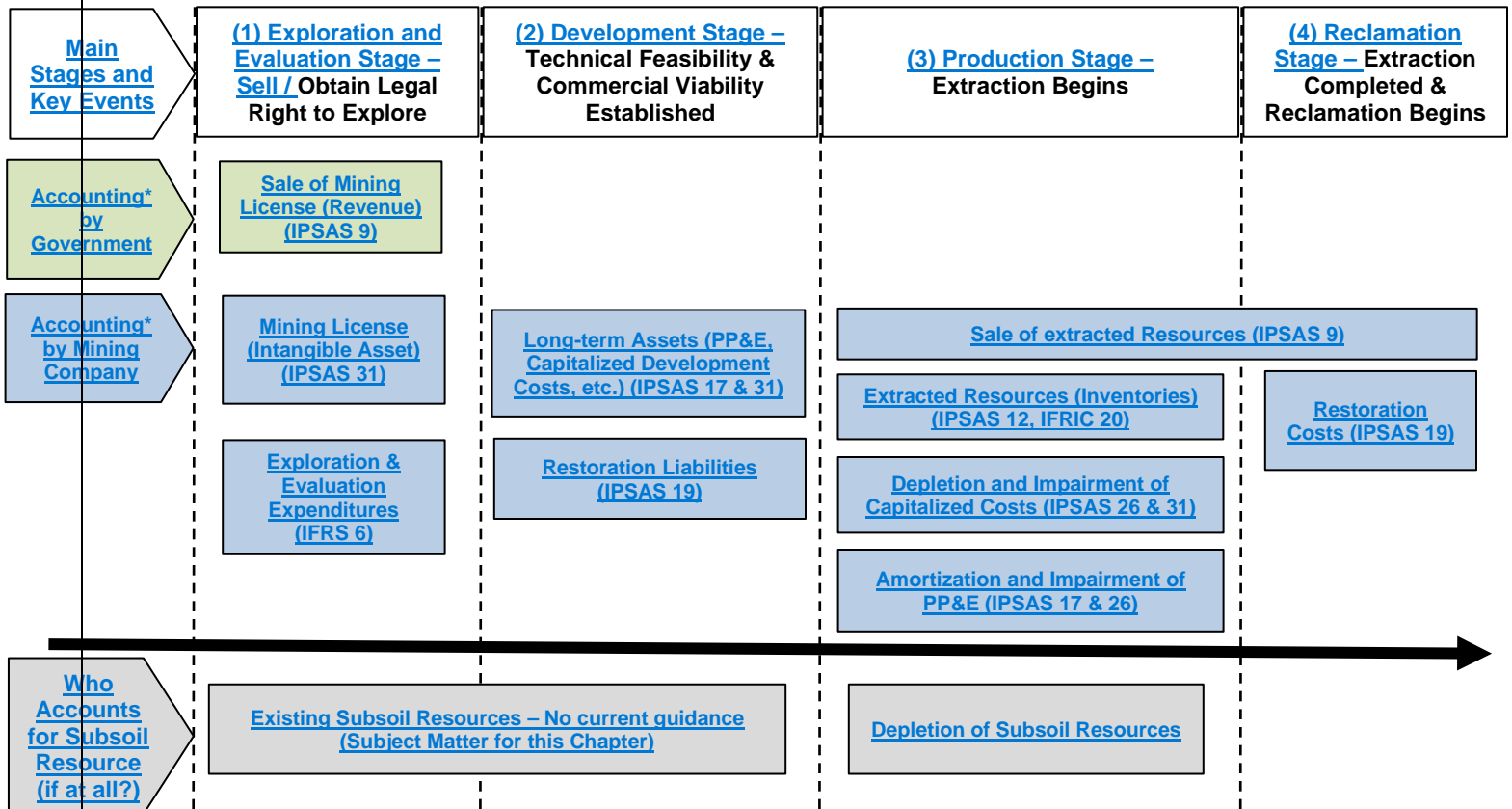
### Description of Subsoil Resources

- 2.1. The term “subsoil resources” broadly refers to all non-living natural items which occur within the earth, both in dry land and the seabed. Subsoil resources include metalliferous ore, such as mineral and metal deposits, and fossil fuels, such as petroleum, coal, and natural gas.
- 2.2. To be considered a natural resource in the context of this CP, the subsoil resource must be in its natural state—i.e., prior to its extraction. Once a subsoil resource has been extracted, it is no longer a natural resource for accounting purposes and will often be accounted for as inventory under IPSAS 12.

### Clarification of what is Considered a “Subsoil Resource”

- 2.3. During the initial outreach stage of the Natural Resources project, the IPSASB staff noted confusion among constituents in distinguishing between the underlying subsoil resources, the costs incurred for activities relating to subsoil resources, and other related assets such as exploration and extraction licenses. Therefore, before the analysis of whether subsoil resources can be recognized or measured, it is important to clarify what exactly is meant by “subsoil resources”.
- 2.4. To illustrate the various concepts, the following example timeline summarizes the main stages in the mining process and the key events or activities undertaken by the parties involved. While the general stages and key events in both mining and oil and gas industries are similar, please note that there may be other activities and processes applicable specifically to the oil and gas industry. These considerations are not discussed in the following example.

*Illustrative Timeline of the Mining Process*



\*Accounting based on current IPSAS & IFRS. A private sector mining company would typically report under IFRS, but references to the equivalent IPSAS are provided to illustrate the subject matter of this chapter.

**(1) Exploration & Evaluation Stage** – The mining process typically begins with an entity (e.g., the “Mining Company”) obtaining the legal right to explore an area for subsoil resources from a government entity (the “Government”). At this stage, the Mining Company performs activities such as surveys and geological studies to determine if there are any technically feasible and commercially viable resources—i.e., resources which can physically be extracted at a cost below their expected realizable value.

For illustration purposes, this timeline assumes that the Mining Company reports their accounting results using IFRS. From the Mining Company’s perspective, the legal right (i.e., the license) is typically accounted for as an intangible asset under IAS 38, *Intangible Assets*. At this stage, the Mining Company would also account for the costs of exploration or evaluation activities using IFRS 6, *Exploration for and Evaluation of Mineral Resources*. If the activities were performed by a public sector entity (either directly or through a joint arrangement), the potential treatment of exploration and evaluation activities are discussed in this CP starting at paragraph 2.42<sup>19</sup> [Reference to be updated pending the IPSASB’s decision].

From the Government’s perspective, prior to the sale of the legal right, there is no revenue to be recognized under IPSAS 9, *Revenue from Exchange Transactions*.<sup>19</sup> This is because

<sup>19</sup> The IPSASB currently has a project to replace IPSAS 9. More details on the revenue project can be found at <http://www.ipsasb.org/consultations-projects/revenue>.

the existence of a government's sovereign powers allowing it to sell licenses does not give rise to a past event until the licenses are sold. See Appendix A of this CP for further information on sovereign powers.

- (2) Development Stage** – Once the technical feasibility and commercial viability of a site has been established, the site progresses to the development stage and the Mining Company begins to construct infrastructure to facilitate access to the mine site, as well as processing facilities in preparation for the extraction of resources.

The costs incurred by the Mining Company at this stage are capitalized as a long-term asset using the principles from the IASB's Conceptual Framework and IAS 38.<sup>20</sup> It should be emphasized that these costs relate entirely to the development activities and do not relate to the underlying subsoil resources. These development costs are recognized as assets when their development is technically feasible, and they are commercially viable, and it is probable that the costs will be recoverable.

Subsequent to initial measurement, the geological studies are typically updated periodically, and the results are normally disclosed as part of regulatory requirements. The Mining Company will also use the information from the geological studies when considering if the estimated useful life of its capitalized development costs continues to be appropriate, and if applicable, in any impairment analysis of these capitalized costs.

However, the underlying mineral resources are not recognized under IFRS. While the feasibility study and other geological studies provide some information to support the recoverability of costs incurred, they do not provide information with sufficient reliability or precision to support the recognition of the unextracted subsoil resources within an area as a separate asset. This is further discussed in paragraph 2.38 of this CP.

At this stage, unless the Government issues a separate license for the Mining Company to move on to the development stage, or unless the Government is involved in the development activities, there are typically no transactions or events which would impact the Government.

- (3) Production Stage** – Once the necessary infrastructure and processing facilities have been established, the Mining Company will begin extraction of the underlying subsoil resources, and the production stage of the mine begins. As resources are extracted, they are recognized by the Mining Company as inventory under IAS 2, *Inventories*. During this stage, the Mining Company will typically continue to update its geological studies for regulatory compliance purposes as well as for its analysis of the capitalized development costs' useful life and potential impairment. If the extraction involves surface mining, the Mining Company may also need to remove surface waste materials to gain access to mineral deposits. The costs incurred in this waste removal activity is accounted for as a long-term asset or inventory under IFRIC 20, *Stripping Costs in the Production Phase of a Surface Mine*, depending on whether there are any recoverable resources within the waste material.

It is important to note that upon extraction, the cost of the recognized inventory consists of any direct extraction costs as well as depletion of the capitalized development costs—i.e., a systematic allocation of the capitalized development costs based on an estimate of total

<sup>20</sup> IFRS 6, paragraph 10.

extractable resources. Even at this stage, any unextracted subsoil resources are not recognized due to the reasons noted above in the development stage.

Similar to the development stage, the accounting by the Government entity at the production stage will depend on whether the Mining Company requires a separate license to begin production. In some cases, the initial legal right issued in the exploration stage includes subsequent payments to the Government based on actual quantities of resources extracted.

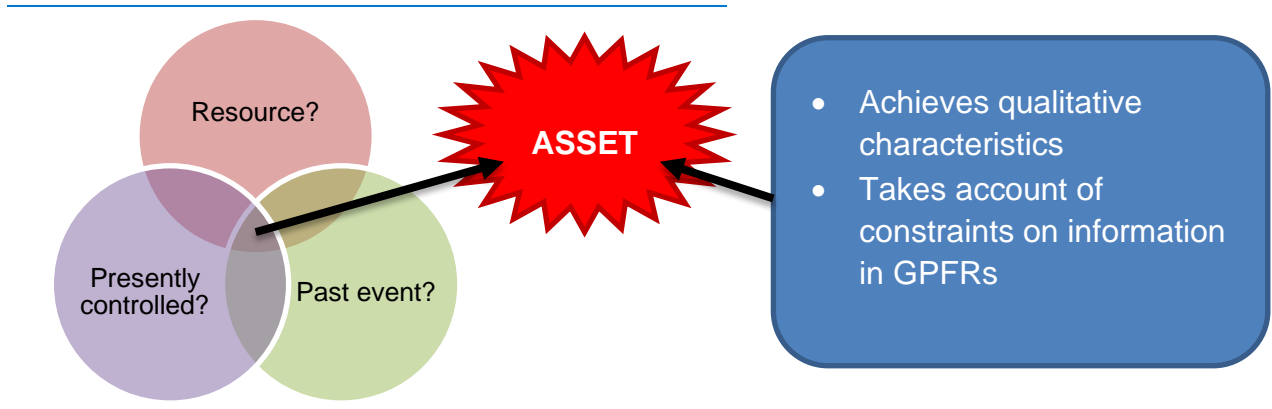
- (4) **Reclamation Stage** – At this stage, the amount of commercially viable resources left is minimal and the mine is considered depleted. Typically, the Mining Company would be responsible for activities such as remediation and restoration of the area, while the Government would monitor the execution and completion of these activities.

2.2.2.5. In the example timeline above, “subsoil resources” narrowly refers to the physical mineral resources which are within the earth prior to their extraction. In the production stage in the timeline, these mineral resources become inventory assets once they have been extracted and are no longer considered subsoil resources. Furthermore, although closely related to subsoil resources, the costs incurred for exploration, evaluation, development, and extraction activities are not themselves considered subsoil resources.

### Application of the Asset Recognition Criteria to Subsoil Resources

To be Recognized as an Asset, an Item Must:

- 1) Meet the definition of an asset: 2) Be Measurable in a way that...



2.3.2.6. As noted in the introduction to the CP, for a subsoil resource to be recognized as an asset under IPSAS, the item must:

- (a) Satisfy the definition of an element, in this case an asset; **and**
- (b) Be measurable in a way that achieves qualitative characteristics and takes account of constraints on information in the GPFRs.

2.4.2.7. The Conceptual Framework defines an asset as a resource, or an item with service potential or the ability to generate economic benefits, that is presently controlled by an entity as a result of a past event. In addition, the qualitative characteristics of information refers to the concepts of relevance, faithful representation, understandability, timeliness, comparability, and verifiability, while the



constraints on information refer to considerations of materiality, cost-benefit, and achieving the appropriate balance between the qualitative characteristics.

**2.5.2.8.** Keeping the above concepts in mind, the key considerations regarding the recognition and measurement of subsoil resources are as follows:

- (a) Prior to extraction, can a subsoil resource be considered a resource to an entity?
- (b) Can an entity demonstrate control over a subsoil resource prior to their extraction?
- (c) Is there a past event that gave rise to the entity's control over the subsoil resource?
- (d) Can an entity appropriately measure a subsoil resource which balances the qualitative characteristics while taking materiality and cost-benefit considerations into account?

**2.6.2.9.** The following analysis considers each of these questions to arrive at a PV regarding the recognition of subsoil resources as assets under IPSAS.

*Consideration of whether a subsoil resource is a resource as defined in the Conceptual Framework*

**2.10.** As noted in paragraph 18(d), *extracted* metalliferous ore or fossil fuels can clearly generate economic benefits through sale or service potential through their use in activities such as construction, the manufacture of goods, or the generation of energy. To determine if an unextracted subsoil resource can be an asset, the first step is to assess if whether the item is a resource (as defined by the Conceptual Framework in paragraph 5.7). ~~measurement uncertainty were to be considered separately (see paragraph 2.19-2.24), the fact that a subsoil resource has not yet been extracted does not detract from their ability to generate economic benefits or service potential.~~<sup>24</sup>

**2.11.** It is important to note that the Conceptual Framework's definition of a resource focuses on the nature of the underlying item and whether it has service potential or the *ability* to generate economic benefits. The Conceptual Framework does not contemplate a probability threshold for the ultimate realization of a resource's service potential or its economic benefits—i.e., if an item has possible service potential or the ability to generate economic benefits in some possible way, the item can be considered a resource. Therefore, the fact that a subsoil resource has not yet been extracted does not detract from its inherent service potential or ability to generate economic benefits. This interpretation is consistent with the Conceptual Framework, as paragraph 16 of the preface of the framework specifically lists items such as mineral reserves, water, fishing grounds, and forests as "resources".<sup>22</sup>

**2.7.** —

**2.8.** —~~In some jurisdictions, a public sector entity's objective may be to act as custodians of subsoil items and to preserve them for the benefit of current and future generations. In these jurisdictions, a public sector entity can fulfil its mandate to act as custodians without the extraction of the subsoil~~

<sup>24</sup>—Some may argue that the issue of measurement cannot be separated from the assessment of whether an item can be a resource, as the item's expected economic value and the costs of activities required to realize this value both need to be considered to assess if the item can result in a net cash inflow to the entity. However, paragraph 5.10 of the Conceptual Framework states that economic benefits are cash inflows or a reduction of cash outflows, which implies that a net cash inflow is not required for an item to be considered a resource.

<sup>22</sup> Some are of the view that the measurement of an item cannot be separated from the consideration of whether the item can give rise to a resource, as meeting the definition of an asset and measurability are both required for an item to be recognized. However, the wording of the recognition criteria in the Conceptual Framework is clear that measurement is a separate consideration from whether the item meets the definition of an asset (which includes whether the item is a resource).

~~items. Therefore, in these jurisdictions, even if the entity has no plans to ever extract a subsoil item, the subsoil items can be considered a resource as contemplated in the definition of an asset.<sup>23</sup>~~

### *Consideration of control*

~~2.9-2.12.~~ Paragraph 5.11 of the Conceptual Framework defines control of a resource as the ability of the entity to use the resource (or direct other parties on its use) so as to derive the benefit of the service potential or economic benefits embodied in the resource. ~~As noted in paragraph 17, whether an entity presently controls a subsoil resource will depend on factors such as ownership, the ability to access the subsoil resource, including consideration of laws and regulations which may facilitate or prevent access, as well as whether the entity has enforceable rights to the service potential or the ability to generate economic benefits from the subsoil resource.~~ Paragraph 5.12 of the Conceptual Framework ~~further~~ states that when determining whether a resource is controlled, an entity should assess whether the following indicators of control exist:

- (a) Legal ownership;
- (b) Access to the resource, or the ability to deny or restrict access to the resource;
- (c) The means to ensure that the resource is used to achieve its objectives; and
- (d) The existence of an enforceable right to service potential or the ability to generate economic benefits arising from a resource.

~~2.10-2.13.~~ While consideration of the above factors is more extensive than a strict legalistic analysis, most of the indicators are directly impacted by the legal environment in a jurisdiction. For example, ownership and the existence of enforceable rights are directly impacted a jurisdiction's laws and regulations. Certain laws and regulations, such as a jurisdiction's licensing framework, may also grant access or deter unauthorized access to a resource.

~~2.14-2.14.~~ In many jurisdictions, the ownership and management of subsoil resources are governed by surface and subsurface rights. Surface rights relate to the use of the surface area of the land while subsurface rights, sometimes known as mineral rights, relate to the exploration, development and/or extraction of subsoil resources. To gain a preliminary understanding of the various legal frameworks around the world, the IPSASB staff issued an informal survey to get feedback from IPSASB Members and Technical Advisors regarding these factors in their respective jurisdictions. Based on the responses from the survey, the jurisdictions were classified into the following categories:

- (a) **Category A: Subsoil Resources are Owned by the Government and the Government has Access Rights** – For jurisdictions in this category, it appears the government (at either the federal or state/provincial level) has ownership of unextracted subsoil resources. The laws and regulations in these jurisdictions also provide the government the means to gain access to the subsoil resources. (e.g., through expropriation of land).
- (b) **Category B: Subsoil Resources are Owned by the Government, but Access is Impacted by the Holders of Surface Rights** – For jurisdictions in this category, the laws and regulations confer control of unextracted subsoil resources to the government. However, individuals or private enterprises holding surface rights can prevent the government from accessing the subsoil resources within their land.

<sup>23</sup> ~~Discussion Paper 10, Accounting for Living and Non-Living Resources, paragraph 4.6, Accounting Standards Board (South Africa).~~

- (c) **Category C: Subsoil Resources are Controlled by Holders of Surface Rights** – For this category, the laws and regulations specify that subsoil resources are controlled by the holders of surface rights. Some jurisdictions in this category also allow surface right holders to separate subsurface rights and sell them to third-parties.
- (d) **Category D: Subsoil Resources are Managed by the Government in the Capacity of a Custodian but Ownership Resides with the Jurisdiction's Citizens** – For jurisdictions in this category, the laws and regulations specify that subsoil resources are managed by the government, but only in the capacity of a custodian for current and future generations.

2.12-2.15. Based on the above, it [appears that it](#) would be possible for some public sector entities operating within a legal framework that is aligned with Category A to demonstrate that they have control over subsoil resources. For these jurisdictions, the laws and regulations confer legal ownership, access, and enforceable rights to the service potential or economic benefits from subsoil resources to the governments.

2.13-2.16. For other jurisdictions such as those in Category B, the assessment of control is less clear, as a government may have ownership of the subsoil resources, but land ownership rights held by other entities can prevent the government from exercising its control. In these jurisdictions, it would be difficult to argue that a government has control over the subsoil resources within the land owned by individuals and other entities until the government has negotiated access rights with the landowners. In these jurisdictions, subsoil resources within state-owned lands would still be controlled by the government.

2.14-2.17. For Category C, the subsoil resources within lands that are owned by individuals and private enterprises would not be controlled by the government. However, the subsoil resources within state-owned lands would still be controlled by the government.

2.15-2.18. For Category D, governments that are only acting as a custodian of subsoil resources for its citizens will find it difficult to argue that the subsoil resources are their asset.<sup>24</sup>

2.16-2.19. The relationship between the above categories and the control indicators are summarized [as follows in the following table](#). The indicator on means to achieve objectives is excluded as it is largely dependent on the specific facts and circumstances for each public sector entity. For example, a government entity would typically have the economic resources to develop and utilize its subsoil resources.

	Category A	Category B	Category C	Category D
<b>Ownership</b>	✓	✓	✗	✗
<b>Access</b>	✓	Depends*	✗	✗
<b>Enforceable Rights</b>	✓	Depends*	✗	✗

<sup>24</sup> For jurisdictions in Category D, the legal interpretation of a jurisdiction's surface and subsurface rights, as well as how its legal framework is applied in practice, will need to be carefully analyzed before concluding on whether the government controls the subsoil resources. In one of the responses to the survey, it was noted that the jurisdiction's constitution and land-related legislation assert that the government is acting as a custodian. However, in practice, the constitution and legislation have been interpreted to mean that the government has legal ownership of subsoil resources in the jurisdiction.

\*In these jurisdictions, the existence of access rights and enforceable rights to service potential or economic benefits will depend on the results of negotiations with the holders of surface rights.

2.20. During the development of this CP, one constituent noted that, in their view, an entity can never have control over unextracted subsoil resources, as the entity does not readily have physical access to the underground resources. As the above discussion is based on a limited number of responses from an informal survey, the IPSASB noted that it would be prudent to solicit constituents' views on the matter and incorporated this issue into the Specific Matter for Comment following paragraph 2.25.

*Consideration of whether there has been a past event giving rise to control*

2.17-2.21. For an item to meet the definition of an asset, there must have been a past event which conferred control of the item to the reporting entity. Paragraph 5.13 of the Conceptual Framework states:

“Entities can obtain assets by purchasing them in an exchange transaction or developing them. Assets may also arise through non-exchange transactions, including through the exercising of sovereign powers... An asset arises when the power is exercised, and the rights exist to receive resources.”

2.22. Applying the above principle and the discussion of control from paragraphs 2.12-2.19 to subsoil resources, in jurisdictions where the laws and regulations confer control of subsoil resources to a public sector entity, the exercise of sovereign powers<sup>25</sup> to establish the laws and regulations ~~is considered could result in a the~~ past event which result~~ed~~ in control over the resources.

2.18-2.23. In some cases, the existence of a past event is relatively straightforward. For example, a government could enact legislation to specify that ownership of land also confers ownership of any subsoil resources within the land. The government subsequently enacts legislation allowing the expropriation of land from its citizens and carries out an expropriation. In this case, the expropriation would be considered the past event which results in obtaining control over both the land and subsoil resources within the land. ~~As a result, for public sector entities in certain jurisdictions, it is possible for a subsoil resource to meet the definition of an asset.~~

2.19-2.24. In other cases, the existence of a past event is less clear. ~~For To illustrate this concept, consider the following~~ example:

In Country A, ~~thea~~ government concludes from a geological study that there is indication of mineral deposits within its jurisdiction. In response, the government amends its constitution to specify that:

- (a) All mineral resources, regardless of their location within Country A, are owned by the state;
- (b) Landowners have the rights to the surface area of the land but no rights to the underground resources;
- (c) In cases where mineral deposits are located within lands owned by individuals or private enterprises, the state has the right to expropriate land for nominal value and

<sup>25</sup> While the exercise of a sovereign power can factor into the determination of control over subsoil resources, the sovereign power itself is not an asset. This issue is analyzed in [Appendix A](#) of this [draft] Consultation Paper.

have full control over the development, extraction, processing, and utilization of the mineral resources.

In this extreme example, the government would fall within Category A since the government has ownership of the subsoil resources and the ability to expropriate any land in its jurisdiction for nominal value—i.e., the government has a substantive right to gain access over these resources at any time. Based on the above, Therefore, the government concludes that the amendment of the constitution was the past event which conferred control of the subsoil resources in Country A to the state. In practice, such an extreme example would be rare, as it would usually be difficult for a government to enact legislation which lets it unilaterally seize land for little to no consideration. Furthermore, most jurisdictions are likely to already have established laws and regulations over land ownership and subsoil resources.

Overall conclusion on whether a subsoil resource can meet the definition of an asset

2.25. Based on the above preliminary research, an item of subsoil resource is clearly a “resource” as defined in the Conceptual Framework. However, there were mixed views on whether an entity can demonstrate control over an unextracted subsoil resource. Therefore, the IPSASB would like to formally solicit feedback from constituents on this matter in the following Specific Matter for Comment.

**Specific Matter for Comment 1—Chapter 2**

Based on the discussion in paragraphs 2.6-2.24, one potential view is that an unextracted subsoil resource can meet the definition of an asset because: (1) it is a resource as defined in the Conceptual Framework (see paragraphs 2.10-2.11); (2) it is possible in certain scenarios for an entity to demonstrate that it has control over the resource (see paragraphs 2.12-2.20); and (3) it is possible for there to be a past event which gave rise to control (see paragraphs 2.21-2.24).

Alternatively, it could be argued that an entity can never control an unextracted subsoil resource because the entity does not readily have physical access to the resource. Under this option, an item of subsoil resource cannot meet the definition of an asset due to the lack of control over the resource.

In your view, is it possible for an unextracted subsoil resource to meet the definition of an asset?

Please provide the reasons supporting your view.

*Measurement considerations*

2.20-2.26. To be recognized as an asset, a subsoil resource which satisfies the definition of an asset must also be capable of being measured in a way that achieves the qualitative characteristics and take account of constraints on information in the GPFRs. That is, for a subsoil resource to be recognized as an asset in the financial statements, it is necessary to attach a monetary value to the subsoil resource. This involves choosing an appropriate measurement basis and determining whether the measurement of the subsoil resource achieves the qualitative characteristics while considering the constraints on information.<sup>26</sup>

2.21-2.27. The qualitative characteristics which are the most relevant to this analysis are relevance, which is the ability of making a difference in achieving the objectives of financial reporting, and faithful representation, which is the representation of an economic and other phenomenon in a complete

<sup>26</sup> Conceptual Framework (2014), paragraph 6.7.

and neutral manner that is free from material error. Information that faithfully represents an economic or other phenomenon depicts the substance of the underlying transaction, other event, activity, or circumstance.<sup>27</sup>

2-22-2.28. In general, the measurement of an element in the financial statement can be based on historical costs or current values. If an entity controls subsoil resources because of the laws and regulations and incurred little or no costs, it is unlikely that there would be a material amount to recognized from a historical cost perspective. Furthermore, a historical cost measure would not reflect the economic benefit or service potential embodied by the unextracted subsoil resources. Therefore, a current value would be more relevant than historical cost.

2-23-2.29. However, for a current value to faithfully represent the economics of subsoil resources, the value should approximate the economic benefit or service potential embodied in the resources. Determination of this estimated value will involve:

- (a) Estimating the quantities of subsoil resources that can be ultimately extracted, taking into account whether it is physically feasible to extract the resources;
- (b) The estimated price at which extracted resources can be sold, which is impacted by macroeconomic factors such as the estimated market price of the resource, as well as entity-specific factors such the estimated timing of when resources are extracted, as well as the grade of the extracted resources; and
- (c) The estimated costs of extraction and depending on the legal requirement in the jurisdiction, restoration costs.

2.30. The above factors, particularly the quantities of unextracted subsoil resources, are all subjected to a high degree of uncertainty. The need to estimate the quantities of a resource is not a common issue when dealing with the measurement of an asset or liability. In a typical scenario where a valuation is required for financial reporting purposes—for example, valuation of financial instruments or estimation of a pension liability—the number of the units of account for the particular asset or liability being measured (e.g., the number of shares or the number of employees in a pension plan) is known, and the measurement uncertainty arises from the value of each unit of account.

2.31. There is currently no available technological means to quantify subsoil resources with complete accuracy without first extracting the resources from the ground. As a result, the quantity of the units of account for a subsoil resource (i.e., the amount of resources in the ground) needs to be estimated, and it is possible for the true quantity of resources to differ significantly from estimated amounts. This estimate is also particularly important as it directly impacts the estimation of both the economic benefits or service potential which could flow from the resource.

2-24-2.32. A number of internationally accepted estimation approaches exist to estimate the quantities of unextracted resources based on geological studies and models, including the Australian Code for Reporting of Exploration Results, Mineral Resources and Ore Resources as developed by the Australasian Joint Ore Reserves Committee (JORC Code), and models developed by the Society of Petroleum Engineers Classification System (SPE), World Petroleum Congresses (WPC), and the American Association of Petroleum Geologists (AAPG).

<sup>27</sup> Conceptual Framework (2014), paragraph 3.10.

2.33. These models are commonly used by entities which invest in the exploration and development of subsoil resources, and the degree of confidence in the estimated quantities and grade quality of resources, as well as the costs to develop these resources, depends on the level of geological testing performed. While the details of the models for mineral ore and fossil fuel deposits do differ, in general, the modelling process involves:

- (a) Obtaining a number of samples by drilling in an area where subsoil resource deposits could potentially exist;
- (b) Analysis of these samples to determine if any deposits exist in the locations probed by the drilling tests. If resources are found in the samples, the concentration of the resources is analyzed to determine if further testing and modelling should be performed. It is also important to note that in the modelling process, the only resources that are known to exist with 100% certainty are the amounts that have been extracted and found in these samples;
- (c) Consideration of any other available geological data on the area being tested. Such data could include information from seismic tomography (imaging the subsurface of the earth using data produced by earthquakes or explosions), ground penetrating radar readings, and observation of vegetation growth anomalies for certain minerals resources;
- (d) Consideration of the extraction technologies available and extraction methods that can be applied in the area; and
- (e) Based on the data from steps (a) to (d) above, the quantity and quality of deposits in the area are estimated. These estimates are then combined with any estimates of potential costs to derive an estimate of recoverable resources. An entity exploring for subsoil resources will typically focus on recoverable resources, as this estimate takes into account the economic viability and physical feasibility of extracting the resources.

2.34. As discussed in the illustrative timeline in paragraphs 2.3-2.5, the information from these models are used as a basis to estimate the useful life and recoverability of capitalized development costs in financial reporting in the private sector. However, despite the use of these models, the level of uncertainty over the quantities of unextracted subsoil resources continues to be too high for recognition of subsoil resources in the private sector.

2.35. As noted in a presentation by a former Chair of the JORC, "Resource [and] reserve estimates are estimates, not calculations. New information or a different geological interpretation can materially change estimates. There is no single correct resource or reserve estimate for a given deposit." The presentation then elaborates that the estimation of mineral resources and reserves is akin to trying to determine the contents of a large room by penetrating the room with large knitting needles. The needles and other available data on the room, analogous to available geological data, can be used to estimate the room's contents, but until the entire room is excavated, a high degree of uncertainty continues to exist.<sup>28</sup>

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<sup>28</sup> Stephenson, Pat, Associate Principal Geologist at AMC Consultants. *Mineral Resources, Mineral Reserves or Pie in the Sky?* January 2017. [https://www.e4m.fsg.ulaval.ca/fileadmin/documents/Evenements/Distinguished\\_Lecture\\_presentation\\_to\\_E4m\\_Laval\\_University\\_Quebec\\_City\\_PS.pdf](https://www.e4m.fsg.ulaval.ca/fileadmin/documents/Evenements/Distinguished_Lecture_presentation_to_E4m_Laval_University_Quebec_City_PS.pdf). PowerPoint Presentation to the Faculté des Sciences et de Génie -Université Laval.



Pictorial Analogy of a Resource Estimation Model - The “knitting needles” (the grey lines) in the picture represents the drilling tests used to estimate the quantities of subsoil resources in geological models, and the individuals are analogous to deposits of subsoil resources. In this analogy, objects that intersect with the needles will be detected and the resulting data will be combined with any other available information on the room (analogous to geological data) to construct a model of the contents of the room. The picture illustrates that even though a model could provide an estimate on some of the room’s contents, a great deal of uncertainty remains over how many individuals are actually in the room.



2.25.—

2.26-2.36. ~~However, despite the use of these models, a significant amount of uncertainty continues to exist. For example~~Applying this line of thinking to the recognition of unextracted subsoil resources, even during the extraction stage, it is not possible for an entity to estimate with a reliable degree of certainty all the resources in an area, nor is it possible for an entity to determine with a sufficient degree of certainty that all the resources in a site have been extracted. Because resource and reserve estimates from geological models can materially change due to different assumptions and interpretations of data, both preparers and auditors in the private sector have not been able to rely on these estimates for asset recognition in the financial statements. Without a reliable estimate of the amount-quantities of unextracted resources in the area, it ~~will is~~ not ~~be~~ possible to estimate the economic benefits or service potential embodied by these resources.

2.27-2.37. The IPSASB recognizes that geological reports are useful for purposes such as performance reporting and price setting for the sale of extraction rights. However, ~~b~~Because of this significant level of measurement uncertainty, the IPSASB’s preliminary view is that even in jurisdictions where



an entity can demonstrate control over unextracted subsoil resources, it is not possible to recognize these subsoil resources as assets under IPSAS. ~~However, as discussed in paragraph in 2.42, it is possible for subsoil resources to be disclosed as contingent assets under IPSAS 19.~~

### *Comparison of the Preliminary View with Other Accounting Frameworks*

2.38. The IPSASB's preliminary view that subsoil resources cannot be recognized is consistent with the IASB's Discussion Paper which also concluded that unextracted minerals, oil and gas (and other non-regenerative natural resources) should not be recognized in the financial statements, as historical cost generally does not provide relevant information, while entity-prepared current values are not viewed as representationally faithful due to the subjectivity and degree of estimation involved.<sup>29</sup>

2.28-2.39. Similarly, GRAP 110 concluded that unextracted minerals, oil, gas, and other non-regenerative resource cannot be recognized. The South African Accounting Standards Board concluded that an entity is unlikely to conclude that it controls subsoil resources, and more importantly for this discussion, that an entity is unlikely to be able to reliably measure these resources due to the uncertainty from geological estimates.<sup>30</sup>

2.29-2.40. As noted in paragraph 32, SFFAS 38 and Technical Bulletin 2011-1 requires federal government entities in the United States to disclose the present value of estimated royalties from proved oil and gas reserves and certain non-renewable resources in supplemental schedules which are outside the general purpose financial statements. In their basis for conclusions, FASAB explained that these amounts are not recognized in the financial statements due to the inability to reliably measure these reserves and resources.<sup>31</sup> The FASAB originally considered amending the SFFAS 38 and Technical Bulletin 2011-1 to require recognition or disclosure within the financial statements, but as at **February 2021 (to be updated when finalizing the CP)**, the board has not yet revisited the statement or technical bulletin.

2.30-2.41. Paragraph 7.33 of the GFSM (2014) states that the current prices of subsoil assets can be approximated by the net present value of the future economic benefits expected from the asset; however, the manual itself does not provide guidance on how the net present value is to be determined. In practice, the net present value is estimated using statistical models based on macroeconomic factors and assumptions. The specific estimation methodologies vary among jurisdictions and the assumptions used in the models are often not auditable. As a result, such an estimate is acceptable for statistical accounting purposes, which is to provide as full of an economic picture as possible, but it does not have the level of precision and reliability required for financial reporting purposes.

### **Preliminary View 12—Chapter 2**

The IPSASB's Preliminary View is that ~~even regardless of whether for jurisdictions where~~ a public sector entity can demonstrate control over unextracted subsoil resources, due to the level of measurement

<sup>29</sup> IASB Discussion Paper DP/2010/1, *Extractive Activities*, paragraph 4.83.

<sup>30</sup> GRAP 110.BC15-BC16.

<sup>31</sup> SFFAS 38, paragraphs A36 and A38.

uncertainty, an unextracted subsoil resource does not meet the criteria to be recognized as an asset under IPSAS.

Do you agree with the IPSASB's Preliminary View?

If not, please provide your reasons.

### **Recognition of the Costs of Activities Related to Subsoil Resources**

[2.42.](#) [\[Pending IPSASB discussion in Agenda Item X.X.X.\]](#)

### **Measurement and Potential Disclosures**

~~2.31-2.43.~~ As note in paragraph 2.37, the IPSASB's PV is that an unextracted subsoil resource should not be recognized as an asset. Therefore, there is no need to consider measurement of the subsoil resource within the financial statements.

~~2.32-2.44.~~ Despite not meeting the recognition criteria, the disclosure of information regarding unextracted subsoil resources could be useful for users of the financial statements. Furthermore, if an entity concludes that an inflow of economic benefits or service potential from subsoil resources are probable, the disclosure requirements for contingent assets in paragraph 105 of IPSAS 19 will also be applicable. For example, the disclosure of the estimated quantities of mineral resources and reserves, as determined by the JORC Code, along with an estimate of the long-term market price of the mineral and extraction costs, could provide users with an idea of the potential economic inflows that could be realized by an entity. These potential disclosures are considered in detail in Chapter 5 of this CP.

## Chapter 3: Living Resources

### Introduction

- 3.1. Living resources include resources such as animals and plants. While the role of some entities is to hold living resources in meeting their service delivery objectives, other entities hold these resources as custodians<sup>32</sup> for the benefit of present and future generations. A living resource may also be associated with an entity without it being held for any specific purpose, e.g., animals that roam freely on land that is controlled by the entity.
- 3.2. At present, limited guidance exists within IPSAS to account for living resources. IPSAS 27, *Agriculture*, provides accounting requirements for biological assets such as living animals and plants that are used for agricultural activity<sup>33</sup>, while IPSAS 17, *Property, Plant, and Equipment*<sup>34</sup>, provides guidance on bearer plants<sup>35</sup> and animals or plants held for use in the production or supply of goods and services. There is currently no IPSAS that deals specifically with the accounting for living resources.
- 3.3. IAS 41, *Agriculture*, provides similar guidance on biological assets and agricultural activities as IPSAS 27, while IAS 16, *Property, Plant and Equipment*, provides similar guidance on bearer plants and animals or plants held for use in the production or supply of goods and services as IPSAS 17. Consistent with IPSAS, there is no IFRS dealing specifically with the accounting for living resources.
- 3.4. However, as noted in paragraph 31, the South African Accounting Standards Board (ASB) issued GRAP 110, *Living and Non-Living Resources*, in March 2017. Regarding living resources, the GRAP:
  - (a) Defines living resources as “those resources that undergo biological transformation”;
  - (b) Requires living resources to be recognized as an asset, where control and the recognition criteria are met; and
  - (c) Sets out the criteria that must be met for a living resource to be recognized as an asset and requires living resource assets to be initially measured at cost. Subsequent to initial recognition, an entity may choose to measure living resource assets at cost or fair value using a revaluation model if its fair value can be reliably measured.
- 3.5. Based on the nature and diverse uses of living resources in the public sector, application of the existing guidance in IPSAS to account for living resources may be difficult because entities are often unable to:
  - (a) Clearly identify situations where a living resource is controlled by the entity;

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<sup>32</sup> An entity is a custodian of a resource when it has the responsibility for or is entrusted to look after the resource.

<sup>33</sup> Paragraph 4 of IPSAS 27, *Agriculture* defines agricultural activity as the management by an entity of the biological transformation and harvest of biological assets for sale; distribution at no charge or for a nominal charge; or conversion into agricultural produce or into additional biological assets for sale or for distribution at no charge or for a nominal charge.

<sup>34</sup> The IPSASB has a project to replace IPSAS 17, *Property, Plant, and Equipment* with [draft] IPSAS [X] (ED 78), *Property, Plant, and Equipment*.

<sup>35</sup> Paragraph 13 of IPSAS 17, *Property, Plant, and Equipment* defines a bearer plant as a living plant that: (a) Is used in the production or supply of agricultural produce; (b) Is expected to bear produce for more than one period; and (c) Has a remote likelihood of being sold as agricultural produce, except for incidental scrap sales.

- (b) Quantify resources accurately, e.g., counting wild animals in a conservation area; and
  - (c) Measure living resources appropriately, as the measurement methods that are currently outlined in IPSAS may be inappropriate for the nature or purpose for which these resources are held.
- 3.6. As existing IPSAS do not consider the unique characteristics of living resources and do not specifically address their accounting requirements, these resources are in many instances inappropriately quantified, recognized, measured, disclosed or otherwise reported on by entities in their financial statements.
- 3.7. Based on preliminary research<sup>36</sup>, divergent practice exists on the application of the principles in existing IPSAS in accounting for living resources. Some entities have applied the requirements in:
- (a) IPSAS 17 to account for:
    - (i) Living animals that are held for the provision or supply of goods and/or services; and
    - (ii) Certain plant species to ensure that these are preserved for present and future generations; and
  - (b) IPSAS 27 to account for animals even though the entity is not actively involved in the management of the biological transformation.
- 3.8. The purpose of this chapter is to develop preliminary views on proposed accounting guidance to enable preparers to report on living resources. As noted in the introduction to the CP, the IPSASB's Conceptual Framework, existing IPSASB guidance, national public sector accounting guidance, as well as private sector practices will be considered in the development of these preliminary views.
- 3.9. This Chapter considers the following areas in proposing accounting requirements for living resources:
- (a) Describing a living resource;
  - (b) Considering when control over living resources exists; and
  - (c) Considering the recognition and measurement of living resources.

### **Describing Living Resources**

- 3.10. As the focus of this chapter is to formulate accounting requirements for living resources, it is important to understand what is meant by the term "living resources". Consistent with the description of natural resources and subsoil resources, this chapter considers various definitions from existing literature and proposes a description for living resources.

#### *Definitions of Living Resources in Existing Literature*

- 3.11. Extending the plain English definition of natural resources from paragraph 1.3, living resources are understood to be items of vegetation, crops and animal life with service potential or the ability to generate economic benefits, that exist without actions of humankind or prior to their exploitation.
- 3.12. As noted above, GRAP 110 defines living resources as, "those resources that undergo biological transformation." The GRAP further explains that living resources include living organisms such as

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<sup>36</sup> See Discussion Paper 10, *Accounting for Living and Non-Living Resources* issued by the South African Accounting Standards Board (ASB) in July 2014.

animals and plants that are used or held for the delivery or provision of goods and services, research, conservation, recreation, agricultural activities, education or training, and rehabilitation or breeding purposes. It is important to emphasize that the term living resources in GRAP 110 appears to include items which are no longer in their natural state and would not be considered natural resources within the scope of this CP. Therefore, while the GRAP 110 definition is helpful and should be considered in formulating a description for living resources for the CP, it cannot be incorporated without modification.

- 3.13. The GFSM (2014) discusses cultivated biological resources and non-cultivated biological resources. Cultivated biological resources comprise animals and plants that are used repeatedly or continuously for more than one year to produce goods or services, for example breeding stocks, dairy cattle, draft animals, sheep and animals used for transportation, wool production, racing and entertainment. Plants include trees, vines and scrubs cultivated for fruits, nuts, sap, resin, bark, and leaf products. Non-cultivated biological resources consist of animals, birds, fish, and plants that yield both once-only and repeat products over which ownership rights are enforced but for which natural growth or regeneration is not under the direct control, responsibility and management of any institutional units.
- 3.14. The GFSM (2014) clarifies that only cultivated biological resources under the direct control, responsibility and management of government units are economic assets.<sup>37</sup> Therefore, the GFSM (2014) appears to focus on cultivated biological resources, which are outside the scope of this CP, and may not be relevant for our purposes.

*Proposed Description*

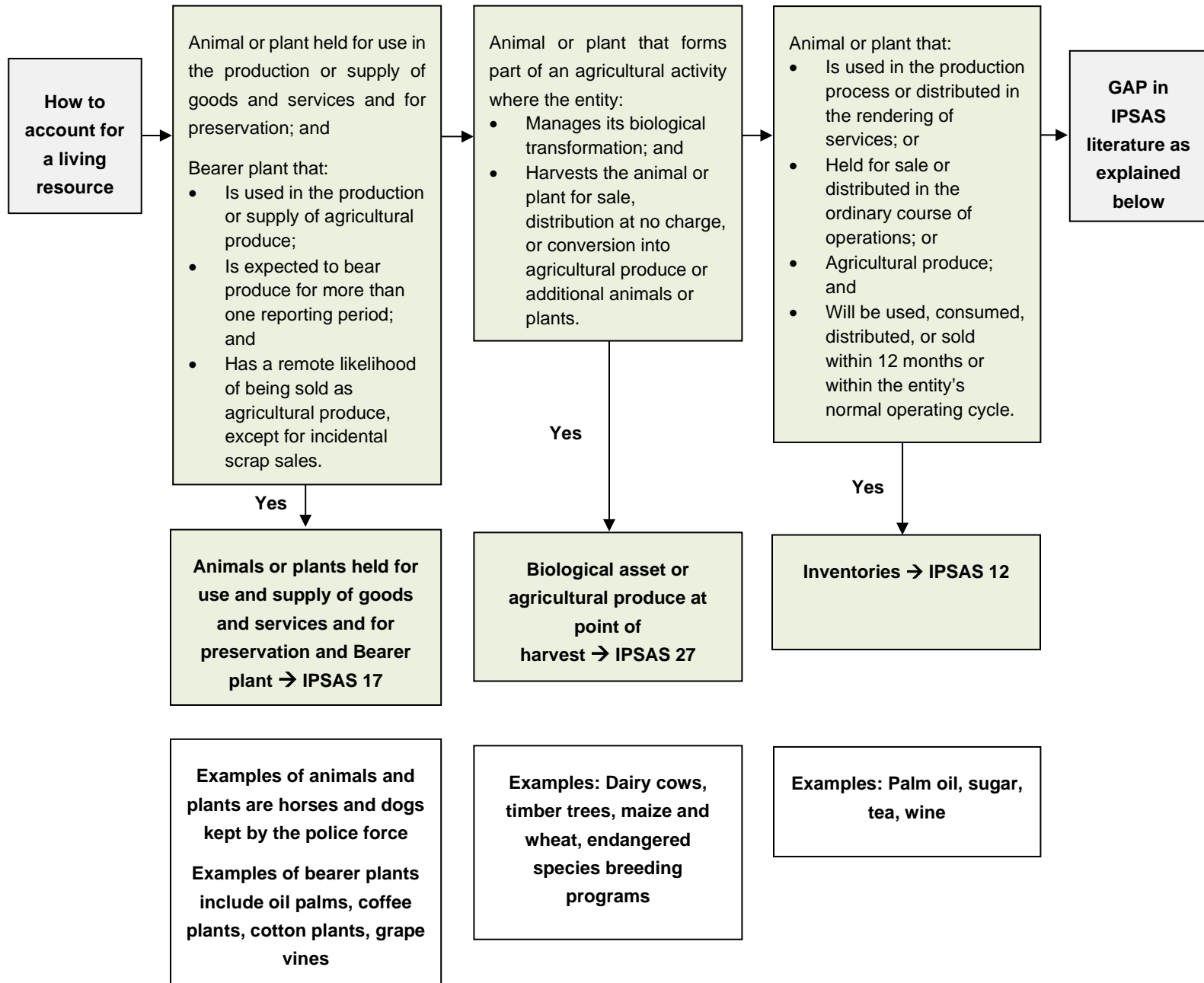
- 3.15. Applying the general description of natural resources from [chapter 1](#) of this CP, and the existing definitions in paragraphs 3.11-3.14, living resources are described as living organisms which:
  - (a) Are resources as described in the IPSASB's Conceptual Framework;
  - (b) Occur naturally, and
  - (c) Remain in their natural state—i.e., have not been subjected to human intervention.
- 3.16. For the purposes of this CP, if a living animal or plant is removed from its natural environment, then the animal or plant is no longer a “natural resource.” That is, living animals and plants held in places like zoos, research and breeding facilities, nurseries etc., are no longer within the scope of this CP.

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<sup>37</sup> The GFSM (2014) paragraph 7.59. It should be noted that the term “cultivated biological resources,” which is used in the current version of the GFSM, is also aligned with the 2008 SNA terminology.

## Interaction of Living Resources with Existing IPSAS Guidance

Diagram Illustrating Existing IPSAS that can be applied in Accounting for Living Resources and the Gap in IPSAS Literature<sup>38</sup>



3.17. Since the description of living resources for the purposes of this CP appears to be quite narrow compared to other sources of guidance such as GRAP 110 and GFSM (2014), it would be helpful to briefly discuss the accounting of biological resources which are not considered living resources. The following IPSAS prescribe accounting guidance for certain types of biological resources:

<sup>38</sup> The following diagram was based on Appendix B of GRAP 110, but modified to align with the IPSASB suite of guidance and the scope of this CP.

(a) **IPSAS 12, *Inventories*** – This standard defines inventory as assets:

- (i) In the form of materials or supplies to be consumed in the production process;
- (ii) In the form of materials or supplies to be consumed or distributed in the rendering of services;
- (iii) Held for sale or distribution in the ordinary course of operations; or
- (iv) In the process of production for sale or distribution.

The principles in IPSAS 12 can be applied to account for:

- (i) Living resources that are held for sale or distribution in the ordinary course of operations, such as the offspring of animals where management will not be involved in the biological transformation. However, if management intends to keep and raise the offspring, it may rather meet the definition of a biological asset accounted for under IPSAS 27; and
- (ii) Living animals intended to be used within its ordinary course of operations, and which are expected to be realized within twelve months, for example mice that are kept as food for other living animals. As these living resources are expected to be realized within twelve months, the measurement principles in IPSAS 12 will be appropriate to account for these resources, as significant changes in the resource's life cycle are unlikely to occur with the twelve month period.

(b) **IPSAS 17, *Property, Plant, and Equipment*** – This Standard provides guidance on:

- (i) Assets that are held for use in the production or supply of goods and services, for rental to others or for administrative purposes; and
- (ii) Assets held for preservation. Many entities may be required in terms of their service delivery objective to preserve and manage living and/or non-living resources for the benefit of current and future generations, for example a National Park. Others may specifically acquire a piece of land to ensure that its contents, for example rare flower bulbs, are preserved for current and future generations; and
- (iii) Bearer plants, which are defined as living plants that is used in the production and supply of agricultural produce, is expected to bear produce for more than one period and has a remote likelihood of being sold as agricultural produce, except for incidental scrap sales.

The concepts prescribed in IPSAS 17, particularly the guidance on bearer plants, will be applicable to cultivated biological assets that are no longer undergoing biological transformation.

(c) **IPSAS 27, *Agriculture*** – This Standard provides guidance on accounting for biological assets and agricultural produce up to the point of harvest. This Standard is applied where an entity is actively involved in the biological transformation of the asset and when the definition of an agricultural activity is met<sup>39</sup>. For example, plants held in nurseries may be within the

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<sup>39</sup> Paragraph 4 of IPSAS 27, *Agriculture* states that, when biological assets are used for research, education, transportation, entertainment, recreation, customs control or in any other activities that are not agricultural activities, those biological assets are not accounted for in accordance with IPSAS 27. Where those biological assets meet the definition of an asset, other IPSAS

scope of IPSAS 27 where an entity actively manages them and enhances conditions such as moisture, temperature, fertility, and light to ensure effective growth.

Where an entity is actively involved in managing the biological transformation of an animal or plant that meets the definition of an agricultural activity the principles in IPSAS 27 should be applied to account for these resources. For example, animals held in breeding facilities, plants held in nurseries or plants that are cultivated in greenhouses fall within the scope of IPSAS 27.

### **Recognition of a Living Resource as an Asset**

3.18. To be recognized as an asset under IPSASB, an item must meet the recognition criteria within the Conceptual Framework. The recognition criteria are met when:

- (a) An item satisfies the definition of an element; and
- (b) An item can be measured in a way that achieves the qualitative characteristics and takes account of constraints on information in GPFRs.

3.19. The section will consider to what extent living resources meet the definition of an asset.

#### *Definition of an Asset*

3.20. The Conceptual Framework defines an asset as a resource presently controlled by the entity as a result of a past event. IPSAS 1, *Presentation of Financial Statements* defines an asset as resources controlled by an entity as a result of past events and from which future economic benefits or service potential are expected to flow to the entity<sup>40</sup>. In determining whether a living resource meets this definition, the following requirements in the asset definition are considered and discussed:

- (a) Resource;
- (b) Presently controlled by the entity; and
- (c) Past event.

#### *Resource*

3.21. A resource is an item with service potential or the ability to generate economic benefits. Economic benefits reflect the ability of an asset to generate net cash inflows. Most public sector entities hold assets primarily to deliver services rather than generate economic benefits. Service potential is the capacity of an asset to provide services that contribute to achieving an entity's service delivery and other objectives established in terms of its mandate without necessarily generating net cash inflows.

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should be considered in determining the appropriate accounting (e.g., IPSAS 12, *Inventories* and IPSAS 17, *Property, Plant, and Equipment*).

<sup>40</sup> Even though there are minor differences to the definition of an asset between the Conceptual Framework and IPSAS 1, *Presentation of Financial Statements*, both definitions contain common components: resource(s), control and past event. The Conceptual Framework includes service potential or the ability to generate economic benefits as part of description of the resource rather than as part of the definition.



- 3.22. The service potential or ability to generate economic benefits can arise directly from the resource itself or from the rights to use the resource<sup>41</sup>. Some resources embody an entity's rights to a variety of benefits including, for example, the right to:
- (a) Use the resource to provide services<sup>42</sup>;
  - (b) Use an external party's resources to provide services, for example, leases;
  - (c) Convert the resource into cash through its disposal;
  - (d) Benefit from the resource's appreciation in value; or
  - (e) Receive a stream of cash flows.
- 3.23. While the role of some entities is to hold living resources in fulfilling their service delivery objectives, others are stewards of these resources as custodians that preserve them for the benefit of present and future generations. Whether these entities use resources in meeting their objectives, or merely act as custodians, it can be argued that they are resources as envisaged in the definition of an asset. For example, where living resources such as virgin forests are available for harvesting, economic benefits or service potential may be realized.

*Presently Controlled by the Entity*

- 3.24. An entity controls the resource if it has the ability to use the resource, or direct other parties on its use, or prevent other parties from using the resource so as to derive service potential or economic benefits embodied in the resource in the achievement of its service delivery or other objectives.
- 3.25. In assessing whether it presently controls a resource, an entity assesses whether one or more of the following indicators of control exists. These indicators are drawn from paragraph 5.12 of the Conceptual Framework:
- (a) Legal ownership;
  - (b) Access to the resource, or the ability to deny or restrict others to access the resource;
  - (c) The means to ensure that the resource is used to achieve its objectives; or
  - (d) The existence of enforceable right to service potential or the ability to generate economic benefits arising from the resource.
- 3.26. Determining whether an entity has control over a living resource may be difficult because:
- (a) These resources often increase or decrease as a result of a natural event;
  - (b) These resources are also frequently exposed to certain natural elements; and
  - (c) These resources may roam freely.
- 3.27. To assist entities in determining whether the living resources are under their control, the following discussion considers the indicators of control from paragraph 3.25 and how they can apply to living resources.
- 3.28. This list of indicators is not comprehensive and need not all be met simultaneously. Management may need to consider other indicators and apply professional judgment in assessing control. These

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<sup>41</sup> Physical form is not a necessary condition of a resource (see paragraph 5.7 of *The Conceptual Framework for General Purpose Financial Reporting by Public Sector Entities* (the Conceptual Framework)).

<sup>42</sup> References to "services" in the Conceptual Framework encompass "goods".

indicators can also be considered in situations where the entity has the ability to control the living resources but has not yet exercised its ability. The indicators are:

- (a) The degree to which an entity manages the condition of the living resource (see paragraphs 3.29-3.31);
- (b) The ability to restrict the movement and/or access to the living resource (see paragraphs 3.32-3.33); and
- (c) The ability to direct the use of the living resource (see paragraphs 3.34-3.36).

*The Degree to which an Entity Manages the Living Resource*

- 3.29. When an entity is required by legislation, government policy or through similar means to manage the condition of a living resource, it will serve as an indication that the entity has control over that resource.
- 3.30. Other factors that could be considered to determine the degree to which it manages the condition of a living resource are:
  - (a) The level at which a detailed feeding plan is set up;
  - (b) The level at which reproduction is managed; and/or
  - (c) The level at which accurate records of the resource are maintained.
- 3.31. In some cases, the entity's ability to manage a resource can be severely limited. For example, legislation could state that an entity can only intervene when there is a severe threat to the living resource, such as the potential extinction of fauna and flora in a national park. It is likely that the entity will not be held accountable for each individual resource within the specific area but will only be expected to maintain the environment so that it is conducive to conserve the living resource. In these circumstances, control for accounting purposes is not met because the entity only has the right to manage and preserve the living resources in limited circumstances.

*The Ability to Restrict the Movement and/or Access to the Living Resource*

- 3.32. If an entity is able to restrict the movement of a living resource within a specified area and also has the ability to restrict access to that area, then this is an indication that the entity has control over that resource. For example, if an entity controls access to a reservation, the vegetation within such a reservation would be controlled by the entity. Devices which restrict movement, such as fences, that prevent the animals from leaving the reservation could also indicate control.
- 3.33. In other instances, living resources can roam freely on land, such as animals in a national park that roam across borders. Though some conservation parks have fences, these fences may be designed only to prevent human access and would still allow animal migration to occur. Smaller animals such as birds, small mammals, reptiles, and insects can roam freely while larger animals may jump over these fences or other structures. Access control in these circumstances is therefore not high and such living resources are thus not under the control of the entity from an accounting perspective.

*Ability to Direct the Use of the Living Resource*

- 3.34. The fact that an entity has the ability to direct the use or disposal of a living resource in a manner it sees fit serves as an indicator of control. In the simplest of cases, the unfettered ability to sell a

living resource for cash or other resources would be a strong indicator of control over the living resource.

- 3.35. Even though trade in a certain species of a living resource is restricted, the resource may still be controlled by the entity as it has the ability to determine whether to directly use the living resources' present service potential to provide services to the public or to employ the resource in another way. The effect of the restriction is that the entity is not able to exchange the present service potential or economic benefit for another asset such as cash. This will affect the measurement of the resource, not its recognition because restrictions will need to be taken into account when deriving the value of the asset.
- 3.36. Where control is granted to an entity through legislation, government policy or similar means, or where a living resource is received through a non-exchange transaction, certain restrictions may be imposed on the entity's ability to sell or dispose of the asset. For example, the Convention on International Trade in Endangered Species (CITES) may impose a restriction on the selling of rhinos to prevent countries trading in threatened species. For a reservation, this restriction does not necessarily result in a loss of control, as the entity still controls aspects of the resource's service potential and/or economic benefits which do not relate to its sale.

*Degree of Human Intervention and Interaction with Scope*

- 3.37. When analyzing the control indicators in paragraph 3.28, the degree of human intervention must be carefully considered as a living resource which is actively managed may no longer meet the definition of a natural resource. That is, a significant degree of management of the resource, restriction of the resource's movement and/or access to the resource or directing the use of the resource may indicate that the resource has been subjected to human intervention or exploitation. In such cases, the resource no longer meets the general description of a natural resource and will be out of scope of this CP. Assessing the significance of the degree of intervention will require the application of judgment and consideration of all relevant facts and circumstances.
- 3.38. For example, an entity that intervenes in every aspect of the life cycle of a living resource, such as taking care of its nutrition, health, reproduction and environment as part of its required daily activities, provides an indication that the living resource is under its control, but such a high degree of involvement also indicates that these resources are no longer in their natural state. Other examples of living resources where an entity is actively involved in the management of the condition, and thus call into question whether these resources are still natural resources, include:
  - (d) Horses and dogs kept by the police force, defense force and customs. These animals are kept under restraint, are sheltered most of the time and are cared for by management to ensure that they are in a good health; and
  - (e) Animals held for rehabilitation, research, and education such as animals held in zoos, aquariums and in breeding and recreation areas. These living resources are actively cared for by management. Where appropriate, sufficient shelter is provided to protect them from the elements. These living resources can also be easily tracked and counted by management.
- 3.39. In contrast, an entity may be monitoring the growth, reproduction, and environment of a living resource to track the quantities of the living resource or to ensure that the living resource is continuing its natural growth and reproduction free from human intervention. In these situations,

there is some degree of management of the condition of the living resource, but the level of involvement is not so high that the living resource ceases to be in its natural state.

- 3.40. One example of management of living resources that are still considered natural resources and indicates control is the management of natural forests. In such an example, the controlling entity is responsible to protect natural forests from the elements, such as fire, by making sure that there are fire breaks. However, the flora and fauna will be allowed to grow and reproduce naturally with little to no intervention.
- 3.41. Regarding restricting the movement of, or access to, a mobile living resource (i.e., animals), it is possible for a barrier to prevent access to the animals without interfering in their natural state. For example, if a barrier fences off an area that is significantly larger than the range of where an animal would naturally roam, one could argue that the barrier would not intervene in the animal's natural development.

*Past event*

- 3.42. An entity also needs to identify a past event to meet the definition of an asset. For living resources, a past event can occur through:
  - (a) Legislation, government policy or similar means where the entity is granted control over living resources to meet its service delivery objectives to manage and preserve the asset for the benefit of present and future generations;
  - (b) Acquisition where the asset is acquired through purchase or production;
  - (c) Non-exchange transaction or where an asset is received at no or for a nominal consideration, for example through a donation; or
  - (d) A living resource having the ability to reproduce naturally, such as when offspring is born.

*Conclusion on Living Resources Meeting the Definition of an Asset*

- 3.43. Paragraphs 3.20-3.42 provides the description of a living resource and considers whether living resources can meet the definition of an asset. The IPSASB notes that whether a specific living resource meets the definition of an asset is a question of specific facts and circumstances. In some situations, it is possible for a living resource to be considered an asset if:
  - (a) The living resource meets the definition of a resource in the IPSASB's Conceptual Framework; and
  - (a) An entity can demonstrate that it controls the living resource as the result of a past event.
- 3.44. As a reminder, the degree of management of the living resource cannot be so high that the item in question is no longer in its natural state—i.e., the level of human intervention is not so high that the resource no longer meets the general description of a natural resource.
- 3.45. As a result, the IPSASB's preliminary view is that in some circumstances, it is possible for a living resource to meet the definition of an asset.

**Consideration of whether Living Resources are Measurable**

- 3.46. For a living resource to be recognized as an asset, it must first meet the definition of an asset. This is discussed in paragraphs 3.20-3.45 above.

- 3.47. The second recognition criterion is that the asset should be measured in a way that achieves the qualitative characteristics, which includes consideration of whether the item can be reliably measured and takes account of constraints on information in GPFRs. In other words, to recognize a living resource in the financial statements, it is necessary to attach a monetary value to the item. This implies that the entity must be able to find an appropriate measurement basis.
- 3.48. The Conceptual Framework acknowledges that a cost or value may be estimated in recognizing an element in certain instances. The use of estimates is therefore an essential part of the preparation of financial statements and does not undermine the financial statements' reliability. The Conceptual Framework also determines that when estimates cannot be made, the item should not be recognized in the statement of financial position or statement of financial performance. If they cannot be measured reliably, disclosing certain information in the notes to the financial statements or explanatory material in supplementary schedules may be useful in providing information to the users of the financial statements about that item.

#### *Quantification of Living Resources*

- 3.49. Unlike subsoil resources, the quantification of some living resources will be more straight forward. Living resources such as trees and other vegetation that are above ground and immobile are easily observable, so it would be possible for an entity to determine with certainty the quantities of the living resource under its control. However, in other cases, the quantification of living resources may be quite challenging. For example, it may be difficult to count animals which can freely roam in and out of a jurisdiction, so unless there is some tracking mechanism, an entity may have difficulties to determine the quantities of a living resource.
- 3.50. In practice, whether the quantities of a living resource are determinable will depend on the specific facts and circumstances specific to the resource. In most cases, if the quantities of a living resource can be determined, an entity should be able to measure the living resource in a way that achieves the qualitative characteristics and takes account of constraints on information in GPFRs. However, the specific facts and circumstances surrounding the living resource will need to be considered before concluding that the living resource is measurable.

#### **Conclusion on the Recognition of a Living Resource as an Asset**

- 3.51. Based on the discussion in paragraphs 3.18-3.50, the IPSASB concludes that:
- (a) For certain living resources, it is possible for an entity to demonstrate that the living resource is a resource which is controlled by the entity as a result of a past event; and
  - (b) Such a living resource can be measured in a way that achieves the qualitative characteristics and takes account of constraints on information in GPFRs.
- 3.52. As a result, the IPSASB's preliminary view is that certain living resources can be recognized as an asset in the financial statements.

#### **Measurement Considerations**

- 3.53. [Placeholder – Paragraphs on Measurement Objective to be added in June 2021 once the IPSASB discussed the paper on Measurement (see Agenda Item 6.2.6)].

*Measurement Bases*

- 3.54. [Placeholder – Paragraphs on Measurement Bases will be considered at a later stage when final pronouncements on ED 76, *Conceptual Framework, Chapter 7, Measurement Update* and ED 77, *Measurement* are developed].

## Chapter 4: Water

4.1. [Placeholder]

### Introduction

4.2. [Placeholder]

4.3. [Placeholder]

### Recognition

*Application of asset recognition criteria to water*

4.4. [Placeholder]

4.5. [Placeholder]

*Distinction between water in nature and water collected in constructed structures*

4.6. [Placeholder]

4.7. [Placeholder]

### Measurement

*Initial measurement*

4.8. [Placeholder]

4.9. [Placeholder]

*Subsequent measurement*

4.10. [Placeholder]

4.11. [Placeholder]

## **Chapter 5: Other Considerations**

5.1. [Placeholder]

### **Consistency with Current IPSAS**

5.2. [Placeholder]

*Consistency of recognition and measurement proposals with existing IPSAS*

5.3. [Placeholder]

5.4. [Placeholder]

*Consistency of measurement proposals with the Measurement Project and the limited scope update of the Conceptual Framework*

5.5. [Placeholder]

5.6. [Placeholder]

### **Consideration of Whether Current IPSAS Adequately Address Derecognition if Natural Resources are Recognized as Assets**

5.7. [Placeholder]

5.8. [Placeholder]

### **Disclosure Considerations for Natural Resources which do not Meet the Asset Recognition Criteria**

5.9. [Placeholder]

### **Other Issues**

5.10. [Placeholder]

5.11. [Placeholder]



## Appendix A: Recognition of a Government's Sovereign Power to Issue Licenses as an Asset

### Background

- A.1. In the Conceptual Framework, the IPSASB had previously decided that a government's sovereign power, in and of itself, did not meet the criteria to be recognized as an asset. The IPSASB's decision was driven by the conclusion that there was no past event to support the recognition of an asset. In their basis for conclusions, the IPSASB further explained that a government's inherent powers do not give rise to assets until these powers are exercised and the rights exist to receive service potential or economic benefits.<sup>43</sup> While this CP will not re-open the IPSASB's previous decision, it would be helpful to apply the IPSASB's thinking specifically to a government's sovereign power to issue licenses in the context of natural resources.
- A.2. In practice, these natural resource-related licenses could include items such as mineral exploration or extraction rights, logging permits, fishing or hunting licenses, or rights to extract water. The following discussion uses a license to explore for subsoil resources.
- A.2-A.3. It is important to note that this example is meant to only cover the narrow issue of the recognition of government sovereign powers and does not address the potential recognition of the underlying subsoil resources, which is discussed in chapter 2 of this CP. Chapter 2 also includes a discussion of the costs of related activities, which is also not covered in this example. Finally, this example does not go into detail on the recognition of revenue when licenses are sold, as the IPSASB currently has a separate project on revenue.<sup>44</sup>

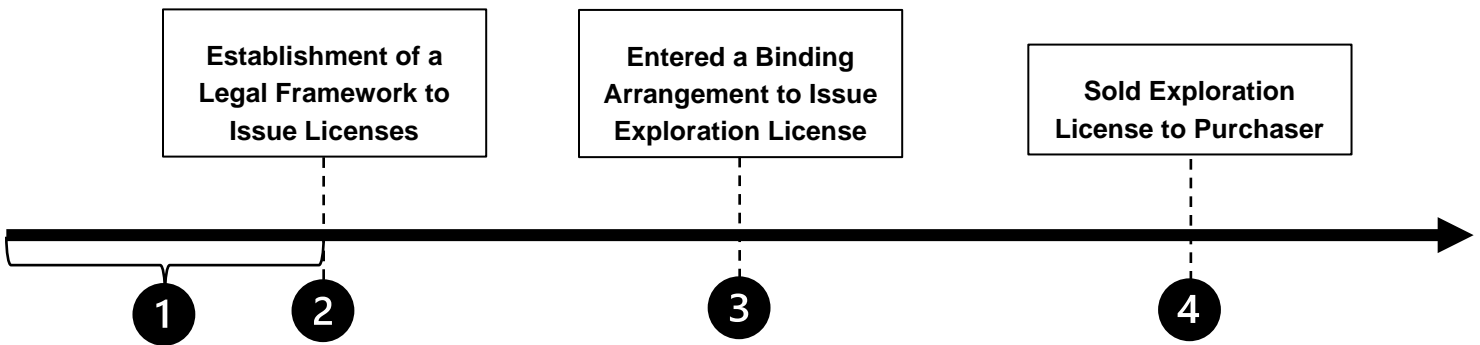
### Example

- A.3-A.4. A government entity plans to exercise its sovereign powers to establish a legal framework to issue exploration licenses to unrelated entities. Prior to the establishment of this framework, there is no legal mechanism for the government entity to issue exploration licenses.
- A.4. ~~For the purposes of this example, it is assumed that the arrangement to issue exploration licenses embodies a performance obligation which is satisfied upon the issuance of the license—i.e., satisfied at a point in time. Other than the issuance of the exploration license, there are no other performance obligations in the arrangement.~~
- A.5. The following timeline illustrates the typical events leading up to the sale of exploration licenses and provides commentary regarding the recognition of an asset at each step in the timeline. As discussed in the IPSASB paper noted above, the principles in the Conceptual Framework would prevent recognition of an asset for the sovereign power on its own.
- A.6. However, as illustrated below, once the entity has exercised its sovereign power by setting up a framework to issue licenses, this legal framework facilitates the actual sale of licenses, which will in turn results in the recognition of an asset.

<sup>43</sup> IPSASB Conceptual Framework, paragraph BC5.18.

<sup>44</sup> More details on the revenue project can be found at <http://www.ipsasb.org/consultations-projects/revenue>.

Timeline



~~(1)~~(5) Prior to an establishment of the legal framework, there is no legal mechanism for the government entity to issue exploration licenses—i.e., it would not be possible for an exploration license to exist within the laws of the jurisdiction. Therefore, during this period, it would not be possible to recognize any asset.

~~(2)~~(6) Upon establishment of a legal framework to issue licenses, it will be possible for an exploration license to legally exist within the jurisdiction. At this stage in the timeline, the government entity may start negotiating with other entities to sell exploration licenses. However, at this point, as no past event has occurred, there continues to be no asset to be recognized. Furthermore, the government entity will have no information on how to measure any asset, such as how many, if any, licenses will be sold, when licenses would be sold, how much licenses will be sold for, or whether licenses will be sold for a fixed or variable amount. As a result, even upon the establishment of a legal framework to issue licenses, as no past event has occurred and no information exists to measure any potential asset, the government entity would not be able to recognize any asset.

~~(3)~~(7) At this point, a government's sovereign power in itself still cannot be recognized as an asset. However, the exercise of the sovereign power through the establishment of the legal framework has made it possible for the government to sell licenses. Once the government has entered into a binding arrangement to sell a license to a purchaser, the government entity ~~can recognize a binding arrangement asset and a corresponding binding arrangement liability at the agreed upon transaction price~~ needs to consider if there is any impact from a revenue accounting perspective.<sup>45</sup> It should be clarified that ~~any such accounting impact would be driven by the this binding arrangement asset represents the government's right to consideration, conditional on its sale of the license, and does not represent the recognition of embody the government's sovereign right power.~~

~~Furthermore, until the government entity actually issues the license, or the purchaser has paid consideration, the government entity would not present the binding~~

<sup>45</sup>—The above accounting is based on the IPSASB's proposals in ED 70, *Revenue with Performance Obligations*. Under IPSAS 9, *Revenue from Exchange Transactions*, the sale of the license in the example would be assessed against IPSAS 9's recognition criteria, which include consideration of: the transfer of risks and rewards; continuing managerial involvement; ability to reliably measure revenue; the probability of economic benefits or services potential flowing to the government; and the ability to reliably measure the costs incurred or to be incurred. If the recognition criteria are met, revenue and an account receivable would be recognized at the fair value of consideration.

~~arrangement asset and binding arrangement liability on a gross basis, as neither party has performed.~~ Effectively, until either party has performed, the binding arrangement asset and liability would net to zero in the financial statements. See paragraph 104 of [draft] IPSAS [X] (ED 70), *Revenue with Performance Obligations*, which requires presentation of a binding arrangement in the statement of financial position only once either party has performed, and also paragraph IE223, which further explains this requirement.

~~(4) Upon the issuance of a license, the government entity will typical recognize an asset for the consideration (e.g., cash received or accounts receivable) from the licensee. has satisfied its performance obligation and established an unconditional right to receive consideration. As a result, the government entity would reclassify the binding arrangement asset to an account receivable at the transaction price at this point in the timeline. At this point, the binding arrangement liability would also be recognized as revenue.~~

~~(5)(8)~~ While the issuance of the license and subsequent recognition of ~~the an-cash or~~ account receivable ~~asset were are~~ made possible by the exercise of the sovereign power, it should be noted that the ~~recognized asset account receivable~~ itself does **not** embody the sovereign power. Rather, the ~~asset represents either the cash received or the~~ account receivable, ~~or is~~ the unconditional right to receive ~~the license fee~~ cash.

A.7.—The above example and timeline illustrate that until a government exercises its sovereign power by establishing a legal framework and enters into a binding arrangement with a counterparty to issue a license, the service potential or economic benefits which could potentially flow from its sovereign power cannot be recognized as an asset.

A.8-A.7.

## **Appendix B: Placeholder**

B.1. [Placeholder]

B.2. [Placeholder]

B.3. [Placeholder]

B.4. [Placeholder]

## **ADDENDUM A – XXX**

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