

Meeting: IPSASB Consultative Advisory Group
Meeting Location: Toronto, Canada
Meeting Date: June 17, 2019

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For:
 Approval
 Discussion
 Information

Natural Resources in the Public Sector

Project summary	<p>The aim of the Natural Resources project is to develop one or more IPSAS for natural resources in the public sector.</p> <p>The purpose of this paper is to consider the project’s scope, including an exploration of the various issues and challenges relating to natural resources in the public sector and whether they have potential accounting implications. This paper will also consider whether, and if so how, to incorporate IFRS 6, <i>Exploration for and Evaluation of Mineral Resources</i> into IPSAS.</p>	
Meeting objectives	Initial discussion with the CAG on the IPSASB’s project on Natural Resources to inform the approach to research and development of a future project brief.	Agenda Item
Discussion Items	<p>CAG input into:</p> <ul style="list-style-type: none"> • Potential scope of the project • Potential approaches to incorporate IFRS 6 into IPSAS • Proposed project communication plan 	6.1
Other supporting items	Appendix A: IPSASB Due Process Checklist – Natural Resources	6.2

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Background

1. The International Public Sector Accounting Standards Board (IPSASB) is considering accounting for natural resources because:
 - (a) Government Finance Statistics (GFS) requires the recognition of natural resources; and
 - (b) Constituents note the lack of natural resources accounting in IPSAS is a problem.
2. The IMF Fiscal monitor published in 2018 reinforces the scale and importance of natural resources to governments balance sheets, noting that from the countries surveyed natural resources assets were equal to 38% of GDP.¹
3. When the IPSASB issued a Consultation Document on its proposed Strategy and Work Plan for 2019-2023, respondents supported adding natural resources to the Work Plan, providing the highest level of support of the IPSASB proposed projects.
4. The issue of accounting for natural resources in the public sector is prevalent in many jurisdictions. Governments often have little idea of the monetary value of natural subsoil resources until after they are extracted. However, the rights to extract such resources are normally granted beforehand to third parties who then profit from their extraction. From a public interest perspective, this is an important issue, particularly in jurisdictions with resource-based and resource rich economies because the identification and quantification of these assets prior to extraction may inform policy decisions on their extraction and impacts thereof.
5. The scoping phase of the natural resources project should not only have regard to extractive resources but should also consider the potential for inclusion of broader natural resources, such as water, natural phenomena and living species. It will be important to consider how the inclusion of these broader resources will interact with the Conceptual Framework for General Purpose Financial Reporting by Public Sector Entities (Conceptual Framework).
6. The objective of this paper is to discuss with the Consultative Advisory Group (CAG) the following:
 - (a) What should be considered natural resources, when they should be recognized and how to measure them;
 - (b) Provide an overview of the items which will be considered for inclusion in the scope of the natural resource project, and to identify related issues and considerations for further research to feed into the development of a project brief;
 - (c) Provide an overview of IFRS 6, and considerations on whether the standard should be incorporated into the IPSASB's natural resources project; and
 - (d) Outline the importance of having a clear communication plan for the project because of the external expectations of various stakeholder groups. Natural resources are important to governments, and there are many issues related their appropriate management which are

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

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beyond the scope of financial reporting. Therefore, the IPSASB needs to clearly communicate the project scope, which being clear on those issues not in scope, including why they are not.

7. There exists a wide range of issues which could be considered in scope of the natural resources project. However, regardless of the natural resource project scope, the issues to be considered in accordance with the IPSASB Conceptual Framework for each type of item, are as follows:
 - (a) What are natural resources (identification and definition);
 - (b) When should natural resources be recognized (is there a resource, is it presently controlled, and has a past event occurred); and
 - (c) How should natural resources be measured?
8. Because of the wide potential scope and the constituent expectations for this project, it is important to be clear on what the financial reporting problem this project addresses and the approach to developing guidance in relation to it. To this end, the IPSASB Conceptual Framework will be used to frame how the project determines items that are considered natural resources, when they should be recognized and how they should be measured. This ensures that the identified problem and proposed solutions are limited to financial reporting.

Issue 1: Potential Project Scope – What are the Potential Project Scopes for Natural Resources in the Public Sector?

9. There exists a range of differing natural resources definitions:
 - (a) There are various definitions of natural resources in statistical accounting guidance, as follows:
 - (i) The System of National Accounts 2008: Natural resources consist of naturally occurring resources such as land, water resources, uncultivated forests and deposits of minerals that have an economic value.²
 - (ii) The Government Finance Statistics Manual 2014: Natural resources comprise land, mineral and energy resources, and other naturally occurring assets.³
 - (b) 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.⁴ One key aspect of natural resources is that they exist without human action, i.e., prior to extraction, cultivation or harvest.

It is clear that an important issue the IPSASB will need to consider is what is the appropriate definition of a natural resource.

² SNA 13.44-13.51.

³ GFSM 2014, 7.90.

⁴ https://en.wikipedia.org/wiki/Natural_resource. The Wikipedia definition combines the definitions from the Oxford, Student, dictionaries with those from investorwords.com and yourdictionary.com.

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10. For financial reporting purposes, the most commonly reported (through either recognition and measurement in the financial statements or disclosure in the notes) natural resources in the private sector are mineral and petroleum resources, collectively known as subsoil resources. Other items considered natural resources in financial reporting include land, as well as forests, vegetation and other living organisms living on the land (collectively referred to as living resources), as well as the electromagnetic spectrum used by the telecom industry.
11. In terms of water, private sector companies that are in the business of selling bottled water commonly recognize the cost of licenses to extract water as intangible assets. Some government entities, such as the South African government, have implemented the System of Environmental-Economics Accounts, an international standard for constructing water accounts to monitor and track water levels and flows for statistical purposes. Other governments, such as the Australian government, have developed their own Australian Water Accounting Standards for statistical and water management purposes. However, these government entities generally do not recognize the water supply as an asset for financial reporting purposes prior to extraction.
12. In order to have a robust starting point for scope considerations when developing the natural resources project brief, it is important to consider the issues and potential challenges from inclusion of the items noted in the above paragraphs. Because land is already treated an asset under IPSAS and in most accounting frameworks, the analysis below will exclude land and focus on subsoil resources, living resources, electromagnetic spectrum, and water.
13. It should be noted that because the concept of a resource is inherent in the definition of an asset in the Conceptual Framework⁵, many of the considerations noted below may appear to relate to whether the potentially in-scope natural resource should be recognized as an asset. However, the purpose of this paper is only to consider whether an item should be considered for inclusion in the scope of the project brief, and the analysis below is not meant to propose any accounting treatment or develop conclusions on how to treat these items.

Subsoil Resources

14. Some of the considerations and challenges for the inclusion of subsoil resources in the project scope are as follows:
 - (a) Subsoil resources such as mineral deposits and petroleum reservoirs are often significant items from a monetary perspective. If these subsoil resources are not included, the lack of accounting for these resources may result in a material understatement of an entity's assets.
 - (b) While the quantities of subsoil resources cannot be estimated with absolute certainty until they are extracted, there are currently commonly accepted processes and frameworks for estimating the quantities available for extraction based on geological studies.⁶

⁵ Paragraph 5.6 of the Conceptual Framework defines an asset as "a resource presently controlled by the entity as a result of a past event," and paragraph 5.7 states that "a resource is an item with service potential or the ability to generate economic benefits."

⁶ The potential quantity of minerals or petroleum at a location are estimated using internationally accepted standards. For minerals, the quantity is estimated based on geological, engineering and economic data, using the professional code of practice established

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- (c) On the other hand, in the private sector, subsoil resources are only indirectly accounted for, and other than scenarios involving the acquisition of a developed property or a subsoil deposit or reservoir in development, the natural resources themselves are not recognized or measured in the financial statements. Under IFRS:
- (i) Expenditures related to the exploration and evaluation of a resource property are accounted for using IFRS 6, *Exploration for and Evaluation of Mineral Resources*, which provides entities with an accounting policy choice to recognize these expenditures as an asset or expense them as incurred;
 - (ii) Expenditures incurred to develop a resource property may be recognized as intangible assets under IAS 38, *Intangible Assets*, depending on whether certain recognition criteria are met; [IFRS 6.10]
 - (iii) The property, plant and equipment used to develop or maintain the underlying resources, as well as the property where the resources are located, are accounted for using IAS 16, *Property, Plant and Equipment*; [IAS 16.3]; and
 - (iv) As resources are extracted, the cost of extraction as well as the depletion of the above capitalized costs are recognized as inventory under IAS 2, *Inventory*.

The lack of recognition of the underlying resource is due to the high degree of uncertainty and subjectivity over both the existence of subsoil resources, as well as the estimation of the resource quantities prior to their extraction. Such recognition and measurement issues would also be applicable in the public sector.

- (d) Whether the extraction of subsoil resources is economically viable depends on fluctuating market prices in relation to the costs of developing, extracting and processing them for sale. There may be scenarios where a resource which qualified for recognition as an asset in a past period may no longer be considered an asset if market prices decrease to the point where the resources can no longer generate economic benefits.
- (e) Some note that the lack of accounting requirements for subsoil resources prior to their extraction leads to poor public financial management decisions. These parties argue that minerals and similar resources should be accounted for as assets with an offset to equity or some other capital account, and that the sale of subsoil resources or the right to extract such resources should be accounted for as a capital receipt to reflect depletion of the resource. Supporters of this view also note that the proceeds from the sale of subsoil minerals should be invested in a trust for future generations, rather than be accounted for as revenue, because by accounting for these as revenue with little or no recognized costs, governments become

by The Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves, referred to as the JORC Code. The JORC Code provides a mandatory system for the classification of potential minerals deposits into mineral resources or mineral reserves according to the levels of confidence in geological knowledge, as well as technical and economic considerations. Resources are minerals deposits which are considered potentially valuable and have reasonable prospects for eventual economic extraction, whereas reserves are mineral deposits which are considered valuable and are legally, economically and technically feasible to extract. Similarly, the potential quantity of petroleum at a reservoir is estimated based on geological, engineering and economic data, and classified as resources or reserves using the US-based Society of Petroleum Engineers (SPE) classification system.

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incentivized to sell as much as possible, often at prices below their fair market value and without regard to the impact future generations.

- (f) As a counterargument to paragraph 14(e), accounting financial information alone will not improve the management of subsoil resources. Governments will need to use this better information to inform better policy decisions regarding the management of natural resources benefit from improved accounting for these items.

Living Resources

- 15. Some of the considerations and challenges for the inclusion of living resources in the project scope are as follows:
 - (a) Some living organisms, such as cultivated crops and farmed animals, are recognized when the recognition criteria in paragraph 13 of IPSAS 27, *Agriculture*, are met. When considering whether living resources should be in scope of the project, there may be cases where the IPSAS 27 criteria are clearly met even before the resource is cultivated or harvested—i.e., an entity has control over the living resource as a result of a past event; it is probable that future economic benefits or service potential associated with the living resource will flow to the entity; and the fair value or cost of the living resource can be measured reliably. For example, a government may own the land on which a forest is located and has control over access to the trees. The trees in turn, can be harvested, processed and sold as lumber or other commodities which have an established market. In such cases, inclusion of such living resources in the scope of the project would not result in many significant challenges, as they are of a similar nature as biological assets which are already accounted for within the IPSAS framework.
 - (b) In other cases, it may be difficult for an entity to establish that it has control over a living organism. For example, if an entity cannot restrict the movement of the living organism, it may not be possible to demonstrate control, as the organisms can freely roam in or out of the entity's jurisdiction. This lack of restriction in movement also inhibits the ability to accurately measure the amount of resources that are owned by the entity. Inclusion of these living organisms in the project scope may lead to significant recognition and measurement issues if a conclusion is made to account for them as assets.
 - (c) Even if an entity can control the physical location and movement of the living organism, there may be cases where the entity does not have the ability to direct their use. For example, a government may be mandated to hold living organisms in a specific area for conservation but is prohibited from interacting with the organisms or interfering with their environment. In such cases, it would be difficult to conclude that the entity controls these organisms, so an alternative to recognition as an asset may be required.

Electromagnetic Spectrum

- 16. Some of the challenges and considerations for the inclusion of electromagnetic spectrum in the project scope are as follows:
 - (a) Many jurisdictions already have regulations in place regarding the sale or allocation of certain spectrum bands for use by specific entities. For example, governments often sell spectrum rights in the form of broadcasting licenses to radio stations or cellular transmission licenses to

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telecom companies in their jurisdictions. The fact that spectrum can be regulated, managed and sold may indicate that it is a resource that is measurable, provides economic benefits, and can be controlled.

- (b) However, unlike the other natural resources discussed above, spectrum has no physical form and has no theoretical limit to its use. This lack of limit might present challenges for an entity which owns or has the right to issue licenses over the use of spectrum in a jurisdiction. For example, in the United States of America, the government has set the commercial FM radio spectrum to frequencies to between 87 to 108 MHz, and the current convention is to assign frequencies to individual stations based on increments of 200 kHz. However, the government may unilaterally choose to expand the range of frequencies that could be used or issue licenses for more frequencies within the range. If the unsold radio spectrum in this example were to be scoped in as a natural resource, it would be difficult to come up with a conceptually sound framework to measure and value the spectrum that is controlled by the government.
- (c) Others have also argued that a government's ability to issue licenses for use of specific radio or cellular frequencies does not equate to control over the spectrum. Since spectrum cannot be stored and conserved, any unsold or unallocated spectrum is essentially wasted and arguably should not be recognized or valued.⁷

Water

- 17. Some of the challenges and considerations for the inclusion of water in the project scope are as follows:
 - (a) Water is required to sustain life and thus inherently has value.
 - (b) The key challenge from scoping in water as a natural resource is whether it is in a form that can be controlled by an entity when considering recognition and measurement. Due to the constant flow and evaporation of water in its natural state, it would be difficult, if not impossible, to control the movement of water, so including water in the project scope may lead to issues over recognition and measurement of water as an asset.
 - (c) One could argue that water is a natural resource if it is held in a location that is controlled by an entity and is in a state that can be readily used to generate service potential or economic benefits. However, in jurisdictions which have guidance on accounting for water as a natural resource, water in a controlled environment, such as a water tank or other reservoir, is often viewed as already having been extracted, so it is no longer a natural resource and is considered inventory.⁸

CAG Question 1:

Do you agree with the various potential project scopes and the related issues and further considerations for the above items to be researched in developing the project brief? Are there any additional scope considerations not identified or issues which should be considered?

⁷ <https://www.doncio.navy.mil/chips/ArticleDetails.aspx?ID=2347>

⁸ Paragraph 12 of Standard of Generally Recognised Accounting Practice 110, *Living and Non-Living Resources*.

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Issue 2: Existing Financial Reporting Guidance – How to integrate IFRS 6

18. As noted above, IFRS 6 sets out the guidance on the recognition, measurement and disclosures of exploration and evaluation (E&E) of mineral resources by entities performing these activities. Under IFRS 6, an entity has the accounting policy choice to recognize certain exploration and evaluation expenditures as assets, which are initially measured at cost, or expense them as incurred. After initial recognition, an entity can measure E&E assets using either the cost model or the revaluation model. [IFRS 6.12] However, IFRS 6 does not address the accounting for any activities that are performed subsequent to exploration and evaluation, nor does it provide guidance on the accounting for the underlying mineral resource assets.
19. Furthermore, IFRS 6 does not provide guidance for entities (such as a government) which have the ability to grant the right to perform exploration, evaluation and extractive activities in its jurisdiction.
20. Nevertheless, as IFRS 6 is so frequently used in the financial statements of extractive companies in the private sector, it is important to consider whether the standard should be included in the project, and if so, how it should be incorporated. It appears reasonable to incorporate IFRS 6 into a standard on natural resources and the following alternatives for further research and consideration are highlighted:
 - (a) Option 1: Develop a separate IPSAS that is aligned with IFRS 6. Staff believe that this option would be relatively straightforward, as it would require the IPSASB amending IFRS 6 for public sector terminology and consistency with IPSAS formatting. However, it is thought that an aligned IFRS 6 standard would only apply to a narrow group of public sector entities performing exploration and evaluation activities;
 - (b) Option 2: Incorporate IFRS 6 concepts into a more comprehensive standard on natural resources. Under this option, the requirements from IFRS 6 would import the concepts related to accounting for exploration and evaluation activities, into a broader standard that would also deal with accounting for the natural resource assets themselves (which is not covered in IFRS 6). This broader standard would have the benefits of allowing alignment with IFRS 6, while dealing with the broader issue of accounting for natural resource asset, thought to be more applicable to a wider group of public sector entities; and
 - (c) Option 3: Develop an IPSAS to mirror the requirements of IFRS 6, similar to how IPSAS 32, *Service Concession Arrangements: Grantor*, was developed to mirror IFRIC 12, *Service Concession Arrangements*. This option would allow for the development of the accounting for the sale of resources or the issuance of exploration, evaluation and extraction licenses/permits, which is thought to be more applicable to public sector entities than the issues addressed by IFRS 6. In situations where the licensee is required to make additional payments for extracted minerals or oil, e.g., a license with production royalties, one potential issue to consider is whether positive results of exploration and evaluation activities performed by a licensee—i.e., successful location and estimation of mineral deposits or oil reservoirs—could support the recognition of some form of receivable or intangible by the government which issued the license, in advance of the extraction of the subsoil resources.

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CAG Question 2:

Do you agree with the above options for consideration on how IFRS 6 may be incorporated into IPSAS through the project? Are there any additional considerations not identified or issues which should be considered?

Issue 3: Project Communication Plan

21. As noted in the discussion of subsoil resources above, there is currently an active external stakeholder community with high expectations for this project, including expectations beyond financial reporting and financial statements. These external groups believe that a change in the accounting standards would lead to improved public finance management, a higher degree of intergenerational fairness in relation to the use of resources, and better sustainability.
22. While financial reporting does result in information that can be used in public finance management and policy setting, a new accounting standard on natural resources may not necessarily result in the accounting outcomes or the policy changes that these external parties were expecting.
23. The staff notes that it will be important throughout this project to continually enforce the purpose and objectives of financial reporting, the financial reporting issues that this project is trying to solve, and to explicitly explain in the project brief that the broader challenges in the public finance management of natural resources are beyond the scope of financial reporting.

CAG Question 3:

Do you agree with the IPSASB staff's proposed project communication plan as outlined above?

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Appendix A: IPSASB Due Process Checklist (condensed to included portions relevant to the CAG)

Project: Natural Resources

#	Due Process Requirement	Yes/No	Comments
A. Project Brief			
A1.	A proposal for the project (project brief) has been prepared, that highlights key issues the project seeks to address.	Pending	The natural resources project is in its research and scoping phase. The first step of the project from a due process perspective is the requirement to approve a project brief, which will be brought to the CAG at a future meeting after the research and scoping which will inform the project brief is completed.
A2.	The IPSASB has approved the project in a public meeting.		
A3.	The IPSASB CAG has been consulted on the project brief.		
B. Development of Proposed International Standard			
B1.	The IPSASB has considered whether to issue a consultation paper or undertake other outreach activities to solicit views on matters under consideration from constituents.		
B2.	If comments have been received through a consultation paper or other public forum, they have been considered in the same manner as comments received on an exposure draft.		
B3.	The IPSASB CAG has been consulted on significant issues during the development of the exposure draft.		
D. Consideration of Respondents' Comments on an Exposure Draft			
D4.	The IPSASB CAG has been consulted on significant issues raised by respondents to the exposure draft and the IPSASB's related responses.		

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#	Due Process Requirement	Yes/No	Comments
D5.	Significant comments received through consultation with the IPSASB CAG are brought to the IPSASB's attention. Staff have reported back to the IPSASB CAG the results of the IPSASB's deliberations on those comments received from the CAG.		