INTERNATIONAL PUBLIC SECTOR ACCOUNTING STANDARDS

IPSAS 32—SERVICE CONCESSION ARRANGEMENTS: GRANTOR

IPSAS[®]

International Federation of Accountants® 529 Fifth Avenue New York, New York 10017 USA

This publication was published by the International Federation of Accountants (IFAC*). Its mission is to serve the public interest and strengthen the accountancy profession by supporting the development of high-quality international standards, promoting the adoption and implementation of these standards, building the capacity of professional accountancy organizations, and speaking out on public interest issues.

International Public Sector Accounting Standards, Exposure Drafts, Consultation Papers, Recommended Practice Guidelines, and other IPSASB publications are published by, and copyright of, IFAC.

The IPSASB and IFAC do not accept responsibility for loss caused to any person who acts or refrains from acting in reliance on the material in this publication, whether such loss is caused by negligence or otherwise.

The 'International Public Sector Accounting Standards Board', 'International Public Sector Accounting Standards', 'Recommended Practice Guidelines', 'International Federation of Accountants', 'IPSASB', 'IPSAS', 'RPG', 'IFAC', the IPSASB logo, and IFAC logo are trademarks of IFAC, or registered trademarks and service marks of IFAC in the US and other countries.

Copyright © July 2020 by the International Federation of Accountants (IFAC). All rights reserved. Written permission from IFAC is required to reproduce, store or transmit, or to make other similar uses of, this document, save for where the document is being used for individual, non-commercial use only. Contact permissions@ifac.org.

ISBN: 978-1-60815-451-7

Published by:



IPSAS 32—SERVICE CONCESSION ARRANGEMENTS: GRANTOR

Acknowledgment

This International Public Sector Accounting Standard (IPSAS) sets out the accounting requirements of the grantor in a service concession arrangement. It is adapted from Interpretation 12 (IFRIC 12), Service Concession Arrangements, developed by the International Financial Reporting Interpretations Committee and published by the International Accounting Standards Board (IASB). IFRIC 12 sets out the accounting requirements of the operator in a service concession arrangement. This IPSAS also contains extracts from Interpretation 29 (SIC-29), Service Concession Arrangements: Disclosures, developed by the Standing Interpretations Committee and published by the IASB. Extracts from IFRIC 12 and SIC-29 are reproduced in this publication of the International Public Sector Accounting Standards Board (IPSASB) of the International Federation of Accountants (IFAC) with the permission of the International Financial Reporting Standards (IFRS) Foundation.

The approved text of the International Financial Reporting Standards (IFRSs) is that published by the IASB in the English language, and copies may be obtained directly from IFRS Foundation, Customer Service, Columbus Building, 7 Westferry Circus, Canary Wharf, London E14 4HD, United Kingdom.

E-mail: publications@ifrs.org

Internet: www.ifrs.org

IFRSs, IASs, Exposure Drafts, and other publications of the IASB are copyright of the IFRS Foundation.

"IFRS," "IAS," "IASB," "IFRS Foundation," "International Accounting Standards," and "International Financial Reporting Standards" are trademarks of the IFRS Foundation and should not be used without the approval of the IFRS Foundation.

IPSAS 32—SERVICE CONCESSION ARRANGEMENTS: GRANTOR

History of IPSAS

This version includes amendments resulting from IPSASs issued up to January 31, 2020.

IPSAS 32, Service Concession Arrangements: Grantor was issued in October 2011.

Since then, IPSAS 32 has been amended by the following IPSASs:

- IPSAS 41, Financial Instruments (issued August 2018)
- The Applicability of IPSASs (issued April 2016)
- Improvements to IPSASs 2015 (issued April 2016)
- IPSAS 33, First-time Adoption of Accrual Basis International Public Sector Accounting Standards (IPSASs) (issued January 2015)

Table of Amended Paragraphs in IPSAS 32

Paragraph Affected	How Affected	Affected By
3	Deleted	The Applicability of IPSASs April 2016
4	Deleted	The Applicability of IPSASs April 2016
13	Amended	Improvements to IPSASs April 2016
20	Amended	IPSAS 41 August 2018
29	Amended	IPSAS 41 August 2018
32	Amended	Improvements to IPSASs April 2016
33	Amended	Improvements to IPSASs April 2016
35	Deleted	IPSAS 33 January 2015
35A	New	Improvements to IPSASs April 2016

Paragraph Affected	How Affected	Affected By	
35B	New	Improvements to IPSASs April 2016	
36A	New	IPSAS 33 January 2015	
36B	New	Improvements to IPSASs April 2016	
36C	New	The Applicability of IPSASs April 2016	
36D	New	IPSAS 41 August 2018	
37	Amended	IPSAS 33 January 2015	
AG20	Amended	Improvements to IPSASs April 2016	
AG35	Amended	Improvements to IPSASs April 2016	
AG37	Amended	IPSAS 41 August 2018	
AG45	Amended	IPSAS 41 August 2018	
AG52	Amended	IPSAS 41 August 2018	
AG53	Amended	IPSAS 41 August 2018	
AG68	Deleted	IPSAS 33 January 2015	
AG69	Deleted	IPSAS 33 January 2015	
AG70	Deleted	IPSAS 33 January 2015	
AG71	Deleted	IPSAS 33 January 2015	
AG72	Deleted	IPSAS 33 January 2015	
AG73	Deleted	IPSAS 33 January 2015	
IG2	Amended	IPSAS 41 August 2018	

IPSAS 32—SERVICE CONCESSION ARRANGEMENTS: GRANTOR

CONTENTS

CONTENTS	
	Paragrapl
Objective	
Scope	2—
Definitions	8
Recognition and Measurement of a Service Concession Asset	9-13
Recognition and Measurement of Liabilities	14–28
Financial Liability Model	18-23
Grant of a Right to the Operator Model	
Dividing the Arrangement	27–28
Other Liabilities, Commitments, Contingent Liabilities, and Contingent Assets	29
Other Revenues	30
Presentation and Disclosure	31–33
Transition	34–35
Effective Date	
Appendix A: Application Guidance	
Appendix B: Amendments to Other IPSASs	
Basis for Conclusions	
Implementation Guidance	
Illustrative Examples	

SERVICE CONCESSION ARRANGEMENTS: GRANTOR

International Public Sector Accounting Standard 32, Service Concession Arrangements: Grantor is set out in paragraphs 1–37. All the paragraphs have equal authority. IPSAS 32 should be read in the context of its objective, the Basis for Conclusions, the Preface to International Public Sector Accounting Standards, and the Conceptual Framework for General Purpose Financial Reporting by Public Sector Entities. IPSAS 3, Accounting Policies, Changes in Accounting Estimates and Errors, provides a basis for selecting and applying accounting policies in the absence of explicit guidance.

Objective

1. The objective of this Standard is to prescribe the accounting for service concession arrangements by the grantor, a public sector entity.

Scope (see paragraphs AG1-AG2)

- 2. An entity¹ that prepares and presents financial statements under the accrual basis of accounting shall apply this Standard in accounting for service concession arrangements.
- 3. [Deleted]
- 4. [Deleted]
- Arrangements within the scope of this Standard involve the operator providing public services related to the service concession asset on behalf of the grantor.
- 6. Arrangements outside the scope of this Standard are those that do not involve the delivery of public services and arrangements that involve service and management components where the asset is not controlled by the grantor (e.g., outsourcing, service contracts, or privatization).
- 7. This Standard does not specify the accounting by operators (guidance on accounting for service concession arrangements by the operator can be found in the relevant international or national accounting standard dealing with service concession arrangements).

Definitions (see paragraphs AG3-AG4)

8. The following terms are used in this Standard with the meanings specified:

A <u>binding arrangement</u>, for the purposes of this Standard, describes contracts and other arrangements that confer similar rights and obligations on the parties to it as if they were in the form of a contract.

A grantor, for the purposes of this Standard, is the entity that grants the right to use the service concession asset to the operator.

An <u>operator</u>, for the purposes of this Standard, is the entity that uses the service concession asset to provide public services subject to the grantor's control of the asset.

A <u>service concession arrangement</u> is a binding arrangement between a grantor and an operator in which:

-

An entity for the purposes of this Standard is referred to as the grantor.

- (a) The operator uses the service concession asset to provide a public service on behalf of the grantor for a specified period of time; and
- (b) The operator is compensated for its services over the period of the service concession arrangement.

A <u>service concession asset</u> is an asset used to provide public services in a service concession arrangement that:

- (a) Is provided by the operator which:
 - (i) The operator constructs, develops, or acquires from a third party; or
 - (ii) Is an existing asset of the operator; or
- (b) Is provided by the grantor which:
 - (i) Is an existing asset of the grantor; or
 - (ii) Is an upgrade to an existing asset of the grantor.

Terms defined in other IPSASs are used in this Standard with the same meaning as in those Standards, and are reproduced in the *Glossary of Defined Terms* published separately.

Recognition and Measurement of a Service Concession Asset (see paragraphs AG5–AG35)

- 9. The grantor shall recognize an asset provided by the operator and an upgrade to an existing asset of the grantor as a service concession asset if:
 - (a) The grantor controls or regulates what services the operator must provide with the asset, to whom it must provide them, and at what price; and
 - (b) The grantor controls—through ownership, beneficial entitlement or otherwise—any significant residual interest in the asset at the end of the term of the arrangement.
- 10. This Standard applies to an asset used in a service concession arrangement for its entire useful life (a "whole-of-life" asset) if the conditions in paragraph 9(a) are met.
- 11. The grantor shall initially measure the service concession asset recognized in accordance with paragraph 9 (or paragraph 10 for a whole-of-life asset) at its fair value, except as noted in paragraph 12.
- 12. Where an existing asset of the grantor meets the conditions specified in paragraph 9(a) and 9(b) (or paragraph 10 for a whole-of-life asset), the grantor shall reclassify the existing asset as a service concession

- asset. The reclassified service concession asset shall be accounted for in accordance with IPSAS 17, *Property, Plant, and Equipment* or IPSAS 31, *Intangible Assets*, as appropriate.
- 13. After initial recognition or reclassification, service concession assets shall be accounted for in accordance with IPSAS 17 or IPSAS 31, as appropriate.

Recognition and Measurement of Liabilities (see paragraphs AG36–AG50)

- 14. Where the grantor recognizes a service concession asset in accordance with paragraph 9 (or paragraph 10 for a whole-of-life asset), the grantor shall also recognize a liability. The grantor shall not recognize a liability when an existing asset of the grantor is reclassified as a service concession asset in accordance with paragraph 12, except in circumstances where additional consideration is provided by the operator, as noted in paragraph 15.
- 15. The liability recognized in accordance with paragraph 14 shall be initially measured at the same amount as the service concession asset measured in accordance with paragraph 11, adjusted by the amount of any other consideration (e.g., cash) from the grantor to the operator, or from the operator to the grantor.
- 16. The nature of the liability recognized is based on the nature of the consideration exchanged between the grantor and the operator. The nature of the consideration given by the grantor to the operator is determined by reference to the terms of the binding arrangement and, when relevant, contract law.
- 17. In exchange for the service concession asset, the grantor may compensate the operator for the service concession asset by any combination of:
 - (a) Making payments to the operator (the "financial liability" model);
 - (b) Compensating the operator by other means (the "grant of a right to the operator" model) such as:
 - (i) Granting the operator the right to earn revenue from third-party users of the service concession asset; or
 - (ii) Granting the operator access to another revenue-generating asset for the operator's use (e.g., a private wing of a hospital where the remainder of the hospital is used by the grantor to treat public patients or a private parking facility adjacent to a public facility).

Financial Liability Model (see paragraphs AG37–AG46)

- 18. Where the grantor has an unconditional obligation to pay cash or another financial asset to the operator for the construction, development, acquisition, or upgrade of a service concession asset, the grantor shall account for the liability recognized in accordance with paragraph 14 as a financial liability.
- 19. The grantor has an unconditional obligation to pay cash if it has guaranteed to pay the operator:
 - (a) Specified or determinable amounts; or
 - (b) The shortfall, if any, between amounts received by the operator from users of the public service and any specified or determinable amounts referred to in paragraph 19(a), even if the payment is contingent on the operator ensuring that the service concession asset meets specified quality or efficiency requirements.
- 20. IPSAS 28, Financial Instruments: Presentation, IPSAS 30, Financial Instruments: Disclosures and the derecognition requirements in IPSAS 41, Financial Instruments apply to the financial liability recognized under paragraph 14, except where this Standard provides requirements and guidance.
- The grantor shall allocate the payments to the operator and account for them according to their substance as a reduction in the liability recognized in accordance with paragraph 14, a finance charge, and charges for services provided by the operator.
- 22. The finance charge and charges for services provided by the operator in a service concession arrangement determined in accordance with paragraph 21 shall be accounted for as expenses.
- 23. Where the asset and service components of a service concession arrangement are separately identifiable, the service components of payments from the grantor to the operator shall be allocated by reference to the relative fair values of the service concession asset and the services. Where the asset and service components are not separately identifiable, the service component of payments from the grantor to the operator is determined using estimation techniques.

Grant of a Right to the Operator Model (see paragraphs AG47–AG49)

24. Where the grantor does not have an unconditional obligation to pay cash or another financial asset to the operator for the construction, development, acquisition, or upgrade of a service concession asset, and grants the operator the right to earn revenue from third-party users or another revenue-generating asset, the grantor shall account for the

liability recognized in accordance with paragraph 14 as the unearned portion of the revenue arising from the exchange of assets between the grantor and the operator.

- 25. The grantor shall recognize revenue and reduce the liability recognized in accordance with paragraph 24 according to the economic substance of the service concession arrangement.
- 26. Where the grantor compensates the operator for the service concession asset and the provision of services by granting the operator the right to earn revenue from third-party users of the service concession asset or another revenue-generating asset, the exchange is regarded as a transaction that generates revenue. As the right granted to the operator is effective for the period of the service concession arrangement, the grantor does not recognize revenue from the exchange immediately. Instead, a liability is recognized for any portion of the revenue that is not yet earned. The revenue is recognized according to the economic substance of the service concession arrangement, and the liability is reduced as revenue is recognized.

Dividing the Arrangement (see paragraph AG50)

- 27. If the grantor pays for the construction, development, acquisition, or upgrade of a service concession asset partly by incurring a financial liability and partly by the grant of a right to the operator, it is necessary to account separately for each part of the total liability recognized in accordance with paragraph 14. The amount initially recognized for the total liability shall be the same amount as that specified in paragraph 15.
- 28. The grantor shall account for each part of the liability referred to in paragraph 27 in accordance with paragraphs 18–26.

Other Liabilities, Commitments, Contingent Liabilities and Contingent Assets (see paragraphs AG51–AG54)

29. The grantor shall account for other liabilities, commitments, contingent liabilities, and contingent assets arising from a service concession arrangement in accordance with IPSAS 19, *Provisions, Contingent Liabilities and Contingent Assets*, IPSAS 28, IPSAS 30, and IPSAS 41.

Other Revenues (see paragraphs AG55–AG64)

30. The grantor shall account for revenues from a service concession arrangement, other than those specified in paragraphs 24–26, in accordance with IPSAS 9, *Revenue from Exchange Transactions*.

Presentation and Disclosure (see paragraphs AG65–AG67)

31. The grantor shall present information in accordance with IPSAS 1.

- 32. All aspects of a service concession arrangement shall be considered in determining the appropriate disclosures in the notes. A grantor shall disclose the following information in respect of service concession arrangements in each reporting period:
 - (a) A description of the arrangement;
 - (b) Significant terms of the arrangement that may affect the amount, timing, and certainty of future cash flows (e.g., the period of the concession, re-pricing dates, and the basis upon which re-pricing or re-negotiation is determined);
 - (c) The nature and extent (e.g., quantity, time period, or amount, as appropriate) of:
 - (i) Rights to use specified assets;
 - (ii) Rights to expect the operator to provide specified services in relation to the service concession arrangement;
 - (iii) The carrying amount of service concession assets recognized at the end of the reporting period, including existing assets of the grantor reclassified as service concession assets;
 - (iv) Rights to receive specified assets at the end of the service concession arrangement;
 - (v) Renewal and termination options;
 - (vi) Other rights and obligations (e.g., major overhaul of service concession assets); and
 - (vii) Obligations to provide the operator with access to service concession assets or other revenue-generating assets; and
 - (d) Changes in the arrangement occurring during the reporting period.
- 33. The disclosures required in accordance with paragraph 32 are provided individually for each material service concession arrangement or in aggregate for service concession arrangements involving services of a similar nature (e.g., toll collections, telecommunications or water treatment services). This disclosure is in addition to the disclosures required in IPSAS 17 and/or IPSAS 31 by class of assets. Service concession assets within service concession arrangements of a similar nature that are reported in aggregate may form a subset of a class of assets disclosed in accordance with IPSAS 17 and/or IPSAS 31 or may be included in more than one class of assets disclosed in accordance with IPSAS 17 and/or IPSAS 31. For example, for the purposes of IPSAS 17 a toll bridge may be included in the same class as other bridges. For the purposes of this paragraph, the toll bridge may be included with service concession arrangements reported in aggregate as toll roads.

Transitional

- 34. A grantor that has previously recognized service concession assets and related liabilities, revenues, and expenses shall apply this Standard retrospectively in accordance with IPSAS 3, Accounting Policies, Changes in Accounting Estimates and Errors.
- 35. [Deleted]
- 35A. Paragraphs 13, 32, 33 and AG35 were amended by *Improvements to IPSASs* 2015 issued in April 2016. An entity that has previously applied IPSAS 32 shall reassess the classification of service concession assets in accordance with paragraph 13. The entity shall present service concession assets in the revised classification retrospectively in accordance with IPSAS 3.
- 35B. Where service concessions assets are reclassified in accordance with paragraph 35A, an entity shall account for the service concession assets as follows:
 - (a) If the service concession assets have previously been measured using the cost model, and the class of assets to which those service concession assets have been reclassified is measured using the cost model, the entity shall continue to apply the cost model. The entity shall carry forward the cost of the service concession assets, along with any accumulated depreciation or amortization and any accumulated impairment losses.
 - (b) If the service concession assets have previously been measured using the cost model, and the class of assets to which those service concession assets have been reclassified is measured using the revaluation model, the entity shall either:
 - (i) Revalue the service concession assets; or
 - (ii) Subject to the requirements in IPSAS 3 dealing with changes in accounting policies, retrospectively apply the cost model to the remaining assets in the class of asset to which those service concession assets have been reclassified. Where information regarding the cost of the assets is not available, the entity may use the carrying amount of the assets as the deemed cost.
 - (c) If the service concession assets have previously been measured using the revaluation model, and the class of assets to which those service concession assets have been reclassified is measured using the cost model, the entity shall either:
 - (i) Retrospectively apply the cost model to the service concession assets. Where information regarding the cost of the assets is not

- available, the entity may use the carrying amount of the service concession assets as the deemed cost: or
- (ii) Subject to the requirements in IPSAS 3 dealing with changes in accounting policies, revalue the remaining assets in the class of asset to which those service concession assets have been reclassified
- (d) If the service concession assets have previously been measured using the revaluation model, and the class of assets to which those service concession assets have been reclassified is measured using the revaluation model, the entity shall adjust the revaluation surplus in respect of each class of asset. Where previous revaluation decreases have been recognized in respect of either a service concession asset or one or more assets in the class to which the service concession asset is transferred, the entity shall consider whether transfers between revaluation surplus and accumulated surpluses or deficits are required.

Effective Date

- 36. An entity shall apply this Standard for annual financial statements covering periods beginning on or after January 1, 2014. Earlier application is encouraged. If an entity applies this Standard for a period beginning before January 1, 2014, it shall disclose that fact and apply IPSAS 5, *Borrowing Costs*, IPSAS 13, *Leases*, IPSAS 17, IPSAS 29, and IPSAS 31 at the same time.
- 36A. Paragraphs 35 and 37 were amended by IPSAS 33, First-time Adoption of Accrual Basis International Public Sector Accounting Standards (IPSASs) issued in January 2015. An entity shall apply those amendments for annual financial statements covering periods beginning on or after January 1, 2017. Earlier application is permitted. If an entity applies IPSAS 33 for a period beginning before January 1, 2017, the amendments shall also be applied for that earlier period.
- 36B. Paragraphs 13, 32, 33 and AG35 were amended and paragraphs 35A and 35B added by *Improvements to IPSASs 2015* issued in April 2016. An entity shall apply those amendments for annual financial statements covering periods beginning on or after January 1, 2017. Earlier application is encouraged. If an entity applies the amendments for a period beginning before January 1, 2017 it shall disclose that fact.
- 36C. Paragraphs 3 and 4 were deleted by *The Applicability of IPSASs*, issued in April 2016. An entity shall apply those amendments for annual financial statements covering periods beginning on or after January 1, 2018. Earlier application is encouraged. If an entity applies the amendments for a period beginning before January 1, 2018, it shall disclose that fact.

- 36D. Paragraphs 20, 29, AG37, AG45, AG52 and AG53 were amended by IPSAS 41, issued in August 2018. An entity shall apply these amendments for annual financial statements covering periods beginning on or after January 1, 2022. Earlier application is encouraged. If an entity applies the amendments for a period beginning before January 1, 2022 it shall disclose that fact and apply IPSAS 41 at the same time.
- 37. When an entity adopts the accrual basis IPSASs of accounting as defined in IPSAS 33, First-time Adoption of Accrual Basis International Public Sector Accounting Standards (IPSASs) for financial reporting purposes subsequent to this effective date, this Standard applies to the entity's annual financial statements covering periods beginning on or after the date of adoption of IPSASs.

Appendix A

Application Guidance

This Appendix is an integral part of IPSAS 32.

Scope (see paragraphs 2-7)

- AG1. This Standard is intended to "mirror" Interpretation 12 of the International Financial Reporting Interpretations Committee, *Service Concession Arrangements* (IFRIC 12), which sets out the accounting requirements for the private sector operator in a service concession arrangement. To do so, the scope, principles for recognition of an asset, and terminology are consistent with the applicable guidance in IFRIC 12. However, because this Standard deals with the accounting issues of the grantor, this Standard addresses the issues identified in IFRIC 12 from the grantor's point of view, as follows:
 - (a) The grantor recognizes a financial liability when it is obliged to make a series of payments to the operator for provision of a service concession asset (i.e., constructed, developed, acquired, or upgraded). Using the measurement requirements specified in this Standard under paragraphs 12, 14, and 20 of IFRIC 12, the operator recognizes revenue for the construction, development, acquisition, upgrade, and operation services it provides. Under paragraph 8 of IFRIC 12, the operator derecognizes an asset that it held and recognized as property, plant, and equipment before entering the service concession arrangement.
 - (b) The grantor recognizes a liability when it grants the operator the right to earn revenue from third-party users of the service concession asset or another revenue-generating asset. Under paragraph 26 of IFRIC 12, the operator recognizes an intangible asset.
 - (c) The grantor derecognizes an asset it grants to the operator and over which it no longer has control. Under paragraph 27 of IFRIC 12, the operator recognizes the asset and a liability in respect of any obligations it has assumed in exchange for the asset.
- AG2. Paragraph 9 of this Standard specifies the conditions under which an asset, other than a whole-of-life asset, is within the scope of the Standard. Paragraph 10 of the Standard specifies the condition under which whole-of-life assets are within the scope of the Standard.

Definitions (see paragraph 8)

AG3. Paragraph 8 defines a service concession arrangement. Common features of a service concession arrangement are:

- (a) The grantor is a public sector entity;
- (b) The operator is responsible for at least some of the management of the service concession asset and related services and does not merely act as an agent on behalf of the grantor;
- (c) The arrangement sets the initial prices to be levied by the operator and regulates price revisions over the period of the service concession arrangement;
- (d) The operator is obliged to hand over the service concession asset to the grantor in a specified condition at the end of the period of the arrangement, for little or no incremental consideration, irrespective of which party initially financed it; and
- (e) The arrangement is governed by a binding arrangement that sets out performance standards, mechanisms for adjusting prices, and arrangements for arbitrating disputes.
- AG4. Paragraph 8 defines a service concession asset. Examples of service concession assets are: roads, bridges, tunnels, prisons, hospitals, airports, water distribution facilities, energy supply and telecommunication networks, permanent installations for military and other operations, and other non-current tangible or intangible assets used for administrative purposes in delivering public services.

Recognition and Initial Measurement of a Service Concession Asset (see paragraphs 9–13)

Recognition of a Service Concession Asset

- AG5. The assessment of whether a service concession asset should be recognized in accordance with paragraph 9 (or paragraph 10 for a whole-of-life asset) is made on the basis of all of the facts and circumstances of the arrangement.
- AG6. The control or regulation referred to in paragraph 9(a) could be by a binding arrangement, or otherwise (such as through a third party regulator that regulates other entities that operate in the same industry or sector as the grantor), and includes circumstances in which the grantor buys all of the output as well as those in which some or all of the output is bought by other users. The ability to exclude or regulate the access of others to the benefits of an asset is an essential element of control that distinguishes an entity's assets from those public goods that all entities have access to and benefit from. The binding arrangement sets the initial prices to be levied by the operator and regulates price revisions over the period of the service concession arrangement. When the binding arrangement conveys the right to control the use of the service concession asset to the grantor, the asset meets the condition specified in paragraph 9(a) regarding control in relation to those to whom the operator must provide services.

- AG7. For the purpose of paragraph 9(a), the grantor does not need to have complete control of the price: it is sufficient for the price to be regulated by the grantor, binding arrangement, or a third party regulator that regulates other entities that operate in the same industry or sector (e.g., hospitals, schools, or universities) as the grantor (e.g., by a capping mechanism). However, the condition is applied to the substance of the agreement. Non-substantive features, such as a cap that will apply only in remote circumstances, are ignored. Conversely, if, for example, an arrangement purports to give the operator freedom to set prices, but any excess profit is returned to the grantor, the operator's return is capped and the price element of the control test is met
- AG8. Many governments have the power to regulate the behavior of entities operating in certain sectors of the economy, either directly, or through specifically created agencies. For the purpose of paragraph 9(a), the broad regulatory powers described above do not constitute control. In this Standard, the term "regulate" is intended to be applied only in the context of the specific terms and conditions of the service concession arrangement. For example, a regulator of rail services may determine rates that apply to the rail industry as a whole. Depending on the legal framework in a jurisdiction, such rates may be implicit in the binding arrangement governing a service concession arrangement involving the provision of railway transportation, or they may be specifically referred to therein. However, in both cases, the control of the service concession asset is derived from either the contract, or similar binding arrangement, or from the specific regulation applicable to rail services and not from the fact that the grantor is a public sector entity that is related to the regulator of rail service.
- AG9. For the purpose of paragraph 9(b), the grantor's control over any significant residual interest should both restrict the operator's practical ability to sell or pledge the asset and give the grantor a continuing right of use throughout the period of the service concession arrangement. The residual interest in the asset is the estimated current value of the asset as if it were already of the age and in the condition expected at the end of the period of the service concession arrangement.
- AG10. Control should be distinguished from management. If the grantor retains both the degree of control described in paragraph 9(a) and any significant residual interest in the asset, the operator is only managing the asset on the grantor's behalf—even though, in many cases, it may have wide managerial discretion.
- AG11. The conditions in paragraphs 9(a) and 9(b) together identify when the asset, including any replacements required, is controlled by the grantor for the whole of its economic life. For example, if the operator has to replace part of an asset during the period of the arrangement (e.g., the top layer of a road or

the roof of a building), the asset is considered as a whole. Thus the condition in paragraph 9(b) is met for the whole of the asset, including the part that is replaced, if the grantor controls any significant residual interest in the final replacement of that part.

- AG12. Sometimes the use of a service concession asset is partly regulated in the manner described in paragraph 9(a) and partly unregulated. However, these arrangements take a variety of forms:
 - (a) Any asset that is physically separable and capable of being operated independently and meets the definition of a cash-generating unit as defined in IPSAS 26, *Impairment of Cash-Generating Assets* is analyzed separately to determine whether the condition set out in paragraph 9(a) is met if it is used wholly for unregulated purposes (e.g., this might apply to a private wing of a hospital, where the remainder of the hospital is used by the grantor to treat public patients); and
 - (b) When purely ancillary activities (such as a hospital shop) are unregulated, the control tests are applied as if those services did not exist, because in cases in which the grantor controls the services in the manner described in paragraph 9(a), the existence of ancillary activities does not detract from the grantor's control of the service concession asset
- AG13. The operator may have a right to use the separable asset described in paragraph AG12(a), or the facilities used to provide ancillary unregulated services described in paragraph AG12(b). In either case, there may in substance be a lease from the grantor to the operator; if so, it is accounted for in accordance with IPSAS 13

Existing Asset of the Grantor

- AG14. The arrangement may involve an existing asset of the grantor:
 - (a) To which the grantor gives the operator access for the purpose of the service concession arrangement; or
 - (b) To which the grantor gives the operator access for the purpose of generating revenues as compensation for the service concession asset.
- AG15. The requirement in paragraph 11 is to measure assets recognized in accordance with paragraph 9 (or paragraph 10 for a whole-of-life asset) initially at fair value. Existing assets of the grantor used in the service concession arrangement are reclassified rather than recognized under this Standard. Only an upgrade to an existing asset of the grantor (e.g., that increases its capacity) is recognized as a service concession asset in accordance with paragraph 9, or paragraph 10 for a whole-of-life asset).

- AG16. In applying the impairment tests in IPSAS 17 or IPSAS 31, as appropriate, the grantor does not necessarily consider the granting of the service concession to the operator as a circumstance that causes impairment, unless there has been a change in use of the asset that affects its future economic benefits or service potential. The grantor refers to IPSAS 21, *Impairment of Non-Cash-Generating Assets* or IPSAS 26, as appropriate, to determine whether any of the indicators of impairment have been triggered under such circumstances.
- AG17. If the asset no longer meets the conditions for recognition in paragraph 9 (or paragraph 10 for a whole-of-life asset), the grantor follows the derecognition principles in IPSAS 17 or IPSAS 31, as appropriate. For example, if the asset is transferred to the operator on a permanent basis, it is derecognized. If the asset is transferred on a temporary basis, the grantor considers the substance of this term of the service concession arrangement in determining whether the asset should be derecognized. In such cases, the grantor also considers whether the arrangement is a lease transaction or a sale and leaseback transaction that should be accounted for in accordance with IPSAS 13.
- AG18. When the service concession arrangement involves upgrading an existing asset of the grantor such that the future economic benefits or service potential the asset will provide are increased, the upgrade is assessed to determine whether it meets the conditions for recognition in paragraph 9 (or paragraph 10 for a whole-of-life asset). If those conditions are met, the upgrade is recognized and measured in accordance with this Standard.

Existing Asset of the Operator

AG19. The operator may provide an asset for use in the service concession arrangement that it has not constructed, developed, or acquired. If the arrangement involves an existing asset of the operator which the operator uses for the purpose of the service concession arrangement, the grantor determines whether the asset meets the conditions in paragraph 9 (or paragraph 10 for a whole-of-life asset). If the conditions for recognition are met, the grantor recognizes the asset as a service concession asset and accounts for it in accordance with this Standard.

Constructed or Developed Asset

AG20. Where a constructed or developed asset meets the conditions in paragraph 9 (or paragraph 10 for a whole-of-life asset) the grantor recognizes and measures the asset in accordance with this Standard. IPSAS 17 or IPSAS 31, as appropriate, set out the criteria for when a service concession asset should be recognized. Both IPSAS 17 and IPSAS 31 require that an asset shall be recognized 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 reliably².
- AG21. Those criteria, together with the specific terms and conditions of the binding arrangement, need to be considered in determining whether to recognize the service concession asset during the period in which the asset is constructed or developed. For both property, plant, and equipment and intangible assets, the recognition criteria may be met during the construction or development period, and, if so, the grantor will normally recognize the service concession asset during that period.
- AG22. The first recognition criterion requires the flow of economic benefits or service potential to the grantor. From the grantor's point of view, the primary purpose of a service concession asset is to provide service potential on behalf of the public sector grantor. Similar to an asset the grantor constructs or develops for its own use, the grantor would assess, at the time the costs of construction or development are incurred, the terms of the binding arrangement to determine whether the service potential of the service concession asset would flow to the grantor at that time.
- AG23. The second recognition criterion requires that the initial cost or fair value of the asset can be measured reliably. Accordingly, to meet the recognition criteria in IPSAS 17 or IPSAS 31, as appropriate, the grantor must have reliable information about the cost or fair value of the asset during its construction or development. For example, if the service concession arrangement requires the operator to provide the grantor with progress reports during the asset's construction or development, the costs incurred may be measurable, and would therefore meet the recognition principle in IPSAS 17 for constructed assets or in IPSAS 31 for developed assets. Also, where the grantor has little ability to avoid accepting an asset constructed or developed to meet the specifications of the contract, or a similar binding arrangement, the costs are recognized as progress is made towards completion of the asset. Thus, the grantor recognizes a service concession asset and an associated liability.

Measurement of Service Concession Assets

AG24. Paragraph 11 requires service concession assets recognized in accordance with paragraph 9 (or paragraph 10 for a whole-of-life asset) to be measured initially at fair value. In particular, fair value is used to determine the cost of a constructed or developed service concession asset or the cost of any upgrades to existing assets, on initial recognition. The requirement in paragraph 11 does not apply to existing assets of the grantor that are reclassified as service

Information that is reliable is free from material error and bias, and can be depended on by users to faithfully represent that which it purports to represent or could reasonably be expected to represent. Paragraph BC16 of IPSAS 1 discusses the transitional approach to the explanation of reliability.

concession assets in accordance with paragraph 12 of this Standard. The use of fair value on initial recognition does not constitute a revaluation under IPSAS 17 or IPSAS 31.

- AG25. The type of compensation exchanged between the grantor and the operator affects how the fair value of the service concession asset is determined on initial recognition. The paragraphs that follow outline how to determine the fair value of the asset on initial recognition based on the type of compensation exchanged:
 - (a) Where payments are made by the grantor to the operator, the fair value on initial recognition of the asset represents the portion of the payments paid to the operator for the asset.
 - (b) Where the grantor does not make payments to the operator for the asset, the asset is accounted for in the same way as an exchange of non-monetary assets in IPSAS 17 and IPSAS 31.

Types of Compensation

- AG26. Service concession arrangements are rarely if ever the same; technical requirements vary by sector and by jurisdiction. Furthermore, the terms of the arrangement may also depend on the specific features of the overall legal framework of the particular jurisdiction. Contract laws, where they exist, may contain terms that do not have to be repeated in individual contracts.
- AG27. Depending on the terms of the service concession arrangement, the grantor may compensate the operator for the service concession asset and service provision by any combination of the following:
 - (a) Making payments (e.g., cash) to the operator;
 - (b) Compensating the operator by other means, such as:
 - (i) Granting the operator the right to earn revenue from third-party users of the service concession asset; or
 - (ii) Granting the operator access to another revenue-generating asset for its use.
- AG28. Where the grantor compensates the operator for the service concession asset by making payments to the operator, the asset and service components of the payments may be separable (e.g., the binding arrangement specifies the amount of the predetermined series of payments to be allocated to the service concession asset) or inseparable.

Separable Payments

- AG29. A service concession arrangement may be separable in a variety of circumstances, including, but not limited to, the following:
 - (a) Part of a payment stream that varies according to the availability of the service concession asset itself and another part that varies according to usage or performance of certain services are identified;
 - (b) Different components of the service concession arrangement run for different periods or can be terminated separately. For example, an individual service component can be terminated without affecting the continuation of the rest of the arrangement; or
 - (c) Different components of the service concession arrangement can be renegotiated separately. For example, a service component is market tested and some or all of the cost increases or reductions are passed on to the grantor in such a way that the part of the payment by the grantor that relates specifically to that service can be identified.
- AG30. IPSAS 17 and IPSAS 31 require initial measurement of an asset acquired in an exchange transaction at cost, which is the cash price equivalent of the asset. For exchange transactions, the transaction price is considered to be fair value, unless indicated otherwise. Where the asset and service components of payments are separable, the cash price equivalent of the service concession asset is the present value of the service concession asset component of the payments. However, if the present value of the asset portion of the payments is greater than fair value, the service concession asset is initially measured at its fair value.

Inseparable Payments

- AG31. Where the asset and service component of payments by the grantor to the operator are not separable, the fair value in paragraph 11 is determined using estimation techniques.
- AG32. For the purpose of applying the requirements of this Standard, payments and other consideration required by the arrangement are allocated at the inception of the arrangement or upon a reassessment of the arrangement into those for the service concession asset and those for other components of the service concession arrangement (e.g., maintenance and operation services) on the basis of their relative fair values. The fair value of the service concession asset includes only amounts related to the asset and excludes amounts for other components of the service concession arrangement. In some cases, allocating the payments for the asset from payments for other components of the service concession arrangement will require the grantor to use an estimation technique. For example, a grantor may estimate the payments related to the asset by reference to the fair value of a comparable asset in an

agreement that contains no other components, or by estimating the payments for the other components in the service concession arrangement by reference to comparable arrangements and then deducting these payments from the total payments under the arrangement.

Operator Receives Other Forms of Compensation

- AG33. The types of transactions referred to in paragraph 17(b) are non-monetary exchange transactions. Paragraph 38 of IPSAS 17 and paragraph 44 of IPSAS 31, as appropriate, provide guidance on these circumstances.
- AG34. When the operator is granted the right to earn revenue from third-party users of the service concession asset, or another revenue-generating asset, or receives non-cash compensation from the grantor, the grantor does not incur a cost directly for acquiring the service concession asset. These forms of compensation to the operator are intended to compensate the operator both for the cost of the service concession asset and for operating it during the term of the service concession arrangement. The grantor therefore needs to initially measure the asset component in a manner consistent with paragraph 11.

Subsequent Measurement

AG35. After initial recognition, a grantor applies IPSAS 17 and IPSAS 31 to the subsequent measurement and derecognition of a service concession asset. IPSAS 21 and IPSAS 26 are also applied in considering whether there is any indication that a service concession asset is impaired. These requirements in these Standards are applied to all assets recognized or classified as service concession assets in accordance with this Standard.

Recognition and Measurement of Liabilities (see paragraphs 14-28)

AG36. The grantor recognizes a liability in accordance with paragraph 14 only when a service concession asset is recognized in accordance with paragraph 9 (or paragraph 10 for a whole-of-life asset). The nature of the liability recognized in accordance with paragraph 14 differs in each of the circumstances described in paragraph AG25 according to its substance.

The Financial Liability Model (see paragraphs 18–23)

- AG37. When the grantor has an unconditional obligation to make a predetermined series of payments to the operator, the liability is a financial liability as defined in IPSAS 41. The grantor has an unconditional obligation if it has little, if any, discretion to avoid the obligation usually because of the binding arrangement with the operator being enforceable by law.
- AG38. When the grantor provides compensation to the operator for the cost of the service concession asset and service provision in the form of a predetermined series of payments, an amount reflecting the portion of the predetermined

- series of payments that pertains to the asset is recognized as a liability in accordance with paragraph 14. This liability does not include the finance charge and service components of the payments specified in paragraph 21.
- AG39. Where the grantor makes any payments to the operator in advance of the service concession asset being recognized, the grantor accounts for those payments as prepayments.
- AG40. The finance charge specified in paragraph 21 is determined based on the operator's cost of capital specific to the service concession asset, if this is practicable to determine.
- AG41. If the operator's cost of capital specific to the service concession asset is not practicable to determine, the rate implicit in the arrangement specific to the service concession asset, the grantor's incremental borrowing rate, or another rate appropriate to the terms and conditions of the arrangement, is used.
- AG42. Where sufficient information is not available, the rate used to determine the finance charge may be estimated by reference to the rate that would be expected on acquiring a similar asset (e.g., a lease of a similar asset, in a similar location and for a similar term). The estimate of the rate should be reviewed together with:
 - (a) The present value of the payments;
 - (b) The assumed fair value of the asset; and
 - (c) The assumed residual value, to ensure all figures are reasonable and mutually consistent.
- AG43. In cases when the grantor takes part in the financing (e.g., by lending the operator the funds to construct, develop, acquire, or upgrade a service concession asset, or through guarantees), it may be appropriate to use the grantor's incremental borrowing rate to determine the finance charge.
- AG44. The interest rate used to determine the finance charge may not be subsequently changed unless the asset component or the whole of the arrangement is renegotiated.
- AG45. The finance charge related to the liability in a service concession arrangement is presented consistently with other finance charges in accordance with IPSAS 28, IPSAS 30, and IPSAS 41.
- AG46. The service component of payments determined in accordance with paragraph 21 is ordinarily recognized evenly over the term of the service concession arrangement because this pattern of recognition best corresponds to the service provision. In cases when specific expenses are required to be separately compensated, and their timing is known, such expenses are recognized as incurred.

Grant of a Right to the Operator Model (see paragraphs 24–26)

- When the grantor compensates the operator for the service concession asset AG47. and service provision by granting the operator the right to earn revenue from third-party users of the service concession asset, the operator is granted the right to earn revenue over the period of the service concession arrangement. Likewise, the grantor earns the benefit associated with the assets received in the service concession arrangement in exchange for the right granted to the operator over the period of the arrangement. Accordingly, the revenue is not recognized immediately. Instead, a liability is recognized for any portion of the revenue that is not yet earned. Revenue is recognized and the liability reduced in accordance with paragraph 25 based on the economic substance of the service concession arrangement, usually as access to the service concession asset is provided to the operator over the term of the service concession arrangement. As described in paragraph AG27, the grantor may compensate the operator by a combination of payments and granting a right to earn revenue directly from third-party users. In such cases, if the operator's right to earn such third-party revenues significantly reduces or eliminates the grantor's predetermined series of payments to the operator, another basis may be more appropriate for reducing the liability (e.g., the term over which the grantor's future predetermined series of payments are reduced or eliminated).
- AG48. When the grantor compensates the operator for the service concession asset and service by the provision of a revenue-generating asset, other than the service concession asset, revenue is recognized and the liability recognized in accordance with paragraph 24 is reduced in a manner similar to that described in paragraph AG47. In such cases, the grantor also considers the derecognition requirements in IPSAS 17 or IPSAS 31, as appropriate.
- AG49. In some cases under the grant of a right to the operator model, there may be a "shadow toll". Some shadow tolls are paid for the construction, development, acquisition, or upgrade of the service concession asset, and its operation by the operator. In cases where the grantor pays the operator solely for the usage of the service concession asset by third-party users, such payment is compensation in exchange for the usage and not the acquisition of the service concession asset. Accordingly, such payments do not relate to the liability specified in paragraph AG48. The grantor compensates the operator only to the extent of the usage of the service concession asset, and accounts for such payments as expenses in accordance with IPSAS 1.

Dividing the Arrangement (see paragraphs 27–28)

AG50. If the operator is compensated for the service concession asset partly by a predetermined series of payments and partly by receiving the right to earn revenue from third-party use of either the service concession asset or another

revenue-generating asset, it is necessary to account separately for each portion of the liability related to the grantor's consideration. In these circumstances, the consideration to the operator is divided into a financial liability portion for the predetermined series of payments and a liability portion for the right granted to the operator to earn revenue from third-party use of the service concession asset or another revenue-generating asset. Each portion of the liability is recognized initially at the fair value of the consideration paid or payable.

Other Liabilities, Commitments, Contingent Liabilities and Contingent Assets (see paragraph 29)

- AG51. Service concession arrangements may include various forms of financial guarantees (e.g., a guarantee, security, or indemnity related to the debt incurred by the operator to finance construction, development, acquisition, or upgrade of a service concession asset), or performance guarantees (e.g., guarantee of minimum revenue streams, including compensation for shortfalls).
- AG52. Certain guarantees made by a grantor may meet the definition of a financial guarantee contract. The grantor determines whether guarantees made by the grantor as part of a service concession arrangement meet the definition of a financial guarantee contract and applies IPSAS 28, IPSAS 30, and IPSAS 41 in accounting for the guarantee. Where the guarantee is an insurance contract, the grantor can elect to apply the relevant international or national accounting standard dealing with insurance contracts. See IPSAS 28, paragraphs AG3—AG9 for further guidance.
- AG53. Guarantees and commitments that do not meet the requirements in IPSAS 28 and IPSAS 41 relating to financial guarantee contracts or are not insurance contracts are accounted for in accordance with IPSAS 19.
- AG54. Contingent assets or liabilities may arise from disputes over the terms of the service concession arrangement. Such contingencies are accounted for in accordance with IPSAS 19.

Other Revenues (see paragraph 30)

- AG55. The operator may compensate the grantor for access to the service concession asset by providing the grantor with a series of predetermined inflows of resources, including the following:
 - (a) An upfront payment or a stream of payments;
 - (b) Revenue-sharing provisions;
 - (c) A reduction in a predetermined series of payments the grantor is required to make to the operator; and

- (d) Rent payments for providing the operator access to a revenuegenerating asset.
- AG56. When the operator provides an upfront payment, a stream of payments, or other consideration to the grantor for the right to use the service concession asset over the term of the service concession arrangement, the grantor accounts for these payments in accordance with IPSAS 9. The timing of the revenue recognition is determined by the terms and conditions of the service concession arrangement that specify the grantor's obligation to provide the operator with access to the service concession asset.
- AG57. Where the operator provides an upfront payment, a stream of payments, or other consideration to the grantor in addition to the service concession asset, for the right to earn the revenue from third-party use of the service concession asset, or another revenue-generating asset, any portion of the payments received from the operator not earned in the accounting period is recognized as a liability until the conditions for revenue recognition are met.
- AG58. When the conditions for revenue recognition are met, the liability is reduced as the revenue is recognized in accordance with paragraph 30.
- AG59. However, given the varying nature of the types of assets that may be used in service concession arrangements, and the number of years over which the arrangements operate, there may be more appropriate alternative methods for recognizing revenue associated with the inflows specified in the binding arrangement that better reflect the operator's economic consumption of their access to the service concession asset and/or the time value of money. For example, an annuity method that applies a compounding interest factor that more evenly recognizes revenue on a discounted basis, as opposed to on a nominal basis, may be more appropriate for a service concession arrangement with a term extending over several decades.
- AG60. When an upfront payment is received from the operator, the revenue is recognized in a way that best reflects the operator's economic consumption of its access to the service concession asset and/or the time value of money. For example, when the operator is required to pay annual installments over the term of the service concession arrangement, or predetermined sums for specific years, the revenue is recognized over the specified term.
- AG61. For service concession arrangements under which the operator is granted the right to earn revenue from third-party users of the service concession asset, revenue relates to the inflow of economic benefits received as the services are provided and is therefore recognized on the same basis as the liability is reduced. In these cases, the grantor will often negotiate to include a revenue-sharing provision in the arrangement with the operator. Revenue-sharing as part of a service concession arrangement may be based on all revenue earned by the operator, or on revenue above a certain threshold, or on revenue more than the operator needs to achieve a specified rate of return.

- AG62. The grantor recognizes revenue generated from revenue-sharing provisions in service concession arrangements as it is earned, in accordance with the substance of the relevant agreement, after any contingent event (e.g., the achievement of a revenue threshold) is deemed to have occurred. The grantor applies IPSAS 19 to determine when the contingent event has occurred.
- AG63. A reduction in the future predetermined series of payments the grantor would otherwise be required to make to the operator provides the grantor with upfront non-cash consideration. Such revenue is recognized as the liability is reduced.
- AG64. When the operator pays a nominal rent for access to a revenue-generating asset, the rental revenue is recognized in accordance with IPSAS 23, *Revenue from Non-Exchange Transactions (Taxes and Transfers)*.

Presentation and Disclosure (see paragraphs 31–33)

- AG65. Disclosures relating to various aspects of service concession arrangements may be addressed in existing Standards. This Standard addresses only the additional disclosures relating to service concession arrangements. Where the accounting for a particular aspect of a service concession arrangement is addressed in another Standard, the grantor follows the disclosure requirements of that Standard in addition to those set out in paragraph 32.
- AG66. IPSAS 1 requires finance costs to be presented separately in the statement of financial performance. The finance charge determined in accordance with paragraph 21 is included in this item.
- AG67. In addition to the disclosures outlined in paragraphs 31–33, the grantor also applies the relevant presentation and disclosure requirements in other IPSASs as they pertain to assets, liabilities, revenues, and expenses recognized under this Standard

Transition (see paragraphs 34-35)

- AG68. [Deleted]
- AG69. [Deleted]
- AG70. [Deleted]
- AG71. [Deleted]
- AG72. [Deleted]
- AG73. [Deleted]

Appendix B

Amendments to Other IPSASs

[Deleted]

Basis for Conclusions

This Basis for Conclusions accompanies, but is not part of, IPSAS 32.

Objective

BC1. In the absence of an International Public Sector Accounting Standard dealing with service concession arrangements, public sector entities are directed, in IPSAS 1, *Presentation of Financial Statements* to look to other international or national accounting standards. In the case of arrangements involving private sector participation, they would try to apply the principles in Interpretation 12 of the International Accounting Standards Board's International Financial Reporting Interpretations Committee (IFRIC 12), *Service Concession Arrangements*. However, IFRIC 12 addresses accounting by the operator, and does not, therefore, provide guidance for the grantor. The IPSASB believes this Standard will promote consistency and comparability in how service concession arrangements are reported by public sector entities.

Scope

- BC2. After considering the various types of arrangements involving public and private sector entities identified in the development of the March 2008 Consultation Paper, Accounting and Financial Reporting for Service Concession Arrangements, the IPSASB concluded that the scope of this Standard should be the mirror of IFRIC 12, in particular, the criteria under which the grantor recognizes a service concession asset (see paragraphs BC11–BC16). The rationale for this decision is that this approach would require both parties to the same arrangement to apply the same principles in determining which party should recognize the asset used in a service concession arrangement. Thus, arrangements in which the criteria for recognition of a service concession asset in paragraph 9 (or paragraph 10 for a whole-of-life asset) are not satisfied, are outside the scope of this IPSAS. The IPSASB considers that this approach minimizes the possibility for an asset to be accounted for by both of the parties, or by neither party.
- BC3. The IPSASB recognized that the Standard should provide Implementation Guidance on the relevant IPSASs that apply to arrangements outside the scope of the Standard. The Implementation Guidance contains a flowchart illustrating the application of this Standard as well as a table of references to relevant IPSASs for the other types of arrangements that are outside the scope of this Standard.
- BC4. The IPSASB concluded that it was important to provide guidance on accounting for the consideration given by the grantor to the operator for the service concession asset. The consideration may give the operator rights to a determinable series of payments of cash or cash equivalents or a right to earn revenue from third-party users of the service concession asset or

- another revenue-generating asset for its use, or a combination of both types of consideration. Each type of consideration results in specific accounting issues on which the IPSASB has provided guidance to facilitate consistent application of the Standard.
- BC5. The IPSASB also concluded that guidance was necessary on applying the general revenue recognition principles in IPSAS 9, *Revenue from Exchange Transactions* to service concession arrangements because of the unique features of some service concession arrangements (e.g., revenue-sharing provisions).
- BC6. This Standard does not specify the accounting by operators, because it is addressed in IFRIC 12. In many cases the operator is a private sector entity, and IPSASs are not designed to apply to private sector entities. The operator or the grantor may also be a [Government Business Enterprise (GBE)] (the term in square brackets is no longer used following the issue of *The Applicability of IPSASs* in April 2016). When this Standard was issued, IPSASs were not designed to apply to GBEs. International Financial Reporting Standards (IFRSs) were applied to private sector entities and GBEs.
- BC7. Some respondents to ED 43 suggested that the scope of the proposed Standard should be extended to include public-to-public service concession arrangements. The IPSASB noted that addressing the accounting for such arrangements was not the primary purpose of the project which was to address the cases when the grantor is a public sector entity that follows accrual IPSASs. The IPSASB noted that application of this Standard by analogy would be appropriate under paragraphs 12–15 of IPSAS 3, *Accounting Policies, Changes in Accounting Estimates and Errors* for the public sector grantor and that relevant international or national accounting standard dealing with service concession arrangements may be applied by the public sector operator

Definitions

- BC8. ED 43 did not provide definitions because IFRIC 12 did not do so. Accordingly, ED 43 provided guidance on certain terminology. Respondents to ED 43 proposed that, because this is a Standard and not an Interpretation, it was important to include definitions for consistency in application of the Standard. The IPSASB agreed that this Standard should include definitions.
- BC9. The IPSASB agreed not to use the term "infrastructure" to refer to the asset used in a service concession arrangement, even though IFRIC 12 uses the term. The IPSASB noted that the term is used in IPSASs in ways that may not be fully compatible with this Standard. Further, the term has a prescribed meaning in some jurisdictions that differs from that used in IFRIC 12. To ensure clarity that the asset referred to is the one recognized on the basis of the conditions for recognition in paragraph 9 of this Standard (or paragraph 10 for a whole-of-life asset), the asset in this Standard is referred to as the

- "service concession asset". This term is intended to cover the same types of assets as envisaged in IFRIC 12.
- BC10. The term "binding arrangement" had not been defined previously, but has been used in other IPSASs to describe arrangements that confer similar rights and obligations on the parties to it as if they were in the form of a contract. The IPSASB concluded that for the purposes of this Standard, this term should be defined to ensure consistent application of the Standard.

Recognition of a Service Concession Asset

- BC11. The main accounting issue in service concession arrangements is whether the grantor should recognize a service concession asset.
- BC12. The IPSASB considered the merits of the risks and rewards and the controlbased approach to assess whether the grantor should recognize the asset. The risks and rewards approach focuses on the economic aspects of the terms and conditions in the arrangement. The IPSASB did not believe this focus to be appropriate for service concession arrangements because the primary purpose of a service concession asset, from the grantor's point of view, is to provide specified public services on behalf of the grantor using a service concession asset, and not to provide economic benefits such as revenue generated by such assets (e.g., from user fees). Thus, the service potential of the asset accrues to the grantor. Economic benefits are only likely to arise from a service concession arrangement in circumstances where the operator is granted the right to earn revenue from third-party users, of either the service concession asset or another revenue-generating asset. A control-based approach focuses on control over the economic benefits and the service potential of the service concession asset
- BC13. As it is often the case that service concession arrangements are entered into for the sharing of risks between the grantor and the operator, the IPSASB also questioned whether sufficiently objective criteria could be established for assessing risks and rewards to enable consistent results to be determined. In addition, weighting of various risks and rewards was seen to be problematic. The IPSASB concluded, therefore, that the risks and rewards approach is inappropriate.
- BC14. The IPSASB also considered whether a rights and obligations approach was appropriate. Although such an approach could have conceptual merit, the IPSASB believes that it would represent a significant change in the accounting and financial reporting of assets and liabilities for public sector entities that could have implications beyond service concession arrangements. Given the IPSASB's decision to complement IFRIC 12, which uses a control-based approach, the IPSASB agreed that a rights and obligations approach was not appropriate for this Standard.

- BC15. The IPSASB concluded that a control-based approach was the most effective means to determine whether the grantor should recognize the asset. The IPSASB concluded that if a control-based approach is used, it should be consistent with IFRIC 12, for the same reasons cited in paragraph BC2. Accordingly, this Standard addresses only arrangements in which the grantor (a) controls or regulates the services provided by the operator, and (b) controls any significant residual interest in the service concession asset at the end of the term of the arrangement. Consistent with IFRIC 12, in the case of whole-of-life assets, only condition (a) must be met for recognition of a service concession asset. The IPSASB concluded that it was important to stress that a service concession arrangement is a binding arrangement. Accordingly, the assessment of whether a service concession asset should be recognized is made on the basis of all of the facts and circumstances of the arrangement.
- BC16. Paragraph 9(a) of this Standard is consistent with paragraph 5 of IFRIC 12. It is intended to apply only to the regulation that is specific to the service concession arrangement, and not to the broad understanding of public sector regulatory powers from the grantor's point of view. The regulation referred to in paragraph 9(a) of this Standard is either by contract or through a regulator. Guidance is provided in paragraph AG6 on applying the term "regulates" in paragraph 9(a) to determine whether the grantor should recognize a service concession asset. Some respondents to ED 43 asserted that providing such additional guidance creates an asymmetry with IFRIC 12, as there is no additional guidance on the meaning of this term. The IPSASB considers the additional guidance provided in paragraph AG6 is necessary to ensure symmetry exists between the public sector grantor's and the private sector operator's application of the "regulates" criterion in determining whether to recognize the service concession asset, as the public sector may have considered the term in the context of the broad regulatory powers of governments.

Recognition of a Liability

- BC17. ED 43 described two circumstances that may give rise to a liability when the grantor recognizes a service concession asset, based on the nature of the consideration due to the operator in exchange for the service concession asset.
- BC18. ED 43 proposed that when the grantor recognizes a service concession asset, a liability shall also be recognized. The ED noted that this liability may be any combination of a financial liability and a performance obligation. ED 43 proposed that a financial liability occurs when the grantor has a determinable series of cash payments of cash or cash equivalents to make to the operator and a performance obligation occurs when the grantor compensates the operator by granting the operator the right to charge users of the service concession asset or by granting the operator access to another revenue-generating asset for its use. ED 43 proposed that the grantor account for the performance

- obligation in accordance with IPSAS 19, *Provisions, Contingent Liabilities and Contingent Assets*.
- BC19. Respondents to ED 43 sought clarification on this issue, particularly with respect to the "performance obligation" identified in ED 43. Respondents' concerns are summarized below.
 - (a) The right to charge users of the service concession asset or by granting the operator access to another revenue-generating asset was seen by some respondents as independent of the compensation for the asset. These respondents highlighted that the requirement to provide access is a feature of most service concession arrangements, and if this is to be recognized, such recognition should not be dependent on the nonoccurrence of a payment stream from the grantor to the operator.
 - (b) While being described as a performance obligation, there is no obligation for an outflow of economic resources from the grantor in future periods. These respondents therefore question whether a liability as defined in IPSAS 1, or a provision as defined in IPSAS 19 could be fairly represented to exist.
- BC20. In addition, a number of other respondents, possibly as a result of the above concerns, requested clarification of the meaning of "performance obligation" in the ED. A few of these respondents queried whether the substance of the nature of this "balancing item" was deferred revenue.
- BC21. The IPSASB agreed that clarification of this issue was required. The IPSASB noted that using the term "performance obligation" could give rise to confusion because it is used in IPSAS 23, *Revenue from Non-Exchange Transactions (Taxes and Transfers)* in relation to non-exchange transactions. The IPSASB noted that a service concession arrangement is an exchange transaction rather than a non-exchange transaction and therefore it would be preferable not to use the term performance obligation in relation to exchange transactions.
- BC22. In IFRIC 12, when the operator does not control the service concession asset, the operator recognizes either a financial asset, or an intangible asset, depending on which party bears the demand risk. The IPSASB agreed that, to maintain symmetry with IFRIC 12, the same approach should be adopted for the grantor. Thus, two models are identified for accounting for the credit when the grantor recognizes a service concession asset in accordance with this Standard: the financial liability model, and the grant of a right to the operator model (which replaces the "performance obligation").
- BC23. The IPSASB's decision to amend the terminology used in ED 43 from "performance obligation" to the Standard's use of "liability" does not change the grantor's accounting treatment of a service concession arrangement from that proposed in ED 43.

The Financial Liability Model

- BC24. Where the grantor compensates the operator by the delivery of cash or another financial asset in exchange for its control of a service concession asset, IFRIC 12 classifies this type of arrangement as the "financial asset model" because the operator receives a financial asset. This Standard refers to this type of arrangement as the "financial liability model" because the grantor has a financial liability.
- BC25. A financial liability arises in cases when the grantor is obligated to make a determinable series of payments to the operator because the grantor has an obligation as a result of the binding arrangement to deliver cash or another financial asset to another entity (the operator). The IPSASB concluded further that when there is a determinable series of payments of cash or cash equivalents, the payments should be allocated as a reduction of the liability, an imputed finance charge, and charges for services provided by the operator under the service concession arrangement.
- BC26. Service concession arrangements are concluded by way of a binding arrangement, which may include contracts or similar arrangements that confer similar rights and obligations on the parties as if they were in the form of a contract. The IPSASB concluded that, if similar arrangements exist that confer the same rights and obligations on either party as if they were in the form of a contract, IPSAS 28, *Financial Instruments: Presentation*, IPSAS 30, *Financial Instruments: Disclosures*, and IPSAS 41, *Financial Instruments* should be applied by analogy to such arrangements.
- BC27. In considering a departure from this aspect of IFRIC 12, the IPSASB noted that the main features of IFRIC 12 that were the subject of the "mirror" approach to developing this Standard were limited to the scope of the arrangements to be included and the recognition and disclosure requirements.
- BC28. IFRIC 12 requires the financial asset to be accounted for in accordance with the IFRS on financial instruments. This Standard provides guidance for determining the interest rate to be used to determine the finance charge under the financial liability model. The IPSASB considered the grantor ordinarily would not have sufficient information to determine a market rate. Accordingly, the guidance requires the operator's cost of capital to be used, if that is practicable to determine. It also permits other rates to be used appropriate to the specific terms and conditions of the service concession arrangement.

Grant of a Right to the Operator Model

BC29. In responding to the issues raised by respondents to ED 43, the IPSASB reconsidered the nature of the consideration given by the grantor for the service concession asset where the operator recoups the price of the asset from earning revenue from third-party users of the service concession asset

or another revenue-generating asset. The IPSASB noted that in this situation, the cash consideration for the service concession asset is not being met by the grantor but by users of the service concession asset or other revenue-generating asset. The economic substance of this arrangement provides an increase in net assets to the grantor, and therefore revenue accrues and should be recognized. As the service concession arrangement is an exchange transaction, the Board referred to IPSAS 9 when considering the nature of the revenue and the timing of the recognition of that revenue.

- BC30. Where the operator bears the demand risk, the grantor compensates the operator by the grant of a right (e.g., a license) to charge users of the public service related to the service concession asset or of another revenue-generating asset. The grantor provides the operator access to the asset in order for the operator to be compensated for construction, development, acquisition, or upgrade of the service concession asset. IFRIC 12 classifies this type of arrangement as the "intangible asset model." This Standard refers to this type of arrangement as the "grant of a right to the operator model."
- BC31. The IPSASB therefore considered whether the credit should be accounted for as a liability, as a direct increase to net assets/equity, or as revenue.
- BC32. It was agreed that, in this circumstance, the grantor does not have a liability because the service concession arrangement is an exchange of assets, with the service concession asset being obtained by the grantor in exchange for a transfer of rights to the operator to earn revenue from third-party users of the asset over the period of the service concession arrangement.
- BC33. Some respondents to ED 43 indicated that the credit should be treated as net assets/equity, consistent with IPSAS 1, which defines net assets/equity as the residual interest in the assets of the entity after deducting all its liabilities. IPSAS 1 envisages four components of net assets/equity. Those components include:
 - (a) Contributed capital, being the cumulative total at the reporting date of contributions from owners, less distributions to owners;
 - (b) Accumulated surpluses or deficits;
 - (c) Reserves, including a description of the nature and purpose of each reserve within net assets/equity; and
 - (d) Non-controlling interests.
- BC34. The IPSASB concluded that the credit did not represent a direct increase in the grantor's net assets/equity because the credit is not one of the components of net assets/equity identified in paragraph BC33 for the reasons noted below:
 - (a) Contributions from owners are defined as "future economic benefits or service potential that has been contributed to the entity by parties external to the entity, other than those that result in liabilities of the

entity, that establish a financial interest in the net assets/equity of the entity, which: (a) Conveys entitlement both to (i) distributions of future economic benefits or service potential by the entity during its life, such distributions being at the discretion of the owners or their representatives, and to (ii) distributions of any excess of assets over liabilities in the event of the entity being wound up; and/or (b) Can be sold, exchanged, transferred, or redeemed." The credit related to the recognition of a service concession asset does not meet this definition because the operator has not made a contribution to the grantor that results in a financial interest in the entity by the operator as envisaged by IPSAS 1.

- (b) Accumulated surplus/deficit is an accumulation of an entity's surpluses and deficits. The credit related to recognition of a service concession asset represents an individual transaction and not an accumulation.
- (c) Reserves generally arise from items recognized directly in net assets/ equity from specific requirements in IPSASs, and may include, for example, gains and losses on revaluation of assets (e.g., property, plant, and equipment, investments). The credit related to the recognition or reclassification of a service concession asset does not represent a gain or loss specified to be directly recognized in net/assets equity because it involves an exchange transaction and not a revaluation of an existing asset of the grantor. Existing assets of the grantor, when used in a service concession arrangement and continue to meet the control criteria in this Standard, are reclassified, thus no revaluation is done.
- (d) A non-controlling interest is defined as "that portion of the surplus or deficit and net assets/equity of a controlled entity attributable to net assets/equity interests that are not owned, directly or indirectly, through controlled entities, by the controlling entity." A non-controlling interest may arise, for example, when at the whole-of-government level, the economic entity includes a commercial public sector entity that has been partly privatized. Accordingly, there may be private shareholders who have a financial interest in the net assets/equity of the entity. The credit related to the recognition of a service concession asset does not meet this definition because operator does not have such a financial interest in the grantor.
- BC35. The IPSASB agreed that the credit represents revenue. As a service concession arrangement is an exchange transaction, the IPSASB referred to IPSAS 9 when considering the nature of the revenue and the timing of the recognition of that revenue. In accordance with IPSAS 9, when goods are sold or services are rendered in exchange for dissimilar goods or services, the exchange is regarded as a transaction that generates revenue as it results in an increase in the net assets of the grantor. In this situation, the grantor has received a service concession asset in exchange for granting a right (a license) to the

- operator to charge the third party users of the public service that it provides on the grantor's behalf. The service concession asset recognized by the grantor and the right (intangible asset) recognized by the operator are dissimilar. However, until the criteria for recognition of revenue have been satisfied, the credit is recognized as a liability.
- BC36. The IPSASB noted that, in this situation, there is no cash inflow to equal the revenue recognized. This result is consistent with IPSAS 9 in which an entity provides goods or services in exchange for another dissimilar asset that is subsequently used to generate cash revenues.
- BC37. The revenue is measured at the fair value of the goods or services received, adjusted by the amount of any cash or cash equivalents transferred. When the fair value of the goods or services received cannot be measured reliably, the revenue is measured at the fair value of the goods or services given up, adjusted by the amount of any cash or cash equivalents transferred.
- BC38. IPSAS 9 identifies three types of transaction that give rise to revenue: the rendering of services, the sale of goods (or other assets) and revenue arising from the use by others of the entity's assets, yielding interest, royalties, and dividends. In considering the nature of the revenue, the IPSASB considered these types of transactions separately.
- BC39. The IPSASB considered the approaches to revenue recognition set out in IPSAS 9 in relation to the "grant of a right to the operator" model and concluded that none of those scenarios fully met the circumstances of this model. Nevertheless, the IPSASB noted that the timing of revenue recognition under each of them is over the term of the arrangement, rather than immediately. The IPSASB determined that, by analogy, such a pattern of revenue recognition was also appropriate for recognizing the revenue arising from the liability related to this model. As a result, until the criteria for recognition of revenue have been satisfied, the credit is recognized as a liability.
- BC40. The IPSASB considered whether the grantor should recognize the operating expenses in the circumstances described in paragraph BC30 relating to the grant of a right to the operator model. The IPSASB noted that the grantor's liability recognized relates solely to the service concession asset received by the grantor. If the service expenses were recognized, the grantor would also have to recognize annually imputed revenue equal to the annual expense. The IPSASB did not believe this accounting would provide useful information, because revenue and an expense of equal amounts would be recognized annually. The IPSASB noted further that reliable information about the operator's expenses may not be available in any case. The IPSASB therefore concluded that the grantor should not recognize operating expenses associated with the service concession arrangement in the circumstances described in paragraph BC30.

Accounting Issues Addressed in Other IPSASs

BC41. Because of the complexity of many service concession arrangements, there may be additional accounting issues related to certain terms in the contract, or a similar binding arrangement (e.g., revenues, expenses, guarantees, and contingencies). The IPSASB agreed that it was not necessary to repeat such existing guidance in this Standard. Accordingly, when an existing IPSAS specifies the accounting and reporting for a component of a service concession arrangement, that IPSAS is referred to in this Standard and no additional guidance is provided. However, the IPSASB noted some cases (e.g., revenue recognition), when the application of such IPSASs would be difficult given certain unique features in service concession arrangements. To ensure consistent implementation of this Standard, the IPSASB provided specific guidance on how the principles in the other IPSAS would be applied.

Transition

- BC42. This Standard requires an entity that has previously recognized service concession assets and related liabilities, revenues, and expenses to apply this Standard retrospectively in accordance with IPSAS 3. The Standard also requires an entity that has not previously recognized service concession assets and related liabilities, revenues, and expenses and uses the accrual basis of accounting to apply this Standard either retrospectively or prospectively using deemed cost from the beginning of the earliest period for which comparative information is presented in the financial statements.
- BC43. The general requirement in IPSAS 3 is that the changes should be accounted for retrospectively, except to the extent that retrospective application would be impracticable. The IPSASB noted that there are two aspects to retrospective determination: reclassification and remeasurement. The IPSASB took the view that it will usually be practicable to determine retrospectively the appropriate classification of all amounts previously included in a grantor's statement of financial position, but that retrospective remeasurement of service concession assets might not always be practicable, particularly if an entity has not previously recognized service concession assets and related liabilities, revenues, and expenses.
- BC44. The IPSASB noted that, when retrospective restatement is not practicable, IPSAS 3 requires prospective application from the earliest practicable date, which could be the start of the current reporting period.
- BC45. The transitional provisions in this Standard for entities that have not previously recognized service concession assets were amended from ED 43 because some respondents to ED 43 questioned why the general requirement in IPSAS 3 is not also appropriate for an entity that has not previously recognized service concession arrangements. ED 43 required prospective application in such cases, but permitted retrospective application.

- BC46. When developing ED 43 the IPSASB had concerns relating to the practicality of determining the measurement of a service concession asset, and considered that this could result in inconsistent treatment of arrangements entered into in the past. This was a similar issue to that which arose in finalizing IPSAS 31, *Intangible Assets*. On that basis, the IPSASB considered it appropriate to propose transitional provisions in ED 43 that were consistent with those in IPSAS 31.
- BC47. However, the IPSASB noted that the circumstances surrounding intangible assets differ from those in service concession arrangements. Notably, service concession arrangements generally involve long-term binding arrangements for which information required to develop fair value and cost information would likely be more readily available than it is for intangible assets acquired or developed in the past, even in cases where an entity had not previously recognized service concession assets.
- BC48. The IPSASB did however acknowledge that because many of these arrangements may have been entered into some time ago, it may be difficult to apply full retrospective application. As a result, the IPSASB considered that a "deemed cost" could be used to recognize and measure service concession assets.

Revision of IPSAS 32 as a result of Part II of *Improvements to IPSASs 2015*: issues raised by stakeholders

- BC49. The IPSASB had its attention drawn to a possible inconsistency between the requirements in IPSAS 32 and the requirements in IPSAS 17 and IPSAS 31. The requirements in IPSAS 32 could be seen as requiring service concession assets to be presented as a single class of assets, even if they were of a dissimilar nature and function. As it is not the intention of the IPSASB to require that dissimilar assets be reported as if they were similar, the IPSASB decided to propose clarifications to IPSAS 32 to make its intentions clear. The IPSASB considered whether these changes would reduce the information available to users, but is satisfied that the current disclosure requirements, in particular those in paragraph 32, ensure high quality disclosures about assets subject to service concession arrangements.
- BC50. The IPSASB noted that the reclassification of service concessions assets could require a change in measurement basis for some entities. For example, some service concession assets measured using the revaluation model, might be reclassified into a class of assets measured using the cost model. Equally, some service concession assets measured using the cost model, might be reclassified into a class of assets measured using the revaluation model. Because the balance between the service concession assets and the other assets in a class will vary from entity to entity, the IPSASB agreed to permit entities to select the measurement basis to be applied at the point of reclassification. The IPSASB also noted that the information required to retrospectively apply

the cost model might not be readily available. Consequently, the IPSASB agreed to permit entities to use the carrying amounts determined under the revaluation model as deemed cost at the point of reclassification where an entity elects to measure a class of assets using the cost model.

Revision of IPSAS 32 as a result of the IPSASB's *The Applicability of IPSASs*, issued in April 2016

- BC51. The IPSASB issued *The Applicability of IPSASs* in April 2016. This pronouncement amends references in all IPSASs as follows:
 - (a) Removes the standard paragraphs about the applicability of IPSASs to "public sector entities other than GBEs" from the scope section of each Standard;
 - (b) Replaces the term "GBE" with the term "commercial public sector entities", where appropriate; and
 - (c) Amends paragraph 10 of the *Preface to International Public Sector Accounting Standards* by providing a positive description of public sector entities for which IPSASs are designed.

The reasons for these changes are set out in the Basis for Conclusions to IPSAS 1.

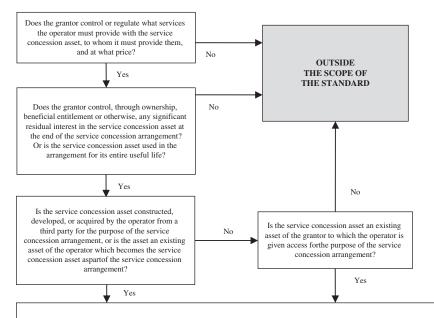
Implementation Guidance

This guidance accompanies, but is not part of, IPSAS 32.

IG1. The purpose of this Implementation Guidance is to illustrate certain aspects of the requirements of IPSAS 32.

Accounting Framework for Service Concession Arrangements

IG2. The diagram below summarizes the accounting for service concession arrangements established by IPSAS 32.



WITHIN THE SCOPE OF THE STANDARD

- Grantor recognizes a service concession asset, or the grantor reclassifies an item of property, plant, and
 equipment, an intangible asset, or a leased asset as a service concession asset
- Grantor accounts for the service concession asset as property, plant, and equipment or an intangible asset in accordance with IPSAS 17 or IPSAS 31, as appropriate
- · Grantor follows impairment testing as set out in IPSAS 21 and IPSAS 26
- Grantor recognizes related liability equal to the value of the SCA asset (IPSAS 9, IPSAS 28, IPSAS 30, and IPSAS 41)
- Grantor recognizes revenues and expenses related to the SCA

References to IPSASs that Apply to Typical Types of Arrangements Involving an Asset Combined with Provision of a Service

- IG3. The table sets out the typical types of arrangements for private sector participation in the provision of public sector services and provides references to IPSASs that apply to those arrangements. The list of arrangements types is not exhaustive. The purpose of the table is to highlight the continuum of arrangements. It is not the IPSASB's intention to convey the impression that bright lines exist between the accounting requirements for various types of arrangements.
- IG4. Shaded text shows arrangements within the scope of IPSAS 32.

Category	Lessee	s	ervice provider		(Owner	
Typical arrangement types	Lease (e.g., operator leases asset from grantor)	Service and/or maintenance contract (specific tasks e.g., debt collection, facility management)	Rehabilitate- operate-transfer	Build- operate- transfer	Build- own- operate	100% Divestment/ Privatization/ Corporation	
Asset ownership		Gra	antor		0	perator	
Capital investment	G	rantor		Oper	ator		
Demand risk	Shared	Grantor	Grantor and/or (Operator	О	perator	
Typical duration	8–20 years	1–5 years	25	–30 years		Indefinite (or may be limited by binding arrangement or license)	
Residual interest		Gra	antor		О	perator	
Relevant IPSASs	IPSAS 13	IPSAS 1	This IPSAS/IF IPSAS		IPSAS 17/IPSAS 31 (derecognition) IPSAS 9 (revenue recognition)		

Illustrative Examples

These examples accompany, but are not part of, IPSAS 32.

IE1. These examples deal with only three of many possible types of service concession arrangements. Their purpose is to illustrate the accounting treatment for some features that are commonly found in practice. To make the illustrations as clear as possible, it has been assumed that the term of the service concession arrangement is only ten years and that the operator's annual receipts are constant over that period. In practice, terms may be much longer and annual revenues may increase with time.

Arrangement Terms (Common to All Three Examples)

- IE2. In these examples, monetary amounts are denominated in "currency units" (CU).
- IE3. These terms are common to the three examples that follow:
- IE4. The terms of the arrangement require an operator to construct a road—completing construction within two years—and maintain and operate the road to a specified standard for eight years (i.e., years 3–10). The arrangement is within the scope of this Standard and the road meets the conditions for recognition of a service concession asset in paragraph 9 (or paragraph 10 for a whole-of-life asset).
- IE5. The terms of the arrangement also require the operator to resurface the road when the original surface has deteriorated below a specified condition. The operator estimates that it will have to undertake the resurfacing at the end of year 8 at a fair value of CU110. The compensation to the operator for this service is included in the predetermined series of payments and/or the revenue the operator has the right to earn from the service concession asset or another revenue-generating asset granted to the operator by the grantor.
- IE6. It is assumed that the original road surface is a separate component of the service concession asset and meets the criteria for recognition specified in IPSAS 17 when the service concession asset is initially recognized. It is further assumed that there is sufficient certainty regarding the timing and amount of the resurfacing work for it to be recognized as a separate component when the resurfacing occurs.³ It is assumed that the expected cost of the resurfacing can be used to estimate the initial cost of the surface layers recognized as a separate component of the service concession asset. The road surface is therefore recognized as a separate component of the initial fair value of the service concession asset and measured at

If this was not the case (e.g., where the operator might resurface in future, or might incur additional maintenance over the period of the service concession arrangement), it might not be appropriate to recognize a component.

the estimated fair value of the resurfacing and depreciated over years 3–8. This depreciation period is shorter than that for the road base, and takes into account that resurfacing would ordinarily occur over six years, rather than 25 years. During the construction phase, it is assumed that only the road base is constructed in year 1, and that the road only becomes ready to use at the end of year 2.

- IE7. Recognition of the replacement component of the road surface as a separate component of the service concession asset in year 8 also results in an increase in the liability recognized by the grantor. Where the liability relates to the grant of a right to the operator model, additional revenue in respect of this increase is recognized evenly over the term of the arrangement. However, if the expenditure represented an improvement in service potential such as a new traffic lane rather than restoration to original service capability then it would be appropriate to instead recognize revenue relevant to that improvement only once it has occurred.
- IE8. At the beginning of year 3, the total fair value of the road is CU1,050, comprised of CU940 related to the construction of the base layers and CU110 related to construction of the surface layers. The fair value of the surface layers is used to estimate the fair value of the resurfacing (which is treated as a replacement component in accordance with IPSAS 17). The estimated life of surface layers (i.e., six years) is also used to estimate the depreciation of the replacement component in years 9 and 10. The total initial fair value of the road is lower than the present value of the series of predetermined payments pertaining to the asset, where applicable.
- IE9. The road base has an economic life of 25 years. Annual depreciation is taken by the grantor on a straight-line basis. It is therefore CU38 (940/25) for the base layers. The surface layers are depreciated over 6 years (years 3–8 for the original component, and starting in year 9 for the replacement component). Annual depreciation related to the surface layers is CU18 (CU110/6). There is no impairment in the value of the road over the term of the service concession arrangement.
- IE10. The operator's cost of capital is not practicable to determine. The rate implicit in the service concession arrangement specific to the asset is 6.18%.
- IE11. It is assumed that all cash flows take place at the end of the year.
- IE12. It is assumed that the time value of money is not significant. Paragraph AG59 provides guidance on methods that may be appropriate where the time value of money is significant.

- IE13. At the end of year 10, the arrangement will end. At the end of the arrangement, the operator will transfer the operation of the road to the grantor.
- IE14. The total compensation to the operator under each of the three examples is inclusive of each of the components of the service concession arrangement and reflects the fair values for each of the services, which are set out in Exhibit 1.
- IE15. The grantor's accounting policy for property, plant, and equipment is to recognize such assets using the cost model specified in IPSAS 17.

Exhibit 1: Fair Values of the Components of the Arrangement (Currency Units)

Arrangement Component	Fair Value
Road – base layers	940
Road – original surface layers	110
Total FV of road	1,050
Annual service component	12
Effective interest rate	6.18%

Example 1: The Grantor makes a Predetermined Series of Payments to the Operator

Additional Terms

IE16. The terms of the arrangement require the grantor to pay the operator CU200 per year in years 3–10 for making the road available to the public. The total consideration (payment of CU200 in each of years 3–10) reflects the fair values for each of the services indicated in Exhibit 1. These payments are intended to cover the cost of constructing the road, annual operating costs of CU12 and reimbursement to the operator for the cost of resurfacing the road in year 8 of CU110.

Financial Statement Impact

- IE17. The grantor initially recognizes the service concession asset as property, plant, and equipment at its fair value (total CU1,050, comprised of CU940 related to construction of the base layers and CU110 related to construction of the original surface layers). The asset is recognized as it is constructed (CU525 in year 1 and CU525 in year 2). Depreciation is taken annually (CU56, comprised of CU38 for the base layers and CU18 for the surface layers), starting from year 3.
- IE18. The grantor initially recognizes a financial liability at fair value equal to the fair value of the asset under construction at the end of year 1 (CU525). The liability is increased at the end of year 2 to reflect both the fair value of the

additional construction (CU525) and the finance charge on the outstanding financial liability. Because the amount of the predetermined payment related to the service component of the service concession arrangement is known, the grantor is able to determine the amount of the payment that reduces the liability. A finance charge at the implicit rate of 6.18% is recognized annually. The liability is subsequently measured at amortized cost, i.e., the amount initially recognized plus the finance charge on that amount calculated using the effective interest method minus repayments.

- IE19. The compensation for the road resurfacing is included in the predetermined series of payments. There is no direct cash flow impact related to the road resurfacing; however, the grantor recognizes the resurfacing as an asset when the work is undertaken and recognizes depreciation expense of CU110/6 = CU18, beginning in year 9.
- IE20. The compensation for maintenance and operating the road (CU12) is included in the predetermined series of payments. There is no cash flow impact related to this service expense; however, the grantor recognizes an expense annually.
- IE21. The costs of services are accounted for in accordance with IPSAS 1.

Overview of Cash Flows, Statement of Financial Performance, and Statement of Financial Position

IE22. The grantor's cash flows, statement of financial performance, and statement of financial position over the duration of the arrangement will be as illustrated in Tables 1.1 to 1.3. In addition, Table 1.4 shows the changes in the financial liability.

Table 1.1 Cash Flows (Currency Units)

Year	1	2	3	4	5	6	7	8	9	10	Total
Predetermined series of	-	_	(200)	(200)	(200)	(200)	(200)	(200)	(200)	(200)	(1,600)
Net inflow/	_	_	(200)	(200)	(200)	(200)	(200)	(200)	(200)	(200)	(1,600)
(outflow)			(11)	()	()	()	()	()	()	()	,,,,,

Table 1.2 Statement of Financial Performance (Currency Units)

Year	1	2	3	4	5	6	7	8	9	10	Total
Service	_	_	(12)	(12)	(12)	(12)	(12)	(12)	(12)	(12)	(96)
expense											
Finance charge	-	(32)	(67)	(59)	(51)	(43)	(34)	(25)	(22)	(11)	(344)
Depreciation –	_	_	(38)	(38)	(38)	(38)	(38)	(38)	(38)	(38)	(304)
base layers											
Depreciation -	_	_	(18)	(19)	(18)	(18)	(19)	(18)	-	-	(110)
original surface											
layer											
Depreciation	_	_	-	_	_	_	_	_	(18)	(19)	(37)
 replacement 											
surface layer											
Total	_	_	(56)	(57)	(56)	(56)	(57)	(56)	(56)	(57)	(451)
depreciation											
Annual	_	(32)	(135)	(128)	(119)	(111)	(103)	(93)	(90)	(80)	(891)
surplus/											
(deficit)											

- Depreciation in years 3–8 reflects the depreciation on the initially-constructed road surface. It is fully depreciated over that period. Depreciation in years 9–10 reflects the depreciation on the new service concession asset component (surface) recognized in year 8.
- 2. Although these Illustrative Examples use a straight-line depreciation method, it is not intended that this method be used in all cases. Paragraph 76 of IPSAS 17 requires that, "The depreciation method shall reflect the pattern in which the asset's future economic benefits or service potential is expected to be consumed by the entity." Likewise, for intangible assets, paragraph 96 of IPSAS 31 requires that, "The depreciable amount of an intangible asset with a finite useful life shall be allocated on a systematic basis over its useful life."

Table 1.3 Statement of Financial Position (Currency Units)

Year	1	2	3	4	5	6	7	8	9	10
Service concession asset – base layers	525	940	902	864	826	788	750	712	674	636
Service concession asset – original surface layer	_	110	92	73	55	37	18	_	_	-
Service concession asset – replacement surface layer	-	-	-	-	_	_	-	110	92	73
Total Service concession asset	525	1,050	994	937	881	825	768	822	766	709
Cash	-	_	(200)	(400)	(600)	(800)	(1,000)	(1,200)	(1,400)	(1,600)
Financial liability	(525)	(1,082)	(961)	(832)	(695)	(550)	(396)	(343)	(177)	-
Cumulative surplus/deficit	-	32	167	295	414	525	628	721	811	891

- In this example, the resurfacing occurs as expected in year 8, when the initially-constructed road surface is fully depreciated. If the resurfacing occurred earlier, the initially-constructed road surface would not be fully depreciated, and would need to be derecognized in accordance with IPSAS 17 before the new component of the service concession asset related to the resurfacing is recognized.
- 2. The new component of the service concession asset related to the resurfacing is recognized in year 8. Years 9–10 reflect deprecation on this additional component (Table 1.2).
- The financial liability is increased in year 8 for the recognition of the new component of the service concession asset.

Table 1.4 Changes in Financial Liability (Currency Units)

Year	1	2	3	4	5	6	7	8	9	10
Balance brought forward	-	525	1,082	961	832	695	550	396	343	177
Liability recognized along with initial service concession asset	525	525	-	-	-	-	-	-	-	-
Finance charge added to liability prior to payments being made	_	32	-	-	-	_	_	-	_	-
Portion of predetermined series of payments that reduces the liability	-	_	(121)	(129)	(137)	(145)	(154)	(163)	(166)	(177)
Liability recognized along with replacement surface layers	-	_	-	-	-	-	-	110	-	-
Balance carried forward	525	1,082	961	832	695	550	396	343	177	_

Example 2: The Grantor Gives the Operator the Right to Charge Users a Toll for Use of the Road

Additional Arrangement Terms

IE23. The terms of the arrangement allow the operator to collect tolls from drivers using the road. The operator forecasts that vehicle numbers will remain constant over the duration of the arrangement and that it will receive tolls of CU200 in each of years 3–10. The total consideration (tolls of CU200 in each of years 3–10) reflects the fair values for each of the services indicated in Exhibit 1, and is intended to cover the cost of constructing the road, annual operating costs of CU12 and reimbursement to the operator for the cost of resurfacing the road in year 8 of CU110.

Financial Statement Impact

IE24. The grantor initially recognizes the service concession asset as property, plant, and equipment at its fair value (total CU1,050, comprised of CU940 related to construction of the base layers and CU110 related to construction of the original surface layers). The asset is recognized as it is constructed (CU525 in year 1 and CU525 in year 2). Depreciation is taken annually

- (CU56, comprised of CU38 for the base layers and CU18 for the surface layers, starting in year 3).
- IE25. As consideration for the service concession asset, the grantor recognizes a liability under the grant of a right to the operator model for granting the operator the right to collect tolls of CU200 in years 3–10. The liability is recognized as the asset is recognized.
- IE26. The liability is reduced over years 3–10, and the grantor recognizes revenue on that basis because access to the service concession asset is expected to be provided evenly over the term of the service concession arrangement from the point at which the asset is capable of providing economic benefits.
- IE27. The compensation for the road resurfacing is included in the tolls the operator expects to earn over the term of the service concession arrangement. There is no direct cash flow impact related to the road resurfacing; however, the grantor recognizes the resurfacing as an asset when the work is undertaken and recognizes depreciation expense of CU110/6 = CU18, beginning in year 9.
- IE28. The compensation for maintenance and operating the road (CU12) is included in the tolls the operator expects to earn over the term of the service concession arrangement. There is no financial statement impact related to this service expense. It does not affect cash flow because the grantor has no cash outflow. It is not recognized as an operating expense because the fair value of the asset and liability initially recognized do not include any service costs the operator may incur.

Overview of Cash Flows, Statement of Financial Performance, and Statement of Financial Position

IE29. The grantor's cash flows, statement of financial performance, and statement of financial position over the duration of the arrangement will be as illustrated in Tables 2.1 to 2.2. In addition, Table 2.3 shows the changes in the liability.

Cash Flows

IE30. Because there are no payments made to the operator, there are no cash flow impacts for this example.

Table 2.1 Statement of Financial Performance (Currency Units)

Year	1	2	3	4	5	6	7	8	9	10	Total
Revenue (reduction of liability)	-	_	145	145	145	145	145	145	145	145	1160
Depreciation – base layers	-	-	(38)	(38)	(38)	(38)	(38)	(38)	(38)	(38)	(304)
Depreciation – original surface layer	_	-	(18)	(19)	(18)	(18)	(19)	(18)	-	_	(110)
Depreciation – replacement surface layer	-	-	-	-	-	-	-	-	(18)	(19)	(37)
Total depreciation	-	_	(56)	(57)	(56)	(56)	(57)	(56)	(56)	(57)	(451)
Annual surplus/(deficit)	_	_	89	88	89	89	88	89	89	88	709

- Depreciation in years 3–8 reflects the depreciation on the initially-constructed road surface. It is fully depreciated over that period.
- Depreciation in years 9–10 reflects the depreciation on the new service concession asset component (surface) recognized in year 8.
- 3. The revenue (reduction of the liability) includes revenue from the additional liability (Table 2.3).
- 4. All revenue is recognized evenly over the term of the arrangement.

Table 2.2 Statement of Financial Position (Currency Units)

Year	1	2	3	4	5	6	7	8	9	10
Service concession asset – base layers	525	940	902	864	826	788	750	712	674	636
Service concession asset – original surface layer	-	110	92	73	55	37	18	_	_	_
Service concession asset – replacement surface layer	_	-	-	_	-	-	_	110	92	73
Total Service concession asset	525	1,050	994	937	881	825	768	822	766	709
Cash	-	_	-	-	-	_	_	_	-	-
Liability	(525)	(1,050)	(905)	(760)	(615)	(470)	(325)	(290)	(145)	-
Cumulative surplus/deficit	_	-	(89)	(177)	(266)	(355)	(443)	(532)	(621)	(709)

- In this example, the resurfacing occurs as expected in year 8, when the initially-constructed road surface is fully depreciated. If the resurfacing occurred earlier, the initially-constructed road surface would not be fully depreciated, and would need to be derecognized in accordance with IPSAS 17 before the new component of the service concession asset related to the resurfacing is recognized.
- 2. The new component of the service concession asset related to the resurfacing is recognized in year 8. Years 9–10 reflect deprecation on this additional component (Table 2.2).
- The liability is increased in year 8 for the recognition of the new component of the service concession asset.

Table 2.3 Changes in Liability (Currency Units)

Year	1	2	3	4	5	6	7	8	9	10
Balance brought forward	-	525	1,050	905	760	615	470	325	290	145
Liability recognized along with initial service concession asset	525	525	-	-	-	-	-	_	_	-
Revenue (reduction of liability)	-	_	(145)	(145)	(145)	(145)	(145)	(145)	(145)	(145)
Liability recognized along with replacement surface layers	_	_	-	_	_	_	_	110	_	-
Balance carried forward	525	1,050	905	760	615	470	325	290	145	_

Example 3: The Grantor Makes a Predetermined Series of Payments to the Operator and Also Grants the Operator the Right to Charge Users a Toll for Use of the Road

Additional Arrangement Terms

IE31. The terms of the arrangement allow the operator to collect tolls from drivers using the road. The operator forecasts that vehicle numbers will remain constant over the duration of the arrangement and that it will receive tolls of CU100 in each of years 3–10. The arrangement also requires the grantor to make a predetermined series of payments to the operator of CU100 annually. The fair value of the right to collect tolls and the predetermined series of payments are considered to compensate the operator equally (i.e., 50% from each form of compensation to the operator).

Financial Statement Impact

- IE32. The grantor initially recognizes the service concession asset as property, plant, and equipment at its fair value (total CU1,050, comprised of CU940 related to construction of the base layers and CU110 related to construction of the original surface layers). The asset is recognized as it is constructed (CU525 in year 1 and CU525 in year 2). Depreciation is taken annually (CU56, comprised of CU38 for the base layers and CU18 for the surface layers).
- IE33. As consideration for the service concession asset, the grantor recognizes both a liability under the grant of a right to the operator model by granting the operator the right to collect tolls of CU100 in years 3–10, and a financial liability to make payments of CU100 in years 3–10. A liability and a financial liability are recognized as the asset is recognized at the end of year 1 (CU525). The liability and financial liability are increased at the end of year 2 to reflect

- both the fair value of the additional construction (CU525) and the finance charge on the outstanding financial liability.
- IE34. The grantor's obligation related to the right granted to the operator to charge tolls and the predetermined payments are regarded as two separate items. Therefore in this arrangement it is necessary to divide the grantor's consideration to the operator into two parts—a liability and a financial liability.
- IE35. The liability of CU525 (recognized evenly at the end of years 1 and 2) is reduced over years 3–10, and the grantor recognizes revenue on the same basis because the tolls are expected to be earned evenly over the term of the service concession arrangement from the point at which the asset is capable of providing service benefits.
- IE36. The grantor initially recognizes a financial liability at fair value equal to half of the fair value of the asset (CU525), recognized evenly at the end of years 1 and 2; a liability under the grant of a right to the operator model is recognized in an amount equal to the other half of the fair value of the asset. The financial liability is also increased at the end of year 2 by the finance charge on the outstanding financial liability. Because the amount of the predetermined payments related to the service component of the service concession arrangement is known, the grantor is able to determine the amount of the payments that reduces the liability. A finance charge at the implicit rate of 6.18% is recognized annually. The liability is subsequently measured at amortized cost, i.e., the amount initially recognized plus the finance charge on that amount calculated using the effective interest method minus repayments.
- IE37. The operator is compensated for the road resurfacing (CU110) equally through the tolls the operator expects to earn over the term of the service concession arrangement and the series of predetermined payments (i.e., 50% from each). There is no direct cash flow impact related to the road resurfacing; however, the grantor recognizes the resurfacing as an asset when the work is undertaken and recognizes depreciation expense of CU110/6 = CU18, beginning in year 9.
- IE38. The operator is compensated for maintenance and operating the road (CU12) equally through the tolls the operator expects to earn over the term of the service concession arrangement and the predetermined payment (i.e., 50% from each). There is no direct cash flow impact related to this service expense because the grantor has no cash outflow. However, the grantor recognizes an expense annually for the portion of the compensation related to the series of predetermined payments (CU6). There is no financial statement impact for the remaining CU6 of this service expense. It is not recognized as an operating expense because the fair value of the asset and liability initially recognized do not include any service costs the operator may incur.

IE39. The grantor's cash flows, statement of financial performance, and statement of financial position over the duration of the arrangement will be as illustrated in Tables 3.1 to 3.3. In addition, Table 3.4 shows the changes in the liability and Table 3.5 shows the changes in the financial liability.

Overview of Cash Flows, Statement of Financial Performance, and Statement of Financial Position

Table 3.1 Cash Flows (Currency Units)

Year	1	2	3	4	5	6	7	8	9	10	Total
Predetermined series of payments	_	_	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(800)
Net inflow/ (outflow)	_	-	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(800)

Table 3.2 Statement of Financial Performance (Currency Units)

Year	1	2	3	4	5	6	7	8	9	10	Total
Revenue (reduction of liability)	-	_	73	72	73	72	73	72	73	72	580
Service expense	-	_	(6)	(6)	(6)	(6)	(6)	(6)	(6)	(6)	(48)
Finance charge	_	(16)	(33)	(30)	(26)	(22)	(17)	(12)	(11)	(5)	(172)
Depreciation – base layers	-	_	(38)	(38)	(38)	(38)	(38)	(38)	(38)	(38)	(304)
Depreciation – original surface layer	-	_	(18)	(19)	(18)	(18)	(19)	(18)	_	_	(110)
Depreciation – replacement surface layer	-	_	-	-	_	-	-	-	(18)	(19)	(37)
Total depreciation	_	_	(56)	(57)	(56)	(56)	(57)	(56)	(56)	(57)	(451)
Annual surplus/ (deficit)	-	(16)	(22)	(21)	(15)	(12)	(7)	(2)	_	4	(91)

- 1. Depreciation in years 3–8 reflects the depreciation on the initially-constructed road surface. It is fully depreciated over that period.
- Depreciation in years 9–10 reflects the depreciation on the new service concession asset component (surface) recognized in year 8.
- 3. The revenue (reduction of the liability) includes revenue from the additional liability (Table 3.3).
- 4. All revenue is recognized evenly over the term of the arrangement.

Table 3.3 Statement of Financial Position (Currency Units)

Year	1	2	3	4	5	6	7	8	9	10
Service concession asset – base layers	525	940	902	864	826	788	750	712	674	636
Service concession asset – surface layer	-	110	92	73	55	37	18	-	-	-
Service concession asset – replacement surface layer	_	_	_	_	_	_	_	110	92	73
Total service concession asset	525	1,050	994	937	881	825	768	822	766	709
Cash	-	_	(100)	(200)	(300)	(400)	(500)	(600)	(700)	(800)
Liability	(262)	(525)	(452)	(380)	(307)	(235)	(162)	(145)	(72)	-
Financial liability	(263)	(541)	(480)	(416)	(348)	(276)	(199)	(172)	(89)	_
Cumulative surplus/ deficit	-	16	38	59	74	86	93	95	95	91

- In this example, the resurfacing occurs as expected in year 8, when the initially-constructed road surface is fully depreciated. If the resurfacing occurred earlier, the initially-constructed road surface would not be fully depreciated, and would need to be derecognized in accordance with IPSAS 17 before the new component of the service concession asset related to the resurfacing is recognized.
- 2. The new component of the service concession asset related to the resurfacing is recognized in year 8. Years 9–10 reflect deprecation on this additional component (Table 3.2).
- 3. The liability is increased in year 8 for the recognition of 50% of the new component of the service concession asset.
- 4. The financial liability is increased in year 8 for the recognition of 50% of the new component of the service concession asset

Table 3.4 Changes in Liability (Currency Units)

Year	1	2	3	4	5	6	7	8	9	10
Balance brought forward	1	262	525	452	380	307	235	162	145	72
Liability recognized along with initial service concession asset	262	263	-	-	-	-	-	_	_	_
Revenue (reduction of liability)	_	_	(73)	(72)	(73)	(72)	(73)	(72)	(73)	(72)
Liability recognized along with replacement surface layers	_	-	-	-	-	-	-	55	_	-
Balance carried forward	262	525	452	380	307	235	162	145	72	-

Table 3.5 Changes in Financial Liability (Currency Units)

Year	1	2	3	4	5	6	7	8	9	10
Balance brought forward	-	263	541	480	416	348	276	199	172	89
Liability recognized along with initial service concession asset	263	262	-	_	-	_	_	_	_	_
Finance charge added to liability prior to payments being made	_	16	_	_	-	-	_	-	_	-
Portion of predetermined series of payments that reduces the liability	-	_	(61)	(64)	(68)	(72)	(77)	(82)	(83)	(89)
Liability recognized along with replacement surface layers	_	_	_	_	_	_	_	55	_	_
Balance carried forward	263	541	480	416	348	276	199	172	89	_