

This accounting policy paper is based on IPSAS 32 Service Concession Arrangements: Grantor, as adopted by the Treasury of the Republic of Cyprus.

Service Concession Arrangements: Grantor

IPSAS Project Team
(by Yiota Michael)
The Treasury of the Republic of Cyprus

Date: 2 July 2018

TABLE OF CONTENTS

1.	INTRODUCTION	2
1.1	Preamble.....	2
1.2	Objectives	2
1.3	Scope	3
1.4	Definitions	4
2.	RECOGNITION AND MEASUREMENT OF A SERVICE CONCESSION ASSET	5
2.1	Recognition Of A Service Concession Asset.....	5
2.1.1	Existing Assets Of The Operator	6
2.1.2	Constructed Or Developed Asset (“Under Construction” Service Concession Assets)	6
2.2	Measurement Of A Service Concession Asset.....	7
2.3	Subsequent Measurement	7
3.	RECOGNITION AND MEASUREMENT OF LIABILITIES	8
3.1	General Principles.....	8
3.1.1	Financial Liability Model.....	9
3.1.2	Grant of a Right to the Operator Model	10
3.2	Dividing Arrangement.....	10
4.	OTHER LIABILITIES, COMMITMENTS, CONTINGENT LIABILITIES AND CONTINGENT ASSETS	12
5.	OTHER REVENUES	12
6.	DISCLOSURES	13
7.	TRANSITIONAL PROVISIONS	14
8.	EFFECTIVE DATE	14
9.	REFERENCES	14
10.	APPENDICES	15

1. INTRODUCTION

1.1 PREAMBLE

Service Concession Arrangements consist mainly of contracts (binding arrangements) under which a public sector entity, the grantor, grants a private entity, the operator, the right to operate the grantor's assets. In a service concession arrangement, the operator agrees to maintain and operate the asset providing a public service for a predefined period of time. In some cases the grantor may agree to pay the operator for the provision of public services, or may agree to pay the operator a predefined rate over the agreement's term, or the grantor may give the right to the operator to charge the users of the asset, at a guaranteed minimum in user fee (such as minimum tolls to be charged to drivers for their usage of a road network).

These Service Concession Assets generally refer to infrastructure assets such as an airport, toll road, bridge, hospital, prison, desalination plant etc. and other non current tangible or intangible assets used for administrative purposes **in delivering public services**, which may already exist, are constructed or even are upgraded by the operator.

1.2 OBJECTIVES

The objective of this accounting policy is to propose the appropriate accounting treatment and disclosures for Service Concession Arrangements by the grantor, a public sector entity. The aim of this policy is to provide technical accounting guidance for the preparation of financial statements, so as to enable them to give a true and fair view. The aforementioned policy is prepared following guidance from all relevant International Public Sector Accounting Standards (IPSASs).

1.3 SCOPE

This accounting policy applies to the accounting treatment of all service concession arrangements in the financial statements of the Republic of Cyprus and its consolidated entities, as these are defined in the relevant accounting policy.

Arrangements within the scope of this accounting policy involve the operator providing public services related to the service concession asset **on behalf of the grantor**.

The following are outside the scope of this accounting policy:

1. Arrangements 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).
2. The accounting treatment to be followed by operators.

1.4 DEFINITIONS

A **binding arrangement**, for the purposes of this policy, 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 accounting policy, is the entity that grants the right to use the service concession asset to the operator.

An **operator**, for the purposes of this accounting policy, is the entity that uses the service concession asset to provide public services subject to the grantor's control of the asset.

A **service concession arrangement** is a binding arrangement between a grantor and an operator in which:

- 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 **service concession asset** 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.

A **whole-of-life asset** is an asset used in a service concession arrangement for its entire useful life.

Any other terms defined in other accounting policies that have been adopted by the government of the Republic of Cyprus, have the meaning presented in these accounting policies.

2. RECOGNITION AND MEASUREMENT OF A SERVICE CONCESSION ASSET

2.1 RECOGNITION OF A SERVICE CONCESSION ASSET

1. The grantor shall recognise an asset provided by the operator and an upgrade to an existing asset of the grantor as a service concession asset¹, 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.

2. Additionally, an asset used in a service concession arrangement for its entire useful life (a ‘whole-of-life’ asset), given that the conditions in (a) above are met, shall be recognised as a service concession arrangement.

Control or Regulation

With regards to the first recognition criterion, **control or regulation** could be a binding arrangement between the grantor and the operator, or otherwise (such as a third party regulator imposed by the government to control other entities that operate in the same industry or sector). The binding arrangement sets the prices to be levied by the operator and regulates price revisions over the period of the service concession arrangement. 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.

Regulate

For the purpose of this accounting policy the term “**regulate**” is intended to be applied only in the context of the specific terms and conditions of the service concession

¹ The assessment of whether a Service Concession Arrangement should be recognised as a service concession asset is made on the basis of all of the facts and circumstances of the arrangement. The recognition is based on whether the grantor controls that asset (control over the economic benefits and the service potential of the Service Concession Asset) and not on whether the grantor bears the risks and rewards related to the service concession asset.

arrangement. The broad meaning of “power to regulate” the behaviour of entities does not meet the control criteria on services, prices or users (referred to in paragraph 2.1(1) (a) above).

Grantor’s Control

Referring to 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.

2.1.1 EXISTING ASSETS OF THE OPERATOR

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 set out in paragraph 2.1 Recognition of a Service Concession Asset. In cases where the conditions are met the grantor shall recognise the operator’s asset as a service concession asset and account for it in accordance with this accounting policy.

2.1.2 CONSTRUCTED OR DEVELOPED ASSET (“UNDER CONSTRUCTION” SERVICE CONCESSION ASSETS)

Where a constructed or developed asset meets the conditions in paragraph 2.1 Recognition of a Service Concession Asset above, the grantor recognises and measures the asset in accordance with this accounting policy. The Accounting Policy on Property Plant and Equipment or in the Accounting Policy on Intangible Assets, set out the criteria for when *a service concession* asset should be recognised².

Those criteria, together with the specific terms and conditions of the binding arrangement, need to be considered in determining whether to recognise the service concession asset during the construction or development period.

² Both accounting policies on Property, Plant and Equipment and Intangible Assets require that an asset shall be recognised if, and only if (a) it is probable that future economic benefits or service potential associated with the item will flow to the entity; and (b) the cost or fair value of the item can be measured reliably.

2.2 MEASUREMENT OF A SERVICE CONCESSION ASSET

A service concession asset shall be initially recognised and **measured at its fair value**, except where an existing asset, which qualifies for recognition as a service concession asset, meets the conditions specified in paragraph 2.1 Recognition of a Service Concession Asset above. If this is the case, then the existing asset shall be reclassified as a service concession asset (rather than recognised) and shall be accounted for in accordance with the Accounting Policy on Property, Plant and Equipment or the Accounting Policy on Intangible Assets, whichever applies.

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 following paragraphs outline how to determine the fair value of the asset on initial recognition based on the type of compensation exchanged:

1. 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.
2. Where the grantor does not make payments to the operator for the asset, the asset is accounted for in the way as an exchange of non-monetary assets as required by the Accounting Policy on Property, Plant and Equipment or the Accounting Policy on Intangible Assets, whichever applies.

2.3 SUBSEQUENT MEASUREMENT

After initial recognition or reclassification of an existing asset, service concession assets shall be accounted for, as a separate class of assets, in accordance with the Accounting Policy on Property, Plant and Equipment or the Accounting Policy on Intangible Assets, whichever applies.

Service Concession Assets are subject to impairment reviews based on the Accounting Policy on Impairment of Cash and Non-Cash Generating Assets. Depreciation or amortisation and derecognition principles described in the Accounting Policy on Property, Plant and Equipment or the Accounting Policy on Intangible Assets apply on Service Concession Assets.

3. RECOGNITION AND MEASUREMENT OF LIABILITIES

3.1 GENERAL PRINCIPLES

1. Where the grantor recognises a service concession asset in accordance with paragraph 2.1, the grantor shall also recognise a liability³. In cases where an existing asset is reclassified as a service concession asset, then the grantor **shall not** recognise a liability, **except** in circumstances where additional consideration is provided (e.g. cash) by the operator.
2. The liability shall be initially measured at the same amount as the service concession asset measured in accordance with paragraph 2.2. In cases where an additional amount of any other consideration (e.g. cash) is provided by the grantor to the operator, or from the operator to the grantor, the liability shall be adjusted to that amount.



3. 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, paragraph 3.1.1);
 - b) Compensating the operator by other means (the Grant of a Right to the Operator Model, paragraph 3.1.2) 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 the access to another revenue-generating asset for the operator's use.

³ A financial liability or a right to the operator (a liability for unearned revenue).

4. The **type of liability the grantor recognises** (Financial Liability Model or the Grant of a Right to the Operator Model or a combination of the two) under this accounting policy **depends on how the grantor compensates the operator.**

3.1.1 FINANCIAL LIABILITY MODEL

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 recognised as a financial liability.

The Accounting Policy on Financial Instruments is applicable for the financial liability recognised under this paragraph, except where the current accounting policy provides different requirements⁴.

The grantor shall allocate 1) the payments to the operator and account for them according to their substance as a reduction in the liability recognised, in accordance with paragraph 3.1(1); 2) a finance charge, and 3) charges for services provided by the operator. The finance charge and charges for services provided by the operator in a service concession arrangement determined shall be accounted for as expenses.

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.

Where the grantor makes any payments to the operator in advance of the service concession asset being recognised, the grantor accounts for those payments as prepayments.

Appendix 2: Example 1 indicates the accounting treatment of a service concession asset under the financial liability model.

⁴The finance charge related to the liability in a service concession arrangement is presented consistently with other finance charges in accordance to the Accounting Policy on Financial Instruments, except in cases where the grantor takes part in the financing (e.g. lending the operator the funds to construct, develop, acquire, or upgrade a service concession asset, or through guarantees). In such a case the grantor's incremental borrowing rate shall be used to determine the finance charge.

3.1.2 GRANT OF A RIGHT TO THE OPERATOR MODEL

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 grants the operator another revenue-generating asset, the unearned portion of the revenue arising from the exchange of assets between the grantor and the operator shall be accounted for by the grantor as a liability.

The grantor shall recognise revenue and reduce the liability recognised according to 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.

Appendix 2: Example 2 indicates the accounting treatment of a service concession asset under the grant of a right to the operator model.

3.2 DIVIDING ARRANGEMENT

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 recognised. In such a case the consideration to the operator is divided into a financial liability portion for the predetermined series of payment 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.

The amount initially recognised for the total liability shall be the same amount as the service concession asset, adjusted by the amount of any other consideration (e.g. cash) from the grantor to the operator, or from the operator to the grantor, as mentioned in paragraph 3.1 (2) above.

The grantor shall account for each part of the liability referred to above in accordance with paragraph 3.1.1 Financial Liability Model and paragraph 3.1.2 Grant of a Right to the Operator Model.

Appendix 2: Example 3 indicates the accounting treatment of a service concession asset, showing the division of the arrangement between the two aforementioned models in paragraphs 3.1.1 and 3.1.2.

4. OTHER LIABILITIES, COMMITMENTS, CONTINGENT LIABILITIES AND CONTINGENT ASSETS

Other liabilities, other than those described above, other commitments, contingent liabilities and contingent assets arising from the service concession arrangement shall be accounted for in accordance with the Accounting Policy on Provisions, Contingent Liabilities and Contingent Asset, or the Accounting Policy on Financial Instruments, as appropriate.

Other liabilities may be in 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 in a form of a performance guarantee. Financial guarantees made by the grantor as part of the service concession asset, shall be determined whether they meet the definition of a financial guarantee contract and applies the Accounting Policy on Financial Instruments in accounting for guarantee. Financial guarantees and other commitments that do not meet the requirements in the Accounting Policy on Financial Instruments or are not insurance contracts shall be accounted for in accordance with the Accounting Policy on Provisions, Contingent Liabilities and Contingent Assets.

5. OTHER REVENUES

Other revenues, other than those described in paragraph 3.1.2 above, shall be accounted for in accordance with the Accounting Policy on Revenues from Exchange Transactions.

Other revenues may be provided by the operator to the grantor through a revenue sharing provision, an upfront payment or a stream of payments or rental payments for providing the operator access to a revenue-generating asset.

6. DISCLOSURES

The grantor shall present information in accordance with the Accounting Policy on Presentation of Financial Statements.

Additional to the disclosure requirements in the Accounting Policy on Property, Plant and Equipment and the Accounting Policy on Intangible Assets, an entity 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 dated, 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 recognised 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.

In cases of a material service concession arrangement the provisions of the above paragraph shall be disclosed separately.

Aggregation of the above disclosures shall be made on arrangements of a similar nature.

7. TRANSITIONAL PROVISIONS

On first time adoption of accrual accounting, an entity shall measure service concession assets at their fair value when reliable cost information about the assets is not available, and use that fair value as the deemed cost.

When an entity elects to measure service concession assets using deemed cost, the related liabilities shall be measured as follows:

- a) For the liability under the financial liability model, the remaining contractual cash flows specified in the binding arrangement and the rate prescribed in this accounting policy.
- b) For the liability under the grant of a right to the operator model, the fair value of the asset less any financial liabilities, adjusted to reflect the remaining period of the service concession arrangement.

An entity shall recognise and/or measure any difference between the value of the service concession asset and the financial liability under the financial liability model, as described in (a) above in opening accumulated surplus or deficit in the period in which the items are recognised and/or measured.

8. EFFECTIVE DATE

This rule shall be effective for annual financial statements covering periods beginning on or after 1 January 2020.

9. REFERENCES

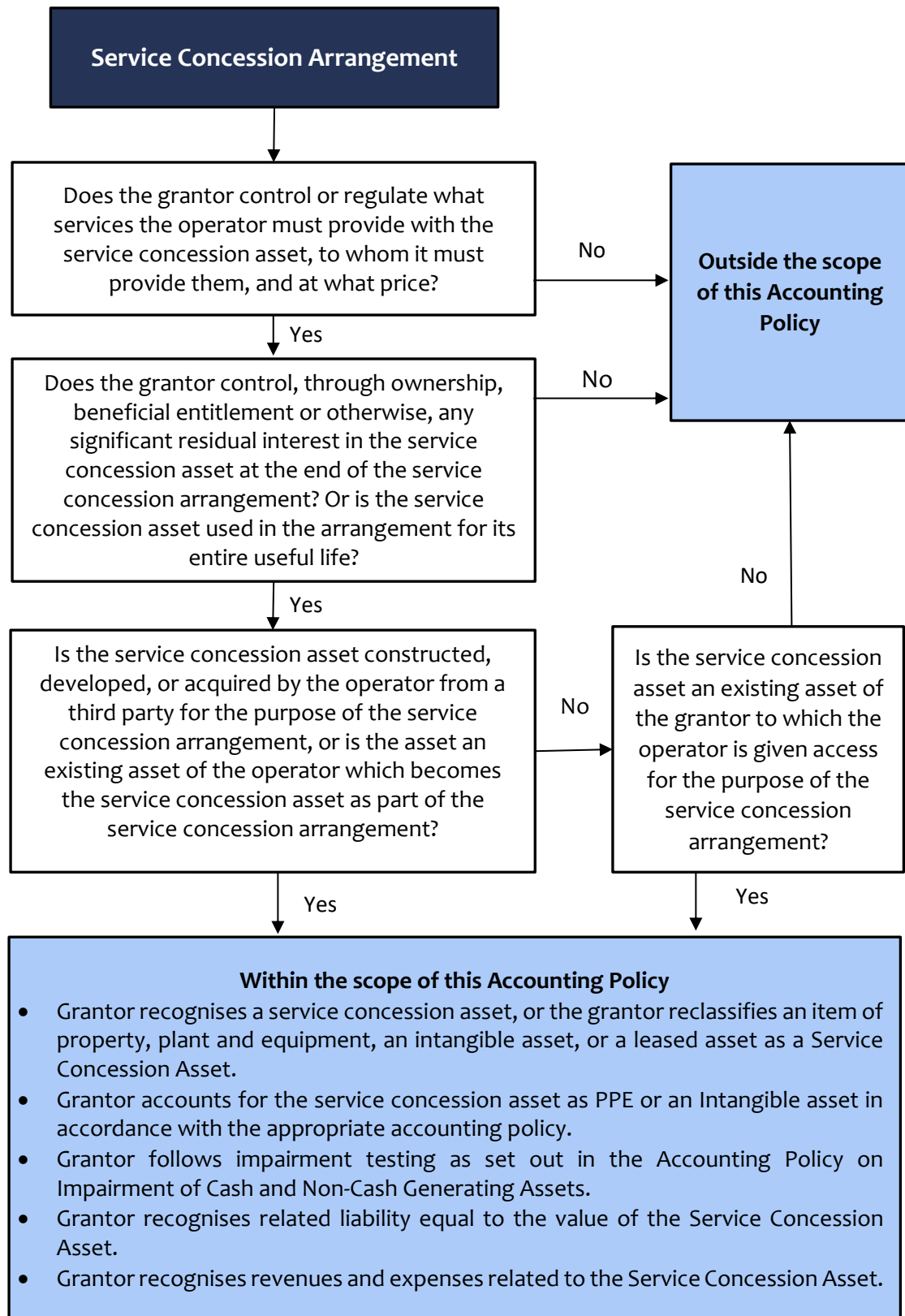
This accounting policy is based on the following IPSAS standards:

IPSAS 32 Service Concession Arrangements.

IPSAS 33 First – time Adoption of Accrual Basis IPSASs.

10. APPENDICES

Appendix 1: Accounting Framework of A Service Concession Arrangement



(Source: IPSAS 32, Implementation Guidance)

Appendix 2: Examples

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, immediately after completion. The arrangement is within the scope of this accounting policy.

Terms of the arrangement (assumptions):

1. The operator is obliged to resurface the road at the end of year 8 (at fair value of €110m), when the original surface will be deteriorated below a specified condition. The resurface compensation is included in the predetermined series of payment.
2. The road surface is a separate component of the service concession asset, meeting the recognition criteria of the accounting policy on PPE.
3. The expected cost of the resurfacing can be used to estimate the initial cost of the surface layers recognised as a separate component of the service concession asset.
4. The road surface depreciated over years 3-8. It is assumed that the road becomes ready to use at the end of year 2.
5. At the beginning of year 3 the total fair value of the road is €1.050m comprised of €940 related to the construction of the base layers and €110 related to construction of the surface layers.
6. The estimated life of surface layers is 6 years.
7. The road base has an economic useful life of 25 years on a straight line basis.
8. There is no impairment of the asset.
9. The rate implicit specific to the asset is 6.18%.
10. It is assumed that all cash flows take place at the end of each year.
11. At year end the arrangement will end and the operation of the road will be transferred to the grantor.
12. The grantor will pay an annual service component of €12m.

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

1. The grantor will pay the operator €200m per year, in years 3 to 10 for making the road available to the public.

Example 2: The grantor gives the operator the right to charge users a toll for use of the road.

1. Assume that the vehicle numbers will remain constant over the duration of the arrangement and that it will receive tolls of €200 in each of years 3 up to 10.

2. The total consideration (of €200 in each of the years 3 to 10) reflects the fair value of both the base service layer, the original surface and the replacement surface layer, is also intended to cover all costs of constructing the roads.

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.

1. Assume that the vehicle numbers will remain constant over the duration of the arrangement and that it will receive tolls of €100 in each of years 3 up to 10.
2. The grantor will make a predetermined series of payments to the operator of €100 annually.
3. The total consideration (the right to collect tolls and the predetermined series of payments) reflects the fair value of the assets, and are considered to compensate the operator equally (i.e. 50% each).

What will be the effects on:

- a) Cash flow;
- b) Statement of financial performance;
- c) Statement of financial position (assets and liabilities); and
- d) What are the changes in financial liability/liability?

Solution to Example 1

a) Cash flow effect

Year	1	2	3	4	5	6	7	8	9	10	Total
Predetermined series of payment	0	0	(200)	(200)	(200)	(200)	(200)	(200)	(200)	(200)	(1600)
Net inflow / (outflow)	0	0	(200)	(200)	(200)	(200)	(200)	(200)	(200)	(200)	(1600)

b) Statement of Financial Performance

Year	1	2	3	4	5	6	7	8	9	10	Total
Service Expenses	0	0	(12)	(12)	(12)	(12)	(12)	(12)	(12)	(12)	(96)
Finance Charge*	0	(32)	(67)	(59)	(51)	(43)	(34)	(25)	(22)	(11)	(344)
Depreciation Base Layers	0	0	(38)	(38)	(38)	(38)	(38)	(38)	(38)	(38)	(304)
Depreciation original surface	0	0	(18)	(19)	(18)	(18)	(19)	(18)	0	0	(110)
Depreciation replacement surface layer	0	0	0	0	0	0	0	0	(18)	(19)	(37)
Total depreciation**	0	0	(56)	(57)	(56)	(56)	(57)	(56)	(56)	(57)	(451)
Annual surplus / (deficit)	0	(32)	(135)	(128)	(119)	(111)	(103)	(93)	(90)	(80)	(891)

c) Statement of Financial Position

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	0	110	92	73	55	37	18	0	0	0
Service concession asset – replacement surface layer	0	0	0	0	0	0	0	110	92	73
Total service concession asset	525	1050	994	937	881	825	768	822	766	709
Cumulative Cash	0	0	(200)	(400)	(600)	(800)	(1000)	(1200)	(1400)	(1600)
Financial liability	(525)	(1082)	(961)	(832)	(695)	(550)	(396)	(343)	(177)	0
Cumulative surplus / deficit	0	32	167	295	414	525	628	721	811	891

d) Changes in Financial Liability

Year	1	2	3	4	5	6	7	8	9	10
Balance B/F		525	1082	961	832	695	550	396	343	177
Liability recognised	525	525	0	0	0	0	0	0	0	0
Finance Charge added to liability prior to payments being made	0	32	0	0	0	0	0	0	0	0
Portion of predetermined series payments that reduces the liability	0	0	(121)	(129)	(137)	(145)	(154)	(163)	(166)	(177)
Liability recognised along with replacement surface layers	0	0	0	0	0	0	0	110	0	0
Balance C/F	525	1082	961	832	695	550	396	343	177	0

Solution to Example 2

a) Cash Flow

No cash outflows arise from this consideration, since there are no payments made to the operator.

b) Statement of Financial Performance

Year	1	2	3	4	5	6	7	8	9	10	Total
Revenue (reduction of liability)	0	0	145	145	145	145	145	145	145	145	1160
Depreciation- base layers	0	0	(38)	(38)	(38)	(38)	(38)	(38)	(38)	(38)	(304)
Depreciation- original surface layer	0	0	(18)	(19)	(18)	(18)	(19)	(18)	0	0	(110)
Depreciation- replacement surface layer	0	0	0	0	0	0	0	0	(18)	(19)	(37)
Total depreciation	0	0	(56)	(56)	(56)	(56)	(57)	(56)	(56)	(57)	(451)
Amount surplus / (deficit)	0	0	89	88	89	89	88	89	89	88	709

c) Statement of Financial Position

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	0	110	92	73	55	37	18	0	0	0
Service Concession asset – replacement surface layer	0	0	0	0	0	0	0	110	92	73
Total Service concession asset	525	1050	994	937	881	825	768	822	766	709
Cash	0	0	0	0	0	0	0	0	0	0
Liability	(525)	(1050)	(905)	(760)	(615)	(470)	(325)	(290)	(145)	0
Cumulative surplus / Deficit	0	0	(89)	(177)	(266)	(355)	(443)	(532)	(621)	(709)

d) Changes in Liability

Year	1	2	3	4	5	6	7	8	9	10
Balance B/F	0	525	1050	905	760	615	470	325	290	145
Liability recognised along with initial service concession asset	525	525	0	0	0	0	0	0	0	0
Revenue (reduction of liability)	0	0	(145)	(145)	(145)	(145)	(145)	(145)	(145)	(145)
Liability recognised along with replacement surface layers	0	0	0	0	0	0	0	110	0	0
Balance C/F	525	1050	905	760	615	470	325	290	145	0

Solution to Example 3

a) Cash flow effect

Year	1	2	3	4	5	6	7	8	9	10	Total
Predetermined series of payment	0	0	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(800)
Net inflow / (outflow)	0	0	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(800)

b) Statement of Financial Performance

Year	1	2	3	4	5	6	7	8	9	10	Total
Revenue (reduction of liability)	0	0	(73)	(72)	(73)	(72)	(73)	(72)	(73)	(72)	(580)
Service expenses	0	(0)	(6)	(6)	(6)	(6)	(6)	(6)	(6)	(6)	(48)
Finance charge	0	(16)	(33)	(30)	(26)	(22)	(17)	(12)	(11)	(5)	(172)
Depreciation Base Layers	0	0	(38)	(38)	(38)	(38)	(38)	(38)	(38)	(38)	(304)
Depreciation original surface	0	0	(18)	(19)	(18)	(18)	(19)	(18)	0	0	(110)
Depreciation replacement surface layer	0	0	0	0	0	0	0	0	(18)	(19)	(37)
Total depreciation	0	0	(56)	(57)	(56)	(56)	(57)	(56)	(56)	(57)	(451)
Annual surplus / (deficit)	0	(16)	(22)	(21)	(15)	(12)	(7)	(2)	0	4	(91)

c) Statement of Financial Position

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	0	110	92	73	55	37	18	0	0	0
Service concession asset – replacement surface layer	0	0	0	0	0	0	0	110	92	73
Total service concession asset	525	1050	994	937	881	825	768	822	766	709
Cash	0	0	(100)	(200)	(300)	(400)	(500)	(600)	(700)	(800)
Liability	(262)	(525)	(452)	(380)	(307)	(235)	(162)	(145)	(72)	0
Financial liability	(263)	(541)	(480)	(416)	(348)	(276)	(199)	(172)	(89)	0
Cumulative surplus / deficit	0	16	38	59	74	86	93	95	95	91

d) i) Changes in Liability

Year	1	2	3	4	5	6	7	8	9	10
Balance B/F	0	262	525	452	380	307	235	162	145	72
Liability recognised	262	263	0	0	0	0	0	0	0	0
Finance Charge added to liability prior to payments being made	0	0	(73)	(72)	(73)	(72)	(73)	(72)	(73)	(72)
Portion of predetermined series payments that reduces the liability	0	0	(73)	(72)	(73)	(72)	(73)	(72)	(73)	(72)
Liability recognised along with replacement surface layers	0	0	0	0	0	0	0	(55)	0	0
Balance C/F	262	525	452	380	307	235	162	145	72	0

ii) Changes in Financial Liability

Year	1	2	3	4	5	6	7	8	9	10
Balance B/F	0	263	541	480	416	348	276	199	172	89
Liability recognised	263	262	0	0	0	0	0	0	0	0
Finance Charge added to liability prior to payments being made	0	16	0	0	0	0	0	0	0	0
Portion of predetermined series payments that reduces the liability	0	0	(61)	(64)	(68)	(72)	(77)	(82)	(83)	(89)
Liability recognised along with replacement surface layers	0	0	0	0	0	0	0	(55)	0	0
Balance C/F	263	541	480	416	348	276	199	172	89	0