

ISSBN: 1178-2560

Public version

[DRAFT] Commerce Act (Specified Airport Services Input Methodologies)
Determination 2010

Consolidating all amendments as of [XX]29 [XX]February 2016

Publication date: [XX]29 [XX]February 2016

Commerce Commission

Wellington, New Zealand

Determination history			
Determination date	Decision number	Determination name	
22 December 2010	709	Commerce Act (Specified Airport Services Input Methodologies) Determination 2010	
14 November 2014	n/a	Determination of Input Methodologies by the High Court in <i>Wellington International Airports Ltd and</i> others v Commerce Commission [2013] NZHC 3289 (11 December 2013)	
24 February 2016	[2016] NZCC 3	Airport Services (Land Valuation) Input Methodologies Amendments Determination 2016	
[XX] [XX] 2016	[2016] NZCC [XX]	Airport Services Input Methodologies Amendments Determination 2016	

COMMERCE ACT (SPECIFIED AIRPORT SERVICES INPUT METHODOLOGIES) DETERMINATION 2010

PART 1	GENERAL PROVISIONS	<u>555</u>
1.1	Title	<u>555</u>
1.2	Application	<u>555</u>
1.3	Commencement	<u>555</u>
1.4	Interpretation	<u>55</u> 5
PART 2	COST ALLOCATION	
2.1	Cost allocation process	
2.2	Accounting-based allocation approach	<u>171714</u>
PART 3	ASSET VALUATION	
3.1	Composition of initial RAB	
3.2	Initial RAB values for assets	
3.3	RAB roll forward	
3.4	Depreciation	
3.5	Unallocated depreciation constraint	
3.6	Asset life	
3.7	Revaluation	
3.8	Revaluation treated as income	
3.9	Value of commissioned asset	
3.10	Value of found asset	
3.11	Cost of excluded asset	<u>272721</u>
3.12	Works under construction	<u>282823</u>
PART 4	TREATMENT OF TAXATION	<u>303024</u>
4.1	Regulatory tax allowance	<u>30302</u> 4
4.2	Regulatory tax asset value	<u>30302</u> 4
PART 5	COST OF CAPITAL	<u>323226</u>
5.1	Methodology for estimating the weighted average cost of capital	<u>32<mark>32</mark>26</u>
5.2	Fixed WACC parameters	<u>333327</u>
5.3	Methodology for estimating risk-free rate	<u>34<mark>34</mark>27</u>
5.4	Methodology for estimating debt premium	<u>34<mark>34</mark>28</u>
5.5	Standard error of the debt premium	<u>373730</u>
5.6	Methodology for estimating the WACC standard error	<u>373730</u>
5.7	Methodology for estimating the WACC range	
5.8	Publication of estimates	<u>383832</u>
SCHEDULE A	AIRPORT LAND VALUATION METHODOLOGY	<u>393933</u>
A1	Interpretation	
A2	Professional valuation framework	<u>4040</u> 34

A3	Valuation requirements	<u>4040</u> 34
A4	Special assumptions	<u>414135</u>
A5	MVAU valuation steps	434 3 37

PART 1 GENERAL PROVISIONS

1.1 Title

This determination is the Commerce Act (Specified Airport Services Input Methodologies) Determination 2010.

1.2 Application

- This determination applies to specified airport services.
- (2) This determination must be applied in accordance with-
 - (a) the **input methodologies** in this determination; or (a)(b) if clause 1.5(1) applies, the next closest alternative approach.

1.3 Commencement

This determination comes into force on the day after the date on which notice of it is given in the New Zealand Gazette under s 52W of the **Act**.

1.4 Interpretation

- (1) In this determination-
 - unless stated otherwise, references to Parts are to named and numbered parts of this determination;
 - (b) unless the context otherwise requires, a word which denotes the singular also denotes the plural and vice versa; and
 - (c) unless stated otherwise, any reference to an allowance, amount, cost, sum or value is a reference to an allowance, amount, cost, sum or value determined in relation to an **airport** in respect of a **disclosure year**.
- (2) In this determination, including in the schedule, the words or phrases in bold type bear the following meanings:

2009 disclosed assets means the assets included by the **airport** in question in the 'Noncurrent assets' category of the **statement of financial position** in the **2009 disclosure financial statements**;

2009 disclosure financial statements means the disclosure financial statements completed by an **airport** under regulation 4 of the **airport regulations** for the accounting period (as defined in regulation 2(1) of those regulations) ending in 2009;

Α

accounting-based allocation approach means the methodology described, in respect of-

- (a) asset values, in clause 2.2(1); and
- (b) **operating costs**, in clause 2.2(2);

Act means the Commerce Act 1986;

aircraft and freight activities has the same meaning as defined in s 2 of the Airport Authorities Act 1966;

airfield activities has the same meaning as defined in s 2 of the Airport Authorities Act 1966;

airport means a company described in s 56A(2) of the **Act** insofar as it provides **specified airport services**;

airport regulations means the Airport Authorities (Airport Companies Information Disclosure) Regulations 1999;

asset allocator means a proportion of a quantifiable measure used to allocate **asset values** that are not **directly attributable** and whose quantum is-

- (a) based on a causal relationship; or
- (b) equal to a proxy asset allocator;

asset category means one of the following asset types-

- (a) land;
- (b) sealed surfaces;
- (c) buildings and infrastructure; and
- (d) vehicles, plant and equipment;

asset life has the meaning specified in clause 3.6;

asset value means, in respect of an asset used by an airport for the undertaking of-

- (a) regulated activities only; or
- (b) regulated activities and the supply of one or more unregulated service,

in-

- (c) the disclosure year 2009, its unallocated initial RAB value; and
- (d) all other disclosure years, its unallocated closing RAB value;

R

business day means any day on which statistics relating to trading in New Zealand government bonds are published by a financial information service such as Bloomberg or Reuters;

 C

<u>capital contributions</u> means money or the monetary value of other consideration charged to or received from <u>consumers</u> or other parties for the purposes of asset construction, <u>acquisition or enhancement;</u>

<u>capital expenditure</u> means costs that have been or will be included in a <u>value of</u> <u>commissioned asset</u>, but only to the extent that the costs have been or will be included in a <u>closing RAB value</u>;

causal relationship means, in relation to-

- (a) **asset values**, a circumstance in which a factor influences the utilisation of an asset during the 18 month period terminating on the last day of the **disclosure year** in respect of which the asset allocation is carried out; and
- (b) operating costs, a circumstance in which a cost driver leads to an operating cost being incurred during the 18 month period terminating on the last day of the disclosure year in respect of which the cost allocation is carried out;

closing RAB value means the value determined in accordance with clause 3.3(4);

Commission has the same meaning as defined in s 2 of the Act;

commissioned means used by the **airport** to **supply specified airport services** other than **excluded services** and **commission** shall be construed accordingly;

commissioning date means the date that an asset is first commissioned;

consumer means a person that consumes or acquires specified airport services;

corporate tax rate means the prevailing rate of income taxation applying to companies as specified in the **tax rules**;

cost allocator means a proportion of a quantifiable measure used to allocate **operating costs** that are not **directly attributable**, and whose quantum is-

- (a) based on a causal relationship; or
- (b) equal to a proxy cost allocator;

cost of debt means the amount specified for r_d in clause 5.1(4);

CPI means-

- (a) subject to paragraph (c), in respect of the December 2010 quarter and subsequent quarters, the consumer price index stipulated in the 'All Groups Index SE9A' as published by Statistics New Zealand;
- (b) subject to paragraph (c), in respect of each quarter prior to the December 2010 quarter, the same index as described in paragraph (a) multiplied by 1.02; and
- (c) in respect of quarters prior to any quarter in which the rate of GST is amended after this determination comes into force, the same index as described in paragraph (a), multiplied by the Reserve Bank of New Zealand's forecast change in that index (expressed as a decimal) arising from the amendment; and

(c)(d) in respect of a forecast value for a quarter, forecast CPI;

D

debt premium has the meaning specified in and is the amount determined in accordance with clause 5.4;

decommissioned asset means an asset (other than a **disposed asset**) formerly used in or in relation to the **supply** of **specified airport services** other than **excluded services** that has been permanently withdrawn from such use;

depreciation means an allowance to account for the diminution in a **non-land asset's** remaining service life potential in the **disclosure year** in question with respect to its **opening RAB value** and the amount of such allowance is determined in accordance with clause 3.4;

directly attributable means, in relation to-

- (a) **asset values**, wholly and solely related to an asset used by the **airport** in or in relation to its undertaking of a **regulated activity**;
- (b) **operating costs**, wholly and solely incurred by the **airport** in or in relation to its undertaking of a **regulated activity**; and

disclosure year shall be construed as a 12 month period ending on the date specified in an **ID determination** as the last date in the period to which annual disclosure relates;

Example: whilst the **ID determination** provides that disclosure is required by Auckland International Airport Limited in respect of the 12 month period ending on 30 June, **disclosure year** 2010 means, in respect of Auckland International Airport Limited, the twelve month period ending 30 June 2010;

disposed asset means an asset that, in the **disclosure year** in question, has been sold or transferred by the **airport**, or has been irrecoverably removed from the **airport's** possession without consent, but is not a **lost asset**;

document has the same meaning as defined in s 2 of the Act;

Ε

easement means a right to use but not possess **land** belonging to another **person** or a right to prevent certain uses of another **person's land**;

easement land means land acquired with the intention of-

- (a) creating an easement in respect of it; and
- (b) disposing of the land thereafter;

excluded asset means-

- (a) an asset that is acquired or held to **supply excluded services**;
- (b) property to the extent due to the incursion of **land conversion costs** except Auckland International Airport Limited's costs of seawall construction;
- (c) an asset that is not used to **supply specified airport services** as on the last day of the **disclosure year** 2009; or
- (d) easement land;

excluded services means **services supplied** in markets directly related to the holding of any facilities or assets for the future undertaking of—

- (a) aircraft and freight activities;
- (b) airfield activities; or
- (c) specified passenger terminal activities;

F

finance lease has the same meaning as under GAAP;

fixed life easement means an easement that-

- (a) is of fixed duration; or
- (b) whilst of indefinite duration, is to be held for a fixed period;

forecast CPI means, for-

- (a) a quarter prior to the quarter for which the vanilla WACC applicable to the relevant price setting event was determined, CPI, excluding any adjustments made under the definition of CPI paragraphs (b) or (c), arising as a result of an event that occurs after the issue of the Monetary Policy Statement referred to in paragraph (b);
- (b) each later quarter than described in paragraph (a) for which a forecast of the change in headline CPI has been included in the Monetary Policy Statement last issued by the Reserve Bank of New Zealand prior to the date for which the vanilla WACC applicable to the relevant price setting event was determined, the CPI last applying under paragraph (a), extended by the forecast change; and
- (c) quarters later than described in paragraph (b), the forecast last applying under paragraph (b), adjusted such that an equal increment or decrement made to that forecast for each of the following three years results in the forecast for the last of those years being equal to the target midpoint for the change in headline CPI set out in the Monetary Policy Statement referred to in paragraph (b).

found asset has the meaning specified in clause 3.10(1);

G

GAAP means generally accepted accounting practice in New Zealand, save that, where the cost of an asset is being determined in accordance with this determination, only the cost model of recognition is applied insofar as an election may be made between the cost model of recognition and the fair value model of recognition;

GST has the same meaning as defined in s YA 1 of the Income Tax Act 2007 as amended from time to time, and any equivalent legislation that supplements or replaces that definition;

Н

highest and best alternative use has the meaning given in Schedule A;

١

ID determination means an information disclosure determination in relation to **specified airport services** made by the **Commission** under s 52P of the **Act**;

identifiable non-monetary asset has the same meaning as under **GAAP** save that goodwill is excluded;

indexed revaluation rate has the meaning specified in clause 3.7(7)(a);

initial RAB has the meaning specified in clause 3.1;

initial RAB value means value of an asset in the **initial RAB** determined in accordance with clause 3.2;

input methodology has the same meaning as defined in s 52C of the Act;

investment grade credit rated means endorsed with a credit rating by an established credit rating agency (such as Standard and Poor's) of "investment grade" on that agency's credit rating scale applicable to long-term investments;

L

land excludes-

- (a) easements; and
- (b) real property to the extent due to the incursion of land conversion costs;

land conversion costs means-

- (a) costs incurred in-
 - (i) the holding and levelling of land;
 - (ii) seawall reclamation;
 - (iii) sea protection; or
 - (iv) seawall construction; or
- (b) any other costs incurred relating to the conversion of land for use in the supply of specified airport services;

leverage means the ratio of debt capital to total capital and is the amount specified in clause 5.2(1);

local authority has the same meaning as defined in s 5(1) of the Local Government Act 2002;

lost asset means an asset having, in relation to a particular **disclosure year**, an **unallocated opening RAB value** but determined by an **airport** in that **disclosure year** never to have been used to provide **specified airport services** in, where the disclosure year is-

- (a) the disclosure year 2012 or earlier, any prior disclosure year; or
- (b) any other disclosure year, any prior disclosure year after the disclosure year 2009;

M

mid-point estimate of WACC means the mid-point estimate of-

(a) vanilla WACC; or

(b) post-tax WACC,

Formatted: Font: Bold

Formatted: Font: Bold

as the case may be, as each is estimated in accordance with clause 5.1;

MVAU has the meaning given in Schedule A;

Ν

nominated WACC period has the meaning specified in clause 5.5;

non-land asset means an asset other than land, and for the avoidance of doubt, includes-

- (a) easements;
- (b) buildings;
- (c) real property to the extent due to land conversion costs;

non-standard asset means a non-land asset in relation to which an airport has applied made a non-standard depreciation methodologydisclosure;

non-standard depreciation disclosure means disclosure of information <u>relating to the</u> <u>airport's use of a non-standard depreciation methodology</u> in accordance with any requirements <u>relating to the making of 'non-standard depreciation disclosure'</u> in an **ID determination**;

non-standard depreciation methodology means a depreciation methodology other than the methodology used in determining-

(a) unallocated depreciation as specified in clause 3.4(1); and

(a)(b) depreciation as specified in clause 3.4(2);

0

opening RAB value means the value determined in accordance with clause 3.3(3); **operating cost** means a cost incurred by the **airport** in question relating to the **supply** of-

- (a) a regulated activity alone; or
- (b) a **regulated activity** and the **supply** of one or more **unregulated service**, and excludes-
 - (c) a cost that is treated as a cost of an asset by GAAP;
 - (d) amounts that are depreciation, tax, subvention payments, revaluations or an interest expense, in accordance with their meanings under **GAAP**;
 - (e) pass-through costs; and
 - (f) recoverable costs; and

(f)(g) payments associated with a finance lease, where the finance lease has an opening RAB value;

P

person has the same meaning as defined in s 52C of the Act;

physical asset life has the meaning specified in clause 3.6(2);

post-tax WACC means the amount determined in accordance with clause 5.1(2);

prescribed investor rate has the same meaning as defined in the Income Tax Act 2007 or any subsequent legislation that supplements or replaces the provisions relating to prescribed investor rate in the Income Tax Act 2007;

price setting event means a fixing or altering of price for a specified airport service by an airport under s 4A and s 4B of the Airport Authorities Act 1966, which-

- (a) is deemed to occur on the date that the new price comes into effect; and
- (b) excludes instances where the price is-
 - (i) subject to adjustment as a result of a wash-up;
 - (ii) reset or adjusted annually, including without further consultation;
 - (iii) subject to separate negotiation for inclusion in the terms of a lease or licence; or
 - (i)(iv) not required to be consulted on by virtue of s 4B(3) of the Airport Authorities Act 1966;

proxy asset allocator means a proportion of a quantifiable measure-

- (a) used to allocate **asset values** for which a **causal relationship** cannot be established; and
- (b) whose quantum is based on factors in existence during the 18 month period terminating on the last day of the **disclosure year** in respect of which the asset allocation is carried out;

proxy cost allocator means a proportion of a quantifiable measure-

- (a) used to allocate **operating costs** for which a **causal relationship** cannot be established; and
- (b) whose quantum is based on factors in existence during the 18 month period terminating on the last day of the disclosure year in respect of which the cost allocation is carried out;

programme means a group of related projects with a common purpose;

project means a temporary endeavour requiring concerted effort, undertaken to create a defined outcome

Q

qualifying issuer means a New Zealand resident limited liability company -

- (a) that-
 - (i) undertakes the majority of its business activities in Australia and New Zealand; or
 - (ii) is part of a corporate group that undertakes the majority of its business activities in Australia and New Zealand;

- (b) that-
 - (i) does not operate predominantly in the banking or finance industries; or
 - (ii) is part of a corporate group that does not operate predominantly in the banking or finance industries; and
- (c) that issues **vanilla NZ\$ denominated bonds** that are publicly traded; **qualifying rating** means-
 - (a) a Standard and Poor's long term credit rating of the specified grade; or
 - (b) an equivalent long term credit rating of another internationally recognised rating agency;

R

regulated activity means one of the following types of activity:

- (a) aircraft and freight activities;
- (b) airfield activities; and
- (c) specified passenger terminal activities;

regulated goods or services has the same meaning as defined in s 52C of the Act;

regulated supplier means a supplier of regulated goods or services;

regulatory tax asset value has the meaning specified in clause 4.2;

related party means-

- (a) a person that, in accordance with GAAP, is related to the airport in question;
- (b) any part of the **airport** in question that does not **supply specified airport** services:

revaluation means the amount determined in accordance with clause 3.7(2)(3), which, for the avoidance of doubt, may be a negative amount;

revaluation rate has the meaning specified in clause 3.7(7);

S

services has the same meaning as defined in s 2 of the Act;

special assumption has the meaning given in Schedule A;

specified airport services has the same meaning as defined in s 56A of the Act;

specified passenger terminal activities has the same meaning as defined in s 2 of the Airport Authorities Act 1966;

standard error means estimated standard deviation;

statement of financial position means the statement of financial position referred to in regulation 5(a) of the **airport regulations**;

supply has the same meaning as defined in s 2 of the **Act**, and **supplied** must be construed accordingly;

Т

tax rules means the rules applicable to an airport for determining income tax payable contained in the Income Tax Act 2007 (as amended from time to time, and any equivalent preceding legislation, or any subsequent legislation that supplements or replaces that Act);

U

unallocated closing RAB value has the meaning specified in clause 3.3(2);

unallocated depreciation means an allowance to account for the diminution in an asset's remaining service life potential in the **disclosure year** in question with respect to its **unallocated opening RAB value** and the amount of such allowance is determined in accordance with clause 3.4(1);

unallocated initial RAB value means value of an asset in the **initial RAB** determined in accordance with clause 3.2(1);

unallocated opening RAB value has the meaning specified in clause 3.3(1);

unallocated revaluation means the amount determined in accordance with clause 3.7(1);

unregulated service means any good or service **supplied** by the **airport** that is not a **regulated good or service**;

V

valuation and property standards has the meaning given in Schedule A;
value of commissioned asset means the value determined in accordance with clause 3.9;
value of found asset means the value determined in accordance with clause 3.10;
valuer means an individual who-

- (a) is registered as a valuer under the Valuers Act 1948;
- (b) holds a current practising certificate issued by-
 - (i) the Property Institute of New Zealand; or
 - (ii) the New Zealand Institute of Valuers;
- (c) has been engaged to act in his or her professional capacity as a valuer; and
- (d) has no relationship with, nor interest in, the **airport** that is likely to involve the individual in a conflict of interest between his or her duties to the-
 - (i) airport; and
 - (ii) Commission;

vanilla NZ\$ denominated bonds means senior unsecured nominal debt obligations denominated in New Zealand dollars without callable, puttable, conversion, profit participation, credit enhancement or collateral features;

vanilla WACC means the amount determined in accordance with clause 5.1(1);

W

WACC means weighted average cost of capital;

wash-up means an annual adjustment to prices reflecting actual use and actual costs incurred;

works under construction means an asset, or a collection of assets that-

- (a) has been or is being constructed by, or on behalf of, an airport;
- (b) has not been commissioned; and
- (c) the airport intends to commission.
- 1.5 Next closest alternative approach
- (1) The Commission may determine that the next closest alternative approach will be applied to any input methodology in this determination if that input methodology is unworkable.
- (2) An **airport** may propose to the **Commission**, in accordance with subclause (3), that it considers the next closest alternative approach should apply to an **input methodology** where it identifies that the **input methodology** is unworkable.
- (3) If an airport proposes a next closest alternative approach, it must-
 - (a) identify the unworkable **input methodology** and explain why it considers the **input methodology** is unworkable;
 - (b) describe the next closest alternative approach that would apply instead of the unworkable **input methodology**;
 - (c) describe whether the next closest alternative approach is likely to have an equivalent or non-equivalent effect to that of the unworkable **input** methodology; and
 - (d) certify the information in paragraphs (a)-(c), as may be specified by the **Commission** in a s 52P determination.
- (4) If the **Commission** applies the next closest alternative approach in accordance with subclause (1), it must-
 - (a) identify the unworkable input methodology;
 - (b) describe the next closest alternative approach that would apply instead of the unworkable **input methodology**;

- (c) describe whether the next closest alternative approach is likely to have an equivalent or non-equivalent effect to the unworkable **input methodology** and whether a change is required to a s 52P determination to give effect to the next closest alternative approach;
- (d) undertake any consultation that the Commission considers appropriate; and
- (e) publish its decision, including a description of the next closest alternative approach as specified in paragraph (b).
- (5) For the purposes of subclauses (1)-(4), an **input methodology** may be considered as unworkable if it cannot be reasonably applied as intended.

PART 2 COST ALLOCATION

2.1 Cost allocation process

- (1) Any-
 - (a) asset values; and
 - (b) operating costs,

that are **directly attributable** must be allocated to the **regulated activity** to which they are **directly attributable**.

(2) Any **asset values** and **operating costs** that are not allocated in accordance with subclause (1) must be allocated to **regulated activities** in accordance with the **accounting-based allocation approach**.

2.2 <u>Accounting-based allocation approach</u>

- (1) Asset allocators must be used to allocate asset values that are not directly attributable to-
 - (a) aircraft and freight activities;
 - (b) airfield activities; and
 - (c) specified passenger terminal activities.
- (2) Cost allocators must be used to allocate operating costs that are not directly attributable to-
 - (a) aircraft and freight activities;
 - (b) airfield activities; and
 - (c) specified passenger terminal activities.
- (3) Where an **airport** uses a **proxy asset allocator** for the purposes of subclause (1) or a **proxy cost allocator** for the purposes of subclause (2), the **airport** must, in accordance with the requirements in the relevant **ID determination**, explain why a **causal relationship** cannot be established.
- (4) Where an airport uses a proxy asset allocator for the purposes of subclause (1), the airport must, in accordance with the requirements in the relevant ID determination, explain the rationale for using a selected quantifiable measure for that proxy asset allocator.
- (5) Where an airport uses a proxy cost allocator for the purposes of subclause (2), the airport must, in accordance with the requirements in the relevant ID determination, explain the rationale for using a selected quantifiable measure for that proxy cost allocator.

PART 3 ASSET VALUATION

3.1 Composition of initial RAB

Initial RAB means the land and non-land assets included in 2009 disclosed assets, less-

- (a) excluded assets;
- (b) intangible assets, unless they are-
 - (i) finance leases; or
 - (ii) identifiable non-monetary assets; and
- (c) works under construction.

3.2 Initial RAB values for assets

- (1) The unallocated initial RAB value of-
 - (a) a **non-land asset** is its value as on the last day of the **disclosure year** 2009 as disclosed in the **2009 disclosure financial statements** had no allocation of asset value relevant to regulatory disclosures been undertaken; and
 - (b) land, is its value 'q' determined in accordance with the formula described in subclause (3) as on the last day of the disclosure year 2010 in accordance with Schedule A.
- (2) The initial RAB value of an asset is determined by-
 - (a) adopting its unallocated initial RAB value; and
 - (b) applying clause 2.1 to it.

(3)
$$q = \frac{a + (d - (b + e) - (c + f))}{2} + b + c$$

where

a is the estimated value of **land** assets for the 2009 year, as used to provide

specified airport services;

b is capital expenditure on land for the disclosure year 2010;

c is the value of disposed assets on land for the disclosure year 2010 which, for

the avoidance of doubt, is a negative amount;

d is the estimated value of **land** assets for the 2011 year, as used to provide

specified airport services;

e is capital expenditure on land for the disclosure year 2011; and

f is the value of disposed assets on land for the disclosure year 2011 which, for

the avoidance of doubt, is a negative amount.

3.3 RAB roll forward

- (1) Unallocated opening RAB value in respect of an asset in relation to-
 - (a) the disclosure year 2010, is its unallocated initial RAB value; and

Field Code Changed

Field Code Changed

Field Code Changed

Field Code Changed

Field Code Changed

Field Code Changed

Field Code Changed

- (b) a disclosure year thereafter is its unallocated closing RAB value in the preceding disclosure year.
- (2) Unallocated closing RAB value means, in relation to a disclosure year, in the case of-
 - (a) a found asset, its value of found asset;
 - (b) a disposed asset, nil;
 - (c) a **lost asset**, nil;
 - (d) any other asset with an **unallocated opening RAB value**, the value determined in accordance with the formula-

unallocated opening RAB value - unallocated depreciation + unallocated revaluation; and

- (e) any other asset having a **commissioning date** in that **disclosure year**, its value of commissioned asset.
- (3) Opening RAB value in respect of an asset, is, for-
 - (a) the disclosure year 2010, its initial RAB value; and
 - (b) a disclosure year thereafter, its closing RAB value in the preceding disclosure year.
- (4) Closing RAB value, in respect of an asset is determined by-
 - (a) adopting its unallocated closing RAB value; and
 - (b) applying clause 2.1 to it.

3.4 Depreciation

- (1) Unallocated depreciation, in the case of an asset with an unallocated opening RAB value, is determined, subject to subclause (3) and clause 3.5, in accordance with the formula-
 - [1 ÷ remaining asset life] × unallocated opening RAB value.
- (2) Depreciation, in the case of an asset with an **opening RAB value**, is determined, subject to subclause (3) in accordance with the formula-
 - [1 ÷ remaining asset life] × opening RAB value.
- (3) For the purpose of subclauses (1) and (2)-
 - (a) unallocated depreciation and depreciation are, in the case of-
 - (i) land, nil;
 - (ii) an easement other than a fixed life easement, nil;
 - (iii) a non-standard asset, the amount calculated, subject to subclause (5), by applying determined in the manner specified in the non-standard depreciation methodology disclosure;
 - (b) in the case of a decommissioned asset-
 - (i) unallocated depreciation is its unallocated opening RAB value; and

- (ii) depreciation is its opening RAB value; and
- (c) in all other cases, where an asset's **physical asset life** at the end of the **disclosure year** is nil-
 - (i) unallocated depreciation is its unallocated opening RAB value; and
 - (ii) depreciation is its opening RAB value.
- (4) In this clause 'remaining asset life' means the term remaining of an asset's **asset life** at the commencement of the **disclosure year** in question.
- (5) a non-standard depreciation methodology may be applied at the time of a price setting event if-
 - (a) the results of using the non-standard depreciation methodology, disclosed in accordance with the non-standard depreciation disclosure, are consistent with the time profile of capital recovery produced by the airport's methodology for calculating its revenue and its indexation approach used in revaluation of its assets;
 - (b) the airport can appropriately justify why it considers the resulting time profile of capital recovery, applied in its methodology for calculating its revenue, is appropriate in the circumstances that exist at the time of the price setting event; and
 - (a)(c) it is applied by the airport in, and disclosed in, all non-standard depreciation disclosures in the period to which the fixed or altered price under the price setting event applies.

3.5 <u>Unallocated depreciation constraint</u>

For the purpose of clause 3.4, the sum of **unallocated depreciation** of an asset calculated over its **asset life** may not exceed the sum of-

- (a) all unallocated revaluations applying to that asset in all disclosure years;and
- (b) in the case of an asset-
 - (i) in the initial RAB, its unallocated initial RAB value; or
 - (ii) not in the initial RAB, its value of commissioned asset or value of found asset.

3.6 Asset life

- (1) Asset life means a finite period relating to an asset, being, in the case of-
 - a non-standard asset, the asset life specified for that asset in the nonstandard depreciation disclosure; and
 - (b) in all other cases, the physical asset life of the asset.
- (2) Physical asset life means, in the case of-
 - (a) a **fixed life easement**, the fixed duration or fixed period (as the case may be) referred to in the definition of **fixed life easement**;

- (b) property to the extent due to the incursion of land conversion costs-
 - in the initial RAB, its remaining physical service life potential determined by an airport as on the first day of the disclosure year 2010;
 and
 - (ii) not in the initial RAB, its physical service life potential determined as of its commissioning date by an airport;
- (c) a found asset-
 - for which an asset with an unallocated opening RAB value for that disclosure year is similar (in terms of asset type and age), the asset life applying to the similar asset; and
 - otherwise, its remaining physical service life potential determined by an airport as on the last day of the disclosure year in which the airport first determined it to be a found asset; and
- (d) any other type of asset-
 - in the initial RAB, its remaining service life potential as on the last day of the disclosure year 2009 as determined in accordance with the airport's 2009 disclosure financial statements; and
 - (ii) not in the **initial RAB**, its remaining service life potential determined as of its **commissioning date** by an **airport**.

3.7 Revaluation

-'Unallocated revaluation' for an asset category means, for indexed revaluations and non-indexed revaluations, the amount calculated determined, subject to subclauses (23) and (46), in accordance with the formula-

unallocated opening RAB value × revaluation rate.

(2) 'Revaluation' means the amount determined, subject to subclauses (4) and (5), in accordance with the formula-

opening RAB value × revaluation rate.

- (2)(3) For the purpose of subclause (1), where an **airport** revalues, in accordance with Schedule A, as of the same date, all-
 - (a) land having an unallocated opening RAB value; and
 - (b) land commissioned by that date,

unallocated revaluation for **land** so revalued is the revalued amount for that **land** less, where the **land**-

- (c) has an unallocated opening RAB value, its unallocated opening RAB value;and
- (d) does not have an unallocated opening RAB value, its value of commissioned asset.

(3)—Revaluation is the amount determined, subject to-subclause (4) and (6), in accordance with the formula-

opening RAB value × revaluation rate.

- (4) For the purposes of subclauses (1) and (2), where-
 - (a) the asset's physical asset life at the end of the disclosure year is nil; or
 - (b) the asset is a-
 - (i) disposed asset; or
 - (ii) lost asset; or
 - (c) the asset is **land** and the **disclosure year** in question is the **disclosure year** 2010,

unallocated revaluation and revaluation are nil.

- (4)(5) For the purpose of subclause (23), where an **airport** revalues **land** in accordance with subclause (32), revaluation for **land** so revalued is determined by-
 - (a) applying clause 2.1 to its revalued amount to obtain the amount allocated to the **supply** of **specified airport services**; and
 - (b) subtracting from the product of paragraph (a), where the land-
 - (i) has an opening RAB value, its opening RAB value; and
 - (iii)—does not have an **opening RAB value**, the value determined by applying clause 2.1 to its **value of commissioned asset** or **value of found asset**.
- (6) When applying the **input methodologies** to calculate **revaluation** for an **asset category**, an **airport** must-
 - (a) use an indexed or non-indexed approach for that asset category; and
 - (b) use the same approach for that **asset category** when setting prices and for complying with the requirements of the **ID determination**.
- (5) For the avoidance of doubt, for the purpose of subclauses (2) and (4), where a revaluation in accordance with Schedule A is undertaken more than once in a disclosure year, 'revalued amount' is determined in respect of the last revaluation undertaken in that disclosure year.
- (6) For the purposes of subclauses (1) and (3), where-
 - (a) the asset's physical asset life at the end of the disclosure year is nil; or
 - (b) the asset is a-
 - (i) disposed asset; or
 - (ii) lost asset; or
 - (c) the asset is **land** and the **disclosure year** in question is the **disclosure year** 2010,

unallocated revaluation and revaluation are nil.

- (7) 'Revaluation rate' for an asset category means-
 - (d)(a) for indexed revaluations, the indexed revaluation rate calculated the amount determined in accordance with the formula-

$$(CPI_4 \div CPI_4^{-4}) -1,$$

where-

*CPI*₄ means **CPI** for the quarter which coincides with the end of the **disclosure** year; and

*CPI*₄⁻⁴ means **CPI** for the quarter which coincides with the end of the preceding **disclosure year**; or

- (b) for non-indexed revaluations, nil.
- (8) For the avoidance of doubt, for the purpose of subclauses (3) and (5), where a revaluation in accordance with Schedule A is undertaken more than once in a disclosure year, 'revalued amount' is determined in respect of the last revaluation undertaken in that disclosure year.
- 3.8 Revaluation treated as income

Revaluation, for the purpose of determining or assessing profitability using disclosures made pursuant to an **ID determination**, must be treated as income.

- 3.9 Value of commissioned asset
 - (1) Value of commissioned asset, in relation to an asset (including an asset in respect of which **capital contributions** were received or a vested asset), <u>means</u> the cost of the asset to an **airport** determined by applying **GAAP** to the asset as on its **commissioning date**, except that, subject to subclause (3), the cost of-
 - (a) an intangible asset, unless it is-
 - (i) a **finance lease**; or
 - (ii) an identifiable non-monetary asset,

is nil;

- (b) an easement, is limited to its market value as on its **commissioning date** as determined by a **valuer**;
- (c) easement land, is nil;
- (d) an asset-
 - (i) acquired by an airport from another regulated supplier; and
 - ii) used by that other **regulated supplier** in the **supply** of **regulated goods or services**,

Formatted: Font: Bold

is limited to the unallocated <u>closingopening</u> RAB value of the <u>asset</u> for the <u>regulated supplier</u> <u>had the asset not been acquired</u>, on the <u>closing day of the period when the asset was transferred</u> as on the <u>day before the commissioning date</u> (as 'unallocated <u>closingopening</u> RAB value' is defined in the <u>input methodologies</u> applying to the <u>regulated goods or services supplied</u> by the <u>regulated supplier</u>);

- (e) an asset acquired by an **airport** from a related party other than an asset to which paragraph (d) applies is-
 - (i) its depreciated historic cost in respect of the **related party** determined by applying **GAAP** as on the day before the acquisition by the **airport**; or
 - (ii) where sufficient records do not exist to establish this cost, its market value as of its commissioning date as determined by a valuer, subject to subclause (4);
- (f) an asset meeting paragraph (a) of the definition of excluded asset, prior to becoming a works under construction, is determined, to the extent relevant in applying GAAP, in accordance with clause 3.11;
- (g) an asset that is-
 - (i) land; or
 - (ii) real property due to the incursion of land conversion costs,

that is **works under construction** on the last day of the **disclosure year** 2009 is determined, to the extent relevant in applying **GAAP**, in accordance with clause 3.12; and

- (h) an asset in respect of which capital contributions were received, where such contributions do not reduce the cost of the asset when applying GAAP, is the cost of the asset by applying GAAP reduced by the amount of the capital contributions; and
- (i) a vested asset in respect of which its fair value is treated as its cost under GAAP, must exclude any amount of the fair value of the asset determined under GAAP that exceeds the amount of consideration provided by the airport.
- (2)—For the purpose of subclause (1), -
- (3)—'capital contributions' means money or the monetary value of other consideration charged to or received from consumers or other parties for the purposes of asset construction or enhancement; and
- (4)(2) 'vested asset' means an asset, associated with the **supply** of **specified airport services**, received by an **airport**-
 - (a) without provision of consideration; or
 - (b) with provision of nominal consideration.
- (5)(3) When applying **GAAP** for the purpose of subclause (1), the cost of financing is-

Formatted: Font: Bold

Formatted: Font: Bold

- (a) applicable only in respect of the period commencing on the date the asset becomes a **works under construction** and terminating on its **commissioning date**; and
- (b) calculated using a rate no greater than the **airport's** <u>weighted average of</u> <u>borrowing costs in accordance with subclause (6)</u><u>estimate of its post-tax cost of capital.</u>

(6)(4) For the purpose of subclause (1)(e), the market value of-

- (a) land, must be determined in accordance with Schedule A; and
- (b) a **non-land asset** is limited to its depreciated replacement cost.

(7)(5) For the avoidance of doubt-

- (a) revenue derived in relation to works under construction that is not included in regulatory income under an ID determination or preceding regulatory information disclosure requirements reduces the cost of an asset by the amount of the revenue where such reduction is not otherwise made under GAAP; and
- (b) where expenditure on an asset which forms part of the cost of that asset under GAAP is incurred by an airport after the asset was commissioned, such expenditure is treated as relating to a separate asset.
- (8) For the purpose of subclause (2)(a), 'consumer' means a person that consumes or acquires specified airport services.
- (6) For the purpose of subclause (3)(b), the 'weighted average of borrowing costs' is calculated for a **disclosure year** using principles set out in **GAAP**, where:
 - (a) the cost of financing rate is the weighted average of the costs applicable to borrowings in respect of **capex** that are outstanding during the **disclosure year**;
 - (b) the total costs applicable to borrowings outstanding, as used in calculating the weighted average, must include costs of borrowings made specifically for the purpose of any particular —
 - (i) capex projects; or
 - (ii) capex programmes; and
 - (c) the amount of borrowing costs capitalised during the **disclosure year** must not exceed the amount of borrowing costs incurred during the **disclosure** year;
 - (d) if a capital contribution is received by an airport, the relevant asset becomes
 works under construction for the purposes of calculating the cost of
 financing;

- (e) subject to subclause (i), a capital contribution will reduce the cost of works under construction for the purpose of the calculation of the finance cost, even if the resulting value of works under construction is negative;
- (f) subject to subclause (g), if the value of works under construction is negative in accordance with subclause (e), the cost of financing for the period ending on the commissioning date will be negative;
- (g) if the cost of financing an asset which is works under construction is negative under subclause (f), it will reduce the value of the relevant asset by that negative amount where such a reduction is not otherwise made to the value of the asset under GAAP;
- (h) for the purpose of subclause (d), works under construction includes assets that are forecast to be enhanced or acquired;
- (i) if the cost of financing is derived as income in relation to works under construction and is both-
 - (i) negative; and
 - (ii) included in regulatory income under an ID determination,

it will not reduce the value of the relevant asset or assets where such reduction is not otherwise made under **GAAP**.

3.10 Value of found asset

- (1) Found asset means an asset-
 - (a) other than easement land:
 - (b) other than an intangible asset, unless it is-
 - (i) a finance lease; or
 - (ii) an identifiable non-monetary asset;
 - (c) not having a **commissioning date** in the **disclosure year** in question;
 - the value of which is neither included as an unallocated opening RAB value in the disclosure year in question nor was so included in any prior disclosure year pursuant to clause 3.3(1); and
 - (e) first determined by the **airport** in the **disclosure year** in question to have a **commissioning date**, where the **disclosure year** is-
 - (i) the **disclosure year** 2012 or earlier, in any prior **disclosure year**; or
 - (ii) any other **disclosure year**, any prior **disclosure year** after the **disclosure year** 2009.
- (2) The value of found asset for a found asset is-
 - (a) its cost calculated in accordance with GAAP; or
 - (b) where sufficient records do not exist to establish its cost for the purposes of **GAAP**, where-

- an asset with an unallocated opening RAB value for that disclosure year is similar (in terms of asset type and age) to the found asset, the unallocated opening RAB value of the similar asset;
- (ii) it is a non-land asset to which sub-paragraph (i) does not apply, its market value as determined by a valuer as at the date that the asset was first determined by the airport to have been commissioned in a prior disclosure year; and
- (iii) it is a land asset to which sub-paragraph (i) does not apply, its value determined in accordance with Schedule A as at the date that the asset was first determined by the airport to have been commissioned in a prior disclosure year.

3.11 Cost of excluded asset

- (1) This clause applies to an asset-
 - (a) meeting paragraph (a) of the definition of excluded asset; and
 - (b) that is not a **works under construction** on the last day of the **disclosure year** 2009.
- (2) Subject to subclauses (3) and (4), the cost of an **excluded asset** to which this clause applies for a **disclosure year** is determined in accordance with the formula
 - base value + holding costs net <u>after tax</u> revenue tracking revaluations.
- (3) For the purpose of subclause (2), where **land** is revalued in accordance with clause 3.7(3)(2), all **land** to which this clause applies that is not **works under construction** must be revalued in accordance with Schedule A as at the same date in respect of which that revaluation was carried out.
- (4) For the purpose of subclause (2), holding costs and net revenue exclude amounts incurred or derived-
 - (a) before the first day of the disclosure year 2010; and
 - (b) on and from the date referred to in subclause (5).
- (5) An excluded asset becomes a works under construction on and from the date at which construction using the excluded asset commences, and the cost of the excluded asset at that date is determined in accordance with subclause (2), provided that-
 - (a) the base value is treated as expenditure relating to the cost of land; and
 - (b) the holding costs less net revenue and tracking revaluations are treated as the cost of property due to the incursion of **land conversion costs**.
- (6) For the purpose of this clause-
 - (a) 'base value' is the sum of tracking revaluations in respect of all prior disclosure years plus, in the case of-
 - (i) **land** held on the last day of the **disclosure year** 2009, the value for that **land** determined in accordance with Schedule A as on that day;

- (ii) an asset other than **land** held on the last day of the **disclosure year** 2009, the value for that asset disclosed in the **2009 disclosure financial** statements; and
- (iii) an asset not held on the last day of the disclosure year 2009, its cost as of its date of acquisition determined in accordance with GAAP, but excluding any costs of financing;
- (b) 'holding costs' means the sum of an airport's notional costs of holding the excluded asset for all disclosure years, where the notional cost of holding an excluded asset for the disclosure year in question is determined by applying the airport's estimate of its post-tax WACC to the cost determined in accordance with subclause (2) in respect of the preceding disclosure year;
- (c) 'net revenue' means the sum of amounts, other than those included in total regulatory income under an ID determination or preceding regulatory information disclosure requirements, for all disclosure years derived from holding, or associated with, the excluded asset, where the amount derived from holding the excluded asset in the disclosure year in question is determined in accordance with the formula-

revenue derived from the excluded asset (other than tracking revaluations) - operating costs incurred in relation to the excluded asset)*(1 - corporate tax rate); and

- (d) 'tracking revaluations' means the sum of all amounts obtained by-
 - (i) multiplying the revaluation rate for each complete disclosure year in which the excluded asset is not revalued in accordance with Schedule A between the disclosure year in which its base value is established and the disclosure year in which the asset becomes a works under construction, by the base value for that disclosure year; and
 - (ii) subtracting the base value from the revalued amount in respect of each disclosure year in which the excluded asset is revalued in accordance with Schedule A.
- (7) For the avoidance of doubt, for the purpose of subclause (6)(d)(ii), where a revaluation in accordance with Schedule A is undertaken more than once in a disclosure year, 'revalued amount' is determined in respect of the last revaluation undertaken in that disclosure year.

3.12 Works under construction

- (1) This clause applies to-
 - (a) land; and
 - (b) real property due to the incursion of land conversion costs,

that are works under construction on the last day of the disclosure year 2009.

(2) The cost of **land** to which this clause applies at the date referred to in subclause (1) is the value for that **land** determined in accordance with Schedule A as on that day.

Formatted: Font: Italic

Formatted: Font: Italic

Formatted: Font: Italic

- (3) The cost of real property described in subclause (1)(b) at the date referred to in subclause (1) is nil, save that Auckland International Airport Limited's cost of constructing the Northern Runway must not exceed \$22.3 million.
- 3.13 Alternative methodologies with equivalent effect
 - (1) When completing the RAB roll forward and forecast total revenue requirements of an **ID** determination, an airport may apply an alternative methodology to that specified for asset valuation in clauses 3.3-3.5, 3.7, 3.9 and 3.10.
 - (2) An alternative methodology applied by an **airport** in accordance with this clause must-
 - (a) produce an equivalent effect on the **price setting event** to the methodology that would otherwise apply under this determination; and
 - (b) be consistent with the purpose of Part 4 of the Act.
 - (3) Notwithstanding clauses 3.3-3.5, 3.7, 3.9 and 3.10, when applying an alternative methodology under subclause (1), an **airport** may treat the RAB values of all or some of the relevant assets in aggregate rather than separately.
- 3.14 Demonstration that alternative methodologies have equivalent effect
 Where an airport applies alternative methodologies in accordance with clause 3.13, it must do so in accordance with the requirements of the ID determination.

PART 4 TREATMENT OF TAXATION

4.1 Regulatory tax allowance

- (1) Regulatory tax allowance is determined by applying the **tax rules** and the **corporate tax rate** to regulatory profit / (loss) before tax.
- (2) For the purpose of subclause (1), 'regulatory profit / (loss) before tax' means the amount of 'regulatory profit / (loss) before tax' as determined in accordance with an **ID determination**.
- (3) For the purpose of subclause (1), in applying the **tax rules** in respect of particular items of income and expenses included in 'regulatory profit / (loss) before tax'-
 - (a) a tax deduction for interest incurred in relation to debt must be substituted with a tax deduction for notional deductible interest;
 - (b) any tax deduction for depreciation in respect of an asset must be calculated by applying the tax rules to the regulatory tax asset value;
 - any revaluation included in 'regulatory profit / (loss) before tax' must be excluded and ignored; and
 - (d) the effect of any-
 - tax losses (other than those produced from the supply of specified airport services); and
 - (ii) subvention payment,

made by an airport must be ignored.

(4) For the purpose of subclause (3)(a), 'notional deductible interest' means the product of multiplying the sum of all **opening RAB values** by both **leverage** and the **cost of debt**.

4.2 Regulatory tax asset value

(1) Regulatory tax asset value, in relation to an asset, means the value determined in accordance with the formula-

tax asset value \times result of asset allocation ratio.

- (2) For the purpose of subclause (1), 'tax asset value' means, in respect of-.
 - (a) an asset-
 - (i) acquired from a **regulated supplier** who used it to **supply regulated goods or services**; or
 - (ii) acquired or transferred from a related party,

the value of the asset determined by applying the tax depreciation rules to its notional tax asset value; and

- (b) any other asset, its adjusted tax value.
- (3) In this clause-

- (a) 'adjusted tax value' has the same meaning as in the tax depreciation rules;and
- (b) 'tax depreciation rules' means the **tax rules** that relate to the determination of depreciation allowances for tax purposes.
- (4) 'Notional tax asset value' means, for the purpose of-
 - (a) subclause (2)(a)(i), value after applying the tax depreciation rules to the tax asset value (as 'tax asset value' is defined in the **input methodologies** applying to the **regulated goods or services** in question) in respect of the **disclosure year** in which the asset was acquired; and
 - (b) subclause (2)(a)(ii), value in respect of the **disclosure year** in which the asset was acquired or transferred that is-
 - (i) consistent with the tax rules; and
 - (ii) limited to its value of commissioned asset or, if relevant capital contributions are treated for tax purposes in accordance with section CG 8 of the Income Tax Act 2007 (or subsequent equivalent provisions), limited to the value of commissioned asset plus any capital contributions applicable to the asset.
- (5) For the purpose of subclause (1), 'result of asset allocation ratio' means, where an asset or group of assets maintained under the **tax rules**-
 - (a) has a matching asset or group of assets maintained for the purpose of Part 3, the value obtained in accordance with the formula-

opening RAB value or sum of opening RAB values, as the case may be

unallocated opening RAB value or sum of unallocated opening RAB values, as the case may be,

applying the formula in respect of the asset or smallest group of assets maintained for the purpose of Part 3 that has a matching asset or group of assets maintained under the **tax rules**; and

(b) does not have a matching asset or group of assets maintained for the purpose of Part 3, the value of the asset allocated to the **supply** of **specified airport services** were clause 2.1 to apply to the asset or group of assets.

4.3 Alternative methodologies with equivalent effect

An **airport** may apply an alternative RAB roll forward methodology with equivalent effect to that specified for taxation in clauses 4.1-4.2 if the alternative methodology is consistent with the alternative methodology for RAB roll forward used in accordance with clause 3.13.

PART 5 COST OF CAPITAL

- 5.1 <u>Commission to determine and publish Methodology for estimatesing of the weighted</u> average cost of capital and standard error
 - (1) The **Commission** will determine <u>and publish itsa</u> mid-point estimate of vanilla **WACC** <u>and the **standard error**</u> for the <u>disclosure year 2011 and</u> each <u>disclosure year thereafter</u>
 - (a) for each airport;
 - (b) in respect of the 5 years commencing on the first day of the **disclosure year** in question;
 - (c) subject to subclause (3), within 1 month of the start of the disclosure year in question; and
 - (d) in accordance with the formula-

$$r_d L + r_e (1 - L)$$
.

- (2) The Commission will calculate and publish itsa mid-point estimate of post-tax WACC and the standard error for the disclosure year 2011 and each disclosure year thereafter-
 - (a) for each airport;
 - (b) in respect of the 5 years commencing on the first day of the **disclosure year** in question;
 - (c) subject to subclause (3), within 1 month of the start of the disclosure year in question; and
 - (d) in accordance with the formula-

$$r_d (1 - T_c)L + r_e (1 - L).$$

- (3)—For the purposes of subclauses (1) and (2), the **standard error** of the **mid-point estimate of WACC** is 0.0144. The **Commission** will estimate or determine, as the case may be, the amounts or values-
- (4) to which this subclause applies; and
- (5) in respect of the disclosure year 2011,
- (6)(3) as soon as practicable after this determination comes into force.
- (7)(4) In this clause-
 - L is leverage;
 - r_d is the cost of debt and is estimated in accordance with the formula:

$$r_f + p + d$$
;

r_e is the cost of equity and is estimated in accordance with the formula:

$$r_f(1 - T_i) + \theta_e TAMRP$$
;

- T_c is the average corporate tax rate;
- r_f is the risk-free rate;
- p is the **debt premium**;
- d is the debt issuance costs;
- T_i is the average investor tax rate;
- θ_e is the equity beta; and

TAMRP is the tax-adjusted market risk premium.

(8)(5) For the purpose of this clause-

- (a) the <u>fixed WACC parameters comprising leverage</u>, average investor tax rate, <u>the average corporate tax rate</u>, the equity beta, the debt issuance costs, the average corporate tax rate and the tax-adjusted market risk premium are the amounts specified in or determined in accordance with clause 5.2; and
- (b) the risk-free rate must be estimated in accordance with clause 5.3.

5.2 Fixed WACC parameters

- (1) 'Leverage' is 197%.
- (2) The a'Average investor tax rate' is the average of the investor tax rates that, as at the date that the estimation is made, will apply to each of the disclosure years in the 5 year period commencing on the first day of the disclosure year in question.
- (3) For the purpose of subclause (2), 'investor tax rate' is, for each disclosure year, the maximum prescribed investor rate applicable at the start of that disclosure year to an individual who is-
 - (a) for the disclosure year 2011, in the case of
 - (i) Wellington International Airport Limited, 29%; and
 - (ii) Auckland International Airport Limited and Christchurch International Airport, 28.5%; and
 - (b) for each disclosure year thereafter, the maximum prescribed investor rate applying at the start of that disclosure year to a natural person who is-
 - (c)(a) resident in New Zealand; and
 - (d)(b) an investor in a multi-rate PIE, (as 'multi-rate PIE' is defined in s YA 1 of the Income Tax Act 2007).
- (4) The a'Average corporate tax rate' is the average of the corporate tax rates that, as at the date that the estimation is made, will apply during the 5 year period commencing on the first day of the disclosure year in question.
- (5) The e'Equity beta' is 0.72.
- (6) The d'Debt issuance costs' are 0.235%.
- (7) The t'Tax-adjusted market risk premium' is, for the 5 year period commencing on the first day of each disclosure year, 7.0%.-

(8)—the disclosure year 2011, 7.1%; and

(9)(7) each disclosure year thereafter, 7.0%.

5.3 Methodology for estimating risk-free rate

The Commission will estimate a risk-free rate in respect of each airport-

- (a) for each disclosure year; and
- (b) subject to clause 5.1(3), within 1 month of the start of the disclosure year in question,

by-

- (c) obtaining, for notional benchmark New Zealand government New Zealand dollar denominated nominal bonds, the wholesale market linearly-interpolated bid yield to maturity for a residual period to maturity equal to 5 years on each **business day** in the <u>3</u> months preceding the start of the airport's disclosure year;
- (d) calculating the annualised interpolated bid yield to maturity for each **business day**; and
- (e) calculating the un-weighted arithmetic average of the daily annualised interpolated bid yields to maturity.

5.4 Methodology for estimating debt premium

- (1) 'Debt premium' means the spread between-
 - (a) the bid yield to maturity on vanilla NZ\$ denominated bonds that-
 - (i) are issued by an airport;
 - (ii) are publicly traded;
 - (iii) have a qualifying rating of grade A-; and
 - (iv) have a remaining term to maturity of 5 years; and
 - (b) the contemporaneous interpolated bid yield to maturity of benchmark New Zealand government New Zealand dollar denominated nominal bonds having a remaining term to maturity of 5 years.
- (2) The **Commission** will, in accordance with subclause (3), determine an estimate of an amount for the debt premium-
 - (a) in respect of each airport; and
 - (b) for each disclosure year; and
 - (b)

subject to clause 5.1(3), within 1 month of the start of each disclosure year.

- (3) <u>For the purposes of subclause (2),</u> ∓the amount of the debt premium will be estimated by-
 - (a) identifying publicly traded **vanilla NZ\$ denominated bonds** issued by a **qualifying issuer** that are-
 - (i) investment grade credit rated; and

- (ii) of a type described in the paragraphs of subclause (4);
- (b) in respect of each bond identified in accordance with paragraph (a)-
 - (i) obtaining its annualised wholesale market bid yield to maturity;
 - calculating by linear interpolation with respect to maturity, the contemporaneous wholesale market annualised bid yield to maturity for a notional benchmark New Zealand government New Zealand dollar denominated nominal bond with the same remaining term to maturity; and
 - (iii) calculating its contemporaneous interpolated bid to bid spread over notional benchmark New Zealand government New Zealand dollar denominated nominal bonds with the same remaining term to maturity, by deducting the yield calculated in accordance with sub-paragraph (ii) from the yield obtained in accordance with sub-paragraph (i),

for each **business day** in the <u>3</u> month <u>period immediately</u> preceding the start of the **disclosure year**;

- (c) calculating, for each bond identified in accordance with paragraph (a), the un-weighted arithmetic average of the daily spreads identified in accordance with paragraph (b)(iii); and
- (d) subject to subclause (4), estimating, by taking account of the average spreads identified in accordance with paragraph (c), and having regard to the debt premium estimated from applying the Nelson-Siegel-Svensson approach in accordance with subclause (6), the average spread that would reasonably be expected to apply to a vanilla NZ\$ denominated bond that-
 - is issued by an airport that is neither-majority owned by the Crown nor a local authority;
 - (ii) is publicly traded;
 - (iii) has a qualifying rating of grade A-; and
 - (iv) has a remaining term to maturity of 5 years.
- (4) For the purpose of subclause (3)(d), the **Commission** will have regard, subject to subclause (5), to the spreads observed on the following types of **vanilla NZ\$ denominated bonds** issued by a **qualifying issuer**:
 - (a) those that-
 - (i) have a qualifying rating of grade A-; and
 - (ii) are issued by an airport-that-is neither-majority owned by the Crown nor a local authority;
 - (b) those that-
 - (i) have a qualifying rating of grade A-; and
 - (ii) are issued by an entity other than an airport-that-is neither-majority owned by the Crown nor a local authority;

- (c) those that-
 - (i) have a qualifying rating of a grade different to A-; and
 - (ii) are issued by an airport-that-is neither-majority owned by the Crown nor a local authority; and
- (d) those that-
 - (i) have a qualifying rating of a grade different to A-; and
 - are issued by an entity, other than an airport_that is neither-majority owned by the Crown nor a local authority; and
 - (iii) those that are-
 - (iv) investment grade credit rated; and
 - (v)(ii) issued by an entity that is majority owned by the Crown or a local authority.
- (5) For the purpose of subclause (4)-
 - (a) progressively lesser regard will ordinarily be given to the spreads observed on the bond types described in subclause (4) in accordance with the order in which the bond types are described in subclause (4);
 - (b) the spread on any bond of the type described in subclause (4) that has a remaining term to maturity of less than 5 years will ordinarily be considered to be the minimum spread that would reasonably be expected to apply on an equivalently credit-rated bond issued by the same entity with a remaining term to maturity of 5 years; and
 - the **Commission** will adjust spreads observed on bonds described under subclauses (4)(b) to (4)(de) to approximate the spread that is likely to have been observed had the bonds in question been of the type described in subclause (4)(a).
- (6) For the purposes of subclause (3)(d), the 'Nelson-Siegel-Svensson approach' means a method for modelling yield curves and term structures of interest rates which establishes a relationship between term to maturity and the debt premium, and where a curve is generated by changing the parameters of a yield curve functional form to minimise the squared deviation between estimated and observed values.
- 5.5 Estimating the WACC and standard error after a price setting event or when requested by an airport
 - An airport may propose in writing that the Commission determines a mid-point
 estimate of WACC and a standard error for a nominated period commencing at the
 start of any quarter in a disclosure year (the 'nominated WACC period').
 - (2) The Commission will determine a mid-point estimate of WACC and a standard error for a price-setting period or the nominated WACC period-
 - (a) in order to carry out its function under the Act; or
 - (b) in response to an **airport's** proposal in accordance with subclause (1).

(3) A mid-point estimate of WACC or a standard error under subclause (2) will be determined in accordance with clauses 5.1 to 5.4, where the reference to disclosure years in those clauses is modified as required to mean the price setting period or the nominated WACC period.

5.5 Standard error of the debt premium

- (1) The Commission will estimate an amount for a standard error of a debt premium
 - (a) subject to clause 5.1(3), within 1 month of the start of the disclosure year in question; and
 - (b) as either-
 - (i) the product of the formula specified in subclause (2); or
 - (ii) 0.0015,

whichever is the greater.

(2) For the purpose of subclause (1)(b)(i), the formula is-

$$\sqrt{\frac{1}{N-1} \sum_{i=1}^{N} (p_i - \bar{p})^2}$$

where-

W is the number of **qualifying issuers** issuing bonds of the type described in the subparagraphs of clause 5.4(3)(d);

 p_i is each **qualifying issuer's** arithmetic average spread for its bonds of the type described in the subparagraphs of clause 5.4(3)(d); and

is the debt premium.

provided that for the purposes of determining N and p_i , no regard may be had to any bonds of the types described in clauses 5.4(4)(b) to 5.4(4)(e).

5.6 Methodology for estimating the WACC standard error

- (1) The Commission will determine a standard error of a mid-point estimate of WACC-
 - (a) subject to clause 5.1(3), within 1 month of the start of the disclosure year in question; and
 - (b) in accordance with this clause.
- (2) The standard error for a mid-point estimate of vanilla WACC determined in accordance with clause-5.1(1)-will be determined in accordance with the formula-

$$\sqrt{0.000087 + 0.0256E^2(TAMRP) + 0.0289 \text{ var}(\hat{p})}$$

(3) The **standard error** for a mid-point estimate of post-tax **WACC** determined in accordance with clause-5.1(2) will be determined in accordance with the formula-

 $\sqrt{0.000087 + 0.0256E^2(TA\hat{M}RP) + (1 - T_c)^2(0.0289 \text{ var}(\hat{p}))}$

- (4) In this clause-
 - (a) E²(TAMRP) is the square of the tax-adjusted market risk premium determined in accordance with clause 5.2(7);
 - (b) $\frac{\text{var}(\hat{p})}{\text{is the square of the standard error of the debt premium determined}}$ in accordance with clause 5.5(1); and
 - (c) T_{ϵ} is the average corporate tax rate determined in accordance with clause 5.2(4).
- 5.7 Methodology for estimating the WACC range
 - (1) The Commission will determine a WACC range for each mid-point estimate of WACC-
 - (a) for each disclosure year; and
 - (b) subject to clause 5.1(3), within 1 month of the start of the disclosure year in question
 - (2) For the purpose of subclause (1), 'WACC range' means the values falling between the 25th percentile and 75th percentile inclusive of the **mid-point estimate of**WACC.
 - (3) For the purpose of subclause (2)-
 - (a) the mid-point estimate of WACC must be treated as the 50th percentile;
 - (b) the 75th percentile must be determined in accordance with the formula-

 $\frac{\text{mid-point estimate of WACC} + 0.674 \times standard\ error\ of\ \text{mid-point estimate}}{\text{of WACC; and}}$

(c) the 25th percentile must be determined in accordance with the formula-

mid-point estimate of WACC - 0.674 × standard error of mid-point estimate of WACC,

where 'standard error' means the **standard error** of the relevant **mid-point estimate of WACC**, as determined in accordance with clause 5.6(2) or 5.6(3), as the case may be.

5.85.6 Publication of WACC estimates and standard error

- The Commission will publish all determinations and estimates that it is required to make by this Ppart on its website no later than 1 month after having made them.
- (1)(2) The determinations published in accordance with subclause (1) will reference the disclosure year or other period to which they apply.
 - (a) on its website: and
 - (b) no later than 1 month after having made them.

SCHEDULE A AIRPORT LAND VALUATION METHODOLOGY

A1 Interpretation

- (1) This schedule sets out the mandatory requirements for a valuer to apply when undertaking a valuation of land held by an airport for the purposes of this determination.
- (2) In this schedule, words or phrases in bold type that are not otherwise defined in clause 1.4(2) of this determination bear the following meanings:

highest and best alternative use means the most probable use of **land**, which use-

- (a) is not the **supply** of **specified airport services**;
- (b) is not a use to the extent that it is influenced by the supply of specified airport services;
- (c) is physically possible;
- (d) is appropriately justified;
- (e) is legally permissible;
- (f) is financially feasible; and
- (g) results in the highest estimated value of the land in question;

land has the meaning given in clause 1.4(2);

MVAU means the market value of **land** in its **highest and best alternative use** or uses determined in accordance with this schedule;

special assumption has the same meaning as defined in IVS 102 – Implementation;

valuation and property standards means the following material which is hereby incorporated by reference, subject to any amendments to, or replacement of, the material in accordance with Schedule 5 of the **Act**:

IVS 101 - Scope of Work;

IVS 102 – Implementation;

IVS 103 - Reporting;

ANZVGN 1 - Valuation Procedures Real Property;

valuer has the meaning given in clause 1.4(2).

A2 Professional valuation framework

- (1) An MVAU valuation must be undertaken by a valuer.
- (2) The valuer must undertake an MVAU valuation in accordance with the valuation and property standards, subject to any modifications, additions, or variations to those standards specified in this Schedule.
- (3) **Valuation and property standards** with 'mandatory practice' status must be adhered to by the **valuer**.
- (4) **Valuation and property standards** with 'best/good practice' status must be adhered to by the **valuer** when reasonably practicable.
- (5) The valuer must -
 - (a) base the estimate of value on data and circumstances appropriate to the valuation;
 - (b) use appropriate methods and techniques for the estimate of value;
 - (c) develop the **MVAU** valuation with sufficient information to fully support the analysis and conclusions; and
 - (d) obtain the advice of a suitably qualified independent expert on any material assumption of the MVAU valuation, including any special assumption, on which the valuer is not suitably experienced or qualified to provide an expert opinion.

A3 Valuation requirements

- (1) In undertaking an **MVAU** valuation, the **valuer** must make the **special assumptions** set out in clause A4.
- (2) The valuer must include in the MVAU valuation the likelihood, timing, and costs (both direct and indirect if any) of moving from the special assumption for land zoning to the zoning required for the development of the land in its highest and best alternative use.
- (3) The valuer must disclose in the valuation report how they determined the special assumption for land zoning and the likelihood, timing, and costs (both direct and indirect if any) of moving from the special assumption for land zoning to the zoning required for the development of the land in its highest and best alternative use.
- (4) The valuer may rely on evidence of sales of land as comparable market-based data only to the extent the sales were unaffected by the supply of specified airport services.

- (5) The **valuer** may rely on evidence of sales of **land** to, or by, the **airport** only to the extent the transactions in question:
 - (a) occurred on an arm's-length basis; and
 - (b) the price and other terms of the sales were unaffected by the supply of specified airport services.
- (6) The **valuer** must assume an orderly sale of the aggregated **land** (in economically manageable parcels) over such time as would likely be needed to achieve the **highest and best alternative use** of the **land**.
- (7) The valuer must give consideration to the physical characteristics of the land (including contiguity), existing title and easement arrangements, zoning, any other restrictions or impediments, and adjoining land uses, when determining the highest and best alternative use, so as to maximise the value in the land's alternate use and market value.
- (8) The **valuer** must disclose all material assumptions and **special assumptions** made in undertaking the **MVAU** valuation in the valuation report.
- (9) The **valuer** must include or attach to the valuation report any expert opinion obtained by the **valuer** in accordance with subclause A2(5)(d).

A4 Special assumptions

- (1) The **land** must be valued as an aggregated parcel (which may be made up of multiple titles) of a size equal to that attributed to the **supply** of **specified airport services.**
- (2) The **land** must be assumed to be notionally vacant and clear of **airport**-related improvements.
- (3) The **land** zoning must be assumed to be the zoning that is most likely to apply if the **airport** did not exist.
- (4) The **land** zoning most likely to apply if the **airport** did not exist must be determined by having regard to:
 - (a) the current zoning (other than zoning for aeronautical services or zoning influenced by the presence of the airport);
 - (b) the existing zoning of the land surrounding the airport;
 - the zoning that applied prior to the land being zoned for aeronautical services; and
 - (d) any other relevant matters including:
 - (i) the physical features of the **land**;
 - (ii) local authority planning objectives and policies, including consistency with regional policy directions;

- (iii) likely permissibility under the Resource Management Act 1991 and any other statutory or regulatory requirements or considerations.
- (5) Relevant development costs, including construction costs, holding costs, and the developer's or investor's profit and risk, must be included in the **MVAU** valuation.
- (6) The costs of converting the land to an **airport** must be excluded from the **MVAU** valuation, including:
 - (a) costs of resource consents for airport development;
 - (b) holding costs during airport development;
 - (c) costs of earthworks necessary for the formation of the level airport platform;
 - (d) costs of any land reclamation or dredging;
 - (e) costs of sea-wall or other coastal protection systems;
 - (f) cost of airport-specific drainage systems, including retention ponds;
 - (g) professional fees, including those for surveyors, engineers, and planners, with respect to the above-mentioned activities; and
 - (h) any other costs incurred in the conversion of **land** to provide aeronautical services.
- (7) Costs for remediation or demolition expenditure must be excluded from the **MVAU** valuation, including the costs of-
 - (a) demolition, crushing and removal of concreted and sealed surfaces including runways, taxiways, aprons, roading, kerbs, and channels;
 - demolition and debris removal of airport-specific buildings and structures including terminals, hangars, fire rescue buildings, control towers, and fuel depots;
 - (c) removing above- and below-ground utilities, including pipelines and cabling required for airport-specific activities like fuel pipelines, tanks, runway drainage and lighting, and approach lighting; and
 - (d) clean-up of potential site contamination, including contamination occurring through aircraft and maintenance operations by spills of aircraft and vehicle fuels, paints/solvents, firefighting foams, underground and above ground storage tanks, radioactive materials, asbestos, PCBs, pesticides and herbicides or battery acids, or through the operation of waste disposal facilities, vehicle storage, dredging operations, building construction and underground and above ground utility lines/pipes.

A5 MVAU valuation steps

In undertaking an MVAU valuation the valuer must-

- (a) establish and compile a schedule of the land parcels that are to be included in the MVAU valuation;
- (b) confirm ownership, tenure and aggregated land area;
- (c) determine the **special assumption** for **land** zoning;
- (d) consider and determine the highest and best alternative use;
- (e) determine the zoning of the land for the highest and best alternative use, and the likelihood, timing, and cost (both direct and indirect, if any) of moving from the special assumption for land zoning to the zoning required for the development of the land in its highest and best alternative use;
- (f) consider resource management (including reserve contribution) requirements, amenities in the area, and access to services;
- (g) for notional subdivision / residual value approaches-
 - (i) prepare a land development plan (in conjunction with a planner, where considered necessary by the valuer), which must demonstrate the valuer's view of the likely highest and best alternative use development of the land, and provide evidence for the assessment of inputs into the notional subdivision / residual value approaches;
 - (ii) determine market demand for the proposed development and the time period for the sale or realisation of the developed land in a notional subdivision or development, including, where material to the valuation, economic analysis to support the market demand and the time period for the sale or realisation of the developed land;
 - (iii) determine the direct costs of developing the land; and
 - (iv) determine any indirect costs of developing the **land**, including the developer's holding costs or **local authority** rates;
- (h) undertake market research and obtain comparable sales information to support the alternate land uses selected including both block sales and developed land sales if both a direct sales comparison and notional subdivision / residual value approaches are to be used;
- apply suitable adjusted market evidence to airport land as required, and taking account of whether a direct sales comparison or notional subdivision / residual value approaches are to be used;

- (j) reconcile the results of the valuation approaches used and determine a final value for the **highest and best alternative use**; and
- (k) prepare a valuation report, incorporating all disclosures required by the relevant **valuation standards** and this Schedule.