

[REVISED DRAFT] Airports (Specified Airport Services) Input Methodologies Amendments Determination 2016

[Technical consultation drafting notes:

- This 'revised draft' amendments determination proposes to amend the Airports (Specified Airport Services) Input Methodologies Determination 2010 ('principal determination').
- The included draft amendments were made as a result of our Input Methodologies Review which is aimed to be completed in December 2016 in accordance with s 52Y of the Commerce Act 1986.
- This revised draft amendments determination has been published in conjunction with draft amendments to the information disclosure determination and this determination may be read in conjunction.
- Proposed amendments to the body of the input methodologies determination are marked as track changes.
- The track changes in blue were proposed as part of our draft decisions, published on 22 June 2016.
- The track changes in red are now proposed as part of our technical consultation, published on 13 October 2016.]

Publication date: [XX] December 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 others v Commerce Commission</i> [2013] NZHC 3289 (11 December 2013)
24 February 2016	[2016] NZCC 3	Airport Services (Land Valuation) Input Methodologies Amendments Determination 2016
[XX] December 2016	[2016] NZCC [XX]	Airports (Specified Airports Services) Input Methodologies Amendments Determination 2016

AIRPORTS (SPECIFIED AIRPORT SERVICES) INPUT METHODOLOGIES DETERMINATION 2010

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Example: if the disclosed estimate was 6.00% and the mid-point estimate of WACC was 5.00%, Z would be 0.69. The cumulative area under the standard normal distribution, obtained from a standard normal distribution table, for a Z-score of 0.69 is 0.7549, so in this example the disclosed estimate would be approximately equivalent to the 75th percentile of the Commission’s WACC distribution 38

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Pursuant to Part 4 of the Commerce Act 1986 the Commerce Commission makes the following determination:

PART 1 GENERAL PROVISIONS

1.1 Title

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

1.2 Application

(1) This determination applies to **specified airport services**.

(2) Amendments to the **input methodologies** in Parts 2-5, including any amended definitions in clause 1.4(2), apply following the commencement date as described in clause 1.3.

Comment [RMMB1]: Plural added

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-

- (a) 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 'Non-current 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;

A

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- <ul style="list-style-type: none"> (a) based on a causal relationship; or (b) equal to a proxy asset allocator;
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- <ul style="list-style-type: none"> (a) regulated activities only; or (b) regulated activities and the supply of one or more unregulated service, in- <ul style="list-style-type: none"> (c) the disclosure year 2009, its unallocated initial RAB value; and (d) all other disclosure years, its unallocated closing RAB value;
business day	B 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;
capital contributions	C means money or the monetary value of other consideration charged to or

	received from consumers or other parties for the purposes of asset construction, acquisition or enhancement;
capital expenditure	means costs that have been or will be included in a value of commissioned asset , but only to the extent that the costs have been or will be included in a closing RAB value ;
causal relationship	means, in relation to- <ul style="list-style-type: none"> (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

	<p>costs that are not directly attributable, and whose quantum is-</p> <p>(a) based on a causal relationship; or</p> <p>(b) equal to a proxy cost allocator;</p>
cost of debt	means the amount specified for r_d in clause 5.1(3);
CPI	means-
	<p>(a) subject to paragraph (b) the consumer price index stipulated for each quarter in the 'All Groups Index SE9A' as published by Statistics New Zealand; and</p> <p>(b) 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;</p>
	D
debt premium	has the meaning specified in and is the amount determined in accordance with clause 5.5;
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-
	<p>(a) asset values, wholly and solely related to an asset used by the</p>

	<p>airport in or in relation to its undertaking of a regulated activity;</p> <p>(b) operating costs, wholly and solely incurred by the airport in or in relation to its undertaking of a regulated activity; and</p>
disclosure year	<p>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;</p> <p><i>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;</i></p>
disposed asset	<p>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;</p>
document	<p>has the same meaning as defined in s 2 of the Act;</p>
E	
easement	<p>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;</p>
easement land	<p>means land acquired with the intention of-</p> <p>(a) creating an easement in respect of it; and</p> <p>(b) disposing of the land thereafter;</p>
excluded asset	<p>means-</p>

(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 cost of capital is the value of forecast cost of capital as disclosed in accordance with the requirements of an **ID determination**;

forecast post-tax IRR is the value of forecast post-tax IRR as calculated in accordance with [Schedule 18](#) of the ~~requirements of an ID~~ **determination**;

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

Comment [RMMB2]: We are of the view that it is potentially confusing to reference the entire ID determination in this definition. This term is only relevant under the IM for calculation of WACC percentiles. Under the ID Determination, the WACC percentile is disclosed under schedule 18 only, but a forecast post-tax IRR is also disclosed in Schedule 19. Therefore, it should be made clear that only schedule 18 IRR is relevant for IM purposes.

	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;
	H
highest and best alternative use	has the meaning given in Schedule A;
	I
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- <ul style="list-style-type: none"> (a) easements; and (b) real property to the extent due to the incursion of land conversion costs;
land conversion costs	means- <ul style="list-style-type: none"> (a) costs incurred in-

	<ul style="list-style-type: none"> (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 5.3(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- <ul style="list-style-type: none"> (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- <ul style="list-style-type: none"> (a) vanilla WACC; or (b) post-tax WACC, as the case may be, as each is estimated in accordance with clause 5.1;
MVAU	has the meaning given in Schedule A;

N

nominated WACC period	has the meaning specified in clause 5.5(1);
non-land asset	means an asset other than land , and for the avoidance of doubt, includes- <ul style="list-style-type: none"> (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 a non-standard depreciation methodology ;
non-standard depreciation disclosure	means the disclosure of information in accordance with requirements in an ID determination in relation to the airport's use of a non-standard depreciation methodology ;
non-standard depreciation methodology	means a depreciation methodology other than the methodology used in determining- <ul style="list-style-type: none"> (a) unallocated depreciation as specified in clause 3.4(1); and (b) depreciation as specified in clause 3.4(2);

O

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- <ul style="list-style-type: none"> (a) a regulated activity alone; or (b) a regulated activity and the supply of one or more unregulated service, and excludes- <ul style="list-style-type: none"> (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;

P

person	has the same meaning as defined in s 2 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);
post-tax WACC at price setting event	has the meaning specified in clause 5.5(3);
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	<p>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-</p> <ul style="list-style-type: none"> (a) is deemed to occur on the date that the new price comes into effect; and (b) excludes instances where the price is- <ul style="list-style-type: none"> (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 (iv) not required to be consulted on by virtue of s 4B(3) of the Airport Authorities Act 1966;
proxy asset allocator	<p>means a proportion of a quantifiable measure-</p> <ul style="list-style-type: none"> (a) used to allocate asset values for which a causal relationship cannot be established or it is impractical to use a causal relationship; and (b) whose quantum is based on factors in existence during the 18 month period terminating on the last day of the disclosure

proxy cost allocator means a proportion of a quantifiable measure-

- (a) used to allocate **operating costs** for which a **causal relationship** cannot be established or it is impractical to use a **causal relationship**; 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;

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; or
- (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), 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;
T	
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;

WACC percentile equivalent for

has the meaning specified in clause 5.6(1);

forecast cost of capital

WACC percentile equivalent for

has the meaning specified in clause 5.6(2);

forecast post-tax IRR

wash-up

means an **annual** adjustment to prices reflecting actual use and actual costs incurred;

Comment [RMMB3]: A price adjustment may not be annual (it could only apply in some years of a pricing period).

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**.

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 Accounting-based allocation approach

(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 or it is impractical to use a **causal relationship**.

(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)(3) 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**.

Comment [RMMB4]: These proposed additional explanation requirements are unjustified. See cover submission for more detail.

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-

Comment [RMMB5]: Bold: defined term.

- (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-

Comment [RMMB6]: Bold: defined term.

- (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).

(2) The **initial RAB** value of an asset is determined by-

Comment [RMMB7]: Bold: defined term.

- (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;

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;

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-

Comment [RMMB8]: Bold: defined term.

- (a) the **disclosure year 2010**, is its **unallocated initial RAB value**; and
- (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-

Comment [RMMB9]: Bold: defined term.

- (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-

$$\text{unallocated opening RAB value} - \text{unallocated depreciation} + \text{unallocated revaluation};$$
 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**.

Comment [RMMB10]: Bold: defined term.

(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.

Comment [RMMB11]: Bold: defined term.

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-

$$[1 \div \text{remaining asset life}] \times \text{unallocated opening RAB value}.$$

(2) Depreciation, in the case of an asset with an **opening RAB value**, is determined, subject to subclause (3) in accordance with the formula-

$$[1 \div \text{remaining asset life}] \times \text{opening RAB value}.$$

(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 the **non-standard depreciation methodology**;
- (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 used in non-standard depreciation disclosures if applied at the time of a price setting event if

Comment [RMMB12]: Deleted text to avoid misrepresenting relationship between pricing and disclosure requirements. See cover submission for more detail.

- (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 explain why it considers the resulting time profile of capital recovery, applied in its methodology for calculating its revenue, promotes the purpose of s 52A(1) of the **Act**, in the circumstances that exist at the time of the **price setting event**; and
- (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 Unallocated depreciation constraint

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) a **non-standard asset**, the asset life specified for that asset in the **non-standard 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**-
 - (i) 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**-
 - (i) 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
 - (ii) 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-
 - (i) 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

- (1) 'Unallocated revaluation' for an asset means, for indexed revaluations and non-indexed revaluations, the amount calculated, subject to subclauses (3) and (4), 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.

- (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**.

- (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.

- (5) For the purpose of subclause (2), where an **airport** revalues **land** in accordance with subclause (3), 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

- (ii) 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, an **airport** must-
- (a) use an indexed or non-indexed approach for that asset; and
 - (b) ~~only use a non-indexed approach for that asset for the same approach for that asset for~~ complying with the requirements of the **ID determination** ~~if a non-indexed approach was as~~ used ~~for that asset~~ when setting prices ~~for the pricing period that the revaluation relates to~~.
- (7) 'Revaluation rate' for an asset means-
- (a) for indexed revaluations, the indexed revaluation rate calculated 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**.

Comment [RMMB13]: While the Commission's edits to this clause are helpful, we are of the view that the clause as drafted remains problematic. See cover submission for more detail.

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), means 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**,

is limited to the unallocated closing RAB value of the **asset** that would have applied for the other **regulated supplier**, had the asset not been acquired by the **airport** in the period when the asset was transferred (as 'unallocated closing RAB value' is defined in the **input methodologies** applying to the **supply of regulated goods or services** by the **regulated supplier**);

- (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), '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.
- (3) When applying **GAAP** for the purpose of subclause (1), the cost of financing is-
- (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** estimate of its post-tax cost of capital.
- (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.
- (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 post-tax 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.

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;
 - (d) 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-
 - (i) 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 revenue - tracking revaluations.
- (3) For the purpose of subclause (2), where **land** is revalued in accordance with clause 3.7(3), 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.
- (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 asset valuation methodology to that specified for asset valuation in clauses 3.3-3.5, 3.7, 3.9 and 3.10.
- (2) An alternative asset valuation methodology applied by an **airport** in accordance with this clause must-

- (a) be likely to 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**.

Comment [RMMB14]: See cover submission for more detail.

- (3) Notwithstanding clauses 3.3-3.5, 3.7, 3.9 and 3.10, when applying an alternative asset valuation 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 asset valuation 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**;
 - (c) any **revaluation** included in 'regulatory profit / (loss) before tax' must be excluded and ignored; and
 - (d) the effect of any-
 - (i) 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 × 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

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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 an alternative taxation methodology is consistent with an alternative asset valuation methodology for RAB roll forward used in accordance with clause 3.13.

PART 5 COST OF CAPITAL

5.1 Commission to determine and publish estimates of the weighted average cost of capital

- (1) The **Commission** will determine and publish its mid-point estimate of vanilla **WACC** for ~~the~~ each **disclosure year**-
- for each **airport**;
 - in respect of the 5 years commencing on the first day of the **disclosure year** in question;
 - within 1 month of the start of the **disclosure year** in question; and
 - in accordance with the formula-

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

- (2) The **Commission** will calculate and publish its mid-point estimate of post-tax **WACC** for each **disclosure year**-
- for each **airport**;
 - in respect of the 5 years commencing on the first day of the **disclosure year** in question;
 - within 1 month of the start of the **disclosure year** in question; and
 - in accordance with the formula-

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

- (3) In this clause-

L is **leverage**;

r_d is the cost of debt and is estimated in accordance with the formula:

$$r_f + p;$$

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

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

T_c is the average corporate tax rate;

r_f is the risk-free rate;

p is the **debt premium**;

T_i is the average investor tax rate;

β_e is the equity beta; and

$TAMRP$ is the tax-adjusted market risk premium.

- (4) For the purpose of this clause-

- the fixed WACC parameters comprising leverage, average investor tax rate, the average corporate tax rate, the equity beta and the tax-adjusted market risk premium are the amounts specified in or determined in accordance with clause 5.3; and

(b) the risk-free rate must be estimated in accordance with clause 5.4.

5.2 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-

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

(4) In this clause-

(a) $E^2(TAMRP)$ is the square of the tax-adjusted market risk premium determined in accordance with clause 5.2(7);

(b) $\text{var}(\hat{p})$ is the square of the **standard error** of the debt premium determined in accordance with clause 5.5(1); and

(c) T_c is the average corporate tax rate determined in accordance with clause 5.2(4).

5.25.3 Fixed WACC parameters

- (1) ['Leverage' is [XX].%.]
- (2) '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) resident in New Zealand; and
 - (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) '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) ['Equity beta' is [XX].]

Comment [RMMB15]: See cover submission for further detail. This is taken from clause 5.6 of the current IM determination.

- (6) ['Tax-adjusted market risk premium' is, for the 5 year period commencing on the first day of each **disclosure year**, [XX].%.]

5.35.4 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) 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 3 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 unweighted arithmetic average of the daily annualised interpolated bid yields to maturity.

5.45.5 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**;
- within 1 month of the start of each **disclosure year**.

- (3) For the purposes of subclause (2), 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;

- (ii) 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 subparagraph (ii) from the yield obtained in accordance with subparagraph (i),

for each **business day** in the 3 month period 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-
 - (i) is issued by an **airport** that is neither 100% 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 100% 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 100% 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 100% owned by the Crown nor a **local authority**;
 - (d) those that-

- (i) have a **qualifying rating** of a grade different to A-; and
 - (ii) are issued by an entity, other than an **airport** that is neither 100% owned by the Crown nor a **local authority**; and
- (e) those that are-
- (i) **investment grade credit rated**; and
 - (ii) issued by an entity that is 100% 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 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
 - (c) the **Commission** will adjust spreads observed on bonds described under subclauses (4)(b) to (4)(e) 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.

5-55.6 Estimating the WACC after a price setting event or when requested by an airport

- (1) An **airport** may propose in writing that the **Commission** determines a **mid-point estimate of WACC** 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 **post-tax WACC at price setting event**-
 - (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 ‘post-tax WACC at price setting event’ under subclause (2) will be a mid-point estimate of post-tax **WACC** determined by the **Commission** 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**.

5-65.7 WACC percentile equivalents

- (1) ‘WACC percentile equivalent for forecast cost of capital’ means an equivalent to the disclosed estimate that is calculated as the cumulative area under the standard normal distribution for Z where-

- (a) 'Z' is the Z score that corresponds with the inverse of the standard normal cumulative distribution for the percentile of the disclosed estimate, which is calculated as-
- $$Z = \frac{\text{disclosed estimate} - \text{midpoint estimate of WACC}}{\text{standard error of midpoint estimate of WACC}}$$
- (b) 'mid-point estimate of WACC' means the **post-tax WACC at price setting event**;
- (c) the 'standard error of mid-point estimate of WACC' is [xx]; and
- (d) 'disclosed estimate' means **forecast cost of capital**.
- (2) 'WACC percentile equivalent for forecast post-tax IRR' means an equivalent to the disclosed estimate that is calculated as the cumulative area under the standard normal distribution for Z where-
- (a) 'Z' is the Z score that corresponds with the inverse of the standard normal cumulative distribution for the percentile of the disclosed estimate, which is calculated as-
- $$Z = \frac{\text{disclosed estimate} - \text{midpoint estimate of WACC}}{\text{standard error of midpoint estimate of WACC}}$$
- (b) 'mid-point estimate of WACC' means the **post-tax WACC at price setting event**;
- (c) the 'standard error of mid-point estimate of WACC' is [xx]; and
- (d) 'disclosed estimate' means **forecast post-tax IRR**.

Example: if the disclosed estimate was 6.00% and the mid-point estimate of WACC was 5.00%, Z would be 0.69. The cumulative area under the standard normal distribution, obtained from a standard normal distribution table, for a Z-score of 0.69 is 0.7549, so in this example the disclosed estimate would be approximately equivalent to the 75th percentile of the Commission's WACC distribution

5.75.8 Publication of WACC estimates and standard error

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

Comment [RMMB16]: See comment above - NZ Airports is of the view that the Commission must continue to publish the standard error.

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**;
 - (c) 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:

Comment [RMMB17]: Defined term

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- (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;
 - (b) 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;
- (i) 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.