



**EDB Information Disclosure Requirements  
Information Templates  
for  
Schedules 1–10**

<b>Company Name</b>	Waipa Networks Limited
<b>Disclosure Date</b>	28 August 2019
<b>Disclosure Year (year ended)</b>	31 March 2019

Templates for Schedules 1–10 excluding 5f–5g  
Template Version 4.1. Prepared 21 December 2017

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## SCHEDULE 1: ANALYTICAL RATIOS

This schedule calculates expenditure, revenue and service ratios from the information disclosed. The disclosed ratios may vary for reasons that are company specific and, as a result, must be interpreted with care. The Commerce Commission will publish a summary and analysis of information disclosed in accordance with the ID determination. This will include information disclosed in accordance with this and other schedules, and information disclosed under the other requirements of the determination.

This information is part of audited disclosure information (as defined in section 1.4 of the ID determination), and so is subject to the assurance report required by section 2.8.

sch ref

7 <b>1(i): Expenditure metrics</b>		Expenditure per GWh energy delivered to ICPs (\$/GWh)	Expenditure per average no. of ICPs (\$/ICP)	Expenditure per MW maximum coincident system demand (\$/MW)	Expenditure per km circuit length (\$/km)	Expenditure per MVA of capacity from EDB-owned distribution transformers (\$/MVA)
8						
9	<b>Operational expenditure</b>	20,494	300	108,711	3,590	30,452
10	Network	9,627	141	51,063	1,686	14,304
11	Non-network	10,868	159	57,648	1,903	16,148
12						
13	<b>Expenditure on assets</b>	16,292	239	86,422	2,854	24,208
14	Network	15,491	227	82,172	2,713	23,018
15	Non-network	801	12	4,250	140	1,190
16						
17	<b>1(ii): Revenue metrics</b>					
18		Revenue per GWh energy delivered to ICPs (\$/GWh)	Revenue per average no. of ICPs (\$/ICP)			
19	<b>Total consumer line charge revenue</b>	68,453	1,003			
20	Standard consumer line charge revenue	78,784	954			
21	Non-standard consumer line charge revenue	19,171	649,000			
22						
23	<b>1(iii): Service intensity measures</b>					
24						
25	Demand density	33				Maximum coincident system demand per km of circuit length (for supply) (kW/km)
26	Volume density	175				Total energy delivered to ICPs per km of circuit length (for supply) (MWh/km)
27	Connection point density	12				Average number of ICPs per km of circuit length (for supply) (ICPs/km)
28	Energy intensity	14,648				Total energy delivered to ICPs per average number of ICPs (kWh/ICP)
29						
30	<b>1(iv): Composition of regulatory income</b>					
31						
32						
33						
34						
35						
36						
37						
38						
39						
40	<b>1(v): Reliability</b>					
41						
42	Interruption rate		11.07			Interruptions per 100 circuit km

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## SCHEDULE 2: REPORT ON RETURN ON INVESTMENT

This schedule requires information on the Return on Investment (ROI) for the EDB relative to the Commerce Commission's estimates of post tax WACC and vanilla WACC. EDBs must calculate their ROI based on a monthly basis if required by clause 2.3.3 of the ID Determination or if they elect to. If an EDB makes this election, information supporting this calculation must be provided in 2(iii).

EDBs must provide explanatory comment on their ROI in Schedule 14 (Mandatory Explanatory Notes).

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sch ref

	CY-2	CY-1	Current Year CY
	31 Mar 17	31 Mar 18	31 Mar 19
	%	%	%
<b>2(i): Return on Investment</b>			
<b>ROI – comparable to a post tax WACC</b>			
Reflecting all revenue earned	6.40%	4.94%	4.46%
Excluding revenue earned from financial incentives	6.40%	4.94%	4.46%
Excluding revenue earned from financial incentives and wash-ups	6.40%	4.94%	4.46%
<b>Mid-point estimate of post tax WACC</b>	4.77%	5.04%	4.75%
25th percentile estimate	4.05%	4.36%	4.07%
75th percentile estimate	5.48%	5.72%	5.43%
<b>ROI – comparable to a vanilla WACC</b>			
Reflecting all revenue earned	6.94%	5.54%	4.97%
Excluding revenue earned from financial incentives	6.94%	5.54%	4.97%
Excluding revenue earned from financial incentives and wash-ups	6.94%	5.54%	4.97%
<b>WACC rate used to set regulatory price path</b>			
<b>Mid-point estimate of vanilla WACC</b>	5.31%	5.60%	5.26%
25th percentile estimate	4.59%	4.92%	4.58%
75th percentile estimate	6.03%	6.29%	5.94%
<b>2(ii): Information Supporting the ROI</b>			
			(\$000)
Total opening RAB value	113,558		
plus Opening deferred tax	(4,146)		
<b>Opening RIV</b>		109,413	
<b>Line charge revenue</b>		26,744	
Expenses cash outflow	16,973		
add Assets commissioned	3,238		
less Asset disposals	284		
add Tax payments	1,210		
less Other regulated income	(182)		
<b>Mid-year net cash outflows</b>		21,319	
<b>Term credit spread differential allowance</b>		–	
Total closing RAB value	114,175		
less Adjustment resulting from asset allocation	(0)		
less Lost and found assets adjustment	–		
plus Closing deferred tax	(4,759)		
<b>Closing RIV</b>		109,417	
<b>ROI – comparable to a vanilla WACC</b>			4.97%
Leverage (%)			42%
Cost of debt assumption (%)			4.33%
Corporate tax rate (%)			28%
<b>ROI – comparable to a post tax WACC</b>			4.46%

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**SCHEDULE 2: REPORT ON RETURN ON INVESTMENT**

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EDBs must provide explanatory comment on their ROI in Schedule 14 (Mandatory Explanatory Notes).

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sch ref

**2(iii): Information Supporting the Monthly ROI**

61								
62								
63	Opening RIV							N/A
64								
65								
66		Line charge revenue	Expenses cash outflow	Assets commissioned	Asset disposals	Other regulated income	Monthly net cash outflows	
67	April							-
68	May							-
69	June							-
70	July							-
71	August							-
72	September							-
73	October							-
74	November							-
75	December							-
76	January							-
77	February							-
78	March							-
79	<b>Total</b>	-	-	-	-	-	-	-
80								
81	Tax payments							N/A
82								
83	Term credit spread differential allowance							N/A
84								
85	Closing RIV							N/A
86								
87								
88	Monthly ROI – comparable to a vanilla WACC							N/A
89								
90	Monthly ROI – comparable to a post tax WACC							N/A
91								

**2(iv): Year-End ROI Rates for Comparison Purposes**

94	Year-end ROI – comparable to a vanilla WACC	4.89%
95		
96	Year-end ROI – comparable to a post tax WACC	4.38%
97		

\* these year-end ROI values are comparable to the ROI reported in pre 2012 disclosures by EDBs and do not represent the Commission's current view on ROI.

**2(v): Financial Incentives and Wash-Ups**

102	Net recoverable costs allowed under incremental rolling incentive scheme	-
103	Purchased assets – avoided transmission charge	
104	Energy efficiency and demand incentive allowance	
105	Quality incentive adjustment	
106	Other financial incentives	
107	<b>Financial incentives</b>	-
108		
109	<b>Impact of financial incentives on ROI</b>	-
110		
111	Input methodology claw-back	
112	CPP application recoverable costs	
113	Catastrophic event allowance	
114	Capex wash-up adjustment	
115	Transmission asset wash-up adjustment	
116	2013–15 NPV wash-up allowance	
117	Reconsideration event allowance	
118	Other wash-ups	
119	<b>Wash-up costs</b>	-
120		
121	<b>Impact of wash-up costs on ROI</b>	-

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### SCHEDULE 3: REPORT ON REGULATORY PROFIT

This schedule requires information on the calculation of regulatory profit for the EDB for the disclosure year. All EDBs must complete all sections and provide explanatory comment on their regulatory profit in Schedule 14 (Mandatory Explanatory Notes).

This information is part of audited disclosure information (as defined in section 1.4 of the ID determination), and so is subject to the assurance report required by section 2.8.

sch ref

3(i): Regulatory Profit		(\$000)
7	<b>Income</b>	
8	Line charge revenue	26,744
9	<i>plus</i> Gains / (losses) on asset disposals	(284)
10	<i>plus</i> Other regulated income (other than gains / (losses) on asset disposals)	102
11		
12	<b>Total regulatory income</b>	<b>26,562</b>
13	<b>Expenses</b>	
14	<i>less</i> Operational expenditure	8,007
15		
16	<i>less</i> Pass-through and recoverable costs excluding financial incentives and wash-ups	8,966
17		
18	<b>Operating surplus / (deficit)</b>	<b>9,590</b>
19		
20	<i>less</i> Total depreciation	4,017
21		
22	<i>plus</i> Total revaluations	1,680
23		
24	<b>Regulatory profit / (loss) before tax</b>	<b>7,253</b>
25		
26	<i>less</i> Term credit spread differential allowance	-
27		
28	<i>less</i> Regulatory tax allowance	1,824
29		
30	<b>Regulatory profit/(loss) including financial incentives and wash-ups</b>	<b>5,429</b>
31		
32		
33	<b>3(ii): Pass-through and Recoverable Costs excluding Financial Incentives and Wash-Ups</b>	<b>(\$000)</b>
34	<b>Pass through costs</b>	
35	Rates	76
36	Commerce Act levies	26
37	Industry levies	75
38	CPP specified pass through costs	
39	<b>Recoverable costs excluding financial incentives and wash-ups</b>	
40	Electricity lines service charge payable to Transpower	8,204
41	Transpower new investment contract charges	585
42	System operator services	
43	Distributed generation allowance	
44	Extended reserves allowance	
45	Other recoverable costs excluding financial incentives and wash-ups	
46	<b>Pass-through and recoverable costs excluding financial incentives and wash-ups</b>	<b>8,966</b>
47		

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**SCHEDULE 3: REPORT ON REGULATORY PROFIT**

This schedule requires information on the calculation of regulatory profit for the EDB for the disclosure year. All EDBs must complete all sections and provide explanatory comment on their regulatory profit in Schedule 14 (Mandatory Explanatory Notes).

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*sch ref*

		(\$000)	
		CY-1	CY
		31 Mar 18	31 Mar 19
48	<b>3(iii): Incremental Rolling Incentive Scheme</b>		
49			
50			
51	Allowed controllable opex		
52	Actual controllable opex		
53			
54	Incremental change in year		
55			
		Previous years' incremental change	Previous years' incremental change adjusted for inflation
56			
57	CY-5 31 Mar 14		
58	CY-4 31 Mar 15		
59	CY-3 31 Mar 16		
60	CY-2 31 Mar 17		
61	CY-1 31 Mar 18		
62	<b>Net incremental rolling incentive scheme</b>		-
63			
64	<b>Net recoverable costs allowed under incremental rolling incentive scheme</b>		-
65	<b>3(iv): Merger and Acquisition Expenditure</b>		
70			(\$000)
66	Merger and acquisition expenditure		-
67			
68	<i>Provide commentary on the benefits of merger and acquisition expenditure to the electricity distribution business, including required disclosures in accordance with section 2.7, in Schedule 14 (Mandatory Explanatory Notes)</i>		
69	<b>3(v): Other Disclosures</b>		
70			(\$000)
71	Self-insurance allowance		-

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**SCHEDULE 4: REPORT ON VALUE OF THE REGULATORY ASSET BASE (ROLLED FORWARD)**

This schedule requires information on the calculation of the Regulatory Asset Base (RAB) value to the end of this disclosure year. This informs the ROI calculation in Schedule 2. EDBs must provide explanatory comment on the value of their RAB in Schedule 14 (Mandatory Explanatory Notes). This information is part of audited disclosure information (as defined in section 1.4 of the ID determination), and so is subject to the assurance report required by section 2.8.

sch ref

7 8 9	10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25	4(i): Regulatory Asset Base Value (Rolled Forward)	for year ended				
			RAB 31 Mar 15 (\$000)	RAB 31 Mar 16 (\$000)	RAB 31 Mar 17 (\$000)	RAB 31 Mar 18 (\$000)	RAB 31 Mar 19 (\$000)
		Total opening RAB value	91,331	91,209	91,746	112,541	113,558
		less Total depreciation	3,400	3,430	3,507	3,907	4,017
		plus Total revaluations	76	534	1,983	1,236	1,680
		plus Assets commissioned	3,376	3,622	22,504	3,865	3,238
		less Asset disposals	174	188	185	177	284
		plus Lost and found assets adjustment	(0)	(0)	-	-	-
		plus Adjustment resulting from asset allocation	-	-	-	-	(0)
		Total closing RAB value	91,209	91,746	112,541	113,558	114,175

26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49	50	4(ii): Unallocated Regulatory Asset Base	Unallocated RAB *		RAB	
			(\$000)	(\$000)	(\$000)	(\$000)
		Total opening RAB value		117,941		113,558
		less Total depreciation		4,272		4,017
		plus Total revaluations		1,745		1,680
		plus Assets commissioned (other than below)	440		435	
		Assets acquired from a regulated supplier	-		-	
		Assets acquired from a related party	2,804		2,804	
		Assets commissioned		3,243		3,238
		less Asset disposals (other than below)	284		284	
		Asset disposals to a regulated supplier	-		-	
		Asset disposals to a related party	-		-	
		Asset disposals		284		284
		plus Lost and found assets adjustment		-		
		plus Adjustment resulting from asset allocation				(0)
		Total closing RAB value		118,373		114,175

\* The 'unallocated RAB' is the total value of those assets used wholly or partially to provide electricity distribution services without any allowance being made for the allocation of costs to services provided by the supplier that are not electricity distribution services. The RAB value represents the value of these assets after applying this cost allocation. Neither value includes works under construction.



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**SCHEDULE 4: REPORT ON VALUE OF THE REGULATORY ASSET BASE (ROLLED FORWARD)**

This schedule requires information on the calculation of the Regulatory Asset Base (RAB) value to the end of this disclosure year. This informs the ROI calculation in Schedule 2. EDBs must provide explanatory comment on the value of their RAB in Schedule 14 (Mandatory Explanatory Notes). This information is part of audited disclosure information (as defined in section 1.4 of the ID determination), and so is subject to the assurance report required by section 2.8.

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**4(iii): Calculation of Revaluation Rate and Revaluation of Assets**

CPI <sub>t</sub>	1,026
CPI <sub>t-4</sub>	1,011
Revaluation rate (%)	1.48%

	Unallocated RAB *		RAB	
	(\$000)	(\$000)	(\$000)	(\$000)
Total opening RAB value	117,941		113,558	
less Opening value of fully depreciated, disposed and lost assets	318		318	
Total opening RAB value subject to revaluation	117,623		113,240	
<b>Total revaluations</b>		1,745		1,680

**4(iv): Roll Forward of Works Under Construction**

	Unallocated works under construction		Allocated works under construction	
<b>Works under construction—preceding disclosure year</b>		514		514
plus Capital expenditure	3,885		3,880	
less Assets commissioned	3,243		3,238	
plus Adjustment resulting from asset allocation			-	
<b>Works under construction - current disclosure year</b>		1,157		1,157
Highest rate of capitalised finance applied				-

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**SCHEDULE 4: REPORT ON VALUE OF THE REGULATORY ASSET BASE (ROLLED FORWARD)**

This schedule requires information on the calculation of the Regulatory Asset Base (RAB) value to the end of this disclosure year. This informs the ROI calculation in Schedule 2. EDBs must provide explanatory comment on the value of their RAB in Schedule 14 (Mandatory Explanatory Notes). This information is part of audited disclosure information (as defined in section 1.4 of the ID determination), and so is subject to the assurance report required by section 2.8.

sch ref

**76 4(v): Regulatory Depreciation**

	Unallocated RAB *		RAB	
	(\$000)	(\$000)	(\$000)	(\$000)
77 Depreciation - standard	3,764		3,764	
78 Depreciation - no standard life assets	508		253	
79 Depreciation - modified life assets	-		-	
80 Depreciation - alternative depreciation in accordance with CPP	-		-	
81 <b>Total depreciation</b>		4,272		4,017

**85 4(vi): Disclosure of Changes to Depreciation Profiles**

(\$000 unless otherwise specified)

Asset or assets with changes to depreciation*	Reason for non-standard depreciation (text entry)	Depreciation charge for the period (RAB)	Closing RAB value under 'non-standard' depreciation	Closing RAB value under 'standard' depreciation

\* include additional rows if needed

**96 4(vii): Disclosure by Asset Category**

(\$000 unless otherwise specified)

	Subtransmission lines	Subtransmission cables	Zone substations	Distribution and LV lines	Distribution and LV cables	Distribution substations and transformers	Distribution switchgear	Other network assets	Non-network assets	Total
98 <b>Total opening RAB value</b>	18,369	-	-	28,349	19,885	26,861	13,899	4,281	1,915	113,558
99 <i>less</i> Total depreciation	253	-	-	1,133	672	899	530	278	253	4,017
100 <i>plus</i> Total revaluations	273	-	-	421	295	395	206	64	28	1,680
101 <i>plus</i> Assets commissioned	121	-	-	382	326	1,504	584	8	313	3,238
102 <i>less</i> Asset disposals	-	-	-	-	-	232	-	-	52	284
103 <i>plus</i> Lost and found assets adjustment	-	-	-	-	-	-	-	-	-	-
104 <i>plus</i> Adjustment resulting from asset allocation	-	-	-	-	-	-	-	-	-	-
105 <i>plus</i> Asset category transfers	-	-	-	-	-	-	-	-	-	-
106 <b>Total closing RAB value</b>	18,510	-	-	28,018	19,834	27,628	14,159	4,074	1,951	114,175
107 <b>Asset Life</b>										
108 Weighted average remaining asset life	52	-	-	28	28	27	22	20	16	(years)
109 Weighted average expected total asset life	55	-	-	60	45	44	38	40	54	(years)

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### SCHEDULE 5a: REPORT ON REGULATORY TAX ALLOWANCE

This schedule requires information on the calculation of the regulatory tax allowance. This information is used to calculate regulatory profit/loss in Schedule 3 (regulatory profit). EDBs must provide explanatory commentary on the information disclosed in this schedule, in Schedule 14 (Mandatory Explanatory Notes).

This information is part of audited disclosure information (as defined in section 1.4 of the ID determination), and so is subject to the assurance report required by section

sch ref

		(\$000)	
7	<b>5a(i): Regulatory Tax Allowance</b>		
8	<b>Regulatory profit / (loss) before tax</b>		7,253
9			
10	<i>plus</i> Income not included in regulatory profit / (loss) before tax but taxable	1,382	*
11	Expenditure or loss in regulatory profit / (loss) before tax but not deductible		*
12	Amortisation of initial differences in asset values	1,601	
13	Amortisation of revaluations	415	
14			3,398
15			
16	<i>less</i> Total revaluations	1,680	
17	Income included in regulatory profit / (loss) before tax but not taxable		*
18	Discretionary discounts and customer rebates	509	
19	Expenditure or loss deductible but not in regulatory profit / (loss) before tax		*
20	Notional deductible interest	1,948	
21			4,137
22			
23	<b>Regulatory taxable income</b>		6,513
24			
25	<i>less</i> Utilised tax losses		
26	Regulatory net taxable income		6,513
27			
28	Corporate tax rate (%)	28%	
29	<b>Regulatory tax allowance</b>		1,824

\* Workings to be provided in Schedule 14

### 5a(ii): Disclosure of Permanent Differences

In Schedule 14, Box 5, provide descriptions and workings of items recorded in the asterisked categories in Schedule 5a(i).

### 5a(iii): Amortisation of Initial Difference in Asset Values

(\$000)

36	Opening unamortised initial differences in asset values	43,228	
37	<i>less</i> Amortisation of initial differences in asset values	1,601	
38	<i>plus</i> Adjustment for unamortised initial differences in assets acquired		
39	<i>less</i> Adjustment for unamortised initial differences in assets disposed	8	
40	Closing unamortised initial differences in asset values		41,619
41			
42	Opening weighted average remaining useful life of relevant assets (years)		27
43			

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### SCHEDULE 5a: REPORT ON REGULATORY TAX ALLOWANCE

This schedule requires information on the calculation of the regulatory tax allowance. This information is used to calculate regulatory profit/loss in Schedule 3 (regulatory profit). EDBs must provide explanatory commentary on the information disclosed in this schedule, in Schedule 14 (Mandatory Explanatory Notes).

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sch ref

44	<b>5a(iv): Amortisation of Revaluations</b>		(\$000)
45			
46	Opening sum of RAB values without revaluations	104,470	
47			
48	Adjusted depreciation	3,602	
49	Total depreciation	4,017	
50	Amortisation of revaluations		415
51			
52	<b>5a(v): Reconciliation of Tax Losses</b>		(\$000)
53			
54	Opening tax losses		
55	plus Current period tax losses		
56	less Utilised tax losses		
57	Closing tax losses		-
58	<b>5a(vi): Calculation of Deferred Tax Balance</b>		(\$000)
59			
60	Opening deferred tax	(4,146)	
61			
62	plus Tax effect of adjusted depreciation	1,009	
63			
64	less Tax effect of tax depreciation	1,214	
65			
66	plus Tax effect of other temporary differences*	(26)	
67			
68	less Tax effect of amortisation of initial differences in asset values	448	
69			
70	plus Deferred tax balance relating to assets acquired in the disclosure year		
71			
72	less Deferred tax balance relating to assets disposed in the disclosure year	(67)	
73			
74	plus Deferred tax cost allocation adjustment	0	
75			
76	Closing deferred tax		(4,759)
77			
78	<b>5a(vii): Disclosure of Temporary Differences</b>		
79	<i>In Schedule 14, Box 6, provide descriptions and workings of items recorded in the asterisked category in Schedule 5a(vi) (Tax effect of other temporary differences).</i>		
80			
81	<b>5a(viii): Regulatory Tax Asset Base Roll-Forward</b>		
82			(\$000)
83	Opening sum of regulatory tax asset values	45,812	
84	less Tax depreciation	4,337	
85	plus Regulatory tax asset value of assets commissioned	4,006	
86	less Regulatory tax asset value of asset disposals	44	
87	plus Lost and found assets adjustment	-	
88	plus Adjustment resulting from asset allocation	-	
89	plus Other adjustments to the RAB tax value	-	
90	Closing sum of regulatory tax asset values		45,437



Company Name **Waipa Networks Limited**  
 For Year Ended **31 March 2019**

**SCHEDULE 5c: REPORT ON TERM CREDIT SPREAD DIFFERENTIAL ALLOWANCE**

This schedule is only to be completed if, as at the date of the most recently published financial statements, the weighted average original tenor of the debt portfolio (both qualifying debt and non-qualifying debt) is greater than five years. This information is part of audited disclosure information (as defined in section 1.4 of the ID determination), and so is subject to the assurance report required by section 2.8.

*sch ref*

7  
8  
9

**5c(i): Qualifying Debt (may be Commission only)**

Issuing party	Issue date	Pricing date	Original tenor (in years)	Coupon rate (%)	Book value at issue date (NZD)	Book value at date of financial statements (NZD)	Term Credit Spread Difference	Debt issue cost readjustment
* include additional rows if needed						-	-	-

16

17

18

**5c(ii): Attribution of Term Credit Spread Differential**

19

20

Gross term credit spread differential -

21

22

Total book value of interest bearing debt -

23

Leverage 42%

24

Average opening and closing RAB values -

25

Attribution Rate (%) -

26

27

Term credit spread differential allowance -

Company Name **Waipa Networks Limited**  
 For Year Ended **31 March 2019**

**SCHEDULE 5d: REPORT ON COST ALLOCATIONS**

This schedule provides information on the allocation of operational costs. EDBs must provide explanatory comment on their cost allocation in Schedule 14 (Mandatory Explanatory Notes), including on the impact of any reclassifications. This information is part of audited disclosure information (as defined in section 1.4 of the ID determination), and so is subject to the assurance report required by section 2.8.

sch ref

		Value allocated (\$000s)				
		Arm's length deduction	Electricity distribution services	Non-electricity distribution services	Total	OVABAA allocation increase (\$000s)
7	<b>5d(i): Operating Cost Allocations</b>					
8						
9						
10	<b>Service interruptions and emergencies</b>					
11	Directly attributable		1,043			
12	Not directly attributable				-	
13	<b>Total attributable to regulated service</b>		1,043			
14	<b>Vegetation management</b>					
15	Directly attributable		941			
16	Not directly attributable				-	
17	<b>Total attributable to regulated service</b>		941			
18	<b>Routine and corrective maintenance and inspection</b>					
19	Directly attributable		1,097			
20	Not directly attributable				-	
21	<b>Total attributable to regulated service</b>		1,097			
22	<b>Asset replacement and renewal</b>					
23	Directly attributable		680			
24	Not directly attributable				-	
25	<b>Total attributable to regulated service</b>		680			
26	<b>System operations and network support</b>					
27	Directly attributable		1,771			
28	Not directly attributable		120	256	376	
29	<b>Total attributable to regulated service</b>		1,891			
30	<b>Business support</b>					
31	Directly attributable		434			
32	Not directly attributable		1,921	417	2,338	
33	<b>Total attributable to regulated service</b>		2,355			
34						
35	<b>Operating costs directly attributable</b>		5,966			
36	<b>Operating costs not directly attributable</b>	-	2,041	673	2,714	-
37	<b>Operational expenditure</b>		8,007			
38						

Company Name **Waipa Networks Limited**  
 For Year Ended **31 March 2019**

**SCHEDULE 5d: REPORT ON COST ALLOCATIONS**

This schedule provides information on the allocation of operational costs. EDBs must provide explanatory comment on their cost allocation in Schedule 14 (Mandatory Explanatory Notes), including on the impact of any reclassifications. This information is part of audited disclosure information (as defined in section 1.4 of the ID determination), and so is subject to the assurance report required by section 2.8.

sch ref

39 **5d(ii): Other Cost Allocations**

	(\$000)
40 <b>Pass through and recoverable costs</b>	
41 <b>Pass through costs</b>	
42     Directly attributable	177
43     Not directly attributable	-
44 <b>Total attributable to regulated service</b>	177
45 <b>Recoverable costs</b>	
46     Directly attributable	8,785
47     Not directly attributable	-
48 <b>Total attributable to regulated service</b>	8,785

50 **5d(iii): Changes in Cost Allocations\* †**

		(\$000)	
		CY-1	Current Year (CY)
51 <b>Change in cost allocation 1</b>			
52     Cost category			
53     Original allocator or line items			
54     New allocator or line items			
55     Difference		-	-
56     Rationale for change			

		(\$000)	
		CY-1	Current Year (CY)
61 <b>Change in cost allocation 2</b>			
62     Cost category			
63     Original allocator or line items			
64     New allocator or line items			
65     Difference		-	-
66     Rationale for change			

		(\$000)	
		CY-1	Current Year (CY)
70 <b>Change in cost allocation 3</b>			
71     Cost category			
72     Original allocator or line items			
73     New allocator or line items			
74     Difference		-	-
75     Rationale for change			

78 \* a change in cost allocation must be completed for each cost allocator change that has occurred in the disclosure year. A movement in an allocator metric is not a change in allocator or component.  
 79 † include additional rows if needed





Company Name **Waipa Networks Limited**  
 For Year Ended **31 March 2019**

**SCHEDULE 6a: REPORT ON CAPITAL EXPENDITURE FOR THE DISCLOSURE YEAR**

This schedule requires a breakdown of capital expenditure on assets incurred in the disclosure year, including any assets in respect of which capital contributions are received, but excluding assets that are vested assets. Information on expenditure on assets must be provided on an accounting accruals basis and must exclude finance costs. EDBs must provide explanatory comment on their expenditure on assets in Schedule 14 (Explanatory Notes to Templates). This information is part of audited disclosure information (as defined in section 1.4 of the ID determination), and so is subject to the assurance report required by section 2.8.

sch ref

7	<b>6a(i): Expenditure on Assets</b>		<b>(\$000)</b>	<b>(\$000)</b>
8	Consumer connection			3,317
9	System growth			222
10	Asset replacement and renewal			1,239
11	Asset relocations			190
12	Reliability, safety and environment:			
13	Quality of supply	857		
14	Legislative and regulatory	-		
15	Other reliability, safety and environment	227		
16	<b>Total reliability, safety and environment</b>			<b>1,084</b>
17	<b>Expenditure on network assets</b>			<b>6,052</b>
18	Expenditure on non-network assets			313
19				
20	<b>Expenditure on assets</b>			<b>6,365</b>
21	plus Cost of financing			-
22	less Value of capital contributions			2,485
23	plus Value of vested assets			-
24				
25	<b>Capital expenditure</b>			<b>3,880</b>
26	<b>6a(ii): Subcomponents of Expenditure on Assets (where known)</b>			<b>(\$000)</b>
27	Energy efficiency and demand side management, reduction of energy losses			-
28	Overhead to underground conversion			338
29	Research and development			-
30	<b>6a(iii): Consumer Connection</b>			
31	<i>Consumer types defined by EDB*</i>		<b>(\$000)</b>	<b>(\$000)</b>
32	Residential		2,710	
33	General		432	
34	11kV		175	
35			-	
36			-	
37	<i>* include additional rows if needed</i>			
38	<b>Consumer connection expenditure</b>			<b>3,317</b>
39				
40	less Capital contributions funding consumer connection expenditure	1,936		
41	<b>Consumer connection less capital contributions</b>			<b>1,381</b>
42	<b>6a(iv): System Growth and Asset Replacement and Renewal</b>			
43				
44				
45	Subtransmission			
46	Zone substations			
47	Distribution and LV lines	48		33
48	Distribution and LV cables	3		147
49	Distribution substations and transformers	73		727
50	Distribution switchgear	68		332
51	Other network assets	29		-
52	<b>System growth and asset replacement and renewal expenditure</b>	<b>222</b>		<b>1,239</b>
53	less Capital contributions funding system growth and asset replacement and renewal	205		176
54	<b>System growth and asset replacement and renewal less capital contributions</b>	<b>17</b>		<b>1,063</b>
55				
56	<b>6a(v): Asset Relocations</b>			
57	<i>Project or programme*</i>		<b>(\$000)</b>	<b>(\$000)</b>
58			-	
59			-	
60			-	
61			-	
62			-	
63	<i>* include additional rows if needed</i>			
64	All other projects or programmes - asset relocations	190		
65	<b>Asset relocations expenditure</b>			<b>190</b>
66	less Capital contributions funding asset relocations	148		
67	<b>Asset relocations less capital contributions</b>			<b>42</b>

Company Name **Waipa Networks Limited**  
 For Year Ended **31 March 2019**

**SCHEDULE 6a: REPORT ON CAPITAL EXPENDITURE FOR THE DISCLOSURE YEAR**

This schedule requires a breakdown of capital expenditure on assets incurred in the disclosure year, including any assets in respect of which capital contributions are received, but excluding assets that are vested assets. Information on expenditure on assets must be provided on an accounting accruals basis and must exclude finance costs. EDBs must provide explanatory comment on their expenditure on assets in Schedule 14 (Explanatory Notes to Templates). This information is part of audited disclosure information (as defined in section 1.4 of the ID determination), and so is subject to the assurance report required by section 2.8.

sch ref

68				
69	<b>6a(vi): Quality of Supply</b>			
70	<i>Project or programme*</i>		(\$000)	(\$000)
71	Install 11kV Dropout fuses spurs & services		13	
72	Disconnectors		-	
73	Install remote control switches		49	
74	Install TMU-HTI 110kV line		121	
75	St Kilda Feeder reconfiguration		641	
76	<i>* include additional rows if needed</i>			
77	All other projects programmes - quality of supply		33	
78	<b>Quality of supply expenditure</b>			857
79	less Capital contributions funding quality of supply		-	
80	<b>Quality of supply less capital contributions</b>			857
81	<b>6a(vii): Legislative and Regulatory</b>			
82	<i>Project or programme*</i>		(\$000)	(\$000)
83			-	
84			-	
85			-	
86			-	
87			-	
88	<i>* include additional rows if needed</i>			
89	All other projects or programmes - legislative and regulatory		-	
90	<b>Legislative and regulatory expenditure</b>			-
91	less Capital contributions funding legislative and regulatory		-	
92	<b>Legislative and regulatory less capital contributions</b>			-
93	<b>6a(viii): Other Reliability, Safety and Environment</b>			
94	<i>Project or programme*</i>		(\$000)	(\$000)
95	Replace two pole sub structures		39	
96			-	
97			-	
98			-	
99			-	
100	<i>* include additional rows if needed</i>			
101	All other projects or programmes - other reliability, safety and environment		188	
102	<b>Other reliability, safety and environment expenditure</b>			227
103	less Capital contributions funding other reliability, safety and environment		20	
104	<b>Other reliability, safety and environment less capital contributions</b>			208
105				
106	<b>6a(ix): Non-Network Assets</b>			
107	<b>Routine expenditure</b>			
108	<i>Project or programme*</i>		(\$000)	(\$000)
109			-	
110			-	
111			-	
112			-	
113			-	
114	<i>* include additional rows if needed</i>			
115	All other projects or programmes - routine expenditure		313	
116	<b>Routine expenditure</b>			313
117	<b>Atypical expenditure</b>			
118	<i>Project or programme*</i>		(\$000)	(\$000)
119			-	
120			-	
121			-	
122			-	
123			-	
124	<i>* include additional rows if needed</i>			
125	All other projects or programmes - atypical expenditure		-	
126	<b>Atypical expenditure</b>			-
127				
128	<b>Expenditure on non-network assets</b>			313

Company Name **Waipa Networks Limited**  
 For Year Ended **31 March 2019**

**SCHEDULE 6b: REPORT ON OPERATIONAL EXPENDITURE FOR THE DISCLOSURE YEAR**

This schedule requires a breakdown of operational expenditure incurred in the disclosure year.

EDBs must provide explanatory comment on their operational expenditure in Schedule 14 (Explanatory notes to templates). This includes explanatory comment on any atypical operational expenditure and assets replaced or renewed as part of asset replacement and renewal operational expenditure, and additional information on insurance.

This information is part of audited disclosure information (as defined in section 1.4 of the ID determination), and so is subject to the assurance report required by section 2.8.

sch ref

		(\$000)	(\$000)
7	<b>6b(i): Operational Expenditure</b>		
8	Service interruptions and emergencies	1,043	
9	Vegetation management	941	
10	Routine and corrective maintenance and inspection	1,097	
11	Asset replacement and renewal	680	
12	<b>Network opex</b>		3,761
13	System operations and network support	1,891	
14	Business support	2,355	
15	<b>Non-network opex</b>		4,246
16			
17	<b>Operational expenditure</b>		8,007
18	<b>6b(ii): Subcomponents of Operational Expenditure (where known)</b>		
19	Energy efficiency and demand side management, reduction of energy losses		-
20	Direct billing*		N/A
21	Research and development		N/A
22	Insurance		
23	* Direct billing expenditure by suppliers that directly bill the majority of their consumers		

Company Name	<b>Waipa Networks Limited</b>
For Year Ended	<b>31 March 2019</b>

## SCHEDULE 7: COMPARISON OF FORECASTS TO ACTUAL EXPENDITURE

This schedule compares actual revenue and expenditure to the previous forecasts that were made for the disclosure year. Accordingly, this schedule requires the forecast revenue and expenditure information from previous disclosures to be inserted.

EDBs must provide explanatory comment on the variance between actual and target revenue and forecast expenditure in Schedule 14 (Mandatory Explanatory Notes). This information is part of the audited disclosure information (as defined in section 1.4 of the ID determination), and so is subject to the assurance report required by section 2.8. For the purpose of this audit, target revenue and forecast expenditures only need to be verified back to previous disclosures.

sch ref

7(i): Revenue		Target (\$000) <sup>1</sup>	Actual (\$000)	% variance
7				
8	Line charge revenue	29,609	26,744	(10%)
7(ii): Expenditure on Assets		Forecast (\$000) <sup>2</sup>	Actual (\$000)	% variance
9				
10	Consumer connection	3,866	3,317	(14%)
11	System growth	1,642	222	(86%)
12	Asset replacement and renewal	597	1,239	108%
13	Asset relocations	97	190	96%
14	Reliability, safety and environment:			
15	Quality of supply	1,506	857	(43%)
16	Legislative and regulatory	–	–	–
17	Other reliability, safety and environment	519	227	(56%)
18	<b>Total reliability, safety and environment</b>	<b>2,025</b>	<b>1,084</b>	<b>(46%)</b>
19	<b>Expenditure on network assets</b>	<b>8,227</b>	<b>6,052</b>	<b>(26%)</b>
20	Expenditure on non-network assets	105	313	198%
21	Expenditure on assets	8,332	6,365	(24%)
7(iii): Operational Expenditure				
22				
23	Service interruptions and emergencies	690	1,043	51%
24	Vegetation management	1,003	941	(6%)
25	Routine and corrective maintenance and inspection	1,082	1,097	1%
26	Asset replacement and renewal	534	680	27%
27	<b>Network opex</b>	<b>3,309</b>	<b>3,761</b>	<b>14%</b>
28	System operations and network support	1,367	1,891	38%
29	Business support	2,624	2,355	(10%)
30	<b>Non-network opex</b>	<b>3,991</b>	<b>4,246</b>	<b>6%</b>
31	<b>Operational expenditure</b>	<b>7,300</b>	<b>8,007</b>	<b>10%</b>
7(iv): Subcomponents of Expenditure on Assets (where known)				
32				
33	Energy efficiency and demand side management, reduction of energy losses		–	–
34	Overhead to underground conversion		338	–
35	Research and development		–	–
36				
7(v): Subcomponents of Operational Expenditure (where known)				
37				
38	Energy efficiency and demand side management, reduction of energy losses		–	–
39	Direct billing		N/A	–
40	Research and development		N/A	–
41	Insurance		–	–
42				

1 From the nominal dollar target revenue for the disclosure year disclosed under clause 2.4.3(3) of this determination

2 From the CY+1 nominal dollar expenditure forecasts disclosed in accordance with clause 2.6.6 for the forecast period starting at the beginning of the disclosure year (the second to last disclosure of Schedules 11a and 11b)



Company Name	Waipa Networks Limited
For Year Ended	31 March 2019
Network / Sub-network Name	

**SCHEDULE 9a: ASSET REGISTER**

This schedule requires a summary of the quantity of assets that make up the network, by asset category and asset class. All units relating to cable and line assets, that are expressed in km, refer to circuit lengths.

sch ref

sch ref	Voltage	Asset category	Asset class	Units	Items at start of	Items at end of	Net change	Data accuracy
					year (quantity)	year (quantity)		(1-4)
8	All	Overhead Line	Concrete poles / steel structure	No.	20,608	20,658	50	4
9	All	Overhead Line	Wood poles	No.	1,606	1,579	(27)	4
10	All	Overhead Line	Other pole types	No.	2	3	1	4
11	HV	Subtransmission Line	Subtransmission OH up to 66kV conductor	km	-	-	-	N/A
12	HV	Subtransmission Line	Subtransmission OH 110kV+ conductor	km	36	36	-	4
13	HV	Subtransmission Cable	Subtransmission UG up to 66kV (XLPE)	km	-	-	-	N/A
14	HV	Subtransmission Cable	Subtransmission UG up to 66kV (Oil pressurised)	km	-	-	-	N/A
15	HV	Subtransmission Cable	Subtransmission UG up to 66kV (Gas pressurised)	km	-	-	-	N/A
16	HV	Subtransmission Cable	Subtransmission UG up to 66kV (PILC)	km	-	-	-	N/A
17	HV	Subtransmission Cable	Subtransmission UG 110kV+ (XLPE)	km	-	-	-	N/A
18	HV	Subtransmission Cable	Subtransmission UG 110kV+ (Oil pressurised)	km	-	-	-	N/A
19	HV	Subtransmission Cable	Subtransmission UG 110kV+ (Gas Pressurised)	km	-	-	-	N/A
20	HV	Subtransmission Cable	Subtransmission UG 110kV+ (PILC)	km	-	-	-	N/A
21	HV	Subtransmission Cable	Subtransmission submarine cable	km	-	-	-	N/A
22	HV	Zone substation Buildings	Zone substations up to 66kV	No.	-	-	-	N/A
23	HV	Zone substation Buildings	Zone substations 110kV+	No.	-	-	-	N/A
24	HV	Zone substation switchgear	50/66/110kV CB (Indoor)	No.	-	-	-	N/A
25	HV	Zone substation switchgear	50/66/110kV CB (Outdoor)	No.	-	-	-	N/A
26	HV	Zone substation switchgear	33kV Switch (Ground Mounted)	No.	-	-	-	N/A
27	HV	Zone substation switchgear	33kV Switch (Pole Mounted)	No.	-	-	-	N/A
28	HV	Zone substation switchgear	33kV RMU	No.	-	-	-	N/A
29	HV	Zone substation switchgear	22/33kV CB (Indoor)	No.	-	-	-	N/A
30	HV	Zone substation switchgear	22/33kV CB (Outdoor)	No.	-	-	-	N/A
31	HV	Zone substation switchgear	3.3/6.6/11/22kV CB (ground mounted)	No.	-	-	-	N/A
32	HV	Zone substation switchgear	3.3/6.6/11/22kV CB (pole mounted)	No.	-	-	-	N/A
33	HV	Zone Substation Transformer	Zone Substation Transformers	No.	-	-	-	N/A
34	HV	Distribution Line	Distribution OH Open Wire Conductor	km	1,227	1,229	1	4
35	HV	Distribution Line	Distribution OH Aerial Cable Conductor	km	-	-	-	N/A
36	HV	Distribution Line	SWER conductor	km	-	-	-	N/A
37	HV	Distribution Cable	Distribution UG XLPE or PVC	km	137	141	4	4
38	HV	Distribution Cable	Distribution UG PILC	km	1	1	-	4
39	HV	Distribution Cable	Distribution Submarine Cable	km	-	-	-	N/A
40	HV	Distribution switchgear	3.3/6.6/11/22kV CB (pole mounted) - reclosers and sectionalisers	No.	115	115	-	4
41	HV	Distribution switchgear	3.3/6.6/11/22kV CB (Indoor)	No.	-	-	-	N/A
42	HV	Distribution switchgear	3.3/6.6/11/22kV Switches and fuses (pole mounted)	No.	5,086	5,152	66	4
43	HV	Distribution switchgear	3.3/6.6/11/22kV Switch (ground mounted) - except RMU	No.	-	-	-	N/A
44	HV	Distribution switchgear	3.3/6.6/11/22kV RMU	No.	99	110	11	4
45	HV	Distribution Transformer	Pole Mounted Transformer	No.	2,724	2,727	3	4
46	HV	Distribution Transformer	Ground Mounted Transformer	No.	764	800	36	4
47	HV	Distribution Transformer	Voltage regulators	No.	50	54	4	4
48	HV	Distribution Substations	Ground Mounted Substation Housing	No.	-	-	-	N/A
49	LV	LV Line	LV OH Conductor	km	507	507	1	4
50	LV	LV Cable	LV UG Cable	km	304	316	13	4
51	LV	LV Street lighting	LV OH/UG Streetlight circuit	km	146	149	3	4
52	LV	Connections	OH/UG consumer service connections	No.	26,372	26,441	69	4
53	All	Protection	Protection relays (electromechanical, solid state and numeric)	No.	-	-	-	N/A
54	All	SCADA and communications	SCADA and communications equipment operating as a single system	Lot	1	1	-	4
55	All	Capacitor Banks	Capacitors including controls	No.	-	-	-	N/A
56	All	Load Control	Centralised plant	Lot	3	3	-	4
57	All	Load Control	Relays	No.	18,577	18,728	151	3
58	All	Civils	Cable Tunnels	km	-	-	-	N/A





Company Name **Waipa Networks Limited**

For Year Ended **31 March 2019**

Network / Sub-network Name

**SCHEDULE 9c: REPORT ON OVERHEAD LINES AND UNDERGROUND CABLES**

This schedule requires a summary of the key characteristics of the overhead line and underground cable network. All units relating to cable and line assets, that are expressed in km, refer to circuit lengths.

sch ref

9			
10	<b>Circuit length by operating voltage (at year end)</b>	<b>Overhead (km)</b>	<b>Underground (km)</b>
11	> 66kV	36	—
12	50kV & 66kV	—	—
13	33kV	—	—
14	SWER (all SWER voltages)	—	—
15	22kV (other than SWER)	—	—
16	6.6kV to 11kV (inclusive—other than SWER)	1,229	142
17	Low voltage (< 1kV)	507	316
18	<b>Total circuit length (for supply)</b>	<b>1,772</b>	<b>459</b>
19			
20	Dedicated street lighting circuit length (km)	67	81
21	Circuit in sensitive areas (conservation areas, iwi territory etc) (km)		
22			
23	<b>Overhead circuit length by terrain (at year end)</b>	<b>Circuit length (km)</b>	<b>(% of total overhead length)</b>
24	Urban	215	12%
25	Rural	1,478	83%
26	Remote only	—	—
27	Rugged only	80	5%
28	Remote and rugged	—	—
29	Unallocated overhead lines	—	—
30	<b>Total overhead length</b>	<b>1,772</b>	<b>100%</b>
31			
32		<b>Circuit length (km)</b>	<b>(% of total circuit length)</b>
33	Length of circuit within 10km of coastline or geothermal areas (where known)	161	7%
34		<b>Circuit length (km)</b>	<b>(% of total overhead length)</b>
35	Overhead circuit requiring vegetation management	1,265	71%

Company Name **Waipa Networks Limited**  
 For Year Ended **31 March 2019**

**SCHEDULE 9d: REPORT ON EMBEDDED NETWORKS**

This schedule requires information concerning embedded networks owned by an EDB that are embedded in another EDB's network or in another embedded network.

*sch ref*

<i>sch ref</i>	Location *	Number of ICPs served	Line charge revenue (\$000)
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			
23			
24			
25			

\* Extend embedded distribution networks table as necessary to disclose each embedded network owned by the EDB which is embedded in another EDB's network or in another embedded network

Company Name **Waipa Networks Limited**

For Year Ended **31 March 2019**

Network / Sub-network Name

**SCHEDULE 9e: REPORT ON NETWORK DEMAND**

This schedule requires a summary of the key measures of network utilisation for the disclosure year (number of new connections including distributed generation, peak demand and electricity volumes conveyed).

sch ref

**9e(i): Consumer Connections**

Number of ICPs connected in year by consumer type

Consumer types defined by EDB\*

Residential
General
Unmetered
11KV

\* include additional rows if needed

Number of connections (ICPs)

500
79
-
1

Connections total

580
-----

**Distributed generation**

Number of connections made in year

103
-----

connections

Capacity of distributed generation installed in year

0.48
------

MVA

**9e(ii): System Demand**

**Maximum coincident system demand**

GXP demand

74
----

plus Distributed generation output at HV and above

-
---

Maximum coincident system demand

74
----

less Net transfers to (from) other EDBs at HV and above

0
---

Demand on system for supply to consumers' connection points

74
----

Demand at time of maximum coincident demand (MW)

**Electricity volumes carried**

Electricity supplied from GXPs

413
-----

less Electricity exports to GXPs

-
---

plus Electricity supplied from distributed generation

2
---

less Net electricity supplied to (from) other EDBs

1
---

Electricity entering system for supply to consumers' connection points

413
-----

less Total energy delivered to ICPs

391
-----

Electricity losses (loss ratio)

23
----

5.5%

Load factor

0.64
------

**9e(iii): Transformer Capacity**

Distribution transformer capacity (EDB owned)

263
-----

Distribution transformer capacity (Non-EDB owned, estimated)

49
----

Total distribution transformer capacity

312
-----

Zone substation transformer capacity

N/A
-----

(MVA)

Company Name	Waipa Networks Limited
For Year Ended	31 March 2019
Network / Sub-network Name	

**SCHEDULE 10: REPORT ON NETWORK RELIABILITY**

This schedule requires a summary of the key measures of network reliability (interruptions, SAIDI, SAIFI and fault rate) for the disclosure year. EDBs must provide explanatory comment on their network reliability for the disclosure year in Schedule 14 (Explanatory notes to templates). The SAIFI and SAIDI information is part of audited disclosure information (as defined in section 1.4 of the ID determination), and so is subject to the assurance report required by section 2.8.

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8 **10(i): Interruptions**

9 **Interruptions by class**

	Number of interruptions
10 Class A (planned interruptions by Transpower)	1
11 Class B (planned interruptions on the network)	98
12 Class C (unplanned interruptions on the network)	148
13 Class D (unplanned interruptions by Transpower)	-
14 Class E (unplanned interruptions of EDB owned generation)	-
15 Class F (unplanned interruptions of generation owned by others)	-
16 Class G (unplanned interruptions caused by another disclosing entity)	-
17 Class H (planned interruptions caused by another disclosing entity)	-
18 Class I (interruptions caused by parties not included above)	-
19 <b>Total</b>	247

20 **Interruption restoration**

	≤3Hrs	>3hrs
22 Class C interruptions restored within	86	62

24 **SAIFI and SAIDI by class**

	SAIFI	SAIDI
25 Class A (planned interruptions by Transpower)	0.01	1.5
26 Class B (planned interruptions on the network)	0.21	53.2
27 Class C (unplanned interruptions on the network)	1.17	115.0
28 Class D (unplanned interruptions by Transpower)	-	-
29 Class E (unplanned interruptions of EDB owned generation)	-	-
30 Class F (unplanned interruptions of generation owned by others)	-	-
31 Class G (unplanned interruptions caused by another disclosing entity)	-	-
32 Class H (planned interruptions caused by another disclosing entity)	-	-
33 Class I (interruptions caused by parties not included above)	-	-
34 <b>Total</b>	1.38	169.7

36 **Normalised SAIFI and SAIDI**

	Normalised SAIFI	Normalised SAIDI
37 Classes B & C (interruptions on the network)	1.37	168.19

Company Name **Waipa Networks Limited**For Year Ended **31 March 2019**

Network / Sub-network Name

**SCHEDULE 10: REPORT ON NETWORK RELIABILITY**

This schedule requires a summary of the key measures of network reliability (interruptions, SAIDI, SAIFI and fault rate) for the disclosure year. EDBs must provide explanatory comment on their network reliability for the disclosure year in Schedule 14 (Explanatory notes to templates). The SAIFI and SAIDI information is part of audited disclosure information (as defined in section 1.4 of the ID determination), and so is subject to the assurance report required by section 2.8.

**10(ii): Class C Interruptions and Duration by Cause**

Cause	SAIFI	SAIDI
Lightning	0.06	2.7
Vegetation	0.15	14.7
Adverse weather	0.12	20.9
Adverse environment	0.01	0.4
Third party interference	0.33	43.3
Wildlife	0.00	0.2
Human error	0.14	6.8
Defective equipment	0.22	21.6
Cause unknown	0.13	4.5

**10(iii): Class B Interruptions and Duration by Main Equipment Involved**

Main equipment involved	SAIFI	SAIDI
Subtransmission lines	–	–
Subtransmission cables	–	–
Subtransmission other	–	–
Distribution lines (excluding LV)	0.18	46.3
Distribution cables (excluding LV)	0.00	0.7
Distribution other (excluding LV)	0.02	6.2

**10(iv): Class C Interruptions and Duration by Main Equipment Involved**

Main equipment involved	SAIFI	SAIDI
Subtransmission lines	–	–
Subtransmission cables	–	–
Subtransmission other	–	–
Distribution lines (excluding LV)	1.16	113.6
Distribution cables (excluding LV)	0.01	1.4
Distribution other (excluding LV)	–	–

**10(v): Fault Rate**

Main equipment involved	Number of Faults	Circuit length (km)	Fault rate (faults per 100km)
Subtransmission lines	–	–	–
Subtransmission cables	–	–	–
Subtransmission other	–	–	–
Distribution lines (excluding LV)	146	1,229	11.88
Distribution cables (excluding LV)	2	142	1.41
Distribution other (excluding LV)	–	–	–
<b>Total</b>	<b>148</b>		