Electricity Ashburton Limited

Information Disclosures

for year ending 31 March 2019

Electricity distribution information disclosure determination 2012



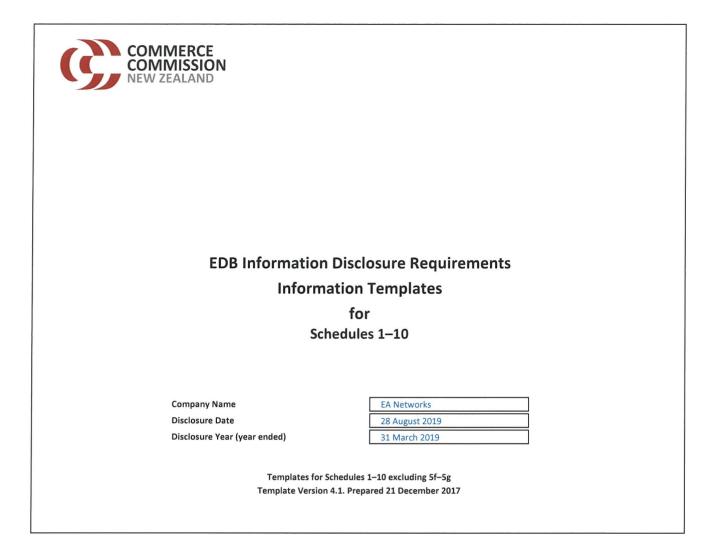


Table of Contents

	Schedule name
1	ANALYTICAL RATIOS
2	REPORT ON RETURN ON INVESTMENT
3	REPORT ON REGULATORY PROFIT
4	REPORT ON VALUE OF THE REGULATORY ASSET BASE (ROLLED FORWARD)
5a	REPORT ON REGULATORY TAX ALLOWANCE
5b	REPORT ON RELATED PARTY TRANSACTIONS
5c	REPORT ON TERM CREDIT SPREAD DIFFERENTIAL ALLOWANCE
5d	REPORT ON COST ALLOCATIONS
5e	REPORT ON ASSET ALLOCATIONS
6a	REPORT ON CAPITAL EXPENDITURE FOR THE DISCLOSURE YEAR
6b	REPORT ON OPERATIONAL EXPENDITURE FOR THE DISCLOSURE YEAR
7	COMPARISON OF FORECASTS TO ACTUAL EXPENDITURE
8	REPORT ON BILLED QUANTITIES AND LINE CHARGE REVENUES
9a	ASSET REGISTER
9b	ASSET AGE PROFILE
9c	REPORT ON OVERHEAD LINES AND UNDERGROUND CABLES
9d	REPORT ON EMBEDDED NETWORKS
9e	REPORT ON NETWORK DEMAND
10	REPORT ON NETWORK RELIABILITY



Disclosure Template Instructions

These templates have been prepared for use by EDBs when making disclosures under clauses 2.3.1, 2.4.21, 2.4.22, 2.5.1, and 2.5.2 of the Electricity Distribution Information Disclosure Determination 2012.

Company Name and Dates

To prepare the templates for disclosure, the supplier's company name should be entered in cell C8, the date of the last day of the current (disclosure) year should be entered in cell C12, and the date on which the information is disclosed should be entered in cell C10 of the CoverSheet worksheet.

The cell C12 entry (current year) is used to calculate disclosure years in the column headings that show above some of the tables and in labels adjacent to some entry cells. It is also used to calculate the 'For year ended' date in the template title blocks (the title blocks are the light green shaded areas at the top of each template). The cell C8 entry (company name) is used in the template title blocks.

Dates should be entered in day/month/year order (Example -"1 April 2013").

Data Entry Cells and Calculated Cells

Data entered into this workbook may be entered only into the data entry cells. Data entry cells are the bordered, unshaded areas (white cells) in each template. Under no circumstances should data be entered into the workbook outside a data entry cell.

In some cases, where the information for disclosure is able to be ascertained from disclosures elsewhere in the workbook, such information is disclosed in a calculated cell.

Validation Settings on Data Entry Cells

To maintain a consistency of format and to help guard against errors in data entry, some data entry cells test keyboard entries for validity and accept only a limited range of values. For example, entries may be limited to a list of category names, to values between 0% and 100%, or either a numeric entry or the text entry "N/A". Where this occurs, a validation message will appear when data is being entered. These checks are applied to keyboard entries only and not, for example, to entries made using Excel's copy and paste facility.

Conditional Formatting Settings on Data Entry Cells

Schedule 2 cells G79 and I79:L79 will change colour if the total cashflows do not equal the corresponding values in table 2(ii).

Schedule 4 cells P99:P105 and P107 will change colour if the RAB values do not equal the corresponding values in table 4(ii).

Schedule 9b columns AA to AE (2013 to 2017) contain conditional formatting. The data entry cells for future years are hidden (are changed from white to yellow).

Schedule 9b cells AG10 to AG60 will change colour if the total assets at year end for each asset class does not equal the corresponding values in column I in Schedule 9a.

Schedule 9c cell G30 will change colour if G30 (overhead circuit length by terrain) does not equal G18 (overhead circuit length by operating voltage).

Inserting Additional Rows and Columns

The templates for schedules 4, 5b, 5c, 5d, 5e, 6a, 8, 9d, and 9e may require additional rows to be inserted in tables marked 'include additional rows if needed' or similar. Column A schedule references should not be entered in additional rows, and should be deleted from additional rows that are created by copying and pasting rows that have schedule references.

Additional rows in schedules 5c, 6a, and 9e must not be inserted directly above the first row or below the last row of a table. This is to ensure that entries made in the new row are included in the totals.

Schedules 5d and 5e may require new cost or asset category rows to be inserted in allocation change tables 5d(iii) and 5e(ii). Accordingly, cell protection has been removed from rows 77 and 78 of the respective templates to allow blocks of rows to be copied. The four steps to add new cost category rows to table 5d(iii) are: Select Excel rows 69:77, copy, select Excel row 78, insert copied cells. Similarly, for table 5e(ii): Select Excel rows 70:78, copy, select Excel row 79, then insert copied cells.

The template for schedule 8 may require additional columns to be inserted between column P and U. To avoid interfering with the title block entries, these should be inserted to the left of column S. If inserting additional columns, the formulas for standard consumers total, non-standard consumers totals and total for all consumers will need to be copied into the cells of the added columns. The formulas can be found in the equivalent cells of the existing columns.



Disclosures by Sub-Network

If the supplier has sub-networks, schedules 8, 9a, 9b, 9c, 9e, and 10 must be completed for the network and for each sub-network. A copy of the schedule worksheet(s) must be made for each sub-network and named accordingly.

Schedule References

The references labelled 'sch ref' in the leftmost column of each template are consistent with the row references in the Electricity Distribution ID Determination 2012 (as issued on 21 December 2017). They provide a common reference between the rows in the determination and the template.

Description of Calculation References

Calculation cell formulas contain links to other cells within the same template or elsewhere in the workbook. Key cell references are described in a column to the right of each template. These descriptions are provided to assist data entry. Cell references refer to the row of the template and not the schedule reference.

Worksheet Completion Sequence

Calculation cells may show an incorrect value until precedent cell entries have been completed. Data entry may be assisted by completing the schedules in the following order:

1. Coversheet 2. Schedules 5a--5e 3. Schedules 6a--6b 4. Schedule 8 5. Schedule 3 6. Schedule 4 7. Schedule 2 8. Schedule 7 9. Schedules 9a-9e



			Company Name		EA Network	
			For Year Ended		31 March 201	19
5	CHEDULE 1: ANALYTICAL RATIOS					
n n h	nis schedule calculates expenditure, revenue and service ratios from the inform ust be interpreted with care. The Commerce Commission will publish a summa formation disclosed in accordance with this and other schedules, and informat nis information is part of audited disclosure information (as defined in section : ef	ary and analysis of info ion disclosed under th	ormation disclosed in the other requirements of the other requirements	n accordance with t nts of the determina	he ID determination tion.	n. This will include
	1(i): Expenditure metrics					
		Expenditure per GWh energy delivered to ICPs (\$/GWh)	Expenditure per average no. of ICPs (\$/ICP)	MW maximum coincident system demand (\$/MW)	Expenditure per km circuit length (\$/km)	of capacity from EDB owned distribution transformers (\$/MVA)
	Operational expenditure	23,728	613	75,406	3,864	20,478
	Network	7,509	194	23,863	1,223	6,480
	Non-network	16,219	419	51,543	2,641	13,997
	Expenditure on assets	38,951	1,006	123,787	6,343	33,616
	Network	37,049	957	117,741	6,033	31,974
	Non-network	1,902	49	6,046	310	1,642
	1(ii): Revenue metrics					
		Revenue per GWh	Revenue per			
		energy delivered	average no. of			
		to ICPs	ICPs			
		(\$/GWh)	(\$/ICP)			
	Total consumer line charge revenue	87,216	2,252			
	Standard consumer line charge revenue Non-standard consumer line charge revenue	87,216	2,252			
	Non-standard consumer line charge revenue					
	1(iii): Service intensity measures					
					1	
	Demand density Volume density	51 163				ength (for supply) (kW, or supply) (MWh/km)
	Connection point density	6		of ICPs per km of ci		
	Energy intensity	25,826	-	vered to ICPs per av		
	1(iv): Composition of regulatory income		(\$000)	% of revenue		
	Operational expenditure	[11,913	27.39%		
	Pass-through and recoverable costs excluding financial incen	tives and wash-ups	8,061	18.53%		
	Total depreciation		9,530	21.91%		
	Total revaluations		3,831	8.81%		
	Regulatory tax allowance		2,881	6.62%		
	Regulatory profit/(loss) including financial incentives and was	sh-ups	14,946	34.36%		
	Total regulatory income		43,499			
	1(v): Reliability					
	Internuction rate	г	15.76	Interruption	100 circuit km	
	Interruption rate		15.76	Interruptions per	100 circuit km	



	Company	State State State		EA Networks	
	For Year	Ended	3	1 March 2019	
SC	CHEDULE 2: REPORT ON RETURN ON INVESTMENT				
alc	s schedule requires information on the Return on Investment (ROI) for the EDB relative to the Commerce Comm ulate their ROI based on a monthly basis if required by clause 2.3.3 of the ID Determination or if they elect to. I		CONTRACTOR COLUMN IN		
	st be provided in 2(iii). 3s must provide explanatory comment on their ROI in Schedule 14 (Mandatory Explanatory Notes).				
	s information is part of audited disclosure information (as defined in section 1.4 of the ID determination), and so	is subject to th	e assurance repo	rt required by secti	ion 2.8.
ref				,	
7	2(i): Return on Investment		CY-2	CY-1	Current Year CY
8			31 Mar 17	31 Mar 18	31 Mar 19
7	ROI – comparable to a post tax WACC		%	%	%
	Reflecting all revenue earned	_	5.86%	5.58%	5.53%
1	Excluding revenue earned from financial incentives		5.86%	5.51%	5.49%
2	Excluding revenue earned from financial incentives and wash-ups		5.91%	5.56%	5.53%
3	Mid point actimate of post toy WACC	-	4 770/	E 0.49/	4.750
5	Mid-point estimate of post tax WACC	-	4.77%	5.04%	4.75%
	25th percentile estimate		4.05%	4.36%	4.07%
7	75th percentile estimate		5.48%	5.72%	5.43%
3					
	ROI – comparable to a vanilla WACC				
	Reflecting all revenue earned		6.41%	6.17%	6.04%
	Excluding revenue earned from financial incentives		6.41%	6.11%	6.00%
	Excluding revenue earned from financial incentives and wash-ups		6.45%	6.15%	6.04%
3	Excluding revenue earned from miancial meentives and wash-ups		0.4578	0.1378	0.047
	WACC rate used to set regulatory price path		7.19%	7.19%	7.19%
5					
	Mid-point estimate of vanilla WACC		5.31%	5.60%	5.26%
,	25th percentile estimate		4.59%	4.92%	4.58%
3	75th percentile estimate		6.03%	6.29%	5.94%
9				and the second of	
	2(ii): Information Supporting the ROI			(\$000)	
	Total opening RAB value		259,359		
	plus Opening deferred tax		(12,615)		
	Opening RIV			246,744	
			_		
	Line charge revenue		L	43,789	
	Expenses cash outflow		19,974		
	add Assets commissioned		16,376		
	less Asset disposals		773		
	add Tax payments		1,353		
	less Other regulated income		(290)		
	Mid-year net cash outflows			37,219	
	Term credit caread differential allowance		-		
	Term credit spread differential allowance				
	Total closing PAP value		200.447		
	Total closing RAB value		268,447		
	less Adjustment resulting from asset allocation less Lost and found assets adjustment		(816)		
	plus Closing deferred tax		(14,143)		
	Closing RIV		(14,143)	255,120	
				233,120	
	ROI – comparable to a vanilla WACC			Г	6.04%
					0.0476
	Leverage (%)			Г	42%
	Cost of debt assumption (%)				42%
	Corporate tax rate (%)				4.33%
					2070
	ROI – comparable to a post tax WACC			Г	5.53%
1					5.557



			1				
				Company Name		EA Networks 31 March 2019	
S	CHEDULE 2: REPORT ON RETURN ON INV	ESTMEN	л	For Year Ended		SI Watch 2015	
	is schedule requires information on the Return on Investment (RO			erce Commission's esti	mates of post tax	WACC and vanilla WA	CC. EDBs must
ca	lculate their ROI based on a monthly basis if required by clause 2.3						
all contracts	ust be provided in 2(iii). DBs must provide explanatory comment on their ROI in Schedule 14	(Mandatory	Explanatory Notes).				
	is information is part of audited disclosure information (as defined			on), and so is subject t	o the assurance r	eport required by sect	ion 2.8.
sch re 61		ROI					
62		Nor					
63							N/A
64 65							
0.5	Line char	ge	Expenses cash	Assets	Asset	Other regulated	Monthly net cash
66			outflow	commissioned	disposals	income	outflows
67 68							-
69		_					_
70							
71							-
72 73							
74							_
75	December						-
76	January						
77	February						
78	March						-
79 80	Total	-		NAMES AND ADDRESS OF TAXABLE		-	-
81	Tax payments						N/A
82							
83	Term credit spread differential allowance						N/A
84 85	Closing RIV						N/A
86							17/4
87							
88	Monthly ROI – comparable to a vanilla WACC						N/A
89 90	Monthly ROI – comparable to a post tax WACC						N/A
91							11/2
92	2(iv): Year-End ROI Rates for Comparison P	urposes					
93							5.070/
94 95	Year-end ROI – comparable to a vanilla WACC						5.87%
96	Year-end ROI – comparable to a post tax WACC						5.36%
97							
98 99	* these year-end ROI values are comparable to the RO	l reported in	pre 2012 disclosures by	y EDBs and do not rep	resent the Comm	ission's current view o	n ROI.
100	2(v): Financial Incentives and Wash-Ups						
101							
102	Net recoverable costs allowed under incremental re	lling incention	ve scheme			-	
103	Purchased assets – avoided transmission charge						
104 105	Energy efficiency and demand incentive allowance Quality incentive adjustment					130	
105	Other financial incentives					130	
107	Financial incentives						130
108							
109	Impact of financial incentives on ROI						0.04%
110 111	Input methodology claw-back						
112	CPP application recoverable costs						
113	Catastrophic event allowance						
114	Capex wash-up adjustment					(155)	
115	Transmission asset wash-up adjustment						
116 117	2013–15 NPV wash-up allowance Reconsideration event allowance						
117	Other wash-ups						
119	Wash-up costs						(155)
120							
121	Impact of wash-up costs on ROI						-0.05%



	Company Name	EA Networks
	For Year Ended	31 March 2019
SCH	HEDULE 3: REPORT ON REGULATORY PROFIT	and the share share the
This so their r This ir	chedule requires information on the calculation of regulatory profit for the EDB for the disclosure year. All EDBs must complete all sections regulatory profit in Schedule 14 (Mandatory Explanatory Notes). Information is part of audited disclosure information (as defined in section 1.4 of the ID determination), and so is subject to the assurance r	
n ref		
	3(i): Regulatory Profit	(\$000)
8	Income	
9	Line charge revenue	43,7
2	plus Gains / (losses) on asset disposals	(7
	plus Other regulated income (other than gains / (losses) on asset disposals)	4
2		12.4
	Total regulatory income	43,4
	Expenses	
	less Operational expenditure	11,9
;		
1	less Pass-through and recoverable costs excluding financial incentives and wash-ups	8,0
	Operating surplus / (deficit)	23,5
	less Total depreciation	9,5
	plus Total revaluations	3,8
		17.0
	Regulatory profit / (loss) before tax	17,8
	less Term credit spread differential allowance	
	less Regulatory tax allowance	2,8
	less Regulatory tax allowance	2,0
	Regulatory profit/(loss) including financial incentives and wash-ups	14,9
	regulatory profity (1055) including financial incentives and wash-ups	14,5
	3(ii): Pass-through and Recoverable Costs excluding Financial Incentives and Wash-Ups	(\$000)
	Pass through costs	
	Rates	182
	Commerce Act levies	131
	Industry levies	99
	CPP specified pass through costs	
	Recoverable costs excluding financial incentives and wash-ups	
	Electricity lines service charge payable to Transpower	5,223
	Transpower new investment contract charges	1,239
	System operator services	-
	Distributed generation allowance	1,187
	Extended reserves allowance	
	Other recoverable costs excluding financial incentives and wash-ups	- 8,0
	Pass-through and recoverable costs excluding financial incentives and wash-ups	8,0



	Company Name	EA Networks
	For Year Ended	31 March 2019
sc	HEDULE 3: REPORT ON REGULATORY PROFIT	
This thei	schedule requires information on the calculation of regulatory profit for the EDB for the disclosure year. All EDBs must complete al regulatory profit in Schedule 14 (Mandatory Explanatory Notes). information is part of audited disclosure information (as defined in section 1.4 of the ID determination), and so is subject to the as:	
ref		
3	3(iii): Incremental Rolling Incentive Scheme	(\$000)
		CY-1 CY
		31 Mar 18 31 Mar 19
	Allowed controllable opex	
2	Actual controllable opex	
3		and the second
1	Incremental change in year	
5		
		Previous years Previous years' incremental incremental change adjuste
		change for inflation
7	CY-5 31 Mar 14	
	CY-4 31 Mar 15	
	CY-3 31 Mar 16	
	CY-2 31 Mar 17	
	CY-1 31 Mar 18	
2	Net incremental rolling incentive scheme	
3		
	Net recoverable costs allowed under incremental rolling incentive scheme	
5	3(iv): Merger and Acquisition Expenditure	
	Sivi, werger and Acquisition Expenditure	(\$000)
5	Merger and acquisition expenditure	(3000)
	Provide commentary on the benefits of merger and acquisition expenditure to the electricity distribution business, inclu	uding required disclosures in accordance with
	section 2.7, in Schedule 14 (Mandatory Explanatory Notes)	anny required discosures in accordance with
	3(v): Other Disclosures	
		(\$000)
	Self-insurance allowance	

			2	Company Name For Year Ended	ш.	EA Networks 31 March 2019	
SC This EDB FDB	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.	ion in Schedule ire information	2. as defined in secti	on 1.4 of the ID dete	:rmination), and so is	s subject to the assur	ance report
ch ref							
Να	4(i): Regulatory Asset Base Value (Rolled Forward)		RAB	RAB	RAB	RAB	RAB
9 6		tor year ended	31 Mar 15 (\$000)	31 Mar 16 (\$000)	31 Mar 17 (\$000)	31 Mar 18 (\$000)	31 Mar 19 (\$000)
10	Total opening RAB value		220,521	226,349	237,258	251,141	259,359
12	less Total depreciation		7,375	7,616	8.152	9.240	9 530
13	nius. Total evaluations						apala
15			184	1,324	5,072	2,756	3,831
16	plus Assets commissioned		13,834	17,848	19,679	14,921	16,376
18	less Asset disposals		815	647	2,717	218	773
19	nlue net and found accore adjustment	L					
21			1	1	1	ſ	1
22	plus Adjustment resulting from asset allocation		1	(0)	(0)	(0)	(816)
23		L					
25	Total closing kAb value		226,349	237,258	251,141	259,359	268,447
26	4(ii): Unallocated Regulatory Asset Base						
27				Unallocated RAB *	d RAB *	RAB	
23	Total opening RAB value			(000\$)	(\$000) 259.359	(000\$)	(\$000) 259.359
30	less] []	
37	Total depreciation				9,530		9,530
33					3.831	L	3 831
34	plus		L]			1000
35	Assets commissioned (other than below)			8,796		8,796	
37				7 580		7 600	
38	A		J		16,376	oppi i	16,376
39	less Accet dicnocals (other than helow)		L				
41	Asset disposals to a treat around Asset disposals to a treat around			//3		//3	
42	Asset disposals to a related party						
43	Asset disposals]		773		773
44				l			
45	plus Lost and found assets adjustment						
47	plus Adjustment resulting from asset allocation					L	(816)
48]	
49	Total closing RAB value				269,263		268,447
1	* 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.	ng made for the	allocation of costs	to services provided	l by the supplier that	t are not electricity d	stribution
05							

pwe

		Company Name		EA Networks	
1		For Year Ended		31 March 2019	
SC This	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 vear. This informs the ROI calculation in Schedule 2.				
EDE	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.	r section 1.4 of the ID dete	rmination), and so	o is subject to the ass	urance report
sch ref					
51					
52	4(iii): Calculation of Revaluation Rate and Revaluation of Assets				
53					
54 55	CPI4 CPI4				1,026
56	Revaluation rate (%)				1,011
57					T.40%
58		Unallocated RAB *	HRAB *	RAR	
59		(\$000)	(\$000)	(\$000)	(¢nnn)
60	Total opening RAB value	259.359		259.359	(anad)
61	less Opening value of fully depreciated, disposed and lost assets	1,128		1.128	
62					
63	Total opening RAB value subject to revaluation	258,231		258,231	
64	Total revaluations		3,831		3.831
65		1			
99	4(iv): Roll Forward of Works Under Construction				
67		Unallocated works under	orks under		
09	Worker media sussets at the state of the sta	construction		Allocated works under construction	ider construction
8			3,850		3,850
50 5	pus capital expenditure	18,504		18,504	
22		16,376		16,376	
72	Works under construction - current disclosure year		5.978		5 978
73		1			outo
74	Highest rate of capitalised finance applied				T
75				,	



40: F: Cardinary Sinter Si	SC This EDB requ	Company Name Company Name EA Networks 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 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 informs the ROI calculation in Schedule 2. required by section 2.8.	GULATORY ASSET BASE (ROLLED FORWARD) /Asset Base (RAB) value to the end of this disclosure year. This informs th schedule 14 (Mandatory Explanatory Notes). This information is part of a	SSET BASE (I ue to the end of thi ry Explanatory Not	ROLLED FOF disclosure year. T ss). This informatic	XWARD) his informs the ROI on is part of audited	calculation in Schec disclosure informat	ule 2. ion (as defined in sect	For Year Ended	ermination), and so	31 March 2019 is subject to the ass	Irance report
Targetation: accounce with CP targetation: Targe	76 77 79 80 81	4(v): Regulatory Depreciation Depreciation - standard Depreciation - no standard life assets Depreciation - modified life assets							Unallocat (\$000) 8,183 1,346	ed RAB * (\$000)	3,18	(000\$) 8
Constrained in the c	82 83 84	Depreciation - alternative depreciation in accordar Total depreciation	ce with CPP							9,530		9,530
Consistential Consiste	85	4(vi): Disclosure of Changes to Depreciation	Profiles						n 000\$)	nless otherwise spe	cified)	
Accord control independing and independent andependent and independent and independent and										Depreciation charge for the	Closing RAB value under 'non- standard'	Closing RAB value under 'standard'
Induction Induction <t< th=""><th>86</th><th>Asset or assets with changes to depreciation*</th><th></th><th></th><th></th><th>Reas</th><th>on for non-standar</th><th>d depreciation (text e</th><th>ntry)</th><th>period (RAB)</th><th>depreciation</th><th>depreciation</th></t<>	86	Asset or assets with changes to depreciation*				Reas	on for non-standar	d depreciation (text e	ntry)	period (RAB)	depreciation	depreciation
Induct additional row fineded Image: row fined Image: row fineded <t< th=""><th>88</th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th></t<>	88											
Inductor and the additional formation Inductor additional formation	89											
Inductor of freedation Image	16											
*Include additional rows fyneded *Include additional rows fynedditional rows fyneddi rows fyneded *Include additi	93											
Include additional forward Include additional forward <th< td=""><td>94</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<>	94											
Auri: Disclosure by Asset Gategory (600 unless officing in the previse specified) Auri: Disclosure by Asset Gategory Connersonics specified) Connersonics specified) Connersonics specified) Connersonics specified) Total opening RAB vulue Subtransmission Distribution and Distribution and Distribution and Distribution and Stations and Intervork integers and substations Distribution and Stations and Stations and Stations and Distribution and Stations	95	* include additional rows if needed										
Interaction Distribution Distribution </td <td>96 97</td> <td>4(vii): Disclosure by Asset Category</td> <td></td> <td></td> <td></td> <td></td> <td>(\$000 unless ot</td> <td>herwise specified)</td> <td></td> <td></td> <td></td> <td></td>	96 97	4(vii): Disclosure by Asset Category					(\$000 unless ot	herwise specified)				
Total opening RAB value rease curres	00					Distribution and		Distribution substations and	Distribution	Other network	Non-network	
less Total depreciation desc desc <thdesc< th=""> <thdesc< th=""> desc<td>66</td><td>Total opening RAB value</td><td>12,933</td><td>847</td><td>23,431</td><td>48.050</td><td></td><td></td><td>34.526</td><td></td><td>14 747</td><td>10tal 259 359</td></thdesc<></thdesc<>	66	Total opening RAB value	12,933	847	23,431	48.050			34.526		14 747	10tal 259 359
plus Total revaluations 191 13 347 705 989 854 512 6 215 plus Asset commissioned 28 2,185 5,976 3,171 1,101 1,114 1,352 plus Asset commissioned 2 2 2 2 3,171 1,701 1,114 1,352 plus totat drond assets adjustment 2	100		456	29	951	1,795			1,472	24	1,373	9,530
Asset continuation Continu	101		191	13	347	705			512	9	215	3,831
plus lost and found assets adjustment lost and found assets adjustment lost and found assets adjustment lost adjustment los	103		20		040	007			T0/'T	1,114	1,352	16,376
plus plus static action asset allocation plus rotal dosing RaB value - - - - - - - 0 (0) (816) - - - - - 0 <	104				1	1	1 1	aat I	1 1	(I	- 45	- 1/3
PUL: Assertiategory transfers 12,623 831 23,675 48,655 72,051 59,757 35,267 1,508 1,4081 Total doing RAB value 13,06 33,16 23,675 48,655 72,051 59,757 35,267 1,508 14,081 Asset Life 33.0 33.6 32.4 29.2 44.2 36.5 11.1 19.1 Weighted average expected total asset life 49.6 55.0 43.3 50.9 55.0 38.1 15.6 22.9	105		1	1	1	0	1	Т	U.	(0)	(816)	(816)
Asset Life 33.0 33.6 32.4 29.2 44.2 36.5 26.9 11.1 19.1 Weighted average remaining asset life 49.6 55.0 43.3 50.9 55.0 45.0 36.1 15.6 22.9	107	E.	12,623	831	23,675	48,655	72,051	59,757	35,267	1,508	14,081	268,447
Weighted average remaining asset life 33.0 33.6 32.4 29.2 44.2 36.9 11.1 19.1 Weighted average expected total asset life 49.6 55.0 43.3 50.9 55.0 38.1 15.6 21.1 19.1	108	Asset Life										
Weighted average expected total asset life 49.6 55.0 43.3 50.9 55.0 45.0 15.6 22.9	110	Weighted average remaining asset life	33.0	33.6	32.4	29.2			26.9	11.1	19.1	(years)
	111	Weighted average expected total asset life	49.6	55.0	43.3	50.9			38.1	15.6	22.9	(years)



54.RAB Value (Rolled Forward)

	Company Name	EA Networks
	For Year Ended	31 March 2019
HEDULE	5a: REPORT ON REGULATORY TAX ALLOWANCE	
fit). EDBs mu	uires information on the calculation of the regulatory tax allowance. This information is used to calculate regulato st provide explanatory commentary on the information disclosed in this schedule, in Schedule 14 (Mandatory Expl is part of audited disclosure information (as defined in section 1.4 of the ID determination), and so is subject to the	anatory Notes).
5a(i): R	egulatory Tax Allowance	(\$000)
0	Regulatory profit / (loss) before tax	17,8
plus	Income not included in regulatory profit / (loss) before tax but taxable	188 *
	Expenditure or loss in regulatory profit / (loss) before tax but not deductible	714 *
	Amortisation of initial differences in asset values	2,143
	Amortisation of revaluations	798
		3,8
less	Total revaluations	3,831
	Income included in regulatory profit / (loss) before tax but not taxable	7 *
	Discretionary discounts and customer rebates	2,883
	Expenditure or loss deductible but not in regulatory profit / (loss) before tax	265 *
	Notional deductible interest	4,393
		11,3
	Regulatory taxable income	10,2
less	Utilised tax losses	
	Regulatory net taxable income	10,2
		2001
	Corporate tax rate (%)	28%
	Regulatory tax allowance	2,8
* 14/	ince to be previded in Calendula 14	
* wor	rings 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 Sche	dule 5a(i).
52(111).	Amortisation of Initial Difference in Asset Values	(\$000)
Ja(iii).		(\$000)
	Opening unamortised initial differences in asset values	59,993
less	Amortisation of initial differences in asset values	2,143
plus	Adjustment for unamortised initial differences in assets acquired	2,143
less	Adjustment for unamortised initial differences in assets disposed	483
1633	Closing unamortised initial differences in asset values	485
	closing unumerased initial differences in asset values	
	Opening weighted average remaining useful life of relevant assets (years)	



		Company Name	EA Networ	·ks
Ser 18		For Year Ended	31 March 2	
5		5a: REPORT ON REGULATORY TAX ALLOWANCE	Simarchi	010
			n, profit/loss in Schod	le 2 (regulatory
pro Thi	fit). EDBs mus	uires information on the calculation of the regulatory tax allowance. This information is used to calculate regulato t provide explanatory commentary on the information disclosed in this schedule, in Schedule 14 (Mandatory Expl s part of audited disclosure information (as defined in section 1.4 of the ID determination), and so is subject to th	anatory Notes).	
sch re				
44	5a(iv):	Amortisation of Revaluations		(\$000)
45 46		Opening sum of RAB values without revaluations	240,111	
47		opening sum of new values without revaluations	240,111	
48		Adjusted depreciation	8,731	
49		Total depreciation	9,530	
50		Amortisation of revaluations		798
51				
52	5a(v): F	econciliation of Tax Losses		(\$000)
53				
54		Opening tax losses		
55	plus	Current period tax losses		
56	less	Utilised tax losses		
57		Closing tax losses	L	-
	F = (!).	Colouistics of Defement Toy Belance		(*****)
58	5d(vi):	Calculation of Deferred Tax Balance		(\$000)
59 60		Opening deferred tax	(12,615)	
61			(12,015)	
62	plus	Tax effect of adjusted depreciation	2,445	
63				
64	less	Tax effect of tax depreciation	3,335	
65				
66	plus	Tax effect of other temporary differences*	(7)	
67				
68	less	Tax effect of amortisation of initial differences in asset values	600	
69				
70 71	plus	Deferred tax balance relating to assets acquired in the disclosure year		
72	less	Deferred tax balance relating to assets disposed in the disclosure year	35	
73	1000			
74	plus	Deferred tax cost allocation adjustment	4	
75				
76		Closing deferred tax		(14,143)
77				
78	5a(vii):	Disclosure of Temporary Differences		
70		In Schedule 14, Box 6, provide descriptions and workings of items recorded in the asterisked category in Schedu	le 5a(vi) (Tax effect of o	other temporary
79 80		differences).		
	52(11)	Regulatory Tax Asset Base Roll-Forward		
81 82	Ja(VIII):	Negulatory rak Asset base Noll-Loi wald		(\$000)
83		Opening sum of regulatory tax asset values	134,592	(\$000)
84	less	Tax depreciation	11,911	
85	plus	Regulatory tax asset value of assets commissioned	16,376	
86	less	Regulatory tax asset value of asset disposals	324	
87	plus	Lost and found assets adjustment		
88	plus	Adjustment resulting from asset allocation	(802)	
89	plus	Other adjustments to the RAB tax value		
90		Closing sum of regulatory tax asset values		137,930



		Company Name	EA Networks	
~	IFRUIT FL. DEPORT ON RELATER -		31 March 2019	
1000	IEDULE 5b: REPORT ON RELATED P			
	chedule provides information on the valuation of related nformation is part of audited disclosure information (as de			red by clause 2.8
				cu by chube 2.c
ef				
	5b(i): Summary—Related Party Transac	tions	(\$000)	(\$000)
	Total regulatory income		(\$000)	(\$000)
	,,			
	Market value of asset disposals			
	Service interruptions and emergencies		419	
	Vegetation management Routine and corrective maintenance and	inspection	229 694	
	Asset replacement and renewal (opex)		850	
	Network opex			2,1
	Business support		80	
	System operations and network support		876	
	Operational expenditure Consumer connection		1,524	3,1
	System growth		2,051	
	Asset replacement and renewal (capex)		3,516	
	Asset relocations			
	Quality of supply		1,254	
	Legislative and regulatory Other reliability, safety and environment		- 194	
	Expenditure on non-network assets		194	
	Expenditure on assets			8,5
	Cost of financing			
	Value of capital contributions			
	Value of vested assets Capital Expenditure			8,5
	Total expenditure			8,5 11,7
	rotur experience			11,1
5	Other related party transactions	arty Transactions		1
5		arty Transactions Nature of opex or capex service		Total value o
5	5b(iii): Total Opex and Capex Related Pa Name of related party	Nature of opex or capex service provided		Total value o transactions (\$000)
5	5b(iii): Total Opex and Capex Related Pa Name of related party EA Field Services	Nature of opex or capex service provided Consumer connection		Total value o transactions (\$000) 1,510
5	5b(iii): Total Opex and Capex Related Pa Name of related party EA Field Services EA Field Services	Nature of opex or capex service provided Consumer connection System growth		Total value o transactions (\$000) 1,510 2,030
5	5b(iii): Total Opex and Capex Related Pa Name of related party EA Field Services	Nature of opex or capex service provided Consumer connection System growth Asset replacement and renewal (capex)		Total value o transactions (\$000) 1,510 2,030 3,344
5	5b(iii): Total Opex and Capex Related Pa Name of related party EA Field Services EA Field Services EA Field Services EA Field Services	Nature of opex or capex service provided Consumer connection System growth		Total value o transactions (\$000) 1,510 2,030
5	Sb(iii): Total Opex and Capex Related Party EA Field Services	Nature of opex or capex service provided Consumer connection System growth Asset replacement and renewal (capex) Quality of supply Other reliability, safety and environment Expenditure on non-network assets		Total value o transactions (\$000) 1,510 2,030 3,344 1,253 193 26
5	Sb(iii): Total Opex and Capex Related Party EA Field Services	Nature of opex or capex service provided Consumer connection System growth Asset replacement and renewal (capex) Quality of supply Other reliability, safety and environment Expenditure on non-network assets Business support		Total value o transactions (\$000) 1,510 2,030 3,344 1,253 193 26 75
5	Sb(iii): Total Opex and Capex Related Party EA Field Services	Nature of opex or capex service provided Consumer connection System growth Asset replacement and renewal (capex) Quality of supply Other reliability, safety and environment Expenditure on non-network assets Business support System operations and network support		Total value o transactions (\$000) 1,510 2,030 3,344 1,253 193 26 75 60
5	Sb(iii): Total Opex and Capex Related Party EA Field Services	Nature of opex or capex service provided Consumer connection System growth Asset replacement and renewal (capex) Quality of supply Other reliability, safety and environment Expenditure on non-network assets Business support		Total value o transactions (\$000) 1,510 2,030 3,344 1,253 193 26 75
5	Sb(iii): Total Opex and Capex Related Party EA Field Services	Nature of opex or capex service provided Consumer connection System growth Asset replacement and renewal (capex) Quality of supply Other reliability, safety and environment Expenditure on non-network assets Business support System operations and network support Service interruptions and emergencies	ection	Total value o transactions (\$000) 1,510 2,030 3,344 1,253 193 26 75 60 388
5	Sbb(iii): Total Opex and Capex Related Party EA Field Services EA Field Ser	Nature of opex or capex service provided Consumer connection System growth Asset replacement and renewal (capex) Quality of supply Other reliability, safety and environment Expenditure on non-network assets Business support System operations and network support Service interruptions and emergencies Routine and corrective maintenance and inspect Asset replacement and renewal (opex) Vegetation management	ection	Total value o transactions (\$000) 1,510 2,030 3,344 1,253 193 26 75 60 388 656 837 229
5	Sbb(iii): Total Opex and Capex Related Party EA Field Services EA Field Ser	Nature of opex or capex service provided Consumer connection System growth Asset replacement and renewal (capex) Quality of supply Other reliability, safety and environment Expenditure on non-network assets Business support System operations and network support Service interruptions and emergencies Routine and corrective maintenance and inspect Asset replacement and renewal (opex) Vegetation management System operations and network support	ection	Total value o transactions (\$000) 1,510 2,030 3,344 1,253 193 26 75 60 388 656 837 229 803
5	5b(iii): Total Opex and Capex Related Party EA Field Services EA Field Serv	Nature of opex or capex service provided Consumer connection System growth Asset replacement and renewal (capex) Quality of supply Other reliability, safety and environment Expenditure on non-network assets Business support System operations and network support Service interruptions and emergencies Routine and corrective maintenance and inspection Asset replacement and renewal (opex) Vegetation management System operations and network support Business support	ection	Total value o transactions (\$000) 1,510 2,030 3,344 1,253 193 26 75 60 388 656 837 229 803 4
5	Sbb(iii): Total Opex and Capex Related Party EA Field Services EA Field Ser	Nature of opex or capex service provided Consumer connection System growth Asset replacement and renewal (capex) Quality of supply Other reliability, safety and environment Expenditure on non-network assets Business support System operations and network support Service interruptions and emergencies Routine and corrective maintenance and inspect Asset replacement and renewal (opex) Vegetation management System operations and network support	ection	Total value o transactions (\$000) 1,510 2,030 3,344 1,253 193 26 75 60 388 656 837 229 803 4 172
5	5b(iii): Total Opex and Capex Related Party EA Field Services EA Field Serv	Nature of opex or capex service provided Consumer connection System growth Asset replacement and renewal (capex) Quality of supply Other reliability, safety and environment Expenditure on non-network assets Business support System operations and network support Service interruptions and emergencies Routine and corrective maintenance and inspective data and renewal (opex) Vegetation management System operations and network support Business support Asset replacement and renewal (opex) Vegetation management System operations and network support Business support Asset replacement and renewal (capex)	ection	Total value o transactions (\$000) 1,510 2,030 3,344 1,253 193 26 75 60 388 656 837 229 803 4
5	Sob(iii): Total Opex and Capex Related Para EA Field Services EA Field Serv	Nature of opex or capex service provided Consumer connection System growth Asset replacement and renewal (capex) Quality of supply Other reliability, safety and environment Expenditure on non-network assets Business support System operations and network support Service interruptions and emergencies Routine and corrective maintenance and inspect Asset replacement and renewal (opex) Vegetation management System operations and network support Business support Asset replacement and renewal (capex) Consumer connection System growth Other reliability, safety and environment	ection	Total value o transactions (\$000) 1,510 2,030 3,344 1,253 193 26 75 60 388 656 837 229 803 4 172 14 3 1
5	Sob(iii): Total Opex and Capex Related Para EA Field Services EA Ashburton Contracting Limited	Nature of opex or capex service provided Consumer connection System growth Asset replacement and renewal (capex) Quality of supply Other reliability, safety and environment Expenditure on non-network assets Business support System operations and network support Service interruptions and emergencies Routine and corrective maintenance and inspection Asset replacement and renewal (opex) Vegetation management System operations and network support Business support Asset replacement and renewal (capex) Consumer connection System growth Other reliability, safety and environment Quality of supply	ection	Total value o transactions (\$000) 1,510 2,030 3,344 1,253 193 26 75 60 388 656 837 229 803 4 172 14 3 1 1
5	Sob(iii): Total Opex and Capex Related Para EA Field Services EA Ariburton Contracting Limited Ashburton Contracting Limited	Nature of opex or capex service provided Consumer connection System growth Asset replacement and renewal (capex) Quality of supply Other reliability, safety and environment Expenditure on non-network assets Business support System operations and network support Service interruptions and emergencies Routine and corrective maintenance and inspection Asset replacement and renewal (opex) Vegetation management System operations and network support Business support Asset replacement and renewal (capex) Consumer connection System growth Other reliability, safety and environment Quality of supply Asset replacement and renewal (capex)		Total value o transactions (\$000) 1,510 2,030 3,344 1,253 193 26 75 60 388 656 837 229 803 4 172 14 3 1 12
5	Sb(iii): Total Opex and Capex Related Party EA Field Services EA Field Se	Nature of opex or capex service provided Consumer connection System growth Asset replacement and renewal (capex) Quality of supply Other reliability, safety and environment Expenditure on non-network assets Business support System operations and network support Service interruptions and emergencies Routine and corrective maintenance and inspection Asset replacement and renewal (opex) Vegetation management System operations and network support Business support Asset replacement and renewal (capex) Consumer connection System growth Other reliability, safety and environment Quality of supply Asset replacement and renewal (capex) Consumer connection System growth Other reliability, safety and environment Quality of supply Asset replacement and renewal (opex) Routine and corrective maintenance and inspection		Total value o transactions (\$000) 1,510 2,030 3,344 1,253 193 26 75 60 388 656 837 229 803 4 172 14 3 1 12 38
5	Sob(iii): Total Opex and Capex Related Para EA Field Services EA Ariburton Contracting Limited Ashburton Contracting Limited	Nature of opex or capex service provided Consumer connection System growth Asset replacement and renewal (capex) Quality of supply Other reliability, safety and environment Expenditure on non-network assets Business support System operations and network support Service interruptions and emergencies Routine and corrective maintenance and inspection Asset replacement and renewal (opex) Vegetation management System operations and network support Business support Asset replacement and renewal (capex) Consumer connection System growth Other reliability, safety and environment Quality of supply Asset replacement and renewal (capex)		Total value o transactions (\$000) 1,510 2,030 3,344 1,253 193 26 75 60 388 656 837 229 803 4 172 14 3 1 12
5	5b(iii): Total Opex and Capex Related Pars EA Field Services EA Afibre Ashburton Contracting Limited Ashburton Contracting Limited Ashburton Contracting Limited Ashburton Contracting Limited Cullimore Enginering Limited Cullimore Enginering Limited	Nature of opex or capex service provided Consumer connection System growth Asset replacement and renewal (capex) Quality of supply Other reliability, safety and environment Expenditure on non-network assets Business support System operations and network support Service interruptions and emergencies Routine and corrective maintenance and inspection System operations and network support Business support Asset replacement and renewal (opex) Vegetation management System operations and network support Business support Asset replacement and renewal (capex) Consumer connection System growth Other reliability, safety and environment Quality of supply Asset replacement and renewal (opex) Routine and corrective maintenance and inspective System growth		Total value o transactions (\$000) 1,510 2,030 3,344 1,253 193 26 75 60 388 656 837 229 803 4 172 14 3 1 12 38 18
5	Sb(iii): Total Opex and Capex Related Park EA Field Services EA Shourton Contracting Limited Ashburton Contracting Limited Ashburton Contracting Limited Ashburton Contracting Limited Cullimore Enginering Limited Ashburton District Council Ashburton District Council Ashburton District Council	Nature of opex or capex service provided Consumer connection System growth Asset replacement and renewal (capex) Quality of supply Other reliability, safety and environment Expenditure on non-network assets Business support System operations and network support Service interruptions and emergencies Routine and corrective maintenance and inspet Asset replacement and renewal (opex) Vegetation management System operations and network support Business support Asset replacement and renewal (capex) Consumer connection System growth Other reliability, safety and environment Quality of supply Asset replacement and renewal (opex) Routine and corrective maintenance and inspet System growth Other reliability, safety and environment Quality of supply Asset replacement and renewal (opex) Routine and corrective maintenance and inspet System growth Business support Service interruptions and emergencies Asset replacement and renewal (opex)		Total value o transactions (\$000) 1,510 2,030 3,344 1,253 193 26 75 60 388 656 837 229 803 4 172 14 3 1 12 38 18 1 31 1
5	Sb(iii): Total Opex and Capex Related Party EA Field Services EA Ashburton Contracting Limited Ashburton Contracting Limited Ashburton Contracting Limited Ashburton Contracting Limited Cullimore Enginering Limited Cullimore Enginering Limited Ashburton District Council Ashburton District Council	Nature of opex or capex service provided Consumer connection System growth Asset replacement and renewal (capex) Quality of supply Other reliability, safety and environment Expenditure on non-network assets Business support System operations and network support Service interruptions and emergencies Routine and corrective maintenance and inspet Asset replacement and renewal (opex) Vegetation management System operations and network support Business support Asset replacement and renewal (capex) Consumer connection System growth Other reliability, safety and environment Quality of supply Asset replacement and renewal (capex) Consumer connection System growth Other reliability, safety and environment Quality of supply Asset replacement and renewal (opex) Routine and corrective maintenance and inspetee System growth Business support Service interruptions and emergencies		Total value o transactions (\$000) 1,510 2,030 3,344 1,253 193 26 75 60 388 656 837 229 803 4 172 14 3 1 12 38 18 1 31
5	Sb(iii): Total Opex and Capex Related Park EA Field Services EA Shourton Contracting Limited Ashburton Contracting Limited Ashburton Contracting Limited Ashburton Contracting Limited Cullimore Enginering Limited Ashburton District Council Ashburton District Council Ashburton District Council	Nature of opex or capex service provided Consumer connection System growth Asset replacement and renewal (capex) Quality of supply Other reliability, safety and environment Expenditure on non-network assets Business support System operations and network support Service interruptions and emergencies Routine and corrective maintenance and inspection Asset replacement and renewal (opex) Vegetation management System operations and network support Asset replacement and renewal (capex) Consumer connection System growth Other reliability, safety and environment Quality of supply Asset replacement and renewal (opex) Consumer connection System growth Other reliability, safety and environment Quality of supply Asset replacement and renewal (opex) Routine and corrective maintenance and inspective System growth Business support Service interruptions and emergencies Asset replacement and renewal (opex) System operations and network support <td></td> <td>Total value o transactions (\$000) 1,510 2,030 3,344 1,253 193 26 75 60 388 656 837 229 803 4 172 14 3 1 12 38 18 1 31 1</td>		Total value o transactions (\$000) 1,510 2,030 3,344 1,253 193 26 75 60 388 656 837 229 803 4 172 14 3 1 12 38 18 1 31 1
5	Sb(iii): Total Opex and Capex Related Park EA Field Services EA Shourton Contracting Limited Ashburton Contracting Limited Ashburton Contracting Limited Ashburton Contracting Limited Cullimore Enginering Limited Ashburton District Council Ashburton District Council Ashburton District Council	Nature of opex or capex service provided Consumer connection System growth Asset replacement and renewal (capex) Quality of supply Other reliability, safety and environment Expenditure on non-network assets Business support System operations and network support Service interruptions and emergencies Routine and corrective maintenance and inspet Asset replacement and renewal (opex) Vegetation management System operations and network support Business support Asset replacement and renewal (capex) Consumer connection System growth Other reliability, safety and environment Quality of supply Asset replacement and renewal (opex) Routine and corrective maintenance and inspet System growth Other reliability, safety and environment Quality of supply Asset replacement and renewal (opex) Routine and corrective maintenance and inspet System growth Business support Service interruptions and emergencies Asset replacement and renewal (opex)		Total value o transactions (\$000) 1,510 2,030 3,344 1,253 193 26 75 60 388 656 837 229 803 4 172 14 3 1 12 38 18 1 31 1



Company Name Gover Ended Environment of the detail portion to be compared by section 2.8. For Year Ended 11.0.1.0.1.0.1.0.1.0.1.0.1.0.1.0.1.0.1.	Company Name For Year Ended oth qualifying debt and non-qualifying debt) is gre on 2.8. Book value at ate (%) issue date (NZD) statements (NZD) ate (%) issue date (NZD) statements (NZD)	ee EA Networks al 31 March 2019 al Term Credit D) Spread Difference Image: Spread Difference Feadjustment Image: Spread Difference Feadjustment
27 Term credit spread differential allowance		



SCHEDULE Sci. REPORT ON COST ALLOCATION This activitude provider information on the allocation for eventuation of a cardination for a car	Total To	oVABAA allocation increase (\$000s)
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. Detrasting Cost Allocations Value allocated (\$000) reduction value allocated reduction		OVABAA allocation increase (\$000\$)
value allocate value allocate encies encies <th></th> <th>OVABAA allocation increase (\$000s)</th>		OVABAA allocation increase (\$000s)
Value allocate Value allocate Retrictly Arm's length Retrictly Retrictly Retrictor		OVABAA allocation increase (\$000s)
Arm's length deduction services reading reading readi		OVABAA allocation increase (\$000s)
reduction arrites		
	1	
inspection		
III III IIII IIII IIIIIIIIIIIIIIIIIIII		
inspection		
	1	
	1	
Not directly attributable 0	0	0
Total attributable to regulated service 3466		
Directly attributable		
Not directly attributable – 3.751	701 4.452	
Total attributable to regulated service 4,677		
Operating costs directly attributable		
Operating costs not directly attributable 3,751 3,751	701 4,453	1
Operational expenditure		

pwc

Index constrained (00) Index constrained Index constrained Index constrained Index con
Image: state of the state
Image: signed:
Image: Since it is a since
Image: state of the state
Image: state in the state
A A
Bit Contained of Containing Costs Contained of C
the the field of the transmission of the trans
Markation Original allocation
Interview ACAM Develocation Image ABA Difference Difference Image Changed to align to Commerce Commission cost allocation methodology for business Support costs identified as not directly attributable Image Image Changed to align to Commerce Commission cost allocation Difference Image Image Image Business Original allocation Image Image Image Difference Original allocation Image Image Image Difference Image Image
Inference Infer
Charged to slip to Commerce Commission cost allocation methodology for Business Support costs identified as not directly attributable fibe business. (500) International control costs Example (100) Business Support - General Costs Example (100) Business Support - General Costs (100) (100) Business Support - General Costs (100) (100) ACM (100) (100) (100) <t< td=""></t<>
Interview Original allocation Crute Business: Business: Support - General Costs Crute Business: Business: Original allocation Crute AGAM Adam Original allocation Crute Adam Difference Crute Crute Changed to align to Commerce Commission cost allocation methodology for Business Support costs identified as not directly attributes Crute Crute Business: Support - Office related IT Costs Crute Crute Crute Business: Support - Office related IT Costs Original allocation Crute Crute Business: Difference Original allocation Crute Crute Crute Business: Original allocation Original allocation Crute Crute Crute Business: Original allocation Na Original allocation Crute Crute Crute Crute Business: Original allocation Na Original allocation Crute Crute <td< td=""></td<>
terms barbort - General Costs Terms AGM AGM AGM AGM AGM AGM AGM ABA Changed to align to Commerce Commission cost allocation methodology for Business Support costs identified as not directly attributable in alteration and access in allocation methodology for Business Support costs identified as not directly attributable terms ADM AGM AGM AGM AGM AGM AGM AGM AG
Officience Orginal allocation Cr4.1 Lens CrM Evaluation Evaluation AGM AGM Difference Image of align to commerce commission cost allocation methodology for Business Support costs identified as not directly attributels line business. Image of align to commerce commission cost allocation methodology for Business Support costs identified as not directly attributels line business. Image of align to commerce commission cost allocation methodology for Business Support costs identified as not directly attributels line business. Image of align to commerce commission cost allocation Image of a allocation Image of align to commerce commission cost allocation Image of align to commerce commission cost allocation Image of a allocation Image of align to commerce commission cost allocation Image of
terms balance of the algorithm of the business support to state algorithm of the algorithm of the business support of the algorithm of the business support of the algorithm of the business support of the business of the business support of the
terms terms apport - central LOSTS Of the mathematical and the action term of the mathematical and the action term of the mathematical and the mathematical and the mathematical and the mathematical and the business support - office related IT Costs in the business Support costs identified as not directly attributable in the business.
MBA Difference Commence of the mean of the second
Changed to align to Commerce Commission cost allocation methodology for Business Support costs identified as not directly attributable line business. Intervention Changed to align to Commerce Commission cost allocation methodology for Business Support costs identified as not directly attributable states. Intervention Changed to align to Commerce Commission cost allocation methodology for Business Support costs identified as not directly attributable ine busines.
Changed to align to Commerce Commission cost allocation methodology for Business Support costs identified as not directly attributable line business. (500) Interview Business Support - Office related IT costs (500) Business Support - Office related IT costs 0riginal allocation (500) ACAM Original allocation (150) ACAM Difference (150) ACAM Original allocation (150) Interview Difference (150) Interviews Difference (150)
Interbusiness. Busiemes Support - Office related IT Costs ACAM ACACAM ACACAM ACAM ACACAM ACAM ACACACAM ACACAM ACACACAM ACACAM AC
terms Busienss Support - Office related IT Costs ACAM ACAM ACAM ACAM ABAA Changed to align to Commerce Commission cost allocation methodology for Business Support costs identified as not directly attributable line business.
terms Busienss Support - Office related IT costs Original allocation Original allocati
Busients Support - Office related IT Costs Original allocation 157 ACM ACM New allocation 115 ABAA Difference 42
teams ACAM New allocation 115 New allocation 115 Difference 42 Intervence Commission cost allocation methodology for Business Support costs identified as not directly attributable line business.
Instruction Difference 42 Changed to align to Commerce Commission cost allocation methodology for Business Support costs identified as not directly attributable line business.
Changed to align to Commerce Commission cost allocation methodology for Business Support costs identified as not directly attributable line business.
Changed to align to Commerce Commission cost allocation methodology for Business Support costs identified as not directly attributable a fine business.
The doublesh
Change in cost allocation 3 Crrrent Year (CV)
Business Support - General IT Costs 01 01 01 01 01 01 01 01 01 01 01 01 01
ms ALM ALM Investigation
New allocation on milliterence 43
Changed to align to Commerce Commission cost allocation methodology for Business Support costs identified as not directly attributable to the electricity

For Year Ended		CA INCLUDINS
	E	11 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.	atory Notes), including on the impact	nct of any reclassificatio

			Company Name EA Networks	
			For Year Ended 31 March 2019	
	HEDULE 5e: REPORT ON ASSET AL			
		t values. This information supports the calculation of the RAI		
		ation in Schedule 14 (Mandatory Explanatory Notes), includi etermination), and so is subject to the assurance report requi	ding on the impact of any changes in asset allocations. This information is part of audited suired by section 2.8.	:d
	(
f				
	5e(i): Regulated Service Asset Values			
	(-)			
			Value allocated (\$000s)	
			Electricity distribution	
	Subtransmission lines		services	
	Directly attributable		12,623	
	Not directly attributable		-	
	Total attributable to regulated service		12,623	
	Subtransmission cables			
	Directly attributable Not directly attributable		831	
	Total attributable to regulated service		831	
	Zone substations			
	Directly attributable		23,675	
	Not directly attributable Total attributable to regulated service		23,675	
	Distribution and LV lines			
	Directly attributable		48,655	
	Not directly attributable			
	Total attributable to regulated service Distribution and LV cables		48,655	
	Directly attributable		72,051	
	Not directly attributable			
	Total attributable to regulated service		72,051	
	Distribution substations and transform Directly attributable	ners	59,757	
	Not directly attributable		59,737	
	Total attributable to regulated service		59,757	
	Distribution switchgear			
	Directly attributable Not directly attributable		35,267	
	Total attributable to regulated service		35,267	
	Other network assets			
	Directly attributable		1,508	
	Not directly attributable Total attributable to regulated service		1,508	
	Non-network assets		1,508	
	Directly attributable		5,284	
	Not directly attributable		8,797	
	Total attributable to regulated service		14,081	
	Regulated service asset value directly attribut	able	259,651	
	Regulated service asset value not directly attr	ibutable	8,797	
	Total closing RAB value		268,447	
	5e(ii): Changes in Asset Allocations* +			
	Change in asset value allocation 1		(\$000) CY-1 Current Year (C	CVI
	Asset category	Non-network assets - IT Assets	Original allocation 36	3
	Original allocator or line items	ACAM	New allocation 28	2
	New allocator or line items	ABAA	Difference 8	
	Rationale for change	Changed to align to Commerce Commission cost alloc	ocation methodology for Non-network assets identified as not directly attributable to the	e
		electricity lines business.		
			(\$000)	
	Change in asset value allocation 2		(\$000) CY-1 Current Year (C	CY)
	Asset category	Non-network assets - Main office		4,21
	Original allocator or line items	ACAM		3,98
	New allocator or line items	АВАА	Difference 236	23
	Rationale for change		ocation methodology for Non-network assets identified as not directly attributable to the	e
		electricity lines business.		
			(\$000)	
	Change in asset value allocation 3		CY-1 Current Year (C	CY)
	Asset category	Non-network assets - General	Original allocation 5,358	5,35
	Original allocator or line items	ACAM ABAA		4,78
	New allocator or line items	MDAA	Difference 573	57
	Rationale for change		ocation methodology for Non-network assets identified as not directly attributable to the	e
		electricity lines business.		_
			e disclosure year. A movement in an allocator metric is not a change in allocator or comp	1000



		Company Name	EA Networks
		For Year Ended	31 March 2019
		6a: REPORT ON CAPITAL EXPENDITURE FOR THE DISCLOSURE YEAR	
xcludi DBs m	ing assets t nust provid	uires a breakdown of capital expenditure on assets incurred in the disclosure year, including any assets in respect of w hat are vested assets. Information on expenditure on assets must be provided on an accounting accruals basis and mu e explanatory comment on their expenditure on assets in Schedule 14 (Explanatory Notes to Templates). s part of audited disclosure information (as defined in section 1.4 of the ID determination), and so is subject to the ass	ust exclude finance costs.
ef			
		penditure on Assets	(\$000) (\$000)
		onsumer connection	3,
		ystem growth sset replacement and renewal	3,
		sset relocations	,
	F	eliability, safety and environment:	
		Quality of supply	2,854
		Legislative and regulatory Other reliability refety and environment	-
	т	Other reliability, safety and environment otal reliability, safety and environment	610
		enditure on network assets	18,6
		xpenditure on non-network assets	
		enditure on assets	19,5
		ost of financing alue of capital contributions	1,0
		alue of vested assets	1,0
	Cap	ital expenditure	18,5
e	5a(ii): S	ubcomponents of Expenditure on Assets (where known)	(\$000)
		Energy efficiency and demand side management, reduction of energy losses	
		Overhead to underground conversion	4,0
		Research and development	
F	Sa(iii): C	onsumer Connection	
	54(11). 6	Consumer types defined by EDB*	(\$000) (\$000)
		Capacity/safety & other	546
		Rural with transformer new connection	1,206
		Rural without transformer new connection Urban new connections	719
		Subdivision	199 405
		* include additional rows if needed	405
	C	onsumer connection expenditure	3,0
	less	Capital contributions funding consumer connection expenditure	444
		onsumer connection less capital contributions	2,6
			Asset
6	6a(iv): S	ystem Growth and Asset Replacement and Renewal	Replacement a
			System Growth Renewal (\$000) (\$000)
		Subtransmission	524 1,8
		Zone substations	1,395 -
		Distribution and LV lines	595 1,6
		Distribution and LV cables	128 4,0
		Distribution substations and transformers Distribution switchgear	576 7
		Other network assets	- 4
	S	stem growth and asset replacement and renewal expenditure	3,294 8,7
	less	Capital contributions funding system growth and asset replacement and renewal	45 5
	S	stem growth and asset replacement and renewal less capital contributions	3,249 8,2
6	ia(v): As	set Relocations	
		Project or programme*	(\$000) (\$000)
		[Description of material project or programme]	
		[Description of material project or programme] [Description of material project or programme]	
		[Description of material project or programme]	
		[Description of material project or programme]	
		* include additional rows if needed	
		All other projects or programmes - asset relocations	
	As less	Capital contributions funding asset relocations	-



	Company Name	EA Networks
	For Year Ended	31 March 2019
HEDULI	6a: REPORT ON CAPITAL EXPENDITURE FOR THE DISCLOSURE YEAR	
	quires a breakdown of capital expenditure on assets incurred in the disclosure year, including any assets in respect of v	which capital contributions are received
	that are vested assets. Information on expenditure on assets must be provided on an accounting accruals basis and m	
	de explanatory comment on their expenditure on assets in Schedule 14 (Explanatory Notes to Templates).	
	is part of audited disclosure information (as defined in section 1.4 of the ID determination), and so is subject to the as	surance report required by section 2.8.
Ealui).	Quality of Supply	
ua(vi).	Quality of Supply	
	Project or programme*	(\$000) (\$000)
	Prior years all other projects	2
	[2017-2018] Rural Underground Conversion	268
	[2017-2018] SCADA - GridLink Configuration	22
	[2017-2018] ZSS - 66kV UG Cable Screens -	14
	[2017-2018] ZSS HTH - 22kV Switchboard Extension & Feeders [2018-2019] 11kV Metering point	14
	[2018-2019] Rural Ring Main Unit Installations	1,601
	[2019-2019] SCADA - Distribution Automation Programme	783
	[2018-2019] ZSS - Upgrading 110Vdc Supplies	785
	* include additional rows if needed	
	All other projects programmes - quality of supply	71
	Quality of supply expenditure	2,
less	Capital contributions funding quality of supply	
	Quality of supply less capital contributions	2,
		and the second states of the second states
6a(vii):	Legislative and Regulatory	
	Project or programme*	(\$000) (\$000)
	[Description of material project or programme]	
	[Description of material project or programme]	
	[Description of material project or programme]	
	[Description of material project or programme]	
	[Description of material project or programme]	
	* include additional rows if needed All other projects or programmes - legislative and regulatory	
	Legislative and regulatory expenditure	
less	Capital contributions funding legislative and regulatory	
	Legislative and regulatory less capital contributions	State of the second sec
6a(viii)	Other Reliability, Safety and Environment	
	Project or programme*	(\$000) (\$000)
	[2018-2019] Distribution Earthing Upgrades	234
	[2018-2019] ZSS Security and Surveillance Programme	22
	[2018-2019] UG Conversion - Rakaia Hwy (Mitcham Rd to Works Rd)	143
	[2018-2019] UG Conversion - Rakaia Hwy (Racecourse Rd to Golf Links Rd)	177
	* include additional rows if needed	
	All other projects or programmes - other reliability, safety and environment	34
	and the programmes other reliability, safety and environment	
	Ither reliability, safety and environment expenditure	
less	Other reliability, safety and environment expenditure Capital contributions funding other reliability, safety and environment	
less	Other reliability, safety and environment expenditure Capital contributions funding other reliability, safety and environment Other reliability, safety and environment less capital contributions	
less	Capital contributions funding other reliability, safety and environment	
less	Capital contributions funding other reliability, safety and environment	
less (Capital contributions funding other reliability, safety and environment	
^{/ess} 6a(ix):	Capital contributions funding other reliability, safety and environment Other reliability, safety and environment less capital contributions Non-Network Assets butine expenditure	
^{/ess} 6a(ix):	Capital contributions funding other reliability, safety and environment Other reliability, safety and environment less capital contributions Non-Network Assets putine expenditure Project or programme*	(\$000) (\$000)
^{/ess} 6a(ix):	Capital contributions funding other reliability, safety and environment Other reliability, safety and environment less capital contributions Non-Network Assets putine expenditure Project or programme* [2017-2018] Software - GIS Development	(\$000) (\$000)
^{/ess} 6a(ix):	Capital contributions funding other reliability, safety and environment Other reliability, safety and environment less capital contributions Non-Network Assets Dutine expenditure Project or programme* [2017-2018] Software - GIS Development [2018-2019] ZSS ASH - Building Improvements	(\$000) (\$000) 55 33
^{/ess} 6a(ix):	Capital contributions funding other reliability, safety and environment Other reliability, safety and environment less capital contributions Non-Network Assets Dutine expenditure Project or programme* [2017-2018] Software - GIS Development [2018-2019] ZSS ASH - Building Improvements [2018-2019] Routine Info Tech	(\$000) (\$000) 55 33 24
^{/ess} 6a(ix):	Capital contributions funding other reliability, safety and environment Other reliability, safety and environment less capital contributions Non-Network Assets project or programme* [2017-2018] Software - GIS Development [2018-2019] ZSS ASH - Building Improvements [2018-2019] Routine Info Tech [2018-2019] Routine Info Tech [2018-2019] Routine vehicles	(\$000) (\$000) 55 33 24 163
^{/ess} 6a(ix):	Capital contributions funding other reliability, safety and environment Other reliability, safety and environment less capital contributions Non-Network Assets Project or programme* [2017-2018] Software - GIS Development [2018-2019] ZSS ASH - Building Improvements [2018-2019] Routine Info Tech [2018-2019] Routine vehicles 0	(\$000) (\$000) 55 33 24
^{/ess} 6a(ix):	Capital contributions funding other reliability, safety and environment Other reliability, safety and environment less capital contributions Non-Network Assets putine expenditure Project or programme* [2017-2018] Software - GIS Development [2018-2019] ZSS ASH - Building Improvements [2018-2019] Routine Info Tech [2018-2019] Routine vehicles 0 * include additional rows if needed	(\$000) (\$000) 55 33 24 163
/ess 6a(ix): Rc	Capital contributions funding other reliability, safety and environment Other reliability, safety and environment less capital contributions Non-Network Assets putine expenditure Project or programme* [2017-2018] Software - GIS Development [2018-2019] ZSS ASH - Building Improvements [2018-2019] Routine Info Tech [2018-2019] Routine vehicles 0 * include additional rows if needed All other projects or programmes - routine expenditure	(\$000) (\$000) 55 33 24 163 -
/ess 6a(ix): Rc	Capital contributions funding other reliability, safety and environment Other reliability, safety and environment less capital contributions Non-Network Assets putine expenditure Project or programme* [2017-2018] Software - GIS Development [2018-2019] ZSS ASH - Building Improvements [2018-2019] Routine Info Tech [2018-2019] Routine vehicles 0 * include additional rows if needed	(\$000) (\$000) 55 33 24 163 -
/ess 6a(ix): Rd	Capital contributions funding other reliability, safety and environment Other reliability, safety and environment less capital contributions Non-Network Assets putine expenditure Project or programme* [2017-2018] Software - GIS Development [2018-2019] ZSS ASH - Building Improvements [2018-2019] Routine Info Tech [2018-2019] Routine vehicles 0 * include additional rows if needed All other projects or programmes - routine expenditure	(\$000) (\$000) 55 33 24 163 -
/ess 6a(ix): Rd	Capital contributions funding other reliability, safety and environment Other reliability, safety and environment less capital contributions Non-Network Assets Dutine expenditure Project or programme* [2017-2018] Software - GIS Development [2018-2019] ZSS ASH - Building Improvements [2018-2019] Routine Info Tech [2018-2019] Routine Info Tech [2018-2019] Routine vehicles 0 * include additional rows if needed All other projects or programmes - routine expenditure toutine expenditure Project or programme*	(\$000) (\$000) 55 33 24 163 -
/ess 6a(ix): Rd	Capital contributions funding other reliability, safety and environment Other reliability, safety and environment less capital contributions Non-Network Assets Dutine expenditure Project or programme* [2017-2018] Software - GIS Development [2018-2019] ZSS ASH - Building Improvements [2018-2019] Routine Info Tech [2018-2019] Routine vehicles 0 * include additional rows if needed All other projects or programmes - routine expenditure toutine expenditure Project or programme* [2017-2018] Software - Payroll Management [2017-2019] Software - Payroll Management	(\$000) (\$000) 55 33 24 163
/ess 6a(ix): Rd	Capital contributions funding other reliability, safety and environment Other reliability, safety and environment less capital contributions Non-Network Assets Project or programme* [2017-2018] Software - GIS Development [2018-2019] Sost Hare - GIS Developments [2018-2019] Routine Info Tech [2018-2019] Routine Info Tech [2018-2019] Routine vehicles 0 * include additional rows if needed All other projects or programmes - routine expenditure toutine expenditure project or programme* [2017-2019] Software - Payroll Management [2017-2019] Software - Payroll Management [2018-2019] DMR Reparter Stations for Rakaia Gorge	(\$000) (\$000) 55 33 24 163
/ess 6a(ix): Rd	Capital contributions funding other reliability, safety and environment Other reliability, safety and environment less capital contributions Non-Network Assets Project or programme* [2017-2018] Software - GIS Development [2018-2019] ZSS ASH - Building Improvements [2018-2019] Routine Info Tech [2018-2019] Routine Info Tech [2018-2019] Routine vehicles 0 * include additional rows if needed All other projects or programmes - routine expenditure toutine expenditure Project or programme* [2017-2019] Software - Payroll Management [2018-2019] DMR Reparter Stations for Rakaia Gorge [2018-2019] Software - Distribution Management System [2018-	(\$000) (\$000) 55 33 24 163 - (\$000) (\$000) (\$000) 117 52 442
/ess 6a(ix): Rd	Capital contributions funding other reliability, safety and environment Other reliability, safety and environment less capital contributions Non-Network Assets Project or programme* [2017-2018] Software - GIS Development [2018-2019] ZSS ASH - Building Improvements [2018-2019] Routine Info Tech [2018-2019] Routine Info Tech [2018-2019] Routine vehicles 0 * include additional rows if needed All other projects or programmes - routine expenditure toutine expenditure Project or programme* [2017-2019] Software - Payroll Management [2018-2019] DMR Reparter Stations for Rakaia Gorge [2018-2019] Software - Distribution Management System [2018-2019] Software - ERP Development [2018-2019] Software - Distribution Management System [2018-2019] Software - ERP Development [2018-2019] Software - ERP Dev	(\$000) (\$000) 55 33 24 163 - (\$000) (\$000) (\$000) 117 52 442 38
/ess 6a(ix): Rd	Capital contributions funding other reliability, safety and environment Other reliability, safety and environment less capital contributions Non-Network Assets Project or programme* [2017-2018] Software - GIS Development [2018-2019] ZSS ASH - Building Improvements [2018-2019] Routine Info Tech [2018-2019] Routine Info Tech [2018-2019] Routine vehicles 0 * include additional rows if needed All other projects or programmes - routine expenditure toutine expenditure Project or programme* [2017-2019] Software - Payroll Management [2018-2019] DMR Reparter Stations for Rakaia Gorge [2018-2019] Software - Distribution Management System [2018-	(\$000) (\$000) 55 33 24 163 - (\$000) (\$000) (\$000) 117 52 442
/ess 6a(ix): Rd	Capital contributions funding other reliability, safety and environment Other reliability, safety and environment less capital contributions Non-Network Assets Project or programme*	(\$000) (\$000) 55 33 24 163 - (\$000) (\$000) (\$000) 117 52 442 38
/ess 6a(ix): Rd	Capital contributions funding other reliability, safety and environment Other reliability, safety and environment less capital contributions Non-Network Assets Project or programme* [2017-2018] Software - GIS Development [2018-2019] Routine Info Tech [2018-2019] Routine Info Tech [2018-2019] Routine vehicles 0 * include additional rows if needed All other projects or programme* [2017-2019] Software - Payroll Management [2018-2019] DMR Reparter Stations for Rakaia Gorge [2018-2019] Software - Distribution Management System [2018-2019] Software - ERP Development [2018-2019] Software - ERP Development [2018-2019] Software - ERP Development [2018-2019] Website Development [2018-2019] Website Development [2018-2019] Website Development [2018-2019] Software - ERP Development [2018-2019] Software - ERP Development [2018-2019] Website Development [2018-2019] Website Development [2018-2019] Website Development [2018-2019] Website Development [2018-2019] Software - ERP Development [2018-2019] Website Development	(\$000) (\$000) 55 33 24 163 (\$000) (\$000) (\$000) 117 52 442 38 31 -
less Ga(ix): 1 Ro F At	Capital contributions funding other reliability, safety and environment Other reliability, safety and environment less capital contributions Non-Network Assets Project or programme* [2017-2018] Software - GIS Development [2018-2019] Routine Info Tech [2018-2019] Routine Info Tech [2018-2019] Routine Info Tech [2018-2019] Routine vehicles 0 * include additional rows if needed All other projects or programme* [2018-2019] Software - Payroll Management [2018-2019] Software - Payroll Manag	(\$000) (\$000) 55 33 24 163
less Ga(ix): 1 Ro F At	Capital contributions funding other reliability, safety and environment Other reliability, safety and environment less capital contributions Non-Network Assets Project or programme* [2017-2018] Software - GIS Development [2018-2019] Routine Info Tech [2018-2019] Routine Info Tech [2018-2019] Routine vehicles 0 * include additional rows if needed All other projects or programme* [2017-2019] Software - Payroll Management [2018-2019] DMR Reparter Stations for Rakaia Gorge [2018-2019] Software - Distribution Management System [2018-2019] Software - ERP Development [2018-2019] Software - ERP Development [2018-2019] Software - ERP Development [2018-2019] Website Development [2018-2019] Website Development [2018-2019] Website Development [2018-2019] Software - ERP Development [2018-2019] Software - ERP Development [2018-2019] Website Development [2018-2019] Website Development [2018-2019] Website Development [2018-2019] Website Development [2018-2019] Software - ERP Development [2018-2019] Website Development	(\$000) (\$000) 55 33 24 163
less Ga(ix): I Ro F At	Capital contributions funding other reliability, safety and environment Other reliability, safety and environment less capital contributions Non-Network Assets Project or programme* [2017-2018] Software - GIS Development [2018-2019] Routine Info Tech [2018-2019] Routine Info Tech [2018-2019] Routine Info Tech [2018-2019] Routine vehicles 0 * include additional rows if needed All other projects or programme* [2018-2019] Software - Payroll Management [2018-2019] Software - Payroll Manag	(\$000) (\$000) 55 33 24 163 (\$000) (\$000) (\$000) 117 52 442 38 31 -



Commerce Commission Information Disclosure Template

SCI This s EDBs expe expe This i	Company Name Company Name EA Networks For Year Ended For Year Ended 31 March 2019 This schedule requires a breakdown of operational expenditure incurred in the disclosure year. 31 March 2019 31 March 2019 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 replacement and renewal operational expenditure, and additional information on insurance. 1.4 of the ID determination), and so is subject to the assurance report required by section 2.8.	EA Networks 31 March 2019 31 March 2019 comment on any atypical op ce. required by section 2.8.	vorks h 2019 ypical operational 2.8.
7	6h(i): Onerational Evnenditure	(0000)	100041
		(nnn¢)	(nnn¢)
×	Service interruptions and emergencies	773	
6	Vegetation management	470	
10	Routine and corrective maintenance and inspection	1,214	
11	Asset replacement and renewal	1,313	
12	Network opex		3,770
13	System operations and network support	3,466	
14	Business support	4,677	
15	Non-network opex		8.143
16]	
17	Operational expenditure		11,913
18	6b(ii): Subcomponents of Operational Expenditure (where known)		
19	Energy efficiency and demand side management, reduction of energy losses		21
20	Direct billing*		1
21	Research and development		06
22	Insurance		118
23	* Direct billing expenditure by suppliers that directly bill the majority of their consumers]	



	Company Name	The observations and state to water	EA Networks	
	For Year Ended		31 March 2019	State of the
This the f EDBs Expla assu	HEDULE 7: COMPARISON OF FORECASTS TO ACTUAL EXPE schedule compares actual revenue and expenditure to the previous forecasts that were made forecast revenue and expenditure information from previous disclosures to be inserted. Is must provide explanatory comment on the variance between actual and target revenue and anatory Notes). This information is part of the audited disclosure information (as defined in se rance report required by section 2.8. For the purpose of this audit, target revenue and forecas	for the disclosure ye forecast expenditure ction 1.4 of the ID de	in Schedule 14 (Mar termination), and so	ndatory is subject to the
ref				
	7(i): Revenue	Target (\$000) ¹	Actual (\$000)	% variance
	Line charge revenue	43,329	43,789	1%
		10/020		
	7/ii): Expanditura on Assats	Foreset (\$000) 2	Actual (\$000)	e/ waring a
	7(ii): Expenditure on Assets	Forecast (\$000) ²	Actual (\$000)	% variance
	Consumer connection	3,268	3,075	(6%
	System growth Asset replacement and renewal	4,933 11.941	3,294 8,769	(33%
	Asset repracement and renewal	11,941	8,769	(27%
	Reliability, safety and environment:			
	Quality of supply	2,418	2,854	18%
	Legislative and regulatory		-	-
	Other reliability, safety and environment	813	610	(25%
	Total reliability, safety and environment	3,231	3,464	7%
	Expenditure on network assets	23,373	18,601	(20%
	Expenditure on non-network assets	2,597	955	(63%
	Expenditure on assets	25,970	19,556	(25%
	7(iii): Operational Expenditure			
	Service interruptions and emergencies	1,101	773	(30%
	Vegetation management	333	470	41%
	Routine and corrective maintenance and inspection	1,082	1,214	12%
	Asset replacement and renewal	1,361	1,313	(4%
	Network opex	3,877	3,770	(3%
	System operations and network support	3,690	3,466	(6%
	Business support	4,715	4,677	(1%
	Non-network opex	8,405	8,143	(3%
	Operational expenditure	12,282	11,913	(3%
	7(iv): Subcomponents of Expenditure on Assets (where known)			
	Energy efficiency and demand side management, reduction of energy losses			
	Overhead to underground conversion	8,927	4,007	(55%
	Research and development	0,527	-	-
			1	
	7(v): Subcomponents of Operational Expenditure (where known)			
	Energy efficiency and demand side management, reduction of energy losses		21	
	Direct billing		-	-
	Research and development	350	90	(74%)
	Insurance	172	118	(31%)
	1 From the nominal dollar target revenue for the disclosure year disclosed under clause 2.4.3			
		131 of this determina	tion	



Image Image <th< th=""><th>Charactery June Charactery June Charactery</th><th>Construction Antioentity Antioentity Any work for Antioentity Antioentity Antioentity Antioentity Any work for Antioentity Antioentity Antioentity Antioentity Antioentity Antioentity Antioentity Antioentity Antioentity Antioentity Antioentity Antioentity<!--</th--><th></th><th></th><th></th><th></th><th>1</th><th>es.</th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th>J</th></th></th<>	Charactery June Charactery	Construction Antioentity Antioentity Any work for Antioentity Antioentity Antioentity Antioentity Any work for Antioentity Antioentity Antioentity Antioentity Antioentity Antioentity Antioentity Antioentity Antioentity Antioentity Antioentity Antioentity </th <th></th> <th></th> <th></th> <th></th> <th>1</th> <th>es.</th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th>J</th>					1	es.										J
Concernational Concentr	Control Multi Control Multi Mul	Construction Antioentity Antioentity Any work for Antioentity Antioentity Antioentity Antioentity Any work for Antioentity Antioentity Antioentity Antioentity Antioentity Antioentity Antioentity Antioentity Antioentity Antioentity Antioentity Antioentity </td <td></td> <th></th> <th></th> <td>pery code, and the ever</td> <td>d susatifies by seles con</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>+</td> <td></td> <td>•</td>				pery code, and the ever	d susatifies by seles con									+		•
Concernational Concentr	Control Multi Control Multi Mul	Construction Antioentity Antioentity Any work for Antioentity Antioentity Antioentity Antioentity Any work for Antioentity Antioentity Antioentity Antioentity Antioentity Antioentity Antioentity Antioentity Antioentity Antioentity Antioentity Antioentity </td <td></td> <th></th> <th>Network /</th> <td>y delivered to these K</td> <td>poment</td> <td></td>			Network /	y delivered to these K	poment											
Number of the state o	Image: control in the contro	Number of the second	Company Nam	For Year Ende	Sub-Network Nam			_										
Membershall Instantion Description Description <thdescription< th=""> <thdescription< th=""></thdescription<></thdescription<>	Image: state	Image: second							per MMA						1	1		
Image: section of the sectio	International (1990) Internati	Image: state		No. of the other of the					yeb ber			-			-			
International International International International International Internal Internationa	Automatical	Image: state			Construction of						~	~ .	-					
Consensition Consensition Particular Pa	Alternotic Alternotic	Induction Induction Constant to intermediate Induction Induction Constant to intermediate Induction Induction Constant to intermediate Induction Induction Intermediate Induction Ind	1.		20101010						235.965	37,270	2.063	185.85				
Consentition Internation Inte	Alternotion Alternotion Alternotion	Alternetis Alternetis Consents (* Name) 200 Consents (* Name) 200 Consents (* Name) 200 Consents (* Name) 200 Partine (*) Partine (*)			10 mm			ion Credit Connects			112,976	2,462		29,422		1		
Metatral MD Metatral MD Metatral MD	Alternotical Alternotical Information Info	IAMACHINAMIA Alfancia UO Mananuo Man	Contraction of	the second											,	13.100	1,191	
	I Alkheverks I Arkenerik I Ar	Alteriorative for the second s	THE PARTY OF	10.15.2 Store	01001000													
		Material Automatics Period Anternatics	EA Network	31 March 20							1							
Network (Market Control (Marke	Provide the second s							Large User MD	per kVA per month									
0 byte united byte of the other of the other other of the other ot	l tope from France Lange (1994 1000 1000 1000 1000 1000 1000 1000	Lurge User Mo						Larg	peckiw						1	1		
Large U	Large Univ Connected VW per VW day	large Unit Connected I VII per VIX day							i.	1				-		-		

Add extra columns for odditional billed quantities by price component os necessory

per k/Wh

25

139,291 167 68

186,982

133,641

17,929 356,067,762 676,71

ļ		
1	Ŗ	
	aller	
a loss of the	0000	
1	500	
	1000	
ŝ		
200		
	TRACK OF	
Į		

Image: state in the state	equires the billed quantities as	ind associated line charge revenue.	Desired of the strengthene of the state of the state of the state of the strengthene of t	UES v the EDB in its pricing sche	eduler. Information is also requir.	ed on the number of ICPs the	at are included in each a	tentumer group or price	ateany code, and th	ret	three ICP.	Network / Sub-Network Name I to these KPt.						and and		151580			1.5				
International state of the state o	ine Charge Revenues (\$	\$000) by Price Componen																									
Matching and statistical statis								-1	the charge revenues	\$6069 by pelon compa	nent																
Matrix function Matrix fun								Price component											Industrial MD	Industrial Peak MD							StreetSphiling
1000 1000 <th< td=""><td>Consumer group name er pi category code</td><td>rtka Consumer type or types (s. residential, commercial etc.</td><td>Mandard er non-standard consumer group (speelby)</td><td>Total See charge revenue In disclosure year</td><td>Notional revenue a foregone from posted discounts (if applicable)</td><td>Total distribution line charge revenue</td><td>Tatal It an univelo Rea charge reserve (X reserve)</td><td>the (eg. 5 per day, 5 per AWh, etc.)</td><td>top and</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>per UW day</td><td>per KW</td><td>per MVA per month</td><td>per KVA per month</td><td>per IVA per month</td><td>-</td><td>-</td><td></td><td></td><td>KWh per fitting per day</td><td>perda</td></th<>	Consumer group name er pi category code	rtka Consumer type or types (s. residential, commercial etc.	Mandard er non-standard consumer group (speelby)	Total See charge revenue In disclosure year	Notional revenue a foregone from posted discounts (if applicable)	Total distribution line charge revenue	Tatal It an univelo Rea charge reserve (X reserve)	the (eg. 5 per day, 5 per AWh, etc.)	top and								per UW day	per KW	per MVA per month	per KVA per month	per IVA per month	-	-			KWh per fitting per day	perda
0 0	General Suendy - 20 LVA	General	Gandeed	(accord		101.02		L																			
0 0	General Supply - 50 MA	General	Gradied	Canada Canada		10/10			1985	11111	loss	513		5			1		1		-	-				£	ŀ
01 010 01	Ceneral Supply - 100 NVA	General	Standard	011.52		81070	~		100	25.825	100	x 3		s. 1		2			*			1	1				•
0.001 0.011 <	General Supply - 150 kVA	General	Standard	54.016	-	052.85			205	53 919	55	100										•	1	1	•		1
$ = \frac{1000}{1000} = \frac{1000}{1$	N/A	General	Standard	3		5			55											-		•	•		•	•	1
$ \frac{1}{1000} = $	Irreston		Standard	\$17,618		515 104				•	•	•	•				1288712							-	•		
$ \frac{1}{1000} = $	Irrigation Harmpiele Penatry	T	Standard	\$194	-	MIS										1	\$104										
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Direct Sumbly , Day Demand		Condard Provident	106'15		38715			•	1								1	51.907		1	•	1				ŀ
$ \frac{100}{100} = \frac{100}{100} =$	Direct Supply - Peak Demand		Candard	and and a		2/4													\$35		3	2	2	1			1
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	CMP		Standard	2580		2875														515	855			4			•
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Silver Fern Farms	Large User	Standard	165	-	85															•		1NCS	5837	,		1
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Mit Hutt Ski Area	Large User	Standard	\$198		5135				1	•	•											115	615			•
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Highbank Pomps	Large User	Standard	1515		M12			•			•											5129	66			1
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Highbank Generation	Generation	Standard	2005	-	\$305				1		3													198		ł
	Montalto Generation	Generation	Candard	SM	7	514					•	2											100				ŀ
	Clear date Generation	Generation	Standard	531	-	115																	100				
	Lavington Generation	Generation	Candard	31	-								1						•				13				ľ
	Street Lighting	Street Lightling	Standard	\$283	-	1825					•	1					•				•						100
Include removed and the remove	ALL STILL FOWL FOR GORIGHT	or consumer proups or price catego	V codes as necessary					L		-	-	-			-												
Total for al reviewent			Non-standard consumer totals			708.454			51.267	520.076	5962	\$15															
			Total for all consumers		-	\$35,802			\$1,267	320,076	2982	\$15								T	t						
	S(H): Number of ICPs directly billed	r billed				1	1													1							

Company Name	Electricity Ashburton Limited
For Year Ended	31 March 2019
Network / Sub-network Name	Eanetworks

SCHEDULE 9a: ASSET REGISTER

Г

sch ref

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.

					Items at start of	Items at end of		Data accuracy
8	Voltage	Asset category	Asset class	Units	year (quantity)	year (quantity)	Net change	(1-4)
9	All	Overhead Line	Concrete poles / steel structure	No.	2,483	2,399	(84)	4
10	All	Overhead Line	Wood poles	No.	27,187	26,174	(1,013)	4
11	All	Overhead Line	Other pole types	No.	-	-		[Select one]
12	HV	Subtransmission Line	Subtransmission OH up to 66kV conductor	km	387	378	(9)	4
13	HV	Subtransmission Line	Subtransmission OH 110kV+ conductor	km	-	-	- 11	[Select one]
14	HV	Subtransmission Cable	Subtransmission UG up to 66kV (XLPE)	km	7	7	(0)	4
15	HV	Subtransmission Cable	Subtransmission UG up to 66kV (Oil pressurised)	km	-	-	-	[Select one]
16	HV	Subtransmission Cable	Subtransmission UG up to 66kV (Gas pressurised)	km	-	-	-	[Select one]
17	HV	Subtransmission Cable	Subtransmission UG up to 66kV (PILC)	km	-	-	-	[Select one]
18	HV	Subtransmission Cable	Subtransmission UG 110kV+ (XLPE)	km	-	-	-	[Select one]
19	HV	Subtransmission Cable	Subtransmission UG 110kV+ (Oil pressurised)	km	-	-	-	[Select one]
20	HV	Subtransmission Cable	Subtransmission UG 110kV+ (Gas Pressurised)	km	-	-		[Select one]
21	HV	Subtransmission Cable	Subtransmission UG 110kV+ (PILC)	km	_	_		[Select one]
22	HV	Subtransmission Cable	Subtransmission submarine cable	km	_	-		[Select one]
23	HV	Zone substation Buildings	Zone substations up to 66kV	No.	28	27	(1)	3
24	HV	Zone substation Buildings	Zone substations 110kV+	No.	_	-		[Select one]
25	HV	Zone substation switchgear	50/66/110kV CB (Indoor)	No.	_	_	-	3
26	HV	Zone substation switchgear	50/66/110kV CB (Outdoor)	No.	68	66	(2)	3
27	HV	Zone substation switchgear	33kV Switch (Ground Mounted)	No.	-	-	-	[Select one]
28	HV	Zone substation switchgear	33kV Switch (Pole Mounted)	No.	157	165	8	3
29	HV	Zone substation switchgear	33kV RMU	No.	-	-		3
30	HV	Zone substation switchgear	22/33kV CB (Indoor)	No.	_	-	-	3
31	HV	Zone substation switchgear	22/33kV CB (Outdoor)	No.	32	32	_	3
32	HV	Zone substation switchgear	3.3/6.6/11/22kV CB (ground mounted)	No.	207	192	(15)	3
33	HV	Zone substation switchgear	3.3/6.6/11/22kV CB (pole mounted)	No.	3	3	_	[Select one]
34	HV	Zone Substation Transformer	Zone Substation Transformers	No.	36	36	-	[Select one]
35	HV	Distribution Line	Distribution OH Open Wire Conductor	km	2,021	1,954	(67)	3
36	HV	Distribution Line	Distribution OH Aerial Cable Conductor	km	_	-	-	[Select one]
37	HV	Distribution Line	SWER conductor	km	-	-	-	[Select one]
38	HV	Distribution Cable	Distribution UG XLPE or PVC	km	265	273	8	3
39	HV	Distribution Cable	Distribution UG PILC	km	4	5	1	3
40	HV	Distribution Cable	Distribution Submarine Cable	km	_	-	-	[Select one]
41	HV	Distribution switchgear	3.3/6.6/11/22kV CB (pole mounted) - reclosers and sectionalisers	No.	26	27	1	3
42	HV	Distribution switchgear	3.3/6.6/11/22kV CB (Indoor)	No.	-	-		[Select one]
43	HV	Distribution switchgear	3.3/6.6/11/22kV Switches and fuses (pole mounted)	No.	7,650	7,707	57	2
44	HV	Distribution switchgear	3.3/6.6/11/22kV Switch (ground mounted) - except RMU	No.	-	-	-	[Select one]
45	HV	Distribution switchgear	3.3/6.6/11/22kV RMU	No.	481	491	10	3
46	HV	Distribution Transformer	Pole Mounted Transformer	No.	5,154	4,990	(164)	3
47	HV	Distribution Transformer	Ground Mounted Transformer	No.	2,176	2,242	66	3
48	HV	Distribution Transformer	Voltage regulators	No.	2	2		3
49	HV	Distribution Substations	Ground Mounted Substation Housing	No.	501	492	(9)	3
50	LV	LV Line	LV OH Conductor	km	96	78	(18)	3
51	LV	LV Cable	LV UG Cable	km	344	389	45	3
52	LV	LV Street lighting	LV OH/UG Streetlight circuit	km	272	310	38	3
53	LV	Connections	OH/UG consumer service connections	No.	19,653	19,868	215	2
54	All	Protection	Protection relays (electromechanical, solid state and numeric)	No.	202	248	46	3
55	All	SCADA and communications	SCADA and communications equipment operating as a single system	Lot	1	1		4
56	All	Capacitor Banks	Capacitors including controls	No	-			[Select one]
57	All	Load Control	Centralised plant	Lot	3	3		3
58	All	Load Control	Relays	No	381	381	-	1
59	All	Civils	Cable Tunnels	km	-			[Select one]

olate
Temp
Disclosure
Information
Commission
Commerce

						or cable and lin	that that	e expressed in	km, refer to cir	uit lengths.													A			
96	SCHEDULE 9b: ASSET AGE PROFILE					o cable and lin	a secole that a	e expressed in	km, refer to cir	cuit lengths.																
quire	This schedule requires a summary of the age profile based on year of installation) of the assets that make up the network by asset caregory and asset class. All units relating to cable and line assets, that are expressed in km, refer to circuit lengths	at make up the network, by asse	et category and	asset class. All u	units relating.		a vest felaces																			
Disc	Disclosure Year (year ended) [31 March 2019							Num	Number of assets at disclosure year end by installation date	disclosure year	end by installa	tion date														
				1940 1950	50 1960	1970		1990																£		with
Ass		Units	pre-1940	-1949 -1959	-196	-1-	'	-1999 2000	2001	2002 2003	3 2004	2005	2006 2007	7 2008	2009	2010 2	2011 2012	12 2013	2014	2015	2016 2	2017 2018	2019	age unknown (year default (quantity) dates	default Data accuracy dates (1-4)
	Overhead une Concrete poles / steel structure Overhead Tine Wood notes	No.		6	20 16		\downarrow							_		9					1	3	11			L
		NO.		183	213 134	848	3,110 6	6,520 815	280	1,543 1	1,142 775	825	581	697 1,037	937	610	479 4	400 404	4 471	496	477	479 54	541 557		26,174	4
Sub	line	NO.												-											1	[Select one
4 N					7	4	43	32	10	100	41 5	11	7	18	13	15	1	6	5 12	13	6	5	4 2	1	378	4
		Ex .	'		1	1		1		1	1	4	1	•	1	1		1	1		1	1	1	1	ï	[Select one
			-	1	1	ſ	4	1	1	1	0	0	0	1	1		-	- 0	1	1		1	1	1	7	4
and i			1	1	1	1	1	1	1	1	1	i.	1		1	1		1	•	1	4	1	1	1		Solect one
			t	1	r i	1	ĩ	1	1	1	3	ï	1	1	1	1	1		1	Ì	1	1	1	1	1	Salact one
an i		ka	1	1	1	1	i	1	ł	ł.	t.	i	1	1	1	1		1	•	1	1	1	1	1	1	Select one
ang .			1	1	1	3	1	1	•	1	1	-	1	- E	1	÷	1	1	1	1		1		1	1	Select one
a i			1	t.	ı r	I.	1	1	1	1	1	-	1	1	1	1	1	1	1	1	1	1	•	1		[Salact one
Sub			1	1	1	1	1	1	P	1	5	i.	1		1	1			1			1				fCalart one
Sub		km	ĩ	1	1	1	-	1	1	1	1	1	1	1	I	1	1	-	1	1	1	-		1		feature and
Sub		km	1	1	i i	1	1	1	1	1	1	1	1		1)	1		1	1	1	1				Colorit and
Zon		No.			~	2	3		3	3	1 2		2	2	2							0			76	1 Scient
Zon		No.																								f Calact one
You		No.																							-	[Salact one
Zon		No.		_					6	15	2 2	7		7	1		2						10		VV	12000
Noy .		No.		+			-																			ISelect one
107	Zone substation switchgear 33KV Switch (Pole Mounted)	No.				2	42	10	2 5	23	3	6	6	7				6	9			6	8		165	3
Zom		NO.				+							-	_		1									1	[Select one
Zone		No			15	c	12	•				T	+				+	+				-			1	[Select one
Son	Zone substation switchgear 3.3/6.6/11/22kV CB (ground mounted)	No.				00	1	6		v	5 37	4	10	10 10					,	•	4		-		32	m
Con		No.						>		2	1		17		-			0	4	8		2	40 3		192	6
ou	Zone Substation Transformer Zone Substation Transformers	No.				4 1	4	2	50	2	2 5				1			•	-			-	1		m 12	m (
ist		ку ка	1	3	14 26	82	313	507 5	56 45	123	94 61	58	37	53 69	65	48	40	28	27 33	33	33	33	33 41	1	1 05.4	
ist.		к¥	1	1	1	1		1	T	1	1	r		•		ī		ľ	ľ	1					-	Salect one
is i		km	1	i.	1	1	1	1	1	4	1	1	1	-		1	i i		1	1	1	1	1	1	1	[Select one
i St		Ę	1	1	-	**	37	24	4	2	6	4	7	11 6	5	9	11	13 1	19 8	15	24	26 1	18 12	1	273	~
ISI I	Distribution Cable Distribution UG PILC	Ę,	1	1	-	4	-	1	1	1	1	t	1	•	1	ł.	1		1	a.	1	1	1	1	5	~
	Distribution capie	mx	1	1		1		1	2		•		1	•	1	1	1	1	1	i.		1	1	÷	1	[Select one
Distu						-	^	4	7	m	2	e	-			1	+	+				-			27	3
Diste				11	37 63	3 75	215	498	6.0 135	250	247	270	300	241 45.4	103	000	100	100							1	[Select one
Dist	Distribution switchgear 3.3/6.6/11/22kV Switch (ground mounted) - except RMU	d) - except RMU No.								ì						107			727	717	457	220	50 176	1,400	7,707	2
Dist						19	59	91 1	14 9	8	12 11	9	28	16 31	9	62	10	19	19 25	18	12	25, 35	17 5		401	Select one
Nst		No.	1	1	75 303	577	462	625 175	5 73	48	-	125		~	263	203				137	171		45 51		4 990	0 9
Dist	Distribution Transformer Ground Mounted Transformer	No.		2	42 61	154	161	191 27	1 17	29	39 44	73	112	85 85	121	88	66			120	166					
Dist		No.				1														~	201				2,042	0 00
Dist	tion Substations	No.			-	40	71	98 1	14 8	7	9	6	14	14 13	13	21	35	14 2	26 24	19	11	1	19 3		492	1
LV Une		щ	0	4	6 12		16	19	1 1	1	1 1	1	0	1	1	0	0	0	0 0	0	0	0	1 0	1	78	
		ka	1		1	6 24	65	66	6	5	7 5	80	12	11 10	11	88	18	10 1	12 15	16	11	16 1	18 14	1	389	~
	LV Street ignung LV UH/UG Streetinght circuit	Ę :	1		3 13	22	54	58		4			9			9		7	8 11	11	10	12 12	13 10	1	310	
Dept			1	×.	1	1	1	- 14.169	287	294	287 342	271	222	362 422	467	263	339 2	283 33	331 307	293	265		225 229	1	19,868	2
SC A	communications					+	+	+		2	5	-	9	1 6	1			6	3	9	6	20 5	53 118	3	248	2
Cap	conservents communications occurs and communications equipment operating as a single sys Canaditor Banks	operating as a single sys Lot					+	+			-			-				_				-		1	1	3
Load		No.					•			+				-		1	+	+				-			r	[Select one
Load		No.	t		+	1	-	+	T	-	_		+	-	T	T	-	_		T	+	+			e	e .
Civils		, m				F				╞	-		-			-		+		T	+		_	381	381	-
							-	_				-	-	_		-	_	_			-			-		[Select one

EDB-ID-determination-templates-for-schedules-1-to-10-v4 (version 1-2019).xlsb.xlsx

S9b.Asset Age Profile

	Company Name	ALL ALL ALL ALL	EA Networks	
	For Year Ended		31 March 2019	
	Network / Sub-network Name			
CCUI	EDULE 9c: REPORT ON OVERHEAD LINES AND UNDERGROUND CABLES	Contraction of the second	NY CHENNEN P	an a
	nedule requires a summary of the key characteristics of the overhead line and underground cable network. All units re	lating to cable and I	ine assets, that are ex	pressed in km, r
to circu	it lengths.			
h ref				
n rej				
9				
				Total circuit
0	Circuit length by operating voltage (at year end)	Overhead (km)	Underground (km)	length (km)
1	> 66kV	-	-	-
2	50kV & 66kV	285	2	28
.3	33kV	93	5	9
4	SWER (all SWER voltages)	()	-	
5	22kV (other than SWER)	1,369	114	1,4
6	6.6kV to 11kV (inclusive—other than SWER)	585	164	74
7	Low voltage (< 1kV)	78	389	41
8	Total circuit length (for supply)	2,409	674	3,0
9				
0	Dedicated street lighting circuit length (km)	28	282	3:
1	Circuit in sensitive areas (conservation areas, iwi territory etc) (km)			-
2			10/	
3	Overhead circuit length by terrain (at year end)	Circuit length (km)	(% of total	
4	Urban	91	4%	
5	Rural	2,263	94%	
6	Remote only	55	2%	
7	Rugged only		-	
8	Remote and rugged	_	-	
9	Unallocated overhead lines	-	_	
0	Total overhead length	2,409	100%	
1				
			(% of total circuit	
2		Circuit length (km)	length)	
3	Length of circuit within 10km of coastline or geothermal areas (where known)	466	15%	
			(% of total	
4		Circuit length (km)		

	Company Name	EA Ne	tworks
	For Year Ended	31 Mai	rch 2019
EDULE 9d: REPORT ON EMBEDDED NE nedule requires information concerning embedded networks	TWORKS owned by an EDB that are embedded in another EDB's network or in another emb	bedded network.	
Location *		Number of ICPs served	Line charge reven (\$000)
Upper Rakaia on Orion Network		13	
	ry to disclose each embedded network owned by the EDB which is embedded in a		

	Company Name	EA Networks
	For Year Ended	31 March 2019
	Network / Sub-network Name	
SC	CHEDULE 9e: REPORT ON NETWORK DEMAND	
	s schedule requires a summary of the key measures of network utilisation for the disclosure year (number of ne	w connections including
	tributed generation, peak demand and electricity volumes conveyed).	
ch re	4	
ch re		
8	9e(i): Consumer Connections	
9	Number of ICPs connected in year by consumer type	
10		Number of
10	Consumer types defined by EDB*	connections (ICPs)
11 12	General Irrigation	231
13	Industrial	(2)
14	[EDB consumer type]	(2)
15	[EDB consumer type]	
16	* include additional rows if needed	
17	Connections total	238
18		
19	Distributed generation	
20	Number of connections made in year	45 connections
21	Capacity of distributed generation installed in year	0 MVA
22	0a/ii): Sustan Damand	
22 23	9e(ii): System Demand	
23		
-		Demand at time
		of maximum coincident
		demand (MW)
25	Maximum coincident system demand	
26 27	GXP demand <i>plus</i> Distributed generation output at HV and above	157
28	Maximum coincident system demand	158
29	less Net transfers to (from) other EDBs at HV and above	(0)
30	Demand on system for supply to consumers' connection points	158
31	Electricity volumes carried	Energy (GWh)
32	Electricity supplied from GXPs	414
33	less Electricity exports to GXPs	0
34	plus Electricity supplied from distributed generation	146
35	less Net electricity supplied to (from) other EDBs	(0)
36	Electricity entering system for supply to consumers' connection points	560
37 38	less Total energy delivered to ICPs Electricity losses (loss ratio)	502 58 10.4%
39	Licentery 103363 (1033 Tario)	58 10.4%
40	Load factor	0.40
41	9e(iii): Transformer Capacity	
42		(MVA)
43	Distribution transformer capacity (EDB owned)	582
44	Distribution transformer capacity (Non-EDB owned, estimated)	7
45	Total distribution transformer capacity	589
46		
47	Zone substation transformer capacity	364

		Company Name	E	A Networks
		For Year Ended	31	March 2019
	Network / Sub	-network Name		
SCH	EDULE 10: REPORT ON NETWORK RELIABILITY		and the second second	
1000	hedule requires a summary of the key measures of network reliability (interruptions, SAIDI, SAIFI and fault rat	te) for the disclosu	e vear EDBs must n	rovide explanatory comme
	ir network reliability for the disclosure year in Schedule 14 (Explanatory notes to templates). The SAIFI and SA			
	1.4 of the ID determination), and so is subject to the assurance report required by section 2.8.			
ref				
	10(i): Interruptions			
		Number of		
9	Interruptions by class	interruptions	-	
	Class A (planned interruptions by Transpower)			
	Class B (planned interruptions on the network)	260		
	Class C (unplanned interruptions on the network)	226		
	Class D (unplanned interruptions by Transpower)	-		
	Class E (unplanned interruptions of EDB owned generation)	-		
	Class F (unplanned interruptions of generation owned by others)	-		
7	Class G (unplanned interruptions caused by another disclosing entity)	-		
	Class H (planned interruptions caused by another disclosing entity)	-		
	Class I (interruptions caused by parties not included above)	-		
9	Total	486		
2				
	Interruption restoration	≤3Hrs	>3hrs	
	Class C interruptions restored within	186	40	
1	SAIFI and SAIDI by class	SAIFI	SAIDI	
	Class A (planned interruptions by Transpower)	-	-	
	Class B (planned interruptions on the network)	0.40	127.45	
	Class C (unplanned interruptions on the network)	1.06	69.97	
	Class D (unplanned interruptions by Transpower)	-	-	
	Class E (unplanned interruptions of EDB owned generation)	-	-	
	Class F (unplanned interruptions of generation owned by others)	-	—	
	Class G (unplanned interruptions caused by another disclosing entity)	-	-	
	Class H (planned interruptions caused by another disclosing entity)	-	-	
	Class I (interruptions caused by parties not included above)	-	-	
	Total	1.46	197.4	
		Normalised SAIFI		
	Classes B & C (interruptions on the network)	1.46	197.43	per 2012 determination
	tClasses B & C (Assessed values for Default Price-Quality Path Determination)	1.20	133.70	
	Glasses Did C (Assessed values for Deladit Frice-Quality Fath Determination)	1.20	155.70	

	C	Company Name	EA Ne	tworks
		For Year Ended		ch 2019
		network Name		
			e na stan a con strant es	Contraction of the local data
50	CHEDULE 10: REPORT ON NETWORK RELIABILITY			
on	is schedule requires a summary of the key measures of network reliability (interruptions, SAIDI, SAIFI and fault rat their network reliability for the disclosure year in Schedule 14 (Explanatory notes to templates). The SAIFI and SAI ction 1.4 of the ID determination), and so is subject to the assurance report required by section 2.8.			
39 40	10(ii): Class C Interruptions and Duration by Cause			
41	Cause	SAIFI	SAIDI	
42	Lightning	0.15	4.15	
43	Vegetation	0.03	1.28	
44	Adverse weather	0.25	22.15	
45	Adverse environment	0.01	1.34	
46	Third party interference	0.13	9.43	
47	Wildlife	0.07	4.95	
48	Human error	0.00	0.01	
49	Defective equipment	0.20	16.74	
50 51	Cause unknown	0.22	9.92	
51				
52 53	10(iii): Class B Interruptions and Duration by Main Equipment Involved			
54	Main equipment involved	SAIFI	SAIDI	
55	Subtransmission lines	0.03	11.73	
56	Subtransmission cables	-	-	
57	Subtransmission other	-	-	
58	Distribution lines (excluding LV)	0.34	106.67	
69	Distribution cables (excluding LV)	0.03	9.06	
60	Distribution other (excluding LV)	-	-	
61 62	10(iv): Class C Interruptions and Duration by Main Equipment Involved			
63	Main equipment involved	SAIFI	SAIDI	
64	Subtransmission lines	0.17	7.81	
65	Subtransmission cables	-	-	
66	Subtransmission other	0.07	0.78	
67	Distribution lines (excluding LV)	0.79	60.87	
68	Distribution cables (excluding LV)	-	-	
69	Distribution other (excluding LV)	0.02	0.51	
70	10(v): Fault Rate			
71	Main equipment involved	Number of Faults Cir	cuit longth (km)	Fault rate (faults per 100km)
72	Subtransmission lines	9	378	2.38
73	Subtransmission rables	1	7	14.29
74	Subtransmission cables	3	· · ·	14.29
75	Distribution lines (excluding LV)	232	1,954	11.87
76	Distribution rables (excluding LV)		279	-
77	Distribution other (excluding LV)	3	215	
78	Total	248		

Company	Name	E

EA Networks

For Year Ended 31 March 2019

Schedule 14 Mandatory Explanatory Notes

(Guidance Note: This Microsoft Word version of Schedules 14, 14a and 15 is from the Electricity Distribution Information Disclosure Determination 2012 – as amended and consolidated 3 April 2018. Clause references in this template are to that determination)

- 1. This schedule requires EDBs to provide explanatory notes to information provided in accordance with clauses 2.3.1, 2.4.21, 2.4.22, and subclauses 2.5.1(1)(f),and 2.5.2(1)(e).
- 2. This schedule is mandatory—EDBs must provide the explanatory comment specified below, in accordance with clause 2.7.1. Information provided in boxes 1 to 11 of this schedule is part of the audited disclosure information, and so is subject to the assurance requirements specified in section 2.8.
- 3. Schedule 15 (Voluntary Explanatory Notes to Schedules) provides for EDBs to give additional explanation of disclosed information should they elect to do so.

Return on Investment (Schedule 2)

4. In the box below, comment on return on investment as disclosed in Schedule 2. This comment must include information on reclassified items in accordance with subclause 2.7.1(2).

Box 1: Explanatory comment on return on investment

ROI – Comparable to a post-tax reflecting all revenue is:

- comparable to the 75 percentile post-tax.
- slightly down from the prior year, due to increasing costs

4 Information on reclassified items in accordance with subclause 2.7.1(2)

There has been no re-classification of items in the disclosure year.

Regulatory Profit (Schedule 3)

- 5. In the box below, comment on regulatory profit for the disclosure year as disclosed in Schedule 3. This comment must include-
 - 5.1 a description of material items included in other regulated income (other than gains / (losses) on asset disposals), as disclosed in 3(i) of Schedule 3
 - 5.2 information on reclassified items in accordance with subclause 2.7.1(2).



Box 2: Explanatory comment on regulatory profit

5.1 A description of material items included in other regulated income (other than gains / (losses) on asset disposals), as disclosed in 3(i) of Schedule 3

Other regulatory income	\$'000
New connection fees	288
Other income	6
Sale of scrap	130
Total other regulatory income	424

5.2 information on reclassified items in accordance with subclause 2.7.1(2)

Business support costs have been reclassified from 'directly attributable' to 'not directly attributable', as result of the adoption of ABAA allocation methodology.

Merger and acquisition expenses (3(iv) of Schedule 3)

- 6. If the EDB incurred merger and acquisitions expenditure during the disclosure year, provide the following information in the box below-
 - 6.1 information on reclassified items in accordance with subclause 2.7.1(2)
 - 6.2 any other commentary on the benefits of the merger and acquisition expenditure to the EDB.

Box 3 Merger and acquisition expenses

No merger or acquisition occurred in the reporting period.

No items have been reclassified in accordance with subclause 2.7.1(2)

Value of the Regulatory Asset Base (Schedule 4)

7. In the box below, comment on the value of the regulatory asset base (rolled forward) in Schedule 4. This comment must include information on reclassified items in accordance with subclause 2.7.1(2).

Box 4: Explanatory comment on the value of the regulatory asset based (rolled forward) All assets commissioned, decommissioned and depreciated in the year have followed the requirements of the determination.

With the adoption of ABAA \$9.613M of 'non-network assets directly attributable' has been reclassified as 'non-network assets not directly attributable'. After the ABAA allocators were applied non-network assets directly attributable allocated RAB decreased by \$0.816M. Which leaves a closing allocated RAB balance of \$8.797M for non-network assets not directly attributable.



Regulatory tax allowance: disclosure of permanent differences (5a(i) of Schedule 5a)

- 8. In the box below, provide descriptions and workings of the material items recorded in the following asterisked categories of 5a(i) of Schedule 5a-
 - 8.1 Income not included in regulatory profit / (loss) before tax but taxable;
 - 8.2 Expenditure or loss in regulatory profit / (loss) before tax but not deductible;
 - 8.3 Income included in regulatory profit / (loss) before tax but not taxable;
 - 8.4 Expenditure or loss deductible but not in regulatory profit / (loss) before tax.

Box 5: Regulatory tax allowance: permanent differences	
8.1 Income not included in regulatory profit / (loss) before tax but taxable	\$'000
Capital Contributions	188
Total	188

Prior to 2014 EA Networks accounted for capital contributions using the 10 year amortisation method for tax. From 2014 capital contributions have been offset against network assets for tax purposes. The \$188k represents amortisation of capital contributions paid prior to the start of 2014 year

8.2 Expenditure or loss in regulatory profit / (loss) before tax but not deductible	\$'000
Account profit on PPE sold	714
	714

8.3 Income included in regulatory profit / (loss) before tax but not taxable	\$'000
Movement in hoilday pay and ACC accruals	7
Total	7

8.4 Expenditure or loss deductible but not in regulatory profit / (loss) before tax\$'000Tax loss on assets sold265Total265

Regulatory tax allowance: disclosure of temporary differences (5a(vi) of Schedule 5a)

 In the box below, provide descriptions and workings of material items recorded in the asterisked category 'Tax effect of other temporary differences' in 5a(vi) of Schedule 5a.



	2018	2019
Employee entitlements	284	286
Provision for ACC	10	1
	294	287
Less 2018		294
Movement		(7

Cost allocation (Schedule 5d)

10. In the box below, comment on cost allocation as disclosed in Schedule 5d. This comment must include information on reclassified items in accordance with subclause 2.7.1(2).

Box 7: Cost allocation

ABAA (accounting-based allocation approach) has been applied to allocate not directly attributable costs in the disclosure year in accordance with the IM determination.

Proxy cost allocators have been used due to no direct relationship between not directly attributable business support operating costs and the manner in which costs are incurred.

Asset allocation (Schedule 5e)

11. In the box below, comment on asset allocation as disclosed in Schedule 5e. This comment must include information on reclassified items in accordance with subclause 2.7.1(2).

Box 8: Commentary on asset allocation

ABAA (accounting-based allocation approach) has been applied to allocate not directly attributable costs for the first time in the disclosure year in accordance with the IM determination.

Proxy cost allocators have been used due to no direct relationship between not directly attributable non-network assets and use.

Capital Expenditure for the Disclosure Year (Schedule 6a)

- 12. In the box below, comment on expenditure on assets for the disclosure year, as disclosed in Schedule 6a. This comment must include-
 - 12.1 a description of the materiality threshold applied to identify material projects and programmes described in Schedule 6a;
 - 12.2 information on reclassified items in accordance with subclause 2.7.1(2).

Box 9: Explanation of capital expenditure for the disclosure year

Section 12.1 Materiality Threshold

A three-step principle based test is used to define materiality associated with schedule 6a.

1) The risk associated with the project in question: projects with notable risk are detailed in the schedule.

2) Projects which require notable financial investment are detailed individually. Currently notable financial investment is defined as above \$100k.

3) Projects individually reported in the 2018 AMP are reported on.

Section 12.2 Reclassified items

There has been no re-classification of items in the disclosure year.

Operational Expenditure for the Disclosure Year (Schedule 6b)

- 13. In the box below, comment on operational expenditure for the disclosure year, as disclosed in Schedule 6b. This comment must include-
 - 13.1 Commentary on assets replaced or renewed with asset replacement and renewal operational expenditure, as reported in 6b(i) of Schedule 6b;
 - 13.2 Information on reclassified items in accordance with subclause 2.7.1(2);
 - 13.3 Commentary on any material atypical expenditure included in operational expenditure disclosed in Schedule 6b, a including the value of the expenditure the purpose of the expenditure, and the operational expenditure categories the expenditure relates to.



Box 10: Explanation of operational expenditure for the disclosure year

Commentary on assets replaced or renewed reported in 6b(i) of Schedule 6b

Assets replacement and renewal	\$000's
Circuit Breakers	11
Distribution substations	132
Other	7
Overhead	381
Substation	15
Transformers	29
Underground	172
Zone Substation	555
Switchgear & Fuses	12
	1,313

Service interruptions and emergencies, vegetation management, routine and corrective maintenance and inspection and asset replacement and renewals are managed together. Collective costs are within 3% of forecasted costs stated in the AMP.

Information on reclassified items in accordance with subclause 2.7.1(2)

ABAA (accounting-based allocation approach) has been applied to allocate not directly attributable costs for the first time in the disclosure year in accordance with the IM determination. The impact of the ABAA is defined in other boxes within schedule 14.

Commentary on any material atypical expenditure included in operational expenditure disclosed in Schedule 6b, a including the value of the expenditure the purpose of the expenditure, and the operational expenditure categories the expenditure relates to.

There was no atypical expenditure in operational expenditure for the year.

Variance between forecast and actual expenditure (Schedule 7)

14. In the box below, comment on variance in actual to forecast expenditure for the disclosure year, as reported in Schedule 7. This comment must include information on reclassified items in accordance with subclause 2.7.1(2).



Box 11: Explanatory comment on variance in a	ctual to forecast expenditure			
Consumer connection				
	Forecast (\$000)	Actual (\$000)	Variance (\$000)	% Variance
Capacity/safety & other	1,042	546	(496)	
Rural with transformer new connection	1,555	1,206	(349)	
Rural LV	345	719	374	
Urban new connections	326	199	(127)	
Subdivision	0	405	405	
	3,268	3,075	(193)	(5.91%

Notes on Variances

Estimated customer connection expenditure for the AMP was set using historical trends and other information which EA Networks was aware of. Several factors beyond EA Networks control affect the actual number of and amount spent on new connections. For example, milk prices.

System Growth				
	Forecast (\$000)	Actual (\$000)	Variance (\$000)	% Variance
Subtransmission	732	524	(208)	
Zone Substations	2,297	1,395	(902)	
Distribution and LV lines	464	595	131	
Distribution and LV cables	195	128	(67)	
Distribution substations and transformers	1,108	576	(532)	
Distribution switchgear	67	76	9	
Other Network Assets	70	0	(70)	
	4,933	3,294	(530)	(10.73%)

Notes on Variances

Subtransmission: Project 66kV ENG-FTH was planned to be completed this year. A delay in the cable delivery has resulted in the 66kV ENG project completion date being deferred to next year.

Zone substation: The delay in the 66kV ENG-FTN project has resulted in the delay of associated projects whose costs are recorded under this heading.

Distribution substations and transformers: The AMP over forecasted the number of 22kV transformers which would be installed in the disclosure year.

Asset Replacement and Renewal				
	Forecast (\$000)	Actual (\$000)	Variance (\$000)	% Variance
Subtransmission	3,093	1,868	(1,225)	
Zone Substations	0	0	0	
Distribution and LV lines	3,564	1,680	(1,884)	
Distribution and LV cables	4,389	4,037	(352)	
Distribution substations and transformers	612	717	105	
Distribution switchgear	263	464	201	
Other Network Assets	20	3	(17)	
	11,941	8,769	(3,172)	(26.57%)

Notes on Variances

Subtransmission. Mainly due to a delay resulting from the delivery of the cable associated with the ENG-ASH Cable project.

Distribution LV lines. Mainly due to the upper Rakaia river project being delayed due to consenting and resourcing issues associated with other projects.



Quality of supply				
	Forecast (\$000)	Actual (\$000) V	ariance (\$000)	% Variance
Prior years all other projects		2	2	
[2017-2018] Rural Underground Conversion		268	268	
[2017-2018] SCADA - GridLink Configuration		22	22	
[2017-2018] ZSS - 66kV UG Cable Screens -		14	14	
[2017-2018] ZSS HTH - 22kV Switchboard Extension & Feeders		14	14	
[2018-2019] 11kV Metering point	31	2	(29)	
[2018-2019] Rural Ring Main Unit Installations	1,133	1,601	468	
[2018-2019] SCADA - Distribution Automation Programme	432	783	351	
[2018-2019] ZSS - Upgrading 110Vdc Supplies	91	77	(14)	
[2018-2019] ZSS - Control upgrades	75		(75)	
[2018-2019] 11 kV Core Network (urban)	421		(421)	
[2018-2019] OH Dampers installation	53		(53)	
[2018-2019] 66kV Synchrophasors	70		(70)	
All other projects programmes - quality of supply	112	71	(41)	
	2,418	2,854	436	18.04%

Notes on Variance

The [2017-2018] projects were carried over from the prior year, due to resourcing issues in the prior year.

[2018-2019] 11kV Metering point. Delayed due to resource consent issues.

[2018-2019] Rural Ring Main Unit Installations. Catch-up from prior years.

[2018-2019] SCADA – Distribution Automation Programme. Catch-up from prior years.

[2018-2019] ZSS – Upgrading 110Vdc Supplies. Equipment cost were less than expected

[2018-2019] ZSS – Control upgrades. Delayed due to engineering resourcing issues

[2018-2019] 11kV Core Network (urban). Delayed due to negotiating a MOU to work with the local council to open the footpath once and share costs.

[2018-2019] OH Dampers installation. Delayed due to resourcing

[2018-2019] 66kV Synchrophasors. Delayed due to resourcing

[2018-2019] 11kV Metering point Rakaia Gorge. Delayed due to consenting issue.

Other Reliability, Safety and Environment				
	Forecast (\$000)	Actual (\$000)	Variance (\$000)	% Variance
[2018-2019] All other projects or programmes - other reliability, safety and environment	55	34	(21)	
[2018-2019] Distribution Earthing Upgrades	386	234	(152)	
[2018-2019] ZSS Security and Surveillance Programme	31	22	(9)	
[2018-2019] UG Conversion - Rakaia Hwy (Mitcham Rd to Works Rd)	176	143	(33)	
[2018-2019] UG Conversion - Rakaia Hwy (Racecourse Rd to Golf Links Rd)	79	177	98	
[2018-2019] UG Conversion - State Hwy Road Crossings	86	0	(86)	
	813	610	(203)	(25.02%)

Notes on Variance

[2018-2019] Distribution earth upgrades. Delayed due to resourcing issue

[2018-2019] UG Conversion – Rakaia Hwy projects. Increased civil costs due to ducts in the ground not being able to be used

[2018-2019] UG Conversion – State Hwy Road Crossing. Delayed due to urgent unplanned undergrounding required in another part of the network.

Expenditure on non-network assets				
	Forecast (\$000)	Actual (\$000)	Variance (\$000)	% Variance
[2017-2018] Software - GIS Development	52	55	3	
[2018-2019] ZSS ASH - Building Improvements	103	33	(70)	
[2018-2019] Routine Info Tech	20	24	4	
[2018-2019] Routine vehicles	283	163	(120)	
[2017-2019] Software - Payroll Management and ERP development	231	155	(76)	
[2018-2019] DMR Reparter Stations for Rakaia Gorge	64	52	(12)	
[2018-2019] Software - Distribution Management System	988	442	(546)	
[2018-2019] Website Development	66	31	(35)	
[2018-2019] Routine Plant	10		(10)	
[2018-2019] ICP Management	106		(106)	
[2018-2019] Billing Engine Development	332		(332)	
[2018-2019] EV Charging Station	146		(146)	
[2018-2019] Website Development	100		(100)	
[2018-2019] Office Hardware & Reconfiguration	39		(39)	
All other projects or programmes - atypical expenditure	57	0	(57)	
	2,597	955	(1,642)	(63.22%)

Notes on Variances

[2018-2019] ZSS ASH-Building Improvements. Delayed due to focus on the 66kV cable project. [2018-2019] Routine vehicles. Lower number of units purchase due to operational requirements [2018-2019] Software – Payroll management and DRP development. Focus has been on embedding the software installed last year over development.

[2018-2019] Software – Distribution Management System. Timing issue associated with payment of software. [2018-2019] Website Development. Chose a lower cost development plan than was allowed for in the budget. [2018-2019] balance of projects. Delayed to next year, due to resources issues.

7(iii): Operational Expenditure

Operational expenditure is managed as a whole rather than on an individual basis. Overall operational expenditure is in line with the 2018 AMP.

Information on reclassified items in accordance with subclause 2.7.1(2)

ABAA (accounting-based allocation approach) has been applied to allocate not directly attributable costs for the first time in the disclosure year in accordance with the IM determination. The impact of the ABAA on the disclosure is explained in this schedule.

Information relating to revenues and quantities for the disclosure year

- 15. In the box below provide-
 - 15.1 a comparison of the target revenue disclosed before the start of the disclosure year, in accordance with clause 2.4.1 and subclause 2.4.3(3) to total billed line charge revenue for the disclosure year, as disclosed in Schedule 8; and
 - 15.2 explanatory comment on reasons for any material differences between target revenue and total billed line charge revenue.



Box 12: Explanatory comment relating to revenue for the disclosure year Line revenue for the year was within 1% of the target.

There are no material differences between targeted revenue and total billed line charge revenue

Network Reliability for the Disclosure Year (Schedule 10)

16. In the box below, comment on network reliability for the disclosure year, as disclosed in Schedule 10.

Box 13: In accordance with the notice published by the Commerce Commission on 22 August 2019, this box has not ben filled in. The information which would have normally been found in this box is recorded in schedule 15.

Insurance cover

- 17. In the box below, provide details of any insurance cover for the assets used to provide electricity distribution services, including-
 - 17.1 The EDB's approaches and practices in regard to the insurance of assets used to provide electricity distribution services, including the level of insurance;
 - 17.2 In respect of any self insurance, the level of reserves, details of how reserves are managed and invested, and details of any reinsurance.

Box 14: Explanation of insurance cover

Question 17.1 level of insurance

Where it is economically sensible to insure assets EA Networks has insurance in place. In practise this means that most items outside of substation fencing will not be insured.

Question 17.2 levels of reserves

Rather than holding insurance reserves EA Networks has identified the highest risk associated with the network is adverse weather conditions. In order to minimise this risk EA is undergrounding its networks when it is economically sensible to do so.

Amendments to previously disclosed information

- 18. In the box below, provide information about amendments to previously disclosed information disclosed in accordance with clause 2.12.1 in the last 7 years, including:
 - 18.1 a description of each error; and
 - 18.2 for each error, reference to the web address where the disclosure made in accordance with clause 2.12.1 is publicly disclosed.



Box 15: Disclosure of amendment to previously disclosed information No material errors have been identified.



Company Name	EA Networks
--------------	-------------

For Year Ended 31 March 2019

Schedule 14a Mandatory Explanatory Notes on Forecast Information

(In this Schedule, clause references are to the Electricity Distribution Information Disclosure Determination 2012 – as amended and consolidated 3 April 2018.)

- 1. This Schedule requires EDBs to provide explanatory notes to reports prepared in accordance with clause 2.6.6.
- 2. This Schedule is mandatory—EDBs must provide the explanatory comment specified below, in accordance with clause 2.7.2. This information is not part of the audited disclosure information, and so is not subject to the assurance requirements specified in section 2.8.

Commentary on difference between nominal and constant price capital expenditure forecasts (Schedule 11a)

3. In the box below, comment on the difference between nominal and constant price capital expenditure for the current disclosure year and 10 year planning period, as disclosed in Schedule 11a.

Box 1: Commentary on difference between nominal and constant price capital expenditure forecasts The difference is 0.0%. Costs have been prepared using 2018-19 values for labour, plant and materials. Years after 2018-19 have been escalated by the 2019-22 CPI Forecast by the New Zealand Government Treasury published on 14th December 2017. (http://www.treasury.govt.nz/budget/forecasts/hyefu2017)

Commentary on difference between nominal and constant price operational expenditure forecasts (Schedule 11b)

4. In the box below, comment on the difference between nominal and constant price operational expenditure for the current disclosure year and 10 year planning period, as disclosed in Schedule 11b.

Box 2: Commentary on difference between nominal and constant price operational expenditure forecasts The difference is 0.0% for 2019-20. Costs have been prepared using 2019-20 values for labour, plant and materials. Years after 2019-20 have been escalated by the 2020 CPI Forecast by the New Zealand Government Treasury published on 13th December 2018. (https://treasury.govt.nz/publications/efu/half-year-economic-and-fiscal-update-2018)

EA Networks considers the answers given for 3. and 4. represent the most prudent source of information available to EA Networks for the purpose of estimating future costs.

A vast range of alternative algorithms can be proposed and defended, but there is no authoritative judgement upon which is the most accurate and reliable.

EA Networks does not have sufficient internal expertise to promote any particular theory or speculate on how future costs will trend.

It is the opinion of EA Networks that the Treasury's CPI forecast is a reasonable indicator of future cost as it incorporates a range of factors that could influence the future cost of expenditure on the electricity network.

Even with additional cost escalation data, EA Networks current future cost modelling is not sufficiently granular to take full advantage of the additional detail.

The Treasury forecast extends to 2023. Beyond 2023, EA Networks have used the 2023 CPI value (2.2%) until 2029.

Company Name	EA Networks

For Year Ended 31 March 2019

Schedule 15 Voluntary Explanatory Notes

(In this Schedule, clause references are to the Electricity Distribution Information Disclosure Determination 2012 – as amended and consolidated 3 April 2018.)

- 1. This schedule enables EDBs to provide, should they wish to-
 - 1.1 additional explanatory comment to reports prepared in accordance with clauses 2.3.1, 2.4.21, 2.4.22, 2.5.1 and 2.5.2;
 - 1.2 information on any substantial changes to information disclosed in relation to a prior disclosure year, as a result of final wash-ups.
- 2. Information in this schedule is not part of the audited disclosure information, and so is not subject to the assurance requirements specified in section 2.8.
- 3. Provide additional explanatory comment in the box below.

Box 1: Voluntary explanatory comment on disclosed information

On 22nd August 2019 the Commerce Commission published a guideline "Information Disclosure exemption: Disclosure of reliability information within Schedule 10 of the 2019 EDB Information Disclosure Requirements Information Templates for Schedules 1-10.", this guideline removes the requirement for:

- the information in Schedule 10 of the Disclosure Requirement to be included within the Audited disclosed information under Clause 1.4.3 and from the definition of interruption specified within Clause 1.4.3 of the ID Determination as it applies to the calculation of SAIFI and SAIDI, and the recording of the Number of Interruptions under Schedule 10 – Report on Network Reliability.
- Disclosing information required under Paragraph 16 of the Schedule 14 Mandatory Explanatory Notes

The exemption is granted on the condition that:

- EDBs submit information calculated on a basis that is consistent with the basis undertaken in preparing the 2018 disclosure year.
- EDBs add a note to Schedule 15, this schedule, disclosing:
 - Whether the information has been prepared on a basis consistent with the previous year's disclosure, if not, the reason for, and nature of, the change in the calculation.
 EA Networks response: The information contained in Schedule 10 has been disclosed using a consistent approach to prepare the data as in prior years.
 - The process applied in recognising, or not recognising, successive interruptions following an initial outage.

EA Networks response: The NOC becomes aware of an outage either from SCADA, Retailer (phone or email) or phone call from a customer. The time of these notifications is taken as the start time for the interruption. When responding to outages for larger areas, restoration is commonly done in stages to connect customers as quickly as possible. This is done by patrolling a section of line up to a switching device, opening it to isolate the unpatrolled section of line beyond and then livening up to the device. This restores supply to the customers fed from the section of line that has been patrolled. This sequence is then followed until the cause of the interruption is identified or in the case of Unknow faults, all the line has been patrolled. This creates a situation where a wider area fault will have one off time, but several restore times for the customers affected by the initial fault. There may at times be a situation where the cause of the fault was not spotted by patrolling e.g. underground cable fault, and the line is inadvertently closed back on to the fault. The result of this is customers that have already had their power restored from the initial fault lose power again. This is captured as a one fault event as the cause of the initial fault has yet to be identified when this happens.

• Comment on network reliability for the disclosure year.

EA Networks response:

- SAIFI and SAIDI for the year did not breach the requirements of the quality path.
- Class C interruptions and Duration by cause:
 - Defective equipment. The main defective equipment causes the outages are cable terminations and broken insulators. We have not been able to identify any obvious patterns or connections between outages.
 - Adverse environment. We have not been able to identify any obvious patterns or connections between outages.
 - Cause unknown. The Unknown Interruptions are almost exclusively blown fuse events with most noting that no cause was found.
- Network reliability is compliant with quality requirements under the default price-quality path.

APPENDIX A

RELATED PARTY REQUIREMENTS OF THE

ELECTRICITY DISTRIBUTION INFORMATION DISCLOSURE DETERMINATION 2012 – CONSOLIDATED APRIL 2018.

For the year ended 31 March 2019.

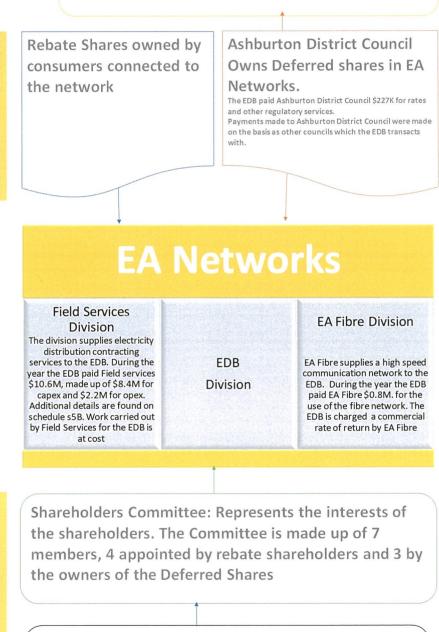
Dated 28 August 2019



Requirement 2.3.8 (1) The relationships between the EDB and the related party

Ashburton Contracting Limited (ACL). 100% owed by Ashburton District Council and supplies civil contracting services to the EDB. The total value of services supplied by ACL to the EDB in the 2019 year was \$207k. Payments made to ACL were on the same basis as other civil contractors that the EDB transacts with

vnership of EA Networ



Controlling interest

Cullimore Engineering Limited is 50% owned by Ian Cullimore who is chairperson of the Shareholders

Committee.

During the year Cullimore Engineering Limited was paid \$57K for engineering services. Payments for Cullimore Engineering Limited services was on the same basis as other external contractors used by the EDB.



The above diagram identifies Ashburton Contracting Limited, Ashburton District Council, Cullimore Engineering, EA Fibre and EA Field Services as related parties.

Related party: Ashburton District Council

What is the relationship between EA Networks and Ashburton District Council?

Ashburton District Council (ADC) is a significant shareholder that holds 28,750,000 deferred shares and can appoint 3 members, out of 7 onto the shareholders committee of the Company.

The role of the Shareholders Committee and Shareholders Committee ability to control EA Networks

Section 16.22 of Electricity Ashburton Limited, trading as EA Networks, constitution stops the shareholders committee from directing or instructing the Board or Management to undertake any actions. The function of the Shareholders Committee shall be:

- To receive reports from the Board of EA Networks so that the Shareholders Committee can report to the shareholders as to whether or not the Board is meeting the reasonable expectations of the shareholders Committee in governing and controlling the Company.
- To appoint the Directors of the Company in accordance with the criteria established by the Shareholders Committee as reviewed and revised from time to time. The criteria established by the Shareholders Committee shall ensure that a balanced Board of Directors comprising people of high business acumen will be appointed as Directors of the Company. The criteria established by the Shareholder Committee will be available to all shareholders of the Company.

Section 19.9 of the constitution allows each member of the shareholders Committee to have one vote each. In the case of an equality of votes the chairperson shall have a second or casting vote.

ADC Share ownership

ADC owns 100 \$1.00 rebate shares in the EDB, which is consistent with all Consumers/Shareholders of EA Networks.

The deferred shares:

- hold no voting rights, unless EA Networks is subject to sale
- have no rights to any distribution unless the company is sold.

What is Ashburton District Council purpose?

The principal activities of the Ashburton District Council (ADC) are defined in section 10 of the Local Government Act 2002 as

The purpose of local government is -

- a. To enable democratic local decision-making and action by, and on behalf of, communities; and
- b. To promote social, economic, environmental, and cultural well-being of communities in the present and for the future.

Financial benefits ADC received as an owner of EA Networks

For the disclosure year ADC received no financial benefits due to its ownership interest in EA Networks.



As a consumer ADC received its share of the annual consumer discount, paid via ADC electricity retailer. The allocation of ADC share of the consumer discount was based on the same calculation that is used for every consumer connected to the electricity network.

Requirement 2.3.10: A summary of EA Networks current policy in respect of the procurement of assets or goods or services from any related party.

EA Networks Procurement Policies requires all related parties, excluding EA Fibre and EA Field services to tender for work as if they are an independent contractor who are not related to the EDB.

In practice most of the services EA Networks purchases off ADC are supplied by ADC in accordance with the Local Government Act 2002. This Act requires the ADC to set their charges annually.

Requirement 2.3.12 (1) A description of how the EDB applies its current policy for the procurement of assets or goods or services from a related party in practice.

All commercial transactions are undertaken as if ADC has no ownership interest in the EDB.

Requirement 2.3.12 (2). A description of any policies or procedures of the EDB that require or have the effect of requiring a consumer to purchase assets or goods or services from a related party that are related to the supply of the electricity distribution services

The EDB has no policies or procedures requiring a consumer to purchase assets or goods or services from ADC.

Requirement 2.3.12 (3) subject to subclause (5), at least one representative example transaction from the disclosure year of how the current policy for the procurement of assets or goods or services from a related party is applied in practice.

EA Networks received a rate demand for installment 1 of 4 in July 2018. The payment was authorised by the CFO and paid on the 20 July 2018.

Requirement 2.3.12 (4) for each representative example transaction specified in accordance with subclause (3), how and when the EDB last tested the arm's-length terms of those transactions.

The Local Body Act 2002 allows councils to strike rates. The Act set out how rates must be struck and applied to owners of property. By ADC complying with this Local Body Act the arm's-length requirement have been meet.

Requirement 2.3.12 (5) separate representative example transactions where the EDB has applied the current policy for the procurement of assets or goods or services from a related party significantly differently between expenditure categories.

Materially the Procurement Policy has been applied consistently between expenditure categories.



Related Party Ashburton Contracting Limited

How Ashburton Contracting is related

Ashburton Contracting Limited (ACL) is 100% owned by Ashburton District Council.

In line with all Shareholders/Consumers of EA Networks ACL owns 100 \$1.00 rebate shares.

Ability to control

ACL has no ability to appoint members onto the Shareholders Committees or Direct Management, Board Members or the Shareholder Committee to undertake any activity solely due to ACL being a subsidiary of ADC.

Financial return to ACL from the EDB

For the disclosure year ACL received no financial benefits due to its ownership interest in EA Networks.

As a consumer ACL received its share of the annual consumer discount, paid via ACL electricity retailer. The allocation of ACL share of the consumer discount was based on the same calculation that is used for every consumer connected to the electricity network.

What the function of ACL is

ACL's website states its principal activities are in civil contracting and construction; drainage and plumbing services; geotechnical drilling; quarry and landscaping supplies; ready mix concrete; rural contracting; surfacing; utility management; and workshop services.

Requirement 2.3.10 A summary of EA Networks current policy in respect of the procurement of assets or goods or services from any related party.

ACL supplies fill for trenching and civil contracting services to Field Services. Civil work awarded to ACL is based on the non-minor works contracts section of the procurement policy which requires:

For electricity contracting and maintenance work, over \$50k, the work will be tendered out. Evaluation of tenders will be based on the attributes set out in the tender documents and taking into consideration the Health and Safety track record of tenders and ability of the contractor to perform the required work within the stipulated timeframe.

Purchasing of fill and other related products from ACL is carried out as if ACL is an independent contractor who is not related to the EDB. EA Networks Procurement Policy requires purchasing from a local company when economically sensible to do so.

Requirement 2.3.12 (1) A description of how the EDB applies its current policy for the procurement of assets or goods or services from a related party in practice.

Transactions with ACL are undertaken as if there was no ownership relationship between the EDB and ACL.

Requirement 2.3.12 (2). A description of any policies or procedures of the EDB that require or have the effect of requiring a consumer to purchase assets or goods or services from a related party that are related to the supply of the electricity distribution services.

The EDB has no policies or procedures requiring a consumer to purchase assets or goods or services from ACL.



Requirement 2.3.12 (3) subject to subclause (5), at least one representative example transaction from the disclosure year of how the current policy for the procurement of assets or goods or services from a related party is applied in practice.

On the 4 February 2019, two purchases of Q0Crusher Dust – Barmac was made for an undergrounding of the network at Dobson Street, Ashburton. An additional purchase of Q-Soil Screened was made on 1 February 2019 for the same Dobson Street job. ACL invoiced the material purchased on invoice 332450. This invoice was approved for payment by the underground manager at EA Networks Field Services and coded to the underground job. The invoice was paid on 20 February 2019.

Requirement 2.3.12 (4) for each representative example transaction specified in accordance with subclause (3), how and when the EDB last tested the arm's-length terms of those transactions.

We have not tested the arm's length transaction requirement due to:

- The low value items purchased from ACL is seen as immaterial.
- ACL has no control or ability to influence EA Networks management, directors and members of the shareholders committee outside of any contractor transacting with EA Networks.
- Any financial benefit that ACL receives from EA Networks is limited that which any external contractor interacting with EA Networks would receive or any holder of rebate shares.
- EA Networks receives no better benefits transacting with ACL than it receivers transacting with any contractor.
- EA Networks have no access to the financial records of ACL to test for the arm's-length requirements.

Requirement 2.3.12 (5) separate representative example transactions where the EDB has applied the current policy for the procurement of assets or goods or services from a related party significantly differently between expenditure categories.

There were no significant differences between expenditure categories.



Related Party Cullimore Engineering

Relationship with EA Networks

Cullimore Engineering Limited is 50% owned by Ian Cullimore who is the chairperson of the EA Networks Shareholders Committee.

Principal activity

The company's principal activities are stated on its website as offering a comprehensive range of engineering services. From product development through to CNC machining and custom dairy solutions.

Ability to control

The ability for Ian Cullimore to control or benefit as chair of the Shareholders Committee is explained under the ACL section of this report.

Financial returns

As a consumer Cullimore Engineering received its share of the annual consumer discount, paid via their electricity retailer. The allocation of Cullimore Engineering share of the consumer discount was based on the same calculation that is used for every consumer connected to the electricity network.

Requirement 2.3.10 A summary of EA Networks current policy in respect of the procurement of assets or goods or services from any related party.

The full and fair opportunity section of the procurement policy applies to purchases from Cullimore Engineering, as set out below:

Wording of the Full and Fair Opportunity section of the procurement policy

EA Networks promotes open and effective competition in the marketplace, and provide full and fair opportunity to New Zealand suppliers. To this end:

- Potential suppliers must not be unreasonably denied the opportunity to bid for EA Networks business.
- All bids received must be evaluated and selected in a fair and unbiased manner.

Due to EA Networks co-operative status and local ownership preference will always go to local business if they are competitive in price, quality, service and other attributes that any tender is being evaluated on.

EA Networks procurement policy also requires that all commercial transactions with Cullimore Engineering are undertaken as if there was no relationship between the two entities.

Requirement 2.3.12 (1) A description of how the EDB applies its current policy for the procurement of assets or goods or services from a related party in practice.

An authorized staff member identifies that Cullimore Engineering is the best supplier to undertake the required task. A purchase order is created; Cullimore Engineering manufactures the required product; an invoice will be sent to EA Networks which will be checked and authorised for payment. Payment will be made on the 20th. This process is consistent with other suppliers.



Requirement 2.3.12 (2). A description of any policies or procedures of the EDB that require or have the effect of requiring a consumer to purchase assets or goods or services from a related party that are related to the supply of the electricity distribution services.

The EDB has no policies or procedures requiring a consumer to purchase assets or goods or services from Cullimore Engineering.

Requirement 2.3.12 (3) subject to subclause (5), at least one representative example transaction from the disclosure year of how the current policy for the procurement of assets or goods or services from a related party is applied in practice.

Technical Services identifies that Cullimore Engineering is the best supplier of the required item. Purchase order 051120 was created to purchase from Cullimore Engineering of 1 * 6mm O'Ring on the 31st of July 2018. After sending EA Networks the O'Ring Cullimore Engineering send EA Networks invoice 23319 on 31 July 2018. This invoice was approved for payment by Technical Services and paid on the 20 August 2018.

Requirement 2.3.12 (4) for each representative example transaction specified in accordance with subclause (3), how and when the EDB last tested the arm's-length terms of those transactions.

We have not tested the arm's length transaction requirement due to:

The low value items purchased from Cullimore Engineering is seen as immaterial.

- Section 16.22 of EA Networks constitution stops Ian Cullimore Directing Directors and Management of EA Networks to transact with him.
- Any financial benefit that Cullimore receives from EA Networks is limited that which any
 external contractor interacting with EA Networks would receive or any holder of rebate
 shares.
- EA Networks receives no better benefits transacting with Cullimore Engineering than it receivers transacting with any contractor.
- EA Networks have no access to the financial records of Cullimore Engineering to test for the arm's-length requirements.

Requirement 2.3.12 (5) separate representative example transactions where the EDB has applied the current policy for the procurement of assets or goods or services from a related party significantly differently between expenditure categories.

There were no significant differences between expenditure categories.



Related party EA Fibre

Due to its coverage EA Fibre is the preferred supplier of high-speed communications to the EDB. As EA Fibre is required to stand on its own feet, the EDB is charged for its services at a commercial rate. Currently there are no other high-speed communication networks which can supply the same level of services as EA Fibre supplies the EDB.

Requirement 2.3.10 A summary of EA Networks current policy in respect of the procurement of assets or goods or services from any related party.

EA Networks procurement policy allows high speed communication services to be purchase from anyone able to supply the required service. Currently there is only one supplier of rural fibre services within the EDB network area. The supplier is EA Fibre.

Requirement 2.3.12 (1) A description of how the EDB applies its current policy for the procurement of assets or goods or services from a related party in practice.

At the time of installing the fibre network, and is still the case, EA Fibre is only the supplier able to supply the required service. This means that EA Fibre is the agreed supplier for the high speed communication network. Consistent with 'large users' of the fibre network the EDB has been charged a daily fee. The fee charged has been calculated using the same principles as another large user on the network.

Requirement 2.3.12 (2). A description of any policies or procedures of the EDB that require or have the effect of requiring a consumer to purchase assets or goods or services from a related party that are related to the supply of the electricity distribution services.

The EDB has no policies or procedures requiring a consumer to purchase assets or goods or services from EA Fibre.

Requirement 2.3.12 (3) subject to subclause (5), at least one representative example transaction from the disclosure year of how the current policy for the procurement of assets or goods or services from a related party is applied in practice.

As part of the annual budget setting process, the fee which the Fibre Business charges the EDB is set, using pricing principles consistent with another large user. When the Board approves the budget the EDB Fibre fee is approved. Each month the EDB was charged 1/12 of the annual fibre fee.

Requirement 2.3.12 (4) for each representative example transaction specified in accordance with subclause (3), how and when the EDB last tested the arm's-length terms of those transactions.

There is no other rural supplier of a high speed fibre networks servicing the Ashburton District to test EDB fibre charges against. As a proxy for realistic commercial return we examined, in 2019, how another large consumer on the fibre Network's charge was determined and applied the same pricing principles against the EDB charge. The calculation of the EDB and other large users charges are consistent.

Requirement 2.3.12 (5) separate representative example transactions where the EDB has applied the current policy for the procurement of assets or goods or services from a related party significantly differently between expenditure categories.

There were no significant differences between expenditure categories.



Related party Field Services

In formulating our procurement policy, we have considered our geographical location, supply standard required by our consumers and access to critical services during a network emergency. Having considered these key elements we have formed the view that an inhouse contracting services (Field Services) best meet the needs of our consumers/shareholders. Field Services has been sized to meet the daily and emergency requirements of the network, in a cost-effective manner. To this end work undertaken by Field Services is at cost.

Field Services supplies underground, overhead and technical services to the EDB

- The underground department install and maintains electricity distribution network asset located underground.
- The overhead department install and maintains electricity distribution network assets located above ground.
- Technical services undertake work associated with zone substations, protection and transformers.

Requirement 2.3.10 A summary of EA Networks current policy in respect of the procurement of assets or goods or services from any related party.

Our procurement policy requires that overhead, underground and substation work is undertaken by Field Services. If Field Services are unable to complete the work in question it is tendered out.

Work tendered out falls into one of two categories:

Minor works contract

For construction and maintenance work under \$50k, associated with electricity and fibre distribution assets a minor tender rate card will be used. One or more contractors may appear on the minor tender rate card, which will be re-tendered every 18 months. Awarding of the minor works to a contractor will be determined on price, ability to meet forecast requirements, and work history of the contactor.

Non-minor works contract

For electricity contracting and maintenance work over \$50k, the work will be tendered out. Evaluation of tenders will be based on the attributes set out in the tender documents and taking into consideration the Health and Safety track record of tenders and ability of the contractor to perform the required work within the stipulated timeframe

Requirement 2.3.12 (1) A description of how the EDB applies its current policy for the procurement of assets or goods or services from a related party in practice.

All contracting work that Field Services can perform is discussed between Field Services and the EDB to identify the resources required to undertake the work. Where Field Services lack the required resources, the work is awarded under the minor works contract or tendered out.

Requirement 2.3.12 (2). A description of any policies or procedures of the EDB that require or have the effect of requiring a consumer to purchase assets or goods or services from a related party that are related to the supply of the electricity distribution services.

EA Networks has no policies requiring consumer to purchase services from a related party.

Our capital contribution policy requires consumers to contribute to assets which EA Networks own. The customer is free to choose who undertakes any work on their property, provided that the person/entity undertaking the work is qualified to do so.

Consumers required to undertake tree work to protect the network, are free to choose from an approved contractor list.

Our notices to consumers notifying them of work required on their privately-owned networks, state that they are free to choose who undertakes the work.

Requirement 2.3.12 (3) subject to subclause (5), at least one representative example transaction from the disclosure year of how the current policy for the procurement of assets or goods or services from a related party is applied in practice.

A construction project that requires tendering out

Field Services – Project requiring a sub-contactor

Project 11466 "2017-2018 Urban OHUG Conv - Tancred Street"

- 1. This project was designed by the EDB. This designed details the scope of work to be undertaken for project 11466.
- 2. The Underground Manager created a number of work order instructing Field Services to undertake the required scope of work, as shown below.

	Work Order	Work Order Description	Work Order Stage	Work Order Narration	Activity Code	Activity Description
	636339	Tancred Street U	Financially Compl	Tancred St - William St to Cambridge St ;; Scheduled Cap ;	RENEWAL	Elect Capital Asset Renewal
	636341	Tancred St Ashb	Financially Compl	Tancred St - William St to Cambridge St .: Scheduled Cap	RENEWAL	Elect Capital Asset Renewal
	636346	Chalmers Ave As	Financially Compl	Chalmers Ave - Beach Rd to Wellington St :: Scheduled C	RENEWAL	Elect Capital Asset Renewal
	636349	Chalmers Ave As	Financially Compl	Chalmers Ave - Beach Rd to Wellington St .: Scheduled C	RENEWAL	Elect Capital Asset Renewal
	644192	Complete OHUG	Financially Compl	William St to Cambridge St Ash;;Network Scheduled Cap	RENEWAL	Elect Capital Asset Renewal
_			and the second se		the second s	

- 3. Field services received the project from the EDB. Field Services General Manager and the Field Services Underground Manager identified that the project required a level of trenching which was outside their abilities.
- 4. Management of Field Services estimated that the required trenching was above the maximum value allowed under minor contracts and tendered the work using NZ/A33910 as the basis.
- 5. After the tendering period was closed, the tenders were opened by the Tender Committee and evaluated based on the criteria set out in the tendering document and awarded to the successful contractor.
- 6. Field services undertook the balance of the required work, which was to install and commission the cable. Labour and plant costs associated with the project was booked to each task as they were incurred. Stock used by Field Services was booked out of the network store and onto the job as required.
- 7. At the end of each milestone the successful tender send EA Networks claims for work completed. For example: Invoice 2386, which was sent on EA Field Services on 28 May 2018 and paid in June 2018 under the terms of the contract.
- 8. At the completion of the project the transactions associated with the project were sent to the Underground Manager who reviewed them and approved the cost of the project.



Requirement 2.3.12 (4) for each representative example transaction specified in accordance with subclause (3), how and when the EDB last tested the arm's-length terms of those transactions.

Work undertaken by Field Services for the EDB is carried out at cost, with no internal profit being created.

How and when we have tested the arm's length terms:

Our budgeting process sets a rate card for field services work, which recovers their operating costs only. At the end of the year we reviewed internal work carried out by Field Services and determined that no profit was created from work undertaken for the EDB. During the year-end financial audit our auditors reviewed our internal profit calculation and confirmed that no material internal profit was created from internal transactions associated with Field Services.

The rate charged by Field Services for external work is calculated as the internal charge out rate + required markup rate for the job in question. This demonstrates that work charged to external parties incurs the same costs as work carried out for the EDB by Field Services.

In 2019 we tested the charge out rates of Field Services against other contractors which we had engaged. The results found that Field Services charge out rates were lower than the independent contractor.

As our testing of Field Services charge out rates with another contractor demonstrates, the price which Field Services charges the EDB is fair and reasonable.

Requirement 2.3.12 (5) separate representative example transactions where the EDB has applied the current policy for the procurement of assets or goods or services from a related party significantly differently between expenditure categories.

There were no significant differences between expenditure categories.





Procurement Policy

Owner	Mark Lester, CFO	
Issued		August 2018
Next Annual Review Due		August 2020

This policy covers all goods and services supplied to EA Networks.

Purpose of the policy

This policy outlines the approach EA Networks takes to planning, sourcing and managing its procurement. Any departure from this policy must first be approved by CEO.

This policy does not apply to employment contracts.

What is Procurement?

Procurement covers all business processes associated with purchasing goods/services/works that are used to run and meet the objectives of EA Networks. It starts with identifying needs, then planning the best way to meet them; continues through sourcing the goods/services/works then managing the contract; and ends with expiry of either the contract or the asset's useful life.

Governing Procurement Principles that EA Networks operate under

The objectives of the procurement process are to:

- Plan and manage for the best results.
- Be fair to all suppliers.
- Get the right supplier.
- Get the best deal for everyone.
- Play by the rules.



Responsibilities of staff

- Procurement activity must be conducted in a manner ensuring EA Networks maintains a reputation of being fair, transparent and unbiased towards suppliers and evidenced through sound and robust record keeping.
- Representatives of EA Networks involved in procurement must be mindful of the fact that EA Networks is subject to and should comply with legislation.
- Representatives of EA Networks involved in procurement must declare any perceived or actual conflicts of interest to the CFO as soon as practicable.
- Representatives of EA Networks involved in procurement must respect the confidentiality of information they are exposed to during their work and must not disclose this information to third-parties. Furthermore, this information must not be used for personal gain.
- Representatives of EA Networks involved in procurement should not accept gifts or hospitality from suppliers, other than items of a minor value (under \$100). It should be noted that where staff are involved in a tender process, it is not acceptable to accept any gifts or hospitality from a tenderer, regardless of its value, until the tender process is completed.
- Any personal benefits that might be gained from accepting a tender are to be well documented and singed off by the CEO prior to the tender being accepted.
- The house rules identify the required behavioral standards for employees in all areas of their work.

Sustainability in Procurement

Sustainability is about meeting the needs of today without compromising the ability of future generations to meet their requirements. Social, environmental and economic context all impact on sustainability. Sustainable procurement means that when buying goods/services EA Networks will consider:

- Strategies to avoid unnecessary consumption and manage demand.
- Minimising environmental impacts of the goods/services over the whole-of-life.
- Suppliers' socially responsible practices including compliance with legislative obligations to employees.
- Value for money over the whole-of-life, rather than just the initial cost.

Health and Safety in Procurement

The Health and Safety in Employment Act has a statutory requirement to complete a hazard assessment for any new or modified equipment, material, service or new work process. This obligation also extends to ensuring public safety.

Managers and staff who are required to undertake procurement need to ensure public and employee health and safety is included in procurement decisions.

Whole of life approach

Procurement decisions are to be based on a whole of life approach, which incorporates all aspects of ownership use and decommission of the item in question.



Procurement risks

EA Networks must identify potential and actual risks relating to each procurement process prior to its commencement. Steps to mitigate risks should be taken wherever possible. Risks could include but not be limited to:

- A business risk to EA Networks.
- A legal risk to EA Networks.
- A public and employee health and safety risk.

EA Networks risk framework should be used, where necessary. This framework assesses the likelihood and impact and enables the development of appropriate mitigations plans. Depending on the nature of the procurement, this risk may also need to be identified on the risk register.

Full and Fair Opportunity

EA Networks promotes open and effective competition in the market place, and provide full and fair opportunity to New Zealand suppliers. To this end:

- Potential suppliers must not be unreasonably denied the opportunity to bid for EA Networks business.
- All bids received must be evaluated and selected in a fair and unbiased manner.

Due to EA Networks co-operative status and local ownership. Preference will always go to local business if they are completive in price, quality, service and other attributes that any tender is being evaluated on.

Preferred supplier

For the construction and maintenance of electricity and fibre distribution assets, Field Services are the preferred supplier. When Field services is unable to carry out the work the task in question will be tendered out as follow:

Minor works contract

For construction and maintenance work, under \$50k, associated with electricity and fibre distribution assets a minor tender rate card will be used. One or more contractors may appear on the minor tender rate card, which will be re-tendered every 18 months. Awarding of the minor works contractors will be determined on price, ability to meet forecasted requirements, and work history of the contactor.

Non-minor works contracts

For electricity and fibre contracting and maintenance work, over \$50k, the work will be tendered out. Evaluation of tenders will be based on the attributes set out in the tender documents and taking into consideration the Health and Safety track record of tenders and ability of the contractor to perform the required work within the stipulated timeframe.

Evaluation of tenders

A suitably qualified tender committee will be used. The make-up of the committee will be determined by the work being tendered. All large tenders will be reviewed by lawyer



Non-network and fibre tenders.

Items falling within this category are non-business as usual activities, such as the purchase of inventory and the use of business as usual consultants. Tendering for these items will be in accordance with the requirements of the delegated authority policy.

Inventory items

Items held in stock will reflect the needs of the electricity, fibre and field services divisions of EA Networks. Before any new stock items is purchased it will be evaluated for fitness of purpose by the department(s) which will be using the items. The results of the evaluation will be reviewed by the Health and Safety team to ensure compliance with legislation.

While the store is primarily owned by the electricity division and managed by the store manager, all Department Managers can request items to be held as inventory. The store manager will not unreasonable decline Department Managers request.

Emergency Procurement

In a genuine emergency, Management may be permitted to forego routine procurement procedures for goods or services that are urgently required to provide emergency assistance or relief. Emergency procurement is to be used in genuinely unforeseen circumstances only and not in the case of poor planning or avoiding EA Networks policies or guidelines.

In the context of this policy an emergency is defined as an event which puts:

- Life, property or equipment at immediate risk; or
- Standards of public health, welfare or safety having to be re-established without delay, such as in the case of disaster relief; or
- EA Networks ability to meet service delivery targets at significantly risk.

Emergency procurement should be limited to what is required to cope with the emergency and should be carried out with the same due diligence and robustness as standard procurement activity.



EDB Procurement from related parties

The section of the policy is written for compliance with section 2.3.10 of the Commerce Commission information disclosure requirements. Which require the EDB to provide a summary of it's current policy in respect of procurement from any related party.

Summary

FIBRE SERVICES

EA Fibre is the EDB preferred supplier of fibre services to network assets. The fibre business unit will charge the EDB a commercial rate of return.

FIELD SERVICES

The EDB will engage EA Field Services as its principle contractor for work it is equipped to undertake. Work carried out by the Field Services for the EDB will be at cost. When Field services is unable to perform the EDB required work, the required work will be contracted out to a third party, in accordance with procurement policy.

OTHER RELATED PARTIES

All related parties, excluding EA fibre and EA Field services, will be required to tender for work as if they are independent contractor who is not related to the EDB.



Map of Anticipated Network Expenditure and Network Constraints

As required by sections 2.3.13 - 2.3.16 the following text details the projects/programmes that represent the largest forecast operational and capital expenditure and the network/equipment constraints that could be addressed by the projects/programmes.

The map is intended to be used in digital form and contains layers that relate to some of the items detailed below. In paper printed form, the map will be very difficult to interpret.

10 Largest (by Value) Operational Projects/Programmes

ID	Name	Description	Timing	Average Value (\$)	Location
OA	Inspecting, Organising and Trimming Trees	The inspection of trees, the liaison with tree owners and the subsequent trimming or felling of trees which are considered be a risk to the electricity network.	2020-2029	365k p.a.	All Line Locations (Map inset)
OB	ZSS Asset Inspection, Testing & Minor Maintenance	The inspection of zone substation assets, routine testing of those assets, and minor maintenance that arises as an immediate result of those inspections and tests.	2020-2029	329k p.a.	<u>Zone</u> <u>Substations</u> Layer
OC	Overhead Inspection, Testing and Minor Maintenance	The inspection, testing and minor maintenance of overhead line assets of all voltages.	2020-2029	263k p.a.	All OH Line Locations (Map inset)
OD	DSS & D Switchgear Planned Maintenance	The planned maintenance of all types of distribution substations and distribution switchgear. Includes ring main units, pole-mounted switches and circuit-breakers, kiosks, and LV switchgear within the kiosks.	2020-2029	235k p.a.	All Distribution Substation Locations
OE	Overhead Planned Repairs & Maintenance	Scheduled maintenance of overhead line assets of all voltages. Generally, a consequence of inspections revealing an issue more widespread than a single structure. Work is normally planned the prior year.	2020-2029	191k p.a.	All OH Line Locations (Map inset)
OF	Distribution Transformer Refurbishment	When distribution transformers are recovered from service for whatever reason they are inspected and where necessary refurbished to allow continued service at another substation.	2020-2029	158k p.a.	<u>EA</u> <u>Networks</u> <u>HQ</u> Layer



OG	D Substation and D Transformer Inspection, Testing and Minor Maintenance	The inspection of distribution substation and distribution transformer assets, routine testing of those assets, and minor maintenance that arises because of those inspections and tests.	2020-2029	152k p.a.	Substations & Workshop
ОН	Ancillary Asset Planned Repairs & Maintenance	Networks assets that are not readily associated with the other major asset groupings (OH, UG, DSS, ZSS) are in this programme. Among other assets, radio systems, data communications and SCADA are accounted for in this category.	2020-2029	149k p.a.	All Locations
OI	ZSS Asset Planned Repairs & Maintenance	Scheduled maintenance of assets within the zone substations. Generally, a consequence of inspections revealing an issue that is not readily resolved during the inspection process and requires additional parts or resources to complete.	2020-2029	129k p.a.	<u>Zone</u> <u>Substations</u> Layer
OJ	22/11kV/LV OH Removal - Following UG Conversion	Once an underground conversion project has been completed the end-of-life overhead line is removed. Generally urban locations, but some sections of rural highways are likely to be converted to underground reticulation.	2020-2026	93k p.a.	Mostly Urban Locations

Few of the items described above have specific locations that can be readily mapped. Zone substations (OB, OI) are shown explicitly on the map and are on their own layer (as are the zone substation names).

The operational expenditure projects/programmes identified above:

Status Situation

Are not already subject to a contract.

- Are forecast to require the supply of assets or goods or services by a related party.
- Are currently indicated for supply by a related party.



10 Largest (by Value) Capital Projects/Programmes

ID	Name	Description	Timing	Average Value (\$k)	Location
CA	Consumer Connection	The addition or modification of assets of all voltages that relate to connecting new or increased loads to the electricity network. This can be the addition of a fuse to a pillar box or the construction of significant 11kV or 22kV assets to service a large industrial load. These loads appear without advance notice on most occasions.	2020-2029	3,140k p.a.	All Locations
СВ	Urban Underground Conversion	As overhead lines in urban areas reach the end of their useful life, the network is replaced with underground cabling and ground-mounted substations. Multiple projects per year are completed and, on average, sum to the amount identified. This programme of work is due for completion in 2026.	2020-2026	2,755k p.a.	Urban Areas Identified on Map
СС	New/Smart Technologies	The need to gather additional information on the electrical network and then provide assets that can react to compensate for rapid changes in load or power flow direction are covered by this programme. The initial phases allow for ICP- level metering, control, and communication. This will permit the network to dynamically interact with loads and generators to ensure a stable supply to all consumers. Additional assets, such as control software, batteries and dynamic VAr compensation are allowed for in later phases of the programme.	2022-2029	1,985k p.a.	All Locations
CD	Unscheduled Projects	This programme of work is to accommodate the unexpected or unscheduled projects that occur when additional information about condition or constraints becomes known. The largest component of this value is the overhead line rebuilds beyond 2022. The likely rebuild candidates have been grouped but not scheduled at this stage.	2020-2029	1,621k p.a.	Predominantly Rural
CE	Overhead Line Rebuild	Known, condition-based overhead line rebuilds of all voltages are included in this category. There is a pool of lines that are becoming candidates for rebuilding (post 2022) but they are yet to be scheduled and therefore not in this category (they are in the CD category above).	2020-2029	1,461k p.a.	Rural Line Locations (Map inset)



CF	Distribution Transformers	New distribution transformers are required for new or increased load and conversion from 11kV to 22kV. The 11 to 22kV conversion work forms a significant proportion of this value and after 2028 will decline significantly.	2020-2029	1,094k p.a.	All Locations
CG	General Rural	This programme includes upgrades to existing assets as well as new assets that are not driven by condition or consumer connection needs. Examples are earthing upgrades, fitting conductor dampers, reconductoring to increase capacity, and new 66kV OH lines between zone substations.	2020-2029	1,058k p.a.	Rural
СН	General ZSS	Any new or upgraded assets within zone substations are included in this programme. Most of the value in this programme is towards the end of the AMP period and is therefore less certain to proceed – driven by load growth.	2020-2029	862k p.a.	<u>Zone</u> <u>Substations</u> Layer
CI	Ashburton 11kV Core Network	This programme is for additional reliability, resilience, capacity and security within the Ashburton township urban area. It consists of a series of high capacity 11kV circuits interconnecting zone substations with network centres (circuit-breaker switchboards) which have multiple feeders radiating from them. The goal is to reduce ICP count per feeder circuit-breaker to less than 250 while increasing network resilience to multiple failures.	2020-2027	843k p.a.	Ashburton Township - <u>Core Network</u> Layers
CJ	11 to 22kV Conversion	The migration of rural areas and townships to 22kV has proven to be very beneficial from the perspective of capacity (when limited by voltage drop it provides a fourfold increase for the same percentage voltage drop). This capacity increase allows much greater flexibility in supplying loads, back-feeding during faults and reducing the need for as many zone substations. The programme covers the necessary re-insulation work and the labour/plant to install 22kV transformers in place of 11kV units.	2020-2028	363k p.a.	<u>11-22kV</u> <u>Conversion</u> Layer. Each colour represents one year of construction.

Not all of the programmes have specific physical locations that can be readily shown on a map. Those programmes that can be located have been allocated a layer in the pdf document and this can be turned on and off to highlight the location(s) involved.



The capital expenditure projects/programmes identified above:

Status Situation

Are not already subject to a contract.

- Are forecast to require the supply of assets or goods or services by a related party.
- Are currently indicated for supply by a related party.

Network or Equipment Constraints Involving Large Operational and/or Capital Projects/Programmes

ID	Name	Description	Project Response	Location
1	Inter-Zone Substation Load Transfer	When operating the distribution network at 11kV, the ability to transfer load between zone substations (such as during a feeder fault near the start of a feeder) is limited by voltage drop in rural areas and cable capacity in urban areas.	CI and CJ	<u>11-22kV Conversion</u> Layer and <u>Core</u> <u>Network</u> Layers
2	Zone Substation Transformer Failure	The failure of a zone substation transformer will either interrupt supply or limit capacity to n-1 levels. Both situations require additional capacity from adjacent zone substations to supply the load that cannot be served from the zone substation with the failed transformer. The availability of an urban Ashburton core 11kV network and a 22kV rural network provide this facility while a spare transformer is installed. Some general zone substation work also provides either more transformation or an extra zone substation site (Montalto 66).	CI, CJ and CH	<u>11-22kV Conversion</u> Layer, <u>Core Network</u> Layers, and <u>Zone</u> <u>Substations</u> Layer.
3	Sub-transmission Circuit Failure	Loss of a single 66kV circuit will generally not result in loss of supply. It can however cause lower than ideal sub-transmission voltages and the ability to transfer load at 22kV or 11kV is beneficial. Loss of more than one 66kV circuit (or a single radial 33kV or 66kV circuit) will potentially cause loss of supply. These scenarios can be mitigated with additional inter-zone substation transfer capacity.	CI and CJ	<u>11-22kV Conversion</u> Layer and <u>Core</u> <u>Network</u> Layers
4	Civil Infrastructure Support Failure	During seismic and flooding events, the failure of civil infrastructure such as bridges and roads can cause failure of portions of the electrical network. Additional electrical network paths and capacity can help mitigate this to some degree. Well maintained or new assets also resist these forces better than older assets.	CB, CE, CI, and CJ	<u>11-22kV Conversion</u> Layer and <u>Core</u> <u>Network</u> Layers. Much of the rural area.



5	Urban 11kV Capacity	The interconnected radial design of the existing Ashburton 11kV underground network is essentially a traditional overhead line configuration that has served well for several decades. The loading of a number of these circuits is close to reaching full capacity and during faults back-feeding can cause slight overload situations. The addition of a layer of larger 11kV cables that connect to network switching centres and interconnection to the rural 22kV network during 11kV cable faults provides both steady state and contingency capacity to alleviate these limitations.	CB, CI, and CJ	<u>Urban UG Conversion</u> Layer, <u>11-22kV</u> <u>Conversion</u> Layer and <u>Core Network</u> Layers.
6	Urban 11kV ICP Count/Feeder	The number of connections per urban 11kV feeder exceeds the limit set in the EA Networks security standard (some by a large amount). To reduce this to the required level, additional feeders are required so that for a single cable fault only a limited number of consumers experience the outage. Adding additional feeders to the zone substations would require excessive amounts of cabling to reach the ICPs as well as extensive zone substation rework. The alternative of large core network 11kV cables connected in closed rings via network centres (new switchboards with additional feeders within the urban network) is a high benefit/value practical solution and advantageous for other constraints as well.	CB and CI	<u>Urban UG Conversion</u> Layer and <u>Core</u> <u>Network</u> Layers.
7	GXP Firm Capacity Exceeded	If a time arises that demand on the Ashburton 220/66kV grid exit point exceeds the 220MVA firm capacity for an unacceptable length of time each year, then an additional GXP will be required. At this point in time, it seems to be less likely this will occur within the 10 year AMP planning period. There are projects included within the AMP (towards the end of the planning period) that address this potential eventuality. A second GXP comes with overall capacity benefits but does provide several technical and operational disadvantages that are not apparent with one GXP.	CG and CH	Predominantly Located in Rural Areas. Network-wide impacts.
8	Low Voltage Network Capacity	The addition of new or increased load or generation will cause the capacity of LV (low voltage) networks to be tested and in some cases exceeded. The location and timing of this new load on existing cables is unknown. To remedy this, additional LV cables and/or distribution substations will be required. Careful load management using demand management control devices will be able to assist in shifting some of the peak demand, but at some stage additional network assets will still be required.	CA, CB, CC, CD, and CF	Urban Areas.



9	Asset Condition - Potential Failure	All assets deteriorate over time and it is critical to proactively manage the asset's condition to ensure it does not fail unexpectedly or catastrophically before it is removed from service at end-of-life. Prudent maintenance strategies ensure that inspections, testing, and either refurbishment or replacement occur in a timely and safe manner. All the operational expenditure programmes/projects identified above are in some way contributing to the safe and reliable operation of the electricity network – ensuring any failures that do occur are largely unforeseeable or uneconomical to completely mitigate against.	OA-OJ and CD	All Locations - Network-wide.
10	Network Resilience	In order to maintain and increase network resilience there must be both effective maintenance of existing assets to prevent failure in adverse conditions (such as the alpine fault rupturing) and improved/additional assets to assist in recovery from adverse events. All of the projects/programmes identified above contribute in large and small ways to increasing the resilience of the EA Networks electricity network. This ranges from more modern design standards for replacement poles to additional alternative network paths should the primary one be unavailable.	OA-OJ, CA-CJ	All Locations - Network-wide.

The constraints detailed above are either explicitly identified in the asset management plan or are alluded to in network development project/programme justifications.

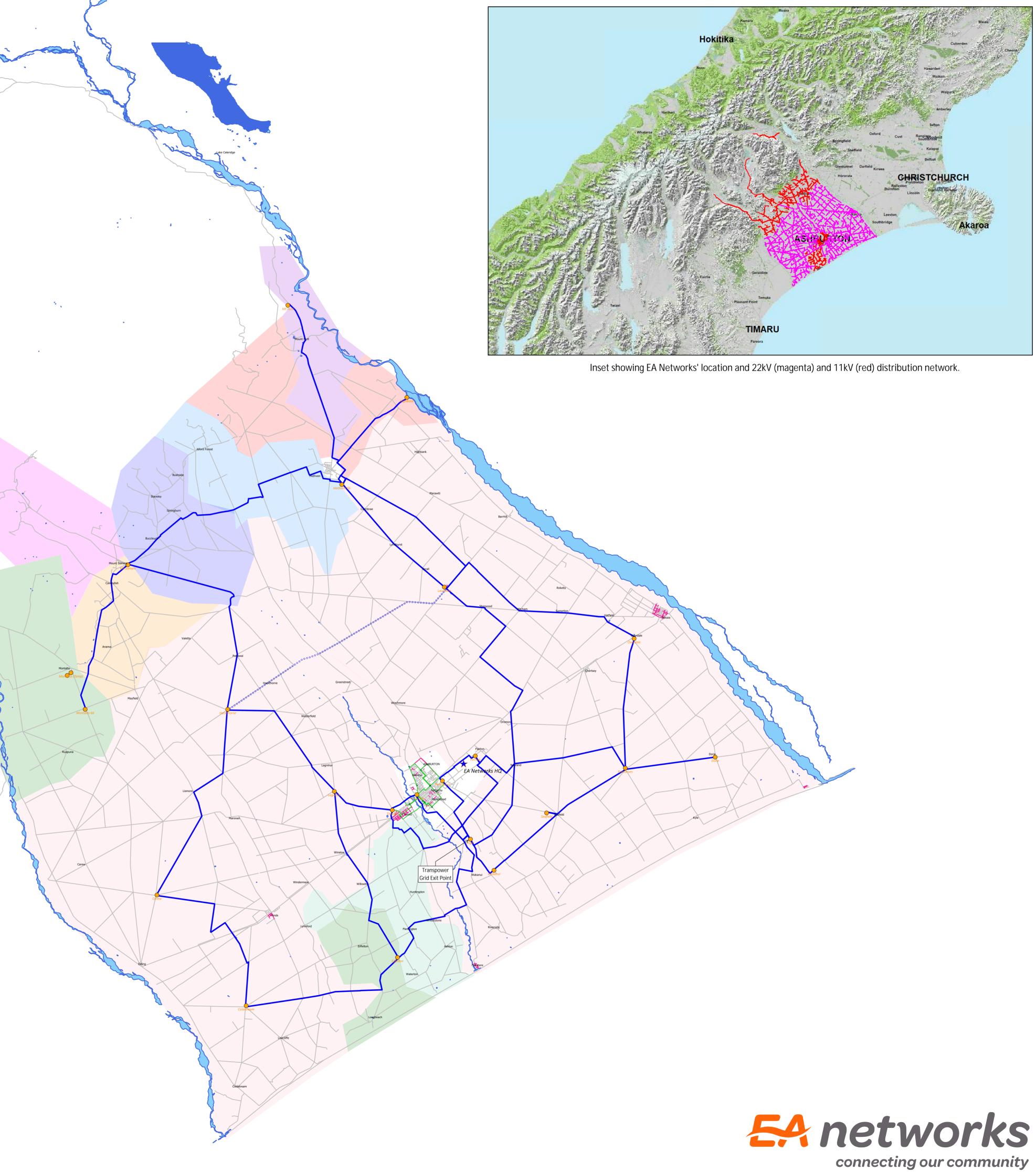
Map of Anticipated Network Expenditure and Network Constraints

. .

This Map is a pdf file with layers controlling what you see. It is intended that you pan and zoom around it to examine the information it contains. To turn on or off the individual layers you need a viewer that can control these. Adobe Acrobat Viewer can do this, as can PDF-XChange Editor. If you cannot see a way to turn a layer on or off, search for "Layer" in help. Printing this map to paper is not recommended, as it will be largely illegible.

<u>LEGEND</u>

	Coloured polygons are annual 22kV conversion areas.
	The large light pink area is existing 22kV distribution network.
	Blue lines represent the sub-transmission network.
	The dotted blue line is a possible future sub-transmission circuit.
•	Orange dots represent zone substation locations.
	Red lines represent urban overhead lines to be converted to underground cables.
	Green lines represent urban core network 11kV cables.
۰	Green dots represent urban core network switching centers.
	Grey lines are roads.



Schedule 18 Certification for Year-end Disclosures

We, Philip John McKendry and Andrew David Barlass, being directors of Electricity Ashburton Limited t/a EA Networks certify that, having made all reasonable enquiry, to the best of our knowledge-

a) the information prepared for the purposes of clauses 2.3.1, 2.3.2, 2.4.21, 2.4.22, 2.5.1, 2.5.2, and 2.7.1 of the Electricity Distribution Information Disclosure Determination 2012 in all material respects complies with that determination; and

b) the historical information used in the preparation of Schedules 8, 9a, 9b, 9c, 9d, 9e, 10, and 14 has been properly extracted from the EA Network's accounting and other records sourced from its financial and non-financial systems, and that sufficient appropriate records have been retained [and if not, what records and systems were used].

c) In respect of information concerning assets, costs and revenues valued or disclosed in accordance with clause 2.3.6 of the Electricity Distribution Information Disclosure Determination 2012 and clauses 2.2.11(1)(g) and 2.2.11(5) of the Electricity Distribution Services Input Methodologies Determination 2012, we are satisfied that- i. the costs and values of assets or goods or services acquired from a related party comply, in all material respects, with clauses 2.3.6(1) and 2.3.6(3) of the Electricity Distribution Information Disclosure Determination 2012 and clauses 2.2.11(1)(g) and 2.2.11(5)(a)-2.2.11(5)(b) of the Electricity Distribution Services Input Methodologies Determination 2012; and ii. the value of assets or goods or services sold or supplied to a related party comply, in all material respects, with clause 2.3.6(2) of the Electricity Distribution Information Disclosure Determination 2012; and ii. the value of assets or goods or services sold or supplied to a related party comply, in all material respects, with clause 2.3.6(2) of the Electricity Distribution Information Disclosure Determination 2012; and ii. the value of assets or goods or services sold or supplied to a related party comply, in all material respects, with clause 2.3.6(2) of the Electricity Distribution Information Disclosure Determination 2012.

Philip John McKendry

28 August 2019

1.100

Andrew David Barlass



Independent Auditor's Report

To the Directors of Electricity Ashburton Limited and the Commerce Commission

Assurance Report Pursuant to Electricity Distribution Information Disclosure Determination 2012

We have completed our reasonable assurance engagement in respect of the compliance of Electricity Ashburton Limited (trading as EA Networks) (the 'Company') with the Electricity Distribution Disclosure Information Determination 2012 (the 'Information Disclosure Determination') for the disclosure year ended 31 March 2019 where we are required to opine on:

- whether the Company has complied, in all material respects, with the Information Disclosure Determination, in preparing the information disclosed under schedules 1 to 4, 5a to 5g, 6a and 6b, 7, the related party transactions information disclosed in Appendix A, and the explanatory notes disclosed in boxes 1 to 11 in Schedule 14 ('the Disclosure Information'); and
- whether the Company's basis for valuation of related party transactions ('valuation of related party transactions'), has complied, in all material respects, with clause 2.3.6 of the Information Disclosure Determination, and clauses 2.2.11(1)(g) and 2.2.11(5) of the Electricity Distribution Services Input Methodologies Determination 2012 ('the Input Methodologies Determination').

Opinion

In our opinion:

- As far as appears from our examination, proper records have been kept by the Company to enable the complete and accurate compilation of the Disclosure Information;
- The information used in the preparation of the Disclosure Information has been properly extracted from the Company's accounting and other records and has been sourced where appropriate, from the Company's financial and non-financial systems;
- The Company has complied, in all material respects, with the Information Disclosure Determination in preparing the Disclosure Information; and
- The basis for valuation of related-party transactions complies, in all material respects, with the Information Disclosure Determination and the Input Methodologies Determination.

Basis for Opinion

We conducted our engagement in accordance with ISAE (NZ) 3000 (Revised), Assurance Engagements Other than Audits or Reviews of Historical Financial Information and SAE 3100 (Revised) *Compliance Engagements* to obtain reasonable assurance that the Company has complied in all material respects with the Determination in the preparation of the Schedules for the year ended 31 March 2019.

In forming our opinion we have obtained sufficient recorded evidence and all the information and explanations we have required.

Our Independence and Quality Control

We have complied with the independence and other ethical requirements of Professional and Ethical Standard 1 (Revised) issued by the New Zealand Auditing and Assurance Standards Board, which is founded on the fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behaviour.

The firm applies Professional and Ethical Standard 3 (Amended) and accordingly maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards, and applicable legal and regulatory requirements.

PricewaterhouseCoopers

The PwC Centre, 60 Cashel Street, PO Box 13244, City West, Christchurch, New Zealand T: +64 3 374 3000, F: +64 3 374 3001, pwc.co.nz



We are independent of the Company. Our firm carries out other services for the Company in the areas of compliance with regulatory requirements of the Commerce Act 1986, tax pooling, Directors' fee benchmarking and the provision of regulatory update advisory services. The provision of these other services has not impaired our independence as auditor of the Company.

Our audit approach

audit scop

Key audit

Overview

Our assurance engagement is designed to obtain reasonable assurance about the Company's qualitative and quantitative compliance, in all material respects, with the Determination.

Quantitative materiality levels are determined for individual schedules included in the Disclosure Information based on the nature of the information set out in the schedules.

Profit based schedules -5% of Regulatory profit before tax Asset based schedules -1% of Regulatory asset base Performance based schedules -5% of non-financial measures Related party transactions -2% of total related party transactions. Qualitative factors were also considered when assessing the arm's length valuation rules on related party transactions.

We have determined that there are three key assurance matters:

- Regulatory Asset Base
- Cost and Asset Allocation
- Related Party Transactions

Materiality

The scope of our assurance engagement was influenced by our application of materiality.

Based on our professional judgement, we determined certain quantitative thresholds for materiality. These, together with qualitative considerations, helped us to determine the scope of our assurance engagement, the nature, timing and extent of our assurance procedures and to evaluate the effect of misstatements, both individually and in aggregate on the Disclosure Information as a whole.

Scope

Our procedures included analytical procedures, evaluating the appropriateness of assumptions used and whether they have been consistently applied, agreement of the Disclosure Information to, or reconciling with, source systems and underlying records, an assessment of the significant judgements made by the Company in the preparation of the Disclosure Information and valuing the related party transactions, and evaluation of the overall adequacy of the presentation of supporting information and explanations. These procedures have been undertaken to form an opinion as to whether the Company has complied, in all material respects, with the Information Disclosure Determination in the preparation of the Disclosure Information for the year ended 31 March 2019, and whether the basis for valuation of related party transactions complies, in all material respects, with the Information and the Input Methodologies Determination.



Key Assurance Matters

Key assurance matters are those matters that, in our professional judgement were of most significance in carrying out the assurance engagement during the current disclosure year. These matters were addressed in the context of our assurance engagement as a whole, and in forming our opinion. We do not provide a separate opinion on these matters.

Key assurance matter

Regulatory Asset Base

The Regulatory Asset Base (RAB), as set out in Schedule 4, reflects the value of the Company's electricity distribution assets. These are valued using an indexed historic cost methodology prescribed by the Determination. It is a measure which is used widely and is key to measuring the Company's return on investment and therefore important when monitoring financial performance or setting electricity distribution prices.

The RAB inputs, as set out in the Input Methodologies, are similar to those used in the measurement of fixed assets in the financial statements, however, there are a number of different requirements and complexities which require careful consideration.

Due to the importance of the RAB within the regulatory regime, the incentives to overstate the RAB value, and complexities within the regulations, we have considered it to be a key area of focus.

How our procedures addressed the key assurance matter

We have obtained an understanding of the compliance requirements relevant to the regulatory asset base as set out in the Information Disclosure Determination (ID Determination) and the Input Methodologies (IMs).

We have performed the following procedures:

Assets commissioned

- We reconciled the assets commissioned, as per the regulatory fixed asset register, to the asset additions disclosed in the audited annual financial statements and investigated material reconciling items;
- We inspected the assets commissioned during the period, as per the regulatory fixed asset register, to identify any specific cost or asset type exclusions, as set out in the ID Determination, which are required to be removed from the RAB;
- We tested a sample of assets commissioned during the disclosure period for appropriate asset category classification;

Depreciation

- We compared the standard asset lives by asset category to those set out in the IMs;
- For assets with no standard asset lives we assessed the reasonableness of the lives used by reference to the accounting depreciation rates used in preparing the financial statements;
- We verified the spreadsheet formula utilised to calculate regulatory depreciation expense is in line with IM clause 2.2.5;

Revaluation

- We recalculated the revaluation rate set out in the Input Methodologies using the relevant Consumer Price Index indices taken from the Statistics New Zealand website;
- We tested the mathematical accuracy of the revaluation calculation performed by management;

Disposals

• We inspected the asset disposals within the accounting fixed asset register to ensure disposals in the RAB meet the definition of a disposal per the IMs.

We have no matters to report from undertaking those procedures.



Key assurance matter

Cost and Asset Allocation

The ID Determination relates to information concerning the supply of electricity distribution services. In addition to the regulated supply of electricity, Electricity Ashburton Limited also supplies customers with other unregulated services such as contracting and fibre services.

As set out in schedules 5d, 5e, 5f and 5g, costs and asset values that relate to electricity distribution services regulated under the ID determination should comprise:

- all of the costs directly attributable to the regulated goods or services; and
- an allocated portion of the costs that are not directly attributable.

The IMs set out rules and processes for allocating costs and assets which are not directly attributable to either regulated or unregulated services. A number of screening tests apply which must be considered when deciding on the appropriate allocation method.

The Company has applied the Accounting-Based Allocation Approach Methodology (ABAA) utilising proxy cost and asset allocators to allocate the asset values and operating costs that are not directly attributable where causal relationships could not be identified.

Given the judgement involved in the application of the cost and asset allocation methodologies we consider it a key assurance matter.

Related party transactions

Disclosures over related party transactions including related party relationships, procurement policies/processes, application of these policies/processes and examples of market testing of transaction terms as required under the ID Determination and the IMs are set out in Appendix A.

The ID Determination and the IM Determination require the Company to value its transactions with related parties, disclosed in Schedule 5b, in accordance with the principles-based approach to the arm's length valuation rule. This rule states

How our procedures addressed the key assurance matter

We obtained an understanding of the Company's cost and asset allocation processes and the methodologies applied.

Our procedures over cost and asset allocation included:

• Reconciling the regulated and unregulated financial information to the audited financial statements;

Classification as directly/not directly attributable

- Considering the appropriateness of the costs allocated as directly attributable, based on the nature and our understanding of the business to determine the reasonableness of the directly attributable classification;
- Testing a sample of invoices to ensure their classification as either directly attributable or not directly attributable costs are appropriate and in line with the ID determination;
- Inspecting the fixed asset register to identify any asset classes which based on their nature and our understanding of the business could be considered assets directly attributable to a specific business unit;
- Testing a sample of assets commissioned to ensure their classification as either directly attributable or not directly attributable are appropriate and in line with the ID determination by inspecting the related invoice;

Appropriateness of the allocators used for not directly attributable costs and assets

- Understanding why causal relationships could not be identified in allocating costs or assets and ensuring appropriate disclosure has been included outlining these in Schedule 14;
- Considering the appropriateness of the cost and asset proxy allocators used in applying the ABAA to not directly attributable costs including inspecting supporting documentation and recalculating proxy allocators;
- Recalculating the split between not directly attributable costs and asset values allocated to electricity distribution services and non-electricity distribution services.

We have no matters to report from undertaking those procedures.

We have obtained an understanding of the compliance requirements relevant to related party transactions as set out in the ID Determination and the IMs. We have ensured Schedule 5(b) and Appendix A includes all required disclosures including current procurement policies, descriptions of how they are applied in practice, representative example transactions and when and how market testing was last performed.

We have performed the following procedures over Schedule 5(b) and Appendix A:

Completeness and accuracy of related party relationships and transactions

We have tested the completeness and accuracy of the related



Key assurance matter

that the value of goods or services acquired from a related party cannot be greater than if it had been acquired under the terms of an arm's length transaction with an unrelated party, nor may it exceed the actual cost to the related party. A sale or supply to a related party cannot be valued at an amount less than if it had been sold or supplied under the terms of an arm's-length transaction with an unrelated party.

Arm's-length valuation, as defined in the IM, is the value at which a transaction, with the same terms and conditions, would be entered into between a willing seller and a willing buyer who are unrelated and who are acting independently of each other and pursuing their own best interests.

The company applies the consolidation (or costbased) approach for demonstrating compliance with the general valuation principles under the ID Determination and the IMs. The determinations presume that where the transaction is valued at the cost normally incurred by the related party, and provided this is fair and reasonable, it may be treated as if it was an arm's length transaction under the consolidation approach (i.e. no profit margin included).

For those transactions where the consolidation approach is not applied, the Company is required to use an objective and independent measure to demonstrate compliance with the arm's-length principle. In the absence of an active market for similar transactions, assigning an objective arm's length value to a related party transaction is difficult and requires significant judgement.

We have identified related party transactions at arm's length as a key audit matter due to the judgement involved.

How our procedures addressed the key assurance matter

party relationships and transactions by:

- Agreeing the disclosures within Schedule 5(b) to the audited financial statements for the year ended 31 March 2019 and to the accounting records, investigating any differences and determining whether any such differences are justified; and
- Applying our understanding of the business structure against the related party definition in IM clause 1.1.4(2)(b) to assess management's identification of any "unregulated parts" of the entity.

Practical application of procurement policies

• Testing a sample of operating expenditure and capital expenditure transactions disclosed in Schedule 5(b) by inspecting supporting documentation to determine compliance with the disclosed procurement policy and practices.

Arm's length valuation rule

We inquired with management, and applied our understanding of the business, to identify the types of transactions accounted for under the consolidation approach and:

- Agreed the values of those transactions disclosed in Schedule 5(b) to those accounted for after elimination of intercompany profit within the EA Networks audited financial statements; and
- Considered whether the costs incurred from related parties, under the consolidation approach, were fair and reasonable by testing controls around the approval of expenses on a sample basis and monitoring actual costs against budgets and the asset management plan.

For those related party transactions not accounted for under the consolidation approach, we obtained the Company's assessment of the available independent and objective measures used in supporting the arm's length valuation principle and reperformed the calculations and agreed key inputs and assumptions to supporting documentation for a sample of transactions.

We have no matters to report from undertaking those procedures.

Director's Responsibilities

The Directors are responsible on behalf of the Company for:

- compliance with the Information Disclosure Determination and the valuation of related party transactions in accordance with the Information Disclosure Determination and the Input Methodologies Determination; and
- the identification of risks that threaten such compliance and controls which will mitigate those risks and monitor ongoing compliance.



Auditors' Responsibilities

Our responsibility is to express an opinion on whether the Company has complied, in all material respects, with the Information Disclosure Determination in the preparation of the Disclosure Information for the disclosure year ended 31 March 2019 and on whether the basis for valuation of related party transactions complies, in all material respects, with the Information Disclosure Determination and the Input Methodologies Determination.

Our engagement has been conducted in accordance with ISAE (NZ) 3000 (Revised), Assurance Engagements Other than Audits or Reviews of Historical Financial Information and SAE 3100 (Revised) *Compliance Engagements* which require that we plan and perform our procedures to obtain reasonable assurance about whether the Company has complied in all material respects with the Information Disclosure Determination in the preparation of the Disclosure Information for the disclosure year ended 31 March 2019, and whether the basis for valuation of related party transactions complies, in all material respects, with the Information Disclosure Determination and the Input Methodologies Determination.

An assurance engagement to report on the Company's compliance with the Information Disclosure Determination and the Input Methodologies Determination involves performing procedures to obtain evidence about the compliance activity and controls implemented to meet the requirements of the Information Disclosure Determination and the Input Methodologies Determination. The procedures selected depend on our judgement, including the identification and assessment of risks of material noncompliance with the requirements of the Information Disclosure Determination and the Input Methodologies Determination.

Inherent Limitations

Because of the inherent limitations of an assurance engagement, together with the internal control structure it is possible that fraud, error, or non-compliance with compliance requirements may occur and not be detected.

A reasonable assurance engagement for the disclosure year ended 31 March 2019 does not provide assurance on whether compliance with the requirements of the Information Disclosure Determination and the Input Methodologies Determination will continue in the future.

Who we report to

This report has been prepared for the Directors and the Commerce Commission in accordance with clause 2.8.1(1) of the Information Disclosure Determination and is provided solely to assist you in establishing that compliance requirements have been met. Our report should not be used for any other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility for any reliance on this report to anyone other than the Directors and the Commerce Commission, or for any purpose other than that for which it was prepared.

The engagement partner on the assurance engagement resulting in this independent auditor's report is Elizabeth Adriana (Adri) Smit.

ouse opers.

Chartered Accountants 29 August 2019

Christchurch, New Zealand