

## Format for submissions

<b>Register content codes - 2017 operational review consultation paper</b>
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Question	Comment
<p>Q1. Do you agree the issues identified by the Authority are worthy of attention?</p> <p>If not, please explain why.</p>	<p>Yes, Register content codes are worth reviewing due to the prevalence of incorrect codes applied in registry and different interpretations from one network to the next. Consolidation and standardisation is expected to reduce the cost of network charge reconciliation and improve the efficiency of network cost recovery where the retailer passes network tariffs to the customer at cost.</p>
<p>Q2. Do you agree that the proposed business requirements around period of availability and distributor's pricing information will support accurate application of register content codes and periods of availability for ICP based volume prices?</p> <p>If not, please explain.</p>	<ul style="list-style-type: none"> <li>a) Where network charges are based on timing, these should be included with the register content code.</li> <li>b) Descriptions of register content codes need to be more explicit to minimise ambiguity between retailer and network application of codes for determination of network charge volume allocation.</li> <li>c) Consolidation of register content codes contributes to the above.</li> <li>d) Multi channel TOU delivery prices should be differentiated at Network Price Plan level to minimise complexity of tariff application.</li> <li>e) Network charges should reflect minimal availability of zero hours if the zero hour register content code is applied, i.e.</li> </ul>

Question	Comment
	<p>zero cost.</p> <p>f) Adding decimal places to period of availability adds complexity. Taking this one step further, it would be more useful to indicate register periods of availability as start and end trading periods (Num 4.0) rather than hours on this basis. i.e. D=1648, N = 0015.</p> <p>g) Yes</p> <p>h) Yes</p>
<p>Q3. Do you agree with the Authority's preferred Option D which introduces generic register content codes for mass market TOU prices, and for consistency deletes existing customised codes that specify time blocks in the descriptions?</p> <p>If not, which option do you prefer and why?</p>	<p>Yes</p>
<p>Q4. If the Authority implements Option D, we propose to allow participants 6 months to convert from using the customised register content codes to the corresponding generic register content codes (mapping demonstrated in Appendix C).</p> <p>Would this be sufficient time?</p> <p>If not, please advise how much time would be reasonable.</p>	<p>Prefer &gt;12 months to allow for network tariff design, system testing, and implementation of changes to MEP records.</p>
<p>Q5. Do you agree that the Authority should progress a Code change to mandate that a distributor's pricing information must contain certain information to assist consistent and correct application of register content codes and periods of availability for ICP based volume prices?</p> <p>If not, please explain why.</p>	<p>Yes</p>
<p>Q6. Do you agree with the objectives of the proposed</p>	<p>Yes</p>

Question	Comment
<p>amendments? If not, why not?</p>	
<p>Q7. Do you agree the benefits of the proposed amendments outweigh the costs? If not, please explain your reasons.</p>	<p>Yes</p>
<p>Q8. Do you agree the proposed amendments are preferable to other options? If you disagree, please give reasons.</p>	<p>Ideally there would be consolidation of controlled duration periods to a minimum number of options per network region. The number of options should be reflected by the number of different network price codes.</p> <p>The wide variety and long tail distribution of “hours of availability” indicates scope for consolidation for CN and IN meter registers.</p> <p>A series of meter register counts is presented in Appendix to demonstrate the abundance and distribution of “unique” meter register content codes in Registry.</p> <p>Data source: 20170915_Metering_configurations.csv from EMI website.</p>

## Appendix – Analysis of data from 20170915\_Metering\_configurations.csv (EMI Website)

### I flow Meters with incorrect register content

I flow without EG24, X flow with EG24	
Network Region	Register Count
Ashburton (Electricity Ashburton)	13
Auckland (Vector)	59
Bay of Islands (Top Energy)	3
Central Canterbury (Orion New Zealand)	557
Central Hawke's Bay (Centralines)	13
Central Otago (Aurora Energy)	5
Counties (Counties Power)	46
Dunedin (Aurora Energy)	5
Eastern Bay of Plenty (Horizon Energy)	53
Hawke's Bay (Unison Networks)	5
Invercargill (Electricity Invercargill)	3
Kapiti and Horowhenua (Electra)	14
Manawatu (Powerco)	9
Marlborough (Marlborough Lines)	4
Nelson (Nelson Electricity)	4
North Canterbury (MainPower NZ)	50
Otago (OtagoNet JV)	4
Rotorua (Unison Networks)	9
South Canterbury (Alpine Energy)	12
Southland (The Power Company)	8
Taranaki (Powerco)	22
Tasman (Network Tasman)	13
Taupo (Unison Networks)	33
Tauranga (Powerco)	22
Thames Valley (Powerco)	9
Waikato (WEL Networks)	48
Waipa (Waipa Networks)	10
Wairarapa (Powerco)	8
Waitaki (Network Waitaki)	11
Waitemata (Vector)	26
Wanganui (Powerco)	5
Wellington (Wellington Electricity)	31
West Coast (Westpower)	14
Whangarei and Kaipara (Northpower)	38
<b>Grand Total</b>	<b>1166</b>

### Meters with Zero hours of availability

Zero Period Register Count					
Network Region	X-CN-0	X-D-0	X-N-0	X-UN-0	Grand Total
Invercargill (Electricity Invercargill)	35	1	6	130	172
King Country (The Lines Company)				8	8
South Canterbury (Alpine Energy)				4	4
Southland (The Power Company)	48	5	2	148	203
Tasman (Network Tasman)				1	1
Waipa (Waipa Networks)		43			43
<b>Grand Total</b>	<b>83</b>	<b>49</b>	<b>8</b>	<b>291</b>	<b>431</b>

### Meters with "DC" register content

Sum of DC Register Count	Registers					Grand Total
Network Region	X-DC-10	X-DC-16	X-DC-17	X-DC-19	X-DC-20	Grand Total
Central Otago (Aurora Energy)	19					19
Dunedin (Aurora Energy)		85				85
Marlborough (Marlborough Lines)					26	26
Tauranga (Powerco)			6	3		9
<b>Grand Total</b>	<b>19</b>	<b>85</b>	<b>6</b>	<b>3</b>	<b>26</b>	<b>139</b>

### Meters with CN Content by period of availability (alphabetical order)

Sum of CN Register Count	Register																			Grand Total
Network Region	X-CN-10	X-CN-11	X-CN-12	X-CN-13	X-CN-14	X-CN-15	X-CN-16	X-CN-17	X-CN-18	X-CN-19	X-CN-20	X-CN-22	X-CN-23	X-CN-24	X-CN-4	X-CN-5	X-CN-7	X-CN-8	X-CN-9	Grand Total
Ashburton (Electricity Ashburton)	416	59	31	1			11429	153	13	32	11							4080	1	16226
Auckland (Vector)			3					71	28	253	2							728		1085
Bay of Islands (Top Energy)						1		4	5	66	827							1		905
Buller (Buller Electricity)		2	32				836	814	4	11								57		1757
Central Canterbury (Orion New Zealand)	4761	1110		448			18	2	9	41	178	33						10268		16868
Central Hawke's Bay (Centralines)							165	54	1	468	54			3		1		8		754
Central Otago (Aurora Energy)	61	1760		876	1	1	11056	3	1	4	296	1						723		14783
Counties (Counties Power)	21	301						1		30170								514		31012
Dunedin (Aurora Energy)	712	2743				57	267	6	1	33	5	782					109	5275	1	9991
Eastern Bay of Plenty (Horizon Energy)							4	78	1011	825	5					2		118		2043
Eastland (Eastland Network)							2	9963	5	1012	4951	1						28		15962
Hawke's Bay (Unison Networks)	3			6		4	12	9202	9	15009	25							404		24674
Invercargill (Electricity Invercargill)		461					14	2		8	12258							2264		15007
Kapiti and Horowhenua (Electra)	132	1913		3			4	85	4	3348	20051	8						456		26004
King Country (The Lines Company)		93	308							5				1					324	731
Manawatu (Powerco)	9	2	3				56	24108	7	449	24						2	5069		29729
Marlborough (Marlborough Lines)	2	8	153	8654		48	5	72	8252	346	51	1						3618		21210
Nelson (Nelson Electricity)	2							6330	1	374	3	9						1177	1	7897
North Canterbury (MainPower NZ)	3	17	1					2		397	63	49						2623		3155
Otago (OtagoNet JV)	2990	7		1		138	19	123	4	29	3	2177					521	1003	23	7038
Queenstown (Aurora Energy)	1	1097		1293			7974	5	2	5	222							799		11398
Rotorua (Unison Networks)	39	4				2	15	3229	10	834	206							2152	77	6568
South Canterbury (Alpine Energy)	3	7608		2		14436	2	11	1	1212	2	3		2				2846		26128
Southern Hawke's Bay (Scanpower)							512	52	7	1734	1651	19		6	20	66		221	1	4289
Southland (The Power Company)	1	751					76	5		15	21676							5930		28454
Taranaki (Powerco)	13	1	8			4	33	23413	2	38	2	1						3645	2	27162
Tasman (Network Tasman)							3	21	1	28787	185							3889		32886
Taupo (Unison Networks)	1					6	9	1237	2129	2139	9	7	1					858	54	6450
Tauranga (Powerco)	106	143	8			9	7	39711	6	991	2			110				3307	2349	46749
Thames Valley (Powerco)	28	15				1	3	37753	88	3825	12							685	655	43065
Waikato (WEL Networks)							3	50745	6	156	1							24		50935
Waipa (Waipa Networks)	7	1				1	1363	661	188	2849	5919			5				861		11855
Wairarapa (Powerco)	28		4				1	11477	4	1026	4							2619		15163
Waitaki (Network Waitaki)	5	729	11			1	18	1794		14	89							456		3117
Waitemata (Vector)	929						2	16	5	793	1							873	1	2620
Wanganui (Powerco)	2	1					51	1647		159	5							1503	4	3372
Wellington (Wellington Electricity)	4362	9						23	1	19233	2							93	4	23727
West Coast (Westpower)	2						12	7585		4	1	5						626		8235
Whangarei and Kaipara (Northpower)	10	172	29				10	28	39283	69	12	1578		1			1	1141		42334
<b>Grand Total</b>	<b>14649</b>	<b>19007</b>	<b>591</b>	<b>11284</b>	<b>1</b>	<b>14709</b>	<b>33981</b>	<b>230486</b>	<b>51093</b>	<b>116758</b>	<b>68808</b>	<b>4681</b>	<b>112</b>	<b>17</b>	<b>20</b>	<b>69</b>	<b>633</b>	<b>70942</b>	<b>3497</b>	<b>641338</b>

## Meters with UN register content by period of availability

Sum of UN Register Count Network Region	Registers				Grand Total
	X-UN-0	X-UN-12	X-UN-19	X-UN-24	
Ashburton (Electricity Ashburton)				18830	18830
Auckland (Vector)				107329	107329
Bay of Islands (Top Energy)				12820	12820
Buller (Buller Electricity)				3141	3141
Central Canterbury (Orion New Zealand)				43383	43383
Central Hawke's Bay (Centralines)				5489	5489
Central Otago (Aurora Energy)				20079	20079
Counties (Counties Power)				52886	52886
Dunedin (Aurora Energy)				11908	11908
Eastern Bay of Plenty (Horizon Energy)				8271	8271
Eastland (Eastland Network)				34492	34492
Hawke's Bay (Unison Networks)			1	47025	47026
Invercargill (Electricity Invercargill)	130			16080	16210
Kapiti and Horowhenua (Electra)				45335	45335
King Country (The Lines Company)	8			22730	22738
Manawatu (Powerco)				58631	58631
Marlborough (Marlborough Lines)				28356	28356
Nelson (Nelson Electricity)				9313	9313
North Canterbury (MainPower NZ)				12123	12123
Otago (OtagoNet JV)				9650	9650
Queenstown (Aurora Energy)				14465	14465
Rotorua (Unison Networks)				16612	16612
South Canterbury (Alpine Energy)	4			35416	35420
Southern Hawke's Bay (Scanpower)				8407	8407
Southland (The Power Company)	148			43366	43514
Taranaki (Powerco)				68946	68946
Tasman (Network Tasman)	1			53730	53731
Taupo (Unison Networks)				12503	12503
Tauranga (Powerco)		1		82977	82978
Thames Valley (Powerco)				84060	84060
Waikato (WEL Networks)				98020	98020
Waipa (Waipa Networks)				26500	26500
Wairarapa (Powerco)				23725	23725
Waitaki (Network Waitaki)				6219	6219
Waitemata (Vector)				68503	68503
Wanganui (Powerco)				18257	18257
Wellington (Wellington Electricity)				98846	98846
West Coast (Westpower)				14154	14154
Whangarei and Kaipara (Northpower)				69555	69555
<b>Grand Total</b>	<b>291</b>	<b>1</b>	<b>1</b>	<b>1412132</b>	<b>1412425</b>

### Meters with D register content by period of availability (alphabetical order)

Sum of D Register Count	Registers										
Network Region	X-D-0	X-D-12	X-D-14	X-D-16	X-D-17	X-D-18	X-D-20	X-D-22	X-D-4	X-D-8	Grand Total
Ashburton (Electricity Ashburton)			3	2313					52		2368
Auckland (Vector)		5	2	454		1					462
Bay of Islands (Top Energy)				1461		4					1465
Buller (Buller Electricity)				619							619
Central Canterbury (Orion New Zealand)			21189	62	24777						46028
Central Hawke's Bay (Centralines)				268							268
Central Otago (Aurora Energy)			1	766		1			1		769
Counties (Counties Power)				71							71
Dunedin (Aurora Energy)				1937							1937
Eastern Bay of Plenty (Horizon Energy)			14	53							67
Eastland (Eastland Network)				26							26
Hawke's Bay (Unison Networks)				295							295
Invercargill (Electricity Invercargill)	1			2614			1				2616
Kapiti and Horowhenua (Electra)			884	9		2					895
King Country (The Lines Company)				21		21470					21491
Manawatu (Powerco)				3634		1					3635
Marlborough (Marlborough Lines)				345	1						346
Nelson (Nelson Electricity)				41							41
North Canterbury (MainPower NZ)			1	2767							2768
Otago (OtagoNet JV)				636							636
Queenstown (Aurora Energy)				335		2					337
Rotorua (Unison Networks)				318							318
South Canterbury (Alpine Energy)				1332							1332
Southern Hawke's Bay (Scanpower)				465	1	1			1		468
Southland (The Power Company)	5			1682		1					1688
Taranaki (Powerco)				1814		1					1815
Tasman (Network Tasman)				899		1					900
Taupo (Unison Networks)				1099							1099
Tauranga (Powerco)				160					14		174
Thames Valley (Powerco)			2	1271							1273
Waikato (WEL Networks)				655		1					656
Waipa (Waipa Networks)	43			172							215
Wairarapa (Powerco)				2593		1					2594
Waitaki (Network Waitaki)			417	6185							6602
Waitemata (Vector)			5	2091							2096
Wanganui (Powerco)				216							216
Wellington (Wellington Electricity)			4	8581							8585
West Coast (Westpower)			1	2579							2580
Whangarei and Kaipara (Northpower)				54				57			111
<b>Grand Total</b>	<b>49</b>	<b>5</b>	<b>22523</b>	<b>50893</b>	<b>24779</b>	<b>21487</b>	<b>1</b>	<b>57</b>	<b>66</b>	<b>2</b>	<b>119862</b>



### Meters with N register content by period of availability (alphabetical order)

Sum of N Register Count Network Region	Registers										Grand Total
	X-N-0	X-N-10	X-N-16	X-N-19	X-N-20	X-N-22	X-N-24	X-N-6	X-N-7	X-N-8	
Ashburton (Electricity Ashburton)		3			52					2315	2370
Auckland (Vector)		2						1		454	457
Bay of Islands (Top Energy)								4		1461	1465
Buller (Buller Electricity)										619	619
Central Canterbury (Orion New Zealand)		28636							24778	68	53482
Central Hawke's Bay (Centralines)										271	271
Central Otago (Aurora Energy)		1						1		772	774
Counties (Counties Power)							1			178	179
Dunedin (Aurora Energy)										1937	1937
Eastern Bay of Plenty (Horizon Energy)		14								54	68
Eastland (Eastland Network)										26	26
Hawke's Bay (Unison Networks)										299	299
Invercargill (Electricity Invercargill)	6									2619	2625
Kapiti and Horowhenua (Electra)		885						12		718	1615
King Country (The Lines Company)								21484		22	21506
Manawatu (Powerco)								1		3814	3815
Marlborough (Marlborough Lines)									1	345	346
Nelson (Nelson Electricity)										41	41
North Canterbury (MainPower NZ)		1								2768	2769
Otago (OtagoNet JV)										638	638
Queenstown (Aurora Energy)								2		335	337
Rotorua (Unison Networks)										318	318
South Canterbury (Alpine Energy)										1332	1332
Southern Hawke's Bay (Scanpower)				1				1	1	466	469
Southland (The Power Company)	2							1		1697	1700
Taranaki (Powerco)								1		1903	1904
Tasman (Network Tasman)								1		902	903
Taupo (Unison Networks)										1099	1099
Tauranga (Powerco)					14					160	174
Thames Valley (Powerco)		1								1271	1272
Waikato (WEL Networks)										658	658
Waipa (Waipa Networks)							45			172	217
Wairarapa (Powerco)								1		2715	2716
Waitaki (Network Waitaki)		417								6185	6602
Waitemata (Vector)		5		1						2087	2093
Wanganui (Powerco)										325	325
Wellington (Wellington Electricity)		4								8579	8583
West Coast (Westpower)		1								2579	2580
Whangarei and Kaipara (Northpower)						57				54	111
<b>Grand Total</b>	<b>8</b>	<b>29970</b>	<b>1</b>	<b>1</b>	<b>66</b>	<b>57</b>	<b>46</b>	<b>21510</b>	<b>24780</b>	<b>52256</b>	<b>128695</b>

### Meters with IN register content by period of availability (alphabetical order)

Sum of IN Register Count Network Region	Registers													Grand Total
	X-IN-11	X-IN-12	X-IN-15	X-IN-16	X-IN-17	X-IN-18	X-IN-19	X-IN-20	X-IN-22	X-IN-24	X-IN-5	X-IN-8	X-IN-9	
Ashburton (Electricity Ashburton)				16	1		1			90				108
Auckland (Vector)				4	1		201497			31455	1	4		232962
Bay of Islands (Top Energy)	1					16229	30	2		9986				26248
Buller (Buller Electricity)				796	186					264				1246
Central Canterbury (Orion New Zealand)	2			5159	5	1	399	46119	274	38619		30		90608
Central Hawke's Bay (Centralines)						1	3168	199		187				3555
Central Otago (Aurora Energy)				102			2	2		38		1		145
Counties (Counties Power)							587	1		2				590
Dunedin (Aurora Energy)			956	10804	2		8411		9	25938		83		46203
Eastern Bay of Plenty (Horizon Energy)				1	17	15157	855			2971				19001
Eastland (Eastland Network)					16		1			222				239
Hawke's Bay (Unison Networks)					470		11370			12655				24495
Invercargill (Electricity Invercargill)							8	711		12				731
Kapiti and Horowhenua (Electra)						2	14	754		2753				3523
King Country (The Lines Company)		1474			2					1				1477
Manawatu (Powerco)					152		3			1419				1574
Marlborough (Marlborough Lines)							13	1		16				30
Nelson (Nelson Electricity)					1		2			9				12
North Canterbury (MainPower NZ)					1		15452			9460				24913
Otago (OtagoNet JV)			3113	5			2	1	35	485		5		3646
Queenstown (Aurora Energy)				1				1		4				6
Rotorua (Unison Networks)	1			8185	10	37				11934				20167
South Canterbury (Alpine Energy)			188		2		42			253				485
Southern Hawke's Bay (Scanpower)				1			3	1	77	91				173
Southland (The Power Company)							8	392		12				412
Taranaki (Powerco)					164		8			2746				2918
Tasman (Network Tasman)							13			5				18
Taupo (Unison Networks)					293	1600	13			2668				4574
Tauranga (Powerco)					13300	10	10			3974		161	139	17594
Thames Valley (Powerco)					424	5	20			3962				4411
Waikato (WEL Networks)					21					718				739
Waipa (Waipa Networks)				5836	2		138	3		2371				8350
Wairarapa (Powerco)					156		1			2005				2162
Waitaki (Network Waitaki)	1							2		11				14
Waitemata (Vector)		1		2	220		77375	2		87390		2		164992
Wanganui (Powerco)					613		14			16744				17371
Wellington (Wellington Electricity)		1			3	2	5890			65874		1		71771
West Coast (Westpower)							1			1				2
Whangarei and Kaipara (Northpower)						191				5				196
<b>Grand Total</b>	<b>1</b>	<b>1480</b>	<b>4257</b>	<b>22727</b>	<b>24237</b>	<b>33221</b>	<b>325376</b>	<b>48190</b>	<b>395</b>	<b>337350</b>	<b>1</b>	<b>287</b>	<b>139</b>	<b>797661</b>