

**WIRELESS TELEGRAPHY ACT, 1926**  
**WIRELESS TELEGRAPHY (THIRD GENERATION AND GSM MOBILE**  
**TELEPHONY LICENCE) (AMENDMENT) REGULATIONS, 2003**

**Amended Licence under Section 5 of the Wireless Telegraphy Act, 1926, to keep and have possession of apparatus for wireless telegraphy for the purpose of providing 3G and GSM mobile telephony.**

The Commission for Communication Regulation, in exercise of the powers conferred on it by section 5 (as substituted by section 182 of the Broadcasting Act 2009 (No. 18 of 2009)) of the Wireless Telegraphy Act, 1926 (No. 45 of 1926), hereby grants to **Three Ireland (Hutchinson) Limited of 28/29 Sir John Rogerson's Quay, Dublin 2**, ("the Licensee") authorisation to keep, have possession of, install, maintain, work and use the apparatus as specified in the Schedule 2 of

this Licence, in the places specified in Schedule 1 of this Licence and subject to the terms and conditions as set out in the Wireless Telegraphy (Third Generation and GSM Mobile Telephony Licence) (Amendment) Regulations, 2003 (S.I. No. 340 of 2003), including but not limited to, the following:

1. The Licensee shall ensure that it complies with the geographical and technical conditions contained within Schedules 1 to 3 to this licence;
2. The Licensee will ensure that it makes payments of the spectrum fees as outlined in the Regulations;
3. The Licensee shall ensure that it complies with all the commitments contained within Schedule 5 of the licence which were made by the Licensee in the course of a comparative evaluation selection procedure, prior to the granting of the Original Licence.

This Licence amends the licence which came into effect **25 July 2016** (the "Licence Commencement Date") and all amendments thereafter and, subject to revocation, suspension or withdrawal, expires on **24 July 2017** ("the Licence Expiry Date").

GIVEN under the official seal of the Commission for Communications Regulation, this day

**For and on behalf of the Commission for Communications Regulation**

**Schedule 1**

**Places at which the Licensee is authorised by this Licence to keep and have possession of the Apparatus.**

No.	Site I.D.	Easting	Northing
1	CE0001	158821	160454
2	CE0004	143700	161203
3	CE0008	137860	160442
4	CE0011	133741	178291
5	CE0015	138481	166847
6	CE0018	121418	171292
7	CE0023	107898	194478
8	CE0025	88643	160462
9	CE0026	170141	172845
10	CE0028	133980	177739
11	CE0030	111117	162765
12	CE0032	164165	171691
13	CE0033	113280	174320
14	CE0035	102674	164321
15	CE0036	128599	209199
16	CE0037	127610	198623
17	CE0042	114831	178764
18	CE0099	165085	162868
19	CE0113	142500	170599
20	CE0115	105893	179175
21	CE0116	139100	187200
22	CE0118	105896	156936
23	CE0119	127172	182797
24	CE0120	139352	168329
25	CE0121	135040	173780
26	CE0122	141813	162961
27	CE0124	140756	162169
28	CE0128	139060	161110
29	CE0129	122790	165105
30	CE0130	133165	175935
31	CE0131	147515	165680
32	CE0134	136978	179129
33	CE0135	133798	179516
34	CE0137	133675	177104
35	CE0138	135292	175254
36	CE0140	141809	163937

<b>No.</b>	<b>Site I.D.</b>	<b>Easting</b>	<b>Northing</b>
37	CE0145	155661	171934
38	CE0146	107888	194499
39	CE0147	158683	161524
40	CE0152	99336	155397
41	CE0153	114453	188896
42	CE0154	126517	211267
43	CE0159	147916	160356
44	CE0161	139664	162412
45	CE0162	151328	159750
46	CE0165	151785	191046
47	CK0001	167762	71993
48	CK0002	167493	73178
49	CK0003	168042	71541
50	CK0004	167700	71005
51	CK0005	166883	72288
52	CK0007	169469	71815
53	CK0009	168477	73820
54	CK0010	165305	70795
55	CK0011	168474	72378
56	CK0012	164600	71200
57	CK0013	168399	70386
58	CK0014	168347	66270
59	CK0015	167541	69194
60	CK0016	165200	69500
61	CK0018	164068	68902
62	CK0019	163347	71452
63	CK0021	161925	71430
64	CK0022	167154	68179
65	CK0024	166393	66908
66	CK0025	166323	66614
67	CK0026	171178	71191
68	CK0027	171849	70542
69	CK0028	170139	70868
70	CK0029	168754	71041
71	CK0030	166425	69187
72	CK0032	170029	69582
73	CK0033	159885	70753
74	CK0034	158033	70719
75	CK0037	171660	66057
76	CK0039	174653	64820

No.	Site I.D.	Easting	Northing
77	CK0041	178092	64322
78	CK0042	165870	72417
79	CK0043	166350	73500
80	CK0044	167367	74348
81	CK0045	170850	72460
82	CK0046	170875	74490
83	CK0047	163257	70804
84	CK0051	166378	70208
85	CK0054	172479	72561
86	CK0055	174650	72051
87	CK0058	178936	73331
88	CK0060	180177	72811
89	CK0062	178535	70069
90	CK0064	176813	66800
91	CK0065	178369	66939
92	CK0066	179510	66635
93	CK0067	172657	70110
94	CK0068	168906	67382
95	CK0069	169735	68567
96	CK0071	176052	71788
97	CK0072	177733	68141
98	CK0075	161145	75750
99	CK0076	174002	76418
100	CK0077	164205	74446
101	CK0079	167208	71761
102	CK0080	167709	72227
103	CK0082	167822	71699
104	CK0083	172973	62737
105	CK0084	172548	65248
106	CK0085	173379	73704
107	CK0088	100205	46847
108	CK0089	180975	73268
109	CK0090	138529	41881
110	CK0091	181639	97889
111	CK0092	163709	50527
112	CK0093	166785	49486
113	CK0096	171130	110500
114	CK0099	188077	73190
115	CK0100	188088	73799
116	CK0103	210285	77509

<b>No.</b>	<b>Site I.D.</b>	<b>Easting</b>	<b>Northing</b>
117	CK0104	209971	76109
118	CK0105	209185	79926
119	CK0107	159220	81894
120	CK0111	179566	92933
121	CK0112	153912	108014
122	CK0114	172778	59800
123	CK0115	198676	77114
124	CK0116	195198	73555
125	CK0117	111694	33351
126	CK0118	167615	69833
127	CK0121	149517	55029
128	CK0122	173626	78218
129	CK0124	164788	72941
130	CK0125	68502	46115
131	CK0126	122925	53272
132	CK0131	153780	122534
133	CK0133	177871	61979
134	CK0135	165749	95857
135	CK0136	190456	69102
136	CK0141	167411	71629
137	CK0145	133847	50204
138	CK0147	176200	57969
139	CK0149	192784	63917
140	CK0150	203463	71117
141	CK0151	142598	95638
142	CK0152	138648	80348
143	CK0154	112856	28857
144	CK0155	79096	29337
145	CK0156	80330	37046
146	CK0157	71094	55372
147	CK0158	131884	92638
148	CK0160	192526	92760
149	CK0161	199345	84044
150	CK0163	131315	65038
151	CK0165	106862	47498
152	CK0166	64172	49267
153	CK0167	190480	103241
154	CK0168	171948	92370
155	CK0170	60979	40884
156	CK0171	74790	47025

<b>No.</b>	<b>Site I.D.</b>	<b>Easting</b>	<b>Northing</b>
157	CK0172	82169	49690
158	CK0173	92579	60701
159	CK0174	153518	105364
160	CK0175	93047	56778
161	CK0176	125460	114641
162	CK0177	183124	80398
163	CK0178	187670	61567
164	CK0179	122734	67526
165	CK0180	121474	107894
166	CK0181	141442	121203
167	CK0182	146483	112448
168	CK0185	143950	51001
169	CK0193	148452	121227
170	CK0196	197239	91435
171	CK0199	174503	53197
172	CK0201	137347	35213
173	CK0203	169774	73435
174	CK0234	181033	110472
175	CK0248	145278	44364
176	CK0249	179093	95961
177	CK0378	99600	48496
178	CK0380	107700	34997
179	CK0381	126857	89104
180	CK0382	93075	31866
181	CK0384	114025	52936
182	CK0397	135300	54000
183	CK0400	134265	72942
184	CK0407	163823	51057
185	CK0409	147836	82319
186	CK0410	144142	61674
187	CK0411	107616	59091
188	CK0412	125900	39000
189	CK0418	164701	50996
190	CK0419	156815	71853
191	CK0422	162171	69402
192	CK0423	155345	59076
193	CK0426	180400	106100
194	CK0432	130866	108938
195	CK0433	139002	103700
196	CK0435	93008	34775

<b>No.</b>	<b>Site I.D.</b>	<b>Easting</b>	<b>Northing</b>
197	CK0437	164900	70200
198	CK0439	61559	44949
199	CK0440	175883	84056
200	CK0444	170658	67232
201	CK0445	155659	66337
202	CK0449	133909	72109
203	CK0455	93200	35059
204	CK0456	146859	90379
205	CK0457	159850	74150
206	CK0460	181184	98428
207	CK0475	173786	97720
208	CK0479	164834	66978
209	CK0487	156381	95257
210	CK0490	180913	113179
211	CK0492	181564	112425
212	CK0498	156127	98528
213	CK0499	156022	116076
214	CK0506	155600	97750
215	CK0507	157118	99115
216	CK0525	179981	72006
217	CK0526	112400	33700
218	CL0002	273073	175995
219	CL0003	272729	177013
220	CL0004	272122	161390
221	CL0005	286563	173246
222	CL0009	272129	176714
223	CL0011	297006	180436
224	CL0028	264172	163498
225	CL0041	271688	177276
226	CL0044	273869	177005
227	CL0045	272322	176475
228	CL0047	278013	176352
229	CL0048	270326	161690
230	CL0053	274316	162076
231	CN0003	246312	300658
232	CN0011	251694	290278
233	CN0012	225850	319850
234	CN0013	234399	316812
235	CN0018	229005	316476
236	CN0019	250295	283775

<b>No.</b>	<b>Site I.D.</b>	<b>Easting</b>	<b>Northing</b>
237	CN0020	216942	317434
238	CN0021	245488	290259
239	CN0022	233352	301983
240	CN0023	258323	304778
241	CN0024	264566	290480
242	CN0025	260451	283433
243	CN0029	216832	325200
244	CN0030	226046	312258
245	CN0032	232882	309104
246	CN0033	264408	313076
247	CN0034	204781	327209
248	CN0036	248213	312645
249	CN0037	230650	299247
250	CN0070	270114	300072
251	CN0077	244349	304216
252	CN0078	235787	286845
253	CN0086	258005	307634
254	CN0087	259163	298522
255	CN0089	242001	305066
256	CN0090	260267	315066
257	CN0091	242213	304428
258	CN0092	239150	300289
259	CN0094	267922	296487
260	CN0098	272256	296212
261	CN0099	260378	289533
262	DO0003	182867	358245
263	DO0005	171294	376453
264	DO0007	217047	411510
265	DO0008	217191	414481
266	DO0018	252174	443997
267	DO0021	174590	386870
268	DO0024	183141	421693
269	DO0027	176812	411797
270	DO0030	193532	432236
271	DO0031	213300	412895
272	DO0036	252808	452002
273	DO0037	219177	433748
274	DO0038	203080	439826
275	DO0040	181815	431961
276	DO0041	198971	384891



No.	Site I.D.	Easting	Northing
277	DO0042	208800	417320
278	DO0043	187740	379000
279	DO0044	196011	373511
280	DO0045	177706	402841
281	DO0046	209820	408450
282	DO0048	154297	386806
283	DO0049	222441	426882
284	DO0050	212225	430929
285	DO0051	194550	404900
286	DO0053	197464	370184
287	DO0054	204397	366144
288	DO0055	204040	412800
289	DO0059	205378	433110
290	DO0060	231948	448774
291	DO0061	212213	424109
292	DO0062	188769	408165
293	DO0064	221540	442390
294	DO0065	188760	432350
295	DO0066	245101	453410
296	DO0067	208868	397598
297	DO0069	190436	367752
298	DO0071	167462	415205
299	DO0072	219531	408505
300	DO0073	212350	370800
301	DO0076	169068	392106
302	DO0077	189193	394293
303	DO0137	226008	403781
304	DO0139	219601	416763
305	DO0148	181316	399354
306	DO0151	261907	438733
307	DO0154	230147	410916
308	DO0157	181335	424591
309	DO0158	232496	405623
310	DO0159	201010	399300
311	DO0160	194458	376887
312	DO0161	219540	412621
313	DO0162	218365	412177
314	DO0163	217664	411691
315	DO0164	221419	399902
316	DO0165	203710	385481

<b>No.</b>	<b>Site I.D.</b>	<b>Easting</b>	<b>Northing</b>
317	DO0166	182227	359099
318	DO0167	192867	378413
319	DO0168	213014	422089
320	DO0170	240578	427131
321	DO0171	223568	404837
322	DO0177	187653	361571
323	DO0178	167591	415218
324	DO0179	212263	407925
325	DO0180	216103	393721
326	DO0181	245353	445371
327	DO0182	234739	432317
328	DO0185	190726	362684
329	DO0186	217375	413682
330	DO0188	213911	394672
331	DO0192	231871	398551
332	DO0195	226415	388756
333	DO0199	236521	433811
334	DO0201	181982	394311
335	DO0203	186446	424481
336	DO0205	216930	411940
337	DU0001	315571	234645
338	DU0002	315844	234187
339	DU0004	315713	233973
340	DU0005	316025	233898
341	DU0006	316568	233779
342	DU0007	316188	234330
343	DU0008	316140	234718
344	DU0009	317033	234503
345	DU0012	316120	235315
346	DU0013	315240	234717
347	DU0014	315496	235169
348	DU0015	314736	234476
349	DU0016	314944	234211
350	DU0017	314870	233719
351	DU0018	315367	233422
352	DU0019	315847	233765
353	DU0020	316975	233977
354	DU0022	317922	234597
355	DU0026	318230	235048
356	DU0030	317204	235802

<b>No.</b>	<b>Site I.D.</b>	<b>Easting</b>	<b>Northing</b>
357	DU0031	316530	235473
358	DU0032	316583	236470
359	DU0033	316212	235580
360	DU0035	316007	236192
361	DU0036	314955	235412
362	DU0037	315000	236001
363	DU0039	313314	235814
364	DU0040	315128	235189
365	DU0041	313379	235077
366	DU0042	314155	235050
367	DU0043	314484	234328
368	DU0044	313950	234476
369	DU0046	314208	233504
370	DU0047	314980	233177
371	DU0048	317011	233442
372	DU0050	316807	233326
373	DU0051	316256	233495
374	DU0052	317637	233200
375	DU0054	318599	236206
376	DU0055	316931	232884
377	DU0056	316007	232581
378	DU0057	316697	232478
379	DU0058	317965	233511
380	DU0059	319667	233748
381	DU0060	317603	232837
382	DU0062	318970	232791
383	DU0063	316516	231813
384	DU0064	315499	232060
385	DU0066	315570	231240
386	DU0068	319553	231250
387	DU0069	320290	236973
388	DU0070	321230	238219
389	DU0071	317850	231381
390	DU0073	318313	232163
391	DU0075	319892	230622
392	DU0076	318450	230796
393	DU0078	319265	228813
394	DU0080	320101	227905
395	DU0081	319859	228710
396	DU0082	321731	229223

No.	Site I.D.	Easting	Northing
397	DU0083	323766	228796
398	DU0084	323694	228006
399	DU0085	324403	228537
400	DU0086	321566	227921
401	DU0087	320944	227041
402	DU0089	321150	224889
403	DU0090	319171	238434
404	DU0091	324281	226901
405	DU0092	322757	226887
406	DU0094	314830	231849
407	DU0095	313825	232805
408	DU0096	314735	231295
409	DU0097	314415	230100
410	DU0099	315514	229553
411	DU0102	316635	230786
412	DU0104	325232	224203
413	DU0105	315085	230417
414	DU0106	316586	230050
415	DU0107	316000	238497
416	DU0108	314350	229000
417	DU0109	317180	229516
418	DU0112	319407	226673
419	DU0113	319432	226145
420	DU0115	312376	238454
421	DU0118	318097	228324
422	DU0119	320293	225681
423	DU0121	316819	226500
424	DU0122	315551	228035
425	DU0123	320566	224370
426	DU0124	318188	225647
427	DU0125	324001	224314
428	DU0126	324042	225916
429	DU0131	311250	227851
430	DU0132	310499	229014
431	DU0133	308852	227515
432	DU0134	310385	230613
433	DU0135	309700	230175
434	DU0136	309100	231097
435	DU0137	313390	232794
436	DU0140	313970	231300

No.	Site I.D.	Easting	Northing
437	DU0141	313220	230900
438	DU0142	316280	228438
439	DU0144	318922	239838
440	DU0145	320141	239602
441	DU0146	317478	239428
442	DU0148	319392	237060
443	DU0149	319346	236438
444	DU0151	317243	236590
445	DU0152	316311	237234
446	DU0153	315210	237566
447	DU0154	315576	239110
448	DU0155	316467	239151
449	DU0156	317093	238238
450	DU0158	312450	229935
451	DU0161	309144	228650
452	DU0162	309159	227654
453	DU0164	308224	228238
454	DU0165	307812	226990
455	DU0166	309868	226333
456	DU0167	309540	240564
457	DU0169	306491	232853
458	DU0172	323518	222709
459	DU0174	320441	238063
460	DU0175	310900	232857
461	DU0176	309950	231851
462	DU0177	311193	232129
463	DU0178	311126	230970
464	DU0179	306409	225973
465	DU0180	312200	230850
466	DU0181	312280	227105
467	DU0183	312200	231850
468	DU0184	308399	234130
469	DU0185	309706	233728
470	DU0186	309603	232598
471	DU0190	312170	233763
472	DU0191	312539	233049
473	DU0193	307959	236271
474	DU0194	305752	234334
475	DU0195	309511	234744
476	DU0196	308316	235270

<b>No.</b>	<b>Site I.D.</b>	<b>Easting</b>	<b>Northing</b>
477	DU0197	306472	235066
478	DU0198	305801	235473
479	DU0199	304647	235262
480	DU0200	303206	235096
481	DU0201	302359	235034
482	DU0202	321344	239155
483	DU0204	304436	232874
484	DU0208	324241	223040
485	DU0210	324868	221308
486	DU0211	318232	237772
487	DU0225	319170	224073
488	DU0227	324915	225546
489	DU0228	318388	240638
490	DU0230	315314	226827
491	DU0232	310050	227665
492	DU0233	322001	239158
493	DU0236	307071	231663
494	DU0238	305550	227589
495	DU0239	325190	239550
496	DU0242	300226	233925
497	DU0243	303619	236561
498	DU0244	328317	239256
499	DU0245	329321	237494
500	DU0250	312747	236304
501	DU0251	311044	237115
502	DU0252	310331	237714
503	DU0253	317890	243331
504	DU0254	317261	240782
505	DU0255	316750	243247
506	DU0256	319204	246448
507	DU0257	318241	246691
508	DU0258	318321	247461
509	DU0259	313198	237143
510	DU0260	313670	238233
511	DU0261	313836	236112
512	DU0263	308934	238011
513	DU0265	307769	238946
514	DU0266	317924	245091
515	DU0267	305551	241570
516	DU0268	317073	247809

<b>No.</b>	<b>Site I.D.</b>	<b>Easting</b>	<b>Northing</b>
517	DU0269	321726	246617
518	DU0270	322539	245055
519	DU0271	324604	243714
520	DU0272	323126	246095
521	DU0273	306776	238001
522	DU0275	310428	239863
523	DU0277	320414	242259
524	DU0281	303619	239943
525	DU0282	312131	240586
526	DU0284	313287	238822
527	DU0287	306443	229926
528	DU0288	313386	239959
529	DU0290	313330	241094
530	DU0292	315368	242132
531	DU0294	305891	231658
532	DU0296	303589	227308
533	DU0301	317422	227613
534	DU0304	315973	235037
535	DU0305	315734	233280
536	DU0306	316615	234349
537	DU0307	315894	234519
538	DU0308	316446	234707
539	DU0309	315771	232754
540	DU0312	325991	225995
541	DU0329	304475	241132
542	DU0332	313610	225715
543	DU0333	315210	225620
544	DU0339	314960	232400
545	DU0344	314413	227380
546	DU0346	317293	225711
547	DU0349	317400	227635
548	DU0350	319735	264203
549	DU0351	320470	263234
550	DU0353	322787	249934
551	DU0354	304049	261032
552	DU0355	310125	245464
553	DU0356	321652	254541
554	DU0357	315354	257976
555	DU0359	325497	254711
556	DU0360	301719	222851

No.	Site I.D.	Easting	Northing
557	DU0361	325501	260510
558	DU0362	324599	259949
559	DU0366	309052	236033
560	DU0370	315430	235885
561	DU0371	308750	241760
562	DU0373	307221	241403
563	DU0374	317760	235673
564	DU0375	315865	240538
565	DU0376	313157	230329
566	DU0377	314918	240553
567	DU0378	312042	239860
568	DU0380	304988	231093
569	DU0381	302866	232634
570	DU0384	317144	245510
571	DU0387	307259	234214
572	DU0390	315369	234261
573	DU0393	306776	238001
574	DU0398	323269	239715
575	DU0399	312998	233726
576	DU0401	316463	235935
577	DU0403	307154	239589
578	DU0405	305391	240917
579	DU0414	307502	227759
580	DU0420	318015	233079
581	DU0421	316473	237638
582	DU0424	300859	235295
583	DU0428	317262	234498
584	DU0430	313155	228838
585	DU0432	317030	243261
586	DU0471	317588	234211
587	DU0480	318015	233083
588	DU0481	316463	235935
589	DU0495	326490	226894
590	DU0503	320262	226969
591	DU0548	317241	231872
592	DU0561	314705	235802
593	DU0562	315637	235537
594	DU0574	311893	228949
595	DU0588	306685	243923
596	DU0600	315217	234035



<b>No.</b>	<b>Site I.D.</b>	<b>Easting</b>	<b>Northing</b>
597	DU0602	314876	234745
598	DU0604	315455	234572
599	DU0609	308939	225835
600	DU0610	307136	225440
601	DU0611	310765	225193
602	DU0622	315108	246401
603	DU0623	319261	231265
604	DU0624	305741	228648
605	DU0625	305977	226858
606	DU0629	314644	238237
607	DU0630	321256	236198
608	DU0631	313140	228196
609	DU0643	302008	226726
610	DU0649	315925	232442
611	DU0658	310619	226987
612	DU0661	301644	228360
613	DU0665	314365	230542
614	DU0669	305050	234205
615	DU0719	316999	242114
616	DU0728	318635	238665
617	DU0816	315426	235793
618	DU0818	317121	234268
619	DU0820	310054	241408
620	DU0822	318030	234477
621	DU0825	309148	230561
622	DU0827	318735	226968
623	DU0828	317121	234268
624	DU0832	325732	253235
625	DU0838	317201	249598
626	DU0874	307685	232512
627	DU0878	314558	234649
628	DU0879	315527	233165
629	DU0886	308373	232612
630	DU0890	311375	231431
631	DU0891	316210	232725
632	DU0892	318105	232572
633	DU0893	322810	246125
634	DU0894	316199	245200
635	DU0903	317335	233691
636	DU0905	322970	227060

<b>No.</b>	<b>Site I.D.</b>	<b>Easting</b>	<b>Northing</b>
637	DU0911	312351	231207
638	DU0914	316195	234225
639	DU0915	318737	247942
640	DU0916	322797	255503
641	DU0921	310222	231052
642	DU0922	315410	233230
643	DU0923	317257	241525
644	DU0933	315585	234061
645	DU0934	318590	259060
646	DU0959	320160	235142
647	DU0971	299331	227303
648	DU0973	307187	239226
649	DU0994	308477	226424
650	DU0999	315003	232721
651	DU1000	314690	233840
652	DU1034	313251	239668
653	DU1042	315403	230166
654	DU1055	316463	235935
655	DU1056	316463	235935
656	DU1073	313627	237333
657	DU1107	325095	227877
658	DU1119	319059	230122
659	GA0001	129963	225404
660	GA0002	129652	224987
661	GA0003	128252	225628
662	GA0005	130049	226120
663	GA0006	130971	226267
664	GA0007	131756	224924
665	GA0008	130198	226926
666	GA0009	128793	224584
667	GA0010	129058	225148
668	GA0011	128383	227014
669	GA0012	129038	226243
670	GA0013	128056	223694
671	GA0014	126541	223663
672	GA0015	126089	224903
673	GA0016	132416	227140
674	GA0017	133083	226886
675	GA0019	134048	227402
676	GA0020	133966	228753

<b>No.</b>	<b>Site I.D.</b>	<b>Easting</b>	<b>Northing</b>
677	GA0021	134713	225835
678	GA0022	127966	224704
679	GA0023	137711	225805
680	GA0024	133508	225321
681	GA0025	123132	222956
682	GA0028	185297	231058
683	GA0032	143370	252076
684	GA0033	155204	211512
685	GA0034	130289	225370
686	GA0035	67400	249910
687	GA0037	180338	228904
688	GA0038	171838	224008
689	GA0040	141174	219999
690	GA0041	150700	241357
691	GA0042	138530	234981
692	GA0043	185020	205275
693	GA0044	149859	227872
694	GA0045	105655	244364
695	GA0049	71410	252430
696	GA0051	138145	224771
697	GA0052	149378	266766
698	GA0054	125930	227335
699	GA0056	190317	219170
700	GA0060	96290	227775
701	GA0062	56470	257620
702	GA0063	139185	241775
703	GA0064	153210	250790
704	GA0065	160990	239630
705	GA0066	162710	212419
706	GA0067	177413	206214
707	GA0068	156347	265102
708	GA0069	138940	250235
709	GA0070	101979	225500
710	GA0071	136627	258603
711	GA0073	164136	228646
712	GA0074	181199	221005
713	GA0075	61912	244483
714	GA0076	71662	240218
715	GA0077	82300	233304
716	GA0078	86461	262210

<b>No.</b>	<b>Site I.D.</b>	<b>Easting</b>	<b>Northing</b>
717	GA0079	143060	210212
718	GA0080	152554	204811
719	GA0081	96702	251445
720	GA0085	163620	235563
721	GA0086	92245	236689
722	GA0087	168153	204838
723	GA0088	170890	249700
724	GA0090	154661	224660
725	GA0091	159972	259345
726	GA0092	104100	253380
727	GA0093	178087	238993
728	GA0095	110948	256407
729	GA0096	66460	250536
730	GA0097	174326	212595
731	GA0100	88389	209168
732	GA0101	94017	204868
733	GA0102	98247	202237
734	GA0106	85762	247473
735	GA0107	93470	247154
736	GA0108	81826	247165
737	GA0109	86628	252940
738	GA0110	76720	246631
739	GA0111	64485	256331
740	GA0112	81729	260315
741	GA0113	92040	255299
742	GA0115	101557	228590
743	GA0118	172014	193419
744	GA0119	167531	255897
745	GA0122	166153	225574
746	GA0126	112976	222495
747	GA0128	132326	225789
748	GA0148	130152	224977
749	GA0149	143376	252075
750	GA0231	133443	228225
751	GA0232	132885	248650
752	GA0234	130694	227992
753	GA0245	145208	202166
754	GA0255	161948	216428
755	GA0261	173150	199666
756	GA0262	140600	264700

No.	Site I.D.	Easting	Northing
757	GA0268	146032	258698
758	GA0270	174635	258021
759	GA0281	68572	262817
760	GA0282	184348	209672
761	GA0300	163017	216978
762	GA0338	114852	254585
763	GA0339	114873	254584
764	GA0340	114895	254568
765	GA0341	114830	254590
766	GA0342	114807	254589
767	KD0001	300814	235981
768	KD0004	298414	236706
769	KD0006	294618	235853
770	KD0007	293753	237664
771	KD0008	296852	234388
772	KD0009	297689	232983
773	KD0010	267722	193637
774	KD0011	286455	228714
775	KD0012	280980	197115
776	KD0013	271301	216995
777	KD0014	289531	240103
778	KD0015	282927	209195
779	KD0016	272995	212324
780	KD0018	263374	210184
781	KD0022	289159	218014
782	KD0023	286497	219289
783	KD0027	275639	201517
784	KD0029	283969	226975
785	KD0031	283482	240239
786	KD0033	280410	214950
787	KD0036	295743	208104
788	KD0037	277848	184202
789	KD0043	280459	214772
790	KD0045	295695	223870
791	KD0046	270167	210145
792	KD0047	264759	208708
793	KD0048	274661	227075
794	KD0049	293142	234204
795	KD0050	291739	215898
796	KD0055	274835	219302

No.	Site I.D.	Easting	Northing
797	KD0056	280142	191826
798	KD0097	300248	233166
799	KD0100	285139	241266
800	KD0103	269162	212206
801	KD0145	282739	229478
802	KD0148	288766	221552
803	KD0150	293092	222906
804	KD0152	289200	218600
805	KD0158	278943	215284
806	KD0166	282407	206640
807	KD0171	268550	242600
808	KD0174	284100	216934
809	KD0175	290415	222008
810	KD0177	278223	196549
811	KD0178	279421	214679
812	KD0179	291785	229506
813	KD0182	289291	219488
814	KD0187	285749	211532
815	KD0189	280330	214690
816	KD0193	288954	224078
817	KD0194	291263	220590
818	KD0195	285461	221090
819	KD0197	290400	219666
820	KD0199	277545	213641
821	KD0201	280440	215140
822	KK0003	262036	113557
823	KK0004	249754	157670
824	KK0005	250649	155704
825	KK0007	251410	153944
826	KK0009	250120	124860
827	KK0011	273085	124272
828	KK0012	233213	167511
829	KK0013	247500	176226
830	KK0014	241172	143401
831	KK0015	254270	174116
832	KK0016	258927	140471
833	KK0017	270081	143587
834	KK0022	255605	121497
835	KK0025	262776	132446
836	KK0026	249073	142457

No.	Site I.D.	Easting	Northing
837	KK0028	260943	172245
838	KK0029	266736	115937
839	KK0030	263100	136985
840	KK0031	252460	165640
841	KK0032	242898	154994
842	KK0051	258800	139283
843	KK0055	256852	175085
844	KK0087	248795	150229
845	KK0093	250067	154875
846	KK0094	257662	163713
847	KK0097	253550	155030
848	KK0101	250434	156271
849	KK0102	251385	156197
850	KK0107	266313	145544
851	KK0108	251905	139711
852	KK0111	264827	152476
853	KK0113	254442	149554
854	KK0114	250774	157267
855	KK0116	252649	157420
856	KR0003	96773	90752
857	KR0006	83065	108040
858	KR0007	96822	89328
859	KR0012	85469	114860
860	KR0013	85592	113741
861	KR0014	83138	114107
862	KR0019	77505	96604
863	KR0020	46526	80988
864	KR0022	41848	99185
865	KR0023	50173	66521
866	KR0027	121466	81815
867	KR0034	70836	93784
868	KR0035	56169	71537
869	KR0037	113897	97283
870	KR0039	70445	82888
871	KR0040	90965	72984
872	KR0041	111846	90056
873	KR0043	81230	69333
874	KR0045	101207	72644
875	KR0046	112655	105459
876	KR0047	45756	71463

<b>No.</b>	<b>Site I.D.</b>	<b>Easting</b>	<b>Northing</b>
877	KR0048	37750	107496
878	KR0050	108935	120810
879	KR0054	33995	101679
880	KR0055	78797	61947
881	KR0057	59941	110918
882	KR0058	98601	98321
883	KR0059	105623	113387
884	KR0061	110220	77229
885	KR0066	96593	121053
886	KR0067	83941	115036
887	KR0068	92251	91655
888	KR0069	93347	92806
889	KR0070	97309	90642
890	KR0072	96021	91774
891	KR0139	93025	102709
892	KR0140	105923	148099
893	KR0146	86700	141399
894	KR0151	99143	133865
895	KR0154	54603	60147
896	KR0157	80822	99556
897	KR0159	98236	90709
898	KR0160	82151	115511
899	KR0161	83392	114406
900	KR0162	83892	114446
901	KR0165	75605	127892
902	KR0166	67166	91246
903	KR0167	37750	107496
904	KR0168	103773	129897
905	KR0170	96775	90145
906	KR0172	91100	70700
907	KR0173	96299	91082
908	KR0176	44600	101000
909	KR0177	106593	125477
910	KR0178	86841	93422
911	KR0179	99933	109653
912	KR0185	52752	99881
913	KR0186	91740	124606
914	KR0188	121439	81811
915	KR0189	116800	93140
916	KR0190	41896	99132



<b>No.</b>	<b>Site I.D.</b>	<b>Easting</b>	<b>Northing</b>
917	KR0192	39315	70941
918	KR0193	85881	116579
919	KR0194	104482	89154
920	KR0195	91017	142526
921	KR0198	99547	92469
922	KR0199	33900	101700
923	KR0202	62926	104384
924	LF0001	212889	275379
925	LF0002	218818	284199
926	LF0010	222514	288524
927	LF0011	224084	293002
928	LF0012	218055	267720
929	LF0017	218055	267720
930	LF0035	211382	280515
931	LF0040	214650	275925
932	LF0041	213032	276898
933	LF0043	224614	272664
934	LF0045	218114	267750
935	LF0048	214349	274888
936	LK0001	157716	156725
937	LK0002	157453	157110
938	LK0004	157141	156456
939	LK0006	157212	155681
940	LK0007	157325	157832
941	LK0009	156001	156156
942	LK0010	155842	157768
943	LK0013	160897	159024
944	LK0016	158155	156829
945	LK0019	159105	155477
946	LK0020	155257	153183
947	LK0022	153426	154105
948	LK0023	155600	159458
949	LK0024	153720	158488
950	LK0028	157915	157043
951	LK0029	161889	157236
952	LK0032	156141	152027
953	LK0033	159708	157012
954	LK0034	160533	155800
955	LK0037	128092	133847
956	LK0039	146259	147448

No.	Site I.D.	Easting	Northing
957	LK0040	151714	149499
958	LK0042	163927	156964
959	LK0047	156473	158292
960	LK0049	163644	147623
961	LK0050	172600	125223
962	LK0051	114589	122185
963	LK0052	150356	133691
964	LK0053	175009	133132
965	LK0054	121706	134505
966	LK0055	180329	140081
967	LK0056	168840	121342
968	LK0059	126694	142026
969	LK0060	168713	139550
970	LK0061	119861	122884
971	LK0067	183208	129794
972	LK0069	172600	125223
973	LK0135	123063	129551
974	LK0141	172953	155628
975	LK0143	116718	147609
976	LK0144	136251	141761
977	LK0145	137910	121117
978	LK0146	111500	134199
979	LK0150	161414	158158
980	LK0151	125307	151468
981	LK0152	157743	157199
982	LK0153	154880	155610
983	LK0157	157737	157368
984	LK0158	155619	152458
985	LK0159	157507	156908
986	LK0160	156671	156359
987	LK0162	124788	150725
988	LK0164	143912	135978
989	LK0167	112220	126919
990	LK0169	133817	149720
991	LK0170	156645	153827
992	LK0174	160100	154172
993	LK0176	158976	156303
994	LK0179	162869	158103
995	LK0180	151271	141371
996	LK0181	158445	155636

No.	Site I.D.	Easting	Northing
997	LK0183	158341	157704
998	LK0184	163011	154362
999	LK0186	158518	159108
1000	LK0187	155922	153227
1001	LK0189	158185	156361
1002	LK0190	157820	157698
1003	LK0191	157355	156575
1004	LK0192	157986	157278
1005	LK0194	155887	158954
1006	LK0197	162900	136324
1007	LK0199	165176	148951
1008	LK0210	175281	146415
1009	LK0211	160458	155256
1010	LK0212	162666	157171
1011	LO0001	297554	287453
1012	LO0002	304803	296081
1013	LO0003	309045	274974
1014	LO0004	311649	273743
1015	LO0005	308627	275573
1016	LO0006	305719	304504
1017	LO0007	303934	305873
1018	LO0008	303406	307302
1019	LO0009	304885	306946
1020	LO0010	306174	306830
1021	LO0011	306002	309184
1022	LO0012	302610	308886
1023	LO0013	304235	289113
1024	LO0014	309800	315700
1025	LO0015	305447	279391
1026	LO0016	298090	283340
1027	LO0019	296310	290679
1028	LO0020	305509	284232
1029	LO0021	315866	283719
1030	LO0023	318864	311742
1031	LO0025	314213	316636
1032	LO0027	310989	276466
1033	LO0028	304286	306726
1034	LO0029	296742	310194
1035	LO0037	306918	302806
1036	LO0051	313983	283163

<b>No.</b>	<b>Site I.D.</b>	<b>Easting</b>	<b>Northing</b>
1037	LO0096	289536	297838
1038	LT0002	188389	339578
1039	LT0005	209526	296321
1040	LT0006	178920	340626
1041	LT0007	197329	343966
1042	LT0008	193613	346488
1043	LT0010	206476	314196
1044	LT0012	182225	335839
1045	LT0013	205560	306235
1046	LT0014	222443	303545
1047	LT0016	199092	298652
1048	LT0017	210101	304365
1049	LT0018	200594	324186
1050	LT0019	191745	330186
1051	LT0043	196647	300934
1052	LT0047	213153	310728
1053	LT0048	201781	314026
1054	LT0051	197192	310886
1055	LT0052	194139	299757
1056	LX0001	257325	206402
1057	LX0002	236620	206751
1058	LX0003	246473	197994
1059	LX0004	248618	199017
1060	LX0006	267003	173776
1061	LX0007	254944	211278
1062	LX0010	236071	193405
1063	LX0011	220467	192866
1064	LX0012	227453	205272
1065	LX0013	226836	178538
1066	LX0014	245489	184463
1067	LX0016	246068	206732
1068	LX0017	249206	189761
1069	LX0020	247493	198434
1070	LX0022	252135	206441
1071	LX0023	231321	195504
1072	LX0024	229402	210817
1073	LX0025	237902	170920
1074	LX0027	227498	185812
1075	LX0029	258367	185238
1076	LX0042	234360	184890

No.	Site I.D.	Easting	Northing
1077	LX0060	260578	208838
1078	LX0072	238971	177074
1079	LX0073	264440	187765
1080	LX0079	244944	208458
1081	LX0080	258562	194031
1082	LX0088	254428	200730
1083	MH0001	283943	303881
1084	MH0006	273113	319336
1085	MH0009	268130	333590
1086	MH0010	251206	320416
1087	MH0011	261375	348781
1088	MH0012	254192	340085
1089	MH0013	280495	310687
1090	MH0016	285706	312867
1091	MH0017	275927	315772
1092	MH0018	277020	306740
1093	MH0019	270734	336496
1094	MH0021	286821	326349
1095	MH0025	244533	322146
1096	MH0057	287011	302966
1097	MH0060	263333	326690
1098	MH0065	287252	325024
1099	MH0066	267347	334117
1100	MH0067	281381	319699
1101	MH0069	282767	319512
1102	MH0070	250460	325697
1103	MH0071	269460	341603
1104	MH0074	267518	333149
1105	MT0003	306394	252284
1106	MT0005	270976	263986
1107	MT0006	295953	270058
1108	MT0007	311622	267424
1109	MT0008	307391	273707
1110	MT0009	304012	268962
1111	MT0010	297111	251875
1112	MT0011	301745	249214
1113	MT0012	275032	275509
1114	MT0013	316357	271345
1115	MT0015	276204	244133
1116	MT0016	301147	251630

<b>No.</b>	<b>Site I.D.</b>	<b>Easting</b>	<b>Northing</b>
1117	MT0017	296251	258303
1118	MT0019	279944	255807
1119	MT0021	264483	244554
1120	MT0022	288714	266831
1121	MT0024	286841	267196
1122	MT0025	286290	268930
1123	MT0027	285043	248191
1124	MT0028	295988	274355
1125	MT0029	277877	241177
1126	MT0032	316049	273452
1127	MT0033	286767	267932
1128	MT0036	291104	248791
1129	MT0037	268841	280848
1130	MT0039	264764	260496
1131	MT0040	277457	266349
1132	MT0041	292045	280275
1133	MT0044	287240	289855
1134	MT0045	253180	274030
1135	MT0046	283508	265033
1136	MT0051	260307	268945
1137	MT0073	307757	252573
1138	MT0122	280572	271769
1139	MT0132	301287	242285
1140	MT0137	255171	280346
1141	MT0140	285662	266966
1142	MT0145	314273	273383
1143	MY0003	123813	318445
1144	MY0004	114882	290672
1145	MY0005	114729	290074
1146	MY0007	135306	274975
1147	MY0008	99906	283993
1148	MY0009	109830	298226
1149	MY0012	149502	279495
1150	MY0013	118971	264524
1151	MY0014	139673	299066
1152	MY0015	134323	289050
1153	MY0017	70457	332267
1154	MY0018	66993	302738
1155	MY0019	98522	293637
1156	MY0022	138900	282550

<b>No.</b>	<b>Site I.D.</b>	<b>Easting</b>	<b>Northing</b>
1157	MY0023	99919	284492
1158	MY0026	148300	287520
1159	MY0027	124608	307698
1160	MY0028	134554	293882
1161	MY0030	130200	267220
1162	MY0031	141730	293570
1163	MY0032	152435	298933
1164	MY0033	86780	281222
1165	MY0034	98755	282186
1166	MY0035	105130	281510
1167	MY0037	122564	255237
1168	MY0038	140943	274608
1169	MY0039	144935	279791
1170	MY0041	122272	268867
1171	MY0042	113018	273703
1172	MY0044	122460	259770
1173	MY0045	109011	317761
1174	MY0047	97776	287570
1175	MY0048	97076	320360
1176	MY0049	81062	296691
1177	MY0050	81850	279605
1178	MY0051	100478	338250
1179	MY0052	96760	275510
1180	MY0058	86741	323491
1181	MY0060	119078	330922
1182	MY0061	114328	317567
1183	MY0062	127524	253533
1184	MY0063	81010	337510
1185	MY0064	62123	319312
1186	MY0065	124810	275540
1187	MY0068	106700	286140
1188	MY0075	129329	287028
1189	MY0076	73371	297437
1190	MY0077	146721	296571
1191	MY0078	129624	311964
1192	MY0079	89799	264203
1193	MY0106	109835	298216
1194	MY0144	120296	327814
1195	MY0145	137541	299438
1196	MY0149	132906	303310

<b>No.</b>	<b>Site I.D.</b>	<b>Easting</b>	<b>Northing</b>
1197	MY0151	125826	318692
1198	MY0154	110539	337512
1199	MY0155	130630	262130
1200	MY0156	115295	338448
1201	MY0157	134950	318700
1202	MY0162	106318	329368
1203	MY0165	124241	318895
1204	MY0179	147890	302000
1205	MY0189	109324	271145
1206	MY0190	115553	254607
1207	MY0191	115518	254602
1208	OF0001	205908	204669
1209	OF0002	225807	233171
1210	OF0003	261742	232868
1211	OF0005	235240	224672
1212	OF0006	233659	224801
1213	OF0007	232568	226330
1214	OF0008	200745	215389
1215	OF0014	206459	205473
1216	OF0015	235218	225538
1217	OF0017	261063	223562
1218	OF0019	220489	230155
1219	OF0020	231117	217398
1220	OF0021	236425	218857
1221	OF0022	246755	214882
1222	OF0023	213298	201964
1223	OF0024	212537	229364
1224	OF0025	260628	217952
1225	OF0026	252121	221226
1226	OF0027	233888	225808
1227	OF0028	249736	214338
1228	OF0038	234236	227861
1229	OF0061	251958	227276
1230	OF0068	216850	210350
1231	RS0001	201693	241401
1232	RS0003	187474	264901
1233	RS0004	191673	230020
1234	RS0005	180414	300448
1235	RS0006	161958	294785
1236	RS0007	195600	275422



No.	Site I.D.	Easting	Northing
1237	RS0012	187226	264438
1238	RS0017	188518	315086
1239	RS0018	193790	291890
1240	RS0019	194172	252522
1241	RS0020	186589	296238
1242	RS0022	161881	284449
1243	RS0023	192917	316776
1244	RS0024	180288	307681
1245	RS0025	198259	281650
1246	RS0026	155865	272714
1247	RS0027	160590	298215
1248	RS0028	181163	268435
1249	RS0029	149891	269663
1250	RS0030	175026	275697
1251	RS0039	167893	278843
1252	RS0070	176661	284886
1253	RS0074	194005	271571
1254	RS0087	179066	280606
1255	RS0092	180361	302694
1256	RS0094	192146	237997
1257	SI0002	168381	336174
1258	SI0003	169370	335520
1259	SI0004	170011	337046
1260	SI0006	170039	335578
1261	SI0009	152394	311136
1262	SI0015	160163	346700
1263	SI0016	157610	311219
1264	SI0017	166275	346791
1265	SI0018	169638	332494
1266	SI0021	155299	329132
1267	SI0025	172717	329507
1268	SI0026	141503	314388
1269	SI0027	171821	308101
1270	SI0028	168119	317739
1271	SI0029	137512	328289
1272	SI0051	165890	321193
1273	SI0054	168231	326388
1274	SI0062	182138	322192
1275	SI0063	166607	302601
1276	SI0064	170847	336988

<b>No.</b>	<b>Site I.D.</b>	<b>Easting</b>	<b>Northing</b>
1277	SI0065	167975	335237
1278	SI0068	129133	323356
1279	SI0069	146480	329080
1280	SI0071	161145	336468
1281	SI0073	175930	347248
1282	SI0076	167745	328282
1283	SI0077	157484	318377
1284	SI0079	174304	314573
1285	SI0080	167656	336260
1286	SI0083	152633	310071
1287	TP0002	212798	158408
1288	TP0003	205521	124997
1289	TP0004	240283	120770
1290	TP0007	186907	178975
1291	TP0008	213890	188763
1292	TP0009	210700	171100
1293	TP0010	189156	135946
1294	TP0011	173610	177407
1295	TP0012	222470	123222
1296	TP0015	193810	152230
1297	TP0016	177642	169493
1298	TP0017	191631	115379
1299	TP0018	210401	143872
1300	TP0019	205442	130660
1301	TP0020	191339	194728
1302	TP0021	198964	176730
1303	TP0023	197285	121960
1304	TP0025	240120	128923
1305	TP0026	220871	133443
1306	TP0027	206081	175987
1307	TP0029	219122	124190
1308	TP0032	212300	158766
1309	TP0037	209352	118075
1310	TP0038	201545	139232
1311	TP0039	225500	150954
1312	TP0041	235389	134344
1313	TP0042	223208	137112
1314	TP0044	195678	146221
1315	TP0046	193311	161060
1316	TP0047	184862	130840

No.	Site I.D.	Easting	Northing
1317	TP0048	183875	194764
1318	TP0049	191735	168884
1319	TP0057	234018	139298
1320	TP0060	182350	166675
1321	TP0076	213617	186300
1322	TP0078	173516	168158
1323	TP0119	211502	150392
1324	TP0131	213867	189820
1325	TP0133	221132	122517
1326	TP0135	203769	180045
1327	TP0143	221098	139569
1328	WK0001	326120	219495
1329	WK0003	326184	217938
1330	WK0004	326851	218962
1331	WK0006	326683	217374
1332	WK0007	325543	217290
1333	WK0008	323311	218079
1334	WK0009	327704	215246
1335	WK0011	329637	212557
1336	WK0012	327122	212563
1337	WK0014	324999	175422
1338	WK0015	323241	172349
1339	WK0016	324458	173519
1340	WK0017	327519	197701
1341	WK0018	329716	187224
1342	WK0020	298629	215842
1343	WK0022	329193	207361
1344	WK0027	327958	194989
1345	WK0028	328376	200923
1346	WK0029	331035	192472
1347	WK0030	331737	193878
1348	WK0034	285831	189589
1349	WK0036	318906	187763
1350	WK0037	322323	217114
1351	WK0038	303283	172837
1352	WK0040	321790	216328
1353	WK0041	298036	214302
1354	WK0043	324986	179612
1355	WK0044	295595	206075
1356	WK0045	292740	195419

<b>No.</b>	<b>Site I.D.</b>	<b>Easting</b>	<b>Northing</b>
1357	WK0046	303157	218378
1358	WK0047	314071	190951
1359	WK0048	319470	196267
1360	WK0049	303322	177274
1361	WK0050	322684	193011
1362	WK0051	323726	187244
1363	WK0053	319822	175354
1364	WK0054	306752	171694
1365	WK0055	292550	188616
1366	WK0057	288332	194528
1367	WK0107	328456	192202
1368	WM0002	207994	241154
1369	WM0003	205886	241273
1370	WM0004	204451	241457
1371	WM0005	247595	254614
1372	WM0006	255571	252860
1373	WM0007	242476	251947
1374	WM0010	243866	253205
1375	WM0011	259700	245270
1376	WM0015	237727	258512
1377	WM0017	251526	244027
1378	WM0018	233398	237462
1379	WM0019	216360	239468
1380	WM0021	246632	270823
1381	WM0024	205123	242940
1382	WM0027	251852	258119
1383	WM0028	263345	253588
1384	WM0029	248212	267525
1385	WM0030	242068	271770
1386	WM0031	238613	264058
1387	WM0032	228097	246798
1388	WM0033	245567	260430
1389	WM0037	216286	246695
1390	WM0093	229070	237670
1391	WM0095	259774	263433
1392	WT0003	259585	112024
1393	WT0004	258050	110915
1394	WT0005	257811	112424
1395	WT0006	260677	110460
1396	WT0008	260710	111974

No.	Site I.D.	Easting	Northing
1397	WT0009	259877	112688
1398	WT0010	261940	111010
1399	WT0011	263539	111256
1400	WT0012	263840	110230
1401	WT0015	260480	112386
1402	WT0016	260879	112482
1403	WT0018	225799	92897
1404	WT0019	217353	87101
1405	WT0022	220900	121000
1406	WT0023	239594	105334
1407	WT0024	248280	111889
1408	WT0032	275890	102998
1409	WT0034	259310	112608
1410	WT0035	230931	99606
1411	WT0036	209309	87240
1412	WT0038	219597	102665
1413	WT0039	227304	100855
1414	WT0040	233584	117573
1415	WT0042	218270	112554
1416	WT0043	244965	105708
1417	WT0044	197937	100848
1418	WT0045	268870	100074
1419	WT0048	265524	103618
1420	WT0049	224689	114765
1421	WT0051	243611	99154
1422	WT0055	267350	101025
1423	WT0095	259750	108150
1424	WT0101	262901	103784
1425	WT0102	267702	104211
1426	WT0103	260204	112777
1427	WT0104	225031	93638
1428	WT0106	257963	101365
1429	WT0111	227851	95479
1430	WT0114	226095	93010
1431	WT0115	225780	87804
1432	WT0116	257601	101683
1433	WX0001	297318	139755
1434	WX0002	297726	141743
1435	WX0003	315519	159749
1436	WX0004	271221	128202

<b>No.</b>	<b>Site I.D.</b>	<b>Easting</b>	<b>Northing</b>
1437	WX0005	303979	121497
1438	WX0006	304759	121973
1439	WX0007	298060	119145
1440	WX0008	313869	112184
1441	WX0010	282740	152456
1442	WX0011	318092	162497
1443	WX0012	302273	157126
1444	WX0013	291366	156875
1445	WX0015	310109	114868
1446	WX0016	296950	103900
1447	WX0019	312000	133773
1448	WX0020	305229	121492
1449	WX0021	319475	156177
1450	WX0023	301893	149864
1451	WX0024	304832	120913
1452	WX0025	296644	140036
1453	WX0026	316596	160101
1454	WX0032	278171	119292
1455	WX0033	306923	138469
1456	WX0034	310061	130342
1457	WX0035	315108	139275
1458	WX0037	309803	163229
1459	WX0053	282736	152454
1460	WX0102	299186	131248

**Schedule 2****The Apparatus for Wireless Telegraphy to which this Licence Applies:**

No.	Manufacturer	Component	Equipment No.
1	Kathrein	Antenna	741572
2	Kathrein	Antenna	742211
3	Kathrein	Antenna	742212
4	Kathrein	Antenna	742213
5	Kathrein	Antenna	742215
6	Kathrein	Antenna	742226
7	Kathrein	Antenna	742233
8	Kathrein	Antenna	742234
9	Kathrein	Antenna	742264
10	Kathrein	Antenna	742265
11	Kathrein	Antenna	742266
12	Kathrein	Antenna	742270
13	Kathrein	Antenna	742271
14	Jaybeam	Antenna	5270306
15	Kathrein	Antenna	80010137
16	Kathrein	Antenna	80010177
17	Kathrein	Antenna	80010248
18	Kathrein	Antenna	80010290
19	Kathrein	Antenna	80010697
20	Kathrein	Antenna	80010698
21	Kathrein	Antenna	80010699
22	Kathrein	Antenna	80010749
23	Kathrein	Antenna	80010825
24	Kathrein	Antenna	742264v02
25	Kathrein	Antenna	742265v02
26	Kathrein	Antenna	742270v03
27	Kathrein	Antenna	742271v03
28	Sigma Wireless	Antenna	AQ65XBU15
29	Amphenol	Antenna	5961200
30	Amphenol	Antenna	5963200
31	Commscope	Antenna	CVV65BSX-M
32	Commscope	Antenna	CVVPX306R3
33	Kathrein	Antenna	80010826
34	Amphenol	Antenna	5880803G
35	Kathrein	Antenna	80010360
36	Kathrein	Antenna	742351v01

<b>No.</b>	<b>Manufacturer</b>	<b>Component</b>	<b>Equipment No.</b>
37	Cellmax	Antenna	CMA3324
38	Cellmax	Antenna	CMA6521
39	Racal	Antenna	R2211
40	Racal	Antenna	R2212
41	Nokia	BTS	Flexi
42	Jaybeam	Antenna	V.AL.17
43	Jaybeam	Antenna	V.AL.13
44	Huawei	Antenna	AQU4517R4
45	Racal	Antenna	AR.R.AL.13
46	Racal	Antenna	AR.R.AL.16
47	Huawei	Antenna	ATR4517R3
48	Huawei	Antenna	ATR4518R2
49	Racal	Antenna	R2204
50	Racal	Antenna	R2209
51	Racal	Antenna	R2290
52	PCTEL	Antenna	PC.R.iS.17
53	PCTEL	Antenna	PC.R.iF.15
54	Huawei	Antenna	AQU4518R23v06
55	Huawei	Antenna	AQU4518R24
56	Huawei	Antenna	AQU4518R4
57	Huawei	Antenna	AQU4518R5
58	Huawei	Antenna	ATR4518R12
59	Kathrein	Antenna	742226v01
60	Alpha Wireless	Antenna	AW3398



**Schedule 3**

**Radio frequency bands in which the Apparatus is authorised by this Licence to be used.**

The following bands may be used for FDD mode operation:

Mobile Transmit	Paired with Base Station Transmit
1920-1925 MHz	2110-2115 MHz
1930-1935 MHz	2120-2125 MHz
1970-1975 MHz	2160-2165 MHz

The following bands may also be used for TDD mode operation.

1920-1925 MHz
1930-1935 MHz
1970-1975 MHz

Use of the bands shall be in compliance with ERC Decision **ERC/DEC/(99)25**, in particular Annex 1 of that Decision with respect to channel rasters and guard bands.

**Schedule 4****Spectrum Feed Payable by the Licensee****1. Spectrum Access Fees**

	Y0	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10	Y11	Y12	Y13	Y14	Y15	Total Fee
<b>Fee (€m)</b>	12.7	0	0	0	0	0	2.5	2.5	2.5	2.5	2.5	5.1	5.1	5.1	5.1	5.1	<b>50.7</b>

Between years 0 (Y0) and 15 (Y15) of the term of The Licence, the spectrum access fees set out in the above table are payable by the Licensee.

**2. Annual Spectrum Fees:**

- (a) In respect of the 2 x 15 MHz a fee of €1,904,610.

**Schedule 5**

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**Commitments which the Licensee made in the course of a competitive or comparative selection procedure. This schedule, parts 1 through 9 inclusive, formed part of the Original Licence.**

## **Schedule 5**

### **Part 1**

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#### **COMMENCEMENT DATE**

The Commencement Date of the Original Licence  
with respect to Third Generation Mobile Telephony  
is the 25<sup>th</sup> day of July 2002.

(henceforth referred to in Schedule 5 as the 'Licence Commencement date').

## **Schedule 5**

### **Part 2**

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#### **Licensed Mobile Services**

The Licensed Mobile Service is a Third Generation Mobile and wireless communications Service based on a standard within the IMT-2000 system capable of supporting innovative multimedia services beyond the capability of second generation systems such as GSM, and capable of supporting the characteristics referred to in Annex 1 of the CEPT ECC Decision ERC/DEC/(99)25 on UMTS -

- (1) Provided in the bands 1900 - 1980 MHz, 2010 - 2025 MHz and 2110 – 2170 MHz (to be known as the 1900 MHz, 2000 MHz and 2100 MHz bands respectively) in accordance with the Wireless Telegraphy Acts 1926 – 1988, as amended.
- (2) Providing the services and conforming to the standards referred to in parts 3 – 9 of this Schedule.

## **Schedule 5**

### **Part 3**

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#### **Access to the Emergency Services**

1. General

The Licensee shall provide ready access for customers through the Licensed Mobile Service to the emergency services.

2. Calls to an Emergency Service

In this part “emergency services” means the Garda Síochána, the fire brigade services, the ambulance services, the boat and coastal rescue services, (including the rescue services provided by the Air Corps) or the mountain and cave rescue services.

3. Directions by the Commission

The Commission may give directions in writing to the Licensee in relation to the handling of calls to and from customers relating to an emergency service (“emergency calls”), and the Licensee shall comply with any such directions.

4. Acceptance of Emergency Calls

Emergency access codes, such as 999 and 112 and any other codes subsequently designated for use as emergency access codes, exclusively for calls to the emergency services shall be open to all terminal equipment equipped with a valid SIM Card (or equivalent), where technically necessary,

5. Routing of Emergency Calls

The Licensee shall ensure that an emergency call is routed at the expense of the Licensee, to a collection centre for emergency calls. The Licensee shall provide not less than two routes with physical diversity between each mobile switching centre and a collection centre as described.

6. Emergency Calls Free of Charge

- (a) The Licensee shall not impose a charge on the customer in respect of an emergency call.

7. Identification of Emergency Calls

When an emergency call is made to an emergency service from terminal equipment of a customer, the Licensee shall, where technically possible, transmit the customer's number to a collection centre for emergency calls in the form of a calling line identification message.

## **Schedule 5**

### **Part 4**

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#### **Quality of Service, Grade of Service**

1. Quality of Service, Grade of Service

In relation to Speed of Service, the Licensee shall, unless agreed otherwise with the Commission, comply with the obligations specified in the following Table:

a) Speed of Service

UDD limited mobility (outdoor) 384 kbps geographical coverage 30 June 2005	6,000 km <sup>2</sup>
UDD limited mobility (outdoor) 384 kbps geographical coverage 30 June 2007	20,000 km <sup>2</sup>
Max Speed (Applies to both Uplink and downlink) – UDD full mobility (outdoor), Rural – 2007 (year end)	384 kbps
Max Speed (Applies to both Uplink and downlink) – UDD full mobility (indoor), – 2007 (year end)	384 kbps

Note: coverage is defined for the purpose of this schedule in the following manner:

**Definition of Coverage**

Radio coverage is established from base station sites. Coverage around a site is accomplished using one (omni-directional) or several sectors. A sector is served by dedicated antenna/transceivers. Coverage is defined in terms of a minimum bearer data rate for UDD packet transmission of 144 kbps.

The sector coverage area is the area served by one dedicated set of antenna/transceivers.

The site coverage area is the total area covered from the base station equipment located at that site (i.e. the sum of sector coverage areas).



b) Customer Care

The licensee shall provide its customers with all the information and related services guaranteed below and shall, unless agreed otherwise with the Commission, comply with the specifications in the following Tables:

<b>Contents</b>	<b>Sub-sections and Service Guarantees</b>
Demand Resolution	<ul style="list-style-type: none"> <li>• Generic Resolution</li> <li>• Service operations assistance and activation</li> <li>• technical problem resolution</li> <li>• query identification</li> </ul>
Billing	<ul style="list-style-type: none"> <li>• Payment methods</li> </ul>
Customer Training	<ul style="list-style-type: none"> <li>• General information</li> <li>• Directory of services</li> <li>• products</li> <li>• handset</li> <li>• applications</li> </ul>
Contact Management	<ul style="list-style-type: none"> <li>• Money back guarantee</li> <li>• Insurance warranty</li> <li>• Compensation</li> <li>• Repairs/faults/replacement</li> </ul>
Advice	<ul style="list-style-type: none"> <li>• Welcome Pack/Call</li> <li>• First Bill Call</li> <li>• Additional appropriate product suggestions</li> <li>• Credit options</li> <li>• Loyalty offers</li> <li>• After sales tariff advice</li> </ul>
Operations Assistance-	<ul style="list-style-type: none"> <li>• Change of personal information</li> <li>• Activation /disconnection of new services</li> <li>• Compensation credits</li> </ul>
Bespoke offers	<ul style="list-style-type: none"> <li>• Access to information</li> <li>• Additional reports provided</li> <li>• Fleet management</li> <li>• Technical support for applications</li> <li>• On site care</li> </ul>

<b>Paragraph Heading</b>	<b>Description</b>	<b>Obligation</b>
Services at Registration / Order Completion	Activation of Handset	80% of services will be activated in 20 minutes
		100% of handsets will have fully charged batteries
	Number Portability	Numbers will be transferred within 2 hours of activation subject to cooperation from other networks
	Address Book Transfer	Address book information will be able to be transferred to the new handset on request from the customer
Contact Centre	Access Channels	Contact Centre will be accessible by phone, interactive voice recognition, E-mail, Fax and post
	Hours of Service	Contact Centre will be accessible 24 hours per day
	Cost of Access	Customers will be able to phone the Contact Centre free of charge when within the Republic of Ireland
	Downtime of Systems	The downtime of the contact centre will not exceed in aggregate 30 minutes in any calendar month
	Customer Satisfaction	More than 85% of customers surveyed will perceive their contact experience with the Contact Centre to be satisfactory or better
	Staff Training	All Customer Care staff will receive at least 5 weeks training in their first 6 weeks and an average of 12 hours per month thereafter

<b>Paragraph Heading</b>	<b>Description</b>	<b>Obligation</b>
	Reviews by internal and external parties	The Contact Centre operations will be subject to ad hoc and periodic reviews to ensure compliance with control systems and best practice
Self-Care	Access to Self Care	Self Care will be accessible 24 hours per day 7 days a week by handset or internet
	Downtime	Downtime will not exceed 30 minutes in any calendar month
Handling of Complaints	Time to resolve complaints	80% of all customer complaints received will be resolved within 2 days (written)
Customer Response Speeds	Voice calls to Contact Centre	80% of calls will be answered in less than 10 seconds
		Less than 4% of calls entering a queue will be abandoned by the customer before they are answered
		75% of customer queries / complaints will be dealt with during the first call to the contact centre
		Average contact handling time for voice calls to Contact Centre will be less than 250 seconds
	Instant Messaging (Text chat)	80% of calls will be answered in less than 10 seconds
	E-mail	100% of emails will be responded to within 2 hours
	Fax and written correspondence	100% of white mail will be responded to within 2 business days.

<b>Paragraph Heading</b>	<b>Description</b>	<b>Obligation</b>
Handsets	Money Back Guarantee	Customers will receive money back if handset returned within 14 days of activation
	Warranty	Customers will receive a new replacement handset if there is a handset fault within 28 days of purchase
	Faulty Handsets	Customers will receive a replacement handset by end of next business day
	Lost or stolen handsets	Customers will receive a replacement handset by end of next business day
Billing	Invoice Accuracy	The number of invoice errors will not exceed 0.2% of the number of invoices despatched per calendar month

## 2. Maps and Data

2.1 For the purposes of carrying out service quality surveys, the Licensee shall provide, on request, to the Commission the following:

- (a) Maps showing Coverage for 3G service. An area A shall be covered where the field strength - measured on the pilot signal (from the Common Pilot Channel/downlink) from the base station, outdoor at a height of 1.7 meters – is maintained equal to or above 58 dBμV/m over 95% of the area A during 95% of the time;
- (b) An up to date list of the locations of the base transceiver stations;
- (c) A mechanism for identifying the base station that is handling a call at any given time;
- (d) An adequate number of test numbers.

### 3. Network Log

- 3.1 The Licensee shall keep a log (the “network log”) for the purposes of recording and tracking all periods of system unavailability. The Licensee shall maintain this network log in a manner that will demonstrate, to the satisfaction of the Commission, that such a network log is an adequate means of assessing whether the Licensee is complying with its system availability obligations under this licence.
- 3.2 The network log, or as may be appropriate part thereof, shall be made available on request to the Commission.
- 3.3 The Licensee shall calculate the service unavailability for the Licensed Mobile Services for any period specified by the Commission from the information recorded in the network log, and shall upon request and within such time as may be specified by the Commission, provide the Commission with the results of the calculation.

### 4. Billing

#### 4.1 Billing Accuracy and Fraud Detection

The Licensee shall incorporate in its billing system:

- (i) measures to ensure that each call record is an accurate record of the actual call and that the correct accumulated call records are applied to generate each customer's bill, and
- (ii) measures to detect cases of possible fraud including measures to identify rapidly abnormal calling patterns.

### 5. Performance Standards and Objectives

- 5.1 The Commission may, by direction in writing given to the Licensee, specify performance standards and obligations with respect to service quality or modify existing performance

standards and obligations and the Licensee shall comply with any such directions.

6. Customer Service

- 6.1 Before the commencement of the provision of 3G Licensed Mobile Services, the Licensee shall implement a customer care system whereby the quality of service offerings are capable of being independently verified and this system shall be agreed by the Commission.

## **Schedule 5**

### **Part 5**

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#### **Roll-out and Coverage Requirements**

In relation to Network Roll-Out, the Licensee shall, unless agreed otherwise with the Commission, comply with the requirements specified in the following Table:

Minimum requirements:

Time of commercial launch of service	30 September 2003
Time to reach UDD full mobility (outdoor) 144 kbps Coverage (53% demographically)	30 June 2005
Time to reach UDD full mobility (outdoor) 144 kbps Coverage (80% demographically)	30 June 2007
UDD full mobility outdoor at 144 kbps demographic coverage at 2007 (year end)	85% Demographic coverage



## **Schedule 5**

### **Part 6**

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#### **National Roaming**

##### **A. National Roaming**

*The Commission shall nominate those who have a duty to provide National Roaming and also those who are entitled to benefit from this Part of the schedule under the proviso that they hold a Mobile Telephony Licence\* issued by the Commission and are designated New Market Entrants.*

1. (1) If and for so long as the Licensee or any member of its Group is authorised under the Postal and Telecommunications Services Act, 1983, as amended,\* and the Wireless Telegraphy Acts 1926 to 1988 to use radio spectrum within the 3G radio bands for the transmission of signals and for so long as it is authorised to use spectrum within the 900 MHz and/or 1800 MHz bands under the Postal and Telecommunications Services Act, 1983, as amended, and the Wireless Telegraphy Acts 1926 to 1988, the Licensee shall negotiate an agreement with a New market entrant or negotiate an amendment to such an agreement, as the case may be, within a reasonable period, if that New market entrant requires it to provide such National Roaming as may be reasonable. Where the authorisation to use radio spectrum is not held by the Licensee but by a member of its Group, the Licensee shall ensure that the holder of the authorisation complies with the terms of this condition. Any National Roaming Agreement negotiated under this Condition shall take effect at the latest from the date on which the New market entrant has rolled out its 3G network to cover 20% of the population of Ireland and shall have effect for a period of 5 (five) years from the date of grant of licence to the New market entrant. For the avoidance of doubt, the period of 5 years referred to above is calculated from the date of grant of licence to the New market

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\*Please see below for the status of references to Licences issued under the 1983 after the transposition of the European Communities Electronic Services Directives.

\* Under Regulation 22(1) of the European Communities (Electronic Communications Networks and Services)(Authorisation) Regulations, 2003 S.I. 306 of 2003 the licensee is deemed to be Authorised under Regulation 4 of those Regulations from the commencement of those Regulations. As such all references to licences issued under the Postal and Telecommunications Services Act 1983 shall now read as references to Authorisations under Regulation 4.

entrant, regardless of how long the New market entrant takes to roll out its 3G network. Any such National Roaming Agreement negotiated under this Condition shall cover at least Teleservices, Bearer services and Standard Supplementary Services supported over the Licensee's or a member of its Group's GSM network.

- 2 (1) The Commission may, if requested by either party, make a direction in order
  - (a) to specify issues which must be covered in a National Roaming Agreement; and/or
  - (b) to lay down specific conditions to be observed by one or more parties to a National Roaming Agreement; or
  - (c) if it thinks fit, to set time limits within which negotiations of a National Roaming Agreement are to be completed. Any such direction shall also set out the steps to be taken if agreement is not reached within these time limits.
- (2) Paragraph 2(1) shall not apply where the parties have concluded the first National Roaming Agreement under paragraph 1(1).
- 3 (1) The Licensee shall ensure that a National Roaming Agreement entered into or an amendment made under paragraph 1(1) contains terms and conditions which are reasonable. In the event of a dispute as to the reasonableness of any term or condition under this paragraph 3, either party may refer the dispute to the Commission for determination. The provisions of paragraph 6 of this Condition shall apply to such a determination.
- 4 (1) The Licensee shall comply with:
  - (a) the requirements of any direction made by the Commission under paragraph 2 or any determination under paragraph 3 in relation to any National Roaming Agreement, and
  - (b) the requirements of any determination made by the Commission under paragraph 6 in relation to any dispute over the terms of a National Roaming Agreement under paragraph 1(1).

- 5 (1) For the avoidance of doubt:
- (a) any question as to whether any term or condition (including a charge) of a National Roaming Agreement is reasonable, shall be decided by the Commission having regard to paragraph 6 and any directions or guidelines on the Application of this Condition issued from time to time by the Commission; and
  - (b) in considering whether a term or condition (including a charge) of a National Roaming Agreement is reasonable, the Commission may take into account, *inter alia*, the effective date of the term or condition and the period during which that term or condition may already have been in effect; the Commission may conclude that a reasonable charge is one which is offered or agreed, as the case may be, on terms that it takes effect in the National Roaming Agreements made under paragraph 1(1) from the date of a complaint or the date on which the term was first offered or accepted by the Licensee or a New market entrant or from any other date which is considered by the Commission to be appropriate in the circumstances.
- 6 (1) Where there is a dispute concerning National Roaming the Commission shall, at the request of either party, take steps to resolve the dispute within three months of the date of the request. The determination that the Commission makes to resolve the dispute shall represent a fair balance between the legitimate interests of both parties. In so doing, the Commission shall take into account, *inter alia*:
- (a) the interests of users;
  - (b) regulatory obligations or constraints imposed on the Licensee or the New market entrant;
  - (c) the desirability of stimulating innovative market offerings, and of providing users with a wider range of telecommunications services within Ireland and the European Union;
  - (d) the need to maintain the integrity of the public telecommunications network and the interoperability of services;

- (e) the nature of the request in relation to the resources available to meet the request;
  - (f) the relative market positions of the Licensee and the New market entrant
  - (g) the need for the Licensee to maintain quality of service and for the New market entrant to provide accurate and timely information in order to facilitate network planning;
  - (h) the public interest, such as the protection of the environment;
  - (i) the promotion of competition; and
  - (j) the provision of National Roaming to New market entrants at a price based on Retail minus avoidable costs, as defined in this condition and any guidelines issued by the Commission from time to time.
- (2) For the avoidance of doubt, the list at paragraph 6(1) is not exhaustive.
- (3) The determination shall be published in accordance with paragraph 7 and shall be binding on the parties.
- (4) The Commission shall not be required to take steps to resolve any dispute referred to it under this paragraph in respect of a New market entrant, where any other dispute has been referred to it under this paragraph or where it has previously resolved a dispute relating to a National Roaming Agreement involving that New market entrant in circumstances where that National Roaming Agreement is:
- (i) still valid and in existence; and
  - (ii) remains in substantially the same form.
- 7 (1) Any determination made by the Commission under paragraph 6 shall automatically lapse upon the entry into force of any subsequent National Roaming Agreement to which the same New market entrant is a party.

- 8      (1)      The Commission shall ensure that up to date and specific information in accordance with paragraph 6 is made available on request to interested parties, free of charge, during normal working hours.

- 9      (1)      In this Condition:

“Mobile Terminal” shall mean a telecommunications terminal intended to be able to register with as well as make and receive calls with one or more public mobile communications networks.

“Visited Network” shall mean a public mobile communications network in which a Mobile Terminal can work without the Mobile Terminal or an inserted identification module (SIM card) being associated therewith via a subscription or a similar customer relationship.

“Retail minus avoidable cost” means the retail price charged by the Licensee for the provision of a service to end-users less any elements of costs that are not incurred in providing the same service to the New market entrant plus any elements of cost reasonably incurred solely to provide National Roaming services.

“Bearer services” shall mean as defined in current and future versions of the ETSI GSM Technical Specifications (and their future 3G equivalents).

“Group” means, in relation to the Licensee:

- a)      any parent undertaking of the Licensee;
- b)      any subsidiary undertaking of the Licensee;
- c)      any subsidiary undertaking of any parent undertaking referred to in a);
- d)      a shareholder or partner in the Licensee which beneficially owns (directly or indirectly) shares in the Licensee in circumstances where there is one other shareholder or partner in the Licensee which beneficially owns (directly or indirectly) the remaining shares in circumstances where neither shareholder or partner has control;
- e)      any undertaking of which the Licensee beneficially owns (directly or indirectly) shares in circumstances where there is one other shareholder or partner in that

undertaking which beneficially owns (directly or indirectly) the remaining shares in circumstances where neither shareholder nor partner has control;

- f) any undertaking in circumstances where two or more of its shareholders or partners which acting in concert together beneficially own (directly or indirectly) more than 50% of the shares or voting rights in that undertaking, acting in concert together beneficially own (directly or indirectly) more than 50% of the shares, or voting rights of the Licensee; and
- g) any undertaking of which the Licensee beneficially owns (directly or indirectly) together with one or more undertakings acting in concert more than 50% of the shares or voting rights of that undertaking.

A Person shall be deemed to control a body corporate if –

- a) he has a controlling interest in it;
- b) he has a controlling interest in a body corporate which has a controlling interest in the body corporate; or
- c) although he does not have such an interest in the body corporate, or in any body corporate with a controlling interest in the body corporate, it is reasonable, having regard to all the circumstances, to expect that he will be able, by whatever means and whether directly or indirectly, to achieve the result that the affairs of the body corporate are conducted in accordance with his wishes; and for this purpose a Person has a controlling interest in a body if he holds, or is beneficially entitled to, 50% or more of the equity share capital in the body corporate, or possesses 50% or more of the voting power in it and a Person shall be deemed to control a body corporate where that Person controls another Person which controls that body corporate.

“National Roaming” shall mean a service which enables a Mobile Terminal to register with as well as make and receive calls on a Visited Network in Ireland.

“National Roaming Agreement” shall mean an agreement that provides for National Roaming.

“New market entrant” means a Person who was not licensed to provide mobile telecommunications services and networks in Ireland on March 27<sup>th</sup> 2002 and who did not

have control of and was not controlled by a body corporate which was so licensed on or before that date.

“Supplementary services” shall have the meanings attached by the relevant ETSI/GSM standards (or equivalent standards).

“Standard Supplementary Services” shall mean those Supplementary services which are most widely used by mobile retail customers (subscribers).

“Teleservices” shall mean as defined in current and future versions of the ETSI GSM Technical Specifications (and their future 3G equivalents).

“2G spectrum” means, for the purposes of this Condition spectrum within the 900 MHz and/or 1800 MHz bands.

“3G spectrum” means, for the purposes of this Condition spectrum within the 1900 MHz, 2000 MHz and 2100 MHz bands.

- 10 (1) The Licensee shall not (whether in respect of the charges or other terms or conditions applied or otherwise) show undue preference to, or exercise undue discrimination against, particular Persons or Persons of any class or description with respect to the provision of the service to which the Licensee is obliged by this Condition to provide.
- This Condition, shall cease to have effect 5 (five) years after the issue of a licence to provide 3G mobile services to any party entitled to benefit from the provisions of paragraph 1(1) of this Condition.

B. International Roaming:

1. The Licensee shall establish and maintain as part of its Mobile Service an international roaming capability for its customers that is as wide and comprehensive as is practicable.
2. Where requested to do so, the Licensee shall provide to members of the public, maps from other 2G and 3G operators with whom it has international Roaming Agreements showing the Coverage provided by them.

## **Schedule 5**

### **Part 7**

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#### **MVNO Access Condition**

1. (1) If and for so long as the Licensee or any member of its Group is authorised under the Postal and Telecommunications Services Act, 1983, as amended<sup>\*</sup>, and the Wireless Telegraphy Acts 1926 to 1988 to use radio spectrum within the radio spectrum bands for the transmission of signals, it shall negotiate an agreement (hereinafter the 'MVNO Agreement') with a Mobile Virtual Network Operator ('MVNO') or negotiate an amendment to such an agreement, as the case may be, within a reasonable period, if that MVNO requires it to provide such access to the Licensee's GSM (or equivalent) and 3G network, as may be reasonable, priced at a level at least 35% below retail. Where the authorisation to use radio spectrum is not held by the Licensee but by a member of its Group, the Licensee shall ensure that the holder of the authorisation complies with the terms of this condition. Such an agreement shall cover at least Teleservices, Bearer services and Standard Supplemental Services supported over the Licensee's GSM (or equivalent) and 3G network as offered to the Licensee's own customers. In addition, the agreement shall cover a set of "wholesale" mobile features/functionality (or their 3G equivalents) required for the MVNO to produce such value added services, which the host network produces and provides to its own retail subscribers. Where the Licensee is under a duty to negotiate an agreement under paragraph 1(1) above, it shall, in addition, be obliged when requested to do so by the MVNO, to co-operate with it to ensure the MVNO is in a position to take reasonable advantage of the MVNO Agreement being or to be negotiated under paragraph 1(1).

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<sup>\*</sup> Under Regulation 22(1) of the European Communities (Electronic Communications Networks and Services)(Authorisation) Regulations, 2003 S.I. 306 of 2003 the licensee is deemed to be Authorised under Regulation 4 of those Regulations from the commencement of those Regulations. As such all references to licences issued under the Postal and Telecommunications Services Act 1983 shall now read as references to Authorisations under Regulation 4.



2. (1) If, within a period of three months from the date on which the request for establishing or modifying an MVNO Agreement was made in writing to a Licensee under a duty to negotiate such an agreement under paragraph 1(1) above, the parties have not reached an agreement, one or more of the parties may request the Commission to intervene.
3. (1) Where the Commission is requested to intervene on foot of paragraph 2 above, it may make a direction in order:
      - (a) to specify issues which must be covered in an MVNO Agreement; or
      - (b) to lay down specific conditions to be observed by one or more parties to an MVNO Agreement; or
      - (c) if it thinks fit, to set time limits within which negotiations of an MVNO Agreement are to be completed. Any such direction shall also set out the steps to be taken if agreement is not reached within these time limits.
    - (2) Paragraph 3(1) shall not apply where the parties have concluded an MVNO Agreement under paragraph 1(1).
4. The Licensee shall ensure that an MVNO Agreement entered into or an amendment made under paragraph 1(1) contains terms and conditions which are reasonable. To the extent that all or any of the terms and conditions of an MVNO Agreement made under paragraph 1(1) (whether on or after the coming into force of this condition) cease to be reasonable, the Licensee shall, within a reasonable period, negotiate an amendment to the MVNO Agreement so that the terms and conditions of the MVNO Agreement are reasonable. In the event of a dispute as to the reasonableness of any term or condition under this paragraph 4, either party may refer the dispute to the Commission for determination. The provisions of paragraph 8 of this Condition shall apply to such a determination.
5. An MVNO Agreement may contain differing elements. Where the Commission is requested to intervene on foot of paragraph 2 or paragraph 8 of this Condition it may divide such a request into sub-questions that may be dealt with separately as independent requests for intervention.

6. The Licensee shall comply with:
  - (a) the requirements of any direction made by the Commission under paragraph 3 or any determination under paragraph 4 in relation to any MVNO Agreement, or any negotiation of an MVNO Agreement to which it is or is intended to be a party; and
  - (b) the requirements of any determination made by the Commission under paragraph 8 in relation to any dispute over the terms of an MVNO Agreement under paragraph 1(1).
7. For the avoidance of doubt:
  - (a) any question as to whether any term or condition (including a charge) of an MVNO Agreement is reasonable, shall be decided by the Commission having regard to paragraph 8 and any directions or guidelines on the Application of this Condition issued from time to time by the Commission; and
  - (b) in considering whether a term or condition (including a charge) of an MVNO Agreement is reasonable, the Commission may take into account, *inter alia*, the effective date of the term or condition and the period during which that term or condition may already have been in effect; the Commission may conclude that a reasonable charge is one which is offered or agreed, as the case may be, on terms that it takes effect in MVNO Agreements made under paragraph 1(1) from the date of a complaint or the date on which the term was first offered or accepted by the Licensee or an MVNO or from any other date which is considered by the Commission to be appropriate in the circumstances.
8. (1) Where there is a dispute concerning an MVNO Agreement or the negotiation thereof, the Commission shall, at the request of either party, take steps to resolve the dispute within three months of the date of the request. The determination that the Commission makes to resolve the dispute shall represent a fair balance between the legitimate interests of both parties. In so doing, the Commission shall take into account, *inter alia*:
  - (a) the interests of users;
  - (b) regulatory obligations or constraints imposed on the Licensee or the MVNO;

- (c) the desirability of stimulating innovative market offerings, and of providing users with a wider range of telecommunications services in the State and in the European Union;
  - (d) the need to maintain the integrity of the public telecommunications network and the interoperability of services;
  - (e) the nature of the request in relation to the resources available to meet the request;
  - (f) the need for the Licensee to maintain quality of service and for the MVNO to provide accurate and timely information in order to facilitate network planning;
  - (g) the public interest, including but not restricted to the protection of the environment;
  - (h) the promotion of competition;
  - (i) the promotion of innovative services and applications;
  - (j) lower tariffs.
- (2) For the avoidance of doubt, the list at paragraph 8(1) above is not exhaustive.
- (3) The determination shall be published in accordance with paragraph 10 and shall be binding on the parties.
- (4) The Commission shall not be required to take steps to resolve any dispute referred to it under this paragraph in respect of an MVNO, where any other dispute has been referred to it under this paragraph or where he has previously resolved a dispute relating to an MVNO involving that MVNO in circumstances where that MVNO Agreement is:
- (i) still valid and in existence; and
  - (ii) remains in substantially the same form.
9. Any determination made by the Commission under paragraph 8 shall automatically lapse upon the entry into force of any subsequent MVNO Agreement to which the same MVNO is a party.
10. The Commission shall ensure that up to date and specific information in accordance with paragraph 8 is made available on request to interested parties, free of charge, during normal working hours.

11. The Licensee shall not (whether in respect of the charges or other terms or conditions applied or otherwise) show undue preference to, or exercise undue discrimination against, particular Persons or Persons of any class or description with respect to the provision of the service to which the Licensee is obliged by this Condition to provide.
12. The operation of this Condition and the duties imposed hereby are subject to the legal and regulatory constraints otherwise imposed on the parties to whom this Condition applies.
13. This Part 7 is subject to the following commercial principles of the Licensee.

The Licensee shall give a discount of at least 35% on its retail prices to MVNOs.

The Obligation above is on the understanding of the definition, technical solution and conditions of MVNO access as described in the tender document Appendix 9A. For the purposes of clarity, the Obligation is also on the understanding of the following commercial principles:

- The MVNO will efficiently utilise the radio network's capacity (geographically and by time of day).
- For the purposes of planning and investing in more capacity in the radio network, the MVNO will need to commit to certain minimum levels of usage.
- Depending on the complexity of the agreed technical solution, the MVNO will be required to pay an upfront fee to cover the Licensee's costs of implementation.
- The MVNO will be responsible for acquiring/developing its own 3G content (e.g. information, news, etc) and IT platforms and systems, and will bear the related costs. (It is understood that the Licensee will provide the network functionality, for example data on the customer's geographic location, required by the MVNO to offer such value added services, provided such network functionality is used by the Licensee for its own customers).
- On the assumption that 'X' is equivalent across all services, the MVNO will deliver a range of services to its customers equal to the services delivered by the Licensee to its customers (this is to avoid the situation whereby, for example, the MVNO decides to offer only one service (e.g. SMS) which the Licensee offers for free to its customers, and thereby pays nothing for utilising the radio network). Alternatively, the Licensee would be willing to offer a range of discounts across different services which would average at 'X' based on the services delivered by the Licensee to its customers.
- The Licensee shall route all outgoing calls made by the MVNO's subscribers to the MSC of the MVNO, and the MVNO will be responsible for further call handling.

14. In this Condition:

“Bearer services” shall mean as defined in current and future versions of the ETSI GSM Technical Specifications (and their future 3G equivalents).

“Group” means for the purposes of this schedule, in relation to the Applicant/Licensee:

- a) any parent undertaking of the Applicant/Licensee;
- b) any subsidiary undertaking of the Applicant/Licensee;
- c) any subsidiary undertaking of any parent undertaking referred to in a);
- d) a shareholder or partner in the Applicant/Licensee which beneficially owns (directly or indirectly) shares in the Applicant/Licensee in circumstances where there is one other shareholder or partner in the Applicant/Licensee which beneficially owns (directly or indirectly) the remaining shares in circumstances where neither shareholder or partner has control;
- e) any undertaking of which the Applicant/Licensee beneficially owns (directly or indirectly) shares in circumstances where there is one other shareholder or partner in that undertaking which beneficially owns (directly or indirectly) the remaining shares in circumstances where neither shareholder nor partner has control;
- f) any undertaking in circumstances where two or more of its shareholders or partners which acting in concert together beneficially own (directly or indirectly) more than 50% of the shares or voting rights in that undertaking, acting in concert together beneficially own (directly or indirectly) more than 50% of the shares, or voting rights of the Applicant/Licensee; and
- g) any undertaking of which the Applicant/Licensee beneficially owns (directly or indirectly) together with one or more undertakings acting in concert more than 50% of the shares or voting rights of that undertaking.

“Mobile Virtual Network Operator - MVNO” means an organisation operating a physical network infrastructure comprising as a minimum a mobile switching centre, home location register and authentication centre (or 3G mobile equivalents), having its own unique mobile network code with distinct IMSI and E.164 number series (where applicable), and issuing its own branded SIM cards (or 3G mobile equivalent), but without a mobile radio access network.

“MVNO Agreement” shall mean an agreement between an MVNO and a host operator that provides for MVNO Access.

“Retail minus X” means the retail price charged by the Licensee for the provision of a service, or a set of services, to end-users less a factor “X” which is the discount on the retail price proposed by the host operator.

“Supplementary services” shall have the meanings attached by the relevant ETSI/GSM standards (or equivalent standards).

“Standard Supplementary Services” shall mean those Supplementary services which are most widely used by mobile retail customers (subscribers).

“Teleservices” shall mean as defined in current and future versions of the ETSI GSM Technical Specifications (and their future 3G equivalents).

“Tender documents” shall mean the documents published by the Commission in December 2001 as ODTR document nos. 01/99 and 01/100.

“2G spectrum” means for the purposes of this Condition spectrum within the 900 MHz and/or 1800 MHz bands.

“3G spectrum” means frequencies within the 1900 MHz, 2000 MHz and 2100 MHz frequency bands.

## **Schedule 5**

### **Part 8**

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#### **Performance and Financial Guarantees (1)**

- (a) Text considered confidential and subject to the protection of confidentiality has been deleted

## **Schedule 5**

### **Part 8**

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#### **Performance and Financial Guarantees (2)**



Text considered confidential and subject to the protection of confidentiality has been deleted–



## **Schedule 5**

### **Part 8**

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#### **Performance and Financial Guarantees (3)**

1. Text considered confidential and subject to the protection of confidentiality has been deleted

## **Schedule 5**

### **Part 9**

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#### **Site Sharing**

1. If and for so long as the Licensee or any member of its Group is authorised to use radio spectrum within the radio spectrum bands for the transmission of signals, it shall, within a reasonable period, negotiate in good faith and conclude a framework contract (hereinafter the 'Site Sharing Agreement') with any other licensed 3G mobile network operator or negotiate and conclude an amendment to such an agreement, as the case may be, upon reasonable request from any such operator for access to radio transmission sites under the Licensee's control (3G or otherwise).
2. The Licensee shall ensure that the Site Sharing Agreement concluded pursuant to this Condition provides other mobile network operators with access to 100% of the radio transmission sites (3G or otherwise) under the control of the Licensee for site sharing purposes at t1 (30 September 2003), t2 (30 June 2005) and t3 (30 June 2007) excluding those sites to which access cannot be offered because of capacity constraints. Where the authorisation to use radio spectrum is not held by the Licensee but by a member of its Group, the Licensee shall ensure that the holder of the authorisation complies with the terms of this Condition.
3. The Licensee shall grant access to sites under its control on a reasonable, transparent and non-discriminatory basis in the form of a framework agreement which will cover the following points
  - i) Requests for access and reaction: once a request for access for a specific site has been made, the agreement must set a reasonable time within which the operator controlling the site must formally respond to the request.
  - ii) Non-exclusivity: an operator controlling a site shared or offered for sharing to any 3G licensee must agree to offer access to the same site to any other 3G licensee on a non-discriminatory basis, subject to capacity constraints.

- iii) Price: the Site Sharing Agreement must include a method of determining a reasonable level of compensation for use of the site. The Licensee shall charge other operators for access to its sites based on the following: 50% of the Licensee's costs relating to establishing the site + any additional costs incurred by the Licensee as a result of the other operator sharing the site.
  - iv) Access: the Site Sharing Agreement must set out the rights of both operators to enter the site and to carry out work on it, in particular any charges associated with site entry and any constraints relating to when the site may be accessed. The licensee offering site sharing should endeavour to provide or ensure the party in control of the site provides unescorted access options that meet reasonable demand.
  - v) Repairs and maintenance: the Site Sharing Agreement must set out the responsibilities of both parties.
  - vi) Liability for accidents etc. on the site: the Site Sharing Agreement must set out the responsibilities of both parties.
  - vii) Technical standards for site sharing must be set in terms of a minimum requirement acceptable to all sharers and conforming to appropriate legislation, such as health and safety and planning regulations.
  - viii) Obtaining permission etc.: the Site Sharing Agreement must set out whose responsibility it is to obtain any permission necessary to use the site for 3G mobile telecommunications.
  - ix) The Site Sharing Agreement should require the burden of proof of the unavailability of access to a particular site should fall on the licensee offering site sharing.
  - x) Disputes: the Site Sharing Agreement must define a method of settling disputes by involving the nomination of a neutral third party (e.g. an arbitrator.).
  - xi) Oversight by ODTR: the Site Sharing Agreement must provide a right for the Commission to inspect any correspondence or documents covered by the agreement.
4. The provisions of this Condition are without prejudice to the rights and obligations relating to facility sharing granted or imposed by the European Communities (Interconnection in Telecommunications) Regulations, 1998, as amended, or otherwise.
5. The Licensee shall participate in any future code of practice concerning the sharing of radio transmission sites, and shall support the Commission in the development of a code of practice relating to the sharing of radio transmission sites, bearing in mind the considerations which are contained in

Appendix A12 of the tender documents, and shall comply with any decision of the Commission in that regard.

6. The Licensee shall provide at the Commission's request a list of the locations of the sites covered by this Part. In response to a request by the Commission, the Licensee shall identify the locations of the Radio transmission sites under its control in respect of which it will provide access to other 3G licensees.