

**Agreement between
the Telecommunications Administration Centre, Finland and
Inspection of Telecommunications, Estonia
concerning the use of the frequency bands 890-915/935-960 MHz**

1997

Section 1 - Cancellation of previous agreement (20 October 1994)

“Agreement between the Estonian and Finnish frequency management authorities on the co-ordination of frequency sharing, interfering field strength and geographical coverage areas of the mobile telephone system GSM” (20 October 1994) shall be cancelled from the date coming into force of the given agreement.

Section 2 - Use of GSM channels from 7 December 1997

2.1 The preferential frequencies and the preferential frequency bands will be shared between Estonia and Finland as follows:

Estonia may use the GSM channels 22 - 48, 70 - 88 and 110 - 119 without co-ordination with Finland, if the field strength of every single carrier produced by a base station does not exceed 36 dB μ V/m within zone F (Annex 2).

Finland may use the GSM channels 1 - 20, 50 - 68 and 90 - 108 without co-ordination with Estonia, if the field strength of every single carrier produced by a base station does not exceed 36 dB μ V/m within zone E (Annex 2).

2.2 The non-preferential frequencies and the non-preferential frequency bands will be shared between Estonia and Finland as follows:

Estonia may use the GSM channels 1 - 21, 49 - 69 and 89 - 109 without co-ordination with Finland, if the field strength of every single carrier produced by a base station does not exceed 19 dB μ V/m within zone F.

Finland may use the GSM channels 21 - 49, 69 - 89 and 109 - 119 without co-ordination with Estonia, if the field strength of every single carrier produced by a base station does not exceed 19 dB μ V/m within zone E.

2.3 The preferential frequencies with restrictions will be shared between Estonia and Finland as follows:

Estonia may, after co-ordination with the Finnish GSM operator concerned, without any obligation to inform the frequency management authority, use the GSM channels 21, 69 and 109 with a field strength exceeding 19 dB μ V/m, but not 36 dB μ V/m, within zone F.

Finland may, after co-ordination with the Estonian GSM operator concerned, without any obligation to inform the frequency management authority, use the GSM channels 49 and 89 with a field strength exceeding 19 dB μ V/m, but not 36 dB μ V/m, within zone E.

The above mentioned field strength values are based on height of receiving antenna 1.5 m, 50 % of time, 50 % of locations. It is possible to use the field strength values based on height of receiving antenna 10 m. In this case the above mentioned field strength value 36 dB μ V/m corresponds to 42 dB μ V/m and 19 dB μ V/m corresponds to 25 dB μ V/m.

Section 3 - General

- 3.1 A field strength exceeding above mentioned levels shall be co-ordinated with the other country by the frequency management authorities.
- 3.2 Preliminary co-ordination may take place between operators concerned. The results from preliminary co-ordination between operators must be approved by the administrations.
- 3.3 A complaint in case of interference shall be based on the median values of measurements of field strength performed at 1.5 m or (and) 10 m of receiving antenna height at least on two different occasions over a range of at least 100 m of the tangent of the wave propagation of an interfering base station. In the case the measurement result at the height of the receiving antenna 1.5 m does not correspond to the measurement result at the height of the receiving antenna 10 m the more stringent result shall be used. Measurements of field strength shall refer to the coast line.
- 3.4 The operation of GSM channels 120 - 124 is intended for cordless telephone system CT-1.

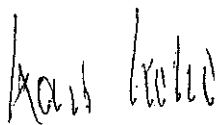
Section 4 - Revision and cancellation

- 4.1 This agreement may be cancelled as desired by one of the administrations with a notice of one year.
- 4.2 This agreement may be revised if mutual understanding is reached at the negotiations between the administrations.
- 4.3 In case this agreement is cancelled and new one is not concluded the co-ordination procedure will be based on CEPT Recommendation T/R 20-08.

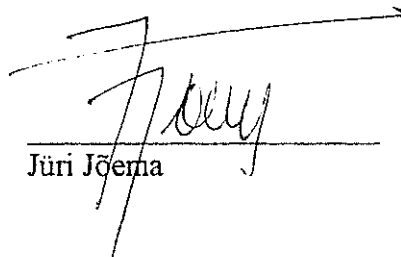
This agreement shall come into effect from 7 December 1997.

This agreement has been drawn up in two identical copies, of which each party has taken its own.

Geneva, 21 November 1997



Kari Koho



Jüri Jõena

List of annexes:

Annex 1: GSM Frequency assignment planning and co-ordination of preferential frequencies between Finland and Estonia

Annex 2: Definition of protected zones
- the map of the South coast of Finland
- the map of the Estonian coast

Ch. No	Assignm.	Rx Centre Fq. (MHz)	Tx Centre Fq. (MHz)	Ch. No	Assignm.	Rx Centre Fq. (MHz)	Tx Centre Fq. (MHz)
1	FIN	890.20	935.20	63	FIN	902.60	947.60
2	FIN	890.40	935.40	64	FIN	902.80	947.80
3	FIN	890.60	935.60	65	FIN	903.00	948.00
4	FIN	890.80	935.80	66	FIN	903.20	948.20
5	FIN	891.00	936.00	67	FIN	903.40	948.40
6	FIN	891.20	936.20	68	FIN	903.60	948.60
7	FIN	891.40	936.40	69	EST	903.80	948.80
8	FIN	891.60	936.60	70	EST	904.00	949.00
9	FIN	891.80	936.80	71	EST	904.20	949.20
10	FIN	892.00	937.00	72	EST	904.40	949.40
11	FIN	892.20	937.20	73	EST	904.60	949.60
12	FIN	892.40	937.40	74	EST	904.80	949.80
13	FIN	892.60	937.60	75	EST	905.00	950.00
14	FIN	892.80	937.80	76	EST	905.20	950.20
15	FIN	893.00	938.00	77	EST	905.40	950.40
16	FIN	893.20	938.20	78	EST	905.60	950.60
17	FIN	893.40	938.40	79	EST	904.80	950.80
18	FIN	893.60	938.60	80	EST	906.00	951.00
19	FIN	893.80	938.80	81	EST	906.20	951.20
20	FIN	894.00	939.00	82	EST	906.40	951.40
21	EST	894.20	939.20	83	EST	906.60	951.60
22	EST	894.40	939.40	84	EST	906.80	951.80
23	EST	894.60	939.60	85	EST	907.00	952.00
24	EST	894.80	939.80	86	EST	907.20	952.20
25	EST	895.00	940.00	87	EST	907.40	952.40
26	EST	895.20	940.20	88	EST	907.60	952.60
27	EST	895.40	940.40	89	FIN	907.80	952.80
28	EST	895.60	940.60	90	FIN	908.00	953.00
29	EST	895.80	940.80	91	FIN	908.20	953.20
30	EST	896.00	941.00	92	FIN	908.40	953.40
31	EST	896.20	941.20	93	FIN	908.60	953.60
32	EST	896.40	941.40	94	FIN	908.80	953.80
33	EST	896.60	941.60	95	FIN	909.00	954.00
34	EST	896.80	941.80	96	FIN	909.20	954.20
35	EST	897.00	942.00	97	FIN	909.40	954.40
36	EST	897.20	942.20	98	FIN	909.60	954.60
37	EST	897.40	942.40	99	FIN	909.80	954.80
38	EST	897.60	942.60	100	FIN	910.00	955.00
39	EST	897.80	942.80	101	FIN	910.20	955.20
40	EST	898.00	943.00	102	FIN	910.40	955.40
41	EST	898.20	943.20	103	FIN	910.60	955.60
42	EST	898.40	943.40	104	FIN	910.80	955.80
43	EST	898.60	943.60	105	FIN	911.00	956.00
44	EST	898.80	943.80	106	FIN	911.20	956.20
45	EST	899.00	944.00	107	FIN	911.40	956.40
46	EST	899.20	944.20	108	FIN	911.60	956.60
47	EST	899.40	944.40	109	EST	911.80	956.80
48	EST	899.60	944.60	110	EST	912.00	957.00
49	FIN	899.80	944.80	111	EST	912.20	957.20
50	FIN	900.00	945.00	112	EST	912.40	957.40
51	FIN	900.20	945.20	113	EST	912.40	957.60
52	FIN	900.40	945.40	114	EST	912.80	957.80
53	FIN	900.60	945.60	115	EST	913.00	958.00
54	FIN	900.80	945.80	116	EST	913.20	958.20
55	FIN	901.00	946.00	117	EST	913.40	958.40
56	FIN	901.20	946.20	118	EST	913.60	958.60
57	FIN	901.40	946.40	119	EST	913.80	958.80
58	FIN	901.60	946.60	120	CT-1	914.00	959.00
59	FIN	901.80	946.80	121	CT-1	914.20	959.20
60	FIN	902.00	947.00	122	CT-1	914.40	959.40
61	FIN	902.20	947.20	123	CT-1	914.60	959.60
62	FIN	902.40	947.40	124	CT-1	914.80	959.80

DEFINITION OF PROTECTED ZONES

In Estonia

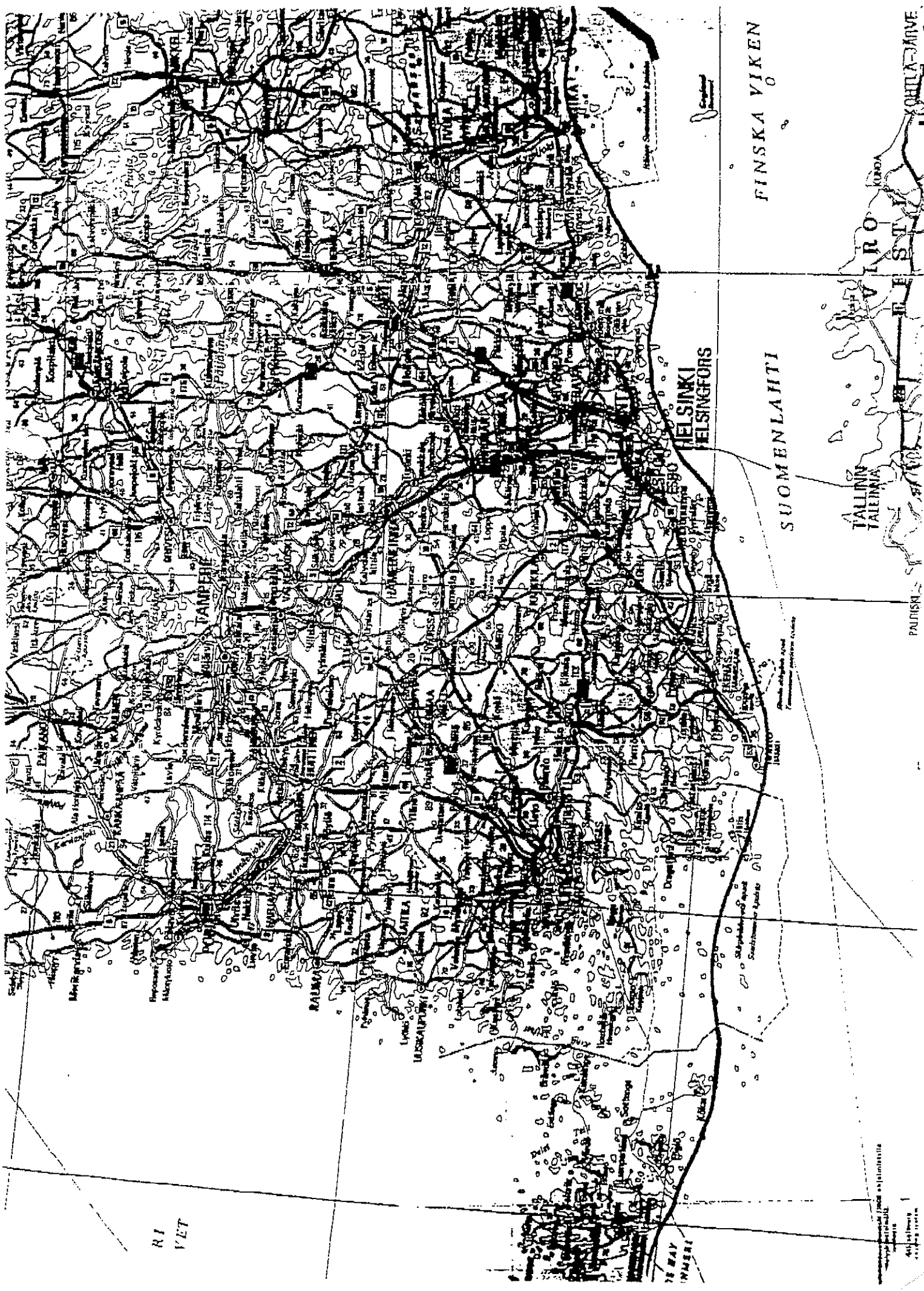
Zone E

The Estonian coast including the following islands:
Saaremaa, Hiiumaa, Vormsi, Naissaar and Prangli.

In Finland

Zone F

The south coast of Finland



HELSINKI
HELSINGFORS

SUOMENLAHTI

FINNSKA VIKEN

TALLINN
TALENNA

V I R O

S T O C K H O L M

K O P P I L A - M O N E

RI
VET

Scale and legend information in small text at the bottom right.

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EESTI VABARIK

REPUBLIC OF ESTONIA

ANNEX 2

