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Ministeriet for Videnskab
Teknologi og Udvikling

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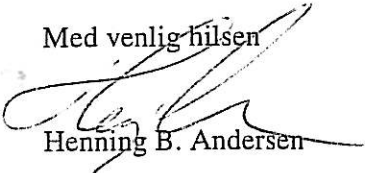
Ministry of Science
Technology and Innovation

Returnering af underskrevet UMTS koordineringsaftale

Kære Mats

Vi returnerer hermed 1 stk original UMTS koordineringsaftale i underskrevet stand.

Med venlig hilsen



Henning B. Andersen

29. marts 2004

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**Agreement between the Telecom Agency, Denmark
and the National Post and Telecom Agency, Sweden
concerning the use of the frequency bands 1900–1980
MHz, 2020-2025 MHz and 2110-2170 MHz
for terrestrial UMTS system.**

March 2004

1 Principles

- 1.1 This agreement is based on the concept of preferential scrambling code groups¹.
- 1.2 The use of TDD systems in the band 1920-1980 MHz is not covered in this agreement.

2 Definition of border

For this agreement only, the coastline of Denmark is defined as excluding the islands of Middlegrund, Flakfortet, Saltholm and Pepparholm and the coastline of Sweden shall be defined as excluding the island of Ven.

3 Preferential scrambling code groups

The assignment of preferential scrambling code groups between Sweden and Denmark within frequency bands 1900-1920 MHz, 2020-2025 MHz and 2110-2170 MHz are defined in Annex 1.

4 Use of frequencies without co-ordination²

- 4.1 Each country may use channels within frequency bands 1900-1920 MHz and 2020-2025 MHz for TDD systems using preferential codes without co-ordination with the neighbouring country, if the field strength value of each carrier produced by the base station does not exceed 36 dB μ V/m/5 MHz at neighbouring coastline.
- 4.2 Each country may use channels within the frequency band 2110-2170 MHz for FDD systems using preferential codes or for systems not using CDMA IMT-2000 radio interface, without co-ordination with the neighbouring country, if the field strength value of each carrier produced by the base station does not exceed 45 dB μ V/m/5 MHz at neighbouring coastline.
- 4.3 Each country can use channels within frequency bands 1900-1920 MHz, 2020-2025 MHz and 2110-2170 MHz for systems using non preferential codes without co-ordination with the neighbouring country, if the field strength value of each carrier produced by the base station does not exceed 21 dB μ V/m/5 MHz at neighbouring coastline.

5 General

- 5.1 Establishment of agreements between operators is encouraged to the extent possible. Subject to agreement between operators other technical characteristics can be used, i.e. preferential frequencies, other field strength limits or propagation models. The Administration shall be informed of such agreements.
- 5.2 A complaint in case of harmful interference shall be based on the median values of measurements of field strength, performed at 3 meter of receiving antenna height at least on two different occasions over a range of at least 100 meter along the coastline.
- 5.3 The field strength values in this agreement are based on a receiving antenna height of 3 meter, 10 % of the time and 50 % of locations.

¹ Annex 4, ERC/REC(01)01

² Annex 1, ERC/REC(01)01

- 5.4 Countries shall use the ITU-R P.1546-1 "Method for point-to area predictions for terrestrial services in the frequency range 30-3000 MHz" as specified in ERC/REC.(01)01 Annex 2 for field strength calculations relating to this agreement.

6 Revision and cancellation

- 6.1 This agreement may be revised or cancelled as desired by one of the administrations with a notice of one year.
- 6.2 In case this agreement is cancelled and new one is not concluded the co-ordination procedure will be based on CEPT ERC Recommendation (01)01 Annex 5.
- 6.3 A review should take place 12 months from the entry into force of this agreement.


This agreement shall come into effect from date of signature.

This agreement has been drawn up in two identical copies, of which each administration has taken one each.

Stockholm 17/3 2004

Copenhagen 27/3 2004


Marianne Treschow


J. Lang Nielsen

Annex 1**Assignment of preferential scrambling code groups between Denmark and Sweden**

In border areas, the codes are divided into six code sets containing one sixth of the available code groups. Each country is allocated three code sets.

Four types of countries are defined in Recommendation ERC(01)01 in a way such that no country will use the same code set as any one of its neighbours. The following lists describe the distribution of codes in this agreement.

Country 1: Denmark, DNK

Country 3: Sweden, S

	Preferential code
	non-preferential code

FDD scrambling codes³

Denmark	Set A	Set B	Set C	Set D	Set E	Set F	Sweden	Set A	Set B	Set C	Set D	Set E	Set F
Country 1	0..10	11..20	21..31	32..42	43..52	53..63	Country 3	0..10	11..20	21..31	32..42	43..52	53..63
Border DNK-S							Border S-DNK						

TDD scrambling codes⁴

Denmark	Set A	Set B	Set C	Set D	Set E	Set F	Sweden	Set A	Set B	Set C	Set D	Set E	Set F
Country 1	0..4	5..10	11..15	16..20	21..26	27..31	Country 3	0..4	5..10	11..15	16..20	21..26	27..31
Border DNK-S							Border S-DNK						

³ 3GPP TS 25.213 defines 64 « scrambling code groups » in §5.2.3, numbered {0..63}.

⁴ 3GPP TS 25.223 defines 32 « scrambling code groups » in §7.3, numbered {0..31}.