

Agreement

between the telecommunications administrations of

Austria,
Croatia,
the Czech Republic,
Hungary,
the Slovak Republic and
Slovenia

concerning the allotment of preferential frequencies and the
coordination of systems using DCS 1800 standards in the frequency
bands 1710-1785 MHz and 1805-1880 MHz

Vienna, September 30th, 1994

1. Introduction

The telecommunications administrations parties hereto concluded this agreement for the purpose of the frequency coordination of systems using the DCS 1800 standards.

2. Principles - Background

Administrations parties hereto deemed it necessary to conclude an agreement on the allotment of preferential frequencies for DCS 1800 systems in conformity with the CEPT Recommendation T/R 22-07.

Such an allotment of preferential frequencies could form a common basis for complementary bilateral coordination agreements in which the compatibility with the fixed service should be taken into account.

When DCS 1800 systems are operated in neighbouring countries, the Vienna Agreement of 1993 shall be applied for the coordination procedure in the frequency bands 1710-1785 MHz and 1805-1880 MHz.

In order to enable each administration to decide on its own in which subbands DCS 1800 may be introduced and to decide on the number of operators the entire band was taken into account.

The entire band is divided into a number of subbands in which equal access to the spectrum is ensured for each administration. This enables each administration, if appropriate, to provide for equal coordination conditions for each DCS 1800 operator.

3. Coordination between DCS 1800 systems and technical provisions

3.1 The allotment of preferential frequencies can be found in Annex 1.

- 3.2 Preferential frequencies may produce a field strength not exceeding 25 dB μ V/m at 3 m above ground at a distance of 15 km in the neighbouring country.
- 3.3 Non-preferential frequencies may produce a field strength not exceeding 25 dB μ V/m at 3 m above ground at the border to the neighbouring country.
- 3.4 The coordination procedures laid down in the Vienna Agreement, 1993, shall be applied.
- 3.5 Propagation criteria for the calculation of the interfering field strength are described in Annex 2.
- 3.6 For adding multiple interferers, the simplified algorithm described in Annex 3 shall be applied.
- 3.7 The technical parameters described in Annex 4 shall be used.

4. Coordination between DCS 1800 systems and fixed services:

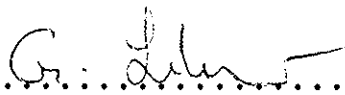
The coordination of frequencies between DCS 1800 systems and fixed services shall be based on complementary bilateral agreements covering the entire frequency bands 1710-1785 MHz and 1805-1880 MHz. These bilateral agreements should take into account the allotment of preferential frequencies laid down in this agreement as far as possible.

5. Date of entry into force

This agreement will enter into force on a bilateral or trilateral basis concerning those parts of the frequency bands 1710-1785 MHz and 1805-1880 MHz for which all the involved administrations have informed each other of their intention to put DCS 1800 systems into operation.

As an exception, if a coordination with the fixed services is required by at least one of the involved administrations, the date of entry into force of this agreement will be subject to signing the complementary agreement.

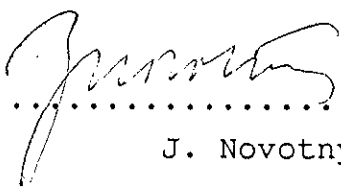
For the Administration of Austria:

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G. Lettner

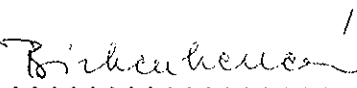
For the Administration of Croatia:

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M. Zadro

For the Administration of the
Czech Republic:

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J. Novotny

For the Administration of Hungary:

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A. Birkenheuer

For the Administration of the
Slovak Republic:

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V. Podhorsky

For the Administration of Slovenia:

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I. Lampe

Preferential division of the frequency band

1710 - 1785 / 1805 - 1880 MHz for DCS 1800

29. 09. 1994

frequency band	1710 (1805) - 1725 (1820) MHz												
	channel number	512 - 518	519 - 524	525 - 530	531 - 536	537 - 543	544 - 549	550 - 555	556 - 561	562 - 568	569 - 574	575 - 580	581 - 586
no of channels	7	6	6	6	6	7	6	6	6	7	6	6	6
AUT/CZE	AUT	AUT	AUT	AUT	D	D	D	D	556	CZE	CZE	CZE	CZE
AUT/CZE	AUT	AUT	AUT	AUT	AUT	AUT	AUT	CZE	CZE	CZE	CZE	CZE	CZE
AUT/CZE/SVK	AUT	AUT	AUT	AUT	SVK	SVK	SVK	SVK	556	CZE	CZE	CZE	CZE
CZE/SVK	CZE	CZE	SVK	SVK	SVK	SVK	SVK	SVK	SVK	CZE	CZE	CZE	CZE
AUT/SVK	AUT	AUT	AUT	AUT	AUT	SVK	SVK	SVK	SVK	SVK	SVK	AUT	AUT
AUT/SVK/HNG	AUT	AUT	AUT	AUT	SVK	SVK	SVK	SVK	556	HNG	HNG	HNG	HNG
AUT/HNG	AUT	AUT	AUT	AUT	AUT	AUT	AUT	HNG	HNG	HNG	HNG	HNG	HNG
AUT/HNG/SVN	AUT	AUT	AUT	AUT	SVN	SVN	SVN	SVN	556	HNG	HNG	HNG	HNG
AUT/SVN	AUT	AUT	AUT	AUT	AUT	SVN	SVN	SVN	SVN	SVN	SVN	AUT	AUT
AUT/SVN/I	AUT	AUT	AUT	AUT	SVN	SVN	SVN	SVN	556	I	I	I	I
HRV/HNG/SVN	HRV	HRV	HRV	HRV	SVN	SVN	SVN	SVN	556	HNG	HNG	HNG	HNG
HRV/HNG	HRV	HRV	HRV	HRV	HRV	HRV	HRV	HNG	HNG	HNG	HNG	HNG	HNG
HRV/SVN	HRV	HRV	HRV	HRV	HRV	SVN	SVN	SVN	SVN	SVN	SVN	HRV	HRV
HNG/SVK	HNG	HNG	HNG	SVK	SVK	SVK	SVK	556	HNG	HNG	HNG	HNG	HNG
HNG/SVN	HNG	HNG	HNG	SVN	SVN	SVN	SVN	556	HNG	HNG	HNG	HNG	HNG

The numbering of the channels is defined in Recommendation GSM 05.05 (Version 4.5.0). Channel number n corresponds to a carrier frequency $F_i(n)$ in the lower band and to a carrier frequency $F_u(n)$ in the upper band, defined by the following equations (frequencies are in MHz) :

$$F_i(n) = 1710,2 + 0,2 \cdot (n - 512)$$

$$F_u(n) = F_i(n) + 95$$

Preferential division of the frequency band

1710 - 1785 / 1805 - 1880 MHz for DCS 1800

29. 09. 1994

frequency band	1725 (1820) - 1740 (1835) MHz												
	channel number	587 - 593	594 - 599	600 - 605	606 - 611	612 - 618	619 - 624	625 - 630	631 - 636	637 - 643	644 - 649	650 - 655	656 - 661
no of channels	7	6	6	6	6	7	6	6	6	7	6	6	6
AUT/D/CZE	CZE	AUT	AUT	AUT	AUT 615	616	D	D	CZE	CZE	CZE	CZE	CZE
AUT/CZE	CZE	AUT	AUT	AUT	AUT	AUT	618	CZE	CZE	CZE	CZE	CZE	CZE
AUT/CZE/SVK	CZE	AUT	AUT	AUT	AUT 615	616	SVK	SVK	CZE	CZE	CZE	CZE	CZE
CZE/SVK	CZE	CZE	599 SVK	SVK	SVK	SVK	SVK	SVK	SVK	CZE	CZE	CZE	CZE
AUT/SVK	AUT	AUT	AUT	AUT	AUT	SVK	SVK	SVK	SVK	SVK	SVK	SVK	SVK
AUT/SVK/HNG	HNG	AUT	AUT	AUT	AUT 615	616	SVK	SVK	HNG	HNG	HNG	HNG	HNG
AUT/HNG	HNG	AUT	AUT	AUT	AUT	AUT	618	HNG	HNG	HNG	HNG	HNG	HNG
AUT/HNG/SVN	HNG	AUT	AUT	AUT	AUT 615	616	SVN	SVN	HNG	HNG	HNG	HNG	HNG
AUT/SVN	AUT	AUT	AUT	AUT	AUT	SVN	SVN	SVN	SVN	SVN	SVN	SVN	SVN
AUT/SVN/I	I	AUT	AUT	AUT	AUT 615	616	SVN	SVN	I	I	I	I	I
HRV/HNG/SVN	HRV	HRV	HRV	HRV	HRV 615	616	SVN	SVN	HNG	HNG	HNG	HNG	HNG
HRV/HNG	HNG	HRV	HRV	HRV	HRV	HRV	618	HNG	HNG	HNG	HNG	HNG	HNG
HRV/SVN	HRV	HRV	HRV	HRV	HRV	SVN	SVN	SVN	SVN	SVN	SVN	SVN	SVN
HNG/SVK	HNG	HNG 600	SVK	SVK	SVK	SVK	SVK	SVK	HNG	HNG	HNG	HNG	HNG
HNG/SVN	HNG	HNG 600	SVN	SVN	SVN	SVN	SVN	SVN	HNG	HNG	HNG	HNG	HNG

Preferential division of the frequency band

1710 - 1785 / 1805 - 1880 MHz for DCS 1800

29. 09. 1994

frequency band	1740 (1835) - 1755 (1850) MHz												
	channel number	662 - 668	669 - 674	675 - 680	681 - 686	687 - 693	694 - 699	700 - 705	706 - 711	712 - 718	719 - 724	725 - 730	731 - 736
no of channels	7	6	6	6	7	6	6	6	6	7	6	6	6
AUT/D/CZE	AUT	AUT	AUT	D	D	D	D	D	D	CZE	CZE	728 729	AUT
AUT/CZE	AUT	AUT	AUT	AUT	AUT	AUT	AUT	CZE	CZE	CZE	CZE	CZE	CZE
AUT/CZE/SVK	AUT	AUT	AUT	SVK	SVK	SVK	SVK	SVK	SVK	CZE	CZE	728 729	AUT
CZE/SVK	CZE	CZE	SVK	SVK	SVK	SVK	SVK	SVK	SVK	CZE	CZE	CZE	CZE
AUT/SVK	AUT	AUT	AUT	AUT	SVK	SVK	SVK	SVK	SVK	SVK	SVK	AUT	AUT
AUT/SVK/HNG	AUT	AUT	AUT	SVK	SVK	SVK	SVK	SVK	SVK	HNG	HNG	728 729	AUT
AUT/HNG	AUT	AUT	AUT	AUT	AUT	AUT	AUT	HNG	HNG	HNG	HNG	HNG	HNG
AUT/HNG/SVN	AUT	AUT	AUT	SVN	SVN	SVN	SVN	SVN	SVN	HNG	HNG	728 729	AUT
AUT/SVN	AUT	AUT	AUT	AUT	SVN	SVN	SVN	SVN	SVN	SVN	SVN	AUT	AUT
AUT/SVN/I	AUT	AUT	AUT	SVN	SVN	SVN	SVN	SVN	SVN	I	I	728 729	AUT
HRV/HNG/SVN	HRV	HRV	HRV	SVN	SVN	SVN	SVN	SVN	SVN	HNG	HNG	728 729	HRV
HRV/HNG	HRV	HRV	HRV	HRV	HRV	HRV	HRV	HNG	HNG	HNG	HNG	HNG	HNG
HRV/SVN	HRV	HRV	HRV	HRV	HRV	SVN	SVN	SVN	SVN	SVN	SVN	HRV	HRV
HNG/SVK	HNG	SVK	SVK	SVK	SVK	SVK	SVK	SVK	SVK	HNG	HNG	HNG	HNG
HNG/SVN	HNG	SVN	SVN	SVN	SVN	SVN	SVN	SVN	SVN	HNG	HNG	HNG	HNG

Preferential division of the frequency band

1710 - 1785 / 1805 - 1880 MHz for DCS 1800

29.09.1994

1770 (1865) - 1785 (1880) MHz

frequency band	1770 (1865) - 1785 (1880) MHz													
channel number	812 - 818	819 - 824	825 - 830	831 - 836	837 - 843	844 - 849	850 - 855	856 - 861	862 - 867	868 - 873	874 - 879	880 - 885		
no of channels	7	6	6	6	7	6	6	6	6	6	6	6	6	6
AUT/D/CZE	AUT	AUT	AUT	AUT	AUT 845	D	D	D	CZE	CZE	CZE	CZE	CZE	CZE
AUT/CZE	AUT	AUT	AUT	AUT	AUT	AUT	AUT	CZE	CZE	CZE	CZE	CZE	CZE	CZE
AUT/CZE/SVK	AUT	AUT	AUT	AUT	AUT 845	SVK	SVK	SVK	CZE	CZE	CZE	CZE	CZE	CZE
CZE/SVK	CZE	CZE	SVK	SVK	SVK	SVK	SVK	SVK	CZE	CZE	CZE	CZE	CZE	CZE
AUT/SVK	AUT	AUT	AUT	AUT	SVK	SVK	SVK	SVK	AUT	AUT	AUT	AUT	AUT	AUT
AUT/SVK/HNG	AUT	AUT	AUT	AUT	AUT 845	SVK	SVK	SVK	HNG	HNG	HNG	HNG	HNG	HNG
AUT/HNG	AUT	AUT	AUT	AUT	AUT	AUT	AUT	HNG	HNG	HNG	HNG	HNG	HNG	HNG
AUT/HNG/SVN	AUT	AUT	AUT	AUT	AUT 845	SVN	SVN	SVN	HNG	HNG	HNG	HNG	HNG	HNG
AUT/SVN	AUT	AUT	AUT	AUT	SVN	SVN	SVN	SVN	AUT	AUT	AUT	AUT	AUT	AUT
AUT/SVN/I	AUT	AUT	AUT	AUT	AUT 845	SVN	SVN	SVN	I	I	I	I	I	I
HRV/HNG/SVN	HRV	HRV	HRV	HRV	HRV 845	SVN	SVN	SVN	HNG	HNG	HNG	HNG	HNG	HNG
HRV/HNG	HRV	HRV	HRV	HRV	HRV	HRV	HRV	HNG	HNG	HNG	HNG	HNG	HNG	HNG
HRV/SVN	HRV	HRV	HRV	HRV	HRV	SVN	SVN	SVN	HRV	HRV	HRV	HRV	HRV	HRV
HNG/SVK	HNG	HNG	SVK	SVK	SVK	SVK	SVK	SVK	HNG	HNG	HNG	HNG	HNG	HNG
HNG/SVN	HNG	HNG	SVN	SVN	SVN	SVN	SVN	SVN	HNG	HNG	HNG	HNG	HNG	HNG