

Minutes

of the meeting of representatives of the Administrations of Poland and Ukraine concerning the frequency coordination for land mobile service and broadcasting services

Wroclaw, 25 – 29 November, 2002

1. Opening of the Meeting

On the invitation of the Office of Telecommunications and Post Regulation of Poland the meeting of the representatives of the Administrations of Poland and Ukraine concerning the frequency coordination for land mobile services and broadcasting services took place in Wroclaw 25 - 29 November 2002. The chairman of the meeting, Mr. Wiktor Segal (Vice Director of the Department of Frequency Resources Management in the Office of Telecommunications and Post Regulation) welcomed the participants on behalf of the Polish Administration and provided them with information about organizational issues.

2. Adoption of the Agenda

The agenda was adopted as given in Annex 1.

The List of Participants is given in Annex 2.

3. Results of the work

A. General issues

Discussion concerning the transition to coordination of frequency assignment for the fixed service and land mobile service in accordance with Vienna Agreement (Berlin, 2001) (agenda item 3)

Parties agreed in coordination of frequency assignments of land mobile service in the frequency bands 29.7 – 48.5, 100 – 960 MHz and 1710 – 1785/1805 – 1880 MHz to use principles and technical characteristics mentioned in *Agreement between the Administrations of Austria, Belgium, the Czech Republic, Germany, France, Hungary, the Netherlands, Croatia, Italy, Liechtenstein, Lithuania, Luxembourg, Poland, Romania, the Slovak Republic, Slovenia, and Switzerland, on the co-ordination of frequencies between 29.7 MHz and 39.5 GHz for the fixed service and the land mobile service (Berlin, 14 September 2001)*

If the Administration which initiated coordination procedure does not receive a reply within 65 days from the date of dispatching a request by fax, it may send a reminder. The Administration affected shall respond to this remainder within 20 days. If the Administration

affected fails again to respond within the period of 20 days, it shall be deemed to have given its consent, and the station shall be considered coordinated.

In the frequency band 48.5 – 87.5 MHz the procedures and technical bases mentioned in the Annex A.1 to this Minutes shall be used.

Consideration of issue on fulfilment by the Polish and Ukrainian Administrations of the Item 3 of the Agenda of Protocol of bilateral meeting of technical experts of the Polish and Ukrainian Administrations on the coordination of frequency assignments to TV and VHF FM broadcasting stations, Kyiv, 1999 (agenda item 5.1)

Parties considered the results of fulfilment by both Administrations of Item 3 of the Agenda of Protocol of bilateral meeting of technical experts of the Polish and Ukrainian Administrations on coordination of frequency assignments to TV and VHF FM broadcasting stations, Kyiv, 1999.

The Ukrainian Administration confirmed technical parameters of VHF FM stations included into Ukrainian National plan of frequency assignments to VHF FM broadcasting (the parameters of these stations were sent to the Polish Administration in 1998).

Parties agreed to use the procedure given in Annex A.1 to the Minutes on coordination of National plans of frequency assignments to VHF FM broadcasting stations in the band (87.5-100.0 MHz). As well parties agreed the following timetable:

1. The Polish Administrations obliged itself to provide by 01.03.2003 with the previously agreed parameters of VHF FM stations in the band 87.5 – 100.0 MHz for verification, and Ukrainian – in the band 100.0 – 108.0 MHz by the same date.
2. By 01.04.2003 Administrations should carry out EMC calculations of all the submitted stations and send lists of coordinated stations and disputing stations.
3. In disputing situations Administration should give details of EMC calculations in accordance with a mutually agreed procedure given in Annex A.1 to these Minutes.
4. By 15.04.2003 Administrations of Poland and Ukraine should confirm the lists of frequency assignments in the band 87.5-100.0 MHz, which should be included into Geneva-84 Plan with Remarks 3/UKR or 3/POL accordingly.

Discussion concerning the technical bases of coordination of the Land Mobile Service stations and the TV and VHF/FM broadcasting stations in the bands 47-50 MHz and 66-87.5 MHz (agenda item 6)

After long discussion, which was carried out during the meeting, Administrations agreed on the procedure of coordination of the Land Mobile Service stations and the TV and VHF FM broadcasting stations in the band 48.5 – 87.5 MHz. The procedure is included in Annex A.1. Additionally, for information only, the Technical Basis for Coordination are attached as Annex A.2.

In Poland, four VHF FM stations in the frequency band 66-74 MHz are put into operation and they will be turned off in the near future. This band will be utilized exclusively by the land mobile services. VHF FM broadcasting is allocated in the frequency band 87.5 – 108 MHz. In Ukraine, two sub-bands 66-74 MHz and 87.5-108 MHz are allocated to VHF FM broadcasting and band I and band II are allocated to TV broadcasting.

B. Land Mobile Service

Preferential frequency division in the frequency band 48–48.5 MHz (agenda item 4.1)

The Polish and Ukrainian representatives discussed the proposal submitted by the Ukrainian Administration in August 2000 and initially accepted by the Polish Administration in October 2000. During this meeting the proposal was finally accepted. The division into preferential frequencies is included in Annex B.1.

Preferential frequency division in the frequency band 148.6625-150 MHz (agenda item 4.2)

The discussion was based on the proposal of Polish Administration submitted before the meeting. During the discussion, the final preferential division of this frequency range was developed. The division into preferential frequencies is included in Annex B.2.

Preferential frequency division in the frequency band 162.7625-163.2 MHz (agenda item 4.3)

The Ukrainian party presented a proposal for the division of this sub-band into preferential channels. The Polish representatives accepted this proposal. The division into preferential frequencies is included in Annex B.3.

Preferential frequency division in the frequency band 165.5-167.5/172-174 MHz (agenda item 4.4)

The discussion on the preferential division of this band was based on the Polish proposal made during the meeting in Warsaw in 1997 and its modification proposed by Ukrainian Administration in 2000. Having agreed on modifications the final division of this band was accepted. The division into preferential frequencies is included in Annex B.4.

Preferential frequency division in the frequency band 168.5-171.15 MHz (agenda item 4.5)

The Ukrainian representatives made a proposal for a preferential division of this band. After a discussion, the final division was developed. The division into preferential frequencies is included in Annex B.5.

Preferential frequency division in the frequency band 380-385/390-395 MHz (TETRA EMERGENCY) (agenda item 4.6)

The discussion was based on the proposal submitted by Poland during the meeting which took place in Warsaw in 1997. Both Polish and Ukrainian representatives proposed small modifications which were taken into account in the final preferential division. The division into preferential frequencies is included in Annex B.6.

Preferential frequency division in the frequency bands 300-308/336-344 MHz and 385-390/395-400 MHz (agenda items 4.7 and 4.8)

The Polish and Ukrainian representatives exchanged opinions on the manner of using the above-mentioned frequency ranges and possibility of their division into preferential parts. Due to the fact that in Poland these frequency ranges are used within the NATO by the Aeronautical Mobile System (AMS) and in Ukraine these frequency ranges are used by land mobile service and aeronautical mobile service, it was agreed to continue consultations by correspondence.

While preparing proposals on preferential division, Parties agreed to use channel spacing 25 kHz.

The Ukrainian representatives presented preliminary proposal on preferential frequency division in the bands concerned. The Polish representatives obliged to send the Ukrainian party their proposals on these bands usage after appropriate consultations with the NATO Frequency Management Sub-Committee (FMSC).

Preferential frequency division in the frequency band 410-430 MHz (agenda item 4.9)

Basing on the Ukrainian proposal of May 2001 and modifications submitted during the meeting, the Polish and Ukrainian representatives discussed and agreed on the final division of this band. The division into preferential frequencies is included in Annex B.7.

Preferential frequency division in the frequency band 440-450 MHz (agenda item 4.10)

The Ukrainian proposal was discussed. Having made arrangements and modifications the final division of this band was accepted. The division into preferential frequencies is included in Annex B8.

Preferential frequency division in the frequency bands GSM 900 and GSM 1800 (DCS) (agenda item 4.11)

Both parties agreed that if, in result of usage by operators of both Administrations of adjacent preferential channels at the same border area, an interference appears, this interference must be eliminated mutually by operators.

If operators cannot reach an agreement the solution should be find by Administrations.

GSM 900 band

The Polish representatives informed the Ukrainian representatives that in Poland, at the moment no radionavigation system operate in any of the fragments of the 890-915/935-960 MHz band and the entire band is used by GSM 900 system stations.

The Ukrainian representatives informed that as the work on GSM band refarming from radionavigation systems is not finished, the final decision on GSM band usage is postponed until June 2003. When the process of the release of the band is finished and the band concerned is available for the GSM 900 system the Ukrainian representatives will inform the Polish representatives thereof.

Taking the above into account both parties agreed that the arrangement that had existed so far (and that was made during a meeting in Warsaw in 1997) will remain unchanged.

GSM 1800 (DCS) band

Basing on the information that had been sent by the Ukrainian representatives before this meeting, the Polish representatives prepared the proposal for preferential frequencies division, which extends the arrangement made in Warsaw by additional channels. During the meeting the Ukrainian representatives proposed to divide the whole frequency range intended for the GSM 1800 (DCS) system into preferential frequencies and presented the proposal for such arrangement. The proposal was accepted by the Polish representatives. The channel arrangement and the division into preferential frequencies are included in Annex B.9.

Approval of Procedure of exchange of the lists containing frequency assignments already coordinated and being used in the bands 33.0 – 48.5 MHz, 57.0 – 57.5 MHz and 150 – 168.5 MHz (agenda item 4.12)

The Parties considered item 4.12 of agenda of the meeting and agreed to exchange the lists of civil frequency assignments in the border area of Poland and Ukraine in the frequency bands 33.0-48.5 MHz, 57.0-57.5 MHz, 150.0-168.5 MHz (excluding the bands 48.0-48.5 MHz, 162.7625-163.2000 MHz, 165.5125-167.4875 MHz, which were divided into preferential channels on this meeting) in order to consider the possibility of coordination of mentioned frequencies and further preferential division (Annex B.10). The Ukrainian representatives informed the Polish representatives that frequencies concerned are used in Ukraine as frequencies assigned on regional basis to civil users of land mobile service and the procedure of assigning such frequencies is simplified. The Parties agreed to fulfil the following:

- to agree on frequency assignments data exchange format by 01.01.2003;
- exchange the frequency assignments register in the border area;
- consider the possibility to coordinate already operating stations as they are;
- approve the list of non-used frequencies for further preferential division;
- based on the coordination results to consider the possibility of preferential division of above mentioned frequency bands in the border area of Poland and Ukraine.

Separately, parties considered frequency band 151.725 – 155.975 MHz, which is used in Ukraine by the railways.

For preliminary consideration the Ukrainian representatives submitted to the Polish party frequency division in the band 151.725 – 155.975 MHz with indication of frequencies, which are preferable for Ukraine in the boarder area (Annex B.11).

The Polish representatives informed the Ukrainian party that frequencies in the band concerned are used in Poland not only by the railways but by other users as well (Ministry of Defence, civil users). Therefore, taking into account the particulars of concerned frequencies usage in Poland and Ukraine, the Ukrainian representatives proposed to continue the process of such frequencies agreement by correspondence.

The parties agreed to fulfil by 01.05.2002 all the work mentioned in item 4.12 of this minutes.

C. Broadcasting Services – analogue TV stations

Consideration of mutual comments concerning TV stations technical parameters published on ERO ftp server in accordance with Resolution 5 of Agreement Chester-97 as of 15.03.2002 (agenda item 5.2)

In accordance with Resolution 5 of the Agreement Chester-97, the technical parameters of the Polish and Ukrainian stations published on the ftp ERO server were analysed. The analysis concerned the data contained in the files Ukr5.tva and Pol4.tva, which had been sent to ERO.

The representatives of Poland and Ukraine discussed and agreed technical parameters of 10 Polish (Annex C.1) and 27 Ukrainian (Annex C.2) TV stations in channels 6 to 60 from the files pol4.tva and ukr5.tva respectively, about which both Administrations had had reservations before.

The technical parameters of the Ukrainian TV stations in channels 1 - 3 and 4 - 5, about which there had been reservations before, were coordinated and accepted to be included in the ERO data base. They are provided in Annexes C.3 and C.4

Poland has abandoned to use TV channels 1 - 5 and in the future all stations from ST-61 Plan will be turned off as well. Nowadays, these station are not considered in compatibility analyses. The complete lists of Ukrainian TV stations in channels 1 - 3 and 4 - 5 accepted by the Polish Administration are included in Annex C.7 and C.8 respectively.

Coordination of frequency assignments to analogue TV broadcasting (agenda item 5.3)

The Polish and Ukrainian Administrations carried out a mutual coordination of frequency assignment to analogue Ukrainian and Polish TV stations.

The tables listing the stations coordinated between Ukraine and Poland are presented in Annex C.5 and C.6 respectively.

D. Broadcasting Services – digital TV stations

Coordination of frequency assignments to digital TV broadcasting (DVB-T) (agenda item 5.5)

The Polish Administration presented the technical parameters of digital terrestrial TV stations in channels 21 – 60 for coordination (the parameters of some of these stations were sent to the Ukrainian administration for coordination in 1998). The list of above mentioned stations is included in the Annex D.1.

Both parties agreed in coordination of DVB-T stations carry out EMC calculations in accordance with methodic and protection ratios given in Agreement Chester-97 and the newest version of ITU-R Rec. BT.1368.

The Ukrainian Administration agreed to provide the Polish Administration with the analysis results of stations mentioned in Annex D.1 by the end of February 2003.

Some of these stations were already coordinated during the meeting. The table listing the coordinated stations is included in Annex D.2.

The Polish Administration also submitted for information the list of DVB-T stations in channels 61 – 69 (Annex D.3).

E. Broadcasting Services – VHF FM stations

Coordination of frequency assignments to VHF FM broadcasting stations (agenda item 5.4)

The Polish Administration analysed the list of the Ukrainian stations that had been previously notified for coordination. The table listing the coordinated stations, together with their parameters, is included in Annex E.1.

The Ukrainian Administration analysed the list of the Polish stations that had been previously notified for coordination. The table listing the coordinated stations, together with their parameters, is included in Annex E.2. Some of the coordinated stations need to be finally accepted by Ukrainian military services. The Ukrainian Administration obliged itself to send an answer with this respect by 31 December 2002.

Some of the coordinated stations can be put into operation with their notified parameters only after the TV transmitters operating in channel 4 and 5 have been put off the operation. For these stations, the Ukrainian Administration accepted temporary parameters. The temporary and notified parameters are specified in Annex E.2.

During the meeting the Polish Administration analysed four Ukrainian VHF FM stations for the frequency band 66-74 MHz which had been submitted for coordination few months ago. The list of coordinated stations with their technical parameters is included in Annex E.3. Poland obliged itself to answer the coordination requests concerning the remaining stations from the frequency band 66-74 MHz as soon as possible.

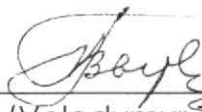
4. Date and place of the next meeting

Administrations agreed to hold the next meeting at the beginning of May 2003 in Kyiv, Ukraine.

5. Closure of the meeting

Mr. Wiktor Segá thanked all delegations for their constructive co-operation and their spirit of compromise which had enabled to conclude such a number of documents.

For Administration of Ukraine



(Volodymyr Zwerev)

For Administration of Poland



(Wiktor Segá)

Channel arrangement in the GSM 1800 (DCS) bands (1710-1785/1805-1880 MHz)

Ch. No	Frequencies, MHz		Ch. No	Frequencies, MHz		Ch. No	Frequencies, MHz		Ch. No	Frequencies, MHz		Ch. No	Frequencies, MHz		Ch. No	Frequencies, MHz	
	Ms to Bs	Bs to		Ms to Bs	Bs to		Ms to Bs	Bs to		Ms to Bs	Bs to		Ms to Bs	Bs to		Ms to Bs	Bs to
512	1710.2	1805.2	576	1723.0	1818.0	640	1735.8	1830.8	703	1748.4	1843.4	767	1761.2	1856.2	831	1774.0	1869.0
513	1710.4	1805.4	577	1723.2	1818.2	641	1736.0	1831.0	704	1748.6	1843.6	768	1761.4	1856.4	832	1774.2	1869.2
514	1710.6	1805.6	578	1723.4	1818.4	642	1736.2	1831.2	705	1748.8	1843.8	769	1761.6	1856.6	833	1774.4	1869.4
515	1710.8	1805.8	579	1723.6	1818.6	643	1736.4	1831.4	706	1749.0	1844.0	770	1761.8	1856.8	834	1774.6	1869.6
516	1711.0	1806.0	580	1723.8	1818.8	644	1736.6	1831.6	707	1749.2	1844.2	771	1762.0	1857.0	835	1774.8	1869.8
517	1711.2	1806.2	581	1724.0	1819.0	645	1736.8	1831.8	708	1749.4	1844.4	772	1762.2	1857.2	836	1775.0	1870.0
518	1711.4	1806.4	582	1724.2	1819.2	646	1737.0	1832.0	709	1749.6	1844.6	773	1762.4	1857.4	837	1775.2	1870.2
519	1711.6	1806.6	583	1724.4	1819.4	647	1737.2	1832.2	710	1749.8	1844.8	774	1762.6	1857.6	838	1775.4	1870.4
520	1711.8	1806.8	584	1724.6	1819.6	648	1737.4	1832.4	711	1750.0	1845.0	775	1762.8	1857.8	839	1775.6	1870.6
521	1712.0	1807.0	585	1724.8	1819.8	649	1737.6	1832.6	712	1750.2	1845.2	776	1763.0	1858.0	840	1775.8	1870.8
522	1712.2	1807.2	586	1725.0	1820.0	650	1737.8	1832.8	713	1750.4	1845.4	777	1763.2	1858.2	841	1776.0	1871.0
523	1712.4	1807.4	587	1725.2	1820.2	651	1738.0	1833.0	714	1750.6	1845.6	778	1763.4	1858.4	842	1776.2	1871.2
524	1712.6	1807.6	588	1725.4	1820.4	652	1738.2	1833.2	715	1750.8	1845.8	779	1763.6	1858.6	843	1776.4	1871.4
525	1712.8	1807.8	589	1725.6	1820.6	653	1738.4	1833.4	716	1751.0	1846.0	780	1763.8	1858.8	844	1776.6	1871.6
526	1713.0	1808.0	590	1725.8	1820.8	654	1738.6	1833.6	717	1751.2	1846.2	781	1764.0	1859.0	845	1776.8	1871.8
527	1713.2	1808.2	591	1726.0	1821.0	655	1738.8	1833.8	718	1751.4	1846.4	782	1764.2	1859.2	846	1777.0	1872.0
528	1713.4	1808.4	592	1726.2	1821.2	656	1739.0	1834.0	719	1751.6	1846.6	783	1764.4	1859.4	847	1777.2	1872.2
529	1713.6	1808.6	593	1726.4	1821.4	657	1739.2	1834.2	720	1751.8	1846.8	784	1764.6	1859.6	848	1777.4	1872.4
530	1713.8	1808.8	594	1726.6	1821.6	658	1739.4	1834.4	721	1752.0	1847.0	785	1764.8	1859.8	849	1777.6	1872.6
531	1714.0	1809.0	595	1726.8	1821.8	659	1739.6	1834.6	722	1752.2	1847.2	786	1765.0	1860.0	850	1777.8	1872.8
532	1714.2	1809.2	596	1727.0	1822.0	660	1739.8	1834.8	723	1752.4	1847.4	787	1765.2	1860.2	851	1778.0	1873.0
533	1714.4	1809.4	597	1727.2	1822.2	661	1740.0	1835.0	724	1752.6	1847.6	788	1765.4	1860.4	852	1778.2	1873.2
534	1714.6	1809.6	598	1727.4	1822.4	662	1740.2	1835.2	725	1752.8	1847.8	789	1765.6	1860.6	853	1778.4	1873.4
535	1714.8	1809.8	599	1727.6	1822.6	663	1740.4	1835.4	726	1753.0	1848.0	790	1765.8	1860.8	854	1778.6	1873.6
536	1715.0	1810.0	600	1727.8	1822.8	664	1740.6	1835.6	727	1753.2	1848.2	791	1766.0	1861.0	855	1778.8	1873.8
537	1715.2	1810.2	601	1728.0	1823.0	665	1740.8	1835.8	728	1753.4	1848.4	792	1766.2	1861.2	856	1779.0	1874.0
538	1715.4	1810.4	602	1728.2	1823.2	666	1741.0	1836.0	729	1753.6	1848.6	793	1766.4	1861.4	857	1779.2	1874.2
539	1715.6	1810.6	603	1728.4	1823.4	667	1741.2	1836.2	730	1753.8	1848.8	794	1766.6	1861.6	858	1779.4	1874.4
540	1715.8	1810.8	604	1728.6	1823.6	668	1741.4	1836.4	731	1754.0	1849.0	795	1766.8	1861.8	859	1779.6	1874.6
541	1716.0	1811.0	605	1728.8	1823.8	669	1741.6	1836.6	732	1754.2	1849.2	796	1767.0	1862.0	860	1779.8	1874.8
542	1716.2	1811.2	606	1729.0	1824.0	670	1741.8	1836.8	733	1754.4	1849.4	797	1767.2	1862.2	861	1780.0	1875.0
543	1716.4	1811.4	607	1729.2	1824.2	671	1742.0	1837.0	734	1754.6	1849.6	798	1767.4	1862.4	862	1780.2	1875.2
544	1716.6	1811.6	608	1729.4	1824.4	672	1742.2	1837.2	735	1754.8	1849.8	799	1767.6	1862.6	863	1780.4	1875.4
545	1716.8	1811.8	609	1729.6	1824.6	673	1742.4	1837.4	736	1755.0	1850.0	800	1767.8	1862.8	864	1780.6	1875.6
546	1717.0	1812.0	610	1729.8	1824.8	674	1742.6	1837.6	737	1755.2	1850.2	801	1768.0	1863.0	865	1780.8	1875.8
547	1717.2	1812.2	611	1730.0	1825.0	675	1742.8	1837.8	738	1755.4	1850.4	802	1768.2	1863.2	866	1781.0	1876.0
548	1717.4	1812.4	612	1730.2	1825.2	676	1743.0	1838.0	739	1755.6	1850.6	803	1768.4	1863.4	867	1781.2	1876.2
549	1717.6	1812.6	613	1730.4	1825.4	677	1743.2	1838.2	740	1755.8	1850.8	804	1768.6	1863.6	868	1781.4	1876.4
550	1717.8	1812.8	614	1730.6	1825.6	678	1743.4	1838.4	741	1756.0	1851.0	805	1768.8	1863.8	869	1781.6	1876.6
551	1718.0	1813.0	615	1730.8	1825.8	679	1743.6	1838.6	742	1756.2	1851.2	806	1769.0	1864.0	870	1781.8	1876.8
552	1718.2	1813.2	616	1731.0	1826.0	680	1743.8	1838.8	743	1756.4	1851.4	807	1769.2	1864.2	871	1782.0	1877.0
553	1718.4	1813.4	617	1731.2	1826.2	681	1744.0	1839.0	744	1756.6	1851.6	808	1769.4	1864.4	872	1782.2	1877.2
554	1718.6	1813.6	618	1731.4	1826.4	682	1744.2	1839.2	745	1756.8	1851.8	809	1769.6	1864.6	873	1782.4	1877.4
555	1718.8	1813.8	619	1731.6	1826.6	683	1744.4	1839.4	746	1757.0	1852.0	810	1769.8	1864.8	874	1782.6	1877.6
556	1719.0	1814.0	620	1731.8	1826.8	684	1744.6	1839.6	747	1757.2	1852.2	811	1770.0	1865.0	875	1782.8	1877.8
557	1719.2	1814.2	621	1732.0	1827.0	685	1744.8	1839.8	748	1757.4	1852.4	812	1770.2	1865.2	876	1783.0	1878.0
558	1719.4	1814.4	622	1732.2	1827.2	686	1745.0	1840.0	749	1757.6	1852.6	813	1770.4	1865.4	877	1783.2	1878.2
559	1719.6	1814.6	623	1732.4	1827.4	687	1745.2	1840.2	750	1757.8	1852.8	814	1770.6	1865.6	878	1783.4	1878.4
560	1719.8	1814.8	624	1732.6	1827.6	688	1745.4	1840.4	751	1758.0	1853.0	815	1770.8	1865.8	879	1783.6	1878.6
561	1720.0	1815.0	625	1732.8	1827.8	689	1745.6	1840.6	752	1758.2	1853.2	816	1771.0	1866.0	880	1783.8	1878.8
562	1720.2	1815.2	626	1733.0	1828.0	690	1745.8	1840.8	753	1758.4	1853.4	817	1771.2	1866.2	881	1784.0	1879.0
563	1720.4	1815.4	627	1733.2	1828.2	691	1746.0	1841.0	754	1758.6	1853.6	818	1771.4	1866.4	882	1784.2	1879.2
564	1720.6	1815.6	628	1733.4	1828.4	692	1746.2	1841.2	755	1758.8	1853.8	819	1771.6	1866.6	883	1784.4	1879.4
565	1720.8	1815.8	629	1733.6	1828.6	693	1746.4	1841.4	756	1759.0	1854.0	820	1771.8	1866.8	884	1784.6	1879.6
566	1721.0	1816.0	630	1733.8	1828.8	694	1746.6	1841.6	757	1759.2	1854.2	821	1772.0	1867.0	885	1784.8	1879.8
567	1721.2	1816.2	631	1734.0	1829.0	695	1746.8	1841.8	758	1759.4	1854.4	822	1772.2	1867.2			
568	1721.4	1816.4	632	1734.2	1829.2	696	1747.0	1842.0	759	1759.6	1854.6	823	1772.4	1867.4			
569	1721.6	1816.6	633	1734.4	1829.4	697	1747.2	1842.2	760	1759.8	1854.8	824	1772.6	1867.6			
570	1721.8	1816.8	634	1734.6	1829.6	698	1747.4	1842.4	761	1760.0	1855.0	825	1772.8	1867.8			
571	1722.0	1817.0	635	1734.8	1829.8	699	1747.6	1842.6	762	1760.2	1855.2	826	1773.0	1868.0			
572	1722.2	1817.2	636	1735.0	1830.0	700	1747.8	1842.8	763	1760.4	1855.4	827	1773.2	1868.2			
573	1722.4	1817.4	637	1735.2	1830.2	701	1748.0	1843.0	764	1760.6	1855.6	828	1773.4	1868.4			
574	1722.6	1817.6	638	1735.4	1830.4	702	1748.2	1843.2	765	1760.8	1855.8	829	1773.6	1868.6			
575	1722.8	1817.8	639	1735.6	1830.6	703	1748.4	1843.4	766	1761.0	1856.0	830	1773.8	1868.8			

Fa(n)(Ms to Bs)=1710,2+0,2*(n-512) [MHz]

Ff(Bs to Ms)=Fa+95 [MHz]

29.11.2002

**Preferential frequency partitioning in the GSM 1800 (DCS) bands
(1710-1785/1805-1880 MHz)**

512	562	612	639	702	737	762	787	812	862
UKR	POL	UKR	POL	UKR	POL	UKR	POL	UKR	POL
561	611	638	701	736	761	786	811	861	885
50	50	27	63	35	25	25	25	50	24

POL 187
UKR 187

29.11.2002

Priglas