

# **TECHNICAL PROCEDURE**

**between the Frequency Management Authorities of**

**CROATIA,  
HUNGARY,  
ROMANIA,  
SERBIA  
and UKRAINE**

**on the frequency coordination in the frequency bands  
880 – 890/925 – 935 MHz  
(E-GSM)**

2010

## **1 Preamble**

In the framework of the bi- or multilateral agreements dealing with frequency coordination in general the Croatian Post and Electronic Communications Agency (Croatia), the National Communications Authority (Hungary), National Authority for Management and Regulation in Communications (Romania), Republic Telecommunication Agency (Serbia) and the Ukrainian State Centre of Radio Frequencies (Ukraine) concluded this Technical Procedure for the purpose of the frequency coordination for E-GSM systems in the frequency band 880 – 890/925 – 935 MHz. The relevant provisions of the general bi- or multilateral agreements and ECC REC/(05)08 shall be applied unless otherwise laid down in this document.

## **2 Principles – background**

- 2.1 The Authorities mentioned above deemed it necessary to conclude a technical procedure on the allotment of the preferential frequencies for E-GSM systems in the frequency band 880 – 890/925 – 935 MHz. The channel arrangement used in this document is according to I-ETS 300 609-1.
- 2.2 Operators shall have the possibility to cooperate in order to minimize interference and to achieve the most efficient use of the available spectrum. Therefore the provisions laid down in the “Agreement between administrations concerned regarding the approval of arrangements between operators” shall be applied.

## **3 Technical provisions**

- 3.1 The preferential frequency division is given in the Appendix.
- 3.2 Preferential frequencies may be used without coordination with a neighbouring country if the field strength of each carrier produced by the base station does not exceed  $19 \text{ dB}\mu\text{V/m}$  (*10% of time, 50% of locations*) at a height of 3m above ground at a distance of 15 km inside the neighbouring country.
- 3.3 Non-preferential frequencies may be used without coordination with a neighbouring country if the field strength of each carrier produced by the base station does not exceed  $19 \text{ dB}\mu\text{V/m}$  (*10% of time, 50% of locations*) at a height of 3m above ground at the border line.
- 3.4 Operators may make arrangements to use frequencies in a different way according to the respective „Agreement between Administrations concerning the approval of arrangements between operators of radiocommunications networks“.
- 3.5 All channels in the allotted frequency blocks shall be considered as preferential ones. In case of harmful interference between stations using block end channels in the border area, the lowest channel in a preferential frequency block allotted to a country will be considered as non-preferential one at the station(s) involved in the harmful interference situation, except for the channel 1 (880,2/925,2 MHz).

## **4 Exchange of information**

Notifications of base stations will be exchanged on explicit request of any Authorities.

## 5 Procedure in case of harmful interference

In cases of harmful interference the Countries affected shall inform each other and endeavour to achieve mutually acceptable solutions.

## 6 Revision of this Technical Procedure

This document can be revised in the light of administrative, regulatory or technical developments at the proposal of any Signatory with the acceptance of all other Parties.

## 7 Withdrawal from this Technical Procedure

Any Party may withdraw from this Technical Procedure by the end of a calendar month by giving notice of its intention at least six months in advance. Frequency assignments made within the framework of this Technical Procedure prior to the date of entry into force of the withdrawal shall remain valid and be protected according to their status.


## 8 Language of the Technical Procedure

This document has been concluded in English in five originals.

## 9 Date of entry into force of the Technical Procedure

This Technical Procedure enters into force for the two- and three-country border areas in which all the affected administrations have signed it.

For Croatia  
date: 07.05.2010.

  
name: Dražen Lučić, Ph.D.

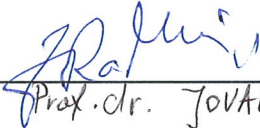
For Hungary  
date: 27.04.2010

  
name: dr. Kolláth Gábor

For Romania  
date:

name:

For Serbia  
date: 07.06.2010.

  
name: Prof. dr. JOVAN RADUNOVIĆ

For Ukraine  
date:

name:



Frequency MHz	Ch. nr.	HNG HRV*	HNG HRV SRB	HNG SRB	HNG ROU SRB	HNG ROU	HNG ROU UKR**	HNG UKR*
925,2/880,2	975	HRV	HRV	SRB	ROU	ROU	UKR	UKR
925,4/880,4	976	HRV	HRV	SRB	ROU	ROU	UKR	UKR
925,6/880,6	977	HRV	HRV	SRB	ROU	ROU	UKR	UKR
925,8/880,8	978	HRV	HRV	SRB	ROU	ROU	ROU	UKR
926,0/881,0	979	HRV	HRV	SRB	ROU	ROU	ROU	UKR
926,2/881,2	980	HRV	HRV	HNG	ROU	ROU	ROU	UKR
926,4/881,4	981	HRV	HRV	HNG	ROU	ROU	ROU	UKR
926,6/881,6	982	HRV	HRV	HNG	ROU	ROU	ROU	HNG
926,8/881,8	983	HRV	HRV	HNG	ROU	ROU	ROU	HNG
927,0/882,0	984	HNG	HNG	HNG	HNG	HNG	HNG	HNG
927,2/882,2	985	HNG	HNG	HNG	HNG	HNG	HNG	HNG
927,4/882,4	986	HNG	HNG	HNG	HNG	HNG	HNG	HNG
927,6/882,6	987	HNG	HNG	HNG	HNG	HNG	HNG	HNG
927,8/882,8	988	HNG	HNG	HNG	HNG	HNG	HNG	HNG
928,0/883,0	989	HNG	HNG	HNG	HNG	HNG	HNG	HNG
928,2/883,2	990	HNG	HNG	HNG	HNG	HNG	HNG	HNG
928,4/883,4	991	HNG	HNG	HNG	HNG	HNG	HNG	HNG
928,6/883,6	992	HNG	HNG	HNG	HNG	HNG	HNG	HNG
928,8/883,8	993	HNG	SRB	SRB	SRB	HNG	HNG	HNG
929,0/884,0	994	HNG	SRB	SRB	SRB	HNG	UKR	UKR
929,2/884,2	995	HNG	SRB	SRB	SRB	HNG	UKR	UKR
929,4/884,4	996	HNG	SRB	SRB	SRB	HNG	UKR	UKR
929,6/884,6	997	HRV	SRB	SRB	SRB	HNG	UKR	UKR
929,8/884,8	998	HRV	SRB	SRB	SRB	ROU	UKR	UKR
930,0/885,0	999	HRV	SRB	SRB	SRB	ROU	UKR	UKR
930,2/885,2	1000	HRV	SRB	SRB	SRB	ROU	UKR	UKR
930,4/885,4	1001	HRV	HRV	SRB	SRB	ROU	UKR	UKR
930,6/885,6	1002	HRV	HRV	SRB	ROU	ROU	UKR	UKR
930,8/885,8	1003	HRV	HRV	SRB	ROU	ROU	ROU	UKR
931,0/886,0	1004	HRV	HRV	SRB	ROU	ROU	ROU	UKR
931,2/886,2	1005	HRV	HRV	HNG	ROU	ROU	ROU	UKR
931,4/886,4	1006	HRV	HRV	HNG	ROU	ROU	ROU	UKR
931,6/886,6	1007	HRV	HRV	HNG	ROU	ROU	ROU	UKR
931,8/886,8	1008	HNG	HNG	HNG	HNG	HNG	HNG	HNG
932,0/887,0	1009	HNG	HNG	HNG	HNG	HNG	HNG	HNG
932,2/887,2	1010	HNG	HNG	HNG	HNG	HNG	HNG	HNG
932,4/887,4	1011	HNG	HNG	HNG	HNG	HNG	HNG	HNG
932,6/887,6	1012	HNG	HNG	HNG	HNG	HNG	HNG	HNG
932,8/887,8	1013	HNG	HNG	HNG	HNG	HNG	HNG	HNG
933,0/888,0	1014	HNG	HNG	HNG	HNG	HNG	HNG	HNG
933,2/888,2	1015	HNG	HNG	HNG	ROU	ROU	ROU	HNG
933,4/888,4	1016	HNG	SRB	SRB	ROU	ROU	ROU	HNG
933,6/888,6	1017	HNG	SRB	SRB	SRB	ROU	ROU	HNG
933,8/888,8	1018	HNG	SRB	SRB	SRB	ROU	ROU	HNG
934,0/889,0	1019	HNG	SRB	SRB	SRB	ROU	ROU	HNG
934,2/889,2	1020	HRV	SRB	SRB	SRB	HNG	UKR	UKR
934,4/889,4	1021	HRV	SRB	SRB	SRB	HNG	UKR	UKR
934,6/889,6	1022	HRV	SRB	SRB	SRB	HNG	UKR	UKR
934,8/889,8	1023	HRV	SRB	SRB	SRB	HNG	UKR	UKR

\* Existing agreements

\*\* Draft agreed in principle by HNG and UKR