

**Agreement on the new T-DAB frequency plan  
in the frequency band 174 – 230 MHz  
between**

**Administration of Romania and Administration of Serbia**

Република Србија  
Регулаторна агенција за електронске  
комуникације и поштанске услуге  
Београд

БРОЈ: 1-01-3483-6/23

ДАТУМ: 15-06-2023

**Preamble**

This document is the bilateral coordination agreement (**hereinafter: Agreement**) on the new T-DAB frequency plan in the frequency band 174 – 230 MHz between **Administration of Romania and Administration of Serbia (hereinafter: Parties)**. It expresses the convergence-of-will between both parties, indicating an intended common course of action. The Agreement is based on the Multilateral Framework Agreement (hereinafter: MFA) signed by the Administrations of Austria, Bosnia and Herzegovina, Croatia, Hungary, Romania, Serbia and Slovenia in Budapest in June 2023.

**Background**

After a decade long of coordination process, a multilateral frequency coordination work has started, in order to create the basis of implementing T-DAB networks and to facilitate the introduction of digital radio in the region. More and more countries decided to allocate all of the VHF Band III for T-DAB purposes only. Based on the above-mentioned, it was necessary to revise, partly to rearrange the GE06 Plan and to coordinate assignments in line with the new frequency distribution.

The intention during the negotiations, while preparing this Agreement, has been to establish the technical parameters for assignments of a new frequency plan enabling up to seven layers in each country, according to the frequency distribution maps presented in the annex of the MFA.

The Parties successfully managed bilateral frequency coordination activities in order to implement the relevant broadcasting spectrum reorganization, with a view to:

- achieving mutual compatibility of the spectrum resources to be used in the VHF Band III;
- facilitating any consequential modifications to the GE06 Plan.



**Working method**

Both Administrations have been gradually exchanged their requirements bilaterally or within multilateral coordination groups dealing with the re-planning of the VHF Band III. The submissions of the requirements have been followed by an analysis of the compatibility of the requirements by both Administrations. This analysis was the basis for the development of an updated frequency plan containing the most feasible solution across frequency coordination area of the Parties. Hence, the development of an updated frequency plan has been an iterative process as:

The Agreement has no binding effect on any coordination processes or agreements that the Parties are willing to sign with other administrations, nor should it in any way hinder such coordination processes or agreements.

Regarding to the use of the frequency band 174-209 MHz, Serbia stated that there is no official decision for the use of the mentioned frequency band for digital radio (T-DAB). Serbia keeps the right to coordinate frequency assignments for T-DAB at a later stage, meaning that when a decision is made.

### **Entry into force**

The Agreement shall enter into force upon the signature of the Parties.

### **Language of the Agreement**

This Agreement is prepared in English in two originals. The Parties hold one original.

Place: Budapest, Hungary

Date: 12 June 2023

for the **Administration of Romania**



Liliana ANDREI

Director

Spectrum Management Division

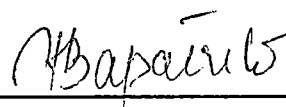


Laurențiu TĂNASE

Head of Broadcasting Unit

National Authority for Management and  
Regulation in Communications of Romania  
(ANCOM)

for the **Administration of Serbia**

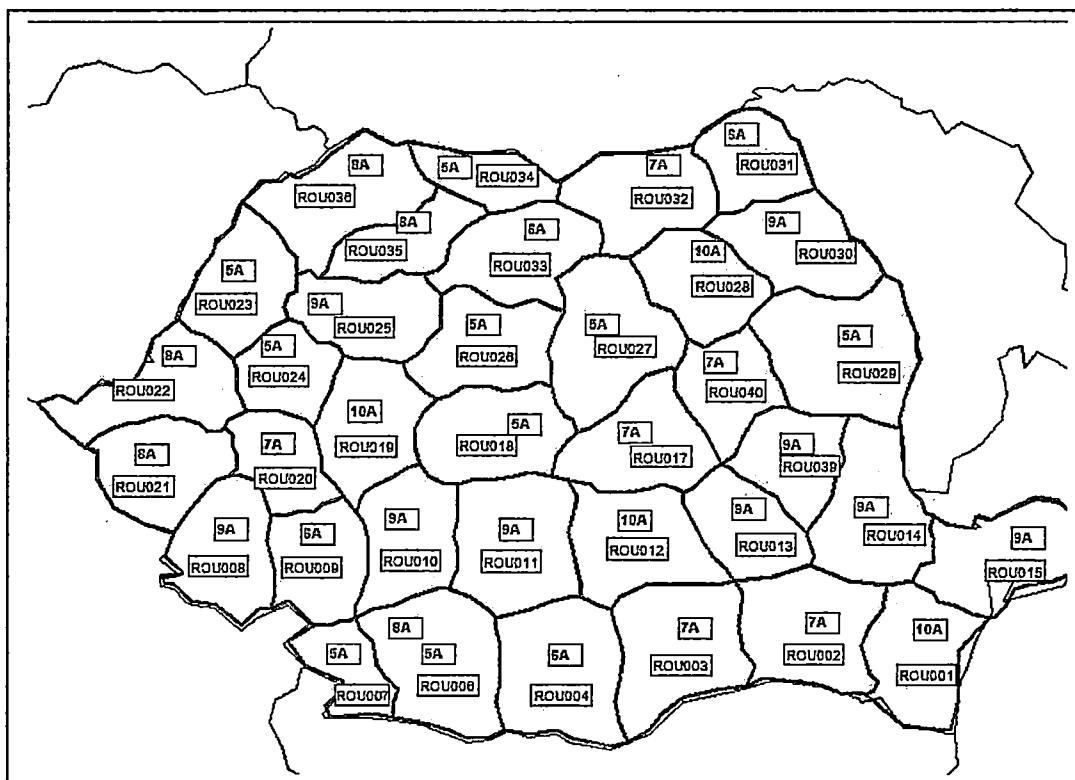


Natalija Varagić

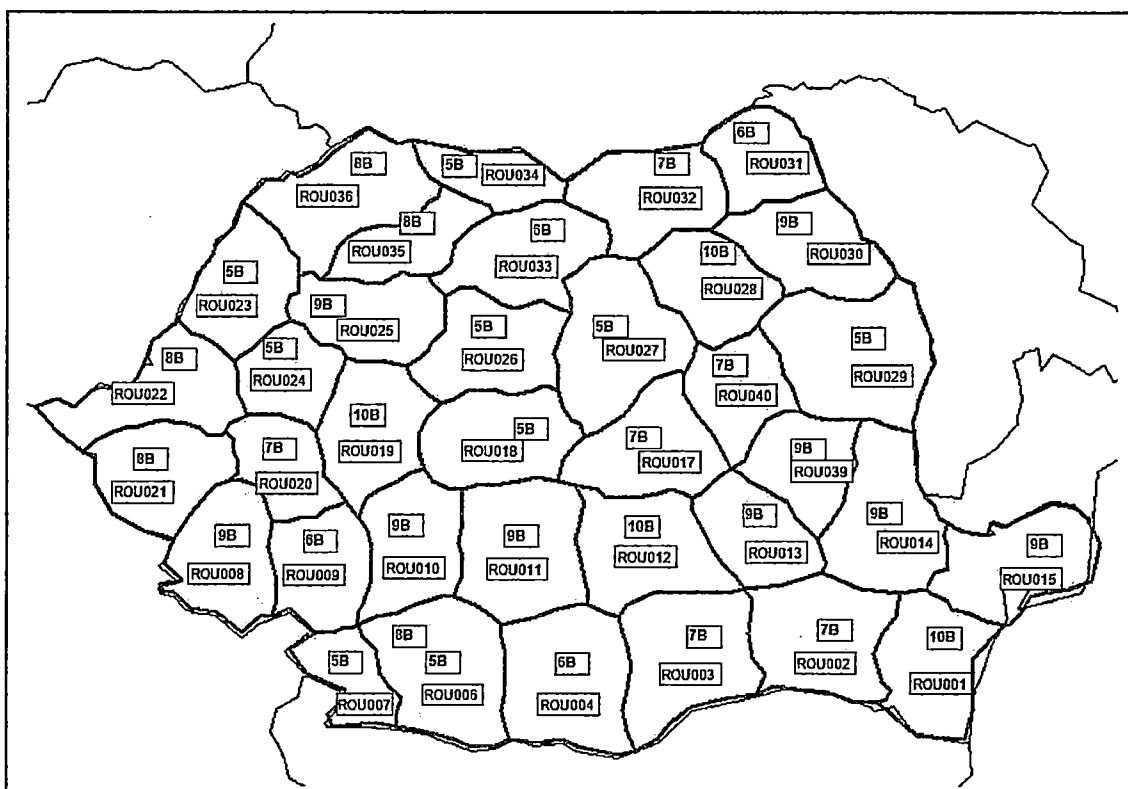
Coordinator of Radio Broadcasting Group

Regulatory Authority for Electronic Communications  
and Postal Services  
(RATEL)

### Layer 3



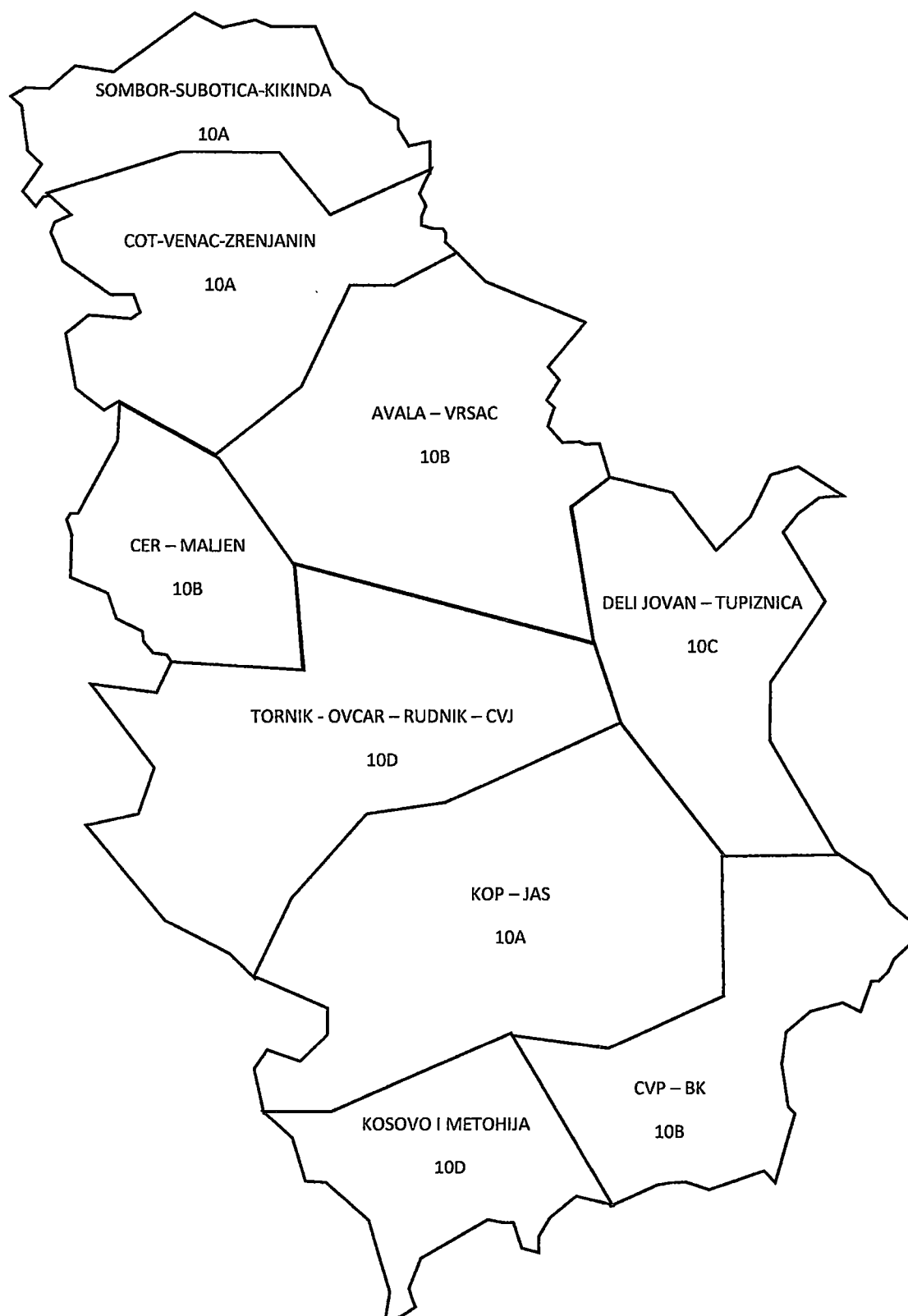
### Layer 4



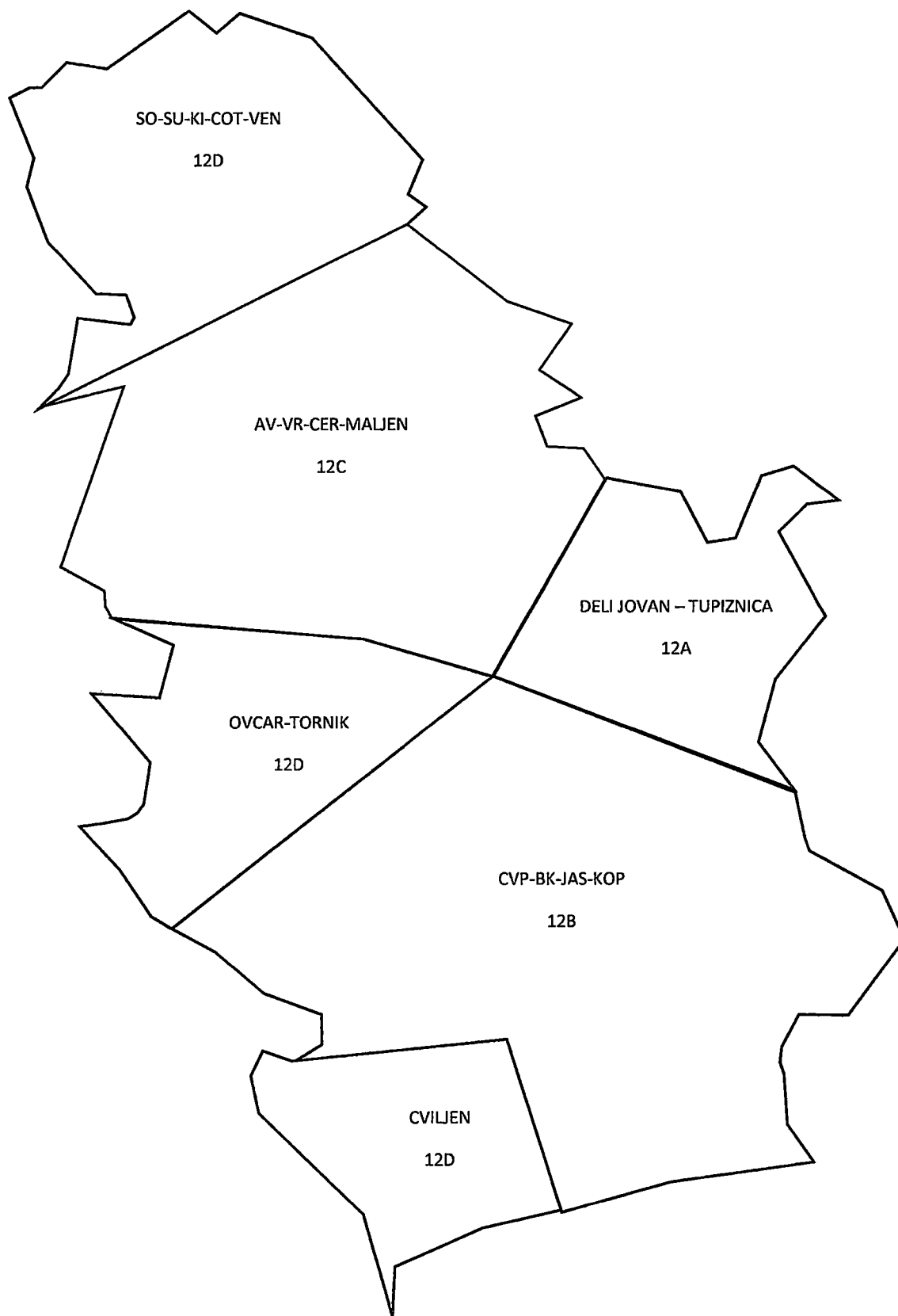
## Annex 2

### Frequency distribution of Administration of Serbia

#### Layer 1 (10CH) SRB



## Layer 3 (12CH) SRB



### Annex 3

## Assignments of Administration of Romania agreed by Administration of Serbia



Notices ROU T-DAB Assignments 2023.04.28.txt

| No. | Name of station | Block | ERP (dBW) | Ant dir       | Lon    | Lat    | Hef. Max | Pol |
|-----|-----------------|-------|-----------|---------------|--------|--------|----------|-----|
| 1   | CRAIOVA-SIMNIC  | 5A    | 40.0      | ND            | 234927 | 442205 | 169      | V   |
| 2   | DABULENI        | 5A    | 30.0      | ND            | 240502 | 434808 | 73       | V   |
| 3   | SEGARCEA        | 5A    | 30.0      | ND            | 234427 | 440637 | 119      | V   |
| 4   | CRAIOVA-SIMNIC  | 5B    | 40.0      | ND            | 234927 | 442205 | 169      | V   |
| 5   | DABULENI        | 5B    | 30.0      | ND            | 240502 | 434808 | 73       | V   |
| 6   | SEGARCEA        | 5B    | 30.0      | ND            | 234427 | 440637 | 119      | V   |
| 7   | CRAIOVA-SIMNIC  | 5C    | 40.0      | ND            | 234927 | 442205 | 169      | V   |
| 8   | DABULENI        | 5C    | 30.0      | ND            | 240502 | 434808 | 73       | V   |
| 9   | SEGARCEA        | 5C    | 30.0      | ND            | 234427 | 440637 | 119      | V   |
| 10  | CRAIOVA-SIMNIC  | 5D    | 40.0      | ND            | 234927 | 442205 | 169      | V   |
| 11  | DABULENI        | 5D    | 30.0      | ND            | 240502 | 434808 | 73       | V   |
| 12  | SEGARCEA        | 5D    | 30.0      | ND            | 234427 | 440637 | 119      | V   |
| 13  | CALAFAT         | 5A    | 37.0      | ND            | 231126 | 441344 | 199      | V   |
| 14  | CALAFAT         | 5B    | 37.0      | ND            | 231126 | 441344 | 199      | V   |
| 15  | CALAFAT         | 5C    | 37.0      | ND            | 231126 | 441344 | 199      | V   |
| 16  | CALAFAT         | 5D    | 37.0      | ND            | 231126 | 441344 | 199      | V   |
| 17  | ORADEA          | 5A    | 37.0      | ND            | 215822 | 470332 | 293      | V   |
| 18  | ORADEA          | 5B    | 37.0      | ND            | 215822 | 470332 | 293      | V   |
| 19  | ORADEA          | 5C    | 37.0      | ND            | 215822 | 470332 | 293      | V   |
| 20  | ORADEA          | 5D    | 37.0      | ND            | 215822 | 470332 | 293      | V   |
| 21  | BIHOR           | 5A    | 30.0      | ND            | 224117 | 462629 | 1323     | V   |
| 22  | BIHOR           | 5B    | 30.0      | ND            | 224117 | 462629 | 1323     | V   |
| 23  | BIHOR           | 5C    | 30.0      | ND            | 224117 | 462629 | 1323     | V   |
| 24  | BIHOR           | 5D    | 30.0      | ND            | 224117 | 462629 | 1323     | V   |
| 25  | VARATEC         | 5A    | 33.0      | 90-330/23dBW  | 240227 | 473938 | 848      | V   |
| 26  | VARATEC         | 5B    | 33.0      | 90-330/23dBW  | 240227 | 473938 | 848      | V   |
| 27  | VARATEC         | 5C    | 33.0      | 90-330/23dBW  | 240227 | 473938 | 848      | V   |
| 28  | VARATEC         | 5D    | 33.0      | 90-330/23dBW  | 240227 | 473938 | 848      | V   |
| 29  | SIGHET          | 5A    | 30.0      | ND            | 235658 | 475538 | 130      | V   |
| 30  | SIGHET          | 5B    | 30.0      | ND            | 235658 | 475538 | 130      | V   |
| 31  | SIGHET          | 5C    | 30.0      | ND            | 235658 | 475538 | 130      | V   |
| 32  | SIGHET          | 5D    | 30.0      | ND            | 235658 | 475538 | 130      | V   |
| 33  | BALOTA          | 6A    | 37.0      | 100-270/30dBW | 224910 | 443601 | 506      | V   |
| 34  | BALOTA          | 6B    | 37.0      | 100-270/30dBW | 224910 | 443601 | 506      | V   |
| 35  | BALOTA          | 6C    | 37.0      | 100-270/30dBW | 224910 | 443601 | 506      | V   |
| 36  | BALOTA          | 6D    | 37.0      | 100-270/30dBW | 224910 | 443601 | 506      | V   |
| 37  | BISTRITA-HENIU  | 6A    | 37.0      | ND            | 244407 | 471639 | 1162     | V   |

|     |                      |     |      |               |        |        |      |   |
|-----|----------------------|-----|------|---------------|--------|--------|------|---|
| 86  | CERBU-NOVACI         | 9B  | 40.0 | ND            | 234207 | 451504 | 1111 | V |
| 87  | CERBU-NOVACI         | 9C  | 40.0 | ND            | 234207 | 451504 | 1111 | V |
| 88  | CERBU-NOVACI         | 9D  | 40.0 | ND            | 234207 | 451504 | 1111 | V |
| 89  | PARANG               | 9A  | 40.0 | ND            | 232815 | 452304 | 1096 | V |
| 90  | PARANG               | 9B  | 40.0 | ND            | 232815 | 452304 | 1096 | V |
| 91  | PARANG               | 9C  | 40.0 | ND            | 232815 | 452304 | 1096 | V |
| 92  | PARANG               | 9D  | 40.0 | ND            | 232815 | 452304 | 1096 | V |
| 93  | COZIA-RAMNICU-VALCEA | 9A  | 40.0 | ND            | 242022 | 451905 | 1304 | V |
| 94  | COZIA-RAMNICU-VALCEA | 9B  | 40.0 | ND            | 242022 | 451905 | 1304 | V |
| 95  | COZIA-RAMNICU-VALCEA | 9C  | 40.0 | ND            | 242022 | 451905 | 1304 | V |
| 96  | COZIA-RAMNICU-VALCEA | 9D  | 40.0 | ND            | 242022 | 451905 | 1304 | V |
| 97  | CLUJ-FELEAC          | 9A  | 37.0 | ND            | 233832 | 464252 | 628  | V |
| 98  | CLUJ-FELEAC          | 9B  | 37.0 | ND            | 233832 | 464252 | 628  | V |
| 99  | CLUJ-FELEAC          | 9C  | 37.0 | ND            | 233832 | 464252 | 628  | V |
| 100 | CLUJ-FELEAC          | 9D  | 37.0 | ND            | 233832 | 464252 | 628  | V |
| 101 | DEVA-MAGURA-BOIU     | 10A | 40.0 | ND            | 230628 | 455606 | 670  | V |
| 102 | DEVA-MAGURA-BOIU     | 10C | 40.0 | ND            | 230628 | 455606 | 670  | V |
| 103 | DEVA-MAGURA-BOIU     | 10D | 40.0 | ND            | 230628 | 455606 | 670  | V |
| 104 | DEVA-MAGURA-BOIU     | 10B | 40.0 | ND            | 230628 | 455606 | 670  | V |
| 105 | CRAIOVA-SIMNIC       | 11A | 40.0 | ND            | 234927 | 442205 | 169  | V |
| 106 | DABULENI             | 11A | 30.0 | ND            | 240502 | 434808 | 73   | V |
| 107 | SEGARCEA             | 11A | 30.0 | ND            | 234427 | 440637 | 119  | V |
| 108 | CALAFAT              | 11A | 37.0 | ND            | 231126 | 441344 | 199  | V |
| 109 | SEMENIC              | 11C | 30.0 | 300-340/27dBW | 220315 | 451057 | 992  | V |
| 110 | RESITA               | 11C | 30.0 | ND            | 215204 | 451720 | 248  | V |
| 111 | BALOTA               | 11D | 40.0 | ND            | 224910 | 443601 | 506  | V |
| 112 | CERBU-NOVACI         | 11D | 40.0 | ND            | 234207 | 451504 | 1111 | V |
| 113 | PARANG               | 11D | 40.0 | ND            | 232815 | 452304 | 1096 | V |
| 114 | COZIA-RAMNICU-VALCEA | 11C | 40.0 | ND            | 242022 | 451905 | 1304 | V |
| 115 | DEVA                 | 11A | 40.0 | ND            | 230628 | 455606 | 670  | V |
| 116 | FAGET-COSEVITA       | 11B | 37.0 | ND            | 222323 | 455244 | 216  | V |
| 117 | TIMISOARA-URSENI     | 11D | 40.0 | ND            | 211519 | 454316 | 207  | V |
| 118 | ARAD-SIRIA           | 11D | 40.0 | ND            | 213949 | 461554 | 481  | V |
| 119 | ARAD-RR              | 11D | 30.0 | ND            | 211911 | 461047 | 64   | V |
| 120 | ORADEA               | 11C | 30.0 | ND            | 215822 | 470332 | 293  | V |
| 121 | BIHOR                | 11C | 30.0 | 260-290/27dBW | 224117 | 462629 | 1323 | V |
| 122 | CLUJ-FELEAC          | 11C | 37.0 | ND            | 233832 | 464252 | 628  | V |
| 123 | VARATEC              | 11D | 33.0 | 90-330/23dBW  | 240227 | 473938 | 848  | V |
| 124 | SIGHET               | 11D | 30.0 | ND            | 235658 | 475538 | 130  | V |
| 125 | BISTRITA-HENIU       | 11A | 37.0 | ND            | 244407 | 471639 | 1162 | V |
| 126 | ZALAU                | 11D | 37.0 | ND            | 230606 | 470910 | 515  | V |
| 127 | BAIA-MARE-MOGOSA     | 11B | 37.0 | ND            | 234712 | 473925 | 1000 | V |
| 128 | NEGRESTI-OAS         | 11B | 30.0 | ND            | 231551 | 475309 | 391  | V |

| No. | Name of station          | Block | ERP [dBW] | LON        | LAT        | Altitude of site above sea level | Antenna directivity                   | Polarization | Height of antenna above ground level |
|-----|--------------------------|-------|-----------|------------|------------|----------------------------------|---------------------------------------|--------------|--------------------------------------|
| 30  | UZICE ZABUCJE            | 10D   | 30        | 19 E 49 41 | 43 N 50 51 | 714                              | ND                                    | V            | 30                                   |
| 31  | VRSAČ                    | 11A   | 40        | 21 E 19 30 | 45 N 07 23 | 386                              | /330-150/ 27 dBW                      | V            | 30                                   |
| 32  | AVALA                    | 11A   | 41.8      | 20 E 30 52 | 44 N 41 46 | 400                              | ND                                    | V            | 182                                  |
| 33  | CER                      | 11A   | 33        | 19 E 29 40 | 44 N 36 11 | 674                              | /200-340/ 30 dBW                      | V            | 50                                   |
| 34  | GUČEVO                   | 11A   | 30        | 19 E 10 38 | 44 N 29 18 | 758                              | /200-0/ 18 dBW                        | V            | 30                                   |
| 35  | VALJEVO-PECINA           | 11A   | 23        | 19 E 52 25 | 44 N 16 00 | 242                              | ND                                    | V            | 35                                   |
| 36  | CRVENI COT               | 11B   | 40        | 19 E 42 40 | 45 N 09 04 | 530                              | /110-210/ 30 dBW                      | V            | 96                                   |
| 37  | SUBOTICA                 | 11B   | 40        | 19 E 37 45 | 46 N 04 31 | 115                              | /240-60/ 27 dBW                       | V            | 195                                  |
| 38  | KIKINDA                  | 11B   | 40        | 20 E 28 56 | 45 N 51 16 | 75                               | /350-110/ 30 dBW                      | V            | 100                                  |
| 39  | SOMBOR                   | 11B   | 40        | 19 E 15 40 | 45 N 47 18 | 96                               | ND                                    | V            | 100                                  |
| 40  | CRNI VRH J               | 11B   | 41.8      | 21 E 06 38 | 44 N 00 36 | 693                              | ND                                    | V            | 100                                  |
| 41  | RUDNIK                   | 11B   | 37        | 20 E 32 22 | 44 N 07 55 | 1121                             | /300-70/ 30 dBW                       | V            | 55                                   |
| 42  | TUPIZNICA                | 11B   | 40        | 22 E 09 25 | 43 N 41 55 | 1112                             | /30-190/ 33 dBW                       | V            | 100                                  |
| 43  | DELI JOVAN               | 11B   | 37        | 22 E 13 02 | 44 N 13 14 | 1105                             | /40-110/ 32 dBW                       | V            | 65                                   |
| 44  | STUBEJ                   | 11B   | 33        | 21 E 37 45 | 44 N 21 30 | 920                              | /300-30/ 27 dBW                       | V            | 30                                   |
| 45  | OVČAR                    | 11B   | 41.8      | 20 E 13 02 | 43 N 53 47 | 893                              | ND                                    | V            | 98                                   |
| 46  | BAJINA BASTA             | 11B   | 33        | 19 E 27 29 | 43 N 56 32 | 1021                             | /210-350/ 27 dBW                      | V            | 30                                   |
| 47  | BITOVIK                  | 11B   | 37        | 19 E 41 32 | 43 N 26 54 | 1325                             | /270-310/ 27 dBW,<br>/330-350/ 31 dBW | V            | 25                                   |
| 48  | TORNIK                   | 11B   | 40        | 19 E 38 24 | 43 N 39 15 | 1394                             | /200-330/ 34 dBW                      | V            | 37                                   |
| 49  | UZICE ZABUCJE            | 11B   | 30        | 19 E 49 41 | 43 N 50 51 | 714                              | ND                                    | V            | 30                                   |
| 50  | MALJEN                   | 11B   | 37        | 20 E 00 35 | 44 N 08 27 | 1027                             | ND                                    | V            | 30                                   |
| 51  | GOC                      | 11C   | 33        | 20 E 52 24 | 43 N 33 45 | 1066                             | ND                                    | V            | 30                                   |
| 52  | KOPAONIK<br>GOBELJA      | 11C   | 37        | 20 E 49 23 | 43 N 19 05 | 1906                             | ND                                    | V            | 72                                   |
| 53  | GOLIJIA                  | 11C   | 30        | 20 E 20 02 | 43 N 16 28 | 1646                             | ND                                    | V            | 40                                   |
| 54  | KOPAONIK PANCIC          | 11C   | 30        | 20 E 49 16 | 43 N 16 09 | 1955                             | /270-90/ 17 dBW                       | V            | 10                                   |
| 55  | NOVI PAZAR-<br>SUTENOVAC | 11C   | 30        | 20 E 30 54 | 43 N 06 40 | 780                              | ND                                    | V            | 30                                   |
| 56  | BESNA KOBILA             | 11D   | 40        | 22 E 13 50 | 42 N 31 46 | 1887                             | ND                                    | V            | 47                                   |
| 57  | SVETI ILIJA              | 11D   | 37        | 21 E 48 17 | 42 N 34 24 | 1256                             | ND                                    | V            | 40                                   |
| 58  | CRNI VRH P               | 11D   | 33        | 22 E 39 10 | 43 N 10 57 | 1122                             | ND                                    | V            | 25                                   |
| 59  | SLJIVOVICKI VIS          | 11D   | 30        | 22 E 21 28 | 43 N 09 47 | 1212                             | ND                                    | V            | 15                                   |
| 60  | JASTREBAC                | 11D   | 41.8      | 21 E 27 56 | 43 N 22 57 | 1447                             | /350-0/ 39.8 dBW,<br>/20-50/ 34.8 dBW | V            | 114                                  |
| 61  | TUPIZNICA                | 12A   | 40        | 22 E 09 25 | 43 N 41 55 | 1112                             | /30-190/ 33 dBW                       | V            | 100                                  |
| 62  | DELI JOVAN               | 12A   | 37        | 22 E 13 02 | 44 N 13 14 | 1105                             | /40-110/ 32 dBW                       | V            | 65                                   |
| 63  | STUBEJ                   | 12A   | 33        | 21 E 37 45 | 44 N 21 30 | 920                              | /300-30/ 27 dBW                       | V            | 30                                   |
| 64  | BESNA KOBILA             | 12B   | 40        | 22 E 13 50 | 42 N 31 46 | 1887                             | ND                                    | V            | 47                                   |
| 65  | SVETI ILIJA              | 12B   | 37        | 21 E 48 17 | 42 N 34 24 | 1256                             | ND                                    | V            | 40                                   |
| 66  | CRNI VRH P               | 12B   | 33        | 22 E 39 10 | 43 N 10 57 | 1122                             | ND                                    | V            | 25                                   |