

| Region                | Country                   | Operator   | LTE       | LTE-Advanced | 5G        |
|-----------------------|---------------------------|--|-----------|--------------|-----------|
| <b>Eastern Europe</b> |                           |  | <b>93</b> | <b>60</b>    | <b>21</b> |
|                       | <b>Albania</b>            | <b>Total</b>   | <b>3</b>  | <b>2</b>     | <b>0</b>  |
|                       | Albania                   | ALBtelecom   | 1         | 0            | 0         |
|                       | Albania                   | ONE Telecommunications (formerly Telekom Albania)    | 1         | 1            | 0         |
|                       | Albania                   | Vodafone Albania (incl. ABCom)                       | 1         | 1            | 0         |
|                       | <b>Armenia</b>            | <b>Total</b>   | <b>3</b>  | <b>3</b>     | <b>0</b>  |
|                       | Armenia                   | MTS Armenia (Viva-MTS)                               | 1         | 1            | 0         |
|                       | Armenia                   | Telecom Armenia (formerly VEON, trading as Beeline)  | 1         | 1            | 0         |
|                       | Armenia                   | Ucom   | 1         | 1            | 0         |
|                       | <b>Azerbaijan</b>         | <b>Total</b>   | <b>4</b>  | <b>3</b>     | <b>0</b>  |
|                       | Azerbaijan                | Azercell   | 1         | 0            | 0         |
|                       | Azerbaijan                | Azerfon (Nar)  | 1         | 1            | 0         |
|                       | Azerbaijan                | Bakcell  | 1         | 1            | 0         |
|                       | Azerbaijan                | Naxtel (Nakhchivan)                                  | 1         | 1            | 0         |
|                       | <b>Belarus</b>            | <b>Total</b>   | <b>4</b>  | <b>3</b>     | <b>1</b>  |
|                       | Belarus                   | A1 Belarus   | 1         | 0            | 1         |
|                       | Belarus                   | Belarusian Cloud Technologies (beCloud)              | 1         | 1            | 0         |
|                       | Belarus                   | Belarusian Telecommunications Network (BeST, life:)) | 1         | 1            | 0         |
|                       | Belarus                   | MTS Belarus  | 1         | 1            | 0         |
|                       | <b>Bosnia-Herzegovina</b> | <b>Total</b>   | <b>3</b>  | <b>1</b>     | <b>0</b>  |
|                       | Bosnia-Herzegovina        | BH Telecom   | 1         | 1            | 0         |
|                       | Bosnia-Herzegovina        | HT Mostar (HT Eronet)                                | 1         | 0            | 0         |
|                       | Bosnia-Herzegovina        | Telekom Srpske (m:tel)                               | 1         | 0            | 0         |
|                       | <b>Bulgaria</b>           | <b>Total</b>   | <b>5</b>  | <b>3</b>     | <b>2</b>  |
|                       | Bulgaria                  | A1 Bulgaria (Mobiltel)                               | 1         | 1            | 1         |
|                       | Bulgaria                  | Bulsatcom  | 1         | 0            | 0         |
|                       | Bulgaria                  | T.com (Bulgaria)                                     | 1         | 0            | 0         |
|                       | Bulgaria                  | Telenor Bulgaria                                     | 1         | 1            | 0         |
|                       | Bulgaria                  | Vivacom (BTC)  | 1         | 1            | 1         |
|                       | <b>Croatia</b>            | <b>Total</b>   | <b>3</b>  | <b>3</b>     | <b>1</b>  |
|                       | Croatia                   | A1 Hrvatska (formerly VIPnet/B.net)                  | 1         | 1            | 0         |
|                       | Croatia                   | Hrvatski Telekom (HT)                                | 1         | 1            | 1         |
|                       | Croatia                   | Tele2 Croatia  | 1         | 1            | 0         |
|                       | <b>Czech Republic</b>     | <b>Total</b>   | <b>4</b>  | <b>3</b>     | <b>3</b>  |
|                       | Czech Republic            | Nordic Telecom                                       | 1         | 0            | 0         |
|                       | Czech Republic            | O2 Czech Republic (incl. CETIN)                      | 1         | 1            | 1         |
|                       | Czech Republic            | T-Mobile Czech Republic                              | 1         | 1            | 1         |
|                       | Czech Republic            | Vodafone Czech Republic                              | 1         | 1            | 1         |
|                       | <b>Estonia</b>            | <b>Total</b>   | <b>3</b>  | <b>3</b>     | <b>1</b>  |
|                       | Estonia                   | Elisa Eesti (incl. Starman)                          | 1         | 1            | 0         |
|                       | Estonia                   | Tele2 Eesti  | 1         | 1            | 0         |
|                       | Estonia                   | Telia Eesti (formerly Eesti Telekom, EMT, Elion)     | 1         | 1            | 1         |
|                       | <b>Georgia</b>            | <b>Total</b>   | <b>6</b>  | <b>3</b>     | <b>0</b>  |

|                        |                                     |          |          |          |
|------------------------|-------------------------------------|----------|----------|----------|
| Georgia                | A-Mobile (Abkhazia)                 | 1        | 0        | 0        |
| Georgia                | AquaFon GSM (Abkhazia)              | 1        | 1        | 0        |
| Georgia                | MagtiCom                            | 1        | 1        | 0        |
| Georgia                | Ostelecom (MegaFon) (South Ossetia) | 1        | 0        | 0        |
| Georgia                | SilkNet (incl. Geocell)             | 1        | 1        | 0        |
| Georgia                | VEON Georgia (Beeline)              | 1        | 0        | 0        |
| <b>Hungary</b>         | <b>Total</b>                        | <b>4</b> | <b>3</b> | <b>2</b> |
| Hungary                | DIGI (Hungary)                      | 1        | 0        | 0        |
| Hungary                | Magyar Telekom                      | 1        | 1        | 1        |
| Hungary                | Telenor Hungary (incl. CETIN)       | 1        | 1        | 0        |
| Hungary                | Vodafone Hungary                    | 1        | 1        | 1        |
| <b>Kosovo</b>          | <b>Total</b>                        | <b>3</b> | <b>0</b> | <b>0</b> |
| Kosovo                 | IPKO                                | 1        | 0        | 0        |
| Kosovo                 | MTS (Kosovo)                        | 1        | 0        | 0        |
| Kosovo                 | Telecom Kosovo (TK, Vala)           | 1        | 0        | 0        |
| <b>Latvia</b>          | <b>Total</b>                        | <b>3</b> | <b>3</b> | <b>2</b> |
| Latvia                 | Bite Latvia                         | 1        | 1        | 0        |
| Latvia                 | Latvijas Mobilais Telefons (LMT)    | 1        | 1        | 1        |
| Latvia                 | Tele2 Latvia                        | 1        | 1        | 1        |
| <b>Lithuania</b>       | <b>Total</b>                        | <b>3</b> | <b>3</b> | <b>0</b> |
| Lithuania              | Bite Lithuania                      | 1        | 1        | 0        |
| Lithuania              | Tele2 Lithuania                     | 1        | 1        | 0        |
| Lithuania              | Telia Lietuva                       | 1        | 1        | 0        |
| <b>Moldova</b>         | <b>Total</b>                        | <b>4</b> | <b>1</b> | <b>0</b> |
| Moldova                | IDC (Transnistria)                  | 1        | 0        | 0        |
| Moldova                | Moldcell                            | 1        | 0        | 0        |
| Moldova                | Moldtelecom (Unite)                 | 1        | 0        | 0        |
| Moldova                | Orange Moldova                      | 1        | 1        | 0        |
| <b>Montenegro</b>      | <b>Total</b>                        | <b>3</b> | <b>2</b> | <b>0</b> |
| Montenegro             | Crnogorski Telekom                  | 1        | 1        | 0        |
| Montenegro             | MTEL (m:tel)                        | 1        | 0        | 0        |
| Montenegro             | Telenor Montenegro                  | 1        | 1        | 0        |
| <b>North Macedonia</b> | <b>Total</b>                        | <b>2</b> | <b>1</b> | <b>0</b> |
| North Macedonia        | A1 Macedonia (formerly Vip)         | 1        | 0        | 0        |
| North Macedonia        | Makedonski Telekom (Telekom)        | 1        | 1        | 0        |
| <b>Poland</b>          | <b>Total</b>                        | <b>7</b> | <b>5</b> | <b>4</b> |
| Poland                 | Aero2                               | 2        | 1        | 0        |
| Poland                 | Orange Poland                       | 1        | 1        | 1        |
| Poland                 | Play (P4)                           | 1        | 1        | 1        |
| Poland                 | Plus (Polkomtel)                    | 2        | 1        | 1        |
| Poland                 | T-Mobile Poland                     | 1        | 1        | 1        |
| <b>Romania</b>         | <b>Total</b>                        | <b>5</b> | <b>2</b> | <b>3</b> |
| Romania                | Orange Romania                      | 1        | 1        | 1        |
| Romania                | RCS&RDS (DIGI)                      | 2        | 0        | 1        |
| Romania                | Telekom Romania Mobile              |          |          |          |
| Romania                | Communications (formerly Cosmote)   | 1        | 0        | 0        |
| Romania                | Vodafone Romania                    | 1        | 1        | 1        |
| <b>Russia</b>          | <b>Total</b>                        | <b>7</b> | <b>3</b> | <b>0</b> |
| Russia                 | Beeline (Russia)                    | 1        | 1        | 0        |
| Russia                 | MegaFon                             | 1        | 1        | 0        |

|                 |   |          |          |          |
|-----------------|---|----------|----------|----------|
| Russia          | Mobile TeleSystems (MTS)  | 2        | 1        | 0        |
| Russia          | MOTIV (Ekaterinburg-2000)   | 1        | 0        | 0        |
| Russia          | Tele2 Russia  | 1        | 0        | 0        |
| Russia          | Vainakh Telecom (Chechen Republic)  | 1        | 0        | 0        |
| <b>Serbia</b>   | <b>Total</b>  | <b>3</b> | <b>2</b> | <b>0</b> |
| Serbia          | Telekom Srbija (MTS)  | 1        | 0        | 0        |
| Serbia          | Telenor Serbia  | 1        | 1        | 0        |
| Serbia          | VIP Mobile (A1 Serbia)  | 1        | 1        | 0        |
| <b>Slovakia</b> | <b>Total</b>  | <b>4</b> | <b>3</b> | <b>1</b> |
| Slovakia        | O2 Slovakia   | 1        | 1        | 0        |
| Slovakia        | Orange Slovensko  | 1        | 1        | 0        |
| Slovakia        | Slovak Telekom (ST, incl. T-Mobile, DIGI)   | 1        | 1        | 1        |
| Slovakia        | SWAN Mobile (4ka)   | 1        | 0        | 0        |
| <b>Slovenia</b> | <b>Total</b>  | <b>4</b> | <b>2</b> | <b>1</b> |
| Slovenia        | A1 Slovenia (formerly Si.mobil, Amis)   | 1        | 1        | 0        |
| Slovenia        | T-2   | 1        | 0        | 0        |
| Slovenia        | Telekom Slovenije (incl. Mobitel)   | 1        | 1        | 1        |
| Slovenia        | Telemach Mobil (formerly Tusmobil)  | 1        | 0        | 0        |
| <b>Ukraine</b>  | <b>Total</b>  | <b>3</b> | <b>3</b> | <b>0</b> |
| Ukraine         | Kyivstar  | 1        | 1        | 0        |
| Ukraine         | Lifecell (formerly Astelit)   | 1        | 1        | 0        |
| Ukraine         | Vodafone Ukraine  | 1        | 1        | 0        |
| 12/15/2020      | <br>McGraw-Hill<br>Financial<br>Data & Analytics |          |          |          |