

**NDB LIST CLE No. 166**    320 - 334.9 kHz    25 - 28 Jan. 2013, midday-midday local time

**COMBINED RESULTS**  
**EUROPE**

For overall statistics, please see the covering email.

**Reporters:**

|     |           |   |
|-----|-----------|---|
| AUT | <b>pc</b> | Patrick Robic, Leibnitz                           |
| CZE | <b>ju</b> | Jaroslav Tomek, Ostrava                           |
| CZE | <b>my</b> | Milos Holy, Lhota pod Radcem                      |
| CZE | <b>ze</b> | Zdenek Elias, Jablonec nad Nisou, N. Bohemia      |
| DEU | <b>bd</b> | Bernhard Hein, Dessau-Roßlau                      |
| DEU | <b>hw</b> | Hartmut Wolff, Near Wolfsburg                     |
| DEU | <b>je</b> | Joachim Rabe, Norderstedt, north of Hamburg       |
| ENG | <b>ag</b> | Alan Gale, Whitworth, Lancashire                  |
| ENG | <b>bk</b> | Brian Keyte, Bookham, Surrey                      |
| ENG | <b>ds</b> | David Atkins, Abbots Langley                      |
| ENG | <b>hh</b> | Brian Heath, Stapleton, Leicestershire            |
| ENG | <b>me</b> | Mike Thayne, Whitley Bay                          |
| ENG | <b>px</b> | Peter Greateorex, Bolsover, Derbyshire            |
| ENG | <b>tg</b> | Tracey Gardner, Foston, Lincolnshire              |
| FIN | <b>jt</b> | Jarno Fält, Tampere                               |
| FIN | <b>ks</b> | Kari Syrjänen, Aitomaki, near Kouvola             |
| FIN | <b>ro</b> | Raimo Karjalainen, Laukaa, near Jyvaskyla         |
| FRA | <b>jj</b> | Jean Jacquemin, Bethune, Merville, near Lille     |
| HOL | <b>rb</b> | Roelof Bakker, Middelburg, Zeeland                |
| HOL | <b>z1</b> | Dan Petersen (WA), University of Twente, Enschede |
| ITA | <b>st</b> | Stefano Temporin, Verona                          |
| POL | <b>ls</b> | Leszek Sieron, Near Lodz                          |
| SUI | <b>ps</b> | Peter Schleuss, Winterthur                        |
| SWE | <b>bn</b> | Bo Nensen, Hanabäckkliden, Örnsköldsvik           |

For full details, please see the individual reporters' logs,  
as previously posted by them to the List.  
If you spot an omission or problem in your own details below  
please let me know ( ndbcle'at'gmail.com  
- replace the 'at' by an @ symbol )

## BEACONS HEARD:

Beacons are shown in kHz order within each country

UNIDs and Offshore NDBs appear at the end of the list.

The numbers shown within the table are the times in 'hh' UTC that the beacons were logged.

(e.g. 16 indicates logged between 16:00-16:59).

| Cou | kHz | Call | Location              | AUT<br>pc | CZE<br>jv | CZE<br>my | CZE<br>ze | DEU<br>bd | DEU<br>hw | DEU<br>je | ENG<br>ag | ENG<br>bk | ENG<br>ds | ENG<br>hh | ENG<br>me | ENG<br>px | ENG<br>tg | FIN<br>jt | FIN<br>ks | FIN<br>ro | FRA<br>jj | HOL<br>rb | HOL<br>z1 | ITA<br>st | POL<br>ls | SUI<br>ps | SWE<br>bn |
|-----|-----|------|-----------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| AUT | 327 | LNZ  | Linz Horsching        | 16        | 14        | 12        | 21        | 11        | 16        | 15        | 23        | 17        | 2         | 17        | 6         | 20        | 14        | 22        | 4         |           | 20        | 20        | 22        | 17        | 17        | 14        |           |
| AZR | 331 | SC   | Santa Cruz das Flores |           |           |           |           |           | 22        | 1         | 1         |           |           |           |           |           |           |           |           |           |           | 2         |           |           |           |           |           |
| BEL | 323 | ONC  | Charleroi Gosselies   |           |           | 2         | 20        | 14        | 16        | 15        | 20        | 12        | 1         | 13        | 12        | 19        | 14        | 5         | 0         |           | 17        | 11        | 22        |           | 18        | 16        |           |
| BLR | 321 | GK   | Minsk                 |           |           |           |           |           | 4         |           |           |           |           |           | 4         |           |           |           | 4         |           |           |           |           |           |           |           |           |
| BLR | 321 | NE   | Minsk                 |           | 21        |           | 23        | 15        | 3         | 15        |           |           |           |           | 4         |           |           |           | 4         |           |           |           |           |           |           |           |           |
| BUL | 321 | BU   | Burgas                |           | 21        | 2         | 22        | 18        | 16        |           |           |           |           | 22        |           | 23        |           |           | 4         |           |           | 1         |           |           | 19        |           |           |
| CAN | 323 | UWP  | Argentia, NL          |           |           |           |           |           | 4         | 3         |           |           |           |           | 4         |           |           |           |           |           |           | 2         |           |           |           |           |           |
| CAN | 329 | YEK  | Arviat Eskimo Pt, NU  |           |           |           |           |           | 5         |           |           |           |           |           | 2         |           | 23        |           | 5         |           |           | 7         |           |           |           |           |           |
| CAN | 332 | YFM  | La Grande 4, QC       |           |           |           |           |           |           |           |           |           |           |           | 2         |           |           |           |           |           |           | 7         |           |           |           |           |           |
| CAN | 332 | YTE  | Cape Dorset, NU       |           |           |           |           |           |           |           |           |           |           |           |           |           | 23        |           |           |           |           | 7         |           |           |           |           |           |
| CAN | 334 | YER  | Fort Severn, ON       |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           | 5         |           |           | 23        |           |           |           |           |           |
| DEU | 320 | HA   | Hannover East         |           |           | 20        | 22        | 11        | 16        | 17        | 20        | 23        |           | 16        | 12        | 19        | 14        | 5         | 17        |           | 1         | 11        | 21        |           | 14        |           |           |
| DEU | 321 | GL   | Berlin Tegel East     |           |           | 12        | 22        | 11        | 16        | 17        |           | 17        |           |           | 12        |           |           | 5         | 3         |           |           | 11        | 21        |           | 14        |           |           |
| DEU | 323 | GT   | Hamburg North         |           |           | 2         | 23        | 11        | 16        | 16        |           | 3         |           | 15        | 13        | 20        | 14        | 1         | 3         |           |           | 11        | 21        |           |           |           |           |
| DEU | 325 | DP   | Diepholz              |           |           | 2         | 21        | 11        | 16        | 16        | 20        | 13        | 1         | 13        | 5         | 22        | 14        | 5         | 1         |           |           | 11        | 22        |           |           |           |           |
| DEU | 327 | LV   | Kohn Bonn             |           |           | 2         | 20        | 13        | 17        | 17        |           |           | 2         | 13        | 6         | 22        |           |           | 5         |           | 4         | 11        | 22        |           |           |           |           |
| DEU | 330 | ABU  | Altenburg Nobitz      |           | 23        | 12        | 21        | 11        | 16        | 15        | 1         | 17        |           | 16        | 0         | 21        | 15        |           | 3         |           |           | 21        | 3         |           | 16        |           |           |
| DEU | 330 | HC   | Heringsdorf           |           |           |           | 22        | 11        | 16        | 11        |           |           |           |           |           |           |           | 1         | 14        |           |           |           |           |           | 0         |           |           |
| DEU | 333 | PI   | Schwerin Parchim      |           |           | 3         | 22        | 11        | 16        | 19        | 21        |           |           | 18        | 22        | 22        | 4         | 6         | 2         |           |           | 11        |           |           | 16        |           |           |
| DNK | 321 | VO   | Vojens Skrydstrup     |           | 23        | 20        | 23        | 14        | 16        | 15        |           | 16        |           | 16        | 12        |           | 14        | 5         | 20        |           |           | 11        | 21        |           | 14        | 16        |           |
| DNK | 324 | ML   | Aarhus Tirstrup       |           |           |           |           | 11        | 16        | 17        |           | 3         | 1         | 15        | 5         |           | 23        |           | 22        |           |           | 11        | 22        |           | 16        | 5         |           |
| DNK | 328 | VJ   | Stauning              |           |           |           | 23        | 15        | 16        | 16        | 21        | 22        |           | 16        | 12        |           | 14        | 0         | 18        |           | 2         | 11        | 2         |           | 22        |           |           |
| DNK | 330 | SB   | Sonderborg            |           |           |           |           | 15        | 17        | 17        |           |           |           |           |           |           | 23        |           | 5         |           |           | 11        |           |           |           |           |           |
| DNK | 334 | FAU  | Ronne Bornholm        |           |           |           | 22        | 5         | 16        | 16        |           |           |           |           |           |           |           | 1         | 19        |           |           |           |           |           | 16        |           |           |
| ENG | 321 | STM  | Scilly Is. St. Marys  |           |           |           |           |           |           |           |           | 19        |           | 23        |           | 22        |           |           |           |           |           | 1         |           |           |           |           |           |
| ENG | 322 | LCY  | London City           |           |           |           |           |           |           |           | 9         | 12        | 0         | 13        |           |           |           |           |           |           |           | 11        |           |           |           |           |           |
| ENG | 327 | TNL  | Tatenhill             |           |           |           |           |           |           |           | 23        | 12        | 2         | 13        |           | 20        | 14        |           |           |           | 22        | 11        |           |           |           |           |           |
| ENG | 328 | BLK  | Blackbushe            |           |           |           |           |           |           |           |           | 12        | 2         | 13        |           | 21        |           |           |           |           |           | 11        |           |           |           |           |           |

|     |       |     |                        |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |  |    |    |    |
|-----|-------|-----|------------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|--|----|----|----|
| ENG | 328   | CL  | Carlisle               |    |    |    |    | 5  | 16 | 23 | 12 | 2  | 15 | 12 | 21 | 14 |    |    |    |    | 11 | 2  |    |  |    |    |    |
| ENG | 331   | GST | Gloucestershire        |    |    |    |    | 5  | 5  | 0  | 12 | 3  | 13 | 13 | 11 | 14 |    | 4  |    |    |    | 11 |    |  |    |    |    |
| ENG | 332   | SHM | Shoreham               |    |    |    |    | 2  | 16 | 9  | 12 | 3  | 13 | 13 | 20 |    |    |    |    |    | 19 | 11 |    |  |    |    |    |
| ENG | 332.5 | CAM | Cambridge              |    |    |    |    | 17 | 15 | 0  | 12 | 3  | 13 | 12 | 11 | 14 | 6  | 4  |    |    | 4  | 11 |    |  |    |    |    |
| ESP | 321   | ABT | Albacete               |    |    |    |    | 17 |    | 23 | 23 | 0  |    |    | 18 |    |    |    |    |    | 2  | 1  |    |  |    |    |    |
| ESP | 325   | AST | Asturias               |    |    | 2  |    | 16 | 17 | 16 | 21 | 17 | 1  | 17 | 7  | 20 |    |    |    |    | 18 | 16 |    |  |    |    |    |
| ESP | 328   | HIG | San Sebastian          |    |    | 2  | 22 | 16 | 16 | 17 | 23 | 17 | 2  | 18 | 21 | 20 | 0  |    |    |    | 18 | 16 | 22 |  |    | 17 |    |
| ESP | 330   | G   | Gerona                 |    |    |    |    |    | 6  |    |    |    |    |    |    |    |    |    |    |    |    |    |    |  |    |    |    |
| ESP | 330   | LEN | Leon Virgen del Camino |    |    |    |    |    | 17 | 1  |    | 23 | 3  | 0  |    |    |    |    |    |    |    | 16 |    |  |    | 2  |    |
| FIN | 322   | KOR | Helsinki Korso         |    | 14 | 20 | 21 | 16 | 16 | 15 | 23 | 22 |    | 15 | 13 | 19 | 14 | 15 | 4  | 16 |    | 20 | 21 |  | 14 | 23 | 11 |
| FIN | 324   | AS  | Kemi Tornio            |    | 20 | 2  |    | 1  | 16 | 5  | 20 | 21 | 1  | 18 | 13 | 20 | 14 | 16 | 4  | 16 |    | 11 |    |  | 19 |    |    |
| FIN | 325   | JOE | Joensuu                |    | 21 | 2  | 22 | 0  | 16 | 5  |    | 21 |    | 23 | 6  |    | 14 | 16 | 16 | 16 |    | 4  |    |  | 13 |    |    |
| FIN | 326   | SUI | Tampere Suini          |    | 14 | 20 | 23 | 22 | 6  | 5  | 21 | 23 |    | 0  | 5  | 21 | 14 | 16 | 4  | 16 |    | 21 |    |  | 16 | 5  | 11 |
| FIN | 328   | KIT | Kittila                |    |    |    |    | 22 |    | 5  |    |    |    |    | 5  |    | 1  | 18 | 4  | 19 |    | 5  |    |  | 19 |    |    |
| FIN | 333   | G   | Kemi Tornio            |    | 20 | 1  |    | 5  | 16 | 5  |    | 21 | 3  |    | 13 | 20 | 14 | 16 | 4  | 17 |    | 11 |    |  | 18 |    | 11 |
| FIN | 334   | S   | Kuopio                 |    | 22 |    |    | 1  | 5  | 0  |    |    |    |    |    |    | 5  | 16 | 4  | 17 |    |    |    |  | 13 |    | 11 |
| FRA | 320   | LSU | Limoges Bellegarde     |    |    | 1  | 22 | 23 | 16 | 15 |    | 23 |    | 1  | 13 |    |    |    |    |    | 23 | 16 |    |  |    |    |    |
| FRA | 320   | TY  | Troyes Barberey        |    |    |    | 23 |    | 0  | 15 |    | 12 | 0  | 13 | 12 |    | 15 | 23 | 1  |    | 5  | 11 |    |  |    |    |    |
| FRA | 320   | VE  | Valence Chabeuil       | 20 |    | 2  | 23 | 16 | 16 | 16 |    |    |    |    | 3  |    |    | 4  |    |    | 20 | 16 |    |  | 19 | 16 |    |
| FRA | 321   | ABY | Albert Bray            |    | 23 | 2  |    | 16 | 16 | 15 | 9  | 12 | 0  | 13 | 12 | 19 | 22 | 5  | 0  |    | 17 | 11 | 21 |  |    | 22 |    |
| FRA | 321   | TL  | Tarbes Lourdes         |    | 22 | 1  |    |    | 0  |    |    |    | 0  |    |    |    |    |    |    |    |    |    |    |  |    |    |    |
| FRA | 322   | ORS | Orleans                |    |    |    |    |    |    |    |    | 12 |    |    |    |    |    |    |    |    | 19 | 11 |    |  |    |    |    |
| FRA | 322   | RL  | La Rochelle            |    |    | 1  |    | 16 | 6  | 16 | 0  | 19 | 0  |    |    |    |    |    |    |    |    | 16 |    |  |    | 16 |    |
| FRA | 322   | TLN | Hyeres Le Palyvestre   | 20 |    | 21 | 21 | 16 | 16 | 2  |    | 17 | 0  | 17 | 5  | 20 | 23 |    | 1  |    | 5  | 16 | 21 |  |    |    |    |
| FRA | 323   | AB  | Albi Le Sequestre      |    |    | 2  |    | 5  | 17 | 0  |    |    | 1  | 23 | 17 |    |    |    |    |    |    | 1  | 22 |  | 18 | 17 |    |
| FRA | 324   | MOU | Moulins                |    |    |    |    |    | 0  | 17 |    | 12 | 1  | 16 |    |    |    |    | 1  |    | 21 | 1  |    |  | 19 |    |    |
| FRA | 326   | LM  | Le Mans Arnage         |    |    | 2  |    | 16 | 6  | 15 | 9  | 12 | 1  | 1  | 17 | 20 |    |    |    |    | 17 | 11 |    |  | 17 | 17 |    |
| FRA | 327   | MVC | Merville Calonne       |    |    |    | 23 | 5  | 17 | 15 | 23 | 12 | 2  | 13 | 13 | 21 | 14 | 6  | 0  |    | 17 | 11 | 2  |  |    |    |    |
| FRA | 330   | MB  | Montbeliard            |    |    | 2  |    | 22 | 19 |    |    | 1  |    | 0  |    |    |    |    |    |    |    |    |    |  | 18 | 14 |    |
| FRA | 331   | TUR | Tours Val de Loire     |    |    | 2  |    | 22 | 6  | 16 | 1  | 12 | 3  | 1  | 5  | 23 |    |    |    |    | 18 | 11 |    |  | 20 |    |    |
| FRA | 332   | LL  | Lille Lesquin          |    | 14 | 3  | 20 | 15 | 17 | 15 | 0  | 12 | 3  | 13 | 12 | 23 | 14 | 6  | 3  |    | 19 | 11 | 3  |  | 20 | 22 |    |
| FRA | 334   | YN  | La Roche sur Yon       |    |    |    |    |    |    |    |    | 13 |    |    |    |    |    |    |    |    |    |    |    |  |    |    |    |
| GRC | 327   | KHR | Kavala                 |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |  |    |    | 20 |
| HNG | 326   | C   | Debrecen               | 23 |    | 20 | 23 | 15 |    | 1  | 0  |    |    | 15 | 5  | 23 | 4  |    | 5  |    |    | 20 |    |  | 19 |    |    |
| HNG | 329   | HA  | Budapest Ferihegy      |    | 21 | 20 | 23 | 15 | 19 | 2  | 1  |    | 3  | 16 | 5  |    | 4  | 0  | 19 |    |    | 16 | 3  |  | 16 |    |    |
| HNG | 330   | NY  | Nyireghaza             |    |    | 2  |    | 1  | 23 | 23 |    |    |    |    | 4  |    | 4  |    | 21 |    |    |    |    |  | 13 |    |    |
| HOL | 326   | LLS | Lelystad               |    |    | 20 |    | 14 | 21 | 16 |    | 12 |    | 13 |    |    |    |    |    |    | 2  | 11 | 22 |  |    |    |    |
| HOL | 330   | SO  | Eelde Groningen        |    |    |    |    | 11 | 17 | 15 | 9  | 12 |    | 13 | 12 | 20 | 14 |    |    |    |    | 11 | 3  |  | 18 |    |    |



|     |     |     |                           |    |    |    |    |    |    |    |    |    |   |    |    |    |    |    |    |    |  |    |    |    |    |    |    |    |
|-----|-----|-----|---------------------------|----|----|----|----|----|----|----|----|----|---|----|----|----|----|----|----|----|--|----|----|----|----|----|----|----|
| POL | 326 | KTW | Katowice Pyrzowice        |    | 12 | 12 |    | 14 | 16 | 15 |    | 17 |   | 15 | 5  |    | 16 | 22 | 0  |    |  | 16 | 22 |    | 15 |    |    |    |
| POR | 322 | MIO | Montijo                   |    |    |    |    |    |    |    |    | 17 | 0 | 0  | 4  |    |    |    |    |    |  | 17 | 16 |    |    |    |    |    |
| POR | 327 | POR | Porto                     |    |    | 2  |    | 23 | 17 |    | 23 | 17 | 2 | 17 | 6  | 20 |    |    |    |    |  | 17 | 16 |    |    |    |    |    |
| POR | 332 | FAR | Faro                      |    |    | 3  |    |    | 0  | 0  | 0  | 17 | 3 | 22 | 23 | 22 |    |    |    |    |  | 2  | 17 |    |    |    |    |    |
| RSE | 325 | GK  | Surgut                    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |    |    |    |  |    |    |    |    |    |    |    |
| RUS | 320 | DM  | Moscow Domodedovo         |    |    |    |    |    | 4  | 21 |    |    |   |    | 21 |    | 22 | 15 | 4  | 20 |  | 20 |    |    |    | 15 |    |    |
| RUS | 320 | RN  | Rostov na Donu            |    |    |    |    |    | 22 | 0  |    |    |   |    |    |    |    |    |    |    |  |    |    |    |    | 15 |    |    |
| RUS | 320 | RW  | Rostov na Donu            |    |    |    |    |    |    |    |    |    |   |    |    |    |    |    |    |    |  |    |    |    |    |    |    |    |
| RUS | 324 | RF  | Ladozhskaya               |    |    |    |    |    |    |    |    |    |   |    |    |    |    |    |    |    |  |    |    |    |    |    |    |    |
| RUS | 325 | NU  | Bryansk                   |    |    |    |    |    | 3  |    |    |    |   |    |    |    |    |    |    |    |  |    |    |    |    |    |    |    |
| RUS | 325 | WD  | Gumrak                    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |    |    |    |  |    |    |    |    |    |    |    |
| RUS | 326 | DD  | Ivanovo Yuzhny            |    |    |    |    |    |    |    |    |    |   |    |    |    |    |    |    |    |  |    |    |    |    |    |    |    |
| RUS | 327 | QV  | Torzhok                   |    |    |    |    |    |    |    |    |    |   |    |    |    |    |    |    |    |  |    |    |    |    |    |    |    |
| RUS | 330 | PM  | Pechora                   |    |    |    |    |    |    |    |    |    |   |    |    |    |    |    |    |    |  |    |    |    |    |    |    |    |
| RUS | 332 | LS  | Ulyanovsk                 |    |    |    |    |    | 0  |    |    |    |   |    |    |    |    |    |    |    |  |    |    |    |    | 22 |    |    |
| RUS | 332 | MR  | Ulyanovsk                 |    |    |    |    |    |    |    |    |    |   |    |    |    |    |    |    |    |  |    |    |    |    |    |    |    |
| RUS | 334 | K   | Arkangelsk Talagi         |    |    |    |    |    |    |    |    |    |   |    |    |    |    |    |    |    |  |    |    |    |    |    |    |    |
| SAR | 331 | DEC | Decimomannu               |    |    | 3  | 21 | 16 | 19 | 1  |    |    |   | 0  |    |    |    |    |    |    |  |    |    |    |    | 18 | 2  |    |
| SCT | 328 | IVR | Inverness                 |    |    |    |    |    |    |    |    |    |   | 16 | 6  | 21 | 16 |    |    |    |  |    |    |    |    |    |    |    |
| SCT | 331 | GLW | Glasgow                   |    |    |    |    |    | 17 | 5  | 21 | 17 |   |    | 12 | 20 | 14 |    |    |    |  |    |    |    |    | 5  |    |    |
| SCY | 329 | PRS | Palermo Punta Raisi       |    |    |    | 21 | 0  | 19 | 23 | 1  |    |   |    |    |    |    |    |    |    |  |    |    |    |    |    |    |    |
| SRB | 328 | SMR | Sremska Mitrovica         |    |    |    |    | 0  |    |    |    |    |   |    |    |    |    |    |    |    |  |    |    |    |    |    |    |    |
| SRB | 330 | ML  | Kraljevo                  |    |    | 2  |    |    | 0  |    |    |    |   |    |    |    |    |    |    |    |  |    |    |    |    |    |    |    |
| SVK | 330 | OB  | Bratislava Stefanik South | 16 | 12 | 12 | 21 | 14 | 19 | 15 |    |    |   | 0  | 5  |    | 4  | 0  | 1  |    |  | 4  | 20 |    |    | 16 |    |    |
| SVN | 334 | MR  | Maribor                   | 16 | 20 | 20 | 22 | 15 | 16 | 15 |    | 23 |   | 1  | 5  |    | 5  | 0  | 20 | 20 |  | 23 | 18 | 3  | 17 | 16 | 16 |    |
| SWE | 320 | OL  | Lycksele                  |    |    |    |    |    | 0  |    |    |    |   |    |    |    |    |    |    |    |  |    |    |    |    |    | 11 |    |
| SWE | 322 | OD  | Ornskoldsvik              |    |    |    |    |    | 5  |    |    |    |   |    |    |    |    |    |    |    |  |    |    |    |    |    | 11 |    |
| SWE | 322 | OU  | Stockholm Bromma          |    | 21 | 3  | 23 | 0  | 16 | 21 |    |    |   |    | 6  |    | 23 |    |    |    |  |    |    |    |    |    | 19 |    |
| SWE | 324 | ON  | Norrkoping Saab           |    | 14 | 20 | 23 | 14 | 16 | 21 | 20 | 17 | 1 | 15 | 13 |    | 14 | 15 | 17 | 19 |  |    | 20 | 22 |    | 16 | 2  |    |
| SWE | 325 | DH  | Oskarshamn                |    | 20 |    | 23 | 15 | 23 | 21 |    |    |   |    | 4  |    |    |    |    |    |  |    |    |    |    |    | 15 |    |
| SWE | 325 | NUT | Hemavan                   |    |    |    |    |    |    |    |    |    |   |    |    |    |    |    |    |    |  |    |    |    |    |    |    |    |
| SWE | 325 | OG  | Gallivare                 |    |    |    |    |    |    |    |    |    |   |    | 5  |    |    |    |    |    |  |    |    |    |    |    |    |    |
| SWE | 325 | PG  | Trollhattan Vanersborg    |    |    | 21 | 23 | 15 | 16 | 21 | 23 | 17 | 1 | 15 | 12 | 20 | 15 | 5  | 4  | 20 |  |    | 16 | 22 |    | 19 |    |    |
| SWE | 326 | KG  | Kramfors Bjartra          |    |    |    |    | 20 | 5  | 20 |    |    |   |    | 3  |    |    |    |    |    |  |    |    |    |    |    | 20 | 11 |
| SWE | 326 | OG  | Gavle Sandviken           |    |    | 20 |    | 20 | 16 | 21 |    |    |   |    |    |    |    |    |    |    |  |    |    |    |    |    | 20 |    |
| SWE | 327 | Y   | Sveg                      |    |    | 2  |    | 22 | 16 | 21 |    | 20 |   | 0  | 4  |    | 15 | 16 | 17 | 17 |  |    | 16 | 23 |    | 20 |    |    |
| SWE | 328 | DK  | Vilhelmina                |    |    |    |    | 15 | 5  |    | 1  |    |   |    | 5  |    | 4  | 16 | 4  | 17 |  | 5  | 16 |    |    | 2  | 11 |    |
| SWE | 329 | VX  | Vaxjo Kronoberg           |    | 14 | 2  | 22 | 14 | 16 | 21 |    | 21 |   | 16 | 4  |    | 14 | 16 | 17 | 18 |  |    | 16 | 3  |    | 16 | 23 |    |

|     |     |      |                        |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |  |
|-----|-----|------|------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|--|
| SWE | 329 | WU   | Umea                   |           |           | 2         |           |           | 16        |           |           |           |           | 4         |           | 14        | 16        | 16        | 17        | 5         | 11        |           |           | 16        |           | 11        |           |  |
| SWE | 330 | LNA  | Lena Enkoping          |           | 14        | 20        | 21        | 5         | 5         | 21        |           | 22        | 2         |           | 6         |           | 23        | 16        | 16        | 18        |           | 17        |           |           | 18        |           |           |  |
| SWE | 330 | SKS  | Karlstad               |           | 20        | 20        |           | 20        | 5         | 21        | 0         | 17        | 2         | 23        | 4         | 21        | 14        | 19        | 6         | 20        |           | 21        | 3         |           | 18        |           |           |  |
| SWE | 333 | LE   | Vasteras Hasslo        |           | 14        | 20        | 22        | 14        | 21        | 21        | 1         | 23        | 3         | 16        | 13        | 20        | 14        | 16        | 4         | 19        |           | 21        |           |           | 0         |           |           |  |
| TKM | 322 | RP   | Dashoguz               |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           | 19        |           |           |           |           |           |           |           |           |  |
| TKM | 322 | VH   | Dashoguz               |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           | 18        |           |           |           |           |           |           |           |           |  |
| TUR | 324 | KFK  | Afyon                  |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           | 21        |           |           |           |           |           |           |           |           |  |
| TUR | 325 | CRM  | Samsun Carsamba        |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           | 20        |           |           |           |           |           |           |           |           |  |
| UKR | 330 | HA   | Kharkiv                |           |           |           | 0         |           |           |           |           |           |           |           |           | 20        |           |           |           |           |           |           |           |           |           |           |           |  |
| UKR | 330 | RD   | Rovno                  |           | 14        |           |           |           | 5         |           |           |           |           |           | 5         |           |           |           | 5         |           |           |           |           |           | 13        |           |           |  |
| UKR | 330 | RW   | Rovno                  |           | 17        |           |           | 14        | 17        |           |           |           |           |           | 5         |           |           |           | 13        |           |           |           |           |           | 5         |           |           |  |
| UKR | 334 | VI   | Verkhnie Vysotske      |           | 20        | 3         | 23        | 16        | 20        | 14        |           |           |           |           | 0         |           |           |           | 23        | 0         |           |           |           | 21        |           | 16        |           |  |
| WLS | 320 | CAE  | Caernarfon             |           |           |           |           |           |           |           | 0         |           |           | 13        | 12        | 18        |           |           |           |           |           | 1         |           |           |           |           |           |  |
| WLS | 323 | WPL  | Welshpool              |           |           |           |           |           | 5         |           | 23        | 12        | 1         | 13        | 12        | 19        | 14        |           |           |           |           |           | 11        |           |           |           |           |  |
| XOE | 320 | SAC  | MPI Adventure (Vessel) |           |           |           |           |           | 7         | 1         | 20        | 10        |           |           | 17        | 10        | 11        | 17        |           |           |           |           |           | 16        | 21        |           |           |  |
| XOE | 322 | ALNG | GBS Vessel (Adriatic)  |           | 14        |           |           | 14        |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |  |
| XOE | 326 | YW   | Tyra West              |           |           |           | 23        |           |           | 5         |           |           |           |           | 13        |           | 15        |           |           |           |           |           |           |           |           |           |           |  |
| XOE | 333 | GFC  | Statoil Gulfaks C      |           |           | 2         |           | 1         | 5         | 5         | 21        |           |           |           |           |           | 0         | 19        | 4         |           |           |           | 22        |           |           | 18        |           |  |
| XOE | 333 | SHO  | Shell/Esso Sean A      |           |           |           |           |           | 17        | 14        | 0         | 12        |           |           | 13        | 12        | 20        |           |           |           |           |           | 11        |           |           |           |           |  |
| XUE | 320 | N    | (UNID)                 |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           | 23        |  |
| XUE | 330 | BER  | (UNID)                 |           |           |           | 23        |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |  |
| XUE | 330 | KN   | (UNID)                 |           |           | 2         | 0         | 1         | 19        |           |           |           |           |           |           |           |           |           | 22        |           |           |           | 2         |           |           |           |           |  |
| XUE | 330 | KR   | (UNID)                 |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           | 14        |           |           |           |           |           |           |           |           |  |
| XUE | 330 | T    | (UNID)                 |           |           |           | 23        |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |  |
| XUE | 333 | P    | (UNID)                 |           | 20        |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |  |
| Cou | kHz | Call | Location               | AUT<br>pc | CZE<br>jv | CZE<br>my | CZE<br>ze | DEU<br>bd | DEU<br>hw | DEU<br>je | ENG<br>ag | ENG<br>bk | ENG<br>ds | ENG<br>hh | ENG<br>me | ENG<br>px | ENG<br>tg | FIN<br>jt | FIN<br>ks | FIN<br>ro | FRA<br>jj | HOL<br>rb | HOL<br>z1 | ITA<br>st | POL<br>ls | SUI<br>ps | SWE<br>bn |  |

**COUNTRIES HEARD:**

This table shows the number of NDBs logged from each radio country by each reporter.

| Cou | Country          | AUT pc | CZE jv | CZE my | CZE ze | DEU bd | DEU hw | DEU je | ENG ag | ENG bk | ENG ds | ENG hh | ENG me | ENG px | ENG tg | FIN jt | FIN ks | FIN ro | FRA jj | HOL rb | HOL z1 | ITA st | POL ls | SUI ps | SWE bn |
|-----|------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| AUT | Austria          | 1      | 1      | 1      | 1      | 1      | 1      | 1      | 1      | 1      | 1      | 1      | 1      | 1      | 1      | 1      | 1      |        | 1      | 1      | 1      | 1      | 1      | 1      |        |
| AZR | Azores           |        |        |        |        |        | 1      | 1      | 1      |        |        |        |        |        |        |        |        |        |        | 1      |        |        |        |        |        |
| BEL | Belgium          |        |        | 1      | 1      | 1      | 1      | 1      | 1      | 1      | 1      | 1      | 1      | 1      | 1      | 1      | 1      |        | 1      | 1      | 1      |        | 1      | 1      |        |
| BLR | Belarus          |        | 1      |        | 1      | 1      | 2      | 1      |        |        |        |        | 2      |        |        |        | 2      |        |        |        |        |        |        |        |        |
| BUL | Bulgaria         |        | 1      | 1      | 1      | 1      | 1      |        |        |        |        | 1      |        | 1      |        | 1      |        |        |        | 1      |        |        | 1      |        |        |
| CAN | Canada NL        |        |        |        |        |        | 1      | 1      |        |        |        |        | 1      |        |        |        |        |        |        | 1      |        |        |        |        |        |
| CAN | Canada NU        |        |        |        |        |        | 1      |        |        |        |        |        | 1      |        | 2      |        | 1      |        |        | 2      |        |        |        |        |        |
| CAN | Canada ON        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        | 1      |        |        | 1      |        |        |        |        |        |
| CAN | Canada QC        |        |        |        |        |        |        |        |        |        |        |        | 1      |        |        |        |        |        |        | 1      |        |        |        |        |        |
| DEU | Germany          |        | 1      | 7      | 8      | 8      | 8      | 8      | 4      | 5      | 2      | 7      | 7      | 6      | 5      | 6      | 8      |        | 2      | 7      | 6      |        | 5      |        |        |
| DNK | Denmark          |        | 1      | 1      | 3      | 5      | 5      | 5      | 1      | 3      | 1      | 3      | 3      |        | 4      | 3      | 5      |        | 1      | 4      | 3      |        | 4      | 2      |        |
| ENG | England          |        |        |        |        |        | 4      | 4      | 6      | 8      | 7      | 8      | 4      | 7      | 4      | 1      | 2      |        | 3      | 8      | 1      |        |        |        |        |
| ESP | Spain            |        |        | 2      | 1      | 2      | 5      | 3      | 3      | 4      | 4      | 3      | 2      | 3      | 1      |        |        |        | 3      | 4      | 1      |        | 1      | 1      |        |
| FIN | Finland          |        | 6      | 5      | 3      | 7      | 6      | 7      | 3      | 5      | 2      | 4      | 6      | 4      | 7      | 7      | 7      | 7      |        | 6      | 1      |        | 7      | 2      | 4      |
| FRA | France           | 2      | 3      | 11     | 6      | 11     | 14     | 12     | 7      | 12     | 11     | 11     | 10     | 6      | 5      | 4      | 7      |        | 11     | 13     | 5      |        | 7      | 7      |        |
| GRC | Greece           |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        | 1      |        |        |
| HNG | Hungary          |        | 2      | 3      | 2      | 3      | 2      | 3      | 2      |        | 1      | 2      | 3      | 1      | 3      | 1      | 3      |        |        | 2      | 1      |        | 3      |        |        |
| HOL | Netherlands      |        |        | 1      |        | 3      | 3      | 3      | 1      | 3      |        | 3      | 2      | 1      | 2      | 1      | 1      |        | 1      | 3      | 3      |        | 1      |        |        |
| HRV | Croatia          | 3      | 2      | 3      | 3      | 3      | 3      | 2      | 1      |        |        | 2      | 2      | 1      | 1      |        | 2      |        | 1      | 3      | 1      | 2      | 2      | 1      |        |
| IRL | Ireland          |        |        | 1      |        |        | 3      | 1      | 3      | 3      | 1      | 3      | 3      | 2      | 3      |        | 1      |        | 1      | 2      |        |        |        |        |        |
| IRN | Iran             |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        | 1      |        |        |        |        |        |        |        |        |
| ISL | Iceland          |        |        | 1      |        | 1      | 1      | 1      | 1      | 1      | 1      |        | 2      | 1      | 3      |        | 3      |        | 1      | 4      |        |        |        |        |        |
| ITA | Italy            | 1      | 2      | 6      | 8      | 7      | 7      | 6      | 3      | 3      |        | 5      | 4      | 2      | 2      | 2      | 4      |        | 4      | 6      | 4      | 5      | 6      | 3      |        |
| JSY | Jersey           |        |        | 1      |        | 1      |        | 1      | 1      | 1      | 1      | 1      | 1      | 1      |        |        |        |        | 1      | 1      |        |        |        |        |        |
| LBY | Libya            |        |        |        |        |        | 1      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        | 1      |        |        |
| MNE | Montenegro       |        |        | 1      |        |        | 1      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        | 1      |        |        |
| MRC | Morocco          |        |        |        |        |        |        |        |        | 1      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| NIR | Northern Ireland |        |        | 2      |        | 1      | 2      | 2      | 2      | 1      | 1      | 2      | 2      | 2      | 2      | 1      | 1      |        |        | 1      |        |        | 1      |        |        |
| NOR | Norway           |        | 1      | 2      | 1      | 3      | 4      | 2      | 1      | 2      | 1      | 2      | 2      | 1      | 3      | 4      | 7      | 1      | 1      | 2      | 1      |        | 3      |        | 1      |
| POL | Poland           | 1      | 3      | 2      | 2      | 3      | 3      | 2      | 1      | 2      | 1      | 2      | 2      | 1      | 3      | 2      | 3      | 1      | 1      | 2      | 2      |        | 3      | 1      |        |
| POR | Portugal         |        |        | 2      |        | 1      | 2      | 1      | 2      | 3      | 3      | 3      | 3      | 2      |        |        | 1      |        | 2      | 3      |        |        |        |        |        |
| RSE | Russia (East)    |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        | 1      |        |        |        |        |        |        |        |        |
| RUS | Russia (Eu)      |        |        |        |        |        | 4      | 2      |        |        |        |        | 1      |        | 1      | 1      | 11     | 3      |        | 1      |        |        | 3      |        |        |
| SAR | Sardinia         |        |        | 1      | 1      | 1      | 1      | 1      |        |        |        | 1      |        |        |        |        |        |        |        | 1      |        |        | 1      | 1      |        |
| SCT | Scotland         |        |        |        |        |        | 1      | 1      | 1      | 2      |        | 1      | 2      | 2      | 2      |        | 1      |        |        | 1      |        |        | 1      |        |        |

|            |                |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |
|------------|----------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| SCY        | Sicily         |           |           | 1         | 1         | 1         | 1         | 1         |           |           |           |           |           |           |           |           |           |           | 1         |           |           |           |           |           |           |
| SRB        | Serbia         |           |           | 1         |           | 1         | 1         |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |
| SVK        | Slovakia       | 1         | 1         | 1         | 1         | 1         | 1         | 1         |           |           | 1         | 1         |           | 1         | 1         | 1         |           | 1         | 1         |           | 1         |           |           |           |           |
| SVN        | Slovenia       | 1         | 1         | 1         | 1         | 1         | 1         | 1         |           |           | 1         | 1         |           | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         |           |           |
| SWE        | Sweden         |           | 7         | 10        | 7         | 12        | 15        | 11        | 5         | 7         | 5         | 6         | 13        | 3         | 10        | 14        | 17        | 12        | 2         | 12        | 5         |           | 13        | 2         | 6         |
| TKM        | Turkmenistan   |           |           |           |           |           |           |           |           |           |           |           |           |           |           | 2         |           |           |           |           |           |           |           |           |           |
| TUR        | Turkey         |           |           |           |           |           |           |           |           |           |           |           |           |           |           | 2         |           |           |           |           |           |           |           |           |           |
| UKR        | Ukraine        |           | 3         | 1         | 2         | 2         | 3         | 1         |           |           |           | 1         | 2         | 1         |           | 1         | 3         |           |           | 1         |           |           | 3         |           |           |
| WLS        | Wales          |           |           |           |           |           | 1         |           | 2         | 1         | 1         | 2         | 2         | 2         | 1         |           |           |           | 2         |           |           |           |           |           |           |
| XOE        | Offshore       |           | 1         | 1         | 1         | 2         | 3         | 4         | 3         | 2         |           | 2         | 3         | 2         | 3         | 1         | 1         |           |           | 3         | 1         |           | 1         |           |           |
| XUE        | (UNID)         |           | 1         | 1         | 3         | 1         | 1         |           |           |           |           |           |           |           |           | 2         |           |           |           | 1         |           |           | 1         |           |           |
| <b>Cou</b> | <b>Country</b> | AUT<br>pc | CZE<br>jv | CZE<br>my | CZE<br>ze | DEU<br>bd | DEU<br>hw | DEU<br>je | ENG<br>ag | ENG<br>bk | ENG<br>ds | ENG<br>hh | ENG<br>me | ENG<br>px | ENG<br>tg | FIN<br>jt | FIN<br>ks | FIN<br>ro | FRA<br>jj | HOL<br>rb | HOL<br>z1 | ITA<br>st | POL<br>ls | SUI<br>ps | SWE<br>bn |



**LISTENING TIMES:**

This table shows the number of NDBs logged by each reporter during the time periods.

| UTC (hh)      | AUT<br>pc | CZE<br>jv | CZE<br>my | CZE<br>ze | DEU<br>bd | DEU<br>hw | DEU<br>je | ENG<br>ag | ENG<br>bk | ENG<br>ds | ENG<br>hh | ENG<br>me | ENG<br>px | ENG<br>tg | FIN<br>jt | FIN<br>ks | FIN<br>ro | FRA<br>jj | HOL<br>rb | HOL<br>z1 | ITA<br>st | POL<br>ls | SUI<br>ps | SWE<br>bn |
|---------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| 00:00 - 00:59 |           |           |           | 2         | 7         | 8         | 6         | 11        |           | 9         | 12        | 1         |           | 4         | 4         | 6         |           | 4         |           |           |           | 2         |           |           |
| 01:00 - 01:59 |           |           | 6         |           | 6         |           | 9         | 9         |           | 11        | 8         | 1         |           | 1         | 3         | 8         |           | 1         | 7         |           |           |           |           |           |
| 02:00 - 02:59 |           |           | 26        |           |           | 1         | 2         |           |           | 13        |           | 2         |           |           |           | 2         |           | 4         | 4         | 3         |           | 1         | 3         |           |
| 03:00 - 03:59 |           |           | 9         |           | 1         | 2         | 1         |           | 3         | 11        |           | 2         |           |           |           | 6         |           |           | 1         | 10        |           |           |           |           |
| 04:00 - 04:59 |           |           |           |           |           | 3         |           |           | 2         |           |           | 10        |           | 6         |           | 30        |           | 4         | 1         |           |           |           |           |           |
| 05:00 - 05:59 | 1         |           |           |           | 6         | 17        | 11        |           |           |           |           | 21        |           | 4         | 8         | 11        |           | 7         | 2         |           |           | 2         | 2         |           |
| 06:00 - 06:59 |           |           |           |           |           | 7         |           |           |           |           |           | 9         |           |           | 5         | 2         |           |           |           |           |           | 1         |           |           |
| 07:00 - 07:59 |           |           |           |           |           | 1         |           |           |           |           |           | 1         |           |           |           |           |           |           | 4         |           |           |           |           |           |
| 08:00 - 08:59 |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |
| 09:00 - 09:59 |           |           |           |           |           |           |           | 5         |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |
| 10:00 - 10:59 |           |           |           |           |           |           |           |           | 1         |           |           | 1         |           |           |           |           |           |           |           |           |           |           |           |           |
| 11:00 - 11:59 |           |           |           |           | 11        |           | 1         |           |           |           |           |           | 4         |           |           |           |           |           | 37        |           | 6         |           |           | 11        |
| 12:00 - 12:59 |           | 3         | 6         |           |           |           |           |           | 23        |           |           | 21        |           |           |           |           |           |           |           |           |           |           |           |           |
| 13:00 - 13:59 |           | 1         |           |           | 2         |           |           |           | 2         |           | 22        | 12        |           |           |           | 1         |           |           |           |           |           |           | 4         |           |
| 14:00 - 14:59 |           | 10        |           |           | 12        |           | 2         |           |           |           |           |           |           | 30        |           | 3         |           |           |           |           |           |           | 9         | 4         |
| 15:00 - 15:59 |           |           |           |           | 15        |           | 21        |           |           |           | 9         |           |           | 8         | 3         |           |           |           |           |           |           |           | 4         |           |
| 16:00 - 16:59 | 3         |           |           |           | 12        | 41        | 14        |           | 2         |           | 10        |           |           | 3         | 18        | 3         | 4         |           | 19        |           |           | 15        | 5         |           |
| 17:00 - 17:59 | 1         | 1         |           |           |           | 16        | 7         |           | 18        |           | 7         | 4         |           | 2         | 1         | 5         | 6         | 5         | 6         |           | 2         | 4         | 4         |           |
| 18:00 - 18:59 |           |           |           |           | 1         |           |           |           |           |           | 4         |           | 3         |           | 1         | 5         | 7         | 3         | 3         |           |           |           | 9         |           |
| 19:00 - 19:59 |           |           |           |           |           | 9         | 1         |           | 2         |           |           |           | 5         |           | 3         | 6         | 3         | 3         |           |           |           |           | 8         |           |
| 20:00 - 20:59 | 5         | 10        | 22        | 4         | 4         | 2         | 1         | 9         | 1         |           |           |           | 20        |           |           | 5         | 5         | 2         | 9         |           |           |           | 8         |           |
| 21:00 - 21:59 |           | 6         | 2         | 16        |           | 2         | 12        | 11        | 4         |           |           | 3         | 10        |           |           | 5         |           | 1         | 10        | 9         | 1         | 1         |           |           |
| 22:00 - 22:59 |           | 2         |           | 16        | 6         | 2         |           |           | 7         |           | 2         | 1         | 6         | 3         | 4         | 4         |           | 2         | 1         | 15        |           | 4         | 3         |           |
| 23:00 - 23:59 |           | 5         |           | 20        | 2         | 4         | 3         | 12        | 7         | 1         | 5         | 1         | 6         | 10        | 3         | 3         |           | 3         | 1         | 1         |           | 2         | 2         |           |
| UTC (hh)      | AUT<br>pc | CZE<br>jv | CZE<br>my | CZE<br>ze | DEU<br>bd | DEU<br>hw | DEU<br>je | ENG<br>ag | ENG<br>bk | ENG<br>ds | ENG<br>hh | ENG<br>me | ENG<br>px | ENG<br>tg | FIN<br>jt | FIN<br>ks | FIN<br>ro | FRA<br>jj | HOL<br>rb | HOL<br>z1 | ITA<br>st | POL<br>ls | SUI<br>ps | SWE<br>bn |

### NDB COUNTS, BY FREQUENCY:

The number of NDBs logged by each reporter on each frequency and the number logged by all on each frequency, ignoring offsets:

| NDBs | kHz   | AUT<br>pc | CZE<br>jv | CZE<br>my | CZE<br>ze | DEU<br>bd | DEU<br>hw | DEU<br>je | ENG<br>ag | ENG<br>bk | ENG<br>ds | ENG<br>hh | ENG<br>me | ENG<br>px | ENG<br>tg | FIN<br>jt | FIN<br>ks | FIN<br>ro | FRA<br>jj | HOL<br>rb | HOL<br>z1 | ITA<br>st | POL<br>ls | SUI<br>ps | SWE<br>bn |
|------|-------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| 14   | 320   | 2         |           | 5         | 5         | 6         | 11        | 8         | 4         | 5         | 2         | 5         | 8         | 4         | 4         | 5         | 9         | 1         | 5         | 9         | 2         | 1         | 5         | 1         | 1         |
| 12   | 321   |           | 5         | 5         | 4         | 5         | 9         | 5         | 3         | 6         | 3         | 6         | 6         | 4         | 3         | 3         | 7         |           | 2         | 6         | 3         |           | 3         | 2         |           |
| 14   | 322   | 2         | 5         | 5         | 5         | 7         | 7         | 5         | 4         | 7         | 5         | 5         | 5         | 3         | 5         | 3         | 8         | 3         | 3         | 9         | 3         |           | 4         | 3         | 2         |
| 6    | 323   |           |           | 4         | 3         | 4         | 6         | 5         | 2         | 4         | 3         | 5         | 6         | 4         | 3         | 2         | 2         |           | 1         | 6         | 3         | 1         | 3         | 2         |           |
| 9    | 324   |           | 2         | 4         | 2         | 5         | 6         | 5         | 2         | 5         | 4         | 5         | 4         | 1         | 4         | 4         | 8         | 2         | 1         | 6         | 4         |           | 6         | 2         | 1         |
| 15   | 325   | 1         | 3         | 5         | 6         | 7         | 8         | 7         | 4         | 4         | 3         | 6         | 9         | 4         | 5         | 5         | 12        | 2         | 2         | 7         | 4         |           | 5         |           | 1         |
| 11   | 326   |           | 3         | 6         | 3         | 7         | 7         | 8         | 3         | 4         | 1         | 5         | 6         | 3         | 5         | 3         | 8         | 3         | 2         | 6         | 2         |           | 7         | 2         | 2         |
| 10   | 327   | 1         | 1         | 5         | 4         | 6         | 7         | 4         | 4         | 5         | 5         | 6         | 5         | 5         | 4         | 3         | 5         | 1         | 5         | 6         | 4         | 2         | 5         | 2         |           |
| 8    | 328   |           |           | 1         | 2         | 5         | 4         | 4         | 4         | 5         | 3         | 5         | 6         | 4         | 6         | 3         | 3         | 2         | 3         | 6         | 3         |           | 4         |           | 1         |
| 1    | 328.5 |           |           | 1         |           | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         |           | 1         |           |           |           | 1         |           |           |
| 7    | 329   |           | 3         | 5         | 4         | 5         | 6         | 5         | 4         | 3         | 3         | 4         | 6         | 2         | 5         | 4         | 5         | 3         | 3         | 7         | 2         |           | 4         | 1         | 1         |
| 24   | 330   | 2         | 7         | 10        | 10        | 13        | 17        | 11        | 5         | 5         | 3         | 8         | 9         | 5         | 9         | 4         | 14        | 3         | 3         | 11        | 3         | 2         | 11        | 3         |           |
| 6    | 331   |           |           | 2         | 2         | 2         | 5         | 5         | 4         | 3         | 2         | 3         | 3         | 3         | 2         |           | 3         |           | 1         | 5         |           |           | 3         | 1         |           |
| 12   | 332   | 1         | 2         | 5         | 2         | 3         | 8         | 6         | 5         | 6         | 3         | 6         | 7         | 4         | 5         | 3         | 6         | 1         | 4         | 7         | 3         | 1         | 4         | 2         |           |
| 1    | 332.5 |           |           |           |           |           | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         |           | 1         | 1         |           |           |           |           |           |
| 6    | 333   |           | 3         | 4         | 2         | 4         | 5         | 5         | 4         | 3         | 2         | 3         | 4         | 4         | 4         | 4         | 4         | 2         |           | 5         |           |           | 4         |           | 1         |
| 1    | 333.5 |           | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         |           | 1         | 1         |           | 1         | 1         | 1         |           | 1         | 1         | 1         | 1         | 1         | 1         |           |
| 10   | 334   | 1         | 3         | 3         | 3         | 4         | 6         | 5         | 2         | 4         | 1         | 4         | 3         | 2         | 4         | 4         | 8         | 2         | 2         | 6         | 1         | 1         | 4         | 1         | 1         |
| NDBs | kHz   | AUT<br>pc | CZE<br>jv | CZE<br>my | CZE<br>ze | DEU<br>bd | DEU<br>hw | DEU<br>je | ENG<br>ag | ENG<br>bk | ENG<br>ds | ENG<br>hh | ENG<br>me | ENG<br>px | ENG<br>tg | FIN<br>jt | FIN<br>ks | FIN<br>ro | FRA<br>jj | HOL<br>rb | HOL<br>z1 | ITA<br>st | POL<br>ls | SUI<br>ps | SWE<br>bn |

## MOBs

The following NDBs were heard by one reporter only - 'Mine Only Beacons' !  
(Occasionally an entry may be the result of an incorrectly received ident)

| kHz | C/S  | Location             | Cou | Reporter      | UTC   |
|-----|------|----------------------|-----|---------------|-------|
| 322 | GDA  | Gdansk               | POL | <b>AUT pc</b> | 05:29 |
| 333 | P    | (UNID)               | XUE | <b>CZE jv</b> | 20:36 |
| 330 | T    | (UNID)               | XUE | <b>CZE ze</b> | 23:58 |
| 330 | BER  | (UNID)               | XUE | <b>CZE ze</b> | 23:58 |
| 328 | SMR  | Sremska Mitrovica    | SRB | <b>DEU bd</b> | 00:20 |
| 330 | G    | Gerona               | ESP | <b>DEU hw</b> | 06:11 |
| 325 | NU   | Bryansk              | RUS | <b>DEU hw</b> | 03:20 |
| 321 | OST  | Ostia Roma Fiumicino | ITA | <b>DEU je</b> | 23:59 |
| 334 | YN   | La Roche sur Yon     | FRA | <b>ENG bk</b> | 13:02 |
| 332 | SBI  | Rabat                | MRC | <b>ENG bk</b> | 22:40 |
| 325 | RH   | Reykholt             | ISL | <b>ENG tg</b> | 23:13 |
| 321 | ZAJ  | Zanjan               | IRN | <b>FIN ks</b> | 19:17 |
| 326 | KKS  | Kirkenes             | NOR | <b>FIN ks</b> | 04:04 |
| 330 | TV   | Alta Talvik          | NOR | <b>FIN ks</b> | 05:04 |
| 325 | GK   | Surgut               | RSE | <b>FIN ks</b> | 19:05 |
| 325 | WD   | Gumrak               | RUS | <b>FIN ks</b> | 02:08 |
| 324 | RF   | Ladozhskaya          | RUS | <b>FIN ks</b> | 04:02 |
| 326 | DD   | Ivanovo Yuzhny       | RUS | <b>FIN ks</b> | 04:03 |
| 327 | QV   | Torzhek              | RUS | <b>FIN ks</b> | 05:03 |
| 334 | K    | Arkangelsk Talagi    | RUS | <b>FIN ks</b> | 05:03 |
| 332 | MR   | Ulyanovsk            | RUS | <b>FIN ks</b> | 05:32 |
| 320 | RW   | Rostov na Donu       | RUS | <b>FIN ks</b> | 21:05 |
| 322 | VH   | Dashoguz             | TKM | <b>FIN ks</b> | 18:49 |
| 322 | RP   | Dashoguz             | TKM | <b>FIN ks</b> | 19:01 |
| 325 | CRM  | Samsun Carsamba      | TUR | <b>FIN ks</b> | 20:01 |
| 324 | KFK  | Afyon                | TUR | <b>FIN ks</b> | 21:01 |
| 330 | KR   | (UNID)               | XUE | <b>FIN ks</b> | 14:23 |
| 327 | KHR  | Kavala               | GRC | <b>POL ls</b> | 20:49 |
| 320 | ATBC | (UNID)               | XUE | <b>POL ls</b> | 23:53 |
| kHz | C/S  | Location             | Cou | Reporter      | UTC   |

## TABs

Trans-Atlantic Beacons' - NDBs that joined in the fun on both sides of the Atlantic  
*These results will be available when the N. American logs have been combined.*

## FREQUENCIES REVISITED - Progress Statistics

(Please see the explanation below)

**THEN:** CLE147 320 - 334.9 kHz 30 Sep-3 Oct 2011  
**NOW:** CLE166 320 - 334.9 kHz 25 - 28 Jan 2013

| Listener         | Av km<br>THEN | Av km<br>NOW | Total<br>km x<br>1000<br>THEN | Total<br>km x<br>1000<br>NOW | NDBs<br>THEN | NDBs<br>NOW | Max<br>km<br>THEN | Max<br>km<br>NOW |
|------------------|---------------|--------------|-------------------------------|------------------------------|--------------|-------------|-------------------|------------------|
| AUT pc           |               | 400          |                               | 4                            |              | 10          |                   | 867              |
| CZE jv           |               | 872          |                               | 32                           |              | 37          |                   | 1805             |
| DEU je           |               | 974          |                               | 89                           |              | 91          |                   | 4428             |
| ENG me           |               | 1225         |                               | 110                          |              | 90          |                   | 5025             |
| FIN ro           |               | 674          |                               | 17                           |              | 25          |                   | 1897             |
| HOL z1           |               | 682          |                               | 26                           |              | 38          |                   | 1723             |
| ITA st           |               | 265          |                               | 2                            |              | 9           |                   | 414              |
| POL ls           |               | 1039         |                               | 76                           |              | 73          |                   | 2520             |
| <b>Averages:</b> |               | 766          |                               | 45                           |              | 47          |                   | 2335             |

| Listener           | Av km<br>THEN | Av km<br>NOW | Total<br>km x<br>1000<br>THEN | Total<br>km x<br>1000<br>NOW | NDBs<br>THEN | NDBs<br>NOW | Max<br>km<br>THEN | Max<br>km<br>NOW |
|--------------------|---------------|--------------|-------------------------------|------------------------------|--------------|-------------|-------------------|------------------|
| CZE my             | 889           | 981          | 60                            | 69                           | 68           | 70          | 2242              | 2321             |
| CZE ze             | 746           | 824          | 36                            | 45                           | 48           | 55          | 1583              | 1583             |
| DEU bd             | 760           | 910          | 36                            | 76                           | 47           | 84          | 1561              | 2078             |
| DEU hw             | 1022          | 1109         | 117                           | 126                          | 114          | 114         | 3409              | 5739             |
| ENG ag             | 564           | 966          | 14                            | 55                           | 25           | 57          | 1904              | 2690             |
| ENG bk             | 784           | 873          | 52                            | 63                           | 66           | 72          | 2126              | 2178             |
| ENG ds             | 757           | 849          | 39                            | 38                           | 51           | 45          | 2146              | 2100             |
| ENG hh             | 886           | 941          | 60                            | 74                           | 68           | 79          | 2122              | 2413             |
| ENG px             | 797           | 926          | 41                            | 50                           | 52           | 54          | 2005              | 2594             |
| ENG tg             | 840           | 1162         | 46                            | 83                           | 55           | 71          | 2559              | 5229             |
| FIN jt             | 1067          | 1006         | 50                            | 53                           | 47           | 53          | 2675              | 2080             |
| FIN ks             | 1063          | 1467         | 61                            | 151                          | 57           | 103         | 3226              | 5820             |
| FRA jj             | 854           | 787          | 59                            | 31                           | 69           | 39          | 2105              | 1854             |
| HOL rb             | 972           | 1186         | 96                            | 123                          | 99           | 104         | 2519              | 5575             |
| SUI ps             | 525           | 788          | 8                             | 18                           | 16           | 23          | 1196              | 1834             |
| SWE bn             | 526           | 255          | 13                            | 3                            | 24           | 11          | 1834              | 477              |
| <b>Averages:</b>   | 816           | 939          | 49                            | 66                           | 57           | 65          | 2201              | 2910             |
| <b>% Increase:</b> |               | 15           |                               | 34                           |              | 14          |                   | 32               |

Av. km = Average distance from listener to NDB for all their loggings  
Total km = Sum of distances from listener to NDBs for all their loggings  
NDBs = Number of NDBs logged  
Max km = Maximum distance from listener to an NDB logged  
(UNIDs are not included)

**Explanation:**

We ENJOY Listening Events, but their real value is to encourage us to improve our knowledge of our hobby, our listening techniques, our receivers and aerials, etc. Many of our CLEs re-use the same narrow range of frequencies after a year or so. This can provide each of us with an excellent way of measuring our personal progress by comparing our results THEN with our corresponding results NOW.

**The lower table shows statistics for listeners who took part in both the events.  
The bottom lines compare the general conditions found during the two events.**

Each listener's own results also depend, of course, on many other things, such as changes in receivers or aerials, time available for listening, use of recording equipment and maybe a move of QTH, as well as progress made through listening practice.

Comparing the results between individual listeners is not very meaningful - we each have so many unavoidable things that affect our ability to hear NDBs; where we and they happen to be, whether we are in a city or in wide open spaces or by the sea, our spending limit, how long we are able to devote to listening, etc.