



Critical Communication Dedicated network overview

May 2025

Gösta Kallner, Executive Chairman, gosta.kallner@450alliance.org



promoting the advancement of 450 MHz worldwide.

Bridging wireless connectivity

» MNO

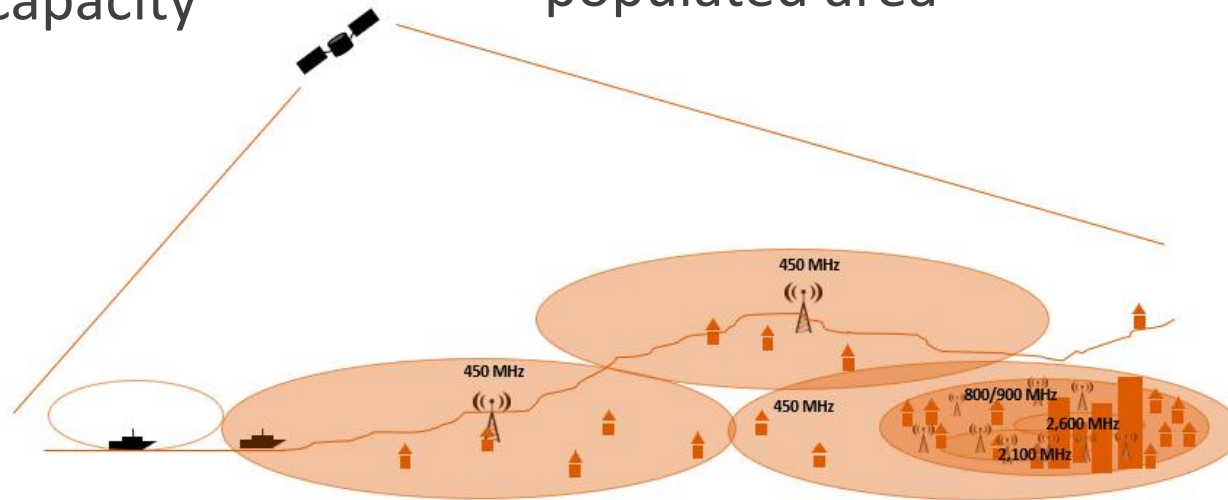
- » Populated areas
- » Consumers
- » Businesses
- » Mission Critical
- » Good capacity

» 450 operations

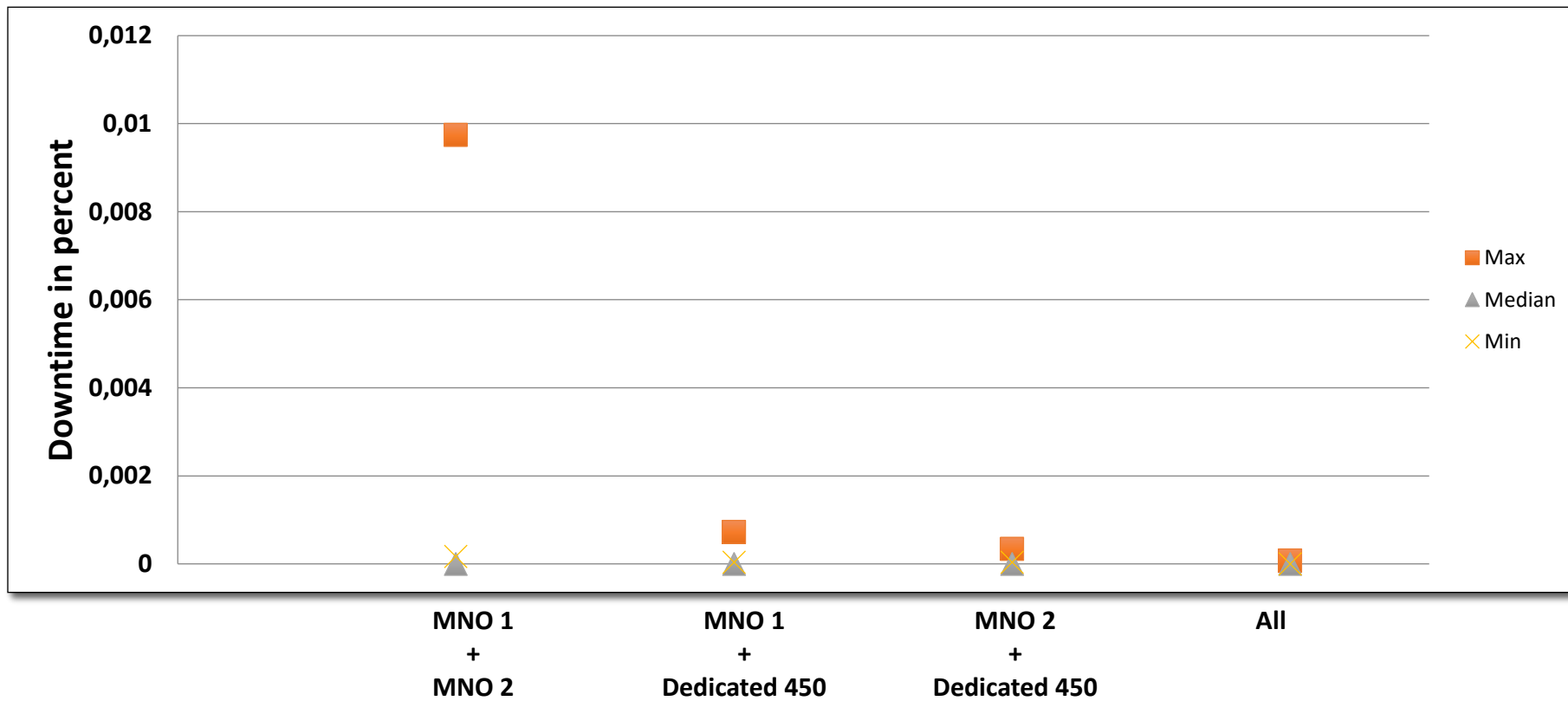
- » Rural areas
- » Business Critical
- » Mission Critical
- » Backup in populated area

» NTN

- » Rural outdoor areas
- » Overseas
 - » Shipping
 - » Flight
- » Backup for critical communication



Complimentary networks



Coverage

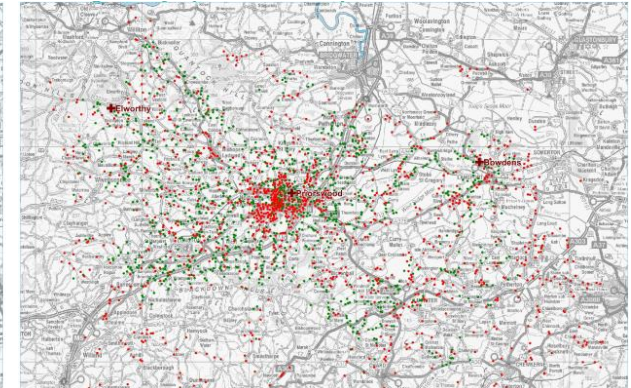
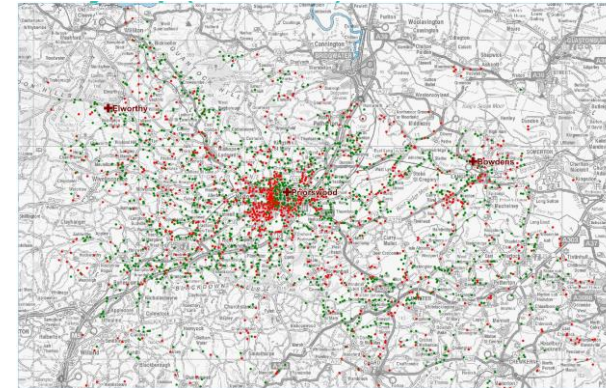
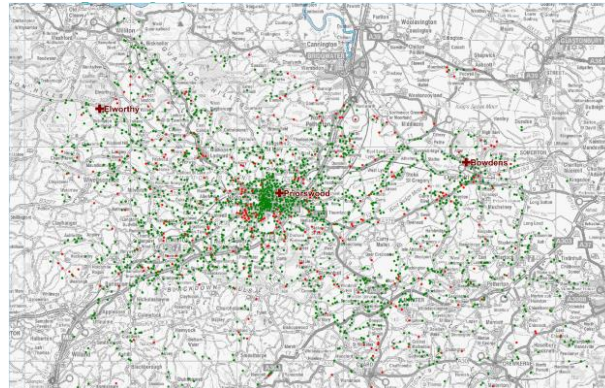
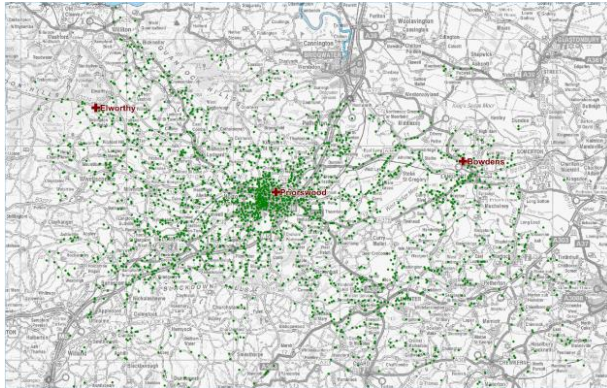
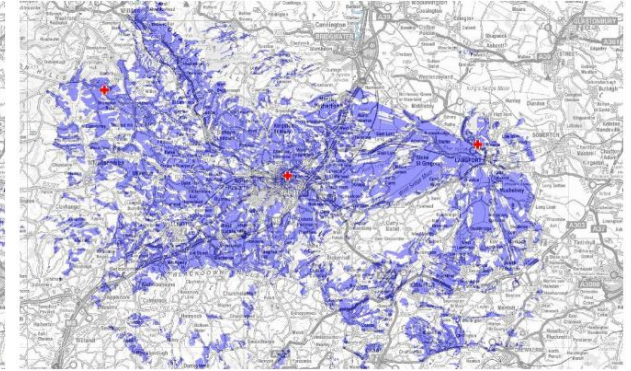
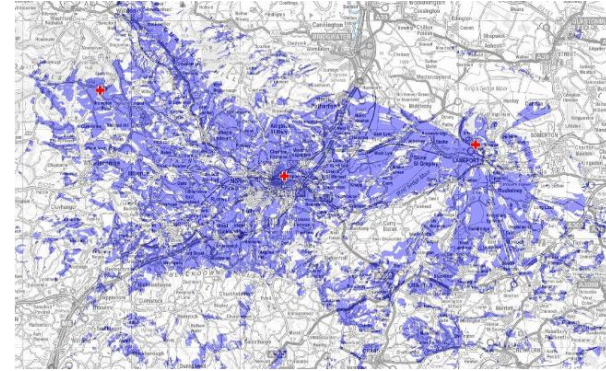
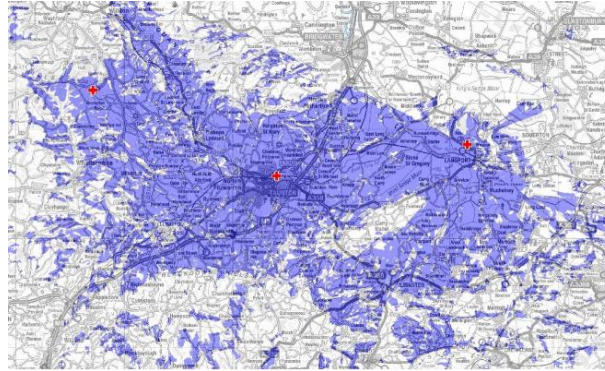
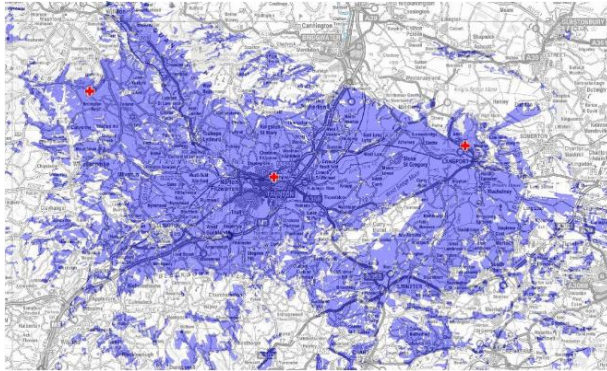


410 MHz

740 MHz

2350 MHz

3850 MHz



100% connected

91,3% connected
2.5-3 x eNB

58,7% connected
12-15 x eNB

45,6% connected
20-25 x eNB

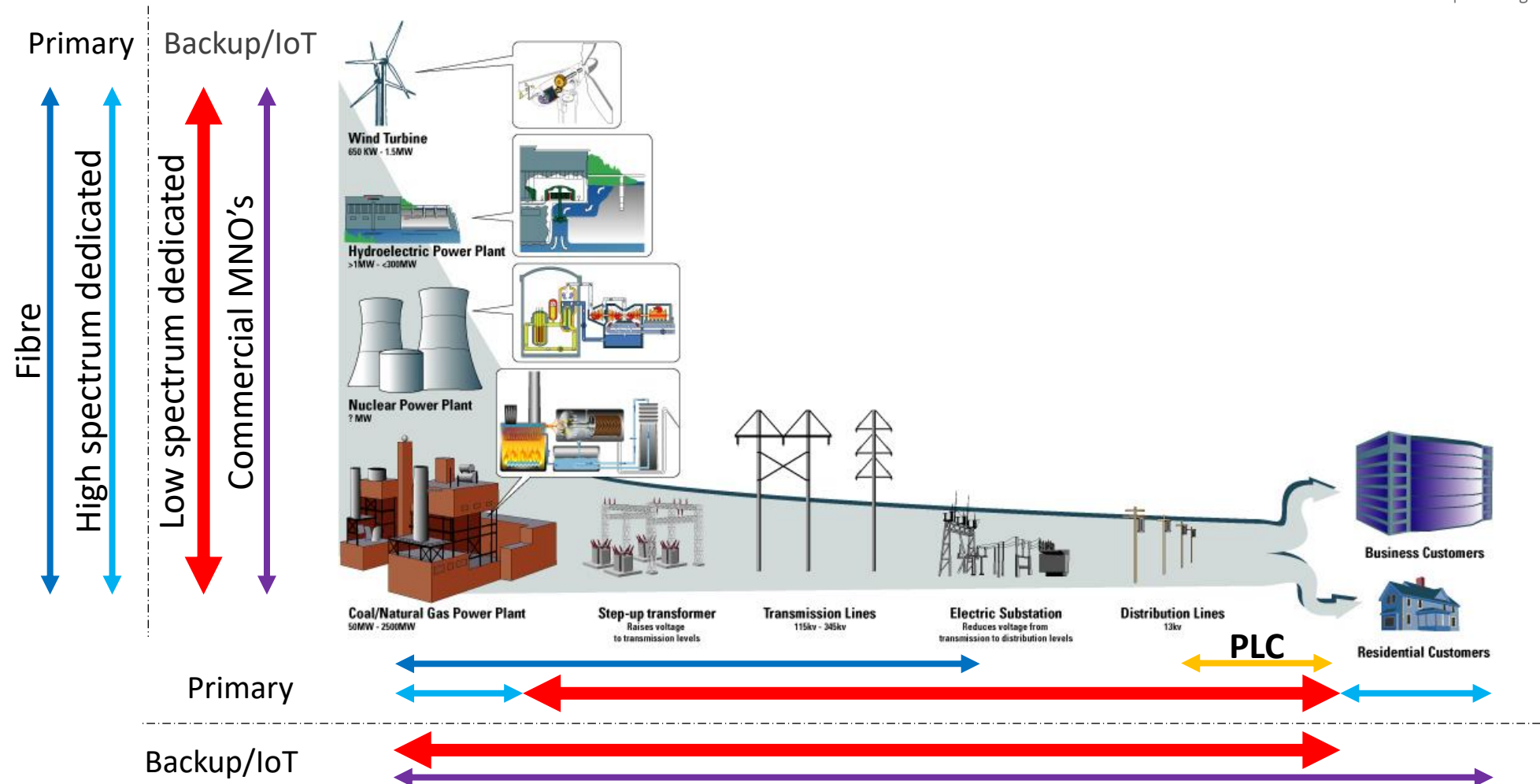
Private network spectrum



promoting the advancement of 450 MHz worldwide.

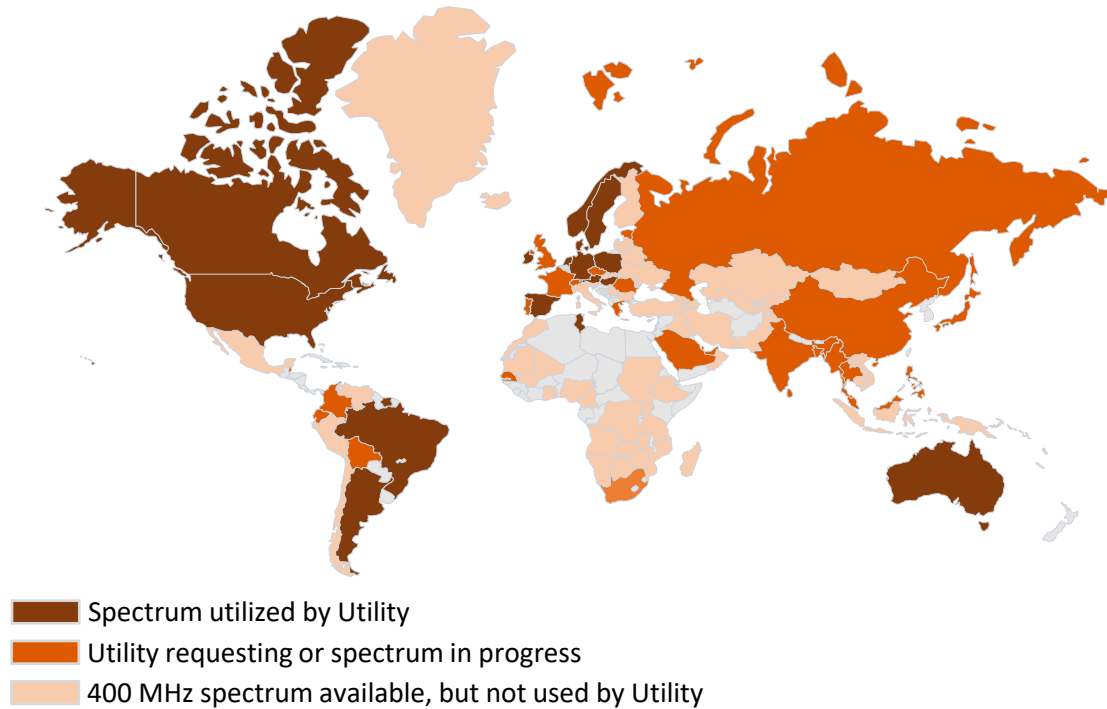
Spectrum Region	410 MHz 450 MHz	700 MHz	800 MHz 850 MHz 900 MHz	1600 MHz 1800 MHz	2100 MHz 2300 MHz	2500 MHz 2600 MHz	3500 MHz 3700 MHz	4900 MHz	2 nd lease
Africa	B31/72/87	B28/68							Yes
Asia	B31/72/87		B26/27			B41		n79	Yes
Europe	B31/72/87	B28/68		B3	B40 n40	B38 n38/n90	B42/43 n77/78		Yes
Middle East	B31/72/87				B1 n65		B43 n77/78		
North America	B31/72/87	B14	B106	B54			B48		Yes
Oceania Pacific	B31/72/87		B26/27					n79	Yes
South America	B31/72/87	B28	B26/27		B40 n40	B38 n38	B42/43 n77/78		Yes

Connectivity for Utilities



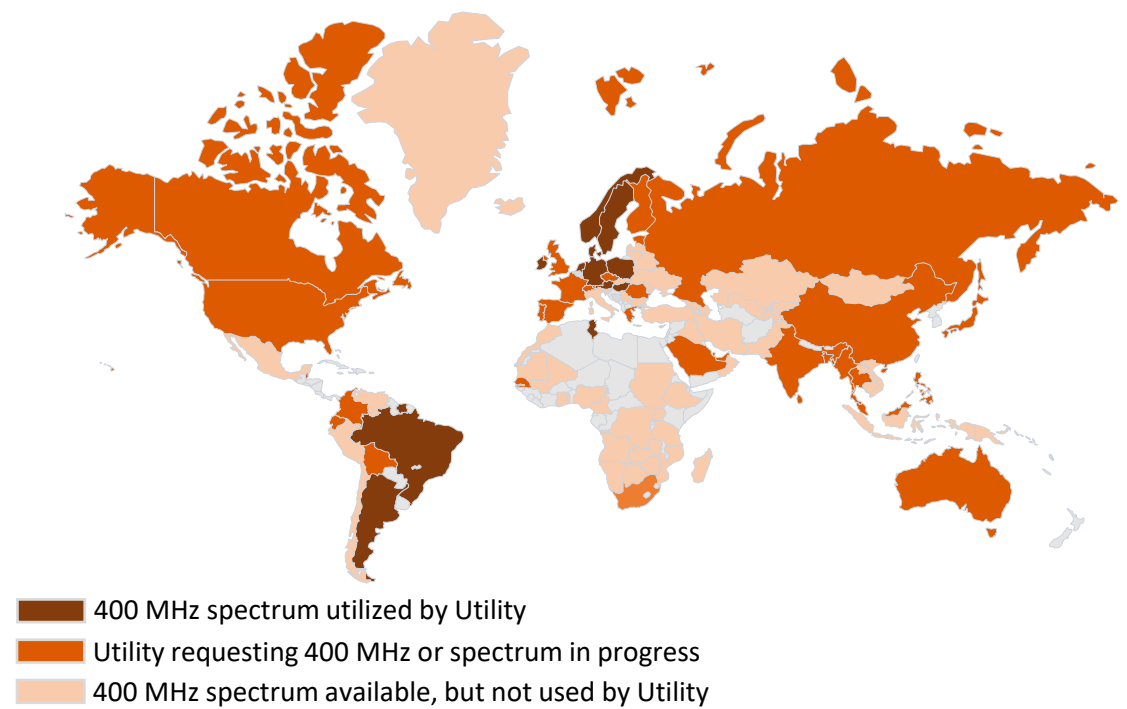
Dedicated wireless operators, URS ITU-R WP5A, for distribution network Globally

» Utilities with dedicated spectrum



The above map is subject to change

» Utilities with 400 MHz spectrum

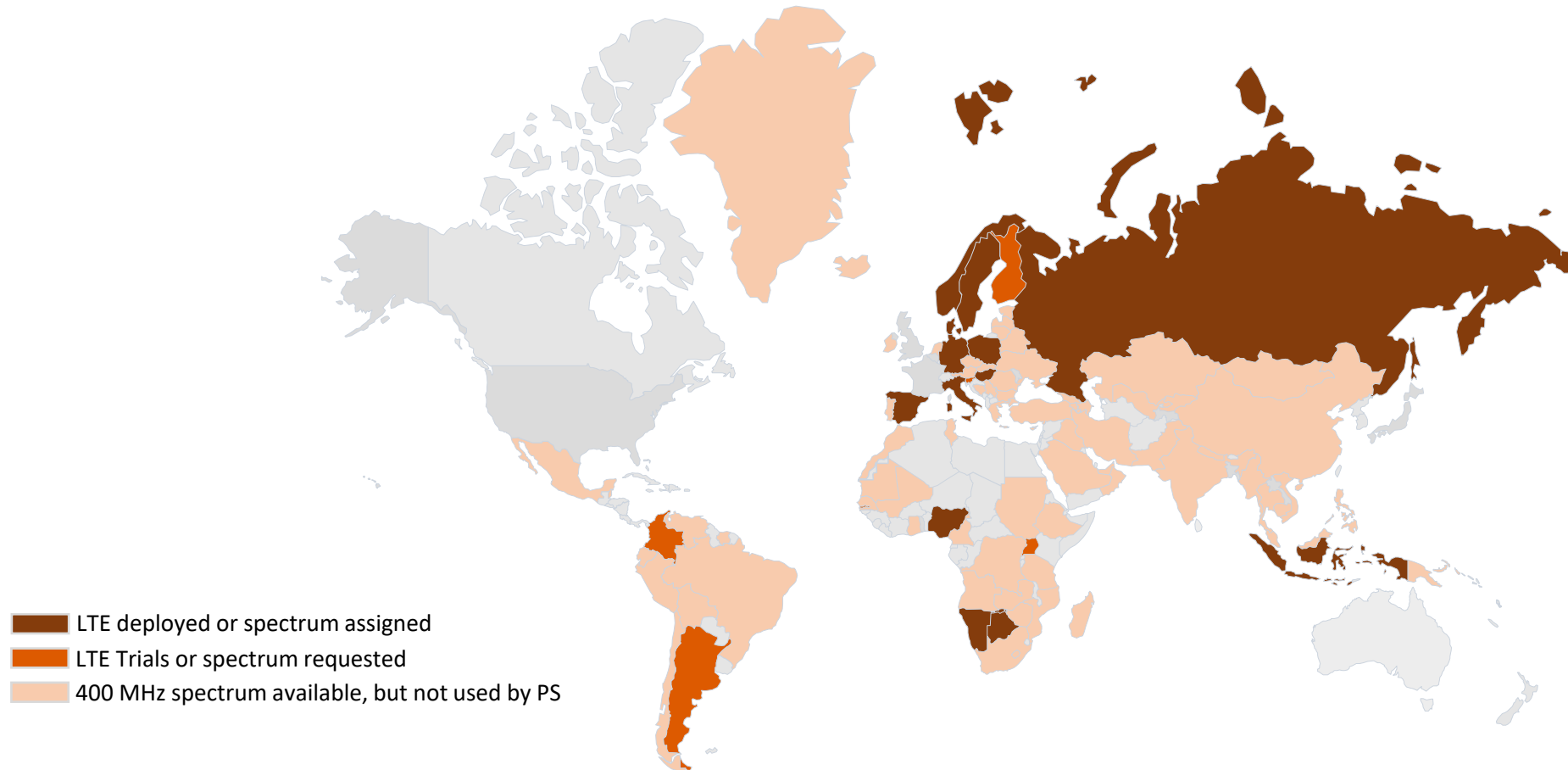


The above map is subject to change

Dedicated wireless operations with PPDR services networks Globally



promoting the advancement of 450 MHz worldwide.

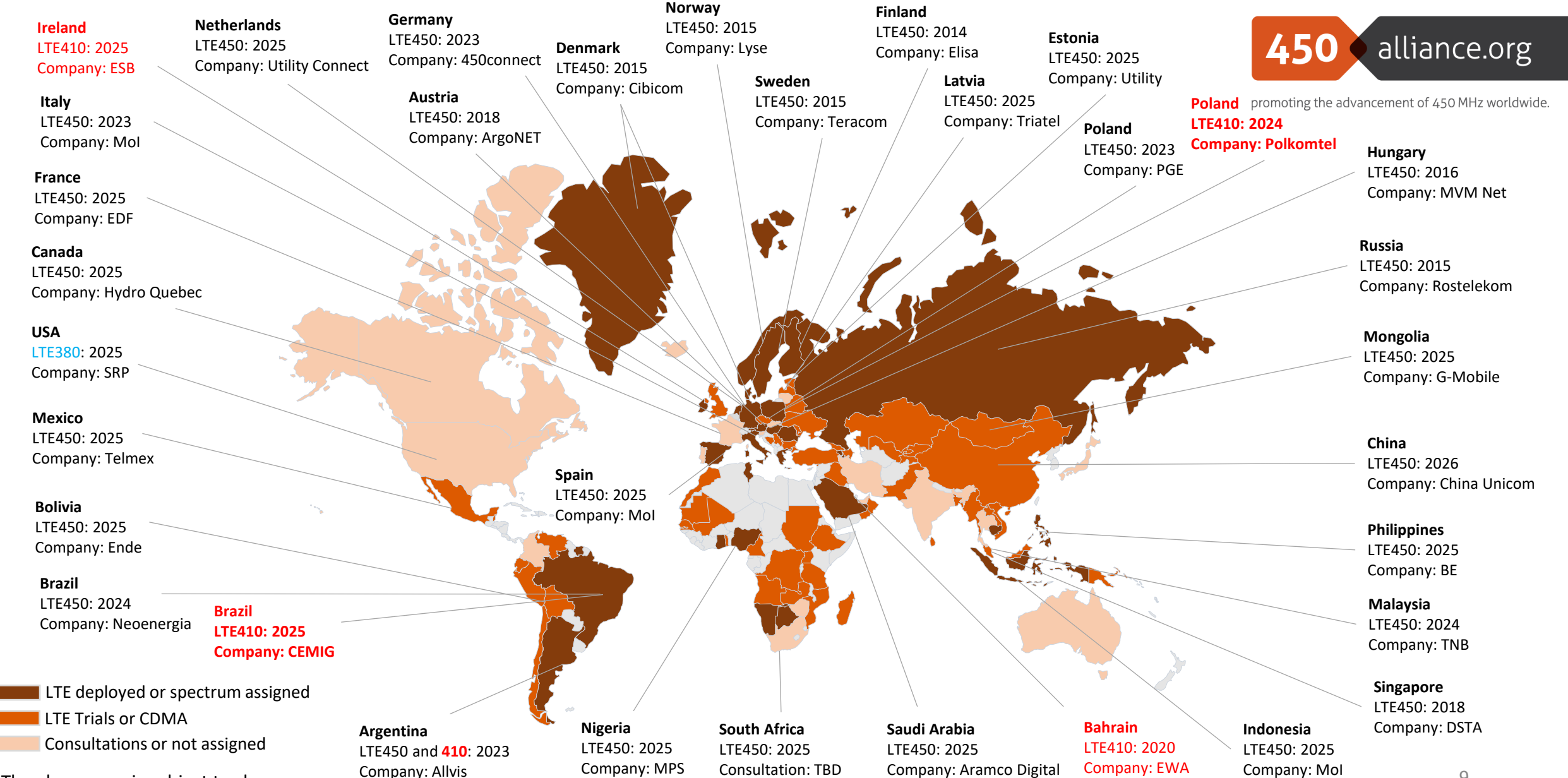


The above map is subject to change

450 MHz and 410 MHz main projects 2025-2026



Promoting the advancement of 450 MHz worldwide.



The above map is subject to change

Operational Structure



promoting the advancement of 450 MHz worldwide.

- » Netcos owned buy utilities
 - » Austria, Germany and Netherlands
- » Utilities building network on their own
 - » Brazil, Ireland, Malaysia and Poland
- » Dedicated Operators
 - » Argentina, Denmark, Hungary, Poland and Sweden





Thanks

Gösta Kallner, Executive Chairman, gosta.kallner@450alliance.org



promoting the advancement of 450 MHz worldwide.

Disclaimer note



promoting the advancement of 450 MHz worldwide.

The information contained in this material is gathered from different sources and has not been independently verified. Any estimates, projections, targets or forecasts contained herein involve significant elements of subjective judgment and analysis which may or may not be correct and the author makes no representation or warranty, express or implied, as to the accuracy or completeness of the information contained in the material nor as to the reasonableness of any assumption contained herein and any liability therefore (including in respect of direct, indirect or consequential loss or damage) is expressly disclaimed. Nothing contained herein shall be relied upon as, a promise or representation, whether as to the past or the future.