

Published on e-Navigation Netherlands (https://www.e-navigation.nl)

Home > Radionavigation > Cesium possible future of R-mode coverage

Cesium possible future of R-mode coverage

This is a demo page showing the nominal range of current, known by <u>IALA</u> [1], DGNSS and <u>AIS</u> [2] stations as registered in their documents.

Marine beacon coverage prediction [3]

<u>IALA</u> [4] provide a Guideline on marine beacon coverage prediction. Coverage is determined through the consideration of a number of factors including propagation effects, noise and interference. The reader is advised to refer to IALA [4] Guideline 1119 for further information.

The reason for this page is a new development called <u>R-mode</u> [5] where current infrastructure could be used for a terrestrial backup system of <u>GNSS</u> [6]systems such as <u>GPS</u> [7]and <u>Galileo</u> [8]. The satellite <u>GPS</u> [9]systems are vulnerable for some atmospheric interference where a backup system could ensure getting to a safe holding position until the problem is solved. Another terrestrial system is <u>eLORAN</u> [10].

Green are current operational sites and yellow are the planned or temporarily not operational sites that could be used for R-mode in the future.

These systems could be used also as a backup timing (and positioning) system.

Below a view of the nominal range of the stations. These are, if something changed in the database, updated every hour. It could be you should refresh you browers cache with ctrl-F5 to see the latest updates.

Language

English

Source URL (modified on 28/11/2023 - 13:17):https://www.e-navigation.nl/content/cesium-possible-future-r-mode-coverage

Links

- [1] http://www.iala-aism.org/ [2] https://www.e-navigation.nl/iala/ais [3] https://www.e-navigation.nl/iala/marine-beacon-coverage-prediction [4] https://www.e-navigation.nl/iala/iala
- [5] http://www.dlr.de/dlr/en/desktopdefault.aspx/tabid-10122/333_read-24695/#/gallery/28882
- [6] https://en.wikipedia.org/wiki/GNSS_applications [7]
- http://nl.wikipedia.org/wiki/Global_positioning_system [8] https://www.gsa.europa.eu/european-gnss/galileo/galileo-european-global-satellite-based-navigation-system
- [9] https://nl.wikipedia.org/wiki/Global_positioning_system [10] https://en.wikipedia.org/wiki/LORAN