

Input paper for the following Committee(s):

check as appropriate

Purpose of paper:

- ☐ ARM **X** ENG ☐ PAP
☐ ENAV ☐ VTS

X Input☐ InformationAgenda item ² (from agenda)

11

Workplan Task Number / Technical Domain ²

.....

Working Group

WG3

Author(s) / Submitter(s)

Michael Card

Note by the IALA Secretariat re IALA Position on DGNSS

1. DEVELOPMENTS IN DGNSS SERVICES

1.1 DGNSS stations being discontinued

At PAP36, informal discussion was held on the future of DGNSS services. Already some AtoN authorities are discontinuing DGNSS broadcasts. Some of these are reported as not retaining DGNSS towers and/or sites.

Countries where DGNSS services are being discontinued include Japan and USA. The General Lighthouse Authorities of the UK and Ireland are conducting a survey to gauge current and future user requirements for their DGNSS service. AMSA Australia is conducting a similar survey. Informal advice is that Canada is considering whether to discontinue DGNSS services.

USA, <https://www.federalregister.gov/documents/2018/03/21/2018-05684/discontinuance-of-the-nationwide-differential-global-positioning-system-ndgps> "The U.S. Coast Guard (USCG) announces the discontinuance of its remaining 38 maritime Differential Global Positioning System (DGPS) sites. The USCG will implement the closures through a phased reduction in service, which will commence in September of 2018, and conclude by September of 2020. These closures will culminate in the complete cessation of the Nationwide Differential Global Positioning System (NDGPS) service."

1.2 Multi-system GNSS

GNSS receivers can now use the signals from GPS and GLONASS satellite systems, and the 26 Galileo satellites in service.

Galileo will reach full operational capability in 2020.

¹ Input document number, to be assigned by the Committee Secretary

² Input papers should be assigned to a work task as listed in the Committee work plan which is available in input papers. Leave open if uncertain but consider how the paper is to be processed if not relevant to a work task

BeiDou has 33 satellites in space, 17 of which are operational.

The Secretariat believes that GNSS receivers can already offer high positioning accuracy without DGNSS, and will increasingly use SBAS for position integrity determination.

1.3 The future

The Secretariat notes the declining importance of and need for DGNSS, and its withdrawal from service by some AtoN authorities, and believes that SBAS SIS is likely to replace DGNSS.

➤ Secretariat view

- **The future of DGNSS is limited, and it will be phased out by shore authorities and by receiver manufacturers.**
- **Recommendation R-135 concerns the recapitalisation of DGNSS. It should be amended or withdrawn.**

2. IALA RECOMMENDATION R-150 UNLIKELY TO BE FOLLOWED

IALA Recommendation R-150 encourages authorities to retain the sites and towers of discontinued DGNSS stations for possible future use for R-Mode and/or broadcasting of maritime information.

R-mode at MF using existing DGNSS beacons, and/or the use of these beacons for digital information broadcast, both appear unlikely to be implemented, and the Secretariat expects that authorities discontinuing DGNSS broadcasts will not be able to retain sites or towers for a possible future MF R-Mode and/or digital information service.

With government expenditure generally under pressure worldwide, it is very difficult to envisage authorities being able to retain and maintain redundant sites and towers for an unclear future purpose.

➤ Secretariat view

- **Recommendation R-150 should be amended or withdrawn.**

3. THE COMMITTEE IS REQUESTED TO

Consider the content of this paper and take appropriate action.