From: Mark van der Hulst [mailto:mark@omsholland.nl]

Sent: Friday, October 24, 2014 1:16 PM

To: Frigg Jørgensen; Helen Shaw

Cc: Ilja Leo Lang

Subject: RE: Notice of Inquiry: Telecommunications Assessment of the Arctic Region

Goodevening,

Frigg has addresses most of the topics but i do want to emphasize on some topics.

Nowadays the shipping industry relies for many occasions on satellite communication, weathercharts, navigational information, email communication, software updates on navigational information programs etc. all passing through the (satellite) Internet. However the Artic and Antarctic areas have very limited broadband coverage. In the high Artic many times we need to rely on Irridium communication. Irrdium is an expensive means of communication with limited bandwidth.

If one would look at the current footprints of the broadband satellites one would see that the high Artic is not covered and thus limiting ships in efficient (and payable) communications means falling back to iridium only with a maximum bandwith of 128 kbps compared to for example Fleetbroadband 432 kbps or VSAT up till much higher speeds.

http://www.stratosglobal.com/~/media/Documents/irid/Public/iridium_openPort_factsheet_overview.pdf https://www.inmarsatgov.com/uploadedFiles/Resources/Downloads/fleetbroadband.pdf

With the increase of vessel traffic in the high Artic shipping would need effective communications and increase of available means of communications indeed.

Best regards,



Mark van der Hulst

Managing Director

Visserijkade 5

4382 ZA Vlissingen
The Netherlands

T: +31 118 413 748

E: Mark@omsholland.nl

Van: Frigg Jørgensen [mailto:frigg@aeco.no]

Verzonden: vrijdag 24 oktober 2014 10:26

Aan: Helen Shaw

CC: Mark van der Hulst: Ilia Leo Lang

Onderwerp: SV: Notice of Inquiry: Telecommunications Assessment of the Arctic Region

Dear Helen

I can add some, but I have in addition cc chair of AECO's Marine Committee, Mark van der Hulst, who might be able to add to details.

Voice

- 1. UHF. Ultra High Frequent within the vessel, carries through the constructions.
- 2. VHF, Very High Frequent around the vessels but limited by mountains if there are no VHF receivers on the mountain. Carries to aircrafts as well.
- 3. HF. High Frequent worldwide
- 4. Mobil in areas with mobil-coverage
- 5. Iridium satellite phone worldwide

Data

- 1. Data transmission satellites over equator gives internet connection via satellite with wide bandwidth. Does not cover the northernmost areas as they fall under satellite shadow.
- 2. Iridium Open Port gives limited internet connection not possible to send large files of data. Equals three Iridium phone lines.

Have a nice weekend.

Med vennlig hilsen/Kind regards,

Frigg Jørgensen

Executive director

AFCO

P.O. Box 103

N-9171 Longyearbyen

Pho + 47 79 02 63 50

Cell pho: +47 913 90 554

Skype: frigg.jorgensen

Twitter: @Friggi

www.aeco.no

frigg@aeco.no

New Animated Guidelines for Visitors to the Arctic

Visitors to the Arctic can now educate themselves about safe, environmentally friendly and considerate behavior in the Arctic through a new entertaining animation. See: https://wimeo.com/97093751 and read more on: https://www.me/p4e3v7-ui