History of VHF radio digitalisation

This page will give the history of the actions taken for determine if digitalisation of VHF radio is possible

1. At the IALA eNAV Communication (International Association of Lighthouse Authorities) communications workgroup intersessional meeting in Sydney a possible technical way of a more efficient use of VHF frequencies was presented.
2. On the 8th of February 2019 the Electronic Communications Committee – Working Group FM send a Liaison note to ETSI TC ERM, International Association of Marine Aids to Navigation and Lighthouse Authorities (IALA), Comité International Radio-Maritime (CIRM) and International Maritime Organisation (IMO) about Subject Feasibility of digitization of voice radiotelephony in the VHF maritime mobile band
3. At the IALA eNAV23 committee meeting held in April 2019 in Singapore the Liaison Note was discussed and a LIaison Note was send to the Electronic Communications Committee – Working Group FM to recognises and agrees that the maritime voice service on the maritime VHF band should be digitised. And in that respect, IALA gave reommendations about topics that could be included. Also IALA stated that IALA is currently evaluating digital Private Mobile Radio (dPMR) as one of the candidate technologies and is able to share high-level evaluation reports when this process is completed. Also during this meeting some presentations were given about the possible use of dPMR as canditate technology to superseed analog VHF radio.
4. During the World Radio Conference 2019 held at Sharm el-Sheikh (Egypt) from 28 October to 22 November 2019the discussion took place for agenda items for the WRC of 2023 and 2027. It was decided that the discussion of the possible digitalisation of VHF radio and the best technologie will be held at the WRC2027
5. At the meeting of ECC FM PT58 from the 11th till the 12th of December Cybernetica presented a report on "Analyses of different digital radio protocols for use in maritime communication" which compared four candidate, currently available, technologies for digitalisation of the VHF radio. Out of this report came dPMR at that moment as the best available at that moment. They also proposed some changes to the dPMR standard to make it more suitable for Maritime use.
6. Also at the meeting of ECC FM PT58 from the 11th till the 12th of December Estonia prestented a report on Test measurements on maritime VHF voice radio communication.
7. On the 10th of December a trial took place in the Port of Rotterdam with Maritime users (Skipper and VTS operator) to test the use of analog VHF radio and the candidate technology dPMR. During this test Agentschap Telecom (Dutch ITU organisation) was mesuring the impact on the spectrum and didn't find any problems spectrum wise with dPMR as candidate technology. Also during this test feedback was collected from

visitors. The visitors were users, technical and policy makers.

8. In Feburary 2020 a special meeting was setup to present the results from the Rotterdam Trial to ECC FM PT58. This meeting was attended by 15 participants; After this meeting from different delegations questions and remarks were gathered.
9. A proposal was initiated to investigate the changes needed to the dPMR standard to accomodate maritime more. (ETSI TS 102 490, 2013-02; ETSI, 2019) Instead of the proposed Technical Specification a Technical Report will be made.
10. On the 29th of July 2020 the Nautical Institute, SE Australia Branch, arranged in a series of webinars on developments in technology a webinar also on the results of the Rotterdam Trial. Also in the following days questions and remarks were gathered. This webinar was recorded https://www.youtube.com/watch?v=MGePD_SHq-w&t=837s [1]
11. At the ECC FM PT58 of the 22th of September the report of the Rotterdam trial will be discussed.

Language
English

Links
[1] https://www.youtube.com/watch?v=MGePD_SHq-w&t=837s