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| sub-committee on navigation, communication and search and rescue  9th session  Agenda item 12 | NCSR 9/INF. X  DD April 2022  Language: ENGLISH  Pre-session public release: |

**response to matters related to the ITU-R study groups and ITU world radiocommunication conference**

**Report of the trial on digital voice communication in maritime VHF band**

**Submitted by International Association of Marine Aids to Navigation and  
 Lighthouse Authorities (IALA)**

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| **SUMMARY** | |
| *Executive summary:* | This document contains in the annex a report of a trial on digital voice communication in maritime VHF band conducted at the port of Rotterdam in 2019. |
| *Strategic direction, if applicable:* | 2 |
| *Output:* | 2.1 |
| *Action to be taken:* | Paragraph 7 |
| *Related documents:* | NCSR 6/12/4 |

**Introduction**

1 This document contains in the annex a report of a trial on digital voice communication in maritime VHF band conducted at the port of Rotterdam in 2019 by the courtesy of the Netherlands.

2 At the 25th session of IALA e-Navigation Information Services and Communications Committee (ENAV) in 2019, the Ministry of Infrastructure and Water Management of the Netherlands, IALA national member, submitted a report of a trial on digital voice communication in maritime VHF band.

**Summary**

3 There are multiple ways to achieve the digital voice communication but the technical candidate solution presented was called dPMR (digital Private Mobile Radio), currently used in land mobile communications as a replacement for analogue FM voice communication in both VHF and UHF bands.

4 This new candidate technology could also have a place within Maritime Safety Information and/or Smart Shipping because it is possible to embed small data/text with the voice transmission. This information could contain the intentions of ships or information about hazards.

5 The trial was conducted at the port of Rotterdam using de-commissioned VTS centre and one of the assistance vessels and an experienced VTS operator and the crew of the vessel participated in the trial.

6 At the trail, both the users and the observers found the voice quality the same or better than analogue. The users reported back that listening to digital voice with the noise reduction made it easier and less intensive to listen. Concluding that with digital transmission of voice, if a mariner is still capable of operating his ship is equal as analogue.

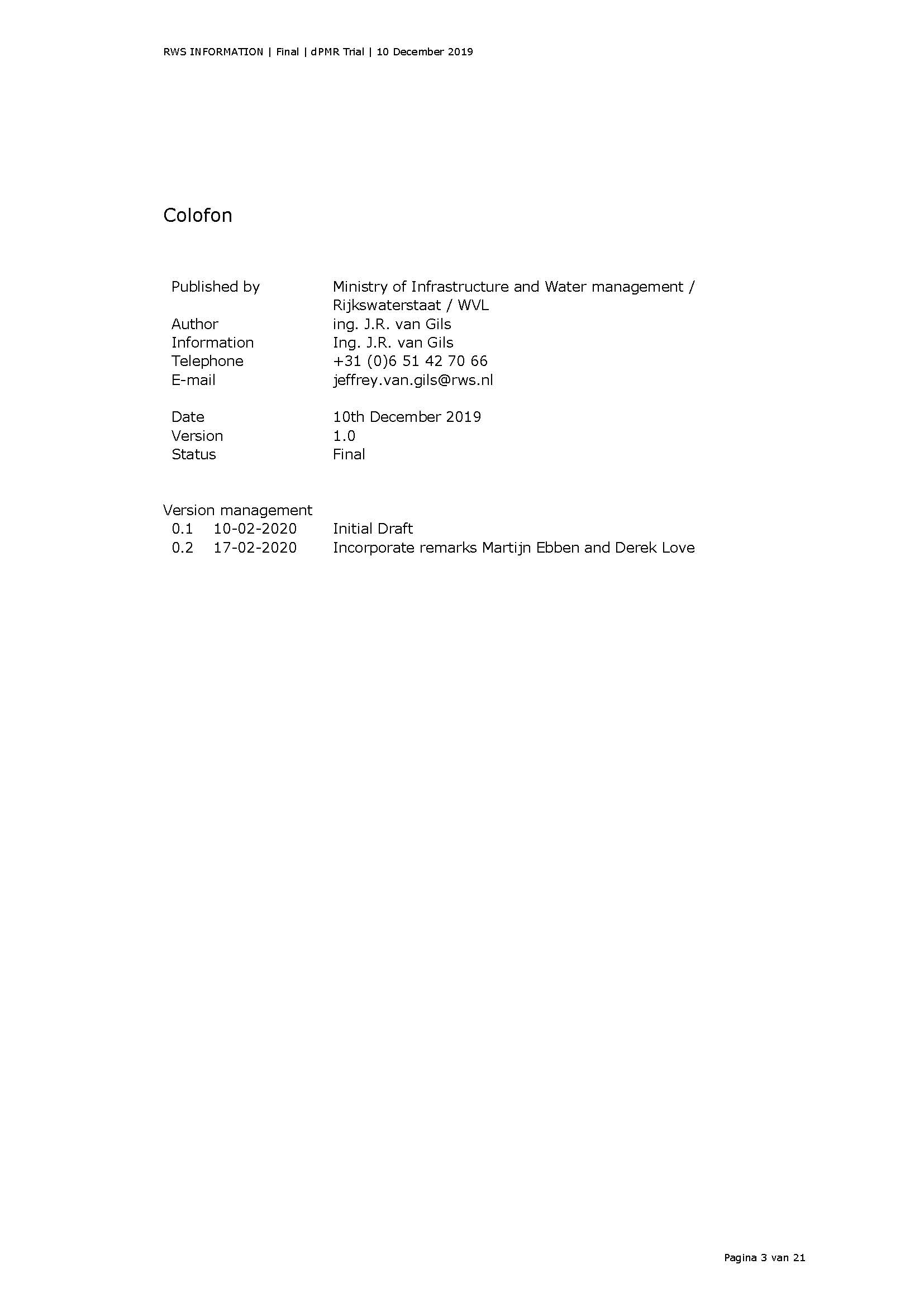
**Action requested of the Sub-Committee**

7 The Sub-Committee is invited to note the information provided.

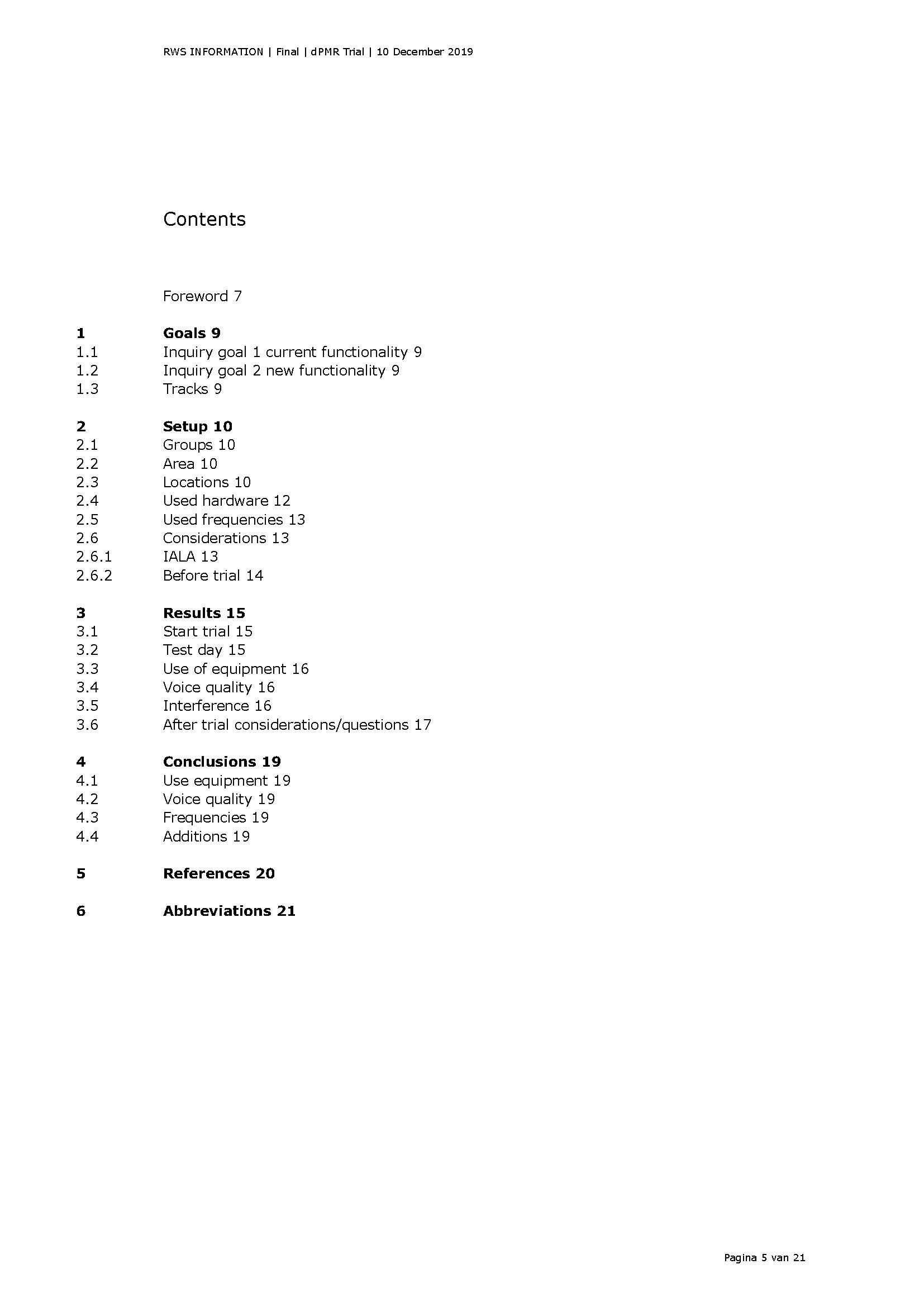
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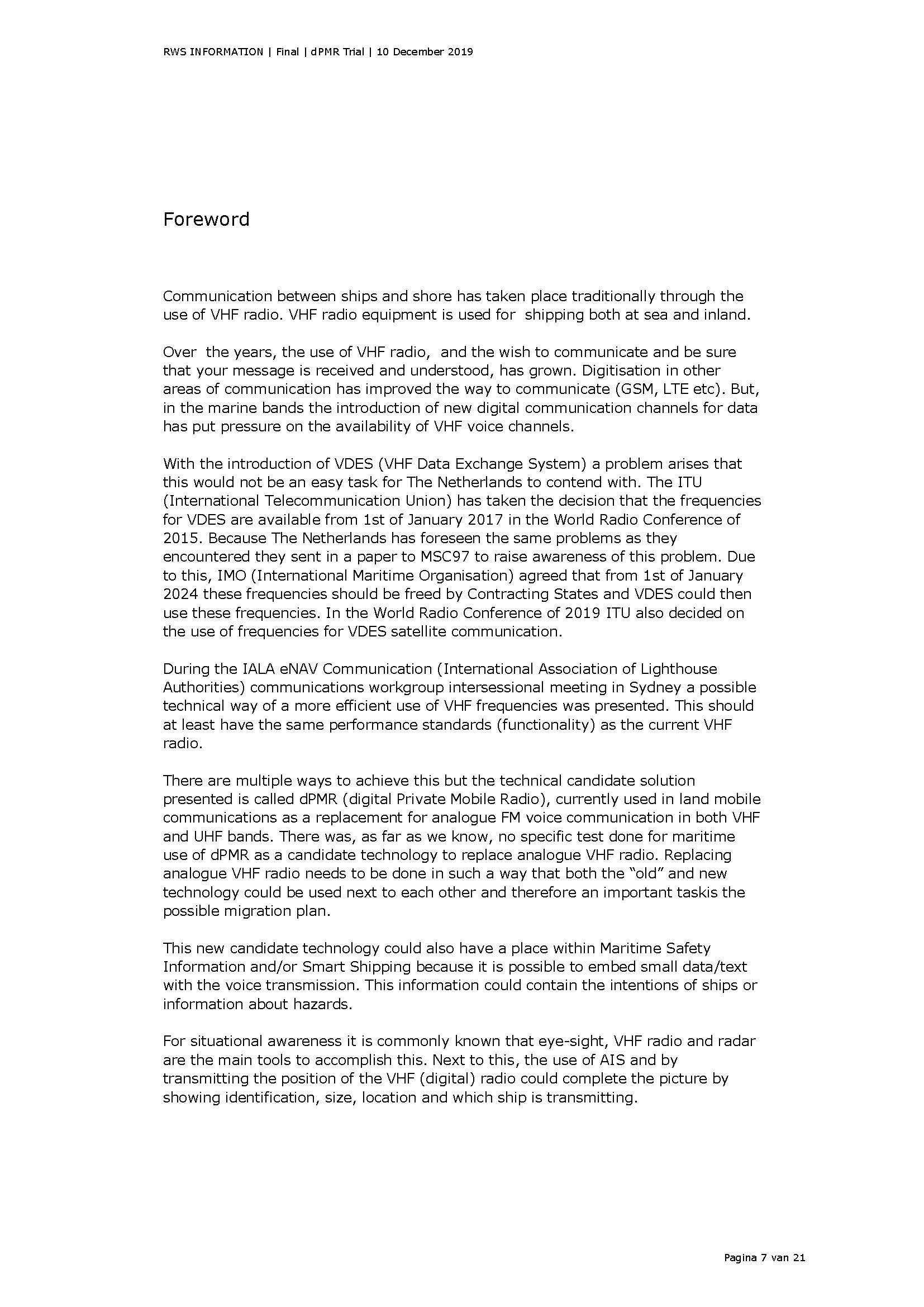




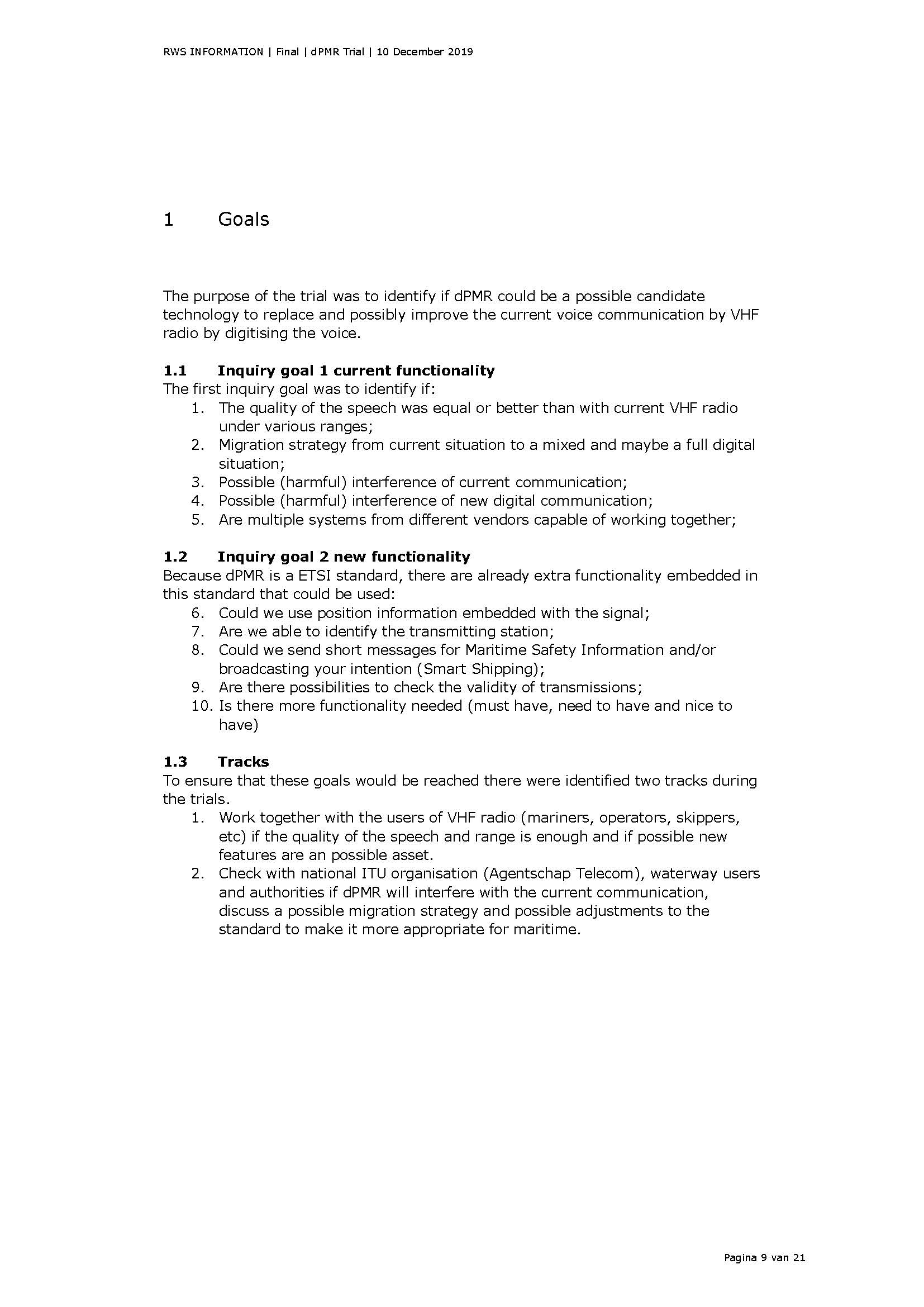


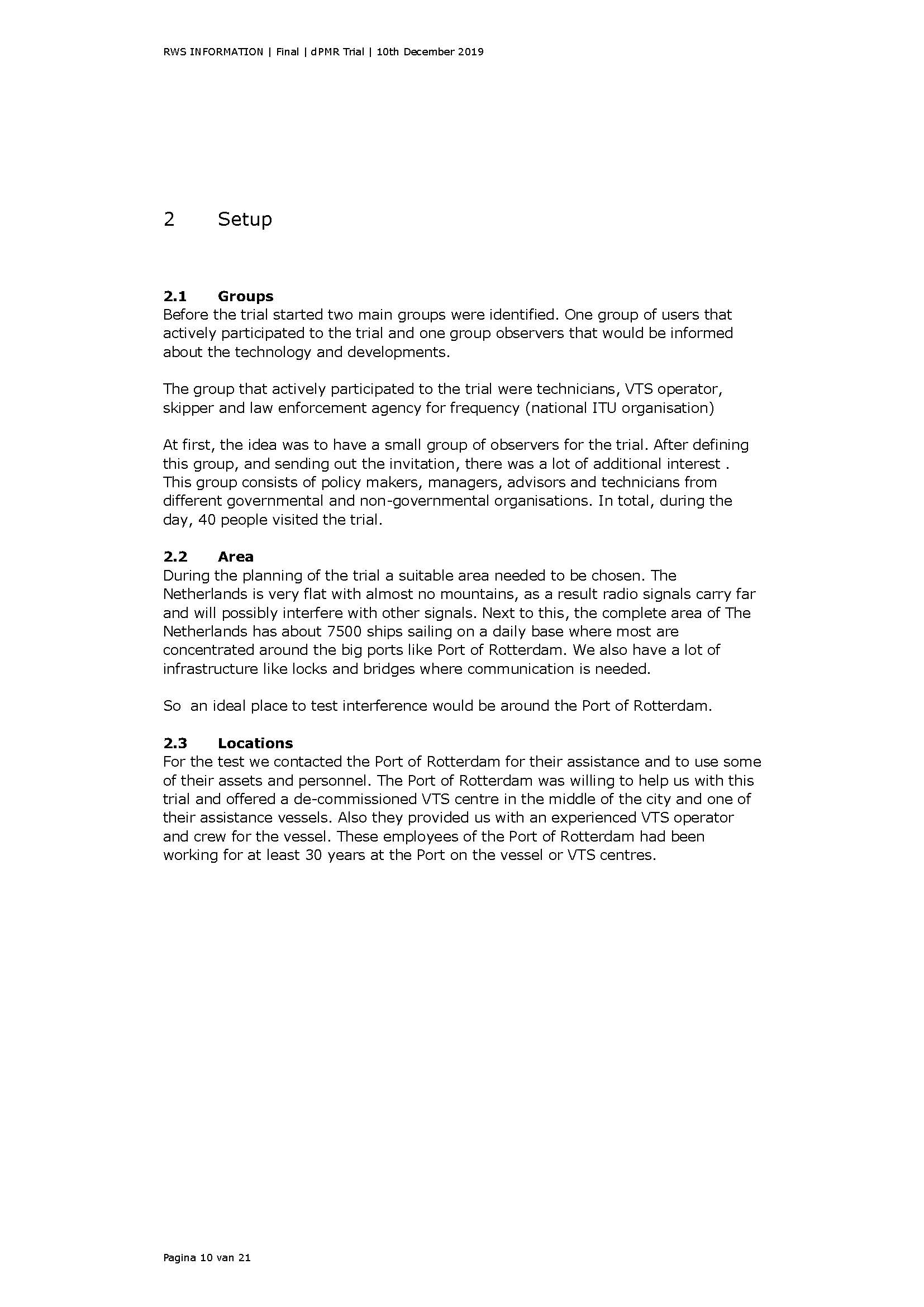


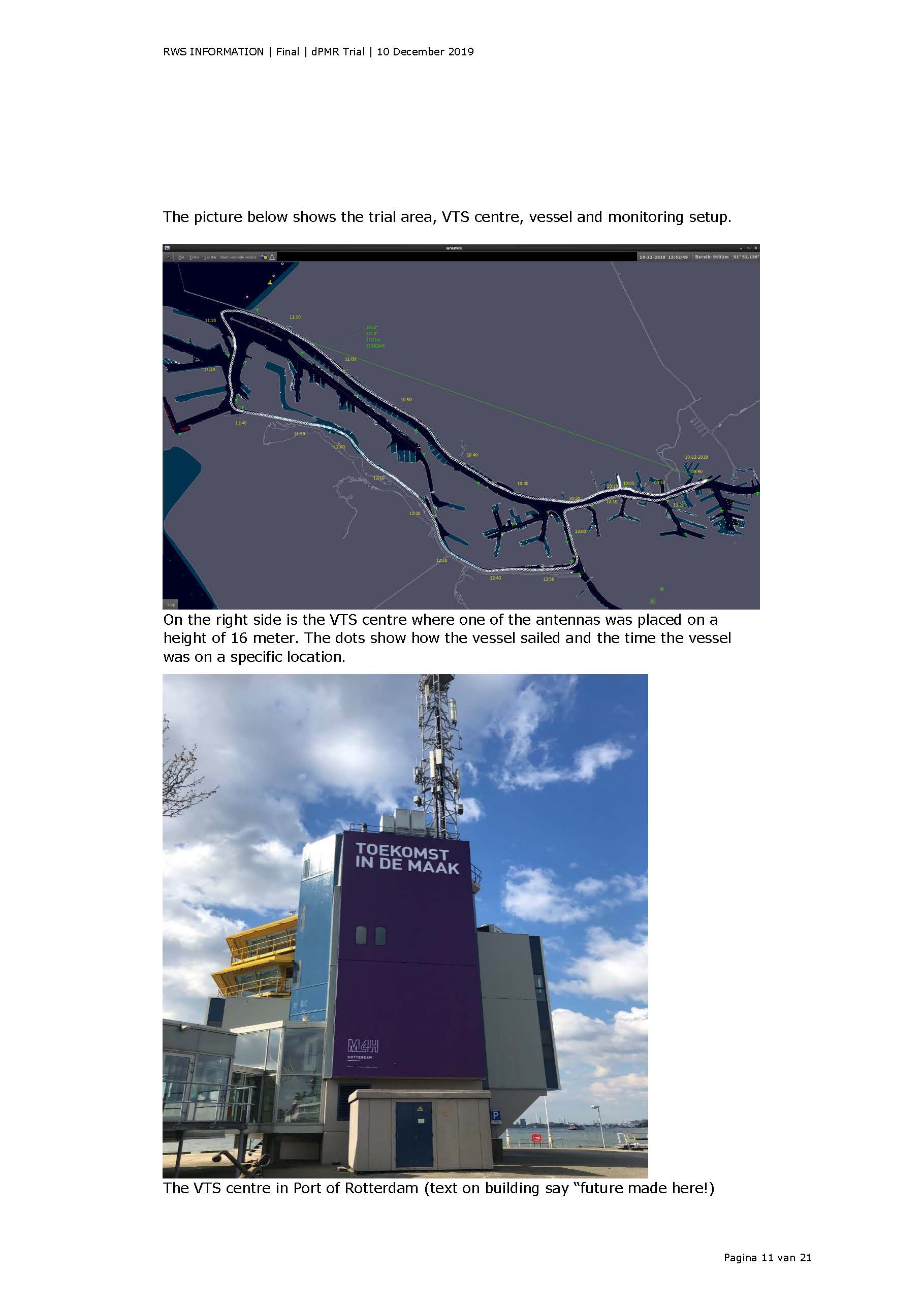


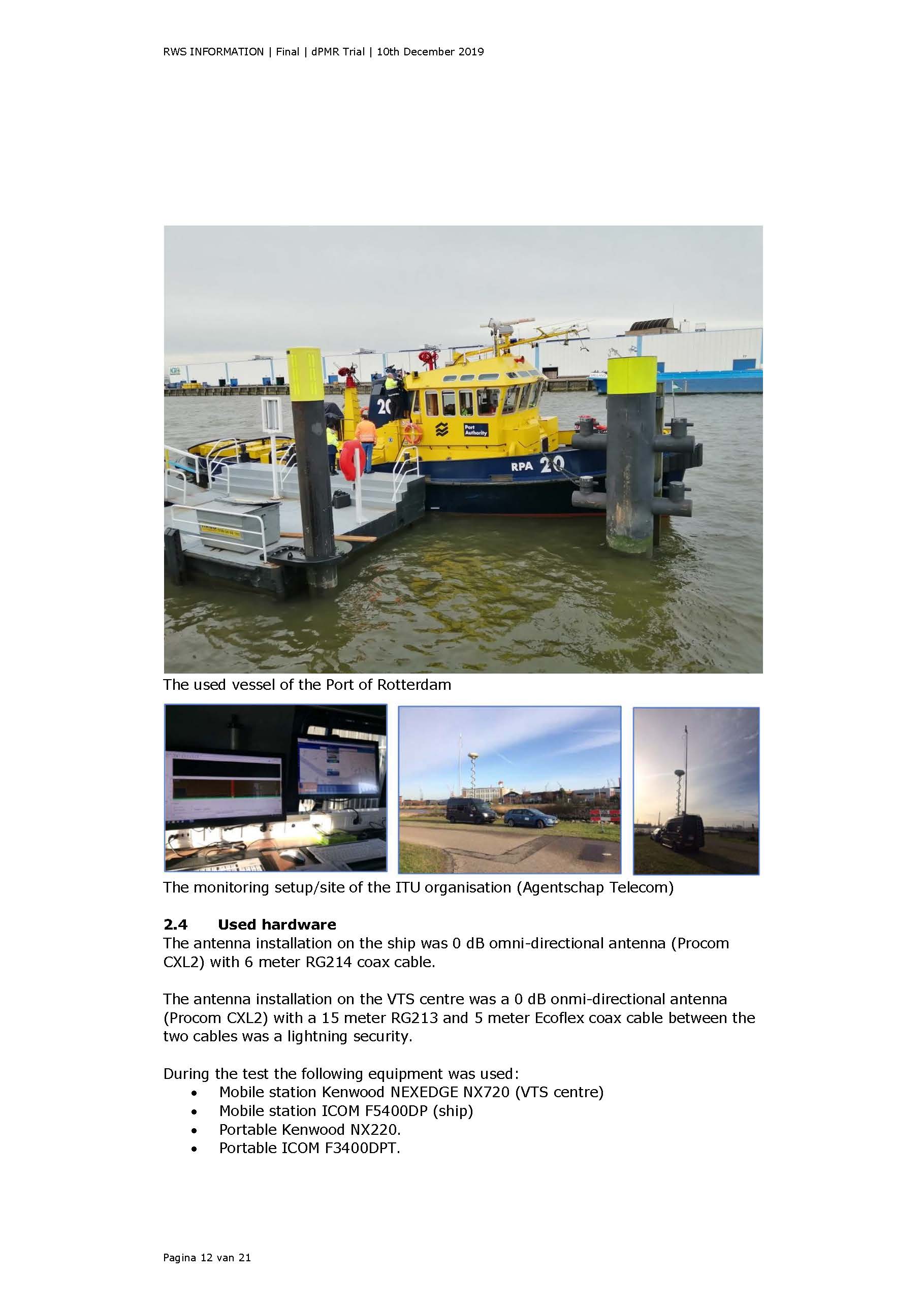


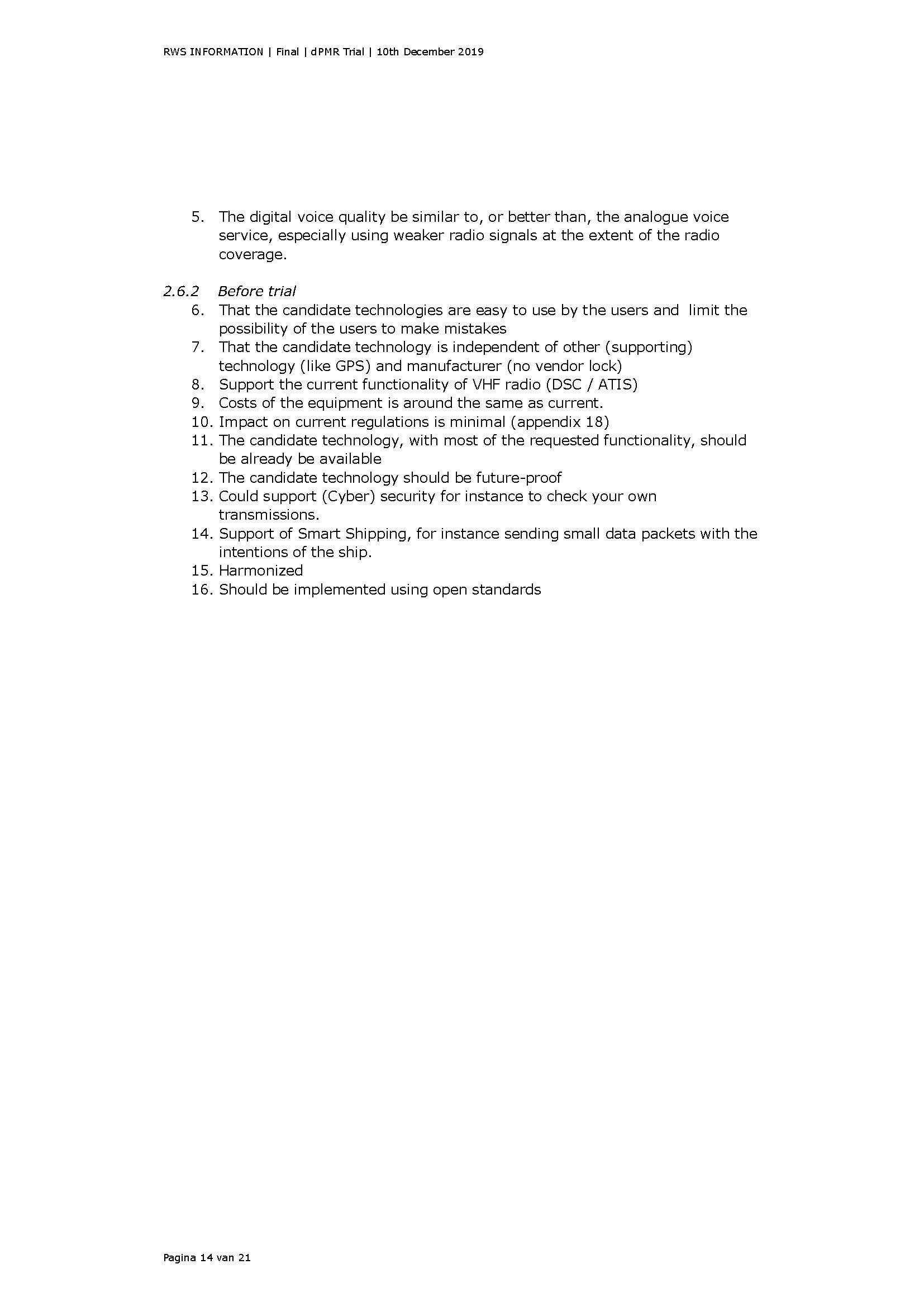


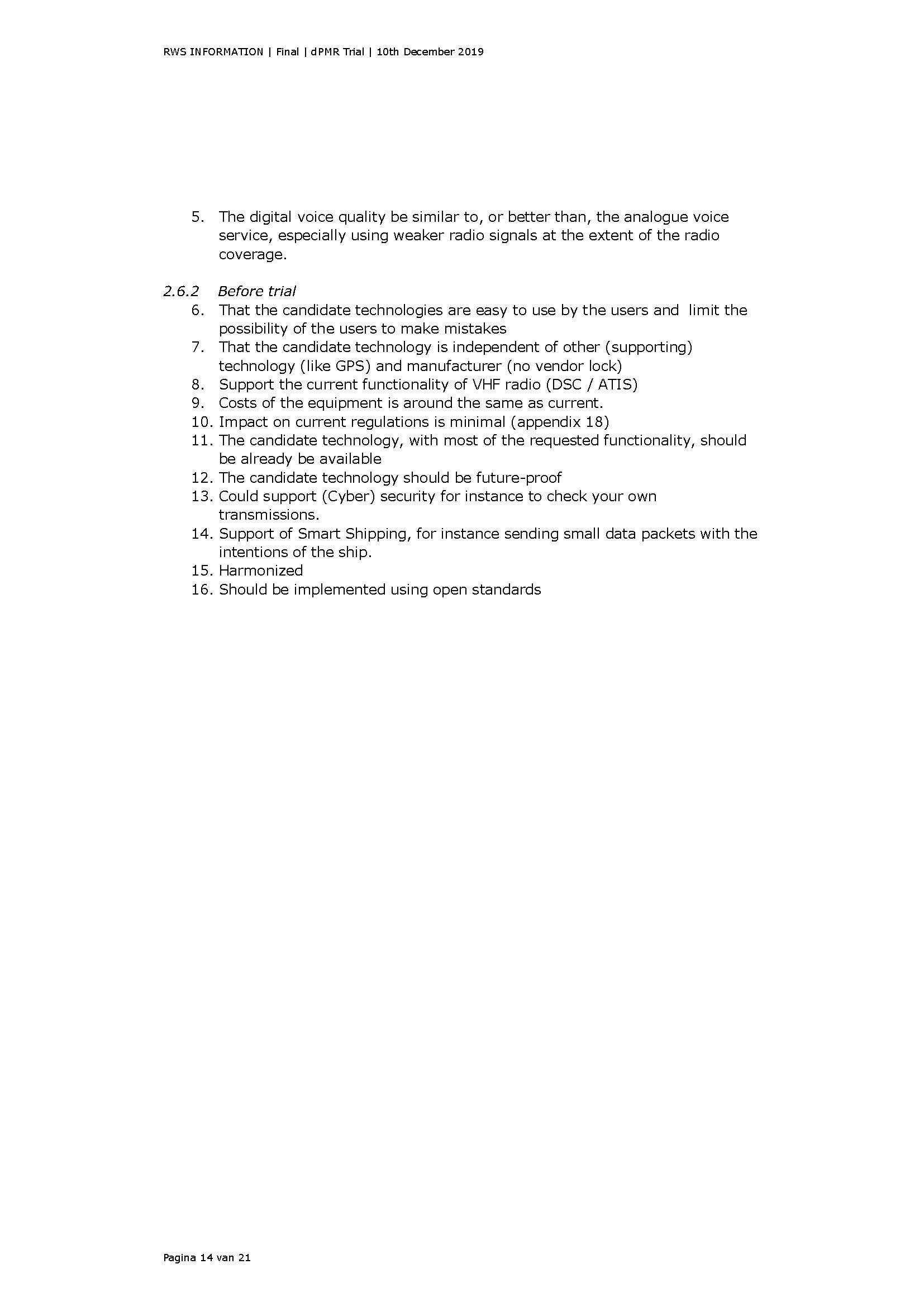


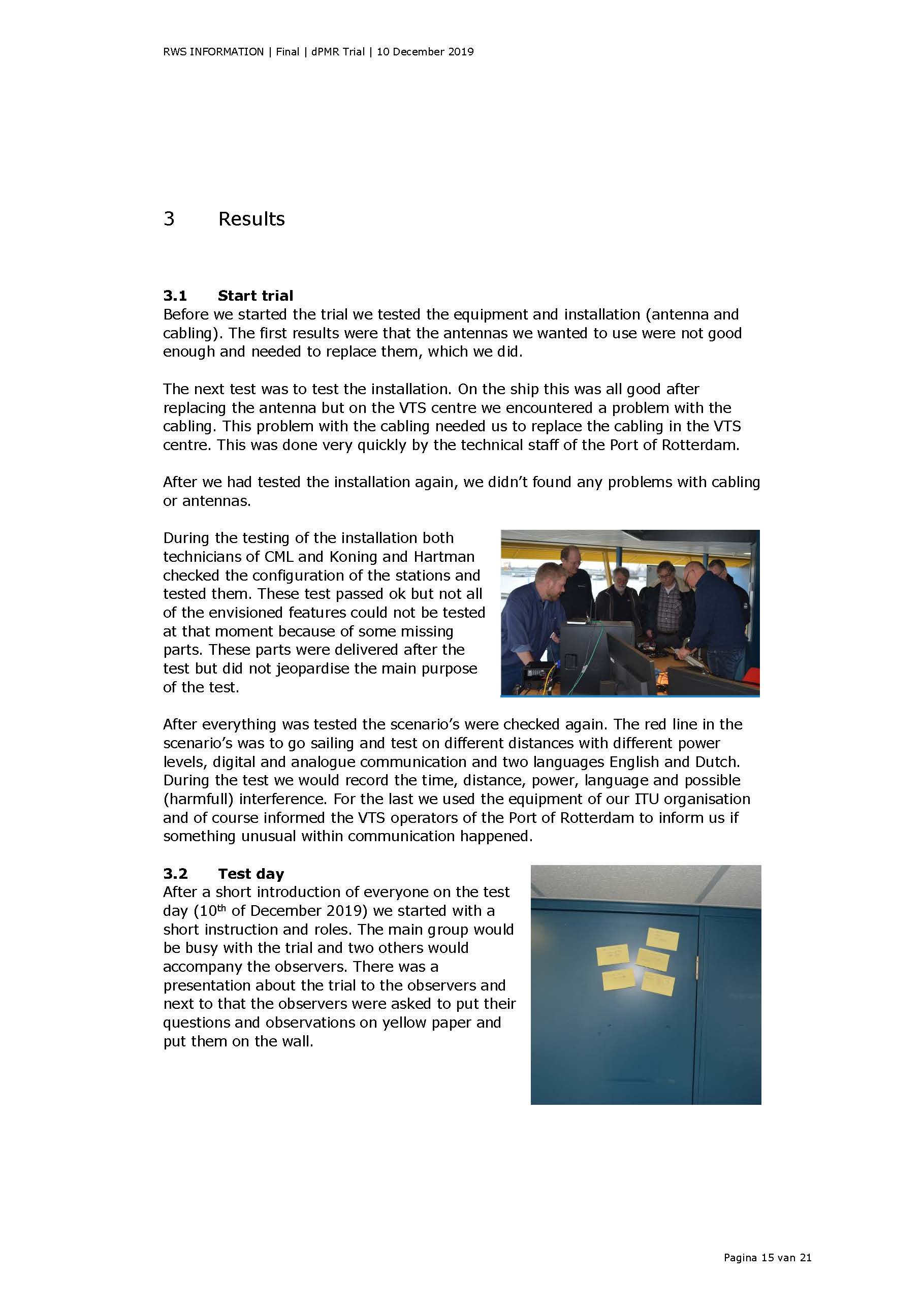




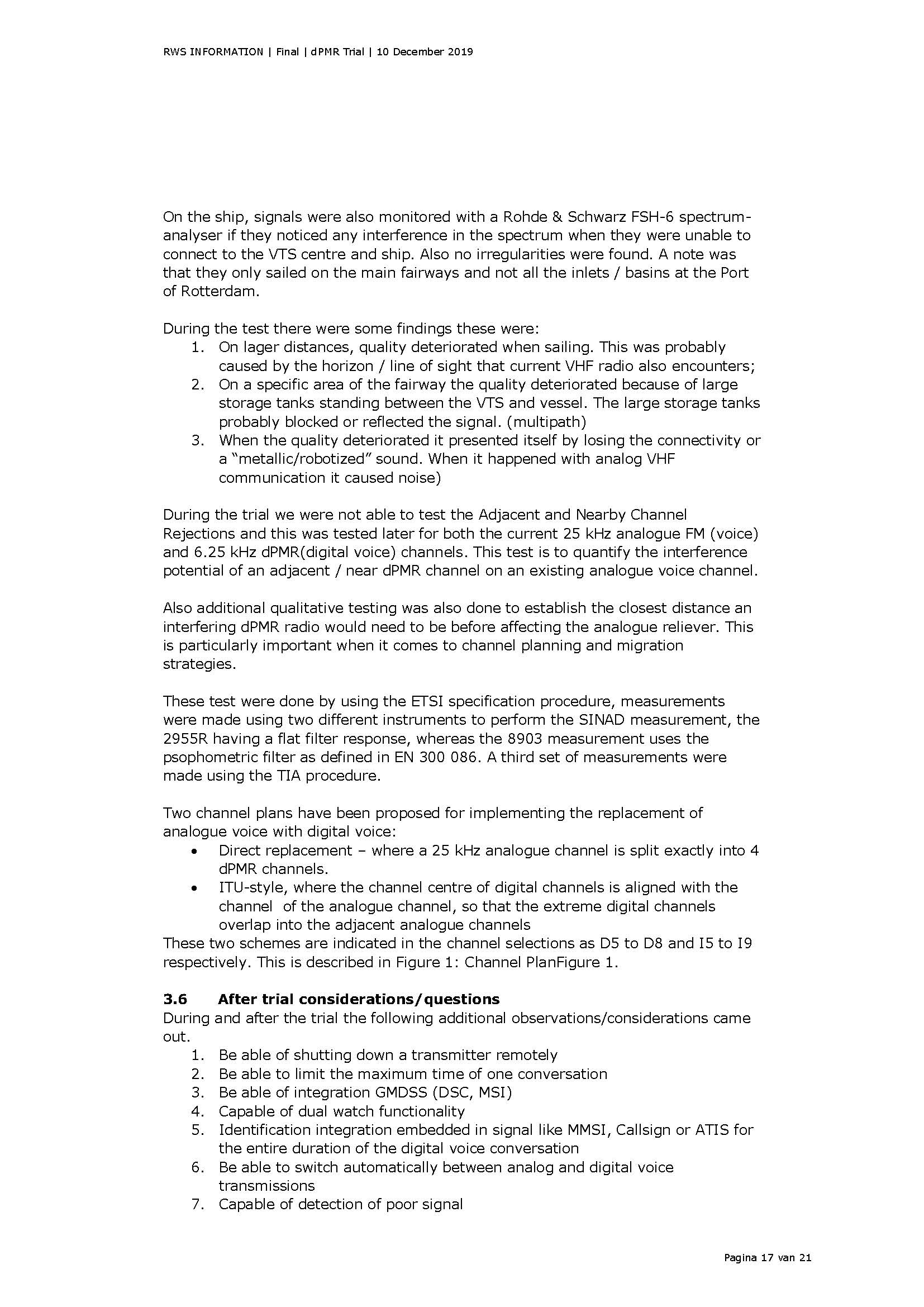




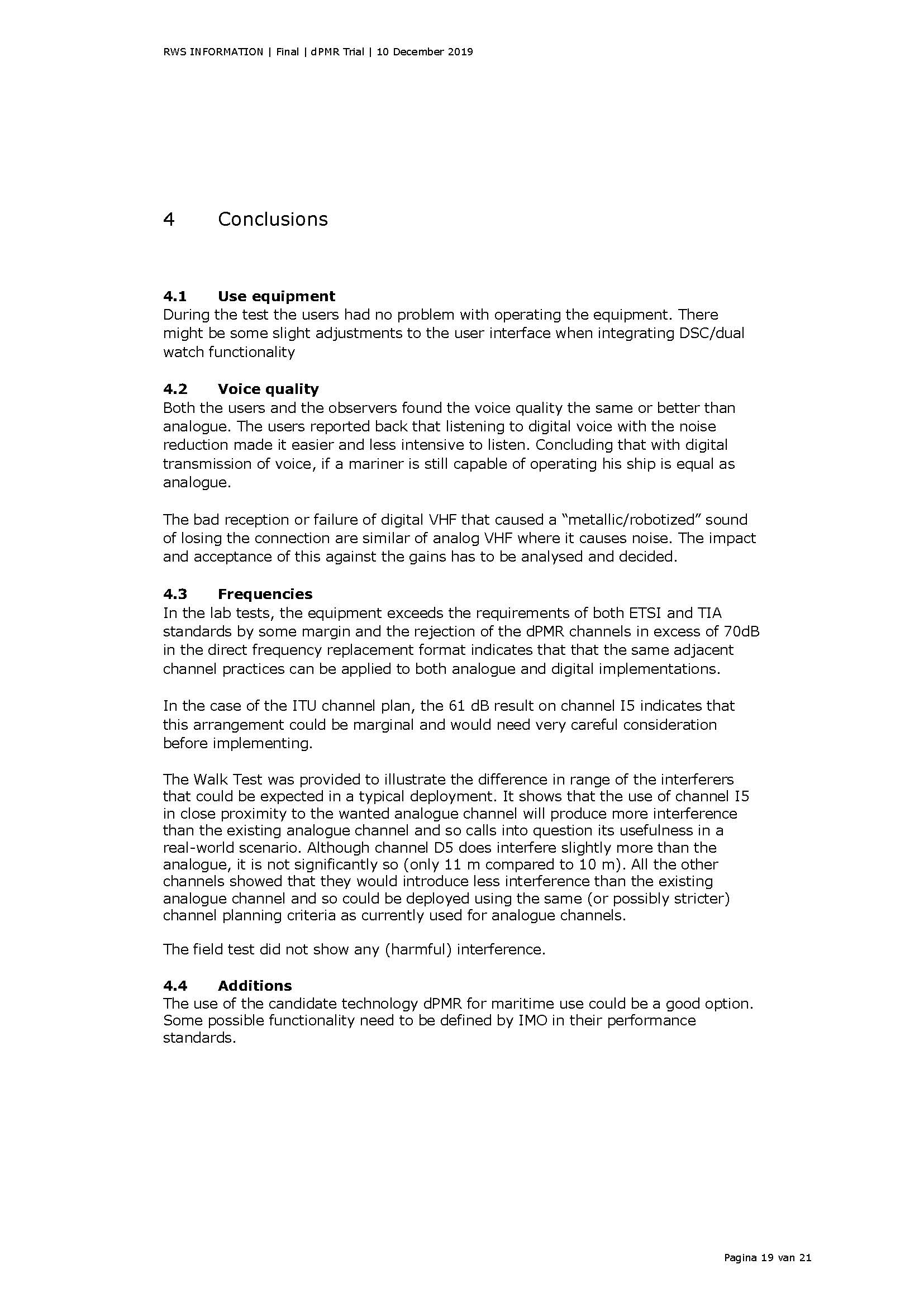


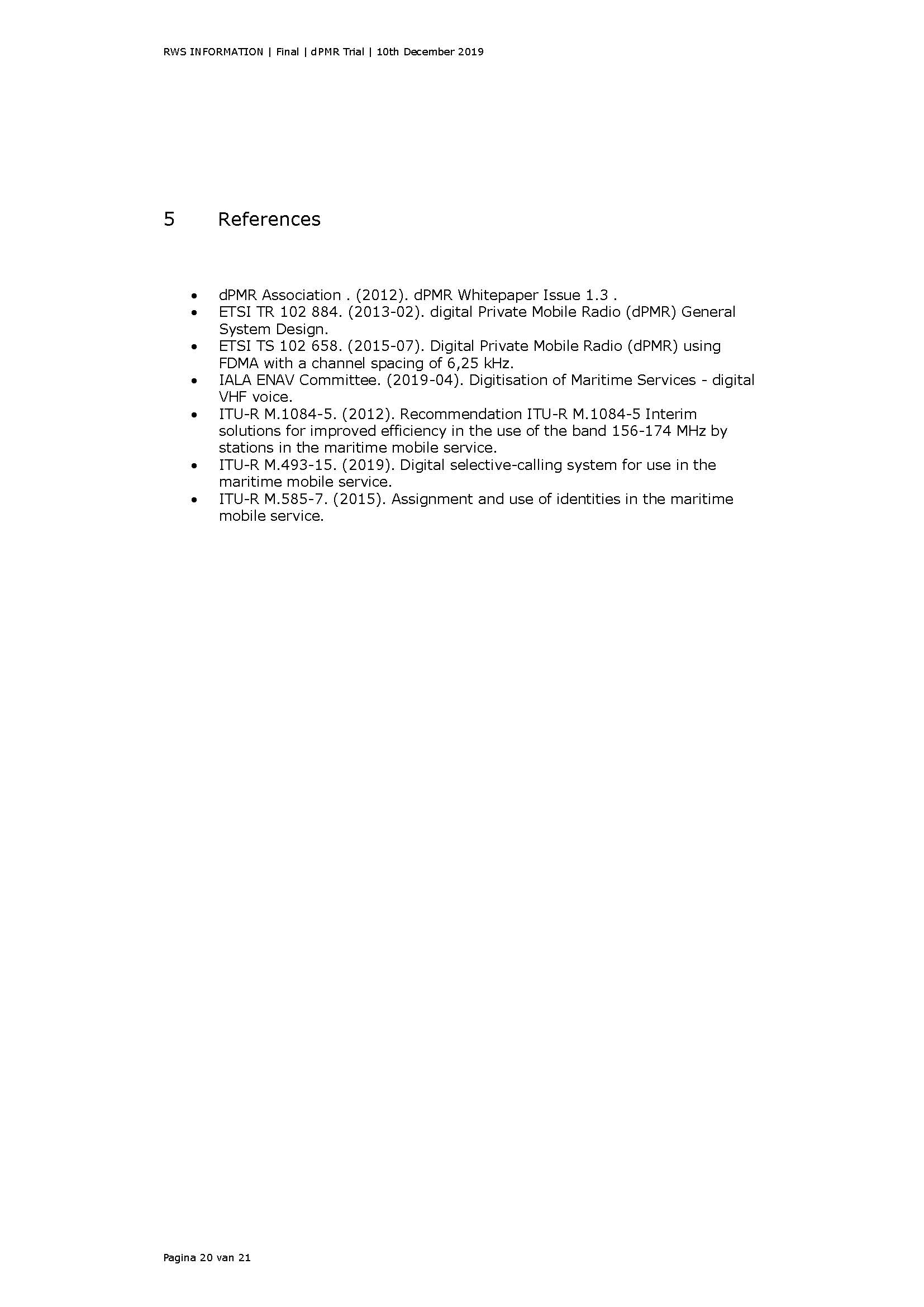


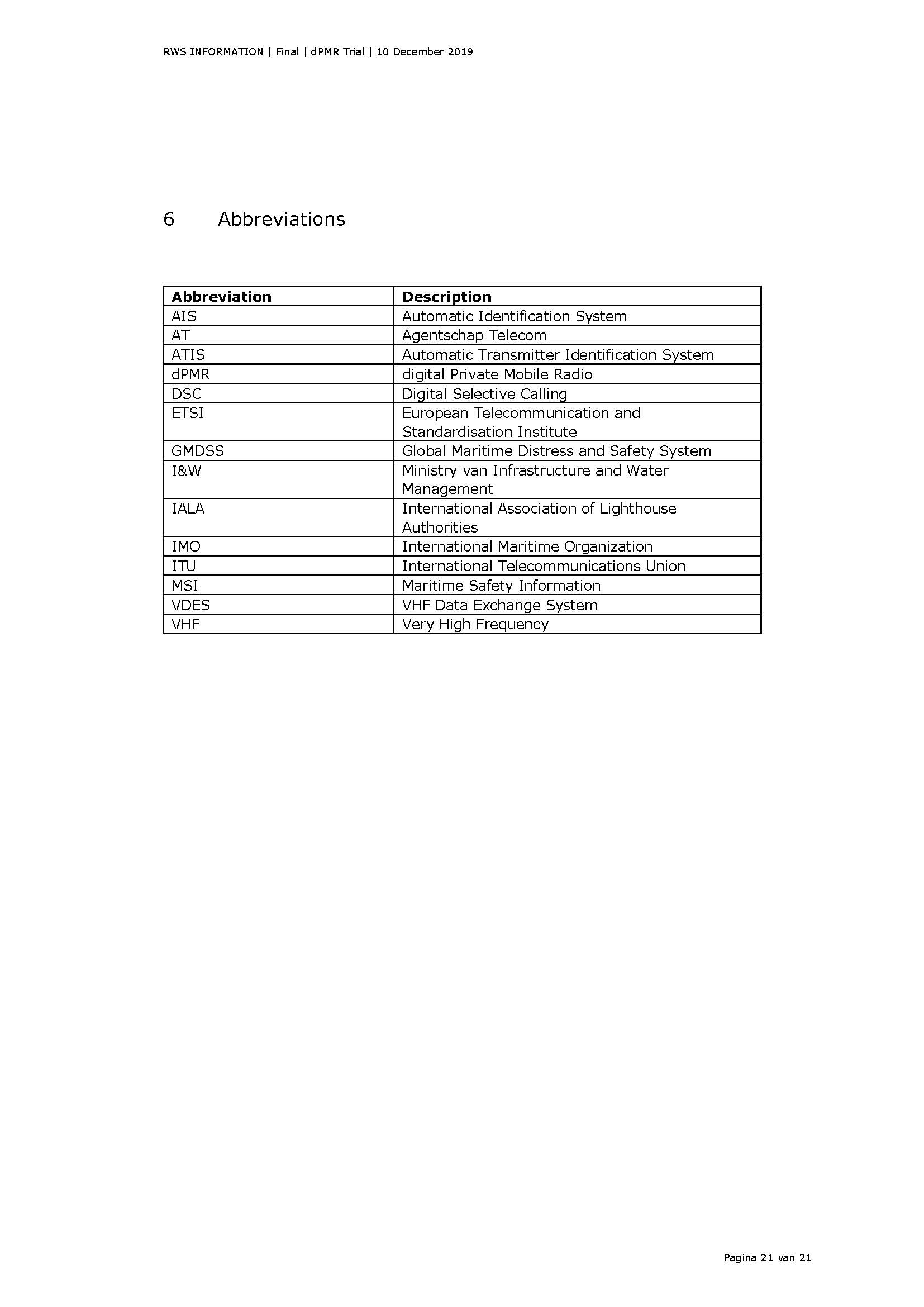












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