VIETNAM NATIONAL UNIVERSITY, HANOI VNU UNIVERSITY OF ENGINEERING AND TECHNOLOGY

SOCIALIST REPUBLIC OF VIETNAM Independence – Freedom – Happiness

INFORMATION ON DOCTORAL THESIS

1. Full name :
3. Date of birth:
5. Admission decision number:
6. Changes in academic process:
(List the forms of change and corresponding times)
7. Official thesis title:
8. Major: 9. Code:
10. Supervisors:
(Full name, academic title and degree)
11. Summary of the new findings of the thesis:The aim of this thesis is to conduct research on
recent Marine Data Transmission Systems to evaluate the advantages and disadvantages of each
system. Thereby, the idea of building a new Marine Data Transmission System is proposed. The
new system can transmit modulated signal containing location information, and status of vessel with
many advantages such as flexible frequency conversion, high efficiency transmitting power
combination; the receiver at Central Station on land is capable of receiving and demodulating signal
to retrieve location, and status information of vessels. Besides that, the proposed system can store
itinerary of vessel in order to improve the management capability and navigation support for marine
vessel. In the framework of the thesis, many technical solutions have been proposed, studied,
designed, and tested. Specifically, the power combination solution using a high-frequency splitter
/combiner DGS-based coupler is focused on research and optimized in design. Finally, an S-band
information system model is developed to validate and evaluate the proposed engineering solutions.
12. Practical applicability, if any:
13. Further research directions, if any:
14. Thesis-related publications:
(List them in chronological order)
Data

Signature:	Signature:
Full name:	Full name:
Note: "Information on Doctoral Thesis" must be proceed	essed on Microsoft Word, font Unicode Times New
Roman, letter size 13. "Summary of the new findings of the	the thesis" should be one-A4 page long.