

# Maritime Digital Communication Technology for e-Navigation

## Technology Overview

- 76.8kbps data rate over 25kHz bandwidth
- 8 times faster data rate than existing AIS
- Use maritime VHF CH 2027, 2028

## Core Technologies

- DSP and FPGA based flexible design for adaptation
- 8-OFDM plus 16QAM modulation
- 70dB Adjacent Channel Rejection
- Real time PAPR (Peak to Average Power Ratio) reduction technology

## Application Area and Advantages

- Local language based SMS service
- Weather information from coast station to ship
- Navigation course exchange and confirm services
- Alerting and report for danger area during navigation

## Accomplishments

- Implementation of coast and ship station
- Field test and maritime safety related service trial
- Pending IPR: Real time PAPR reduction method
- Preferred partnership: Technology transfer or licensing

