

# Sternula MMS Routing Shore

## *The World's First MMS Routing Service for VDE-TER*

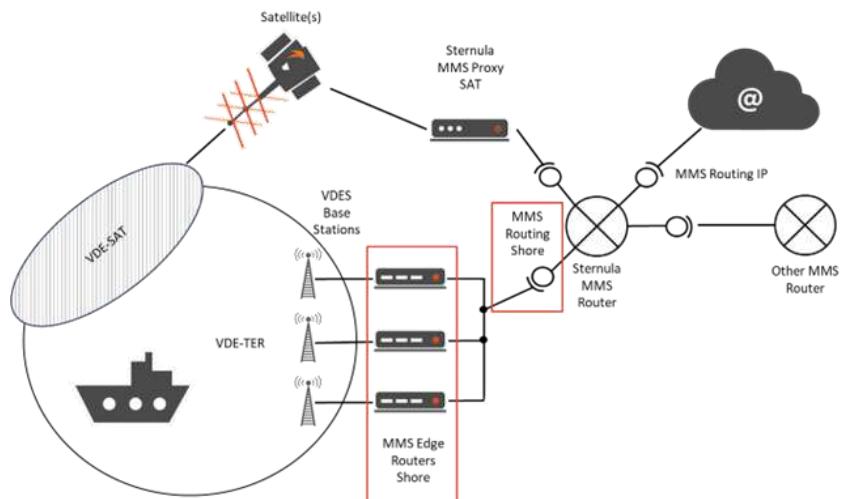
The Sternula MMS Routing Shore stands as the pioneer shoreside MMS Edge router/Router integration service designed according to the RTCM MMS specification 13900.0 for Maritime Messaging Service and Protocol and IALA guideline G1117.

The Sternula MMS Routing Shore is a service to connect your VDES base stations via the Sternula MMS Proxy Shore to the MMS Routing Network. It directs maritime communications to exchange data and messages between authenticated maritime users such as maritime administrations, port authorities, and services, ship crew, captains, pilots, and personal equipment, in an efficient, policy-governed, and seamless manner.

Together with one Sternula MMS Proxy Shore per VDES base station, the Sternula MMS Routing Shore service enables your terrestrial VDES base stations to become part of the Sternula MMS routing solution to route your and/or other secure maritime services over your VDE-TER network to ships and other mobile VDES equipment.

## What is it?

The Maritime Messaging Service (MMS), as defined in the RTCM MMS 13900.0 specification, is a messaging component that allows authenticated maritime stakeholders to send and receive messages in an efficient, reliable, and seamless manner using the Maritime Connectivity Platform (MCP). MMS solves the problems of the current maritime wireless data communication system.



## How does it work?

The Sternula MMS Routing Shore enables the transfer of digital maritime "messages" containing arbitrary digital data, using VDES terrestrial base stations.

The Sternula MMS Proxy Shore makes it possible for the Sternula MMS Router to use the connected VDES base station for MMS communication with VDES-equipped ships in the terrestrial coverage area of that base station. Such MMS services can be selected to be accessible by ships with VDES equipment in the coverage area of that base station.

The Sternula MMS Routing Shore manages access to services and the mobility of ships in a VDES shore network. It provides traffic statistics and accounting functions for management.

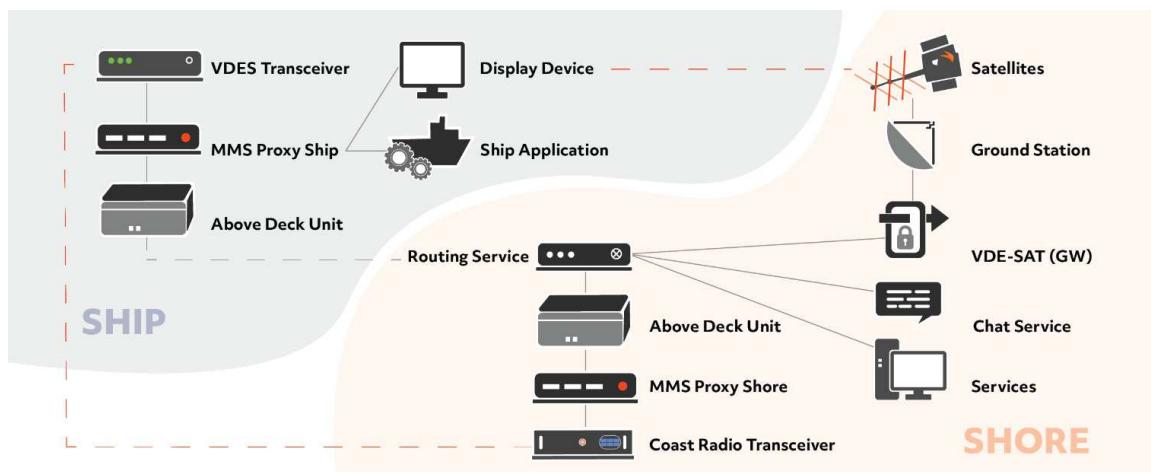
The Sternula MMS Routing Shore service allows coastal terrestrial base station network operators to become part of the MMS network, and as such transport MMS services over that network.

## Create Your Own Application

- Navigational Warnings
- Weather Forecasts
- Ice Charts
- Route exchange
- Virtual AtoN

## Features

- Enables e-Navigation services
- Designed to meet new advanced AIS 2.0 terrestrial communication modes
- Designed in line with the RTCM MMS specification 13900.0
- Connects the Sternula MMS Router with a VDE-TER Base Station
- Designed to integrate with AIS (ITU-R M.1371) and VDES (ITU-R M. 2092) equipment



### Compatibility:

- Sternula Routing Service Shore to connect with the Sternula MMS Router
- One Sternula MMS Proxy Shore for each terrestrial VDES base station to be used for MMS transport, connected via IP

## Technical Specifications

### VDES Functionality

<b>VDE-TER</b>	ITU-R M.2092-1
MMSI White lists	
MMSI Black lists	
<b>MMS Policy Management Functions</b>	
List of services to be accessible for ships (per MMS Proxy Shore)	
Allow all or only whitelisted ships to use VDE-TER	

### Management Functionality (accessible for customer)

Database with specific details for each MMS message transported

### Statistic Functions

Bytes/hour, /day payload  
Number of messages /hour and /day

### Interfaces

<b>MMS Proxy Shore</b>	MMTP/SSL/IP
1 MMS Proxy Shore per VDES Base Station	