1. Preface

Since Japan is surrounded by water all sides, marine transport rivals land transport as one of its primary
transportation methods. There is a large industrial zone known as the “Pacific belt zone” extending from the Kanto
region to northern Kyushu, with distribution of goods highly active in its surrounding areas. On the other hand, as
there are also a number of excellent fishing grounds there, it is an area congested with many different vessels
using the same waters.

It has been one year since operation of the “Japan Marine Accident Risk and Safety Information System”
(hereinafter referred to as “J-MARISIS”) was started at JTSB in May 2013. Users of this system can use the
Internet from a PC to create map displays for themselves, showing information about what types of accidents have
occurred in the past in marine areas of interest, what kinds of risks exist in those areas, and what level of traffic
density those areas have (refer to page 3 for an explanation of “traffic density”).

Looking at the Pacific belt zone using J-MARISIS shows that areas such as Tokyo Bay, Ise Bay, Osaka Bay, Bisan
Seto, Kurushima Strait, and Kanmon Strait are displayed in blue to signify that they have high traffic density, and
also that there are many marks indicating accidents in these locations, which suggests that these are areas with
active marine traffic and a high frequency of accidents occurring in them.

Recent serious marine accidents have resulted in the loss of precious human lives as well as vessels and cargo.
These include an accident that occurred in September 2013 in waters to the west of Izu Oo Shima, involving a
collision between cargo ships leading to 6 fatalities with 1 vessel capsizing and an accident in March 2014 at the
mouth of Tokyo Bay, also involving a collision between cargo ships leading to 1 fatality, 8 people missing, and 3
people injured with 1 vessel sinking (both of these accidents are currently under investigation at JTSB).

In this context, we will provide accident case studies, with statistical data, by using J-MARISIS while focusing
on a frequently occurring type of accident that involves a collision between vessels in areas with high traffic
density, especially areas where serious marine accidents occurred or areas where characteristic accidents occurred
near the entrances or exits of traffic routes, etc. prescribed in the Maritime Traffic Safety Act (not including traffic
routes themselves) (*1).

We hope that this digest will be used as teaching materials on various occasions such as safety seminars held by
parties concerned, and will be able to contribute to the prevention of similar accidents.

Figure 1: Traffic density conditions according to J-MARISIS
(http://jtsb.mlit.go.jp/hazardmap/index_en.html)