



## The Australian Transport Safety Bureau (ATSB)

### *Marine Incident Analysis and Safety Information System (MIASIS)*

#### The Client

The Australian Transport Safety Bureau (ATSB) is an operationally independent body within the Federal Department of Transport and Regional Services and is

Australia's prime agency for transport safety investigations. The bureau is entirely separate from transport regulators and service providers. The ATSB's objective is safe transport. Its mission is to maintain and improve transport safety and public confidence through excellence in:

- independent transport accident and incident investigation
- safety data analysis and research
- safety communication and education

#### The Marine Investigations Unit (MIU)

The Navigation Regulations require that marine incidents are investigated to establish the causes of the marine accidents. Such investigations are carried out to help prevent similar accidents in the future.

<b>Project</b>	<p>The project involved redevelopment of the MIASIS application to provide the investigations unit with a more structured and modular application to assist in the capture of information, recording and reporting of the marine incidents.</p> <p>The Marine Incident Investigations Unit of the ATSB has developed, over the last seven years, a database for the recording and analysis of marine accidents and incidents involving vessels subject to the Commonwealth navigation Act.</p>
<b>Duration</b>	<p>2 Month – Business Analysis &amp; requirements modelling</p> <p>3 Months – The re-development of the MIASIS application</p>
<b>Outcome</b>	<ul style="list-style-type: none"><li>• The re-development and enhancement of the application in newer technologies</li><li>• The development of an easy to use ad-hoc reporting facility, so that requested reports can be provided</li><li>• Delivery of a more adaptable, and versified application which included added functionality</li></ul>



<b>Key Technologies</b>	<ul style="list-style-type: none"><li>• .NET Framework</li><li>• Windows forms</li><li>• Crystal Reports</li><li>• C#</li></ul>
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### **The Need**

- The MIU required redevelopment of the system to improve the reporting flexibility of the system.
- The MIU required additional functionality within the system
- Outputs identifying human factors involved in accidents are in accordance with IMO Res.A.884(21)
- Outputs identifying equipment/part deficiency/ failure involved in accidents
- Quantify accidents by financial year and on a running basis, issue reports on type of incident, ship, flag, year, nationalities of crew, location, state of weather, month and time of day
- Provide information on marine incidents easily to industry when required

### **The Solution**

Ross Human Directions Technology Solutions worked with the MIU to establish the requirements and analyse the structure of the current database to allow redevelopment of a modular solution that provides the report flexibility sought by the MIU.

Ross Human Directions Technology Solutions managed the development of the application under the PRINCE 2 project management methodology. The application was written in C# with .NET windows forms user interface. This application now provides the MIU with a robust, maintainable application with additional functionality that was not available from the previous system.