



Producing Maps for Maritime Security Plans

This document outlines the key elements to be included when producing maps. This document can be used as guidance to assist with producing maps for maritime security planning purposes.

Before you start drafting you need to know:

- where the boundary you need to map is to be located
- what is to be included within this boundary and what is to be excluded
- what interests exist in the area being mapped
- who can provide specialist spatial advice

To ensure a level of consistency and reduce the risk of misinterpretation, maps need to include:

- a map title
- a neatline or map border
- orientation
- a scale bar
- a legend
- the boundary being depicted
- coordinates
- datum referencing
- projection details (where relevant)
- numbered maps, insets and pages
- the date the map was produced
- reference to who created the map

Map Title

All maps require a map title in order to describe what is being mapped. This is essential and is usually in the largest font size on the document (typically pt 16 font).

A neatline

A border line or neatline is drawn around the extent of a plotted map to separate the body of the map from the rest of the document

Orientation

A rose compass or north indicator is included in a map to show the position of features mapped in relation to true north, to points on the compass, or to a specific place or objects. Additionally, each feature mapped needs to be clearly oriented within the port and surrounds.

Scale Bar

Maps produced need to be to scale and the applicable scale referenced by use of a scale bar.

Legend

All important features shown on the map need to be described in a clear legend. Where different colours are used to represent different features, these need to be identified in the legend. It is preferred that patterns or hachures are not used, as they copy and print poorly.

A boundary

- Boundaries are generally described as a series of connected lines that enclose a particular geographical area. The geographical area being depicted may be a maritime security zone (MSZ). The boundary of the MSZ needs to be distinct from other details or features in the map.

Coordinates

In most cases maritime boundaries are defined using a series of coordinates which indicate the shape of the bounded feature e.g. extent of the security regulated port or maritime security zone. All coordinates must reference a horizontal datum. Where coordinates are not used the presence of a grid around the border of the map assists users to locate features.

Datum

Where coordinates are included in a map ensure the appropriate datum is cited.

- GDA 94 or WGS 84 are the preferred geodetic datum to use.

Datum commonly used in Australia include:

- Geocentric Datum of Australia (GDA94)
- Australian Geodetic Datum (AGD66) (AGD84)
- International Terrestrial Frames (ITRF2000)

Projection details

The latitude origin and longitude of origin (central meridian) need to be specified. Often this information is placed adjacent to the scale bar. Mercator projection is commonly used for hydrographic charts. Australian nautical charts typically use a Mercator projection and WGS84.

Maps numbered

Where more than one drawn map is required to depict different features – e.g. maritime security zones at different maritime security levels – each map in the series needs to be numbered e.g. Map 1 of 5, Map 2 of 5, etc..

The date the map was produced

Maps must show the date the map was produced and/or the date which reflects the currency of the information portrayed (e.g. 'January 2008' / 'Data current to November 2007')

Reference to who created the map

It is important to reference who produced and/or published the map and who provided the source information. It is also useful to include contact details e.g. '-Produced by Springville Ports Corporation, Ph 05 7354 2609, www.springvilleports.com.au.-