

Appendix D – Recommended standards for map production

CRIS STANDARDS FOR MAP PRODUCTION

Introduction

The publication of maps is a major output product from the Client and Resource Information System (CRIS). Since this work is being carried out by a number of different people using different software, it is necessary to set some standards for map production so that a professional product is achieved with the appearance of belonging to a set or series. While for reasons of scale etc. it may be difficult to keep map layout exactly the same, we can still adopt some standards with respect to map content, text and symbology and encourage consistency of appearance and proportion of the various map elements. These standards apply equally to digital (.pdf, web-based or image) map products as well as traditional paper maps. The standards adopted here conform to AS3736-1990, 'Geographical information systems – Bibliographical elements on maps' and internationally accepted cartographic conventions.

Map content

The following section sets out the minimum requirements for map products, with respect to map content, layout and background information.

Essential elements:

- a title for the map
- a legend for the map
- a scale bar and north point. **NB: This applies to maps produced using a projection only. Do not put scale or north point on a non-projected map as these will be incorrect.**



Use GeoMedia scale bar style single block with centreline, ensure that label is 'kilometres' (or metres) not 'kilometers' (or meters).

NB: Avoid the use of representative fraction statements, eg. 1:10 000 wherever possible as these will be wrong if a map is copied and reduced or stretched, for example to fit a page in a report. The scale bar is sufficient, as this changes with the map when it is scaled.



Use GeoMedia north arrow symbol arrow17.wmf.

Map layout

Landscape or portrait format may be used, depending upon the size and shape of the area of interest. NB: The main aim of map layout is to maximise the area available for the map, and to minimise the appearance of 'blank' areas within the map.

1. Main title to be placed **top centre** or **top right** of the map wherever possible. In cases where space is limited, the title may be placed above the legend in a vacant area within the neatline of the map in a white box.
2. Map legend to be placed at the **bottom** or to the **right** of the map if possible. Where the legend is large and there is insufficient room to place outside the neatline, it may be placed in a vacant area within the neatline of the map in a white box.
3. Scale bar, north point, edition number and date to be at the **bottom** or to the **right** of the map.
4. Projection, datum and grid statement to be placed at the **bottom** or to the **right** of the map.
5. Disclaimer to be placed at the **bottom** or to the **right** of the map.
6. Grid coordinates to be placed within the map border.

Background information

The purpose of reference information is to serve as a background for location purposes, and as such, should not dominate the map. The following list is indicative of the main base map themes that may be displayed, and does not imply that all of these must be displayed on all maps. The following symbology should be used:

- cadastral (parcel) boundaries – 60% grey, 0.5 point, solid line
- property boundaries (groups of cadastral parcels) – dark blue, 1 point, solid line
- topographic roads-highways – red, 2 point, solid line
 - primary – red, 1.5 point, solid line
 - secondary – red, 1 point, solid line
 - minor – red, 0.5 point, solid line
 - tracks – red, 0.5 point, short dash line
- hydrographic features – blue, 1 point, solid line. NB: If hydrographic data is available showing intermittent features in a dashed line this symbology may be adhered to
- contours – orange, 0.25 point, solid line. Index contours – 1 point, solid line. NB. 1) If contours are shown, a statement of contour interval and height datum (Australian Height Datum) must be given in the map legend. 2) Where contours are to be displayed over an aerial photo background, another colour may have to be used depending on the colour in the base image. Preferably select a colour with an 'earthy' tone
- grid information. MGA or Latitude/Longitude coordinates with tick marks around the map neatline. Where possible, place tick marks outside of the map neatline. Absolute minimum is coordinates on each corner of the map. **NB: Whether Latitude/Longitude or Eastings/Northings coordinates (or both) are shown will depend upon the scale of the product. The following general rules can be used for guidance:**
 - 1:250 000 to 1: 10 000 000 Latitude/Longitude only
 - 1:25 000 to 1:250 000 Latitude/Longitude and Eastings/Northings
 - 1:1 000 to 1:25 000 Easting/Northing only

To enable differentiation between Latitude/Longitude and Eastings/Northings coordinates, place Latitude/Longitude ticks and numbers in black, Eastings/Northings ticks and numbers in cyan
- the date of production
- statement of source data-for example, title, author, scale and date. If maps are to be incorporated into a report, these can be given in the body of the report.

- a statement of projection, datum and grid used. The GDA datum is preferred, as this is now the national standard. The GDA logo can be shown on maps but is no longer essential.

Projection: Transverse Mercator

Datum: Geocentric Datum of Australia 1994

Grid: Map Grid of Australia 1994 Zone XX

Vertical Datum: Australian Height Datum 1971**

Contour Interval: X m**

** These only to be included when map shows contours.

Optional elements: The following elements are optional, but may in many cases be highly desirable or essential depending upon the purpose of the map:

- a location diagram showing the map's location in Western Australia. If maps are to be incorporated into a report, this can be in the body of the report
- grid lines may be shown on the map in addition to the essential tick marks and numbers if required. Place Latitude/Longitude grid lines as a fine (0.25 point) black line and Eastings/Northings grid lines as a fine (0.25 point) cyan line
- logos of bodies involved. If maps are to be incorporated into a report, the logos can appear on the report cover, and do not need to be repeated on the maps
- a reliability diagram. This is especially applicable in situations where a map has been compiled from a variety of source data with differing scales or levels of attribution
- acknowledgments, can include funding bodies, map produced by, survey carried out by etc
- a disclaimer, the following is suggested: 'While all reasonable care has been taken in the preparation of the material in this document, the (*insert organisation's name*) and its officers accept no responsibility for any errors or omissions it may contain, whether caused by negligence, or otherwise, or for any loss, however caused, sustained by any person who relies on it'.