

Appendix L - Glossary

Glossary

Abandoned	A feature, which is no longer in normal use and is not maintained. Future use is not anticipated, although operations could possibly be resumed after repair. The term is applied to roads, railways and airfields, quarries etc. all of which, although not immediately useable for the original purpose, are still landmark features.
Aboriginal (Indigenous) lands	Land set aside for use of Indigenous people, access to which is controlled by Federal or State authorities or by Aboriginal/ Indigenous Land Councils.
Accuracy	The degree of conformity with a standard, or the degree of perfection attained in a measurement. Accuracy relates to the quality of a result, and is distinguished from precision, which relates to the quality of the operation by which the result is obtained.
AGD66	Australian Geodetic Datum 1966. The datum used for the determination of co-ordinates for Geoscience Australia topographic map products and data of medium scale prior to the introduction of the GDA94 datum (see marginalia detail for further information on which datum was used for a particular map & projection information internal to data coverages for digital products).
AGDB	Australian Geographic Data Base program. A program initiated by AUSLIG to produce GIS quality digital spatial data from its map production material.
Aerodrome	An area for the movement of aircraft and for the receipt and discharge of cargo. Aerodromes may be licensed by Airservices Australia.
Airport	Technically an aerodrome at which facilities exist for the shelter, servicing and repair of aircraft, and at which major navigation aids are installed. Note: Airport is used generically in these specifications to include licensed Aerodromes.
Alignment	The direction or position of a linear feature (e.g., road or railway), on a map in relation to surrounding topographic detail.
Altitude	The vertical distance of a level, a point or an object considered as a point, measured from Mean Sea Level.
AMG	See Australian Map Grid.
AMG66	The grid (metres) coordinate set based on the AMG and the 1966 national geodetic adjustment.
Approximate	Very near, fairly correct, near to the actual. 'Approximate Position' is used as a descriptive note on a map to indicate detail, the position of which cannot be determined to the accuracy of the map accuracy statement.

Area feature	A feature, which is portrayed as a region or surface. An area feature is bounded by one or more polygons.
Area symbol	A continuous and distinctive shading, tone or repetitive pattern employed on a map (or chart) to cover an area (or areas) where a particular phenomenon occurs, or to which a particular value is attributed.
Attribute	A descriptive characteristic of a feature. An attribute has a defined set of attribute values.
Attribute object	The attribute object holds the non-locational information about the feature instance
AUSLIG	The Australian Surveying and Land Information Group, which subsequently amalgamated with Australian Geological Survey Organisation (AGSO) to form Geoscience Australia.
Australian Geodetic Datum (AGD)	The geodetic datum adopted by Australia in 1966, defined by the parameters of the Australian National Spheroid and the coordinates of the Johnston Geodetic Station.
Australian Height Datum (AHD)	The datum used for the determination of elevation in Australia. The determination used a national network of benchmarks and tide gauges and set Mean High Water as zero elevation.
Australian Map Grid (AMG)	A cartesian coordinate system based on the Universal Transverse Mercator projection and the Australian Geodetic Datum. The unit of measure is the metre. (see also AMG66)
Australian National Spheroid	A reference spheroid for the computation of surveys, with specific application to Australia and the territories administered by Australia, with exceptions, having the following dimensions: Semimajor axis 6 378 160.0 metres Flattening or ellipticity of 1/ 298.25. and whose minor axis is defined to be parallel to the earth's mean axis of rotation at the start of 1962, and whose plane of zero geodetic longitude is parallel to the vertical through the Bureau International del Heure (BIH) mean observatory near Greenwich; that is to say, 149°00' 18.855" west of the vertical through the photo zenith tube at Mount Stromlo. The position of the centre of the spheroid is defined by the coordinates of the Johnston Geodetic Station. (c.f., Australian Geodetic Datum).
Azimuth	The azimuth of a point is the angle reckoned clockwise in a horizontal plane between the local meridian and that point.
Base map	A map or chart showing certain fundamental information, used as a base upon which additional data of specialised nature are compiled or overprinted.
Base material/digital data	This is hardcopy material or digital data which Geoscience Australia has designated as the starting point on which producers build a new dataset and apply any appropriate revision source material. This includes entities such as

	repmat, latest previous edition map produced by GA, Maps produced by other mapping authorities, GEODATA 250K series 2, State mapping authority digital data.
Bearing	The horizontal angle at a given point measured clockwise from a specific reference datum to a second point.
Bleed (Printing)	Where the printed area extends beyond the trim line so that once trimmed the ink extends to the edge of the paper.
Bleed edge (cartography)	That edge of a map or chart on which detail is extended to the edge of the sheet. Maps, which have a bleed edge, overlap the adjoining maps and generally duplicate the detail thereon, along their northern and eastern edges.
Boundary description	A written description of the alignment of a boundary which enables its position to be correctly located on the ground and plotted to scale on graphics. The boundary is said to be described by metres and bounds.
Boundary disclaimer	A note usually in the marginal area of a map or chart proclaiming that boundaries portrayed on the face of the map or chart are not necessarily authoritative.
Braided Stream	A watercourse comprised of a number of interlaced channels resulting from irregular stream discharge and deposition of course material.
Central meridian	The longitude of origin at the centre of each zone of the Universal Transverse Mercator (UTM) grid. The central meridian is arbitrarily given the value 500 000 metres.
Chain	A line composed of a sequence of non-intersecting line segments bounded by nodes. Chains reference the polygons to the left and right of the chain, and may reference the start and end nodes.
Chart	A special purpose-map, generally designed for navigation or other particular purposes, in which essential map information is combined with other data critical to the intended use.
Clone	An exact copy of a point, line or polygon feature which has precisely the same co-ordinate position as the original feature. Cloned linear or polygon features will have exactly the same number of arcs and associated vertices and nodes.
Coincident	Where a feature location matches exactly the same co-ordinate position as another feature. The coincidence may be either at a single point or along a line feature. Where the endpoints of a linear feature leave the coincident section of line (ie. to change direction) and fall within 1 metre of that line, they are considered to be coincident for data purposes.
Colour Control	Blocks of colour of known density to assist the printer to maintain consistent colours across the sheet.

Colour Separations	Film separations -- one for each colour, which will be reproduced by a separate plate.
Compilation	The production of a new or revised map or chart, or portion thereof, from existing maps, aerial photographs, satellite imagery; surveys, and other source data.
Connector feature	An artificial linear feature used to connect a linear network across an area feature. This allows continuity of the feature and assists the process of linear network analysis.
Control	A collective term for a system of marks or objects on the earth or on a map or photograph, whose positions or elevations, or both, have been determined.
Convergence of meridians	The angular drawing together of the geographic meridians in passing from the equator to the poles. At the equator, all meridians are mutually parallel; passing from the equator, they converge until they meet at the poles, intersecting at angles that are equal to their differences in longitude.
Datum	<p>A point, plane, or surface to which systems of measurement are referred or related to one another. Hence:</p> <p>1. GEOCENTRIC DATUM A reference frame which has its origin as the Earth's centre of mass, which is directly related to the orbits of satellites. Positioning from these satellites is a critical element in modern surveying, mapping, geographic information systems, navigation, aviation, land and sea transport, emergency services, law enforcement and recreation.</p> <p>2. GEODETIC DATUM the position of a reference spheroid as defined by the position of one selected station, usually near the centre of the survey area, known as the origin, and the azimuth from the origin to an adjoining station.</p> <p>3. VERTICAL DATUM A level surface to which elevations are referred, usually, but not always, mean sea level.</p>
Definite	Exact, precise, defined. Especially that detail which is unambiguous to the map user and may be accurately plotted
DEM	See Digital Elevation Model.
Descriptive name or term	Written information on a map or chart used to specify the nature of a physical or cultural feature. Also called toponym.
Digital Elevation Model	A depiction of relief using points and lines, which contain the elevation of each point or the elevation of each point in a line. The data may be in a regular grid or have an irregular spacing.
Dismantled	A feature, such as a railway, from which vital components have been removed and the remaining evidence of a railway is primarily the cleared right of way.
Disused	A feature components of which are still in place but which is no longer in use.

Easting	A linear distance eastwards from the vertical grid line, which passes through the Origin (or False Origin) of a Grid system.
Edition number	A higher number indicates that a map contains later information than a similar map bearing a lower number, and the highest edition number is therefore the current edition of a map.
Elevation	Vertical distance from a datum, usually Mean Sea Level to a point or object on the earth's surface.
Ellipsoid	A mathematically defined surface to which positions and measurements are referred.
Extension	The extension of detail outside the neatline of a map.
False origin	A datum point chosen to the south and west of the TRUE Origin of a grid to ensure that all points have positive grid co-ordinate values.
Feature	Cartographic feature. Spatial data feature. An abstraction of a real world phenomenon selected properties of which are illustrated on a map or held as spatial digital data.
Feature class	A group of features defined by a set of rules and which have common characteristics and relationships that are properties of the corresponding real world phenomena.
Feature instance	An occurrence of a feature class that has a unique set of attribute and relationship values.
Field check	The operation of checking a map compilation manuscript on the ground. Also called Field completion.
Gauge	A dimensional standard, especially the distance between the two inside edges of the rails of a railway line.
Gauge (railway)	Broad Gauge 1600 mm Narrow gauge 1067 mm Standard Gauge 1435 mm
Gazetteer	A list of geographic names, together with references to their positions and, sometimes, descriptive information.
GDA94	See Geocentric Datum of Australia (GDA94)
Generalisation	A process by which features which cannot be separated at a given map scale are displaced from their true positions or simplified for the sake of cartographic clarity.
Generic term	That part of a name which describes the kind of feature to which the name is applied, and which has the same meaning in current local usage; e.g., the generic term 'cape' in Cape York.
Geocentric Datum of Australia (GDA94)	Geocentric Datum of Australia 1994. A geocentric datum used for the determination of geographic co-ordinates. GDA94 is now in use for GEODATA TOPO 250K series 2

	and GEODATA TOPO 100K series 1 as well as associated topographic map products. See Appendix M (for technical description).
GEODATA	The commercial name adopted by Geoscience Australia (formally AUSLIG), for its range of quality digital data products.
Geodesy	The science concerned with the determination of the size and figure of the earth (Geoid) by such direct measures as triangulation levelling and gravimetric observations; which determines the external gravitational field of the earth and to a limited degree the internal structure.
Geographical coordinates	A position given in terms of latitude and longitude.
Geographical sheet lines	The lines of latitude and longitude bordering the area of a map or chart and so form the edge of the map sheet.
Geoid	The equipotential surface in the gravity field of the earth, which coincides, with the imaginary extension of mean sea level continuously through the continents. The direction of gravity (the plumbline) is perpendicular to the geoid at every point. The geoid is the surface of reference for astronomical observations and for geodetic levelling.
Georef (Geographic Reference)	A world wide positional reference system that may be applied to any map or chart graduated in latitude and longitude regardless of projection.
Geoscience Australia	An Australian Government Agency responsible for geoscience research and geospatial information. It was created in November 2001 through the amalgamation of the Australian Survey and Land Information Group (AUSLIG) and the Australian Geological Survey Organisation (AGSO).
GIS	Geographic Information System. A spatial database, which is manipulated with a set of spatial operators or commands.
Graticule	A network of lines on a map or chart representing the parallels of latitude and meridians of longitude of the earth.
Great circle	A circle on the surface of the earth, the plane of which passes through the centre of the earth. The equator and all the meridians of longitude are Great Circles.
Greenwich meridian	The meridian through Greenwich, England, serving as the reference for Greenwich time, in contrast to local meridians. It is accepted almost universally as the prime meridian or the origin of measurement of longitude.
Grid	Two sets of parallel lines intersecting at right angles and forming squares; a rectangular Cartesian coordinate system that is superimposed on maps, charts, and other similar representations of earth's surface in an accurate and consistent manner to permit identification of ground locations with respect to other locations and the computation of direction and distance to other points.

Grid bearing	A bearing measured clockwise from Grid North.
Grid convergence	The angular difference in direction between Grid North and True North. It is measured east or west from True North.
Grid magnetic angle	Angular difference in direction between Grid North and Magnetic North. It is measured east or west from Grid North.
Grid north	The northerly or zero direction indicated by the Grid datum of directional reference.
Grid reference	The position of a point on a map expressed in terms of grid letters and/or coordinates. Conventionally the 'Easting' distance is given before the 'Northing'.
Grid zone designation	An arbitrary division of the earth's surface designed for identification without reference to latitude or longitude.
Height	The vertical distance from the base to the top.
Heliport	A constructed and maintained landing area for helicopters.
Highest astronomical tide	The highest tide level, which can be predicted to occur under average meteorological conditions and under any combination of astronomical conditions.
Horizontal control	A network of stations of known positions referred to a common horizontal datum (in Australia, AGD) and which control the horizontal position of mapped features.
Hydrographic chart	A chart for marine navigation showing water depths, nature of bottom, elevations of land features, configuration and characteristics of the coast, dangers to navigation, navigation aids.
Hydrography	Those features both natural and constructed of which water is the main constituent, either permanently or intermittently. Also, a GEODATA theme consisting of features pertaining to the drainage and run-off of water.
Indefinite	Vague, undefined; that detail which cannot be accurately defined.
Index to adjoining sheets	A diagram, on a map, which shows names and/or series numbers of Adjoining Sheets in the same or related series.
Infrastructure	A GEODATA theme consisting of features pertaining to transportation systems and also includes named localities and places.
Inset	A separate map positioned within the neat line of a larger map. Three forms are recognised: <ol style="list-style-type: none"> 1. An area geographically outside a sheet, but included therein for convenience of publication, usually at the same scale. 2. A portion of the map or chart at an enlarged scale. Sometimes called an 'inset plan'. 3. A smaller scale map or chart of surrounding areas,

	included for location purposes.
Isogonic	Of equal magnetic declination. Isogonals are lines of equal magnetic declination on a map.
Joint Operations Graphic (JOG)	A military map specification used for some 1:250 000 scale maps of Australia.
Landing ground	Unlicensed facility with clearly marked runway but no airport facilities.
Large scale map	A map having a representative fraction (scale) of 1:75 000 or larger. eg. 1:25 000, 1:12 500.
Latitude	The latitude of a place is its angular distance on a Meridian, measured northwards or southwards from the terrestrial Equator.
Layer	Subdivision of a theme into one or more layers of data on the basis of topological relationships. Linear networks, polygons and point/line features are placed in separate layers.
Linear network	A theme layer consisting of linear features, which are connected forming a pathway, along which movement is possible.
Longitude	A linear or angular distance measured east or west from a reference meridian (usually Greenwich) on a sphere or spheroid.
Lowest astronomical tide	The lowest level, which can be predicted to occur under average meteorological conditions and under any combination of astronomical conditions. For reasons of safety lowest Astronomical Tide is the datum used by Navy's Hydrographic Surveys.
Magnetic declination	The angle between true north and magnetic north. The magnetic declination varies for different places continuously with respect to time.
Magnetic north	The uncorrected direction indicated by the north-seeking pole of a compass magnetic needle.
Magnetic variation	Regular or irregular change with time of the magnetic declination.
Map	A representation of part or whole of the earth's surface usually to scale showing both natural and artificial features.
Map accuracy specifications	Specifications, which set up standards to which the completed map, must adhere.
Map Grid of Australia 1994	A coordinate system based on the Universal Transverse Mercator projection and the Geocentric Datum of Australia 1994. The unit of measure is the metre.
Map projection	Any systematic way of representing the meridians and parallels of the earth upon a plane surface.

Map series	A group of map sheets usually having the same scale and cartographic specifications and collectively identified by the producing agency.
Map sheet	An individual map, either complete in itself or part of a series.
Margin	The area of a map sheet, which lies outside the Neatline.
Marginal information (Marginalia)	Information, both standard and of a variable nature, in the form of explanatory notes, symbols and diagrams printed in the margins or borders of maps, charts and other graphics.
Mean High Water (MHW)	The average height of all high waters at a place over an 18.6 year period. On small and medium scale maps MHW coincides with the coastline.
Mean sea level	The mean level of the sea throughout a definite number of complete tidal cycles.
Medium scale map	A map having a scale larger than 1:600 000 and smaller than 1:75 000. eg. 1:100 000.
Mercator projection	The conformal cylindrical projection tangential to the equator possessing the additional valuable property that all rhumb lines are represented by straight lines. Used extensively for hydrographic and aeronautical charts.
Meridian	A Great Circle arc of 180° terminated by the geographic poles.
MGA94	See Map Grid of Australia
MHW	See Mean High Water (MHW).
Minor road	Access, residential or local road.
National park	An area subject to strict control of the activities, which may take place in it, and under Government supervision to maintain its value to the public.
National Topographic Map Series (NTMS)	A civilian map series comprising a set of consistent topographic maps nationwide, at scales of 1:100 000 and 1:250 000.
NATMAP	A product name for topographic 1:100 000 and 1:250 000 scale map products using the NATMAP product name. The use of a NATMAP logo was dropped in October 2003 and replaced with the Australian Coat of Arms.
Nautical mile	A measure of distance equal to one minute of arc of a great circle on the earth's surface. The International Nautical Mile is equal to 1852 metres.
Neatline	A line, usually on the grid or graticule, which encloses the detail of a map.
Node	A point that is a junction of two or more chains or which is

	the end point of a chain.
Node/chain structure	The structuring of linear features in a theme layer so that they consist of chains broken by nodes at intersections or at the point where an attribute of the feature changes.
Non-perennial	Contains water for several months of each year or only contains water intermittently.
Northing	A linear distance northwards from the horizontal grid line which passes through the True Origin or False Origin of a grid.
Overshoot	The case where the spatial object extends beyond its actual position in relationship to other features. For example, at a 'T' road junction where the upright forms a 't'. See also Undershoot.
Parallel	A Small Circle parallel to the equator, on which all points have the same Latitude.
Perennial	Where an area normally contains water for the whole year, except during unusually dry periods, in at least nine years out of ten.
Planimetric map	A map representing only the horizontal positions of detail.
Polygon	A set of chains used to define the boundaries of an area. There is one external polygon and there may be one or more internal, non-nested polygons.
Positional accuracy	Statistical estimate of the degree to which planimetric co-ordinates and elevations of features agree with their real world values.
Principal road	Highway, regional and through road.
Prohibited area	An area into which entry is prohibited without the prior permission of the controlling authority.
Proof	An advanced copy of a map produced either from final film (chemical proof) or from a printing press (press proof) to check the design, register and/or to enable errors to be detected and corrected before final printing.
Reliability notes	A notation in the margin of a map, which shows the dates and quality of the source material from which the map has been compiled.
Relief (GEODATA)	A GEODATA theme consisting of features defining the elevation and shape of the terrain.
Relief	The deviation of an area of the earth's surface from a plane. It refers to the physical shape of the surface of the earth.
Representative fraction (RF)	The scale of a map or chart expressed as a fraction or ratio, which relates unit distance on the map to distance measured in the same unit on the ground. Sometimes called 'natural scale'.

Reproduction material	Material, generally in the form of positive or negative copies on film of each colour plate, from which a map may be reprinted without redrafting. Commonly called 'Repromat' or 'Rep mat'.
Repromat	See Reproduction material
Scale	The relationship between the distance on a photograph, map or other graphic to its corresponding distance on the ground or to another graphic. See also Representative Fraction.
Scale bar	A graduated line by means of which distances on the map or chart may be measured in terms of ground distances.
SDTS	The United States Spatial Data Transfer Standard. This standard is to be the basis of the new Australian Standard for the transfer of spatial digital data.
Secondary road	Linking and distributor road.
Segment	A direct line between a pair of vertices or a vertice and a node.
Series designation	The letters and numbers used to identify land maps and provide a unique designation for each map series by which it can be differentiated from all other series.
Sheet line system	The system by which a Map Series is divided into individual Map Sheets.
Sheet numbering system	The system by which individual map sheets within a series are numbered.
Sliver	Long, thin triangle or polygon of very small area formed by overlaying of almost coincident lines. Often a result of twice digitising the same linear feature.
Small scale map	A map having a scale smaller than 1:600 000. eg. 1:1 000 000.
Source material	Data of any type required for the production of maps and charts including, but not limited to ground control, aerial and terrestrial photographs, satellite imagery, sketches, maps and charts; meteorological information; intelligence documents and written reports pertaining to natural and constructed features of the area to be mapped or charted.
Spatial object	The spatial object holds the locational information of a feature instance. For GEODATA it is composed of either a point, node, line or polygon.
Specification	A document, which sets out the standards to be adhered to in, the production of a particular dataset, map or map series. This generally contains information, which describes or represents data structure, the sheet layout, marginal information, symbols, lettering and colours to be adopted.

Standard parallel	The parallel or parallels on a conical projection along which the principal scale is preserved.
State forest	A tract of forest land gazetted as such by a government.
SYMBAS	SYMBOLISATION ALL SERIES, specifications for topographic maps published by Royal Australian Survey Corps in 1988.
Symbol	A letter, character or other graphic device representing some feature, quality or characteristic on a map.
Terrain	A tract of country considered with regard to its natural features and configuration.
Thematic map	A map designed to demonstrate particular features or concepts. In conventional use, this term excludes topographic maps. Thematic maps include rainfall maps, population distribution maps, and the like.
Theme	The information contained in the map production material is divided into four themes, which contain logically related geographic information (Hydrography, Infrastructure Relief and Vegetation). Each theme is capable of being used as a data set in its own right.
Tile	The area of a spatial database included in a data transfer.
Tile edge	An artificial linear feature, which indicates the boundaries of the tile. The tile edge closes off polygon features, which are situated in more than one tile.
Topographic map	A map whose principal purpose is to portray and identify the features of the Earth's surface as faithfully as possible within the limitations imposed by scale.
Topography	The detailed description, especially on a map, of a locality; including its relief and any relatively permanent objects, whether natural or of human origin, thereon. The configuration of a surface, including its relief, the position of its streams, lakes, roads, cities, and other features. The earth's natural and physical features collectively.
Track (railway)	The number of sets of rails.
Track (vehicular)	Public or private roadway of minimum or no construction, not necessarily maintained.
Transverse Mercator projection (TM)	A conformal cylindrical map projection, originally devised by Gauss, also known as the Gauss-Kruaer projection. As its name implies its construction is on the same principle as the Mercator projection, the only difference being that the great circle of tangency is now any nominated meridian. Meridians and parallels are curved lines, except for the central meridian or a specified zone (meridian of tangency), which remains a straight line. Projection zones are established about the central meridian and vary in width from two degrees to six degrees of longitude, with some overlap between zones.

	<p>Properties:</p> <p>Scale: Scale is true along the central meridian, but enlarges away from the central meridian.</p> <p>Conformality: The projection is conformal; meridians and parallels intersect at right angles and all angles are correctly represented.</p> <p>Sheet fit: Map sheets at the same scale and within the same zone with the same central meridian fit perfectly along their sheet edges.</p> <p>General: The amount of scale distortion may become unacceptable at distances greater than about 1.5 degrees in longitude from the central meridian. In a modified form the projection is in general use for topographic mapping at scales of 1:250 000 and larger. See UNIVERSAL TRANSVERSE MERCATOR.</p>
True bearing	The horizontal angle between the meridian line and a line through the observed point, measured clockwise.
True north	The direction from an observer's position to the geographic North Pole.
UFI	Unique Feature Identifier.
Undershoot	The case where the spatial object stops before its actual position in relationship to other features. For example, at a 'T' road junction where the upright fails to meet the cross bar. See also Overshoot.
Universal Transverse Mercator (UTM)	A world wide systematic application of the Transverse Mercator Projection applying to the region between 80°S and 84°N latitude. The UTM is a modified TM projection whereby the natural scale of the central meridian is scaled by a factor of 0.9996 to enable a wider area to be mapped with acceptable distortion. Each Zone is six degrees of longitude in width with a half degree of overlap within the adjoining zone and having a true origin at the intersection of the central meridian of that zone and the equator.
Vegetation	A GEODATA theme consisting of features describing the vegetation cover.
Vertical control	The measurements taken by surveying methods for the determination of elevation with respect to a vertical datum.
Vertice	An intermediate point on a chain for which coordinates are held in the data.
WGS 84	World Geodetic System 1984. A geocentric datum used for the determination of geographic co-ordinates. It is for most practical purposes the same as GDA 94.
Work Package	A group of Work Units bundled together for production by a producer.
Work Unit	One map sheet and its related dataset within a work package.

World Aeronautical Chart (WAC)	A series of aeronautical charts at the scale of 1:1 000 000 that has been planned to cover the whole surface of the earth (including both land and sea areas) to a common specification laid down by the International Civil Aviation organisation.
World geodetic reference system 1972 (WGS 72)	Superseded by WGS 84. A reference spheroid having the following dimensions: semimajor axis 6 378 135.0 metres; and a flattening or ellipticity of 1/ 298.26.
Zone	See UTM.