

Maritime NSW Aid to Navigation

March 2025

Acknowledgement of Country

Transport for NSW acknowledges the traditional custodians of the land on which we work and live.

We pay our respects to Elders past and present and celebrate the diversity of Aboriginal people and their ongoing cultures and connections to the lands and waters of NSW.

Many of the transport routes we use today – from rail lines, to roads, to water crossings – follow the traditional Songlines, trade routes and ceremonial paths in Country that our nation's First Peoples followed for tens of thousands of years.

Transport for NSW is committed to honouring Aboriginal peoples' cultural and spiritual connections to the lands, waters and seas and their rich contribution to society.

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Document control

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Versions

Version	Amendment notes
v2.0	Inclusion of metadata for Spatial datasets and updated ODI template

1. Maritime NSW Aid to Navigation

This dataset provides all known aids to maritime navigation in NSW, including both private and public channel markers. Data formats include:

- API
- csv
- geoJSON
- JSON
- kml
- shapefile

The data has been collected by field staff of NSW Maritime, Coordinator General Division, Transport for NSW using differential or non-differential GPS. The key attribute is symbology which contains a numeric value from NSW Maritime symbolset representing the type of navigation aid.

This dataset also includes a zip file with icons used by Maritime in EMF format.

Data is refreshed on a weekly basis.

2. Data Structure

2.1 Maritime NSW Aid to Navigation

Field Name	Data Type	Field Description
AID_TO_NAVIGATION_TYPE	string	Description of the type of the feature
ASSET_OWNER	string	Owner of the feature (if known)
MARITIME_ASSET_ID	string	TfNSW asset identifier; null if not an TfNSW asset
POSITION_ACCURACY	string	Description of positional accuracy of the feature (if known)
PUBLISH_DATE	date	Date data last updated as Open Data
SYMBOL	string	Reference to symbol number in the TfNSW boating map symbol catalogue

2.1.1 Sample API Feed

```
{
  "type": "FeatureCollection",
  "features": [
    {
      "type": "Feature",
      "geometry": {
        "type": "Point",
        "coordinates": [ 151.246006, -33.802767 ]
      },
      "properties": {
        "cartodb_id": 68005,
        "aid_to_navigation_type": "Lit Port Beacon No Top Mark",
        "asset_owner": "Transport (Roads)",
        "maritime_asset_id": null,
        "position_accuracy": "Unknown",
        "crc": "679096DB4458B6A4",
        "publish_date": 20230801,
        "symbol": "311",
        "ref_id": 77631
      }
    },
    {
      "type": "Feature",
      "geometry": {
        "type": "Point",
        "coordinates": [
          149.886853,
          -36.969456
        ]
      },
      "properties": {
        "cartodb_id": 68006,
        "aid_to_navigation_type": "Lit Starboard Beacon No Top Mark",
        "asset_owner": "Transport (Maritime)",
        "maritime_asset_id": "SPL017",
        "position_accuracy": "Unknown",
        "crc": "4DDE234866F6F91C",

```

2.2 Sample CSV Feed

OBJECTID	MARITIME_ASSET_ID	ASSET_OWNER	PURPOSE	TYPE	POSITION_ACCURACY
15023		Port Authority of NSW	Aid to Navigation	581	Non-DGPS (Data Owner)
15024		Port Authority of NSW	Aid to Navigation	315	Survey DGPS
15025		Port Authority of NSW	Aid to Navigation	481	Unknown
15026	SBR006	Transport (Maritime)	Aid to Navigation	359	Unknown
15027		Port Authority of NSW	Aid to Navigation	315	Unknown
15028	SPL002	Transport (Maritime)	Aid to Navigation	511	Unknown
15029	SPL009	Transport (Maritime)	Aid to Navigation	301	Unknown
15030	SPL017	Transport (Maritime)	Aid to Navigation	301	Unknown
15031	SPL003	Transport (Maritime)	Aid to Navigation	301	Unknown
15032		Port Authority of NSW	Aid to Navigation	581	Non-DGPS (Data Owner)
15033		Port Authority of NSW	Aid to Navigation	414	Unknown
15034	SBR007	Transport (Maritime)	Aid to Navigation	359	Unknown
15035		Unknown	Aid to Navigation	473	Survey DGPS
15036	NSW023	Transport (Maritime)	Aid to Navigation	202	Unknown
15037	SLM259	Transport (Maritime)	Aid to Navigation	501	Non-DGPS (Data Owner)
15038		Port Authority of NSW	Aid to Navigation	355	Unknown
15039	SLM078	Transport (Maritime)	Aid to Navigation	411	Non-DGPS (Contractor)
15040	SWB011	Transport (Maritime)	Aid to Navigation	202	Non-DGPS (Data Owner)
15041	NHS089	Transport (Maritime)	Aid to Navigation	474	Non-DGPS (Data Owner)
15042	NLM228	Transport (Maritime)	Aid to Navigation	501	Survey DGPS
15043	CBB018	Transport (Maritime)	Aid to Navigation	501	Non-DGPS (Contractor)
15044	NLM021	Transport (Maritime)	Aid to Navigation	501	Survey Method Accurate
15045		WaterNSW	Aid to Navigation	604	Unknown
15046	SFD026	Transport (Maritime)	Aid to Navigation	413	Non-DGPS (Data Owner)

2.3 Sample JSON Feed

```
{
  "json_featuretype": "Maritime_NSW_Aid_To_Navigation",
  "OBJECTID": 15023,
  "MARITIME_ASSET_ID": null,
  "ASSET_OWNER": "Port Authority of NSW",
  "PURPOSE": "Aid to Navigation",
  "TYPE": 581,
  "POSITION_ACCURACY": "Non-DGPS (Data Owner)",
  "json_ogc_wkt_crs": "PROJCS[\"WGS 84 / Pseudo-Mercator\",GEOGCS[\"WGS 84\",DATUM[\"WGS_1984\",SPHEROID[\"WGS 84\",6378137,298.257223563,AUTHORITY[\"EPSG\",\"7030\"]],AUTHORITY[\"EPSG\",\"6326\"],PRIMEM[\"Greenwich\",0,AUTHORITY[\"EPSG\",\"8901\"]],UNIT[\"degree\",0.0174532925199433,AUTHORITY[\"EPSG\",\"9122\"]],AUTHORITY[\"EPSG\",\"4326\"],PROJECTION[\"Mercator_1SP\"],PARAMETER[\"central_meridian\",0],PARAMETER[\"scale_factor\",1],PARAMETER[\"false_easting\",0],PARAMETER[\"false_northing\",0],UNIT[\"metre\",1,AUTHORITY[\"EPSG\",\"9001\"]],AXIS[\"Easting\",EAST],AXIS[\"Northing\",NORTH],EXTENSION[\"PROJ4\",'+proj=merc +a=6378137 +b=6378137 +lat_ts=0 +lon_0=0 +x_0=0 +y_0=0 +k=1 +units=m +nadgrids=@null +wktext +no_defs\"],AUTHORITY[\"EPSG\",\"3857\"]]",
  "json_geometry": {
    "type": "Point",
```

2.4 Interactive Map

