

Digital Road Network (DRN) data requirements

QRA relies on Digital Road Network (DRN) data from councils and state agencies to help verify the location of essential public assets. This assists in determining the eligibility of reconstruction works being claimed.

The DRN data currently in use, as provided to QRA, is available to the relevant organisation in the MARS Portal. This allows each organisation to view their road assets on a digital map and see submission and assessment information displayed geographically. This integration with mapping also means MARS can offer geospatial validations based on the data provided, helping an organisation to address any issues prior to lodgement.

Get your data ready for storm season

Before each disaster season, all organisations should check the currency of their DRN in MARS.

Before damage pickup, organisations must ensure the same DRN dataset is provided to QRA and your third party vendor. This will ensure MARS displays your current data set that will be used for damage pickup, ready to support a smooth assessment process.

Note: submissions created using inaccurate DRN data will need to be rectified which could delay lodgement and assessment. Refer to the checklist below.

STEP 1 Data request

Talk to your RLO to request an export of the MARS DRN. This includes a spatial template (ESRI file) and excel.

STEP 2 Updates

If there are changes to your organisation's DRN, these will need to be provided to QRA. These changes may include:

- new asset
- removed asset
- change to an existing asset e.g. name, asset Id, chainage recalibration, asset length extension.

STEP 3 Format

Use the MARS export provided to you to record any changes. This will expedite the DRN check and update process. All spatial data must be supplied in the following format:

- ESRI file GDB or shapefile, or
- 10m chainage points.

STEP 4 Complete and return

Address the detailed requirements in this tip sheet and send the updated road asset information to support@qra.qld.gov.au and your RLO.

Requirements

All DRN data provided to QRA should include:

- road centreline data
- chainage data in metres (whole numbers).

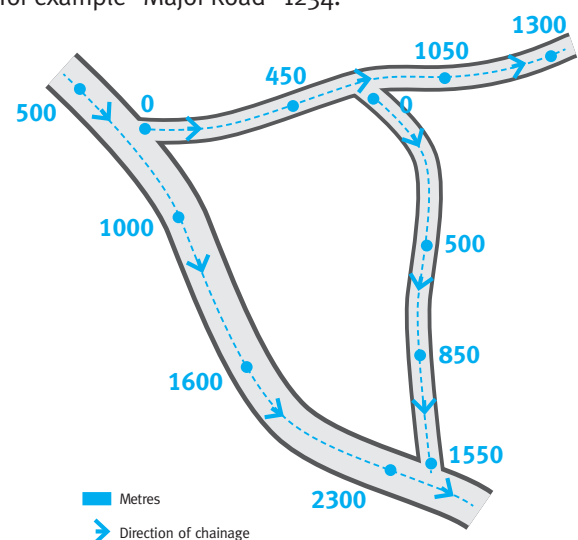
The following information should also be attached:

- unique road name
- unique asset ID
- start point and end point chainage (in metres).

Road centreline detailed requirements

QRA considers the following to be minimum standards of road centreline data:

- all road assets are a single centreline
- segmented centrelines will be accepted but they must have a field designating the entire asset (i.e. asset ID and/or road name)
- a unique asset ID for each road asset (single centreline)
- all roads have a unique name with correct spelling.
 - to make a road name unique, QRA suggests using the asset ID e.g. Smith Street QRA123
 - MARS is case sensitive meaning spelling, case and symbols must be an exact match between the DRN and your submission
 - when separating sections of the asset name, QRA recommends using underscore, hyphen or single spaces only.
- dual carriageways can be one of the following options:
 - two centrelines with separate name and asset ID for each direction for example:
 - “Major Road (Northbound)” – Asset ID 1234_N
 - “Major Road (Southbound)” – Asset ID 1234_S
 - one centreline with single name and asset ID for example “Major Road” 1234.



Chainage data detailed requirements

If an organisation is using chainage only on a disaster funding submission form (not coordinates), it is important the chainage data is supplied as part of the DRN to enable assessment.

Chainage on the disaster funding submission form helps the assessor view the damage as if they were walking from one end of a road to the other. This works best if QRA and the organisation are walking down the road in the same direction.

NOTE: Damage pick up activities and QRA submission assessment should be done using the same centreline and chainage dataset. If using third-party software or resources to capture damage data, make sure you supply the same DRN data set (centreline and chainage) to QRA. This will support a smoother assessment process.

To accompany the road centreline data, an organisation can supply one or more of the following:

- chainage point dataset at regular intervals i.e. 10m points (metres in whole numbers)
- point feature layer identifying start point with attributes, including actual road length
- table with asset name, asset ID and XY coordinates of the start point and actual road length.

If the chainage requirements cannot be provided, MARS will only validate against the start and finish XY coordinates included in the disaster funding submission form. MARS can populate chainage based on the provided coordinates and a rudimentary chainage calculation (start from the top left position). Distance is calculated based on the projected length.

NOTE: All chainage data is to include unique asset name and asset ID to link back to the road centreline. Actual road length (minimum and maximum chainage) is required, as the actual road distance can be different to the spatial line length e.g. on a hilly road.



Questions and Answers

Does QRA do anything to the DRN data before uploading it into MARS?

QRA completes a number of data checks to ensure DRN data is as accurate as possible prior to upload into MARS.

These checks include:

- identifying duplicate road names. QRA will advise the organisation to apply the asset ID to make them unique e.g. “Smith Street (QRA11)” and “Smith Street (QRA22)”
- ensuring there is a unique asset ID for each road. If there is no unique ID and the organisation cannot provide one, QRA will apply a generic one e.g. QRA123. Note, the generic ID will not match the ID on the disaster funding submission form which may generate a validation message. This will not restrict lodgement of the submission
- checking chainage accumulates in a uniform direction, as informed by the organisation’s chainage data
- applying chainage based on the start and end chainage values supplied by the organisation. These values are required for validation and photo distance checks only.

The QRA GIS team sends an Excel and ESRI format file highlighting the outcome of these checks and requests confirmation from the organisation. Once approved by the organisation the data can be scheduled for uploading into MARS.

Do I still need to store my own data if it is in MARS?

Yes. MARS is a portal for building and lodging submissions to QRA and is not intended to replace essential systems within each organisation. Please continue to store all relevant data sets and documentation within your organisation.

How often should my organisation provide updated DRN data?

All organisations should prepare to check the DRN in MARS as part of pre-season preparedness each year.

Can I update the DRN while submissions are in draft?

QRA prefers you check and update your DRN before starting to build submissions. Updates made after creating draft submissions will require revalidation and may cause delays to lodging your submissions. QRA is unable to finalise an assessment until the submission has been validated against a current data set.

How do I update a single road asset in MARS?

Send the updated road asset information based on the above requirements to support@qra.qld.gov.au and your RLO. When this road has been updated in MARS you will need to re-select the asset and validate the submission.

How long does it take to see my updated DRN in MARS?

Approximately 4 weeks depending on the extent of the changes. Please liaise with your RLO to confirm when your DRN will be available in MARS.