

## 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 map and see submission and assessment information displayed geographically. This integration with mapping also means MARS can offer validation messages based on the data provided, helping an organisation to address errors prior to lodgement.

### Action

From 2019 onwards, all organisations should check the currency of the DRN in MARS as part of pre-season preparedness, or when preparing to request activation.

There are a number of ways to check your organisations DRN data:

- contact your Regional Liaison Officer (RLO) to request an export of the MARS DRN in spatial format
- check digital road network in MARS.

If there are changes to your organisations digital road network, such as a new asset or a change to an existing asset, provide **only these changes** to QRA.

If your organisation has updated the digital road network, or it is more than four years old, please provide an updated version of the whole network.

Before each disaster season or damage assessment after activation, ensure the same dataset is with your third party vendor and QRA. This will ensure MARS displays your current data set, ready to support a smooth assessment process.

### Format

All spatial data for new roads and whole networks must be supplied in one of the following format:

- or shapefile
- 10m chainage points.

If only a road is to be **amended** or **updated**, you can supply as above or as one of the following:

- KML format
- hand drawn picture on a printed map.

### Requirements

All DRN data provided to QRA should include:

- road centreline data
- chainage data.

The following information attached:

- unique road name
- unique asset ID
- start point
- road length.

This will assist QRA to assess the coordinates, chainage and distance information provided in a disaster funding submission.

If your organisation is updating the entire network, please consider the following detailed requirements:

### Road centreline requirements

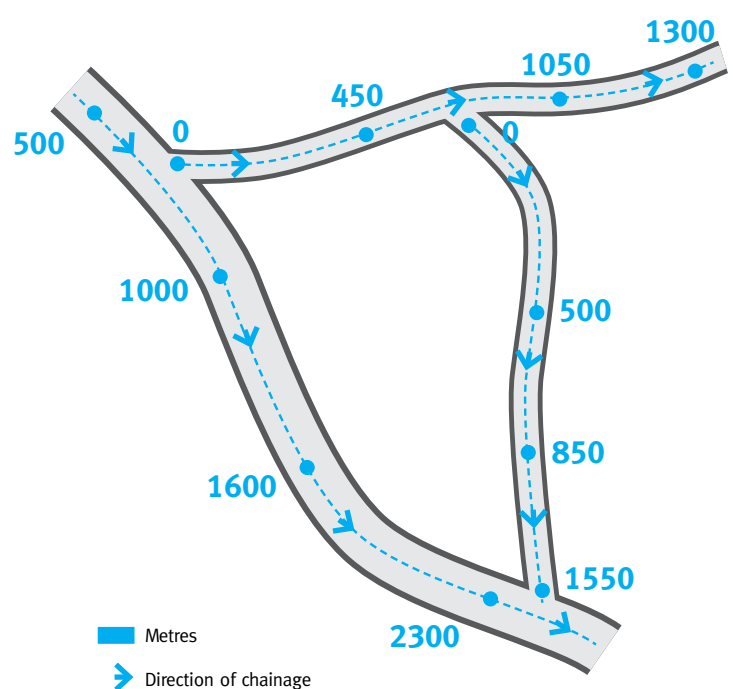
QRA considers the following to be minimum standards of road centreline data:

- all road assets are a single centreline
- segmented centrelines will be accepted but they must have a field designating the entire asset
- a unique asset ID for each road line
- all roads have a unique name with correct spelling
- 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 requirements

If an organisation is using chainage only on a disaster funding submission form, it is important the chainage data supplied to QRA is accurate to enable assessment.

Chainage on the disaster funding submission form helps the assessor to 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.



## Chainage data requirements continued...

*NOTE: Damage pick up activities and QRA submission assessment should be done using the same centreline dataset. If using third-party software or resources to capture damage data, make sure you supply the same DRN data set to QRA. This will reduce the need for queries and information requests that could impact assessment time.*

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

- chainage point dataset at regular intervals i.e. 10 m points
- 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 an organisation is unable to provide the chainage requirements, MARS will only validate against the start and finish XY coordinates included in the disaster funding submission form. MARS has the ability (if the user desires) to

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.

If an organisation is unable to provide the chainage requirements, MARS will only validate against the start and finish XY coordinates included in the disaster funding submission form. MARS has the ability (if the user desires) to 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 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 & Answers

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

QRA completes a number of data checks to ensure the organisation's DRN data is as accurate as possible prior to upload into MARS. These checks include:

- identifying duplicate road names and making these unique. For example, if there are two streets called "Smith Street" in an LGA but in different locations, QRA will add the suburb name in brackets to make them unique i.e. "Smith Street (Cairns City)" and "Smith Street (Smithfield)".
- ensuring there is a unique Asset ID for each road. If there is no unique ID, 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 stop an organisation from lodging the submission.
- checking chainage accumulates in a uniform direction, as directed by the organisation's chainage data.
- applying a chainage where data is not supplied. QRA will apply a chainage starting from the top left location. These values are then used for validation and photo distance checks only.

The QRA GIS team will supply feedback on these checks to help the organisation improve the data supplied and to make it easier when providing new data in the future.

### 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. It is still the responsibility of each organisation applying for disaster funding to maintain and store all relevant data sets and documentation.

### How often should my organisation provide updated DRN data?

From 2019 onwards, all organisations should prepare to check the DRN in MARS as part of pre-season preparedness each year.

### Can I update a road asset while submissions are in draft?

Yes, you can send through a request to update a road that is not in your organisation's DRN in MARS. When this road has been updated into the system you will then need to revalidate the submission.

### How do I update a road asset in MARS?

Send the updated road asset information based on the above requirements to [support@qra.qld.gov.au](mailto:support@qra.qld.gov.au) and your RLO.