**Task 2**

**Analysing RCL maps – Exercise**

1. **Explore RCL maps**
2. From the Layers Panel in your QGis project select to show the RCL group layers.
3. Explore the differences in between OS Meridian 2, OS Open Roads and OSM (geometry representation and attributes)
4. Select Add Group to create a new group of layers from the Layers Panel.
5. Rename the group layer to “RCL-cleaned”

**2. Clean RCL layer – OS Open Roads**

1. Start RCL cleaner
2. Select “road\_os\_openroads” as the input layer to clean
3. Do not select to snap endpoints
4. Specify output type as memory layer
5. Change the name of the cleaned memory layer to “road\_os\_openroads\_cleaned”
6. Select to load errors and unlinks and press OK
7. Rename errors memory layer to “road\_os\_openroads\_errors”
8. Rename unlinks memory layer to “road\_os\_openroads\_unlinks”

**3. Clean RCL layer – OS Meridian2**

1. Start RCL cleaner
2. Select “road\_os\_meridian2” as the input layer to clean
3. Specify snapping threshold to 3 decimals
4. Specify output type as postGIS
5. Select database and schema
6. Specify output name as “road\_openstreetmap\_cleaned” and press OK
7. Select to load errors and unlinks and press OK
8. Rename errors memory layer to “road\_openstreetmap\_errors”
9. Rename unlinks memory layer to “road\_openstreetmap\_unlinks”

**4. Clean RCL layer – OSM**

1. Start RCL cleaner
2. Select “road\_openstreetmap” as the input layer to clean
3. Specify snapping threshold to 3 decimals
4. Specify output type as shapefile
5. Select output location
6. Specify output name as “road\_openstreetmap\_cleaned” and press OK
7. Select to load errors and unlinks and press OK
8. Rename errors memory layer to “road\_openstreetmap\_errors”
9. Rename unlinks memory layer to “road\_openstreetmap\_unlinks”

**5. Compare OS Open Roads cleaned, OS Meridian2 and OSM cleaned**

1. Compare errors layers of the three cleaned RCL layers
2. Compare unlinks layers of the three cleaned RCL layers

**6. Simplify OS Open Roads RCL map**

1. Select ‘Simplify geometries’ from Processing Toolbox
2. Select “road\_os\_openroads\_cleaned” as input
3. Specify tolerance to 10
4. Specify output file location and set the name as “road\_os\_openroads\_cleaned\_simpl”

**7. Prepare OS Open Roads/ OS Meridian2 for analysis**

1. Explode the“road\_os\_openroads\_cleaned\_simpl” to segment the RCL map
2. Verify unlinks using the Graph Analysis module form SST
3. Check and update unlinks where necessary
4. Select Update IDs

**8. Analyse OS Open Roads/ OS Meridian2 RCL map**

1. In Graph analysis dialog select the map tab and specify the input layer
2. Tick “Segment map or road centre line map”
3. In DepthmapX remote tab of the tool select segment, specify the radius of analysis as 500,1000,1500
4. Specify the output table name as “…”
5. Make sure that you have depthmapXNet running on the background.
6. Press Calculate