

FAQ: Flowmap Answers to Questions

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The answers to questions in this document are organized by Flowmap Main Menu options first and next by (pull-down) sub-options

Analysis / Regular Catchment Area Analysis

- **Can Catchment Areas overlap?**
- No, by definition origins or destinations are assigned once only to the nearest facility that has sufficient capacity. Trade Areas, however, can overlap.

Analysis / Transport Network Analysis

- **There are islands in my study area, can I still apply transport network analysis?**
- Yes, but to test connectivity either ferry links need to be added or exactly one extra central origin/destination in each unconnected island must be selected

Conversion / Shape File to BNA

- **Is it always correct to cut off the transport network at the boundary of the study area?**
- No, even if both origin and destination are inside the study area the actual shortest (/quickest /cheapest) path may very well travel partly on the outside. For instance, the shortest path between the Dutch cities Terneuzen and Maastricht travels largely through the neighboring country Belgium. Depending on the research topic the transport network should always contain the actual shortest path between all origins and their (potentially) relevant destinations.

Import / BNA to Flowmap Import

- **When importing a transport network many 'Overpass' and 'Bypass' errors are reported, can these be ignored?**
- No, in case the source data was harvested for instance from OSM lots of intersections were simplified to speed up the display and using this network for any shortest path based analysis will lead to impossible connections or overestimated distances. Try fixing the problem in Flowmap first using Edits | Split BNA file.
- **When importing a transport network a great many 'Duplicate Coordinates' are reported, can these be ignored?**
- No, this could corrupt the topological model of the network used by Flowmap and hence lead to incorrect shortest path calculations. There are a few known causes for this error to occur:
 - o A few roads were digitized twice during creation or editing of the original source; if it's just a few duplicate coordinates reported it can be ignored, otherwise display

the error BNA file to see where the problems occur and fix them outside Flowmap before continuing

- The source file is a (re-)merge of the transport networks of neighboring areas in which case border crossing roads might be duplicated. Possibly these duplicate roads have identical ID's and can simply be removed in GIS. For instance using the 'Elimination' tool in ArcGIS
- When the source file has a background in car-navigation it may occur that all two-way streets are duplicated taking redundant coordinates for granted. In case the duplicate roads can be recognized as having a positive and a negative value of the same ID the problem can be fixed outside Flowmap, but there is no known standard tool available.

Preparations / Create Network Distance Table

- **Some roads are not physically connected to the main body of the transport network, do they need to be removed before import into Flowmap?**
- No, in case the missing connections are not based on an error but for instance caused by border effects they can be left in provided they are deactivated before the table creation by overwriting the access attribute all unconnected segments with a negative value. See Tips & Tricks topic "Deactivating unconnected network segments".
- **The road network is spread over several unconnected islands in my study area. Can I still create a transport network distance table that works for all Flowmap functionality?**
- No, impossible connections are marked with a negative distance value that can't be handled by several functions like potential value measures and gravity modelling. To avoid these problems is it better add ferry links (or bogus connections) with (impossibly) high distance values.