**Files with input data:**

**The nodes are indexed from 0**

**ff.net – file with network topology**

File format:

Number of nodes

Number of links

Matrix *n* x *n* with lengths of network links (in kilometers). 0 – link does not exit.

Please note: all network links are directed (row index denotes source node, column index denotes destination node).

**xxxx\_yy.dem – file with unicast demands, where xx*xx* denotes average network load (in Erlangs) and yy is number of the demands set for the considered load**

File format (each row describes one demand):

Iteration\_of\_arrival Source\_node Destination\_node Bitrate Duration

…

**ff30.pat – file with candidate paths, where *k*=30 is a number of candidate paths between each pair of network nodes**

For a network with *m* link (numbered according to the order from network file), each path is coded as a sequence of *m* binary values (1 – the link belongs to the path, 0 – the link does not belong to the path).

File format:

Path number 1 for pair of nodes (0,1)

Path number 2 for pair of nodes (0,1)

…

Path number *k* for pair of nodes (0,1)

Path number 1 for pair of nodes (0,2)

Path number 2 for pair of nodes (0,2)

…

Path number *k* for pair of nodes (0,2)

…

…

**ff30.spec – file with spectrum requirements for demands**

The file is analogous to the ff30.pat. Both files should be read jointly (they have the same number of lines). The lines of ff30.spec describe spectrum requirements for corresponding paths from ff30.pat. For instance, *i*-th line of ff30.spec describes spectrum requirements for path saved in the *i*-th line of line ff30.pat.

Each row in ff30.spec consists of 20 columns. First column describes number of slices required for demands up to 50 Gbps. Second column describes number of slices for demands between 51 Gbps and 100 Gbps. … The last column (20-th) describes number of slices for demands between 951 Gbps and 1000 Gbps.

**Please note that values reported in the ff30.spec file do not include a one slice guard-band.**

**For the purpose of simulations, there are 20 different network loads (xxxx = 100, 200, …, 2000) and for each load 10 different sets of demands (yy = 01, 02, …, 10). Some example results are attached to the project documentation (in the file Euro28\_dynamic.xlsx).**