Example taken from Gianpaolo, G., Gilbert, L., & Roberto, M. (2013). Introduction to logistics systems management.

Milatog is a Russian company producing cattle forage. In the Volga region, there are seven farms which have an average daily forage demand (in quintals) equal to 36, 42, 34, 50, 27, 30, and 43, respectively.

Milatog intends to purchase some silos, to supply the seven farms. Six different potential sites in the area have been identified, with a daily forage throughput (expressed in quintals) equal to, respectively, 80, 90, 110, 120, 100, and 120. For the next four years, Milatog has estimated the fixed costs (in EUR). Please refer to Milatog.xlsx for the data. The daily average running cost (in EUR) per quintal of forage, for each potential site is also given.

The transportation cost per quintal of forage and per kilometer travelled is equal to EUR 0.06. The kilometric distances for each origin and destination pair are given in Milatog.xlsx. The daily transportation costs are computed by considering that every trip is made up of both an outward and a return journey.

Milatog is planning to keep the warehouses in operation for four years (corresponding to 365\*3+366 =1461 days).