Project description Statistics Netherlands

The Nationale Databank Wegverkeergegevens (NDW), a database for traffic data, contains the counts of more than 14,000 traffic loops, that are to be found in the Dutch system of motorways and provincial roads. During a day it is analysed how many vehicles of which type pass through these loops each minute. Each day this gives a dataset of more than 100 million measurements.

Statistics Netherlands (Centraal Bureau voor de Statistiek) produces each three months a traffic index for the north, south, east and west part of the Netherlands, but not for each so-called COROP[1]-region. This is done by coupling a small set of loops to a corresponding road, and then weighing the measurements according to the total road length in the province. At the moment only a very small part of the dataset (about 25 traffic loops) is used to determine the traffic index. Statistics Netherlands would like to extend this, but there are several problems:

- not all roads in the Netherlands contain traffic loops;
- not all parts of the Netherlands are equally represented;
- not all loops produce data all the time;
- loops that are close together practically produce the same data (redundancy).

Main question for the studygroup
What is the smallest set of loops needed to give reliable statements on the amount of traffic, in whole and for freight traffic, in each COROP-region in the Netherlands?

Available data:

1. A file containing names and geocoordinates of all traffic loops in the Netherlands.
2. A file containing the minute data of three classes of vehicles (small, medium sized, large) during a period of one month for the traffic loops.

[1] The Netherlands is divided into several COROP-regions, such as Noord-Drenthe, de Veluwe and de Kop van Noord-Holland; http://nl.wikipedia.org/wiki/COROP