Supply Chain Network Design: La Poste in Paris: Group E

Key elements of the project:

- **Data**
  - From the course's data & respective websites of the subsidiaries of La Poste group

- **General assumptions for bike**
  - Distances: Cross flies + 1.3 detour coefficient
  - Costs: Drivers wage (27€/h), 190€ daily rental for hubs
  - Capacity : Bicycle distributor carries a maximum of 60 parcels
  - Speed: line haul (22km/h), bicycle (13km/h) and 3 min stops per delivery.

⇒ For van distribution, assumptions are remaining the same except; 120 parcels can be carried together, speed of line haul is 25 km/h and van speed of 11 km/h + 5min deleivery stops

- **Model used for final recommandations**
  - Our final model for recommendations minimises the transport costs between the main warehouses of each subsidiary and the various hubs, and then the model also minimises the costs of distributing parcels across the city.

⇒ Total costs are around 3 times cheaper than for our next innovation and are fluctuating around a daily cost of 1 million €.

Key findings and recommandations:

In addition to solving the initial problem, we chose to propose a potential innovation for the La Poste group, which would be to use the Paris metro network to make deliveries more easily.

⇒ Using terminus to rely with warehouses
⇒ Stations as micro hubs
⇒ Additional metro carriage for parcels transportation (6k parcels per carriage according our assumptions)

Costs for this option are too high at the moment but several options to reduce them are possible, such as:

⇒ Lockers at micro-hubs to encourage self-collection
⇒ Relation between RATP and La Poste to reduce hub's costs + closing unused ones
⇒ Increasing delivery costs for customers