# FiDeli – A Friendly Delivery System

### 1 MAIN PURPOSE

Main purpose of FiDeli project is to make delivery fast, quick and easy. FiDeli offers point-to-point delivery, as it became the most currently used system.

## 2 BUSINESS PROCESS

The process which is being handled by FiDeli is going to be descripted in points:

#### 1. Commission

Parcel commission can be made either through an app or an API. The commissioner is responsible for collecting all the necessary data of the recipient. In advance client (e.g. shop) decides the size of the parcel. The data needs to be passed to FiDeli. FiDeli informs the client of the price of parcel transportation. The moment the payment is posted, FiDeli returns unique Parcel Number.

2. Awaiting for a parcel

The commission figures in the system waiting for clients' shipment. The moment the commissioner chooses the parcel locker and types in the Parcel Number, a suitable locker in the parcel locker opens if available. Commissioner puts the parcel inside and ascertains the locker is closed afterwards. Then he needs to inform FiDeli of submitting the parcel.

- 3. Receiving a parcel by a parcel locker
  - When submitted, the parcel awaits for a delivery driver. FiDeli handles choosing available delivery man and informs him of the new parcel. The delivery man obtains notification on his app and arrives to the target packer locker.
- 4. Receiving the parcel by a delivery driver When close to the parcel locker, the delivery man commands the locker containing package to open. He receives the parcel and continues his way.
- 5. Transport
  - The parcel is now being transported
- 6. Receiving the parcel by the target parcel locker
  - When the delivery man arrives near the target parcel locker, he once again uses his app to place the parcel inside the parcel locker. Recipient is being informed by FiDeli of his parcel being delivered. Recipient now is in the possession of 7 digit code, which will enable a locker opening.
- 7. Receiving the parcel by the recipient
  - Recipient visits the target parcel locker, uses the app to type in the code and receives his parcel. He closes the locker and the whole process finishes.

## 3 LIST OF BUSINESS ENTITIES

- 1. Commissioner
  - a. Provides data about the recipient and parcel information
- 2. Commission
  - a. Contains information about Commissioner, Parcel, Addresses, Price, Recipient, Status of the delivery
- 3. Parcel
  - a. Contains information about parcel itself
- 4. ParcelLocker
  - a. Contains information about its localisation and lockers it contains
- 5. Locker
  - a. Has size, State of being open/closed
- 6. Deliverer
  - a. Contains every parcel he is assigned to and every parcel he is in possession of
- 7. Recipient
  - a. Contains unique code and other basic information
- 8. DeliveryStatus
  - a. Enum which is one of the following: AwaitingForSubmission, AwaitingForDeliveryMan, Transported, ReadyToBeCollected

## 4 Main Functionalities

- 1. Commission
  - a. Receiving the commission
- 2. Awaiting parcel
  - a. Finding nearest to commissioner parcel lockers suitable for parcel needs
  - b. Ability to tell if a given parcel locker contains a locker suitable for a parcel
  - c. Ability to recognise Parcel Number
- 3. Awaiting delivery man
  - a. Choosing available delivery man and assigning him to the package
- 4. Arriving to target parcel locker
  - a. Creating code
  - b. Informing recipient of the parcel being delivered
- 5. Common
  - a. Changing the status of delivery
  - b. Ability to create reports
  - c. Controlling opening and closing the lockers, ensuring no locker remains opened after interactions