Planning and management of delivery areas in urban centres

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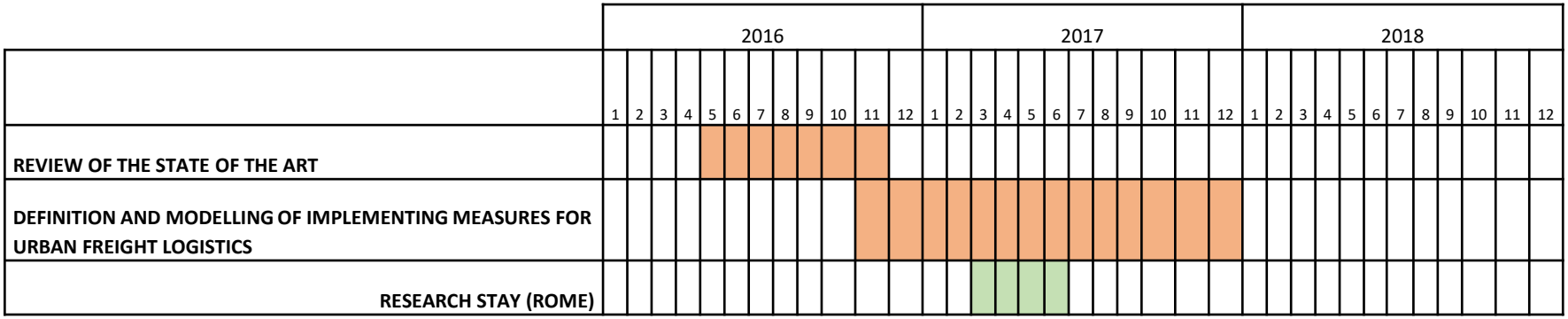
1. INTRODUCTION

The main objective of my research is **to explore new scenarios of development in the field of urban freight logistics and propose application tools** to improve the negative aspects of urban logistics planning processes and management



POLICIES FOR IMPROVE URBAN FREIGHT LOGISTICS

1. Low emissions zone (LEZ): congestion charge, fiscal policies…
2. Access restrictions: vehicle weight or level of vehicle contamination
3. Time access restrictions
4. Delivery areas
5. Used of reserved lines
6. Urban distribution centre
7. Improvement in green vehicles
8. Combined transport
9. Others.

LOADING AND UNLOADING AREAS BIBLIOGRAPHY

- (Aiura & Taniguchi, 2005)
- (Patier, 2006)
- (Dezi et al., 2010)
- (McLeod & Cherrett, 2011)
- (Alho & Silva, 2014)
- Projects: MOSCA, STRAIGHTOL, ENCLOSE, BESTUFS, BESFACT, DOROTHY, ALF, DynaLOAD….

3.WHAT IS THE PROBLEM IN LOADING/UNLOADING AREAS?

- There are a lot of freight vehicles double parked doing loading and unloading activities.
- Double parking delays other traffic, so increasing congestion, especially at peak hours.
- Double parking implies costs for freight operators due to fines and they are affected for congestion, too.

➢ ARE THE **NUMBER** AND **LOCATION** OF CURRENT DELIVERY BAYS OPTIMAL (waiting time in a queue, number of vehicles in queue, delivery bay empty for a long time….)?

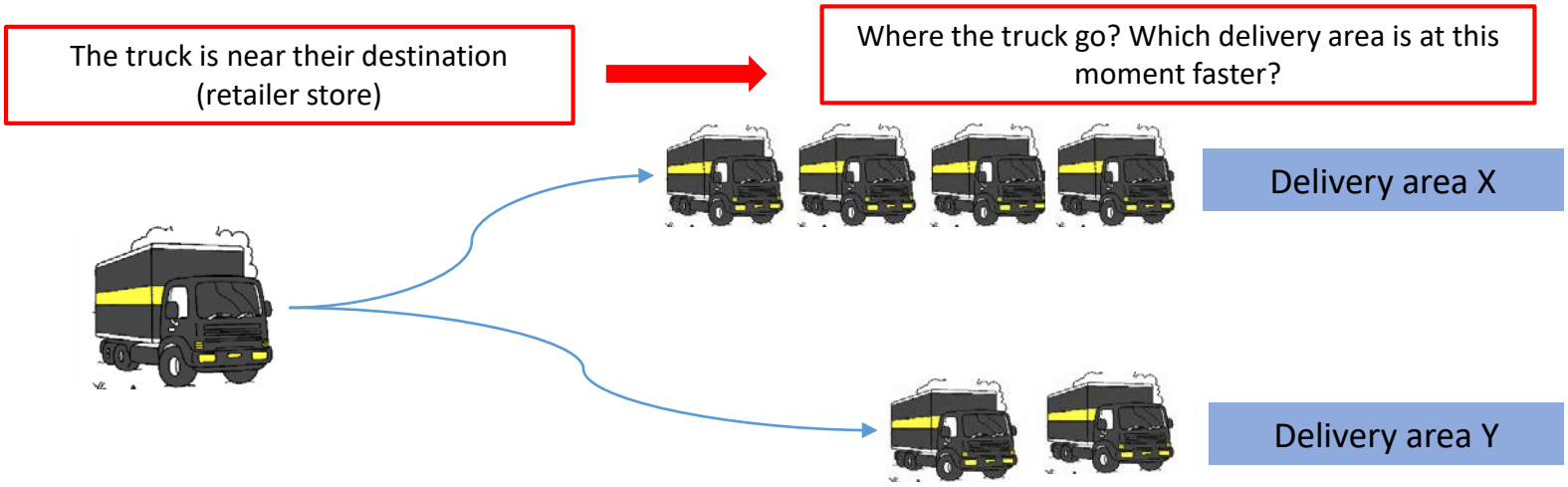
4. METHODOLOGY

➢ HOW WE CAN IMPROVE THIS SITUATION?

- We have to verify the current scenario in ROCKWELL ARENA.
- If the current scenario is not optimal, based on the simulation results new scenarios have to be designed according to new hypotheses managing and control rules.

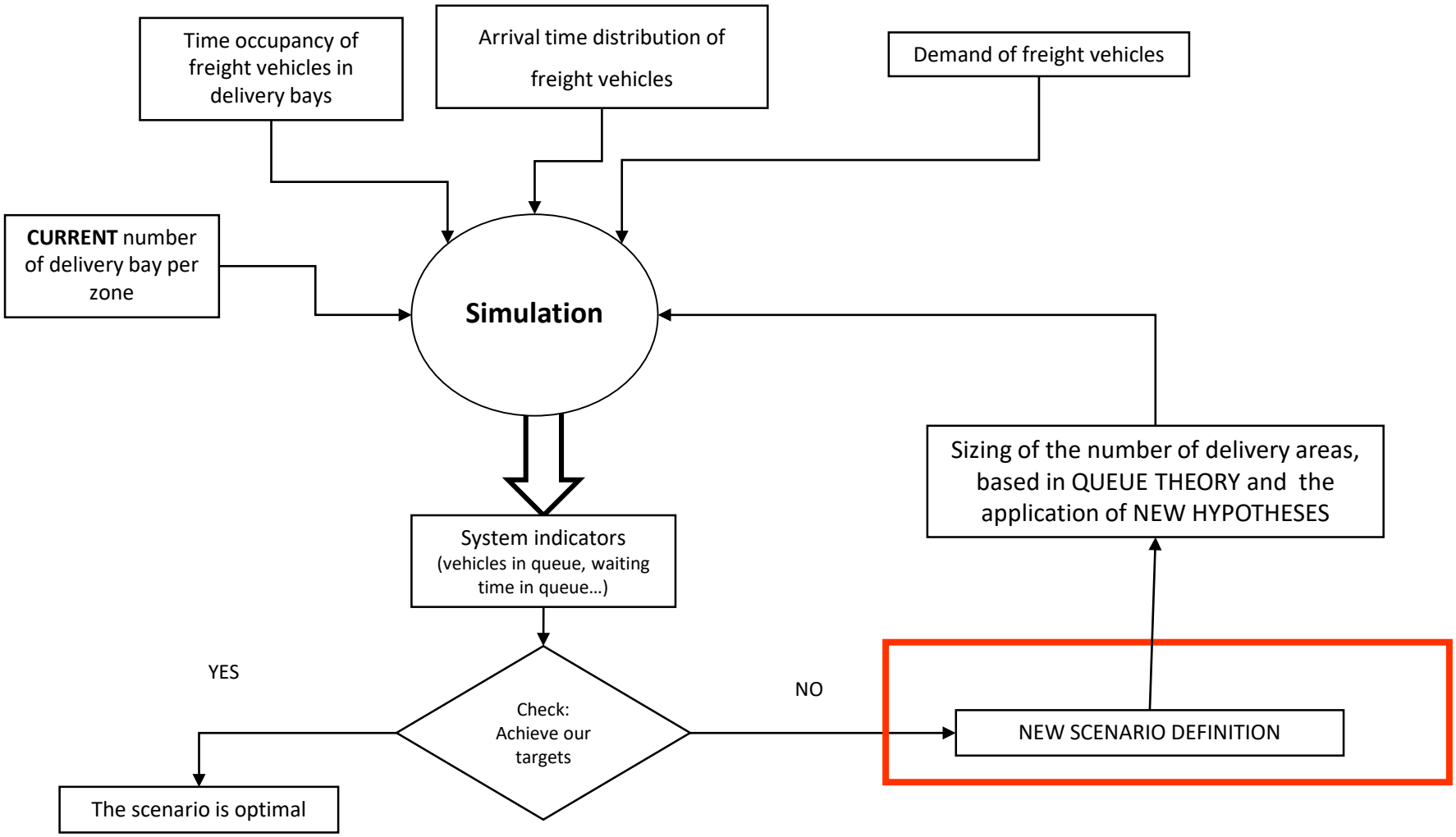
A. **Share delivery areas** with cars and light freight vehicles (weight < 1.800 kg)

B. **Giving suggestions to vehicles on where to park** with the aim of make the most of the delivery areas and decrease the time a vehicle spends waiting in a queue and making delivery operations.



4. METHODOLOGY

➢ VERIFICATION OF THE CURRENT SCENARIO IN SANTANDER



5. COURSES

- TRAINING COURSES:
  - 1º year:
    - Modelos de simulación de sistemas de transporte
    - Modelo de redes de transporte público y privado con y sin congestión
    - EDUC basic course.
    - EDUC advance course.
  - 2º year:
    - “Uso y análisis de la componente especial de la información mediante Sistemas de Información Geográfica (GIS), nivel avanzando”
    - Logistica territoriale

- International stay in Rome.

THANK YOU FOR YOUR ATTENTION

Sara Ezquerro Eguizábal