

## Actors

Characterization								
Actors	Role	Description	Indicators	Request information	Restriction Liveness	Restriction Safety	Departures	Interaction with other actors
Airline	Environment where agents interact, generating requests, interactions, generating indicators. In turn, this agent initializes the input parameters and general restrictions that must be met in the planning horizon.	Represents the environment in which there are different events, requirements and information about their workforce	Objective fuction (Demand fuction attended/ unattended and wellness Objective fuction)	Agent information, vehicles, system time, demand, indicators, agent information, System restrictions • There are 24h / 7 d • Phase 1 (2h) • Phase 2.3 (2:30 am) • Phase 4 (2h) • Free days and vacations • Break of feeding	• Duration of 9 hours per turn • Do not assign an agent more than one turn the same day	• Break of feeding of 1 hour. The agent does not serve demand. • Maximum amount of programmed agents is 75 • Minimum amount of programmed agents is 30	Establish week agent's schedule and routing	Transport supervisor and RRHH supervisor
RRHH Supervisor	Supervise the demand attention operation	It is responsible for ensuring that the requirements of the company are met, ensuring the well-being of SC Agents. This agent is in charge of making the schedules of the Customer Service Agents taking into account the concept of the Transportation Supervisor about the proximity between agents.	• Schedules variability • Assing free days • Missing demand	Company demand, welfare of SC Agents	• At least one activity and a maximum of four must be assigned • One activity per phase	• Activities can be realized according to customer services agent skills	Agent's activities may organized by time slot, OF de HHRR, current resources of ability	Airline and transport supervisor
Customer Service Agent	Attend the demand for the different activities that the airline presents daily	Customer service personnel at the airport who establish the tasks that they can perform according to their abilities, and also establish the possible order in which they will carry out those tasks during the week. On the other hand, they interoperate with each other to determine the round trip order (as appropriate).	• Heterogeneity of skills • Combinatorics • Km to travel in a vehicle	Skills, turn restrictions, Coordinates	• Comply with 48 hours of work per week	• Rest times about 12 hours between turn • 24 hours between the end of the last turn and the beginning of the new. • One day of pause per week	• Horario Semanal Week schedule • Vehicle with participants	Transport supervisor and RRHH supervisor
Transport Supervisor	Supervise the transportation operation of SC Agents	Provide your concept to the HR Supervisor regarding the possible routing that would be generated according to the schedules it generates. Likewise, this agent is in charge of generating leaders by strip in which transport is required so that they are in charge of establishing the conformation of vehicles.	• Efficiency • Number of transported • Transport cost • Average Additional Km • Average Ideal Km	Coordinates of agents' homes, Minimum efficiency	• Vehicle allocation period from 9 pm to 6:30 pm • Do not penalize the vehicle rate greater than or equal to 1.83 people / vehicle	• Same kind of trip • Maximum 4 agents per vehicle	Indicator	Airline and Agents SC