

*Measure title:* **Changing Parking Behaviour (Business Areas)**

*City:* **Donostia–San Sebastián** *Project:* **ARCHIMEDES** *Measure number:* **23**

---

## Executive Summary

This measure was intended to start a “soft” regulation of parking provisions in business areas affecting mostly short and medium stay demand associated to loading/unloading services and visitors, who experience difficulties to find parking places in the middle of the day when all spaces are already occupied. In particular, it was planned to extend the paid parking scheme to the business areas of Igara, Miramon and Zuatzu.

A study was conducted to develop a strategy to curb these parking issues in the business areas. Two streams of action were identified to help parking provision meet demand:

- The partial regulation of parking provision, reserving a certain number of parking places at each business area with a parking time limit and a fee for parking to achieve regular turnover of the vehicles parked there.
- HOV (High occupancy vehicles) zoning. Previous studies in other business areas of Donostia – San Sebastian have showed that a very high percentage of cars were single occupancy vehicles (SOV). The number of SOVs also impacts negatively on the sustainability of the city because it creates a high volume of cars on the road, particularly during peak times. In order to reduce the congestion generated for this reason, a specific parking provision for people who share their car with others was thought to be a sensible solution. This designated parking provision for car-poolers would also serve to compensate for the reduction in free parking places and encourage their use among industrial areas employees. This parking provision would be located in preferred areas in order to reward and incentivise its users.

In order to define the particularities of this strategy, the quantity of parking spots, its location and the timing of its usage was analysed in each business area. As a conclusion, it was agreed to devote 15% of the supply of parking for both initiatives, i.e. rotation parking places and HOV zoning.

Nevertheless, due to created controversy in social and political spheres, the commissioning of this activity was, on a first place, postponed until having the analysis made in the measure 33 about workplace travel plans which covers the three business areas involved in this measure, and finally cancelled given the increased social and political contestation towards the measure.

The process implementation of this measure has revealed that, in order to guarantee success, political and strategic involvement of all stakeholders and resources allocation should be gained during the planning phase, before further progress in the implementation of the measure is achieved.

## **A Introduction**

Within this measure, two different kinds of actions have been implemented:

- Implementation of a new parking policy and the extension of the restricted parking area to the western part of the city
- Extension of the paid parking scheme to the business areas

Given the differences in the methodological approach between them, as well as the different rhythm in its implementation, the assessment of these measures has been split in two separate reports, this one corresponding to the extension of the paid parking scheme to the business areas.

### **A1 Objectives and target groups**

#### **A1.1 Objectives**

The measure objectives are:

(A) High level / longer term:

- Reduce the use of private car achieving a modal shift towards public transport and cycling.

(B) Strategic level:

- Introduce paid parking in 3 industrial and business areas.

(C) Measure level:

- Reduce the number of cars entering Business Areas
- By achieving these objectives, the measure will contribute in order to reach the corridor and city level objectives
  - i. Maintain the high level of 47% pedestrian mobility
  - ii. Increase PT passengers by 5%
  - iii. Reduce number of cars entering the city centre by 5%
  - iv. Increase bicycle use by 30%

#### **A1.2 Target groups**

The measure is directed towards citizens and commuters travelling by private car to the business areas.

## **A2 Description**

This measure was intended to start a “soft” regulation of parking provisions in business areas affecting mostly short and medium stay demand associated to loading/unloading services and visitors, who experience difficulties to find parking places in the middle of the day when all spaces are already occupied. In particular, it was planned to extend the paid parking scheme to the business areas of Igara, Miramon and Zuatzu.

Nevertheless, due to created controversy in social and political spheres, the commissioning of this activity was, on a first place, postponed until having the analysis made in the measure 33 about workplace travel plans which covers the three business areas involved in this measure, and finally cancelled given the increased social and political contestation towards the measure.

The measure also contemplated the implementation of reserved parking spaces for High Occupancy Vehicles (HOV) in the business areas. Although this has not been implemented yet, the parking regulation by-law is being modified to include this typology and it is expected to be operating in Miramon business district in the near future.

---

## **B Measure implementation**

### **B1 Innovative aspects**

The innovative aspects of the measure are:

- **New conceptual approach:** On-street parking regulation (paid parking) in Business Areas.

### **B2 Research and Technology Development**

A study was conducted to develop a strategy to solve parking issues in the business areas within the CIVITAS Plus corridor in Donostia-San Sebastián.

A research of best practice in other cities was included in order to inform the policy developed for the demonstration. Following the best practice analysis, two streams of action were identified to help parking provision meet demand:

- The partial regulation of parking provision, reserving a certain number of parking places at each business area with a parking time limit and a fee for parking to achieve regular turnover of the vehicles parked there.
- HOV (High occupancy vehicles) zoning. Previous studies in other business areas of Donostia – San Sebastian have showed that a very high percentage of cars were single occupancy vehicles (SOV). The number of SOVs also impacts negatively on the sustainability of the city because it creates a high volume of cars on the road, particularly during peak times. In order to reduce the congestion generated for this reason, a specific parking provision for people who share their car with others was thought to be a sensible solution. This designated parking provision for car-poolers would also serve to compensate for the reduction in free parking places and encourage their use among industrial areas employees. This parking provision would be located in preferred areas in order to reward and incentivise its users.

In order to define the particularities of this strategy, the quantity of parking spots, its location and the timing of its usage was analysed in each business area. As a conclusion, it was agreed to devote 15% of the supply of parking for both initiatives, i.e. rotation parking places and HOV zoning.

Regarding parking rates and time limits, given the nature of these rotation parking places it was agreed to apply city’s Green Parking Rate 1 (the cheapest one) with a time limit of 180 minutes to all three business areas:

<b>Time (mins.)</b>	<b>Rate (€)</b>
15	0.27
60	0.87
90	0.98
180	1.42

**Table 1. Proposed parking rates in business areas**

For the case of HOV zones, city’s Green Parking Rate 3 would be applied and with no time limitation.

Time (mins.)	Rate (€)
15	0.08
60	0.26
90	0.29
180	0.42
270	0.57
300	0.62
540	1.05

Table 2. Proposed parking rates for HOVs in business areas

The expected regulation schedule defined by the parking department for both parking services (HOV and rotation places) would be as follows:

- Operational service throughout all the year.
- Only working days (From Monday to Friday) 9:00 to 14:00.
- Saturdays, Sundays and non-working days, parking places will not be regulated.

### B3 Situation before CIVITAS

Before the CIVITAS-ARCHIMEDES project started parking was allowed free of charge in all business areas of the city.

### B4 Actual implementation of the measure

The stages in the attempt to implement the new parking policy in the business areas were as follows:

**Phase 1: By-law amendment** - As it was agreed during the research phase, it was decided to reserve a 15% of the parking supply for external visits and for loading/unloading operations for the business areas of Zuatzu, Miramon and Igara. The parking regulation by-law was amended to define new, regulated zones in the mentioned business areas.

**Phase 2: Stakeholder’s workshops** - The following step, whose objective was to reach consensus regarding the measure, was conducted through various workshops, mainly with affected neighbourhoods near Igara and Zuatzu business areas and in Miramon to inform about next steps and providing detailed information about the range of actions that were to be carried out with companies within the business area. At the workshops there was a general consensus among companies against the measure to be adopted, as detailed in section D.

**Phase 3: Information campaign** - After these workshops it was planned to launch information campaign to publicise the initiative, not only among business areas but also for the whole city, but the reaction against the measure increased before it could accomplish any of its goals, which forced the cancellation of its implementation.

## **B5 Inter-relationships with other measures**

The measure is related to other measures as follows:

- **Measure DSS 17.** – New bus services service to the business districts of Zuatzu, Miramón and Polígono 27.
  - **Measure DSS 33.** – Travel Plans for business districts.
-

## **C Planning of Impact evaluation**

### **C1 Measurement methodology**

#### **C1.1 Impacts and indicators**

##### **C1.1.0 Scope of the impact**

Parking policy is one of the main drivers for car use, as well as one of the more effective tools to moderate its use. This measure is part of a package of measures (measures n<sup>o</sup> 18, 23 and 75) aiming at reducing the number of cars entering the city of Donostia-San Sebastian by changing parking behaviour.

The new parking policy introduced with this measure is expected to make single occupant car trips less attractive, encourage drivers to carpool and/or shift to public transport. It is expected that this measure will alleviate traffic congestion in inner city streets, improving private cars but also public transport operation, making the latter a more competitive and attractive mode.

The overall strategy to reduce the number of cars entering the city and circulating within its neighborhoods is expected to provide benefits in the form of better air quality, less carbon emissions and reduced noise levels, resulting in a better health and quality of life for Donostia-San Sebastian citizens. It is also expected that the need for on-street parking spots will be reduced, allowing the municipality to recover public space for other uses.

**C1.1.1 Selection of indicators**

NO.	EVALUATION CATEGORY	EVALUATION SUB-CATEGORY	IMPACT	INDICATOR	DESCRIPTION	DATA /UNITS
<b>ECONOMY</b>						
2a		Costs	Costs	Capital costs	Capital cost per system or unit	Euros, quantitative
2b				Operating costs	Costs per pkm or vkm	Euros/pkm or Euros/vkm, quantitative, derived or measured
<b>ENVIRONMENT</b>						
8		Pollution and Nuisance	Emissions	CO2 emissions	CO2 per vkm by type	G/vkm, quantitative, derived
9				CO emissions	CO per vkm by type	G/vkm, quantitative, derived
10				NOx emissions	NOx per vkm by type	G/vkm, quantitative, derived
11				Particulate emissions	PM10 and/or PM2.5 per vkm by type	G/vkm, quantitative, derived
<b>SOCIETY</b>						
13		Acceptance	Awareness	Awareness level	Awareness of the policies/measures	Index (%), qualitative, collected, survey
<b>TRANSPORT</b>						
29		Transport system	Modal Split	Average modal split-trips	Percentage of trips for each mode	%, quantitative, derived
				Occupancy Rates	Occupancy rates in paid parking areas	Hours / parking space
			Traffic Levels	Number of vehicles	Number of cars entering the business areas	Vehicles / day



### C1.1.2 Methods for evaluation of indicators

No.	INDICATOR	TARGET VALUE	Source of data and methods	Frequency of Data Collection
2a	Capital costs		ADS expenses in infrastructure and technology associated to the extension of paid parking areas.	When implementation or purchase takes place
2b	Operating costs		Financial accounts from parking operator with costs related to the operation of paid parking areas.	Annual
8, 9, 10, 11	CO <sub>2</sub> , CO, NO <sub>x</sub> , PM emissions		Emissions will be estimated based on the mobility survey and traffic flows data analysis conducted in the framework of the Travel Plans in Business Areas	Two (Before and after implementation)
13	Awareness level		Data will be collected through a specific survey over a representative sample of potential users of paid parking areas. The target audience are citizens of all ages and gender living or visiting the neighbourhoods where paid parking will be extended. The survey method will be based on on-street personal interviews. The questionnaire will include questions regarding awareness levels. A sample size of 400 interviews is defined (95% confidence level)	1 time after the implementation of the measure
29	Modal split	Maintain the 47% of pedestrian mobility on modal split	Modal split will be estimated based on the mobility survey and traffic flows data analysis conducted in the framework of the Travel Plans in Business Areas	Two (Before and after implementation)
	Occupancy Rates		Non resident occupancy in paid parking areas will be manually accounted by paid parking areas inspectors	Every 3 months
	Number of vehicles		ADS is responsible for the monitoring of the number of private cars entering the business areas.	Annual

### C1.1.3 Planning of before and after data collection

EVALUATION TASK	INDICATORS INVOLVED	COMPLETED BY (DATE)	RESPONSIBLE ORGANISATION AND PERSON
Analysis of financial accounts.	2a, 2b	Months 24, 36, 48	ADS – J Ramón Ordoñez (ADS)
Questionnaires among target companies	8, 9, 10, 11, -	Months 13-14-29	ADS – J Ramón Ordoñez (ADS)
Specific survey to reveal the attitude towards the implementation of a P&R network connected to PT services.	14	Month 36	ADS – J Ramón Ordoñez (ADS)
Questionnaires among target companies	8, 9, 10, 11, -	Months 13-14-29	ADS – J Ramón Ordoñez (ADS)
Occupancy rates		Month 27-30-33-36-39-42-45-48	ADS – J Ramón Ordoñez (ADS)
Traffic counts and/or traffic modelling		Month 39	ADS – J Ramón Ordoñez (ADS)

### **C1.2 Establishing a baseline**

Note: it is not possible to undertake this assessment due to measure cancellation

## **C2 Measure results**

### **C2.1 Economy**

**Table C2.1.1: Costs**

Indicator	Before (date)	BaU (date)	After (date)	Difference: After –Before	Difference: After – BaU
<b>2a. Capital costs</b>					
<b>2b. Operating costs</b>					

Note: it is not possible to undertake this assessment due to measure cancellation

### **C2.2 Environment**

**Table C2.2.1: Pollution and Nuisance**

Indicator	Before (date)	BaU (date)	After (date)	Difference: After –Before	Difference: After – BaU
<b>8. CO<sub>2</sub> emissions</b>					
<b>9. CO emissions</b>					
<b>10. NOx emissions</b>					
<b>11. Particulate emissions</b>					

Note: it is not possible to undertake this assessment due to measure cancellation

### **C2.3 Society**

**Table C2.3.1: Acceptance**

Indicator	Before (2010)	BaU (date)	After (2012)	Difference: After –Before	Difference: After – BaU
<b>13. Awareness level</b>					

Note: it is not possible to undertake this assessment due to measure cancellation

## C2.4 Transport

**Table C2.4.1: Modal Split**

Indicator		Before (2008)	BaU (2011)	After (2011)	Difference: After – Before	Difference: After – BaU
29. Average modal split-trips	Car					
	Public Transport					
	Cycle					
	Walk					

Note: it is not possible to undertake this assessment due to measure cancellation

**Table C2.4.2: Traffic Levels**

Indicator	Before (2010)	BaU (2010)	After (2010)	BaU (2011)	After (2011)
Occupancy rates in paid parking areas					

Indicator	Difference: 2010 – Before	Difference: 2010 – BaU	Difference: 2011 – Before	Difference: 2011 – BaU
Occupancy rates in paid parking areas				

Note: it is not possible to undertake this assessment due to measure cancellation

Indicator	Before (2006)	BaU (date)	After (2010)	Difference: After – Before	Difference: After – BaU
Number of cars entering the business areas					

Note: it is not possible to undertake this assessment due to measure cancellation

## C3 Achievement of quantifiable targets and objectives

No.	Target	Rating
1		
2		
3		
4		
NA = Not Assessed    O = Not Achieved    * = Substantially achieved (at least 50%) ** = Achieved in full    *** = Exceeded		

Note: it is not possible to undertake this assessment due to measure cancellation

## **C4 Upscaling of results**

Up-scaling this measure to the whole city would mean that paid parking regulation would be extended to all employment areas (including business and commercial areas).

## **C5 Appraisal of evaluation approach**

Note: it is not possible to undertake this assessment due to measure cancellation

## **C6 Summary of evaluation results**

Note: it is not possible to undertake this assessment due to measure cancellation

## **C7 Future activities relating to the measure**

There are no future plans to extend this measure to other business areas in the near future.

---

## D Process Evaluation Findings

### D1 Deviations from the original plan

- **Parking regulation in business areas cancellation** – As already mentioned above, the implementation of a new parking regulation in the business areas was forced to cancellation due to created controversy in social and political circles.

After the research phase, the first contact with involved companies was made in the framework of a workshop held in Miramon business area. Focusing on the features of that business area the main key points presented to justify the need to regulate the parking supply were the following ones:

- Although the parking ratio is 1.37 spots per employee, the reality is that parking in the business area after all employees arrive to their works becomes a very difficult task.
- There are many empty private parking spaces inside buildings (on the ground floor or in the basement) whose owners prefer to park on the outside for convenience.
- The illegal parking ratio is very high and users park their cars on the pavement or on crosswalks.

Taking into account this situation, the regulation of a limited number of parking spots, both for rotation purposes (110 spots) and for loading and unloading operations (146 spots) was suggested.

The involved companies expressed a clear opinion against the implementation of that regulation. Some expressed understanding of the problem and they agreed the need to act to improve mobility situation in the business park, but they also considered that it was not the time to bring this solution due to the economic crisis which would affect employees. Larger companies were the ones which expressed strongest rejection and their non-acceptance of the proposal was based primarily on the defence of their employees.

A similar situation occurred in the other business areas, Zuatzu and Igara.

Meanwhile various groups of employees at each business area started to join in platforms to protest against the measure. Their main concern was the need to start paying for parking in their workplaces, which in their eyes responded to the sole intention of the City Hall raise money through a measure that would not report any benefit to the companies based there.

The low proportion of regulated parking did not convince the workers that the places covered by the regulation were intended to provide a parking solution for external flows, which may benefit their business. They considered it as an initial strategy to enter gradually into the workplaces and gradually increase this regulated parking proportion over time with the intention to increase cash generated in the medium to long term.

The reaction against the measure was echoed by the media which began reporting on the creation and activities of these groups, providing misleading data that served to strengthen its position and penalise the development of the measure, even before the launch of an information campaign.

Picture 1. Demonstrations held in Miramon business park published in the media



It should also be taken into account that all the demonstrations coincided with the municipal election period in the city, and taking advantage of the social impact that these mobilisations were having, the political groups who were in opposition used them to attack the current municipal government, which forced the mayor to cancel the implementation of the measure.

## D2 Barriers and drivers

### D2.1 Barriers

The main barriers encountered for the development of the measure 75 are:

#### Preparation phase

- **Social** – People attitude towards the creation of new paid parking zones is always negative and specifically in business areas where this sort of measures had not been taken before.
- **Political** - Due to the unpopularity of these actions, the opposition political groups took advantage of them to attack the current government which was at that time in the process of municipal elections.
- **Communication** – If not efficiently addressed by the provision of accurate and up to date information, media can feed controversy and boost the reaction against the measure.

### D2.2 Drivers

As for the drivers, the main ones affecting the measure are:

### Preparation phase

- **Positional:** This measure could have benefited from the parallel development of Travel Plans in the same business areas.

### **D2.3 Activities**

In order to handle the above referred barriers and/or to make use of the drivers, the following activities were taken during the implementation of the measure:

### Preparation phase

- **Involvement/Communication:** Several informative campaign explaining parking regulations were held in order to build consensus and gain stakeholders support.

## **D3 Description of organisations and risks**

### **D.3.1 Measure partners**

Following there is a brief description of all project partners and its level of involvement with the measure:

- **Department of Mobility - City of Donostia-San Sebastian** - Design new zoning and pricing policy for paid parking extension. Principal role.
- **Mobility Advisory Board** – Cooperate in the design of the new zoning and pricing policy for paid parking extension

### **D.3.2 Stakeholders**

The main stakeholders involved in the measure are:

- **Representatives and managers from the business areas** – Cooperate in the design of the parking scheme and support its implementation.
- **Unions.** Cooperate in the design of the parking scheme and support its implementation.

## **D4 Recommendations**

### **D.4.1 Recommendations: process**

- **Mobility Commission** - One of the first conclusions drawn from the workshop in Miramon business area, was the need to create a 'Mobility Commission' formed by both the city administration, the business areas management team and the companies based at the work centre. The creation of this kind of working group represents an opportunity for cooperation and consensus building. Also, even if no further progress regarding the initial approach is achieved, the Commission may lead to other solutions beneficial to the interests of the stakeholders involved.

- **Political consensus** – in order to prevent the measure to be used as a topic for political opposition, prior dialogue with all parties in order to reach a basic consensus regarding the need for action and the possible solution is recommended.
- **Approach:** in order to limit public contestation it is recommended to start with a less “invasive” activity on a first stage of the process to make all stakeholders aware about a problem which already exists in all work centres across the whole city, which is the mobility to access workplaces and provide information on the adequate action guidelines.
- **Media** – It is very important to provide regular and updated information to the media about the real objectives of the measure, especially when it is likely to be unpopular.

#### ***D.4.1 Recommendations: measure replication***

- **Incentives provision** – in order to gain support and avoid controversy about the final goals of the measure, it is recommended to design an incentive program to accompany this kind of restrictive measures. So that target users get the clear idea that the ultimate goal is to improve their particular situation, as well as quality of life in the city.