

URBAN FREIGHT TRANSPORT IN REGULATIONS AND PLANNING IN NINE AREAS OF BRITTANY

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ABSTRACT

With the increase of power of the local authorities, especially with regards to movement of urban goods, we decided to focus on the manner in which local authorities in the area of Brittany planned the implementation of regulations and infrastructure. This research studies nine towns in Brittany, namely: Rennes, Saint-Malo, Saint-Brieuc, Lannion, Morlaix, Brest, Quimper, Lorient and Vannes.

Keywords: Urban freight transport, national law and research, local authority planning and infrastructure, modelisation, collective action.

INTRODUCTION

The urban environment is the hub of the transportation of people and goods with a multitude of means of transport. The delivery of goods is essential to create the economic in a dynamic town centre.

Urban goods transport is the movement by a vehicle of goods or materials. A delivery is a pause when goods are loaded and unloaded. This study only deals with the movement of goods between business units, and the supply of public authorities, which represents 40% of all urban goods movement (vehicle-kilometre equivalent to private vehicles).

With the increase of power of the local authorities, especially with regards to movement of urban goods, we decided to focus on the area of Brittany. In this research, we questioned how the local authorities define the regulation about deliveries? And, how did they building the town according to the needs of road-users and inhabitants? This research studies nine towns in Brittany, namely: Rennes, Saint-Malo, Saint-Brieuc, Lannion, Morlaix, Brest, Quimper, Lorient and Vannes. It is based on urban documents and interviews with local authorities, followed by diagnosis.

This paper concerns the choice of the local authorities in Urban Mobility Plan or the municipal regulation. Then, we can see the decision of regulation or infrastructures according to the model FRETURB and the solution equipment adapted to the deliveries found of different by the public authorities.



Map n°1: Localisation of the area Brittany in France

Map n°2: Localisation of the nine areas



THE HISTORY OF THE FRENCH GOVERNMENT'S CONSIDERATION ABOUT THE TRANSPORT OF GOODS

The history of planning about movement of goods shows the change of government's intervention.

Before the early nineties, the principal interest was public transport and private motor vehicle traffic. Therefore, the movement of goods was limited in town centres in order to improve the flows of cars and buses. Some difficulties appeared:

- the economic activities, initially in the town centre, started delocalised in areas around the periphery; so, the town centres were diminished.
- The restriction of the tonnage of goods vehicles made hauliers to organize differently and they chose to load the town centre with small vehicles up to 3,5 tonnes. So, it produced the opposite effect because it can contribute to an increase the number of the goods vehicles in the town centre.

In the early nineties, with the advent of the notion of sustainable development and environmental problems, the lorries were rapidly considered responsible for environmental pollution with the image of being polluting lorries. The authorities of European countries discovered a lack of data of urban goods movements. The French Government adopted a centralist policy: it didn't have any statistics about studies on town planning or technological solutions; the objective was to build a comprehensive quantitative survey in order to help local authorities to choose an adequate policy or infrastructures for the transport of goods. Therefore, the French Transport Ministry and the ADEME (the French Agency of Environment) commissioned a national research program called "the national program on goods in city" to provide local authorities with information. With this survey, the government decided in the way centralist and descending; the local power was restricted, answering to a centralist hierarchical approach.

Quantitative surveys have been implemented in three cities in France namely Bordeaux, Dijon and Marseille and experiments have been launched at the same time in several cities. During the same period, as a result of this survey, the first analysis revealed that several ratios were constant in different cities; so, the FRETURB model was developed by the Economic Laboratory of Transports (localised in Lyon), following the national researches, to calculate the generation of freight vehicle flows that an economic establishment can produce in a town centre. Consequently, the model can contribute towards planning urban goods movement and infrastructures.

The FRETURB model is a tool which can describe and calculate the freight vehicles delivery flows and anticipate the evolution of transport of goods; so, the interpretation of the results can resolve many problems of traffic and it can structure the collective action of the local authorities: it can aid the local authorities to make decisions or plan infrastructures. Therefore this tool called into question the previous central policy and, it produce a progressive approach in the choice of goods policy.

The government then decided to decentralize the politics of goods transport to local authorities: the government gave the priority to local projects and provoked a change: the relationships were not hierarchical but became horizontal with the increase of power to local authorities and partnerships.

THE URBAN MOBILITY PLAN AND MUNICIPAL REGULATION: TWO REGULATIONS TO DEFINE GOODS TRAFFIC

The regulation is the principal means for the authorities to influence the transport of goods; this regulation concerns not only the scale of the town centre but, moreover, the scale to include the outlying areas with the Urban Mobility Plan.

The Urban Mobility Plan

Since December 1996 with the French Clean Air Act (LAURE law) and the Law on Solidarity and Urban Renewal (SRU law) of December 2000, it became compulsory for metropolitan areas over 100 000 inhabitants to produce an Urban Mobility Plan that includes public transport and, moreover goods transport: according to the law, *“the Urban Mobility Plan defines the principles of passenger and freight transport, of traffic and parking regulations within the urban transport perimeter”*. It intends to make the Urban Mobility Plan more effective and it obliges an Urban Mobility Plan to include freight issues. The Urban Mobility Plan came into being after a change in public action following to a quantitative survey that called into question the previous national politic; and, the Urban Mobility Plan can contribute to group together the multitude of local planning.

The Urban Mobility Plan produces a collective action and global thought regarding the problem thanks the actions of stakeholders: it questioned the transport of goods issue for local authorities in order to find more adequate regulations and solutions of infrastructures. In the Urban Mobility Plan, the collective action was organised with different groups of actors who were rallied to resolve the problem of goods transport traffic. The project became a tool of dialogue between different parties that anticipate public action: the town became a collective actor. The project was based on the existing town: according to Bernard Huet, *“to build the town wasn’t innovative. There is a will to preserve town, a sense of protection”*.

When the city adopted an innovative technological solution, it gave to the local authority the opportunity to be visible in competitive national context of territories: the city turns into a collective actor with a specific wish that was expressed in the project in its area. Moreover, the project became a tool of territorial marketing that includes the environment problem and the quality of life in urban areas.

In the Urban Mobility Plan, the authorities take transport of goods into account differently. Not all of local towns in Brittany have got to produce an Urban Mobility Plan because they are cities under 100 000 inhabitants.

	Inhabitants in the area	Inhabitants in town centre	Number of towns in the area
Rennes	384 992	207 922	37
Brest	213 545	142 722	8
Lorient	190 799	58 135	19
Vannes	127 987	52 984	24
Saint-Brieuc	111 433	46 178	14
Quimper	89 098	63 961	7
Saint-Malo	81 415	50 206	18
Lannion	53 650	19 773	20
Morlaix	64 826	15 605	28

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Nevertheless, Vannes is producing an Urban Mobility Plan; Saint-Brieuc and Morlaix have produced a similar document:

- Saint-Brieuc has produced a voluntary Urban Mobility Plan (dated from 2005) but this plan mainly concerns public transport. Saint-Brieuc deals with the transport of goods in general namely: *“To define and to apply a new regulation of the transport of goods and delivery of goods”*.
- Morlaix has produced the Community Scheme of Urban Movement (dated from 2007): the transport of goods has been envisaged on a larger scale than the town. In Morlaix, the subject was general: *“It was necessary to define the real needs in the delivery area, to be coherent between the time of delivery and the type of delivery, and to check the correct implement of the local regulation”*.

For these two towns, the transport of goods has been dealt with public transport was the main concern: indeed, they were smaller towns and with a few number of deliveries so few opportunities of inconvenience caused by delivery vehicle traffic.

In the Urban Mobility Plan (dated from 2001), Lorient said that an urban distribution centre wasn't suited to the area and to resolve the problem of deliveries in the town centre. The authorities have become aware that it was necessary to resolve problems of delivery. The authorities undertook:

- *“to simplify the regulation,*
- *to define the hours of delivery suited to the practice of deliverymen,*
- *to put in place goods vehicle parking delivery areas,*
- *to promote environmentally-friendly vehicles,*
- *to act in consultation with delivery professionals”*.

In the Urban Mobility Plan of Brest (dated from 2002), one of 18 projects is to build a scheme of transport of goods to better organise deliveries. The local manager intended:

- *“to have better knowledge of practice of deliveries,*
- *to develop partnerships with all the parties of goods transport,*
- *to guarantee available goods vehicle parking areas”*.

Some initiatives were clearly defined:

- *“to do survey to increase knowledge,*
- *to simplify the regulation of delivery in the town centre,*
- *to build a plan of circulation of delivery vehicles”*.

In the Urban Mobility Plan of Rennes (2007 to 2017), three objectives were defined:

- *“to define a plan of circulation of delivery vehicles,*
- *to involve the local authorities and the parties of the transport of goods in decision making,*
- *to improve the situation between the different road-users”*.

To sum-up, we can easily group Rennes and Brest together because there is a desire for cooperation between the parties of the institutional and economic sphere. Although, the transport of goods is an undervalued subject, the local authorities became aware that deliveries were necessary to revitalize the economics in the town centre and with the growth of influx it can produce some traffic problems.

Regarding smaller areas of Brittany, the goods transport was quite often a stimulating subject linked with the willingness to build a network of public transport. Indeed, the local authorities have chosen public transport because it promotes a good image of the town and of its politic to the electorate. On the whole, the Urban Mobility Plan doesn't revolutionize the organisation of transport of goods in the town centre; but, the action field of action of the authorities was restricted within the economic parties. Indeed, the goods must be delivered a

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particular moment in the day and in a particular place in the town that were decided by the addressee without necessarily respecting the regulation currently in force. In addition, the local authorities were confronted with a multitude of different persons of the goods transport so people together find it difficult to get a consensus.

The municipal regulation

The municipal regulation is a localized project in an area: some parties were in interaction to set together the objective of making Urban Mobility Plan a reality. This local regulation allows one to take resources into account from an operational point of view.

In the scale of Brittany, many regulations have similarities in their regulations:

- the regulations dated from 1980 with the increase of the goods transport or they were more recent to follow on from the application of national laws,
- as regards the weight, it's often 3,5 tonnes,
- as regards timetables of delivery, they are according to the peak time of the traffic of cars; generally, the deliveries were authorised until 10h00 or 11h00 and the removals of goods were at the beginning of the afternoon (generally until 16 hours).

	Area of application	Tonnage authorised	Timetable authorised
Brest	Creation of a blue area	For vehicles with a weight of less than 7,5 tonnes	Deliveries were authorised between 6h00 to 11h00 except Sunday and bank holidays. When parking was authorised, the vehicle mustn't leave the parking area between 22h00 to 6h00 to respect the tranquillity of inhabitants.
	Outside of the blue area		Deliveries were authorised between 6h00 to 19h00.
Lannion	In the pedestrian streets		Deliveries were authorised between 7h00 to 10h00 and 13h30 to 15h00 except on Thursday. Circulation and parking of delivery vehicle were forbidden.
Lorient	In the town centre	For vehicles with a weight of less than 3,5 tonnes	Deliveries were authorised between 7h00 to 10h30 and 12h30 to 13h30. The engine must be stopped when the goods vehicle was parked less than 100 metres of the houses.
Morlaix	In the town centre	For vehicles with a weight of less than 3,5 tonnes	The deliveries were forbidden between 10h00 to 14h00 and 16h30 to 19h00.
Quimper	In the outlying	All of the deliveries vehicles were authorised.	

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	In the pedestrian streets	- For vehicles with a weight of less than 3,5 tonnes - For vehicles with a weight of less than 3,5 tonnes	- Access permanently. - Deliveries were authorised between 19h00 to 10h00 and 13h00 to 15h30.
Saint-Brieuc	In the pedestrian streets		Access to the pedestrian streets with access restriction. Deliveries were authorised: - Monday to Wednesday: 5h00 to 10h00, 13h30 to 14h30, 19h00 to 24h00, - on Saturday: 5h50 to 8h30 and 19h00 to 24h00, - on Sunday: 8h00 to 14h00 and 19h00 to 24h00.
Saint-Malo	In the very heart of Saint-Malo, during the summer		Deliveries were authorised only in the morning and they must be stopped at 11h00.
Rennes regulation was in the process of being renovated	Throughout the area		Deliveries were forbidden between 22h00 to 6h00.
	- In the town centre - In many streets - In the bus lane		- Deliveries were forbidden between 11h30 to 18h00. - Deliveries were forbidden between 7h30 to 9h00 and 11h30 to 18h30. - Deliveries were forbidden between 7h30 to 9h00 and 11h30 to 18h30.
Vannes	In the very heart of Vannes	The vehicles with a tonnage bigger than 6 tonnes were forbidden.	
	In the town centre		Deliveries were authorised: - in the morning, until 10h30, - in the afternoon, between 13h30 to 15h30
	In the pedestrian streets and on the Saturday		The traffic was forbidden between 10h30 to 18h30.

Since the regulation in 1980' or 1990', fewer regulations have been passed except to forbid the deliveries in the area of pedestrian streets. To sum-up, all of the areas try to limit the increase of the traffic of the goods vehicles with the intention of facilitating the flow of public vehicles and of cars. And, all of the areas passed the law independently with a lack of consultation together and a lack of coordination between each regulation in an area. This provoked the splitting-up of local regulations: the increase of different local regulations or infrastructures can reduce the possibility of haulier to deliver in town centres because the local decisions were not coordinated each of them.

Given that they were the professionals of transport of goods, who wanted concrete solutions to resolve the problems of deliveries in the town centre, the local authorities were

struggled when confronted by a subject that they misunderstood. Therefore, the authorities have recourse to the model in order to diagnose the practices of deliveries.

THE USE OF THE FRETURB MODEL TO AID THE LOCAL AUTHORITIES TO MAKE DECISIONS

Among the urban areas studied, some local authorities referred to the FRETURB model to best knowledge in goods movement in the town centre and to orient the local regulation. The FRETURB model was made up of four modules:

- a generation of the picks-up and deliveries (activity type, the number of jobs in the premises, the type of premises),
- road occupancy by running vehicles (distance travelled between two stops, number of the stops during a round, the vehicle type, the operating mode),
- road occupancy by stationary vehicles (duration of space occupancy, illicit on road parking, no parking allowed),
- road occupancy at any instant (based on opening hours of each economic activity).

The example of Rennes: a diagnosis of delivery and the future progress of the authorities as regards infrastructures and regulation

In the area of Rennes, a planning department "Isis-Jonction" has produced a survey for 2001 to 2003 and has used the FRETURB model. The principal objective was to define innovative actions for urban goods transport in the town centre. Firstly, the planning department has collected the point of view of shopkeepers, deliverers, carriers and the institutional administration. Then, they made a survey of the conditions of delivery namely the type of vehicles, the activity of the trade that receive a delivery, the type of handling charge, the packaging of goods, the type of parking of the delivery vehicles and the inconvenience of parking in traffic.

Here are some principal results of this survey:

- 40% of the trade that receive a delivery is retailing,
- 42% of goods were stocked on the premises,
- the deliverer worked 62% for themselves and 80% of delivery were in regular rounds,
- 70% of deliveries were in commercial vehicles,
- 53% of deliveries were boxed and 23% in small packages,
- 80% of deliverers do not have loading equipment,
- deliveries last less than 10 minutes,
- 86% of deliveries were in illegal parking.

Thanks to the results obtained, the planning department has offered technological and innovative solutions: an urban distribution centre, delivery vehicle point and pick-up points. But, for a long time, no means have been built in Rennes for the goods transport and the problems of circulation have increased in the town centre. And, the goods transport is relevant to the Urban Mobility Plan of Rennes 2007-2017.

In October 2007, the operator of public transport namely Keolis, has noticed following a survey that the delivery vehicles blocked the buses circulation when they were parked in bus lanes. According to this survey, 92% of deliveries blocked the buses circulation in two streets of Rennes and in 14% of incidents caused passenger alighting problems.

Then, Rennes Metropole decided to study the characteristics of the streets where the deliveries disturbed more the buses circulation: it was the objective of my internship for four months (November 2007 to February 2008). The objective was to update the results of the survey of Isis-Jonction, to verify the results of the survey of Keolis and to suggest solutions in order to reduce the conflict between the buses circulation and the delivery vehicles. I performed different surveys: attributes of streets, attributes of trade (type of activity, the openings hours), the circumstances of delivery, and the inconveniences of the buses circulation. These are some results:

- 45% of trades are clothes and accessories retailers,
- 46% of trades are open all-day and 56% opened between 10h00 and 10h30 that provoke a decrease in the time of delivery which is forbidden until 11h30,
- 78% of deliveries don't require delivery equipment because they are in small quantities,
- 64% of deliveries are with a commercial vehicle,
- on average, a delivery lasted 16 minutes and 65% of deliveries lasted less than 10 minutes,
- 14% of deliveries were in the bus lanes and the deliveries lasted 17 minutes,
- in the morning, the buses are distracted by 57% because of delivery vehicles, in the afternoon they are distracted by 60% by pedestrians and only 33% by delivery vehicles,
- 69% of deliveries can simply be avoided by buses going around the delivery vehicle whilst, in the case of pedestrians crossing the street, the bus must stop completely ultimately slowing the flow of buses more increasing commercial loss.

Since the survey of Isis-Jonction, some improvement, namely: a decrease of the delivery time from 20 to 16 minutes and a decrease of the inconvenience of delivery vehicles in the bus circulation. These modifications could be explained because: the roads signs were more clearly visible; two persons from the agency of public transport facilitated the buses circulation; and, the deliverers were more attentive not to distract the buses circulation. But, some deliveries disturbed greatly the buses circulation in some streets and it was necessary to find other solutions: the infrastructure of goods vehicle parking area of 20 metres and one of 40 metres in two different streets, two goods vehicle parking areas of 8 metres in an other street, and the transfer of deliveries in some pedestrian streets.

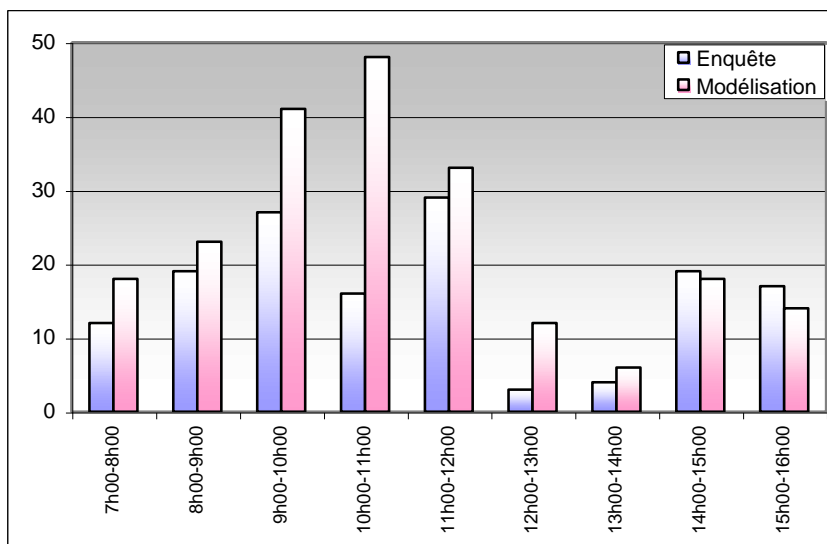
As well as this diagnosis, Rennes Metropole suggested that I take on an other internship of three months: the objective was to produce a leaflet to make local authorities of the town and the area more attentive to the goods movement in future urban regulation schemes. The first page of this leaflet attracted the attention of the reader with a photo that shows different conflicts between road-users namely the buses, the pedestrians, the delivery vehicles and the bicycles and we can see different economic figures regarding the impact of deliveries in Rennes. Inside, a double-page spread: on the left, the impact of delivery vehicles in the buses circulation along with the environment and social impacts; on the right, we can see local solutions and solutions that other towns have chosen to limit the impact of deliveries on circulation. With this leaflet, the objective was to increase the local authorities awareness of an issue and to alert it in order to change the practices and their representation. And, now, Rennes Metropole is considering this leaflet and about new local regulations.

The use of FRETURB in small towns and his limitations

Further to the thoughts involved by the Urban Mobility Plan in 2002, the local authorities of Brest became aware of the deliveries impacts in the town centre. But, the subject of goods transport was unknown to them; therefore, the authorities decided to make a survey with FRETURB model in 2005: this survey had been necessary in order to forecast the facilities required to ensure the optimal goods circulation when the tramline was built.

In the same year, in 2005, university students in Lorient carried out research to discover more about the way in which goods were transported in the town centre without concrete outcomes: this survey concerned 405 shopkeepers. Indeed, according to the local authorities, there are fewer problems of circulation with delivery vehicles. Some special features of the survey of Lorient:

- the majority of trade opened between 9h (170 trades) and 10h (139), and closed generally at 19h (281 trades),
- few trades are opened all the day (139 trades), the majority of trades closes during the lunch time (144),
- the deliveries are often carried out on Tuesday and Thursday because the trades were closed on the Monday (106 trades) and on the Sunday (363), but for 214 trades deliveries were irregular,
- the main trade activities were off-the-peg (24%), 7,4% of bar, 7,2% in furniture and 4,7 of the catering that could explain that the deliveries lasted 15 minutes on average (for 329 trades) and there are several deliveries during a week (for 117 trades),
- the majority of deliveries were only for one a trade (in 314 of case),
- the majority of deliveries were on the morning (in 195 of case),
- the vehicle of deliveries was in 221 of case a van and in 246 a vehicle with a weight of less than 3,5 tonnes,
- fewer deliveries are located on goods vehicles parking areas,
- only 13% of shopkeepers, who were questioned, know the deliveries regulation.



according to time slot.

In Lannion, the planning department has used the FRETURB model to know that a distribution platform was or wasn't necessary to deliver in the town centre. These results demonstrated that this equipment wasn't the solution. But, the results of the model didn't coincide with the observations in the town centre. For example, this graphic of the survey shows this difference regarding the number of deliveries

The model uses a global and a general approach that could explain this difference: therefore, the application of the model is less suited to the small towns. In the case of Lannion, the town centre has narrow streets and there are many slopes bordered by a river.

Therefore, it's important for the local authorities to adopt a suitable solution as regards its own characteristics.

The FRETURB model is not only used in diagnosis the practice of goods transport but is also to direct local authorities in regulations and infrastructures.

EXPERIMENTATION ON DELIVERY EQUIPMENT THANKS TO A MODEL OR BASED WITHOUT INITIAL QUANTITATIVE SURVEY

The local authorities want to rationalize the distribution of deliveries and to promote a best urban environment for his inhabitants.

Lannion: a survey shows that a distribution platform wasn't necessary for the deliveries in the town centre

The authorities of Lannion decide in 2001 to make a survey by a planning department who has used the FRETURB model. They define five objectives:

- to study the possibilities of parking near the station,
- to know the practices of the users of public transport and possibilities of intermodality,
- to analyze the potentiality to fit the itinerary for the pedestrian and the bike,
- to update the organisation of the traffic,
- to know the deliveries practises in the town centre and to bring out main points of action.

The subject of the goods transport wasn't the main concern of the local authorities but there is a will to improve the situation with a infrastructure: beyond the knowledge of the practises, the authority wants to identify the issue of a distribution goods platform infrastructure. This issue can offset the limited use of delivery areas and it can moreover reduce the inconvenience of deliveries on traffic.

The survey shows that the number of deliveries is higher than in the outlying areas. Here some results:

- the deliveries were between 11h and 12h,
- the majority of the deliveries were located on the Aiguillon Quay because it can permit an access on different streets,
- the deliveries lasted between 3 to 5 minutes because the main activity was retailing (78%) and 12% in the restoration with small package carried without loading equipment,
- the vehicles of deliveries were parked on the road but it's normal because the town centre of Lannion were pedestrian street,
- the majority of deliveries were with a vehicles with a weight of less than 3,5 tonnes
- 80% of deliveries were integrated in the round,
- 56% of deliveries were carried out on behalf of other people,
- most of deliveries account for 78% the small trade and for 12% in catering; therefore, a short time of a delivery namely between 3 to 5 minutes and the goods were delivered in small parcels that doesn't involve loading equipment,
- 60 of deliveries can't be loud from a distribution platform.

This survey highlights that a delivery platform wasn't suited to the deliveries practices in the town centre of Lannion because the place of delivery were too geographically dispersed and the volume of goods wasn't considerable.

In Saint-Malo, an experiment of distribution platform without survey

A haulage contractor, specialist in late-night deliveries, has decided to make good use of delivery vehicles during the day: these vehicles could be used for deliveries in the very heart of Saint-Malo. With financial support and a suitable regulation from the authorities, the platform has been built at the entrance of the town since 1999. Several road hauliers were interested by this infrastructure because they wanted to avoid the difficulties to deliver in the very heart of Saint-Malo with a lot of narrow streets. The road haulier who delivered the goods in the town centre has been employed as a subcontractor of the regional road haulier.

In this year, the distribution platform was a success: the number of deliveries increased by 30 tonnes of goods in the first month to 100 tonnes in the late year 1999. Despite the success of this infrastructure, the firm had to file a petition in bankruptcy in 2000 due to haulier debts.

This example shows that it was very difficult to manage a distribution platform because it was dependent on economic factors and current trends of the roads hauliers.

In Morlaix, a long implementation of a distribution platform

In 1985, 1986, a distribution platform was built in the area of Morlaix and it was served by railway track. It was an innovate subject but the platform worked only for 3 years. The main objective of this infrastructure was to carry chilled foodstuffs. The goods were brought in by container by road up to the platform; then, the container was transferred on goods wagons of SNCF by crane. The platform closed because the activity was insufficient compared with the initial forecast. Moreover, the platform was confronted with the road transport lobbies.

In 2008, the area of Morlaix has bought the plot of land with the intention to start the distribution platform again with several partners; and, a company owns wagons and rents the tracks. The authorities of Morlaix were responsible for the renovations and they had to invest in loading equipments.

The location of delivery area in each town according to the needs

The delivery area was authorised by a municipal regulation that indicates the setting-up and the functioning of the infrastructure. This infrastructure was fitted according to the local needs, therefore without harmonization in the local regulation. For example:

- Morlaix has built about twenty areas for all the vehicles and one of them for delivery vehicles: the regulation didn't allow the parking of vehicles between 22h00 to 8h00,
- Quimper has built 7 delivery areas mainly localised in the town centre: the regulation indicated that only the vehicles of goods were authorised,
- in Saint-Brieuc, there are 8 delivery areas,
- in Brest, about thirty delivery areas were implemented in the town that the planning department studied,
- in Vannes, about 70 delivery areas were implemented in the town to avoid the blocking of traffic in the narrow streets,

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- in Lannion, there are 4 delivery areas and 3 areas to stop during a small down time, therefore in one street a goods vehicles only lane is in place and without any regulation for its operation,
- in the heart of Saint-Malo, there are only 3 small down time parking areas,
- in Rennes, there are about forty delivery areas and deliveries were authorised for up to 30 minutes.

In spite of an important number of goods vehicle parking areas in the town centre of each area, a lot of private cars parked on them and the deliverymen must park his goods vehicle in the traffic because of lack of space. All the authorities were confronted by this problem because there isn't any means of checking.

Although the increase of the vehicles goods parking areas, their location according to the needs without real global coordination to organize the offer of parking area. And, the authorities' town continue to make regulations without coordination with the other areas.

CONCLUSION

The goods transport was ignored for a long time by national and local politics; but, the deliveries were a necessity to keep commercial activities in the town centre. It was very late in 1990' that we can see the first researches and quantitative surveys can aid the authorities to choice adapted regulations. With decentralization, the local public authorities have more power to regulate the goods transport but, without ability to face up a specific thematic. Actually, we can see a patchwork in the local regulation in spite of the implementation of the Urban Mobility Plan that defines global objectives. To better know the deliveries practices in town centres and to aid the local authorities, the model FRETURB was a good solution to define a new regulation or new infrastructures. But, despite of several tentative of regulation, the transport of goods was submitted to economic logic.

The survey of these 9 areas in Brittany was a first in this area and it shows a real will of the local authorities to include the goods transport with the intention of reducing the conflict between the users in the town centre. But, several dysfunctions appeared because of a lack of consultation between the public authorities and the economic sphere of the transport of goods; and, we noted also a lack of harmonisation between regulations of each local area. Moreover, a unique solution does not exist to facilitate the goods traffic and, even if the same solution was implemented in two towns, the results would not necessarily be similar. So, it was interesting to bring together the areas of Brittany with the delivery professionals to discuss and to popularise the infrastructures and regulations that promote a better goods flow in the town in order to associate the individual liberty to move and the collective respect of the environment.

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- Communauté d'agglomération de Rennes (2002) *Propositions d'actions sur le transport de marchandises, phase 2 lot 2*, ISIS – JONCTION.
- Communauté d'agglomération de Rennes (2002) *Propositions pour un projet de Plan de Circulation Marchandises et d'une expérimentation d'équipement, phase 2 lot 2.*
- Plan de Déplacement Urbain de l'agglomération rennaise 2001 - 2007 et 2007 - 2017.