Investigating the inclination of the Ho.Re.Ca. sector to city logistics measures: the case of Cagliari

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Extended abstract

Objectives and motivation
Nowadays European cities are growing more and more and the increase in urbanization is strictly related to the increase in motorization. Also, the socio-economic development of cities is strongly related to freight distribution. However the not-sustainability of urban freight transport represents a major cost in economic, social and environmental terms. A sustainable urban development can be achieved by applying city logistics measures which provide more efficient and environmentally friendly urban freight transport systems by, at the same time, conciliating the different interests of the stakeholders involved in the complex urban system. In this context, Urban Freight Consolidation Centres (UFCCs) represent a good tool to reduce negative impacts related to urban freight distribution (Anderson, Allen, and Browne 2005). In fact, by using high-load shared delivery vehicles for the last mile, UFCCs allow reducing congestion and pollution related to heavy good vehicles (HGVS) in urban areas. Even though best practice and policies of urban sustainability are strongly promoted by the European commission, sustainable urban freight policies are difficult to implement; in fact, initial funding from the central or local government is necessary for feasibility studies and trials when the UFCC project starts. (Browne, Sweet, Woodburn and Allen, 2005). Furthermore, often stakeholders involved in city logistics process do not know city logistics measures and they are not aware of the benefits these schemes can provide (Stathopoulos, Valeri and Marcucci, 2012). Also, local authorities are not very conscious about the acceptability and the operative constraints related to the potential users of the scheme which are those that determine the success of of the scheme because they provide for its financial sustainability. For this reason, the lack of awareness and the financial issues discourage local authorities from relying on these measures. A deep behavioural change in all the stakeholders involved is needed.

The paper presents findings from a survey carried out in the city of Cagliari (Italy). The survey aims to investigate on the stakeholders' freight urban transport habit in order to evaluate the possibility of their behavioral change and involvement to implement a sustainable urban freight distribution scheme. A multi-stakeholders approach has been developed by involving the retailers operating in a specific commercial limited traffic zone of the city centre with the purpose to understand the perspective of the potential users involved about innovative urban freight systems policies.

The survey can represent the basis on which policy-makers can understand the acceptability of city logistics measure, above all UFCCs schemes respect to the potential users of the UFCC; so, they can decide if, when and how a city logistics measure can be implemented in the city centre of Cagliari to make it more sustainable.

General description
Cagliari is the capital of the Sardinia island. Its city centre is full of bars, restaurants and hotels that work hard on Summer due to the high tourists affluence in this season. The survey has been carried out by identifying a specific commercial area of the city centre. The area identified is a limited traffic zone located characterized by a high number of commercial activities related to the Ho.Re.Ca. sector. This kind of sector is quite exigent in terms of deliveries due to the fresh and perishable nature of the products they use for their business; a typical delivery is a small size delivery with high frequency, so this sector generates a high number of journeys in low load. For this reason the authors decided to identifying an area in which these activities were prevalent, in order to investigate if, and how, city logistics schemes could reconcile with their delivery needs.

The population considered for the survey is composed by 60 commercial operators (about 50% of Ho.Re.Ca. activities located in that area), which can be split approximately in equal parts in bar, restaurants, discount markets and hotels.

Data collection process has been carried out in 2015 during the months of February and March by means of questionnaires administration and face-to-face interviews. Two kind of questionnaires have been designed: a shorter one and a longer one depending of the availability of the interviewees.

The questionnaires aim to collect data on the habits related to the goods delivery by considering the different type of goods delivered and the way of the delivery (self-provisioning or outsourcing or supplied by the suppliers ). Also, a specific part of the questionnaire investigates on food waste.

Based on these data, the authors decided to employ multiple correspondence analysis to elaborate qualitative data and, on the other hand, principal component analysis to elaborate quantitative data. Afterwards, a cluster analysis has been performed.
Results and conclusions
From a first step analysis, interviewees involved in the survey are resulted to be similar with respect to delivery experiences. In fact, due to the nature of the activities (Ho.Re.Ca.), they work with fresh food and for this reason a typical delivery is characterised by high frequency and small size. Based on their experience, they buy goods day-by-day and they arrange for the delivery by themselves. Also, due to this kind of delivery, a very low food waste has been outlined. On the contrary, analyzing survey data, the beverage deliveries can be redesigned using urban freight strategies, as the introduction of local UFCC.

Results will help local authorities to understand how and when new innovative urban freight policies can be implemented and accepted by the stakeholders. Moreover, policy-makers can have an idea of the factors for a successfully city logistics scheme implementation and they can also investigate the perception of these kind of measures from the potential users point of view. The multi-stakeholders approach can be considered an important tool to be used to support policy makers to improve knowledge in this new field. It can therefore represent a management support in decision making within sustainable urban freight policies. However, even if the interviewees showed to have a propensity for sustainability and green transport solution, on the other hand they have a strong general will of manage their own delivery by themselves, because they want to see and choose the products they buy (fresh food: i.e. fish, meat, fruits, etc.).

References

Keywords: city logistics measures; stakeholders involvement; case study; Horeca deliveries.