



Thematic network BESTUFS (BEST Urban Freight Solutions)



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City Inquiry “European Survey on Transport and Delivery of Goods in Urban Areas”

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1 INTRODUCTION AND OBJECTIVES OF BESTUFS AND THE CITY INQUIRY

BESTUFS (= Best Urban Freight Solutions) is a EC funded thematic network in the 5th framework program (for more information see www.bestufs.net). Within these activities a city inquiry on "issues, requirements and innovative measures for transport and delivery of goods in urban areas" was carried out.

In this chapter 1 general information and the background on BESTUFS and the City Inquiry itself are given. Chapter 2 shows the sample size of the city inquiry and general information on the quality of the feedback are given. The following chapter 3 includes the analysis of the filled in questionnaires (for the whole questionnaire see ANNEX VII) with the most important results and an assessment. In chapter 4 final conclusions are given.

1.1 Objectives of BESTUFS

BESTUFS is establishing and maintaining an open European network between urban freight transport experts, user groups/associations, ongoing projects, interested cities, the relevant European Commission Directorates and representatives of national transport administrations in order to identify, describe and disseminate best practices, success criteria and bottlenecks with respect to the movement of goods in urban areas.

It is the role of this thematic network to act as a facilitator in order to ensure that excellent strategies and best practices are not lost to the remainder of the European Community, the freight community and cities themselves. Overall, BESTUFS

- will identify the problems and the requirements of the cities,
- will set up the environment for establishing recommendations and
- will identify best practice scenarios.

1.2 Objectives of the city inquiry

The '**European Survey on Transport and Delivery of Goods in Urban Areas**' has been developed in close work together with the BESTUFS-consortium and POLIS¹ and has been sent to important European cities in order to identify their major problems, requirements and initiatives concerning urban freight transport. The results will help to focus on major aspects of urban freight transport and to choose the themes to be treated.

It has to be considered that the results of this city inquiry represent exclusively the view of the involved cities. Other relevant actors in urban freight as shippers, transport companies, systems suppliers etc. may have different concerns and views.

¹ The POLIS network exists to help cities and regions in Europe exchange their experiences and develop closer technical and political co-operation towards building more efficient and sustainable transport systems and solutions. The main goal of the network is to improve urban and interurban transport management by promoting integrated systems and services using telematics tools and alternative modes of transport.

2 DISTRIBUTION OF QUESTIONNAIRE, FEEDBACK AND QUALITY OF RESULTS

2.1 Asked cities

148 questionnaires have been distributed to medium sized and big cities. 44 cities answered (approx. 30%) and 43 questionnaires could be analysed. This includes 11 agglomerations (conurbations) and 32 cities; in some cases only the city center was regarded. In the following analysis and assessment they will be regarded altogether and called "cities".

The feedback lies over the average feedback of European surveys concerning freight transport planning (about 20 %) because apart from POLIS personal contacts of the BESTUFS-members and contractors could be used.

The following table shows the number of analysed questionnaires. More filled in questionnaires were received from Northern and Central European countries whereas the southern part of Europe is only partly covered. This has to be considered reading and assessing the results.

Country	Number of analysed questionnaires
Austria	2
Danmark	4
Finland	1
France	6
Germany	5
Greece	6
Italy	1
Netherlands	3
Republic of Ireland	1
Sweden	3
Switzerland	7
United Kingdom	4
Total	43

2.2 Quality of answers

Due to the fact that most of the cities filled in the questionnaires carefully it can be concluded that a strong interest on urban freight issues exists. In general the quantitative parts (multiple choice, figures) were answered more completely than the qualitative parts.

Knowing that it is always difficult to get a representative view from 'the city' most of the questionnaires were filled in by the city planning and development department or a department closely related to this field of activities within the city. Considering this the results of the BESTUFS city questionnaire give a unique view on problems and requests of European cities on urban freight transport.

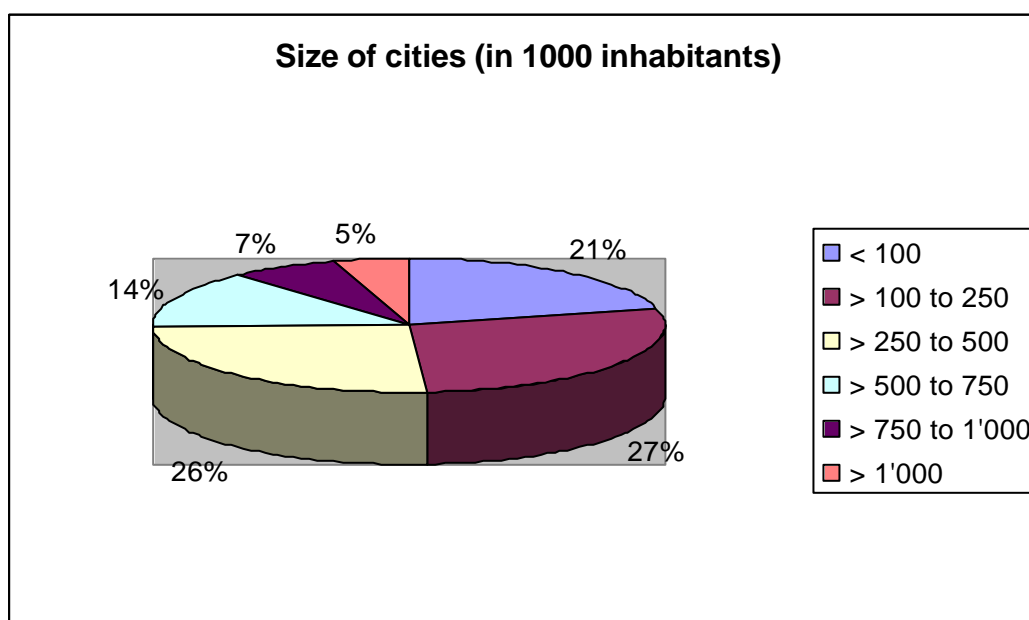
3 RESULTS OF ANALYSIS

3.1 Part 1: General information (on the structure of the cities)

Within the general questions on the city or agglomeration the main indicators are the size of the city including area in square kilometers, population (= number of inhabitants) and employment (= number of jobs) (see also ANNEX I). As only the number of inhabitants was given for all cities this indicator was regarded for further analysis.

3.1.1 Size of the cities

Size of city [in 1'000 inhabitants]	Number of cities	Percentage
< 100	9	20.9%
> 100 to 250	12	27.9%
> 250 to 500	11	25.6%
> 500 to 750	6	14.0%
> 750 to 1'000	3	7.0%
> 1'000	2	4.7%
Total	43	100%



The average size of the asked cities within one country differs heavily (e.g. Switzerland: 170'000 inhabitants, Germany: 660'000 inhabitants) but this is quite typical for the structure of European cities in general. The average size of all regarded cities is approximately 410'000 inhabitants (this includes agglomerations (conurbations), cities and city centers). Regarding cities with more than 1 Mio. inhabitants as big small and medium cities are dominating in this inquiry.

3.1.2 Main sector of economy within the cities

The sector of economy could be ranked between 1 (= very important sector) and 5 (= less important sector). Therefore a low number of total points (and a low mean value) indicates a high importance of the regarded sector of economy.

No.	Sector of economy	Points	Rank	Mean Value
7	Government, public administration, health services	79	1	1.8
6	Banking, finance, insurance	105	2	2.4
3	Distribution, storage, communication	107	3	2.5
5	High-technology, media	109	4	2.5
4	Hotels and catering, tourism	110	5	2.6
1	Manufacturing, industries, utilities	122	6	2.8
8	Other services	128	7	3.0
2	Construction and equipment	133	8	3.1

The sector "government, public administration, health services" (No. 7) is dominating the economic situation within many cities/agglomerations. This is reasonable because many of the asked cities are capitols or regional centers where administrative institutions are situated. It has to be considered that this is also influenced by the sample; the "own" sector of economy is usually over-weighted. In those cities also many banks and assurances (No. 6) have got their main office. There the sectors No. 3, 5 and 4 also represent services which are dominating over industrial activities.

The sectors No. 1, 8 and 2 are of a minor importance. A reason is certainly that companies of these sectors are often not situated within the city but in the surrounding municipalities. The difference in importance between the sectors No. 6, 3, 5 and 4 are very small; simplified they have the same importance.

3.1.3 Equivalent number of fulltime staff dealing with urban freight within the administration of the city

For getting an impression about the importance of urban freight transport planning within the cities the equivalent number of fulltime staff² dealing with freight transport planning within the administration of the city was analysed. 74% of the cities answered on this question (32 out of 43).

² Examples for interpretation:

In Nice the equivalent number of fulltime staff is 90%. This means that if the time of all employees who are working on urban freight transport is assumed on fictive persons there would be 1 person who uses 90% of his or her time for working on urban freight and 10% for other issues.

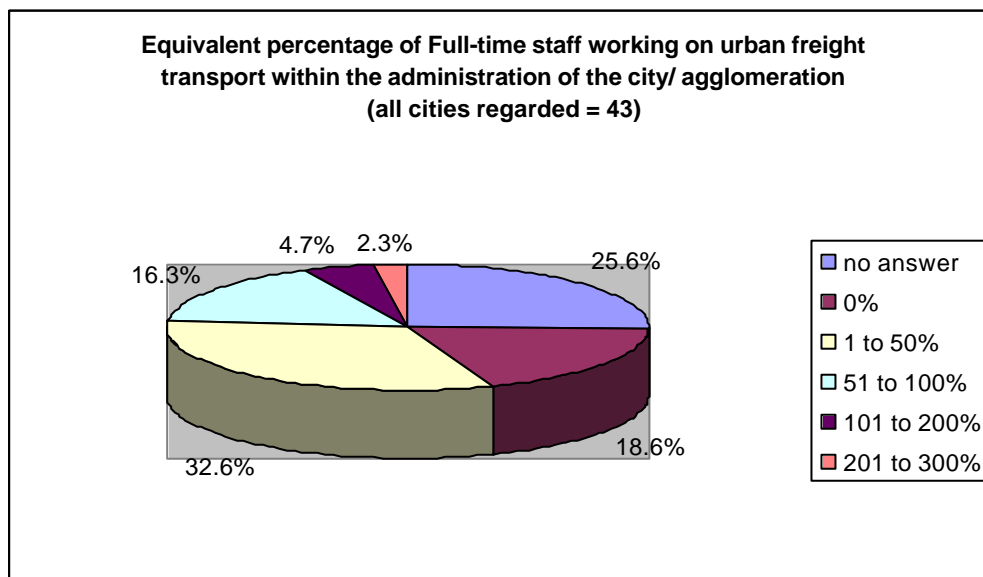
In Zürich the equivalent number of fulltime staff is 150%. This means that if the time of all employees who are working on urban freight transport is assumed on fictive persons there would be 1 person who uses 100% of his or her time for working on urban freight plus 1 person who uses 50% of his or her time for working on urban freight and 50% for other issues.

19% of all cities (43) do not have any person being in charge of urban freight planning. One third of the cities (33% out of 43) has got half a fulltime employee or less dealing with freight transport planning.

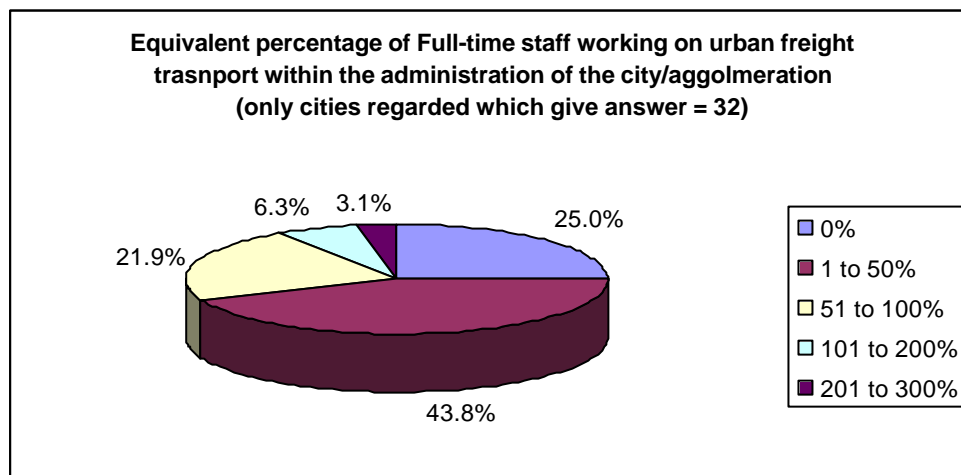
If the cities which are giving no answer are not regarded the situation within the cities appears even worse:

25% of all cities which answered (32) do not have any person being in charge of urban freight planning. 44% of the cities (out of 32) have got less than half a fulltime employee dealing with freight transport planning.

All cities regarded = 43 cities		
Fulltimestaff	Number of cities	Percentage
no answer	11	25.6%
0%	8	18.6%
1 to 50%	14	32.6%
51 to 100%	7	16.3%
101 to 200%	2	4.7%
201 to 300%	1	2.3%
Total	43	100%



Only cities regarded which gave answer = 32 cities		
Fulltime staff	Number of cities	Percentage
0%	8	25.0%
1 to 50%	14	43.8%
51 to 100%	7	21.9%
101 to 200%	2	6.3%
201 to 300%	1	3.1%
Total	32	100%



The equivalent number of fulltime staff is only partly depending on the size of the city: e.g. Aarhus (DK) has got 50'000 inhabitants and a 75%-job whereas Strasbourg (F) with 450'000 inhabitants has got only a 10%-job³ (see also ANNEX II).

The answers have to be regarded critically because very often different levels of administration within the city have got joint responsibility of a task but probably don't know about the total equivalent number of fulltime staff working on a specified subject.

Compared to passenger transport planning the fulltime staff allocation in urban freight transport planning is poor. So in many cities urban freight issues are neglected compared to passenger transport issues according to insufficient manpower.

³ Remark: In general those cities which have employees dealing with freight planning do also answer within chapter 2 that they have problems concerning urban freight transport.

3.2 Part 2: Problems within the cities

Which main problems appear within the cities concerning urban freight transport in the view of the authorities?

Within the inquiry a selection of problems was given with the possibility to add additional problems (see ANNEX VII).

The problems could be ranked between 1 (= very important problem) and 5 (= less important problem). Therefore a low number of total points (and a low mean value) indicates a high importance of the regarded problem. Two different methods have been used to get a rank list of problems: addition of all points and addition of the number of cities which give 1 or 2 (4 or 5) points. Both methods lead to the same results. Therefore in the following table only the ranking of the sum of the points is presented.

The mean value of all regarded problems is 2.68 in a scale form 1 to 5 which means that in general the cities have problems to be solved.

No.	Problem	Points	Rank	Mean
8	Lack of suitable infrastructure for deliveries (ramps, areas for loading/unloading, reserved parking spaces)	89	1	2.07
4	Noise emissions	92	2	2.14
16	Conflicts with other road users during delivery operations (loading and unloading)	93	3	2.16
7	Access of goods vehicles to pedestrian zones or historic centers	94	4	2.19
1	Traffic disruption in inner city due to goods transport vehicles to/from the city	99	5	2.30
5	Environmental pollution	99	6	2.30
15	Intimidation of road users (especially vulnerable users: cyclists, pedestrians) by large delivery vehicles	107	7	2.49
10	Enforcement of regulations (traffic, road use, parking, deliveries)	111	8	2.58
14	Too many small delivery vans	112	9	2.60
6	Damage to road surface and infrastructure due to heavy goods vehicles	120	10	2.79
13	Too many heavy goods vehicles	125	11	2.91
17	Lack of co-operation and co-ordination between transport companies (shippers, transporters, forwarders)	128	12	2.98
11	<i>Location of business and producer/consumer activities (industrial zones, warehouses, shopping centers situated in the city periphery)</i>	130	13	3.02
2	<i>Traffic disruption on main roads to/from the city due to goods transport vehicles to/from the city</i>	135	14	3.14
3	<i>Traffic disruption in inner city and/or on main roads to/from the city due to goods transport vehicles in transit</i>	137	15	3.19
9	<i>Inappropriate/insufficient legislation and regulations</i>	139	16	3.23
12	<i>Migration of companies (lack of capacity on highway network)</i>	146	17	3.40
	Mean values	115		2.68

Regarding the table we can state that for the city authorities:

- Environmental problems are of high importance (No. 4 and 5).

- Infrastructural and operational problems concerning the access and the conditions at the delivery points are of high importance (No. 8, 16 and 7).
- The traffic disruption in the city by city internal traffic (No. 1) is a bigger problem than by transit (No. 3).
- The organizational and co-operational problems (No. 17) and problems with regulations (No. 9) seem to be less important than infrastructural and operational problems (No. 8 and 16).

Most of the important problems are dealing with the situation within the city center. Many conflicts seem to appear between the city center's function as a commercial zone and as an area where people live, shop and relax. The lack of available space in the inner city to carry out these activities can be regarded as one major city problem and underlines the demand for appropriate solutions.

The less important problems are situated more outside the city center or deal with problems which do not directly occupy the city administrations and their responsibility. Up to now the cities do not think that the migration of companies because of poor access conditions is a big problem.

Obviously, for the cities there is no lack of legislation and regulation (No. 9) to influence urban freight transport. Therefore, it can be assumed that the prerequisites for e.g. access of goods vehicles to pedestrian or historic center (No. 7) are given. Furthermore the cities do not regard enforcement support as a main problem despite enforcement is an important task to get a successful implementation of a measure. One reason for this contradiction may be that in many cases different departments within a city are responsible for planning of measures and the according enforcement (e.g. transport planning unit and enforcement by police).

Concerning the size of the cities big cities (1.000.000 inhabitants and more) seem to have usually more problems than small and medium sized cities (see ANNEX III).

3.3 Part 3: Issues concerning urban freight transport

Which main issues are important within the cities concerning urban freight transport in the view of the authorities?

Within the inquiry a selection of issues was given with the possibility to add additional issues (see ANNEX VII).

The issues could be ranked between 1 (= very important issue) and 5 (= less important issue). Therefore a low number of total points (and a low mean value) indicates a high importance of the regarded issue. Two different methods have been used to get a rank list of issues: addition of all points and addition of the number of cities which give 1 or 2 (4 or 5) points.

The average value of all regarded issues is 2.59⁴ in a scale of 1 to 5 which means that in general the cities have issues to be dealt with. Both methods lead to the same results. Therefore in the following table only the ranking of the sum of the points is presented.

⁴ Remark: 42 questionnaires could be analysed concerning the issues.

No.	Issue	Points	average value
5	Co-operation among all local actors: public authorities/police, retailers and business sector associations, shippers, forwarders, transport companies, etc.; framework agreements	83	1.93
6	Information to goods transport professionals, drivers, retailers on existing rules and regulations, available pickup/delivery areas parking spaces for goods vehicles, transit itineraries	93	2.16
1	Statistical data, data acquisition and data analysis on urban freight transport	96	2.23
3	Co-ordinated urban freight policy: better co-operation among various city departments and local organisations (police, development agencies, chambers of commerce, etc.) and better co-operation between cities within the metropolitan area	96	2.23
16	Integration of urban freight in transport policy and mobility planning (mobility management)	98	2.28
18	Integration of urban freight in town planning and land-use/infrastructure planning (construction and development regulations, access to installations, etc.)	98	2.28
4	Practical experimental measures: surveys, forums and information sessions, pilot projects, brochures, awareness-raising campaigns, PPPs, etc.	100	2.33
13	Use of vehicle technology for goods transport (low-emission standards, vehicle size and loading gauge, loading apparatus, etc.)	100	2.33
8	Adjust local traffic and parking/delivery regulations, delivery times and access/weight restrictions, according to economic activity and actual pickup/delivery patterns	103	2.40
10	Improved management of urban road space and kerbside access, infrastructural solutions (loading/unloading bays)	103	2.40
14	Widened use of city distribution centres intermodal transfer facilities and integration with traffic management operation	103	2.40
21	Use of railway and/or waterborne freight transport and better integration of freight terminals/ports with road networks (inter-modal transfer facilities)	104	2.42
22	New consumer modes: home deliveries, encouraging retailers to group deliveries, e-commerce (home shopping), etc.	105	2.44
19	Integration of urban freight in economic development strategies and business/shopping activities location policy and land-use/infrastructure planning	108	2.51
7	Consistency and harmonisation of local/regional, national regulations and legislation (highway code, local traffic and parking regulations, technical norms and standards, commercial/carrier consignment contracts)	109	2.53
2	Modelling tools and methods for urban freight transport planning and management	110	2.56
20	<i>Link to neighbouring areas' policy/regional plans (through-traffic, externalities from nearby industrial/portuary activities, etc.)</i>	118	2.74
11	<i>Traffic management for goods transport: access restriction, signage and information systems (VMS), variable lane use, automatic tolling (EFC), vehicle recognition</i>	121	2.81
15	<i>Goods transport efficiency, assessment and pricing (identification of costs)</i>	122	2.84
17	<i>Integration of urban freight in road planning and infrastructure design (tunnels/bridges, roundabouts, junctions, etc.)</i>	124	2.88
9	<i>Enforcement support (video control, automatic detection systems, complaints hotline)</i>	128	2.98
12	<i>Use of ITS for goods transport (integrated fleet management, vehicle location, driver information, etc.)</i>	134	3.12
23	<i>Innovative urban freight transport ideas (e.g. using underground systems, pipelines, etc.)</i>	147	3.42
	Mean Value		2.59

Regarding the table it can be stated that for the city authorities:

- Organizational, co-operational, informational and political aspects (No. 5, 3, 6 and 16) are of higher importance than infrastructure, enforcement, traffic management, transport telematics and innovations (No. 17, 9, 12 and 23).
- E-commerce seems to be not (yet) a main issue to be dealt with (No. 22)
- From the so called “technical measures” a sustainable vehicle technology (No. 13) is a more important issue than other innovative technologies (ITS, underground systems, etc.)
- Statistical data and its use is relevant for improving urban goods transport.
- The connection between urban freight and land use planning is of a high relevance.

In general the answers given show that the city authorities are regarding those issues as important which can be influenced by themselves (PPP, information, policy, land use planning, etc.).

Comparing the results of the questions about the problems and issues it can be assessed that not all cities are aware of the developments going on in logistics and city distribution and the possibilities of new technologies and innovations are underestimated or not well know yet.

Concerning the size of the cities big cities (1.000.000 inhabitants and more) seem to regard the issues as more important than small and medium sized cities (see ANNEX III).

3.4 Part 4: On which themes (issues) would you like to receive further information?

The following table shows the issues on which most of the cities want to get further information.

No.	Issue	Number of cities
305	Co-operation among all local actors: public authorities/police, retailers and business sector associations, shippers, forwarders, transport companies, etc.; framework agreements	13
314	Widened use of city distribution centres intermodal transfer facilities and integration with traffic management operation	12
322	New consumer modes: home deliveries, encouraging retailers to group deliveries, e-commerce (home shopping), etc.	11
302	Modeling tools and methods for urban freight transport planning and management	10
304	Practical experimental measures: surveys, forums and information sessions, pilot projects, brochures, awareness-raising campaigns, PPPs, etc.	10
313	Use of vehicle technology for goods transport (low-emission standards, vehicle size and loading gauge, loading apparatus, etc.)	10
310	Improved management of urban road space and kerbside access, infrastructural solutions (loading/unloading bays)	9
321	Use of railway and/or waterborne freight transport and better integration of freight terminals/ports with road networks (inter-modal transfer facilities)	9
306	Information to goods transport professionals, drivers, retailers on existing rules and regulations, available pickup/delivery areas parking spaces for goods vehicles, transit itineraries	8
311	Traffic management for goods transport: access restriction, signage and information systems (VMS), variable lane use, automatic tolling (EFC), vehicle recognition	8
318	Integration of urban freight in town planning and land-use/infrastructure planning (construction and development regulations, access to installations, etc.)	8
308	Adjust local traffic and parking/delivery regulations, delivery times and access/weight restrictions, according to economic activity and actual pickup/delivery patterns	7
303	<i>Co-ordinated urban freight policy: better co-operation among various city departments and local organizations (police, development agencies, chambers of commerce, etc.) and better co-operation between cities within the metropolitan area</i>	6
307	Consistency and harmonization of local/regional, national regulations and legislation (highway code, local traffic and parking regulations, technical norms and standards, commercial/carrier consignment contracts)	6
315	Goods transport efficiency, assessment and pricing (identification of costs)	6
316	<i>Integration of urban freight in transport policy and mobility planning (mobility management)</i>	6
323	Innovative urban freight transport ideas (e.g. using underground systems, pipelines, etc.)	6
301	<i>Statistical data, data acquisition and data analysis on urban freight transport</i>	5
309	Enforcement support (video control, automatic detection systems, complaints hotline)	4
312	Use of ITS for goods transport (integrated fleet management, vehicle location, driver information, etc.)	4
317	Integration of urban freight in road planning and infrastructure design (tunnels/bridges, roundabouts, junctions, etc.)	3
319	Integration of urban freight in economic development strategies and business/shopping activities location policy and land-use/infrastructure planning	3
320	Link to neighboring areas' policy/regional plans (through-traffic, externalities from nearby industrial/portuary activities, etc.)	3

The cities want to get information on the above shown issues. Most of them are also regarded as important issues in part 3 of the questionnaire. It is remarkable that obviously cities seem to have sufficient enough information available on the following issues:

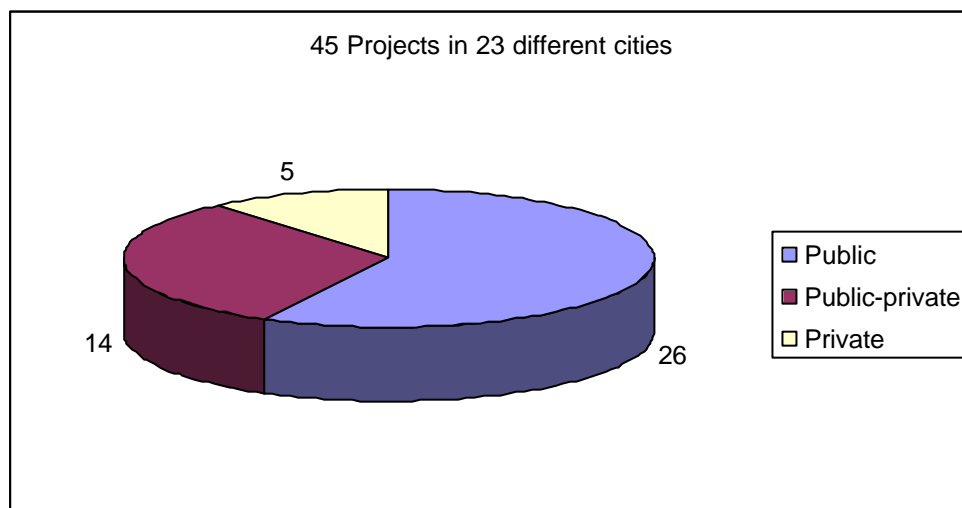
- No. 301: Statistical data, data acquisition and data analysis on urban freight transport

- No. 303: Coordinated urban freight policy: better co-operation among various city departments and local organizations (police, development agencies, chambers of commerce, etc.) and better co-operation between cities within the metropolitan area
- No. 316: Integration of urban freight in transport policy and mobility planning (mobility management)

3.5 Part 5: Projects and measures on urban freight planning within the cities

Which cities are proceeding or planning projects concerning urban freight planning?

24 cities (56 %) of various sizes answer that they have projects. A list of the projects please find enclosed within ANNEX IV.



The public projects are mainly dealing with distribution platforms (Issue No. 14), vehicle technology (Issue No. 13), Improved management of road space (Issue No. 10) and co-operation among all local actors (Issue No. 5).

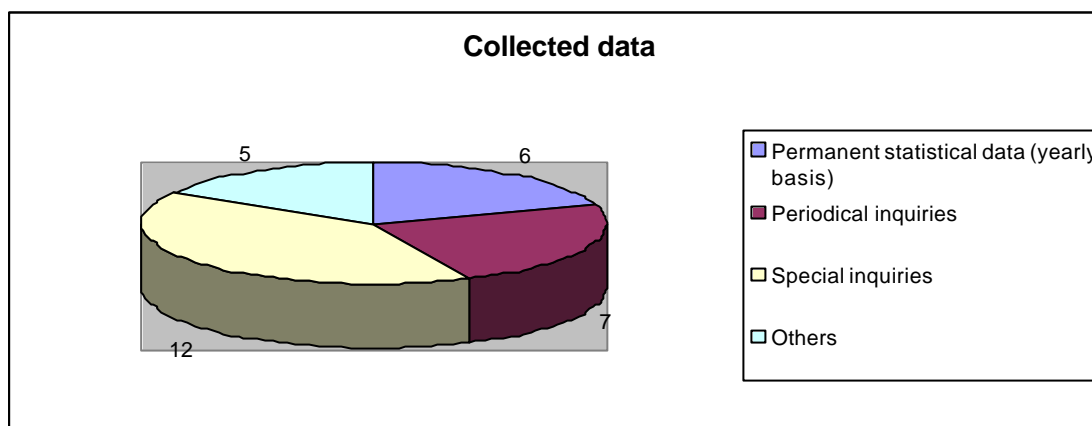
The public-private projects are mainly dealing with distribution platforms (Issue No. 14), Use of railway and/or waterborne freight transport (Issue No. 21), Statistical data (No. 1) and practical experimental measures (Issue No. 4).

The private projects are mainly dealing with co-operation among all local actors (Issue No. 5) and distribution platforms (Issue No. 14). The number of private projects is very low in comparison to public and public-private projects this might be due to the lack of information on it within the administrations of the cities.

These projects will be considered as far as possible for deriving Best Practices within the BESTUFS thematic network.

3.6 Part 6: Data collection within the city

25 cities (= 58%) answered that they are not collecting data on urban freight transport, 18 cities (= 42%) are collecting data:



City	Population	Permanent statistical data on a yearly basis	Periodical inquiries (general data)	Special inquiries (e.g. concerning a specific project)	Others
Bern	125000	X		X	
Zürich	360000	X	X	X	
Lausanne	124700		X		
Genf	400000		X		
Stockholm	750000			X	
Malmö	255000				X
Helsinki	539000	X			X
Dortmund	590000			X	
Duesseldorf	520000			X	X
Köln	1000000	X		X	
Bordeaux	215363			X	
Toulouse	755000	X	X		X
Genoa	90000			X	
Bristol	405200		X		
Norfolk	250000	X	X	X	
Aalborg	160000			X	
Copenhagen	500000		X	X	X
Aarhus	50000			X	

Most of the data is collected within special inquiries in order to get information on a special situation or question for preparation of measures. The permanent statistical data and periodical inquiries are not so widespread. Especially for the assessment of the success or failure of the finally implemented measure often no further data is collected. Only a few permanent data are collected and therefore no main data is available for assessment of the developments. "Others"

seem to be inquiries which were carried out to get knowledge of a certain aspect of the current situation within the city but which were not connected directly to a special project.

The list of collected data please find enclosed within ANNEX V.

In general it can be concluded that in passenger transport the availability of statistics and data is much better than in freight transport.

3.7 Part 7: Urban freight transport planning within the city

3.7.1 How is urban freight planning dealt with?

Urban freight transport planning in the cities?	Number of cities
No answer	2
No planning	23
Planning is done partly within the administration (in most of the cities help of consultants is used)	16
Planning is done completely within administration (help of consultants is used)	2
Total	43

53% of the cities answer that they do not have any planning concerning urban freight. It is obvious that in these cities urban freight aspects are neglected.

3.7.2 Do you meet representatives of the transport companies?

Do meet representatives of the transport companies?	Number of cities	[%]
No	14	32
Yes	29	68
Total	43	100

How often do meet representatives of the transport companies?	Number of cities	[%]
Sometimes	7	24
In case of problems	5	17
1 to 5 times a year	9	31
More than 5 times a year	6	21
Planned	1	3.5
No answer	1	3.5
Total	29	100

Do you find it easy identifying and working with these companies?	Number of cities	Reasons
Yes	14	Local knowledge.
		Keen to set up a partnership.
		The stakeholder are positive on cooperation.
		We are open and listening.
		There is a great number of private transport companies compared to the size of the city.
		We have common interests.
		We find an open mind for new developments.
		We have a good atmosphere for talking.
		All local actors are open for traffic problems because they are all involved daily.
		It depends, but there are the same conflicts to be solved.
No	15	Sometimes. It's depending on how they are involved in the projects.
		No. They are not at all open minded to changes even concerning a pilot program.

68 % of the asked cities are meeting representatives of the transport companies. Half of them have regularly meetings with the transport companies and have positive experiences.

In freight transport the success of implementation of new solutions often depends on a good relationship between the authorities and transport actors. They know about the main problems and also about the interaction between different problems. Furthermore a measure can easily be dodged if the transport actors do not accept its implementation.

3.8 Part 8: Planning tools for urban freight transport planning

72% of the cities answer that they do not use any planning tools for urban freight transport planning. One reason is probably that the use of planning tools needs experienced and educated staff which is a matter of the budget a city has got for planning.

Other reasons could be that the necessary data for models are not available and there are not many tools which are suitable for modeling of urban freight transport and delivery chains.

Do you use planning tools?	Number of cities	[%]
No planning tools used	31	72
Planning tools used	12	28
Total	43	100

Which kind of planning tool?	Number of cities	[%]
Classical four-step transport model	7	59
Classical four-step transport model incl. modeling of tours/delivery chains	1	8
Others (Static)	2	17
Dynamic transport model	0	0
Simulation tools	1	8
Others (Dynamic)	1	8
Total	12	100

Freight transport models can be useful for analysis and assessment of the effects of measures and projects and also for mid and long term forecast and prognosis. The experiences in COST 339 have shown that models are very efficient in calculating the effects of different alternatives and scenarios.

Which kind of planning tool?	City	Tool
Classical four-step transport model	Zürich	Emme/2
	Nürnberg	VISUM, VISEM
	Thessaloniki	Emme/2
	Tilburg	Not specified
	Duesseldorf	HHS, Aachen (consultants-product)
	Malmö	Emme/2
	Copenhagen	Excel (program is offered to nine transporters)
Classical four-step transport model incl. modeling of tours/delivery chains	Toulouse	TRANSURBANA
Others (Static)	Stockholm	The Nätra model, not specified
	Strasbourg	FRETURB
Dynamic transport model	--	--
Simulation tools	Genoa	Aimsun2
Others (Dynamic)	Genoa	An Object Oriented simulator written with Modsim III

Two thirds of the cities which use planning tools in urban freight use classical four-step transport models. Only one city uses a four-step-model which is able to model pick-up and delivery chains. Simulation tools are very rarely used and dynamic models are not used at all.

Some of the cities use passenger transport models for freight issues. Specific freight transport models as WIVER, FRETURB and STAN are only very seldom used. In the frame of the COST 339 project urban freight transport models have been used to estimate the effects of various measures.

3.9 Part 9: Comments of the cities

Only a few comments have been given (see ANNEX VI).

4 MAIN FINDINGS AND CONCLUSIONS

The results of the city inquiry give a good overview on the current problems and issues to be dealt with concerning the movements of goods in urban areas and the situation in urban freight transport planning in city administrations.

The following general conclusions can be drawn:

- Most of the asked European cities have problems concerning urban freight transport which affect the attractiveness and quality of life of the city. Main problems are related to suitable infrastructure for deliveries, city access, noise and pollution.
- For most of the cities the important issues concerning urban freight are dealing with co-operation among all local actors, coordinated urban freight policy, information, statistical data/data acquisition and use of innovative vehicle technology for city distribution.
- Not all of the cities are aware of the ongoing changes in logistics and city distribution (e.g. e-commerce, ITS) and know about new operational and technical possibilities (e.g. traffic management, enforcement support, etc.) to improve the situation.
- Compared the existing problems and issues to be dealt with in urban freight transport planning there is no or not enough manpower (compared to passenger transport) within the city administration who takes care about urban freight issues. Urban freight transport planning is neglected in many cities compared to passenger transport. More than half of the cities do not even deal with urban freight transport planning. The cities should provide more manpower to deal with urban freight transport planning.
- The asked cities are very interested in getting information about urban freight issues as e.g. co-operational issues, city distribution centers, e-commerce, modeling tools, PPP.
- In most of the cities there is a lack of statistics and data concerning urban freight transport. The data availability is poor compared to passenger transport. For urban freight transport planning data is a very important basis for evaluation of suitable measures. Especially permanent or periodic surveys are needed as well as more investment in data collection and statistics on urban freight transport.
- Half of the cities meet regularly transport actors. These contacts are crucial to solve the existing problems with solutions which have a high acceptance. Therefore the cities should intensify these activities.
- Only a few cities are using planning tools for urban freight transport issues. Especially the use of tools which are able to model distribution chains is low. For evaluation of measures and forecasts such models are efficient tools. The cities should be more informed about the available tools and possible applications referring to urban freight transport.

Overall it can be concluded that to reach a more sustainable urban goods transport joint activities by the cities and transport actors are needed.

Remarks of the authors:

The process of analysing the city questionnaire is not finished yet. Questions which will arise during the work of BESTUFS will be regarded by using the raw material of the city inquiry.

In general the city questionnaire showed the point of view of the cities and the need for action they have. Especially the problems and the issues which are important for the cities will be regarded of BESTUFS for the decisions of the next steps to be done.

Information on current activities and results are available on www.bestufs.net.

ANNEX I: OVERVIEW ON ALL CITIES

No	Name	Area [km2]	Inhabitants	City or Agglomeration	Employment	Area [Ha]	Inhab/ Ha	Empl/Inhab
4	Fribourg	10	36000	C	29000	1000	36	0.81
39	Taastrup	78	45913	C	30700	7800	6	0.67
41	Aarhus	9	50000	C	50000	900	56	1.00
12	Katerini	94	50000	C		9400	5	
25	St. Pölten	108	55000	C	40000	10800	5	0.73
7	St. Gallen	40	69798	C	55287	4000	17	0.79
37	Trikala	12	70000	C		1200	58	
18	Karlstad	12	80000	C		1200	67	
6	Winterthur	68	90000	C	50000	6800	13	0.56
9	Volos	98	116031	A	50000	9800	12	0.43
3	Lausanne	20	124700	C	62200	2000	62	0.50
1	Bern		125000	C				
24	Innsbruck	105	128000	C	67000	10500	12	0.52
43	Larissa	19	150000	C	32000	1900	79	0.21
38	Aalborg	83	160000	C		8300	19	
5	Basel	20	170000	C	150000	2000	85	0.88
14	Tilburg	119	193000	C	90000	11900	16	0.47
27	Bordeaux	49	215363	C	157130	4900	44	0.73
30	Dijon	172	244466	A	115000	17200	14	0.47
35	Norfolk	100	250000	A	130000	10000	25	0.52
13	Dordrecht		250000	A				
17	Malmö		255000	C	125000			0.49
32	London Borough of Lambeth	32	260000	Centre	130000	3200	81	0.50
29	Nice	72	343000	C	163700	7200	48	0.48
2	Zürich	92	360000	C	320000	9200	39	0.89
8	Genf	220	400000	A	250000	22000	18	0.63
34	Bristol	109	405200	C	201900	10900	37	0.50
15	The Hague	7	441000	C	209000	700	630	0.47
42	Strasbourg		450000	A	180000			0.40
20	Nürnberg	186	486000	C	253000	18600	26	0.52
40	Copenhagen	13	500000	C	300000	1300	385	0.60
36	Dublin		500000	C				
22	Duesseldorf	217	520000	C	200000	21700	24	0.38
19	Helsinki	185	539000	C	329000	18500	29	0.61
26	Nantes	475	550000	A	250000	47500	12	0.45
21	Dortmund		590000	C				
31	Genoa	24	637000	C	180000	2400	265	0.28
16	Stockholm	215	750000	C	500000	21500	35	0.67
28	Toulouse	787	755000	A	330000	78700	10	0.44
10	Thessaloniki	235	1000000	A	380000	23500	43	0.38
23	Köln	403	1000000	C	450000	40300	25	0.45
33	Hampshire	377	1200000	A	748300	37700	32	0.62
11	Athen		3000000	C				
	Average		409639					
--	<i>Hamburg (not analysed)</i>	755.3	1700000	C	900000	75530	22.5	0.53

ANNEX II: EQUIVALENT NUMBER OF FULLTIME STAFF DEALING WITH URBAN FREIGHT TRANSPORT WITHIN THE ADMINISTRATION OF THE CITY

City	Fulltime staff [%]	Population
St. Pölten	0	55000
St. Gallen	0	69798
Winterthur	0	90000
Lausanne	0	124700
Innsbruck	0	128000
Basel	0	170000
Genf	0	400000
Nantes	0	550000
Bern	5	125000
Larissa	5	150000
Aalborg	5	160000
Dordrecht	5	250000
Dortmund	5	590000
Fribourg	10	36000
Karlstad	10	80000
Strasbourg	10	450000
Helsinki	20	539000
Malmö	25	255000
Thessaloniki	30	1000000
Tilburg	50	193000
Norfolk	50	250000
Hampshire	50	1200000
Aarhus	75	50000
Nice	90	343000
Copenhagen	90	500000
Bristol	100	405200
Toulouse	100	755000
Genoa	100	900000
Köln	100	1000000
Zürich	150	360000
Stockholm	200	750000
Duesseldorf	250	520000

Examples for interpretation:

In **Nice** the equivalent number of fulltime staff is **90%**. This means that if the time of all employees who are working on urban freight transport is assumed on fictive persons there would be 1 person who uses 90% of his or her time for working on urban freight and 10% for other issues.

In **Zürich** the equivalent number of fulltime staff is **150%**. This means that if the time of all employees who are working on urban freight transport is assumed on fictive persons there would be 1 person who uses 100% of his or her time for working on urban freight plus 1 person who uses 50% of his or her time for working on urban freight and 50% for other issues.

City	Fulltime staff [%]	Population
Taastrup	??	45913
Katerini	??	50000
Trikala	??	70000
Volos	??	116031
Bordeaux	??	215363
Dijon	??	244466
London Borough of Lambeth	??	260000
The Hague	??	441000
Nürnberg	??	486000
Dublin	??	500000
Athen	??	3000000

In these cities no answer on the question was given.

ANNEX III: IMPORTANCE OF THE PROBLEMS AND ISSUES IN REGARD OF THE SIZE OF THE CITIES

City	Population	Problems (Points)	Issues (Points)
Fribourg	36000	56	69
Taastrup	45913	36	48
Katerini	50000	40	45
Aarhus	50000	43	72
St. Pölten	55000	57	83
St. Gallen	69798	68	111
Trikala	70000	47	50
Karlstad	80000	61	64
Winterthur	90000	72	95
Volos	116031	39	68
Lausanne	124700	60	86
Bern	125000	41	104
Innsbruck	128000	46	83
Larissa	150000	43	55
Aalborg	160000	39	59
Basel	170000	48	88
Tilburg	193000	58	63
Bordeaux	215363	28	37
Dijon	244466	45	52
Dordrecht	250000	40	37
Norfolk	250000	34	47
Malmö	255000	46	68
London Borough of Lambeth	260000	38	52
Nice	343000	45	54
Zürich	360000	33	41
Genf	400000	49	51
Bristol	405200	49	41
The Hague	441000	55	61
Strasbourg	450000	51	42
Nürnberg	486000	44	--
Dublin	500000	30	63
Copenhagen	500000	38	68
Duesseldorf	520000	41	50
Helsinki	539000	45	60
Nantes	550000	62	43
Dortmund	590000	62	75
Genoa	637000	35	37
Stockholm	750000	40	59
Toulouse	755000	50	45
Thessaloniki	1000000	33	42
Köln	1000000	46	49
Hampshire	1200000	34	28
Athen	3000000	32	58
Average	407821	46	60

- A high number of points means a low importance of the problem or issue!

ANNEX IV: PROJECTS WITHIN THE CITIES

City	Population	Number of Projects
Taastrup	45913	4
Aarhus	50000	2
Katerini	50000	2
Karlstad	80000	1
Volos	116031	1
Larissa	150000	1
Aalborg	160000	2
Tilburg	193000	3
Bordeaux	215363	1
Dijon	244466	1
Norfolk	250000	1
Dordrecht	250000	2
Norfolk	250000	1
Malmö	255000	1
Zürich	360000	5
Bristol	405200	1
Copenhagen	500000	1
Duesseldorf	520000	4
Helsinki	539000	3
Genoa	637000	1
Toulouse	755000	2
Thessaloniki	1000000	1
Köln	1000000	2
Hampshire	1200000	2
Total		45

ANNEX V: DATA COLLECTED WITHIN THE CITIES

Kind of data collection	City	Statistics/Inquiries
Permanent statistical data (yearly basis)	Bern	Traffic counters
	Zürich	Traffic counters
	Helsinki	Traffic movements on main street of Helsinki
	Köln	Statistic annual of the year (f.e.1999) Quantity of handled goods in the six parts of the city: Container-Handling, separated in groups of goods, same for all goods, air-cargo, Business report of the HGK (communal transport society).
	Toulouse	Traffic Counters: Streets and toll stations (yearly)
	Norfolk	Classified traffic center information on vehicles only.
Periodical inquiries (general data)	Zürich	empirical survey on a national base
	Lausanne	Traffic counting, every five years Determination of percentage of heavy vehicles on about 30 roads (city and Agglomeration)
	Genf	GTS 93 (not further specified)
	Toulouse	Survey (origin-destination) on special roads
	Bristol	HGV transport flows into Bristol.
	Norfolk	Information on vehicles only (no data on load factors)
	Copenhagen	About vans and lorries entering the city centre, svw, types etc.
Special inquiries (e.g. concerning a specific project)	Bern	Goods transports in the old city centre
	Zürich	goods traffic in its various forms (pilot study)
	Stockholm	The Natra project (not further specified)
	Dortmund	Forschungsvorhaben Integrate Güterverkehrsplanung Dortmund im Auftrag des BMV (heute BMVBW), Dauber 1995.
	Duesseldorf	Analysis of sendings by regional/local haulage contractors, Analysis of freight amount (total/rail/road) in region of düsseldorf.
	Köln	Güterverkehrskonzept - Urban freight conception for the city of Cologne as a basic for selected inquiries.
	Bordeaux	Enquête quantitative réalisée à Bordeaux, en 1995, peu le LET (financé par le DRAST l'ADEME et le CUB) pour tenter d'appréhender le totalité de flux de véhicules mis en jeu dans le déplacements de marchandises.
	Genoa	Transport demand (packages/day, delivery timetable), Transport supply (operators, vehicle used, routes,...), Number of operators for market categories, All the data concern the historical city centre.
	Norfolk	for specific studies, developments.
	Aalborg	Rapport No. 209, 2000 "Effectiveness of goods transport" Analyses of concept for city logistics, to order: e-Mail: vd@vd.dk
	Copenhagen	use of eapants (not further specified)
	Aarhus	Amount of Goods delivered in streets.
	Others	Malmö
Helsinki		1991 volumes of goods traffic in the Helsinki economic area.
Duesseldorf		Analysis of Demand matrix in road freight transport in city of Düsseldorf.
Toulouse		2 etudes faites dans le cadre des PDV: 1. Etude sur les horaires a l'echelle de l'agglomeration, 2. ...
Copenhagen		couriers and handy craft vans.

ANNEX VI: COMMENTS OF THE CITIES

City	Comment
St. Gallen	In general we don't have any problems with urban freight transport, so we have no intention to change the situation that exists. There is no pressure neither from politics nor from the transport companies.
Katerini	The municipality expresses its willing to receive all available information concerning the management of freight transport in urban areas and also the planning tools (appropriate models) for urban freight transport planning.
Trikala	Information on projects, strategies, initiatives or measures on a private base are not publicized to the Municipality services so it is not in the knowledge of the municipality.
The Hague	The Hague is a service-based city. Problem with traffic is not only caused by freight traffic but mostly by private cars. Consequence is a lack of interest and attention for freight traffic.
Copenhagen	The city goods project of Copenhagen is a very unique project. Only Amsterdam has something similar. We and the transporters do not believe in city logistics companies (we are all operation city logistics inside each company).

ANNEX VII: QUESTIONNAIRE