Case Selection in Environmental Sustainability

Deliverable 6.2 of the project:
"**I**mpact of the **T**hird **S**ector as **So**cial **In**novation" (ITSSOIN),
European Commission – 7th Framework Programme

28 October 2015

Suggested citation

Figueroa, M. (2015). Report on the Selection of Case Studies in Environmental Sustainability and Sustainability in Cities. Deliverable 6.2 of the project: "Impact of the Third Sector as Social Innovation" (ITSSOIN), European Commission – 7th Framework Programme, Brussels: European Commission, DG Research.

Acknowledgements

ITSSOIN

ITSSOIN is a research project funded under the European Commission's 7th Framework Programme responding to a call to investigate "The impact of the third sector on socio-economic development in Europe". The project is a research collaboration between 11 European institutions led by the University of Heidelberg and runs from 2014-2017.

Content

1. Introduction

This document reports the results and steps followed in the process of selection of a priority stream within which a case study will be selected in the field of environmental sustainability, and with the focus of sustainability in cities. Presently, several methodological steps are already completed in advancing the aims of the ITSSOIN project. The previous steps have contributed essential supporting elements to advancing the empirical work. These steps are continued with the present deliverable. Two of the finalized reports require here specific reference since they directly contribute basic background information to the present effort. These reports are: the country selection report which provided the full documentation for the selection of countries (Anheier, Krlev, Mildenberger, & Preuss, 2015) and, the field description report focusing on sustainability in cities as the aspect within environmental sustainability to be comparatively studied in selected countries (Figueroa, 2015). The two reports gave a full account of the macro (regional and national), meso (national and city level) characteristics in the field, highlighting institutions, actors, activities, modes of organizations, legislation and, governance arrangements within each country. In addition, with the focus on sustainability in cities, the field description provided the basis for the selection of four cities (Brno, Copenhagen, Frankfurt and Milan) which comparatively stood out for criteria such as: geography (population, overall density), the city's economic vitality with respect to the nation and the number of examples and level of experimentation as social innovation observed within each city. Finally, the field description reported the initial mapping of the numerous social innovative activities reported for each of these cities and actors advancing local sustainability objectives.

The present report takes departure from these gained insights and makes full use of the resulting initial mapping of initiatives obtained for Brno, Copenhagen, Frankfurt and Milan. The following pages contain the reporting for the subsequent methodological steps intended to narrowing our research gaze and facilitating the later selection of a case study of a social innovation which can contribute explanatory potential for the ITSSOIN project with regard to the research questions and have great relevance among the activities advanced for sustainability across these four cities.

The present report is structured as follows: Section 2 considers the mapping of social innovation trends that emerged with the field description in environmental sustainability, and it reports the internally validated classification an initial prioritization of these trends in each of the four cities advanced by the project partners and via consultation solicited from selected invited experts. Section 3 reports the results of the external expert consultation. First the section discusses the methodology that was followed (3.1); and later the section (3.2) breaks down by streams attending to the commentaries registered from the group of international experts and aggregating and synthetizing perspectives and highlighting the priorities they have indicated and whether the stream priority matches the trends discussed in the previous section. Section 4 presents the final selection of social innovation stream following the previous line of discussion. Next, some examples of social innovation activities within the identified priority stream are introduced and when available a preliminary activity or case is mentioned for the city if this was obtained from the experts and partners in their contributions. Section 5 offers a final general commentary as a conclusion that also offers some preliminary questions connecting the stream selected to the coming ITSSOIN research phases.

2.   Mapping Social Innovation Trends

One concrete outcome of the report on field descripton (Figueroa, 2015) was the mapping of major initiatives of social innovative trends for each of the four selected cities Brno, Copenhagen,Frankfurt and Milan. One of the first observations when contrasting the map of social innovation trends reported on sustainability in the cities, was that these trends could be related to specific areas or sectors (Transport, Waste, Water, Energy, Climate, Buildings etc); while others trends could be organized as operating accross-sectors as groups of activities (Neighborhood Scale redesign and Resilience, Quality of Life & Awareness; etc).

The mapping effort and the comprehensive discussion on trends with project partners lead to the initial main characterization of trends in two types: a social innovation trend which bring focus to particular sectors and even about particular technologies (bicycles, cars, solar fotovoltaics, efficiency at home); often and very clearly related to for profit entrepreneurship endeavors. And, a group of social innovation trends related to cross-sectoral activities and actions (improving quality of life, promotion of sustainability education and awareness etc). The activity configuration of this later kind of social innovation was visibly more spread encompassing all forms of participation from non-for profit organizations, advocacy and volunteer activities, even civil disobedience. This observation led to the mapping of trends in a single table that emerged already from the field description (Figueroa, 2015); but was now presented for further refinement and discussion with the partner countries. The resulting table mapped out all the SI trends observed for discussion and sharing with the partners. The SI trends were then listed according to two major categories sectoral—business and for profit oriented —and, cross-sectoral trends with more propensity to exemplify social cohesion, civic engagement and volunteering work.

The observation was validated internally in the discussion with partners and considered a good organizing principle to understand the long list of social innovation trends that each of the cities presented. This led to the circulation of the table and further cross-checking of the facts and discussions contained in the field description for each of the cities and the activities reported. This final revision led to the production of a final table which is presented in the following Table 1. This table summarizes the first approximation to define what is the priority of social innovation for sustainability activities in the four cities that could be concluded from the field report, and from the discussion between partners as internal validtion during internal discussions. The aim of producing such a map in the form of a table was the creation of a concrete output that should feed directly the process of external consultation with European expert that would be following next and that is presented in the following sections.

Table 1: Streams of Social Innovation for Sustainability in Cities in Selected ITSSOIN Cities

SECTORAL / AREA	Brno	Copenhagen	Frankfurt	Milan	Potential Counter-example	Stream Priority
FOOD	✔✔	✔✔✔	✔✔	✔✔✔		✔✔✔
bio-food production & distribution	✔		✔	✔		
composting - locally grown food-farmers	✔	✔	✔	✔		
food banks	✔	✔				
Urban Gardens GROW -Rooftop Tomato		✔	✔	✔		
Copenhagen Food Community		✔	✔			
Slow Food - FPS Catering - Citizen Consortium			✔			
Nutrition / Consume Locally			✔	✔		
Stop Food Waste- Food Recycling	✔	✔		✔		
WASTE	✔✔	✔✔		✔✔		✔✔
waste management & Reuse	✔	✔	✔	✔		
Ressource use-water-energy		✔				
Ressource use- Waste disposal	✔				✔ (1)	
Reuse and Recycling Waste		✔		✔		
recycling centre for electronic scrap and a second-hand furniture shop			✔			
'Workshop Frankfurt'			✔			
ENERGY & CLIMATE	✔✔	✔✔		✔✔		✔✔
Energy Production		✔				
Increase e-efficiency in buildings		✔	✔	✔		
Increase share of renewables		✔	✔	✔		
Renewables in district heating		✔				
Sparkasse 100 business for climate			✔			
Climate adaptation rainwater collect		✔	✔			
BUILDINGS	✔✔	✔✔	✔✔	✔✔		✔✔
Energy use & efficiency in buildings	✔	✔	✔	✔		
Green jobs isolating old & new buildings		✔	✔	✔		
rehabilitation areas	✔	✔	✔	✔	✔ (2)	
building techniques		✔	✔	✔		
use of public space & parks	✔	✔	✔			
Nordhavn sustainable cooling system		✔				
Engagement Urban Design		✔	✔			
Climate tours - ABGnova GmbH.			✔			
come closer / sustainable designforum			✔			
Future Frankfurt Platform			✔			

	Brno	Copenhagen	Frankfurt	Milan	Potential Counter-example	Stream Priority
TRANSPORT	✔✔	✔✔✔	✔✔✔	✔✔		✔✔
Green Mobility (50% bike use)		✔				
promotion of bicycling subculture	✔					
car sharing / pooling	✔	✔	✔	✔		
bike sharing	✔	✔	✔	✔		
Bicycling & Mobility & Bike Festival	✔	✔	✔	✔		
Mobility Plans in Public Transport	✔	✔	✔	✔		
Frankfurtemobil-E- Mobility-City Logistic		✔	✔	✔		
CROSS-SECTORAL / INTEGRATED	Brno	Copenhagen	Frankfurt	Milan	Potential Counter-example	Stream Priority
QUALITY OF LIFE - AWARENESS	✔✔✔	✔✔✔	✔✔✔	✔✔		✔✔✔
Green Belt& Sust. Learning- programs			✔	✔		
Frankfurtemobile', and 'Climate Tours'			✔			
Palmegarten - ExperiMintia			✔			
Ecology education/nature conservation	✔	✔	✔			
reclaiming streets to QoL participation	✔		✔			
Church Seminars - Green Church		✔	✔			
Community Gardens	✔	✔	✔			
Smart City Project	✔	✔		✔		
Third sector - Green School		✔				
Green growth business innovating		✔				
Sustainability in Business - Fine		✔	✔	✔		
use smart phones reporting		✔		✔		
Diffusion of new Technologies			✔	✔		
Clean air, less noise and green blue area		✔				
Think-Tanks		✔	✔			
SHARING – CIRCULAR ECONOMY	✔✔✔	✔✔✔	✔✔	✔✔		✔✔✔
Built City Identity Sharing& Cooperation	✔	✔	✔	✔		
promotion of bicycling subculture	✔	✔	✔			
car sharing - pooling - platforms	✔	✔	✔	✔		
bike sharing	✔	✔	✔	✔		
Bicycling & Mobility	✔	✔	✔	✔		
Mobility Plans in Public Transport	✔	✔	✔	✔		
Redistribution of Used Things/Food	✔	✔	✔	✔		
Co-creation Platforms - We economy		✔	✔			

NEIGHBOURHOOD SCALE REDESIGN - RESILIENCE	✔✔	✔✔	✔✔	✔		✔✔
rehabilitation areas	✔		✔		✔ (3)	
building techniques	✔	✔	✔	✔		
use of public space & parks	✔	✔	✔			
cycling and pedestrian zones	✔	✔	✔			
fast bike lanes - bike app		✔				
Resilience Skt. Kjeld's Neighbourhood		✔				
Clean Harbor (water front)		✔				
Rain Water resilience project		✔				
Nordhavn neighborghood		✔				
Carlsberg neighborghood		✔				
Green belt Frankfurt			✔			

Legend

✔✔✔	Top Stream Priority
✔✔	Secondary Stream Priority
✔	Active initiative in city

Notes on Counter Examples:

(1) Low environmental quality technologies kept in use to maintain lower prices for waste collection services

(2) Trikaya's housing project near a nature preservation area/Relocation of main train station

(3) Civil Society protest against construction of shopping mall

3.   External Expert Consultation

3.1.   Methodology

All partners followed a similar methodology in consulting external experts. The Social Innovation Stream Priority Table 1 introduced in the previous section was fully discussed and shared among the partners before they initiated their contacts and programed the specific date for carrying on interviews with external experts. In total twelve interviews were conducted with international experts on sustainable urban development on the topic of the stream priority selection. These experts represented different perspective (state, third sector and market) (see Table 2 below).

The partners were free to decide the interview format that better fitted their approach. Most partners reported having followed interviews over the telephone and within a time frame that lasted between half an hour and fifty minutes.

The protocol for the interview was similar and shared by all partners. It required providing at the beginning of the interview as much explanation about the research approach of ITSSOIN as it deemed necessary. The interviewees were then asked if they would agree that anonymized

quotes may be taken from the interview. The other part of the protocol consisted in providing the interviewees with the Social Innovation Stream Priority Table in advance and soliciting from them that at the time of the interview the specific aim of the conversation would be to obtain from them two forms of commentary. 1) Whether in her/his opinion the overview of social innovations trends reflected in the table were adequate in general and representative of the major social innovation trends as seeing by this expert in question. 2) Whether in his/her opinion it was possible to give a priority order to this according to a simple (high/medium/low) scale. A final request was the more informal commentary to solicit from the expert to give concrete examples in the cases where the expert had not mentioned any during the elaborations offered to addressing points 1 and 2.

While the goal was to have a minimum of 2 experts per city giving inputs. This goal was exceeded in three cities and therefore the total number of experts consulted was 12. These experts' represented views from the state, third sector, market. An effort was made to contacting experts that could formulate their opinion not only with regards to social innovation streams within their respective country but also internationally.

The interview process asked for the expert opinion in an open ended format. This meant that some of the experts provided a fuller account of their answers while others provided a more direct answer. As the objective of the interview was to obtain expert validation for the concrete prioritization of social innovation streams, a direct and short answer was as important for this study. The summary that follows synthetizes the contributions by the experts consulted.

Table 2. Experts Consulted and their affiliations

Government (National- EU Urban Strategies at Regional level)
1) Representative of the National Platform 'Future Town'. The National Platform Future Town is founded to implement the research and innovation strategy 'Future Town' of the German Government. The interviewee is therefore informed about the aims of the government in regard to sustainable urban development in Germany.
2) Representative involved in the joint efforts in Europe to implement a common research agenda across Europe -> Joint Programming Initiative Urban Europe.
3) Head of department responsible for Green Transition. Environmental Protection Agency. Denmark l www.mst.dk
4) Representative from Region Capital – Zealand- Copenhagen
5) Representative City Board Milan

Third Sector Representatives/ and Hybrids: ex. research institute financed by State
1) Referee for sustainability of the BUND (German branch of Friends of the Earth). International expert in sustainability in urban development but has also a good understanding of social innovations.
2) One member of the German Institute for Urbanistic (DIFU).(Hybrid)
3) Head of the Office of "Environmental Responsibility" of FAI (Fondo Ambiente Italiano, Italian Environment Fund).
4) Head of the development of the Partnerství Foundation (http://www.partnerstvi-ops.cz/lide/michal-vesely-31), the largest Czech foundation focusing on the issue of environmental protection
5) Head consultant in the Think-tank Concito-Denmark. www.concito.dk/stoet-concito

Market Representatives
1) One Head of the function of "Social Responsibility and Web" A2A. (Milan)
2) Ex-vice chairman of the Green Party, representative in the Brno municipal government, and deputy of the mayor of Brno.

3.2.   Results Experts Perspectives by SI Stream

The expert consultation is summarized below breaking and grouping the commentary provided by the country partners according to the different social innovation streams. Regarding the two specific questions or topics that were expected to be addressed, as open questions during the interviews, the result indicate regarding 1) whether the table reflected the most important trends, there experts reaction was in general very positive. However, at least four of the interviewed experts indicated that they did not see as necessary to consider or to talk about the social innovation trends using the division in "sector and cross-sector categories" as formulated in the table. This comment aside, all experts agreed that the mapping provided a list of social innovation trends and subdivision in streams that included in their opinion the most important trends observed in the four selected countries and cities. The four experts who directly have comments about the division in sector/cross-sector trends highlighted that they considered of greater interest the trends despite having focus on a particular sector attempted to influence or touch upon some of the cross sectors areas. For example how social innovation occurring in transport and mobility would be related to improving 'quality of life / awareness' and 'sharing economy' trends. In what follows the expert's positions are discussed giving the break down by social innovation stream priority that resulted from the consultation. When possible examples given will refer to the country/city in question priority reported as result of the consultation.

Transport & Mobility

The theme transport was reflected by all experts from different perspectives. Especially the discussion about what can function as sustainable mobility concepts in each city becomes interesting for further analysis. All experts confirmed an accepted that one of the social innovation streams with highest priority will be those that provide alternative approaches to transport from the dominant car usage. In all four cities there are clear efforts today that have civil society actors as initiators aimed at garnering support for increasing use of public transport and supporting the increase in bicycle usage in these cities. A change in public awareness in regard to inner-city mobility became more and more relevant, as individual transport with cars has overflowed these cities and continues to grow. Alternative to cars as sustainable mobility ideas or concepts were reported as mostly originating in the four cities from the state and third sector, however market actors are beginning to take more significant roles in this context, particularly viewed for the example of car sharing, which is seen by the experts as an important social innovation that has experienced an economisation over time.

Sharing Urban Space for Sharing Mobility

Sharing as a priority trend and specifically sharing mobility as a social innovation stream was mentioned also by all experts and given a high priority in the context of the four cities. An identifiable new form of advancing mobility in the city, sharing as a social innovation stream refers not only to sharing means of transport (cars, bicycles) but it also reflected the promotion of initiatives to share (re-claim) the urban space, with the request that more space is allocated to improve quality of life for with safer pedestrian, green areas and bicycling routes in the city. The overall emphasis of the experts also indicated that sharing (car and bicycles) as a social innovation stream could facilitate observation of scaling processes which can be of special interest to the ITSSOIN project. However, one of the experts expressed doubts that for example car sharing could be strictly classified as a social innovation emerging from civil society initiatives in the pure sense, as it has developed not always as bottom-up phenomena. This

expert pointed at the example that car-sharing in Germany has been often implemented following high level of research involvement, for concrete examples it was mentioned the that initiatives from the economic research centre in Berlin and from the industry resulted in start-ups which strongly connect research and industry and finally new business models of car providers. This example makes clear that in addition to bottom-up developments, at least in the case of car sharing it is in some areas more a reaction of the market to changes in consumption requirements.

Sharing may be however provide very interesting examples where civil society and market actors are of relevance, but also the state as regulating institution can be expected to play an important role. Sharing mobility options provides a case that would also touch on several identified priority trends 'transport' and 'quality of life / awareness' as specific changes in the use of means of transport is the basis for the success of car and bicycle sharing.

Energy & Climate

The social innovation streams connected to energy & climate where discussed by all experts as relevant for the city governments and business sector engaged in a variety of efforts aimed at achieving efficient usage of energy resources, as this addresses mainly a number of technical and financial solutions to promote the use renewable energy and to promote use of more efficient technology devices, this stream seems to be of little interest for ITSSOIN.

Buildings

Similarly to the social innovations stream originating in the topic of energy and climate, the stream related to buildings presents a more interesting angle in reference to questions of the type of energy savings, efficiency gains and finances for rebuilding and retrofitting. Even though these questions may be touching upon relevant issues of social equality, the topic is more typically the result of top-down government initiatives, with high participation of private sector. Other possible interesting project associated to communal usage and shared living space are here mentioned as belonging to the stream 'neighbourhood scale redesign'.

Food

All experts brought up the importance that social innovation streams on "food" has gained in recent years in their respective country/cities. Experts pointed at a great diversification of activities within this stream category and at the regionalisation of markets in regard to food. The wish to purchase food that is locally produced has become visible by the push it has created for maintaining urban gardening initiatives. This also implies the whish for more autonomy in food production and the opportunity for food production in urban spaces. The regionalisation of markets with the example of food production seems to be an especially interesting stream, and it connects this social innovation stream food' to a high number of other themes for example: 'quality of live / awareness' and 'neighbourhood scale redesign'. In addition this stream is very open for all actors' participation from third sector, market and state, which is an important selection criterion.

Neighbourhood Scale Redesign – Resilience

Social innovation stream of redesigning urban areas was identified in the four cities as a stream that could possibly touch or be spoken about or related to all previously identified streams. However, one difficulty with the selection of this as a priority stream would be that the actual

areas that can be analysed might be difficult, as comparability of cases across cities needs to be guaranteed.

Quality of Live – Awareness

Social Innovation streams related to the usage (above discussed as sharing of urban space) of different recreation areas in cities, was seen by the experts as an interesting stream for evaluating how the civil society wish for having access to more and better green and blue (water) spaces is manifested and negotiated in each city. Social innovations that are intended to promoting changes in the usage of public spaces can be understood as social innovation. In practice, strong contestation may emerge related to social differences and perceptions of how public spaces ought to be used for each city and this in turn tell us something about environmental sustainability. According to the experts a number of the social innovation streams that have been previously discussed have underpinning considerations on the 'quality of life'. This becomes then a stream that complements or is implicitly relevant to many of the other themes.

4.   Final Priority Selection:

The single social innovation streams highlighted by the experts and discussed in the previous sections offered substantive discussion points that come together in what follows in an effort to articulate and arrive at a conclusion regarding the selection of one project stream priority. Section 4.1 emphasizes the type of insights that facilitated arriving at the decision for the stream social innovation that is of higher value in providing a rich example for the field of environmental sustainability and specifically sustainability in the city to the ITSSOIN project. Section 4.2 introduces some concrete activities when available for some of the cities at this point.

4.1.   Identification of Priority SI Stream:

This report departed from reflecting on social innovations in the context of a mapping of social innovation trends that emerged from the field description. After following a process of internal and external validation the new insights gained make now possible to refine and select a high priority stream of relevance to the further investigation.

A first key insight was the recognition that the mapping provided in Table 1 offered a very good overview of what both partners and external experts could identify as priority social innovation trends in the four cities. In this connection, the second insight gained was that the separation of the named social innovation trends into sector specific and cross-sectoral areas did not provide a particularly helpful approach for discussing and communicating the way in which social innovations streams in practice work. All experts highlighted the evidence of strong interconnections between the identified social innovations trends and streams. According to this the resulting recommendation from the external validation process was the need to identify a social innovation stream that related well to other of the named social innovation streams rather than separating them.

Sharing emerged in this way as a key example for cross-sectoral social innovation that has been observed in practice in all the cities, in a variety of forms. In some cases of sharing can be traced and probably can be found to be initiated as forms of social innovation that have later developed to become an economic business model. A prime example is the case of Car-sharing. Car sharing emerged in some places as a bottom-up development as well as by economic driven

actors. Therefore, it is also clear that for this specific example the reality is that car sharing cannot be simultaneously analysed as a bottom up social innovative phenomena. Other forms of sharing examples exist in relation to people moving around or people claiming urban space to accomplish this sharing in a sustainable way (for example, advocating creation of safe pedestrian pathways, bike routes, shared of completed streets etc.).

In selecting Sharing as the priority social innovation stream the participation of actors from all sectors became one important selection criteria. Another insight gained from all the selected cities practices is that all actors (state, civil society, third sector, business) are demonstrating great interest and willingness to experiment new social innovative activities through Sharing in transport and urban mobility. Examples of these abound e.g. the acceptance of new means of sharing mobility needs, new potential experiences and services for public transport; expansion of the opportunities for walking, and using other non-motorized modes of which the most prominent is bicycle use. To some of the expert commentators this willingness and acceptance reflects a change of individual, governmental and business awareness that may be leading in sum to experimenting new forms of sharing the urban space and to redefine the ways in which people collectively interact and moves around in the city. Sharing therefore embraces other contextual social innovation streams for example the type related to Neighbourhood Scale/Redesign which provides therefore a framework for activities in the context of re-organizing and negotiating areas where mobility of pedestrians, bicyclist can begin to take place in the city.

Summing up, the adoption of new more sustainable forms of mobility will require sharing the urban space by civil society, state and market actors. This will require a particular way of participating and great social innovation to share the available space in which to safely organize how to move around people, bikes, buses, cars and trucks while still improving quality of life and sustainability in the city. Sharing urban space to accommodate people on the move defines therefore the most interesting stream for exploration of social innovation in regard to sustainability. Besides the specific results of activities in this stream in terms of social innovations there are other related interesting questions on what these activities can produce in terms of improvement of local transport, quality of life, awareness of sustainability safety and traffic calming, or simply in terms of gaining public spaces for other forms of communal usage.

Sharing space for mobility may present actors of state, business and civil society with challenging positions. On the one hand, civil society may demonstrate civic engagement in the direction of promoting more sharing of space as part of the common good, for sustainability, climate, inclusive community. But with similar reasons, other civil society groups on the other hand, may be seeing social innovation to share space for moving people as a reflection of particular interest (car sharing companies, bicyclist organizations) and be subject to the danger that particular interests of small groups. This will become relevant aspects for consideration as the project advances.

Sharing public space for mobility will necessarily touch or be connected to aspect of quality of life, and this implies that other tensions may arise among actors. As the new tensions become visible (new bicycles lanes reduces space for pedestrians or car drivers) this tension begin to make also clear that social innovations may not necessarily be always emerging as a reaction on social problems. Questions of how to share the urban public space, of how to improve quality of

life and of neighbourhood redesign cannot be separated, and they provide a very fertile ground of case studies in all four cities.

As for City governments, as they have more and more competencies but fewer monetary means to pursue every goal they will always mostly encourage and seek to facilitate civic engagement, but some form of balance and counterbalance of the new activates will be still necessary. One promising approach for the interaction of city authorities, businesses and civil society groups are networks: neighbourhoods and their connection in networks can provide very important in regard to advancing social innovations. Through approaching these networks, highlighted by the experts as very active in all cities, during the future steps of this project it will become possible to differentiate the actors 'new' and varied understandings of social innovations, and distinguish when activities emerge as a product of a more technical understanding that is very much influence by providing technical solutions to city problems. The case of sharing mobility includes technical solutions but should not be strictly seen as technical innovation.

The point that not only technical but other social innovation streams apply to sharing and in particular, other physical and cultural conditions apply to make a social innovation for sustainable mobility successful was strongly emphasized by the experts in connection with the case of bicycles in Copenhagen. The reality from other cities reveal that when the situation is of bad quality or non-existing cycling lanes the resulting bike use is difficult and dangerous to human life. A case study on sharing urban space for bicycle usage in cities could therefore reveal to be interesting, as Copenhagen is a city that has developed a well advanced concept on transportation via bicycles. Comparing this to the three other cities could be really interesting as it reflects on how transportation is organised across countries / cities.

The decision is therefore to combine three social innovation streams "sharing" and "neighbour redesign" with mobility and in particular defining mobility concepts for the cities toward sustainable transport solutions. The resulting stream denomination that we are using to make it explicit but wide enough for inclusion of the different examples that will be approached in each of the four cities is: Social Innovations Sharing urban space and Mobility Concepts for People on the Move".

4.2.   City Examples

Approaching the more concrete examples within the social innovation stream of sharing urban space for people on the move, the following further criteria for case selection applies: a) An observable case that can provide information and has received attention in the media; b) A case that can generate strong dynamics between actors public, private, third so that is possible to approach their different contributions; and c) Data can be collected on organizational level and where the actors have thereby the capacity to be involved in the research

The presentation offered below is not as yet responding to this more concrete set of criteria. They offer only general ideas of developments for the cities as offered by the experts and indicating the type of concrete examples that will be subjected to consideration within the following phase of empirical work within ITSSOIN.

BRNO/Czech Republic

In the city of Brno, promotion of bicycling subculture and cyclo-culture in general is a relevant activity in Transport. In the Czech context bike sharing is conceived as part of a social

innovation stream related to a circular economy, and also to the stream defined as: Use of public space & parks within "Neighbourhood scale redesign". These streams identify the areas where the most essential social innovation activities for the city are taken place at the moment. In Brno, crucial topics can be related to "reclaiming streets for a better quality of life" a movement that has been gaining in participation and was highlighted as an activity with very high priority in Brno. Therefore awareness about public space and neighbourhood redesign for quality of life cannot be seen as separated categories as both refer to the communal usage of public space. But neighbourhoods and their connection in networks is really important in regard to social innovations, and networks are central to differentiate the 'new' understanding of innovations from a pure technical understanding. Besides these, a strong connection can be found between three social innovation streams Food, Quality of live, and Neighbourhood redesign can often be document by a number of social innovations in space / at one special space. Reclaiming streets for Quality of Life through participation is therefore perceived as the most significant activity from all activities. In particular, the importance in creating such public space that will reflect claims and needs of citizens. The awareness about creating public space is crucial from the beginning, since community planning should be about communication with stakeholders and their participation. The third sector plays essential role in participation of citizens. While public administration has just begun to learn about public awareness, the third sector is already the bearer of this social innovation. In response to aforementioned causes, for Brno the assigned highest priority stream goes to "Quality of Life - Awareness". In summary, in the context of Neighbourhood Scale/Redesign it would be interesting to look at the ways how existent areas are redesigned in regard to sustainability in general and mobility in particular. How is local transport considered, is traffic calming planned for, what about public spaces for communal usage, etc. Finally, ecology education/nature conservation activity can be identified as the most important part in connection to "Quality of Life - Awareness" social innovative stream. The use of public space & parks can be highlighted as the key crucial topic in connection with improving neighbourhood scale redesign and these can be all thought together within the label of Sharing - Circular Economy.

COPENHAGEN/Denmark

In Copenhagen promoting bicycling combined with sharing as a social innovation is done more to create an approach to organizing social life, a new way for organizing how things function and how to move people around. Social innovation will be related to how a specific area, a specific group of people can achieve a different type of mobility taking advantage of the possibilities provided in the city's mobility tool box (e.x sharing bikes, car-sharing etc) which are well-developed and known ideas.

The experts in Copenhagen admitted that bicycle sharing is one of the least successful ideas in Copenhagen since there is already a strong bicycle culture in the city. Ideas about sharing bikes for mobility are working better in other places than Copenhagen (ex: bike sharing in Paris, or in Germany). The Copenhagen based think-tank Concito has prepared a report (Bellers Madsen, 2015); on the effects of sharing and they concluded that it is still small and marginal effect in terms of climate. Therefore it is unclear whether bicycle sharing (even car-sharing) as a model will scale up in Denmark. At least up to know is still a small share of passenger movement for both car and bike sharing.

The success of programs such as "sharing bicycles" can be associated with other social and physical-infrastructural conditions. In the case of Copenhagen, an important driver of why

people use bicycles relates much more to conditions like car parking being very expensive and limited. This provides, the other side of the story, and it relates to how urban space is organized and what physical conditions exist, and how they allow having a substantial or growing number of bike riders circulating in safety, sharing space with pedestrians and cars in a safe manner.

In Copenhagen this has taken time and a sustained long-term effort to create the bike network that makes bicycling safer to all users. In countries that have gone too fast in implementing bicycling without advancing the proper infrastructure conditions this may come with paying a high cost in terms of human lives and injuries. In Copenhagen sharing space to allow low speed modes was something that was in the 1970's was called "fights for streets" in a form of early pro-bike activism. In conclusion, even though the level of bicycles ridership in Copenhagen is important, it has come to be so significant not only as a result of sharing initiatives that have emerged of late, but as a sustained long term effort of all actors state, civil society and business. The other types of sharing initiatives for Car sharing (car2go and Elektro) are, so far, small "for-profit" initiatives. At the same time, the lobby groups advocating for more roads and car –related infrastructure is strong and have lobby groups represented by the Danish motorist association and the Danish industry association.

Having explained the case of sharing and bicycling in Copenhagen, there are still lots of activities linked to the promotion of sharing space and improving quality of life in the city. For the experts consulted, many active civil society groups in the city will make no distinction between projects advancing sharing public space and projects improving quality of life. Sharing has become in the Copenhagen area a social movement on its own according to the experts.

MILAN / Italy

The experts consulted agree that Milan has shown in these last years a significant effort in managing urban transports in a more sustainable way. For instance, through improvements made on the bike sharing system as the most notable social innovation stream in Transport. Currently, the city of Milan has implemented a system of electric bikes to share. However, it has become clear that sharing bicycles is not only about the technology offered in itself, and therefore the city is showing interest to look at this trend as a more integrated system. Sharing bicycles becomes interesting with the increase in number and quality of these bicycles around the city, which can change the way people still perceive mobility in the city, and demonstrate how bicycles can become a perfect tool for travelling the city for its citizens. The experts showed wide agreement on pointing at how transport/mobility seems to have become the top priority social innovation stream in Milan. In addition, improving Quality of Life – Awareness has also become a high priority social innovative stream in Milan. It is often linked to increasing digitalization of public services. It is not just a shift of services from the offline into the online, but it means a completely new redefinition of the relations between public sector and citizens. It is extremely interesting how this is entirely reshaping the idea of participation in cities, especially considering that it is expected that even urban mobility and the wider access to public services for most people will be changing with further digitalization. This trend is less prominent in the other three cities.

FRANKFURT/Germany

Analysis of the city entire mobility concept and its implementation can lead to searching for areas in the city that have been entirely redesigned with this propose. An example in Frankfurt is the quartier Riedberg that will be presented in more detail in the next deliverable, and offers

to be an integrated approach that reflects on several of the named aspects. Continuing with a mobility concept for the city, a selection between means of transport could be conducted. For example, public transport and the support of bike usage in the city would be two interesting subjects that were addressed by German experts. In regard to public transport the usage of e-busses could be one subject. In this context the role of business firms – mostly big companies – that sell e-busses needs to be reflected, as the purchase of a new fleet of busses in a city is a big business. However this mainly refers to practical and technical opportunity to use public transport that uses renewable energy. This is less interesting in regard to social innovations.

More interesting is the rising interest in the usage of bicycles in the city, which could compare well with the case provided by Copenhagen as mentioned earlier. The biggest issue in this context is from the perspective of the research experts from DLR and DIFU was the new requirements of infrastructure, when not only cars but also bikes are traffic participants and sharing the space becomes problematic. For the municipalities the planning of the street infrastructure needs to be adapted. Further the approach towards mobility of the public changes when people use mainly bikes instead of cars connecting to issues of 'quality of live'. At the same time this offers new opportunities for business. Workshops that offer bike repair, possibly with people that need support for the integration of the job market, can develop. Further the rising market of e-bikes is supported and a rising number of bike-sharing offers can be observed. Thereby 'transport' will be in this way connected to the theme 'sharing economy'.

Finally, car sharing was also highlighted as presenting an interesting case study. It connects as a social innovation stream but following discussion with the ITSSOIN partners this economisation can be understood as a way of scaling up a social innovation. As we are interested gain focus on the implementation of a social innovation over time, car sharing might offer an interesting example, even though for countries where car sharing have not being adopted, the innovation may not be at this point initiated any longer as a "social innovation". However the decision for the social innovation stream 'car-sharing' has to be made with some caution, as this refers to a special engagement of third sector actors. The possible involvement of actors from state and market should be an option in the selected case. Otherwise it is possible to criticise that the case selection itself lead to the (possible) result, that especially the third sector contributed to the implementation of the researched case.

5. Conclusions

Governments represented by experts both at national and regional level have made clear that they have set "cities" and "urban strategies toward sustainability" high in their agendas. This reflects to a great extend the interest that government, business and civil society representatives in the four countries have in regard to their cities future developments. These insights give a clear indication of the significance of the results of the ITSSOIN empirical work steps. The high accordance level on the mapping of existing social innovation trends between the internal partners, and external experts in the field validated our findings and results.

The identification of a single stream of social innovation has been here achieved by merging three trends observed and discussed for all four cities. They are concerning transport/mobility, sharing economy and neighbourhood redesign for quality of life. In summary the selected stream is concerned with how a city conceptualizes its mobility. In essence for how does social innovation facilitate sharing the city for mobility, what social innovation promotes an innovative concept for occupying the public space and accommodate people on the move. The

social innovation stream will therefore identify possibilities and options the city actors are creating linking concepts of quality of life, resilience and neighbourhood redesign to achieve ways of sharing of urban space for sustainable mobility options.

The exploration of mobility concepts in the four cities and their implementation sharing urban space for people in the move can be related to numerous innovative approaches by actors from civil society, from the state and the market together or in conflict acting in communities as long as cities and places will exists. Simultaneously sharing is probing to be creating a booming focus for research, so far for the most part focused on its economic contributions and implications as a collaborative form of consumption(Botsman & Rogers, 2010); or as form of no-ownership base exchange (Belk, 2007), and more loosely as a range of digital platform and online –share, exchange, resell, hire and rent activities (Schor 2014).

The attempt to understand the social innovation as part of the mobility concepts in cities for sharing urban space will raise many interesting questions, some of which will be finding answers as this research progresses. Examples of these questions are: sharing urban space who is making the choice and over what form of legitimacy is this choice adopted?, what forms of social relationships (democratic? Inclusive) make possible and sustain sharing activities? what kind of collaboration is necessary between civil society-state-market to make possible and sustain sharing mobility over time? What potential for disruption of market perspective are sharing mobility activities promoting in terms of bringing about solidarity or non-economic exchange? What role this form of innovative sharing plays with regard to perceptions of the public and the private (John, 2013) and with what consequences to the ongoing debates on sustainability in cities.

6. References

Anheier, H. K., Krlev, G., Mildenberger, G., & Preuss, S. (2015). Country Selection: Country-Field Combinations Evaluated in the Empirical Case Studies in the ITSSOIN Project. A deliverable of the project: "Impact of the Third Sector as Social Innovation" (ITSSOIN). Brussels: European Commission.

Belk, R. (2007). Why Not Share Rather Than Own? The ANNALS of the American Academy of Political and Social Science, 611(1), 126–140. http://doi.org/10.1177/0002716206298483

Bellers Madsen, M. (2015). Deløkonomiens Klimapotentiale. -Climate Potential of the Sharing Economy. (Velux Fonden) (p. 51). Copenhagen, Denmark: CONCITO.

Botsman, R., & Rogers, R. (2010). What's Mine Is Yours - Audiobook. US and Canada: Tantor media. Retrieved from https://tantor.com/whats-mine-is-yours-rachel-botsman-roo-rogers.html

Figueroa, M. (2015). Field description in Environmental Sustainability: Sustainability in Cities. Part 1 of deliverable 6.1 of the project: "Impact of the Third Sector as Social Innovation" (ITSSOIN),. Brussels: European Commission, DG Research.

John, N. A. (2013). The Social Logics of Sharing. The Communication Review, 16(3), 113–131. http://doi.org/10.1080/10714421.2013.807119