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40th Congress of the European Regional Association (ERSA)
Barcelona, August 30th to September 2nd 2000

City, Hinterlands – Sustainable Relations

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Abstract

Due to permanently increasing urban agglomerations the question of urban and regional sustainable development has been pushed up high on the agenda of decision makers as well as the scientific community. It is widely accepted that urban agglomerations are defined as city cores plus their hinterlands. To reach a sustainable development path within such a system the examination of the relations between those two spatial forms is necessary. According to phase models of urban development the relation between city cores and its hinterlands are defined by strong inter-linkages and interdependencies. Due to those inter-linkages conflicts may arise between the different functions within the autarky administrative competencies. How could those inter-linkages be pictured best in order to identify the underlying conflicts? - An appropriate way could be via looking at the institutional framework with its relevant actors (i.e. organisations, associations) embedded in both spatial areas. Such a network of actors could be successful by mutual co-operation. The paper will focus on an analysis of the triad conflict/problem, actors/players and co-operations with the aim of identifying the relevant inter-linkages. An overview of different approaches of co-operation specifically in urban areas tries to implement these inter-linkages. Finally the contribution ends with an evaluation of currently existing city – hinterland co-operations in the Vienna region.

1 BACKCLOTH

Urban areas are the world's most dynamical regions. There are several urban development models co-existing, which try to handle these diverging development paths. Some of these models emphasise the inter-linkages between cities (e.g. "Zentrale-Orte-Theorie" (Christaller 1933)) and others focus mainly on the mutual effects inside a city (e.g. "new urban economics" (Alonso 1964, Richardson 1977)). Those, which try to link both approaches can be summarised as urban phase models (see van den Bergh et al. 1982, Vanhove and Klaassen 1987). The phase models distinguish between the city centre and its surrounding area and merge both to a functional urban region (FUR). During the eighties these models found empirical evidence of three different development stages. European cities went through it during the former decades: urbanisation – suburbanisation – desurbanisation. These development stages can be compared with product cycles. Currently functional urban regions in Europe pass through a fourth development stage that can be summarised as a re-urbanisation stage. A development, which initiated new forms of urban specialisation, i.e. city marketing as a promoting strategy for city centres to gain attractiveness. One strategic aspect is the investment in revitalisation projects to renew the building substances. One of the reasons for that is the individual equalisation of revenue and costs between government and local authorities. Therefore this phase includes tendencies of individual city centre development without caring of the hinterland – a strategy that hinders sustainable development activities.

Why is it important to promote initiatives to achieve sustainable development in cities? In terms of increasing population density and the loss of spatial capacities cities are centres of many of our global environmental problems. *"Cities are the major consumers of the world's non-renewable energy resources; they are also the world's major producers of pollution and waste. The city is also the locus of both major population migration and population growth. Much of the current environmental 'crisis' is seen as either directly or indirectly attributable to cities."* (Hall 1998, p. 158) Additionally cities are *"inevitably major generators of both transboundary pollution (e.g. NO_x) and of global pollutants (e.g. CO₂)"* (Button 2000). According to the suburbanisation process cities tend to transfer some of their house-made problems to their

hinterland. This development built up an interdependent status between cities and their hinterland – often defined as agglomeration effects (the sum of positive and negative interdependencies). An increasing population living in the city hinterland and working in the city centre determined lots of problems, i.e. increasing traffic, exchange of energy and mass-flows, sharing logistical and deposit functions, etc. These interdependencies are problematically in terms of the separated organisational structure of cities and their hinterlands, which means in detail that both have their own financial resources, strategies and municipal policies, etc. Simply spoken both are embedded in their own administrative duties with separated competencies and need to fulfil their own goals, which are not harmonised with each other. Due to the inter-linkages and the autarky conflicts may arise. These conflicts will hinder the development of common strategies, which would be the basis for a systemic view and therefore the basis for sustainable development strategies.

Under these preconditions the integration of the sustainability concept seems unrealistically, especially in terms of the postulate to merge "the" urban region – city centre and the hinterland - to one system. Besides this operational problem the general question arises: How is a sustainable city realisable? Looking at the literature about sustainable cities (for an overview see also Nijkamp 1990) it seems that the problem of integrating the concept of sustainability into urban policies should be more than covered. But currently implemented sustainable city management in reality is not existing at the moment in Europe. As Giradet (1999) pointed out: *"...The critical issue is how to initiate a cultural process of urban self regulation in which cities take on the responsibility for monitoring, comprehending and ameliorating their own impact on the biosphere... They will only be sustainable if they are prepared to reorganise the way they relate to the global environment."* Indeed there are several definitions existing on sustainable cities (see e.g. Haughton/Hunter 1994, Gaffikin/Morrissey (eds.) 1999) which can be summarised as integrated approaches that pay regard to environmental impacts, are set in a wider regional frame (systemic approach) and postulate the inclusion of all sections of the population (participatory approach). As argued by Peter Hall and Colin Ward (1998), there is a problem with the generally accepted overall definition of sustainability: *"...it is not clear how this maps into actual everyday decisions in everyday urban contexts."* Frank Gaffikin and Mike Morrissey (1999,

p.101) argue that a sustainable city has to be concerned about the five "E's": *"Efficiency, Economy, Equity, Environment, Empowerment: And it is the latter dimension – empowering diverse stakeholders to get involved – which underpins the others. Trade-offs between conflicting goals, weighting among the goals, phasing the investment needed – all these and more need to be subject to debate and engagement in a wide political process that includes the citizen."* All these definitions agree upon the necessity of widening the concept. There is one more integrated approach existing, which is currently in the implementation stage – "Planning the Sustainable City Region: Manchester 2020." – that focus on three criteria for sustainable development strategies in a city region (see Gaffikin/Morrissey 1999):

- **The containment of spatial growth:** implies a mixed land use
- **The reorganisation of aspects such as 'the physical metabolism':** to ensure higher standards of services
- **The integration of economic, environmental and social dimensions.**

To achieve a sustainable city, city management need to be reorganised in a way of finding commonly defined policy tools. One way of guiding a city region towards sustainability could be policy integration within the city management, which concentrates on different kind of co-operation models. As Haughton and Hunter (1994) argue cities would need management guidelines for sustainable development including the following principles as a minimum requirement for an effective administration:

- Subsidiarity
- Flexibility in devising and implementing environmental policy regimes
- Long-term strategies are necessary for environmental management
- Improved co-ordination across environment-related policies
- Non-discrimination and equal right of hearing
- Need for better availability and understanding of environmental information

The paper will mainly focus on these kind of co-operation models and will try to find out in what way different kind of co-operation philosophies can influence the development of a city region towards sustainability.

2 ENCOURAGING CONDITIONS - HOW TO PROMOTE SUSTAINABLE CITY - HINTERLAND RELATIONS?

As mentioned above the theoretical concepts of how to introduce the idea of sustainability into the spatial context of an agglomeration are fairly well developed. What seems to be the major problem is the operationalisation of these concepts (see also Nijkamp 1990). We do not claim to have a solution of how to reach sustainability in a city-hinterland context. The idea of sustainability as a final and ultimate goal is to some extent criticised anyway (e.g. see Nijkamp and Perrels 1994) and the arguments are somehow convincing. Consequently sustainability could be merely seen as a means instead of an end - thus describing a path towards a goal which can not be ultimately determined (see also Nijkamp and Perrels 1994).

Therefore it seems more useful to identify factors which help to foster this path. Thus helping to design city-hinterland relations which do support sustainable development without being able to precisely identify how the final status of a sustainable agglomeration could possibly look like - or whether such a status could ever be reached. By doing so the burden to reach for a goal which can not be exactly specified or of which it is not known whether it exists at all, is taken from decision makers and actors who are responsible for the management of cities, regions or even nations. So what factors of interaction could be identified, which will support sustainable development within an urban agglomeration? Amongst others the following could be identified:

- Co-operations
- Networks
- Information exchange

We do think that co-operations could be seen as key factors for the success of sustainable city-hinterland relations. The latter two factors could be merely seen as sub-factors or components as well. Therefore in this paper we will try to concentrate on co-operations as supporting factors of sustainable development. In principal two types of co-operations could be identified:

- Formal co-operations
- Informal co-operations

A distinction between those two types could be made along the actors involved: In case of a formal co-operation the actors or the groups of actors could be identified and a clear distinction could be made. Whereas in the case of informal co-operations the actors do often belong to many acting groups at the same time - therefore actors could not be identified easily. Another distinction could be made along the publicity of the co-operations. Formal ones show clear publicity (i.e. in the sense that information about the co-operation is available for third parties). Whereas informal co-operations do not practice publicity as the information about the co-operation is basically not of interest or not necessary for the not involved third party.

From this introductory classifications it becomes quite obvious that we will concentrate on the formal co-operations in this work. The reasons are to be seen in the following facts: First formal co-operations are - as explained above - fairly easily caught as research objects, as they themselves try to address the public thus being open for research. Second this way of acting and the clear classifications, which can be made to distinguish the different types (as described in more detail in the following) of formal co-operations provide the possibility to compare and evaluate them far more efficiently than the informal ones. Last but not least the comparable research, which could be referred upon in this context is far richer for formal co-operations than for informal ones. Thus if we refer to co-operations in the following, formal co-operations are to be meant.

The main goal of this paper - as mentioned above - shall be the attempt to evaluate different types of co-operations in order to identify their capacity to foster sustainable development within urban agglomerations. Therefore it will be necessary to find strengths and weaknesses of co-operations. In order to find generalising facts it will therefore be useful to establish some abstraction of co-operations first. Thus enabling a classification of co-operations and a more thorough analysis of dominating factors, which are responsible for their design and real appearance. Factors, which determine co-operations in this sense have been identified as follows:

- **Type of co-operation**
- **Actors and players in co-operations**
- **Problem/sources of conflicts**

2.1 Type of co-operation

(A) Traditional formal co-operation

Those co-operations are established via a specifically created institution or corporation, which has been founded because of a need of co-ordinating two or more public authorities in a specific policy field or along a specific problem solution. Typical examples of such co-operations are to be found in the form of planning institutions or traffic compound systems.

We refer to those systems as “traditional” as they are the ones following the logic of bureaucracy and thus the theory of Weber (see Weber 1965), which claims that bureaucratic systems will only find solutions by establishing new bureaucracy. The main principles of bureaucratic acting is therefore reflected in those co-operations (see Weber 1965):

- Long-term horizon
- Stability
- Division of executive functions and strategic planning
- Decisions according to fixed rules, which are known in public
- Principle of filing
- Generally non-profit orientation

Consequently those principles lead to certain advantages and disadvantages of this type of co-operation. The advantages are to be seen in the stability and long-term orientation of its goals - thus supporting the basic principles of sustainability. The general notion of transparency vis-à-vis the public could be seen as advantage as well. In the contrary the following disadvantages are to be identified: first the general notion of inflexibility has to be mentioned. As a consequence another disadvantage is the comparably low significance of the factor time, which might lead to long bureaucratic proceedings.

It has to be admitted that some of the institutionalised co-operations of this type are designed in the form of a corporation thus showing the institutional form of an enterprise and suggesting that the principles of business administration (cost minimisation, profit maximisation) are predominating instead of the bureaucratic ones. It has to be decided case by case whether this has some significance or if the public

authorities do still dominate the institution (by ownership or political control) thus transferring their characteristics on to the co-operation.

(B) Formal co-operations without institutionalisation

Those co-operations are based upon legal agreements without founding specific institutions or corporations, which might carry out the tasks in question. The partners to those agreements could either be public authorities and/or private corporations. The most commonly known example of this type of co-operation is the public- private partnership, which is to be found in many cases of public services (waste management, water treatment). The general notion behind this form of co-operation is the idea of outsourcing. Since the late eighties the idea of the “lean” organisation has started its success-story initiated by the example of the Japanese manufacturing industry (see Heimerl-Wagner 1992, Bösenberg und Hauser 1994). The idea of lean management, which is based upon the idea of concentrating on a core business, has ever since found its way into almost every part of the business and public administration. Hand in hand with this concentration the tendency of “outsourcing” has come along. Businesses as well as public administrations have started to shift tasks and the provision of goods and services, which are not within the core business on to private enterprises, which has basically been organised in the form of bilateral agreements. There is one other type of co-operation to be summarised under this heading - i.e. legally induced ones. This means that laws and other form of agreements based on democratic majorities do demand for co-operations between different stakeholders to a conflict or problem thus also forming a kind of formal co-operation.

The advantages of this form of co-operation are to be found in the fact that economic efficiency is introduced into public management thus decreasing costs and public spending. Secondly this form of co-operations has the advantage of more flexibility as the traditional institutionalised co-operations. On the one side this means more flexible reactions on environmental change in time. On the other hand this means more flexibility in the means to reach a specific goal. Of course the specific design of the agreement has to be taken into account in this context. The drawback of this form of co-operation lies in a one-dimensional orientation towards economic efficiency, which leaves out of account the other two dimensions of sustainability (i.e. social and

ecological). Thus the application of those forms of co-operations has certain limits, which is taken account for in its real-world implementation: Formal co-operations are therefore often found in specific sub-tasks of a city-hinterland relation (e.g. collecting and dumping of waste - whereas the information and prevention task is still handled by a public authority). In this respect another disadvantage could be identified in the inability of this form of co-operation to provide comprehensively sustainable solutions.

(C) Modern types of co-operation following the theoretical concepts of management science

- *New public management*: New public management, often defined as strategic approach in the field of environmental policy (Jänicke et al. 1999). It emphasises the importance of defining specific targets, which need to be fulfilled with flexible instruments. Furthermore it implements a consensual legitimisation ("stakeholder approach") by involving all the relevant actors (for an overview see Schubert and Sedlacek 2000).
- *Citizen participation*: For public project, especially large scaled projects, citizens organise themselves in participation groups with the aim of strengthen their position as single actors (see Mayer-Tasch 1985, some examples in the Vienna city region see: http://www.municipia.at/sp4/fallstudien/o_Name/,).
- *Mediation*: For large scaled public projects a mediation process can co-ordinate different parties in the implementation process. Especially for environmental impact assessments a third independent actor functions as such a co-ordinator (see Zilleßen 1998, some examples in the Vienna region see: <http://www.wienonline.at>).
- *Harvard model*: The Harvard model is mainly applied in the United States and in United Kingdom. It is a resolution model with win-win character mainly based on arguing, which depends on complete information and know-how of each actor. Components, which often do not exist in the case of public projects: equal decision power, willingness to solve the problem, equal basis of negotiation and social competencies (see Kostka 1998).

The advantages of these forms are to be found in a very comprehensive way of tackling the problem of co-operations by involving as many stakeholders to the problem as possible. Thus the overall concept of sustainability seems to be reflected quite well in

these concepts. The other advantage lies in the acceptance of the results of the process - as the relevant parties had the possibility to participate. In general the attempt to produce win-win situations in all these types of co-operation seems to be a strong point.

A major disadvantage seems to be the relatively high effort (in organisational and monetary respect) which has to be made to establish these co-operations. Furthermore it has to be stated that from the point of view of democratic legitimisation the question arises whether stakeholder-participation does not contradict the principles of representative democracy. In other words - who does legitimate the different stakeholders involved? Another drawback seems to be the danger that in case of failure the basis for other solutions could be ultimately destroyed whereas in the case of formal co-operations the impersonal way of dealing with the problem may leave enough room for alternative solutions.

(D) Mixed types of co-operations

Those co-operations try to combine different types of the above mentioned concepts in order to minimise the drawbacks and reach an optimal solution. In other words under this heading we summarise a combination of formal and/or modern types of co-operation. From the above said it seems clear that such combinations seem to be the best way of avoiding the specific disadvantages of the different forms of co-operations and therefore such forms are quite often to be found empirically.

A good example of this type of co-operation is the environmental impact assessment, which is not exclusively applied in a city-hinterland context but which has combined to a high extent the different forms of co-operations: On the one hand it is based upon a formal co-operation in the form of a legal agreement, which ensures that public authorities have to work together along the problem in question (e.g. road construction, establishing shopping centres). On the other hand modern forms of citizen participation are ensured as stakeholders are to be involved as parties in the proceedings. Furthermore in many cases mediation methods are applied as well in order to produce win-win situations.

The advantage of this form of co-operation seems obviously to be the capacity to combine two or more types thus combining their individual strengths as well. The problem solving capacity is therefore enlarged as well as the variety of possible solutions. A disadvantage could be identified in the increase of organisational work and therefore an increase in costs. Furthermore a positive correlation between the application of different methods and the quality of co-operations is empirically very difficult to be proved.

2.2 Actors and players in co-operations

The next factor, which has to be taken into consideration when identifying generalising facts of co-operations are the actors and players involved in a co-operation. Of course this list does not claim to be comprehensive but gives a taxative enumeration, which seems to our mind represent the major ones. The selection of these actors - although we are aware how many other possibilities of classification could have been applied - has been made along the following criteria:

- The capacity of the actor/player to initiate decision power.
- The role the actor/player plays within the co-operation (in the sense of character).
- The degree of participation in the co-operation.

Those three criteria seem to be pretty close in their meaning and some doubt may arise whether they are distinguishable at all. To clarify things we will point out some of the underlying assumptions and hypothesis which gave way to these distinctions:

First of all we do think that in order to identify strengths and weaknesses of co-operations it has to be stressed that the formal framework (i.e. the written agreements, the official design,...) differs quite significantly from how things are practised. Therefore the first assumption would be that although an actor/player within the co-operation may have the capacity to initiate decision power thus filling it with life she/he may not play this role (willingly or not).

Another point may be that although an actor may play quite an important role in a co-operation (at least “on the paper”) – she/he may not actually participate within. On the

other hand there may be actors/players who are not included in a formal framework but do play an important role in the real world design of the co-operation.

Third as we know from decision theory (see Roy 1985) in many real world situations there are several actors, which take part in a decision process and there is a confusion between the one who ratifies the decision and what is called the decision-maker. Moreover even when the decision-maker is clearly identifiable, his/her preferences very seldom seem well shaped: in and among areas of firm convictions lie hazy zones of uncertainty, half-held belief or, indeed, conflicts and contradictions. The last criterion, which was introduced is the time horizon each of the players/actors anticipates for the co-operation and within the co-operation.

According to these criteria the following actors have been identified:

(A) Public authorities

Public authorities are players/actors which do participate in almost all the co-operations in a city-hinterland context in one way or the other. Of course according to different problems and types of co-operations (according to the above mentioned classification) different public authorities may be involved. There might as well be different numbers of authorities involved in specific problems. Still, as will be shown in the following, it has to be noted that in real world co-operation “the public authority” does not exist. It always acts through representatives and civil servants.

In general their capacity to initiate decision power is to be ranked high as they are suited with the necessary empowerment to do so. Within the legal framework they are positioned in a prominent place and their role is supposed to be a rather significant one in almost all the co-operations. Of course here the above mentioned case arises where this role is in some co-operations not played. This holds especially true for the “traditional formal co-operations”, because of the very seldom well shaped preferences (as mentioned above as well).

The time horizons for the co-operations as well as for the participation in the co-operation is for public authorities a long one. This is due to the fact that stability is one

of the major tasks of bureaucracy and due to fact that authorities are rather inflexible in changing their role as well.

(B) (Political) decision makers

The political decision makers are hardly directly involved in co-operations. They act in most of the cases through organs. Still it is them who the authorities often refer to when co-operations are to be designed and lived. Thus - although they are not directly involved in the co-operation – they play an important role as legitimise and strategic mastermind. On the other hand in some cases the political decision makers play an important and active role in co-operations: their role could be described as a strategic meta-co-operation where they simply co-operate with other decision-makers on the same level (e.g. the regular meetings of the three “Landeshauptleute” of the eastern federal provinces ("Länder") of Austria).

Thus their capacity to initiate decision power is to be ranked highest as they have the final legitimisation for doing so. Their role within co-operations is in principle rather important, but the degree of participation seems to be rather little (except for the above mentioned strategic co-operations). Still the willingness to participate actively in co-operations seems to increase with a decrease of legitimising power of the single decision-maker. In other words: the majors and political representatives of villages and cities in the hinterland are more prepared to actively participate in city-hinterland co-operations than their colleagues from the central city. This may not be surprising as the possibility to delegate this task to civil servants is much higher for the latter. The time horizon is limited in general to the election period (in Austria this is four years). There is hardly any decision-maker who really plans in long-term participation in co-operations.

(C) Civil servants

Civil servants are the operative personnel of public authorities without any political decision power, which is obliged to the political decision makers. They need to prepare different fields for the decision makers. As part of the administrative system of a public authority they function as contact partners for citizens and economic entities (civil service – "Bürgerservicestellen"). Without any decision power civil servants especially

of small city-hinterland villages are often not active actors or players in city-hinterland co-operations because of the lack of equal rights.

(D) Citizens

For initiating sustainable city relations citizens need to be integrated in city-hinterland co-operations. One of the basic conditions of sustainable urban development is the involvement of citizens (empowerment, see section 1). In many cases there is no involvement of citizens guaranteed. Especially the traditional forms of co-operation (formal co-operations with or without institutionalisation) are not based on participatory approaches. The modern forms of co-operation, e.g. the Harvard model or mediations processes are basically initiated as co-operation platforms actively involving all the relevant actors – in most cases citizens are the most relevant actors.

(E) Corporations/economic entities

Corporations and economic entities are in those cases actors of city-hinterland co-operations where business related decisions are needed. In the case of public-private partnerships corporations are in charge.

2.3 Problem/sources of conflicts

Generally spoken problems and conflicts arise in every day-by-day business. Therefore several approaches of resolutions exist in the literature, but without a special focus. This contribution focuses specifically on a classification of spatial conflicts (city – hinterland, communities, etc.) plus the institutional entity (municipalities, regions, federal state, provinces, etc.). In this context two main fields of conflict or problem causes can be distinguished:

- Internal: i.e. same level of spatial conditions within the same institutional entity
- External: i.e. involvement of different levels of spatial conditions and different types of institutional entities (e.g. provinces versus municipalities, municipalities versus other municipalities)

An analysis and evaluation of the strengths and weaknesses of co-operations in this context has shown that a further distinction has to be made (see examples of city-hinterland co-operation). The reasons for that can be summarised as follows:

1. There is a need for more precise identification of specific strengths and weaknesses.
2. Furthermore better targeted solutions for identified weaknesses are warranted.
3. To guarantee high quality co-operations a better identification of target groups to be involved in co-operations is needed.

To take these reasons into consideration a classification in micro and macro levels (i.e. to be distinguished from the classification of economic theory) is useful (see figure 1).

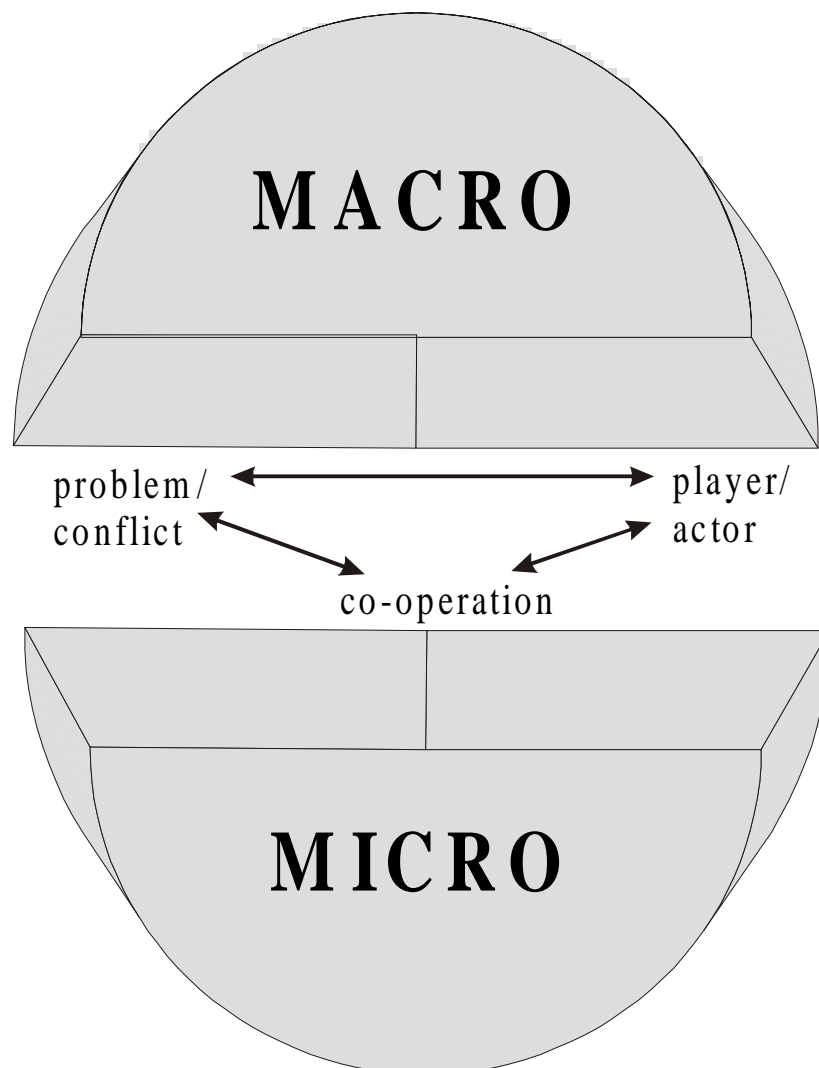


Figure 1: The embeddedness of city-hinterland relations

As pictured in figure 1 all elements of city-hinterland relations are embedded in a micro and a macro level. The micro level can be defined also as the personal level where personal contacts and interactions in form of communication patterns and information flows determine the problem solution capacity, the relationship between the actors/players and the success and failure of a co-operation. The macro level can be defined as the overall framework conditions or the system related conditions. These conditions influence city-hinterland relations directly and are often the reason for failed co-operation efforts. Therefore it is necessary to check these conditions first. In many cases the framework conditions are the impulse for an arising problem and need to be taken into consideration for the resolution strategies.

3 EXAMPLES OF CITY-HINTERLAND CO-OPERATIONS IN THE VIENNA REGION

Finally, two examples of city-hinterland co-operations in the Vienna region should show how such a classification and evaluation could be made.¹

3.1 Traffic compound systems²

In the Vienna region the traffic compound system VOR (Verkehrsverbund Ost-Region) covers a region which includes the whole city of Vienna and its hinterland (districts of the states ("Land") Lower Austria (Niederösterreich) and Burgenland) This region covers 2.3 million inhabitants and an area of 7.000 km². It is an institutionalised co-operation between the three "Länder" Vienna, Lower Austria and Burgenland based on a foundation and financial contract of 1984. It is organised as a limited liability company with four partners, the federal state of Austria (50%), Vienna (30%), Lower Austria (15%) and Burgenland (5%). The board of directors consists of twelve members (four from the federal state, two from Vienna, two from Lower Austria, one from Burgenland and three members of the workers' organisation). The managing directors are from the Federal Railway (ÖBB) and from the Vienna transport services ("Wiener Verkehrsbetriebe", WVB). There are three general tasks established:

- planning
- co-ordination
- organisational management

The VOR is financed by the federal state (50%), and the three "Länder" Vienna (30%), Lower Austria (15%) and Burgenland (5%).

Strengths and Weaknesses:

- The VOR can be classified as a traditional formal co-operation where three public authorities needed a co-ordination along the problem situation of public transport. Therefore one strength is the clear competence of the involved actors. On the macro level the competencies for public transport are clearly defined, whereas on the micro level the communication patterns are locked in a competition situation of the three "Länder" within their different political interests.
- Furthermore the VOR follows the main principles of bureaucratic acting, which covers both strengths and weaknesses as mentioned earlier. One strength is the long-term orientation and planning, which guarantees stabilised connections and supported price systems. One prominent weakness can be identified here as well – the inflexibility and bureaucratic proceedings, which is part of the macro level.
- One clear advantage is the transparency of the organisation.
- The commonly defined marketing and tariff system is an advantage for the user. But there is an enormous disadvantage for the region because of the dominance of the Federal Railway (ÖBB) and the Vienna transport services ("Wiener Verkehrsbetriebe", WVB). Both are self-sufficient in terms of planning the schedules and are interested to optimise their planning without taking care of other interests (micro level).
- An important weakness in that kind of co-operation is the imbalance between the actors and those parties, which use the infrastructure (passenger) and those who need to support their citizens with competitive connections (municipalities in the city hinterland). There is no space of active co-operation between the VOR and these municipalities. If the latter want to increase their public transport supply, they need to pay for this individually. This is a traditional customer-supplier relationship without equal rights. For small municipalities a barrier which strengthens the position of the private vehicle traffic, which hinders sustainable development.
- The most important weakness for the development of the city region Vienna is a lack of inter-linkages between regional and traffic planning institutions. This hinders the implementation of sustainable urban development strategies.

3.2 Waste management associations

In Lower Austria most of the municipalities are linked to 25 waste management associations, which are organised separately. In principle municipalities can be self-sufficient in waste disposal tasks. For the single associations an umbrella association ("NÖ Abfallwirtschaftsverein") exists, where the "Land" Lower Austria is also member of. This umbrella organisation was founded in 1993 as a reaction on the implementation rules of the Austrian packing legislation ("Verpackungsverordnung"). It is responsible for information and co-ordination of all members. Together with the "Land" the umbrella organisation designs conceptual solutions for waste management tasks and problems. The overall target is defined as "saving costs for citizens". The single waste management associations are responsible to inform municipalities and citizens directly. They function as a kind of service board. Most of the associations co-operate with corporations, which fulfil the waste disposal tasks (public-private partnership). The existing city – hinterland conflict which partly induced this co-operation is the increasing population in the hinterland municipalities that works in the city centre. The more restricted waste disposal rules in these communities induced a kind of "waste tourism". In detail this means that the restricted waste disposal possibilities forces citizens to bring part of their waste into the anonymous city centre – their work place. Without any possibility of disposing their waste elsewhere citizens would be forced to reduce their waste – one goal of the waste management legislation ("Abfallwirtschaftsgesetz").

Strengths and Weaknesses:

- The waste management associations are embedded in an umbrella organisation, which covers the institutionalised function. Originally the "Länder" in Austria were responsible for waste management tasks. They have their own waste management legislation as part of the subsidiary principle. For disposal tasks the "Länder" delegated the responsibility to the municipalities. The solution in Lower Austria is a kind outsourcing by legitimating more or less independent associations with these tasks. A strength of this model is the share of responsibilities and therefore an increase of transparency.

- The function of an information pool guarantees awareness increases, which is the basis of developing sustainable development strategies and to solve the above mentioned "waste tourism".
- Municipalities became more relieved by this kind of co-operation model. This covers both strengths and weaknesses, on the one hand they gained capacities for other responsibilities, but at the same time they lost autarky.
- In case of the above mentioned "waste tourism" it is a tremendous weakness that one of the involved players – Vienna – is not part of this co-operation model.

4 CONCLUSIONS

Coming back to the introducing question - **Why is it important to promote initiatives to achieve sustainable development in cities?** – this contribution could only discuss a small part of it. But with the focus on managing strategies for solving increasing conflicts in a city region it provides a tool for starting such a process of achieving sustainable development in urban agglomerations.

The identification of the relevant interdependencies in a city region helps to detect existing conflicts which are often barriers for sustainable strategies. But these conflicts function as a regulative for the inter-linked actors and therefore are helpful to initiate a discussion process between those players.

Furthermore the identification of the triad problems/conflicts, actors/players and co-operation embedded in a micro and macro level helps to evaluate still existing or planned co-operations in a city region. The examples show that there is a strong need for modern forms of co-operation to implement a systemic view, which means to merge city centres and their hinterland to equal partners. There is a strong need of intensifying research in this field in form of initiating city – hinterland partnerships with an active participation of the scientific community (transdisciplinary approach). The still ongoing research project "STAU - Vienna" (see Loibl et al. 1999) will intensify this approach in the near future.

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¹ The examples are based on a still ongoing analysis within the research project STAU (see Loibl et al. 1999) and the project seminar "Stadt, Umland – Nachhaltige Relationen".

² see Antalovsky, E., Sapper, A. and Schadt, G. 1994