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Basic aims and new tasks of urban renovation

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Abstract

The new method is the result of interdisciplinary research project Re Urban Mobil (Mobilising Reurbanisation on condition of demographic change) within the European Fifth Framework Program »Energy, Environment and Sustainable Development« from 2002 – 2005. Faculty of Architecture coordinated and performed special section about architecture and urban planning together with 4 basic sections (others: sociology and demography, economics and law, urban ecology) and in 4 European cities as case-studies (Bologna, Leipzig, Leon, Ljubljana). The general aim of the project was to analyse the urban renovation potentials and obstacles of residential areas and to develop a new methodology of sustainable planning through instruments, incentives and strategies for an appropriate and long-term use of these areas taking into consideration changing demographic preconditions and importance of specific cultural heritage. The specific aims of the new approach are to analyse the advantages and disadvantages of urban areas in general and on the base of case study results. Scientific aim is to define the basic prerequisites for higher living quality with respect to the urban development, architectural planning and the protection of cultural heritage.

The study proposes a new methodological approach in research, planning and implementing the reurbanisation in existing city structures. The most important novelties are: special comparative interdisciplinary analysis, specific list of indicators and their applicability, proposal for work method of architectural and urban planning, new method of analysing renewal feasibility of existing architectural and urban structures, suggestions for special instruments as part of reurbanisation process with
complex aim at development as well as at protection of specific values of cultural heritage in different urban structures and cities. The planning process in the case studies in four cities is based upon such new methodology.

**Key words:** reurbanisation, feasibility studies, researches, methods, planning.

### 1. Introduction

The Re Urban Mobil project (Mobilising Reurbanisation on condition of demographic change) was one of the research projects within the European Fifth Framework Program »Energy, Environment and Sustainable Development« from 2002 – 2005. Divided in 9 work packages, the four of them were developing the basic analysis (sociology and demography, architecture and urban planning, economics and law, urban ecology). 9 important European research institutions carried out the researches and the case studies were elaborated in 4 cities (Bologna, Leipzig, Leon, Ljubljana). Faculty of Architecture at the University of Ljubljana was performing the research on the topic of architecture and urban planning under the leadership of prof. Peter Fister, Ph.D., with special collaborators (prof. Roy Graham and the Catholic university in Washington, Ad Pirum institute, students from the Faculty of Architecture Ljubljana, etc.). The results of the study from the point of view of architecture and urban planning have been published also in a special publication 2007 (Fister, P., *Reurbanizacija/prenova naselbin in arhitektur (metodologija načrtovanja) – Reurbanisation of Architecture and Urban Structures (Planning Methodology)*, Ljubljana, Univerza v Ljubljani Fakulteta za arhitekturo.)

Beside tendencies of intra-urban polarisation, the overall trend of economic and demographic recession could not be reversed. The gap between growing and declining regions in Europe increased and will even more increase in future. Massive demographic changes will accompany these disparities. According to projections, in many European countries the population decline due to partly extremely low fertility rates will coincide with a growing number of households. Moreover, their structure is modifying: households of both younger and older age groups will become smaller and less stable. The general aim of the project is to analyse the urban renovation (re-urbanisation), potentials and obstacles of inner-city residential areas and to develop instruments, incentives and strategies for a sustainable, appropriate and long-term use of these areas and cultural heritage taking into consideration changing demographic preconditions.
2. Architectural and Planning Aspects of the New Methodology

Actual problems of most European city centres from the point of view of architecture and urban structures are connected at the same time to the high architectural, symbolic or semantic values of the built heritage and to the unsuitability of these structures to the changes of social, demographic and economical needs or expectations. Therefore from the point of view of architecture and urban researchers, the renovation process should offer protection of specific values as well as new possibilities for new way of life.

The main frames and expected results must consider the fact that all implementations can be done only by formal planning documents and systems. As the reurbanisation indicates at the same time the preservation of cultural and identity values and the development of new qualities, some new aims and indicators must be built in the existing theories and methodologies of analysing, planning and building of architectural and urban structures: reurbanisation must be in future a strategic part of the spatial planning, organisation, protection and development of the city, incorporated into the long-term plans.

Active revitalisation (= special part of reurbanisation) is a basic form of protection of the city’s cultural heritage and also a basic form of regeneration and high-quality urbanisation of degraded parts of the city. Revitalisation and reurbanisation is planned also as the “recycling” (adaptation to a new use) of structures of high-quality construction and design and carefully supervised »marketing« of established geographic, urban and architectural values. Planning for revitalisation of high-quality (distinctive) areas of the city must be done in at least two steps: a) long-term plan (strategy) of comprehensive urban revitalisation = “master plan”; b) detailed work phase plans for the execution of the comprehensive revitalisation/reurbanisation of the relevant areas.

In order for the aims of urban renovation some special must be defined and evaluated. The criteria of general orientation of the reurbanisation as part of development strategy of a town are conservation of protected areas and parts of the protected immovable heritage, creating acceptance of the appropriacy and precedence of revitalisation as against new construction, revitalisation of degraded urban areas linked to high-quality (distinctive) urban districts, specific development of the central and identifiable important parts of the city. Determination of areas for reurbanisation and revitalisation is according to scope, value criteria, expected problems and outcomes.

Involvement of local inhabitants, owners and users is introduced in this phase for the purposes of publicity and as a necessary form of planning and execution of the
revitalisation. Analysis and determination of degraded sections with respect to social, demographic, economic and spatial conception, construction fabric, content and uses is performed by »expert foundations« for the integral preservation of the protected immovable heritage of the city.

Development of built structures (“recycling”) and orientation towards high-quality uses requires the creation of quantitatively determined development scenarios: linkage of the comprehensive strategy for the revitalisation of the city centre with particular appropriately selected districts with regard to their physical, functional or semantic characteristics. An essential prerequisite is the creation, monitoring and analysing of an appropriate central data repository for all categories of space and buildings, followed by the definition of development strategy and development documentation in the final phase and the interdisciplinary comparable data for environmental, social, demographic and economic indicators. From this material a basic information repository for planning and monitoring the revitalisation process will be created, principles for a long-term strategy will be formulated, and prioritisation of various initiatives required for the creation of the plan and the execution of the comprehensive revitalisation will be undertaken. It will be possible to define detailed components following a review and assessment of the applicability of material created previously. Relevant ecological, demographic, sociological and economic analyses and scenarios, building on the general ones in the basic strategic document, must be conducted in advance.

The reurbanisation master plan can be adopted as part of the city spatial planning documents or entirely independently, while constant monitoring (by the appropriate municipal section), formation of a sufficient number of active initiatives (with an orientation towards ensuring the quality of public goods and towards an appropriate development initiative = management) and linkage with the target strategy at national or international level, must be provided in parallel. The scope may include defined parts of the city structure, distinctive complexes or individual (especially protected) parts of the architectural heritage. The selection of these priority work phases will proceed from the comprehensive revitalisation plan, current circumstances and the possibilities for implementation. The selected districts that are sufficiently homogenous from a design, functional and development standpoint can begin to be addressed while the comprehensive strategic plan for revitalisation is still in preparation - they are particularly useful as pilot cases. In order to gain acceptance for the partial comprehensive revitalisation plans, it is necessary to ensure an appropriate role in the city’s development plans and active involvement of owners, users
and potential investors via the formation of special initiative groups. Detailed components should be defined with respect to the specifics of individual areas or components.

As the planning for architecture and urban revitalisation/reurbanisation needs specific results from different special analysis and because it is based on interdisciplinary gathered indicators, it is obvious that it can be done after the basic studies only. But for the practical use of individual results of these studies, the coordination of their goals must be clear from the very beginning. There are too many examples in every country where special ideas how to revitalise or to reurbanise parts of the city structures (specially the protected ones!) failed because of one simple reason: the connection between cultural, economic, social, demographic, even political strategies on one side and the reality of space, of the state of existing built structures or infrastructures, were not taken in account as basic conditions for any realistic decision in revitalisation!

To develop special methodology of such coordination, it is urgent to start with the coordination at the beginning of the project. Therefore general scheme of theoretical approach in methodology of reconciliation of separated research results of different groups, ideas and viewpoints that could be used for the planning is the starting point of the work on architecture and urban structures within planning the strategy of reurbanisation process, based on some special aims. As the reurbanisation indicates at the same time the preservation of cultural and identity values and the development of new qualities, new aims and new indicators must be built in the existing theories and methodologies of planning. In specific problems, it is focused on particular issues as part of positive recycling and management of the available space, settlement structures and built heritage. Reurbanisation should be planned first of all as the recycling of structures of high quality, as the regeneration of degraded parts of the city and as the revitalisation of the city’s cultural heritage. Analysis should give the interdisciplinary comparable data for social, demographic, economic, cultural and all physical indicators. Unifying and updating such results should form the basic information repository for planning. Establishing the reurbanisation plan requires an appropriate interdisciplinary team, sufficiently strong activity at the city level (public involvement as »open planning system«!) and appropriate policies of the city authorities.

To ensure the reurbanisation process an appropriate role in the city’s development plans, it is necessary to organise active involvement of habitants, owners, users and potential investors. Relevant demographic, sociological and economic analyses and scenarios, building on the general ones (in the strategic document), must be conduced in advance, regarding the actual priorities. Special workshops and/or architectural-urbanistic charrettes
should be provided to be able to create proper scenarios before planning the long-term strategic plans or even before final decisions for detailed plans of reurbanisation are accepted or implemented, because the urban renovation is a process and not a closed action!

The first phase of the project should get underway in two groups: a) definition and evaluation of basic groups of problems and aims, b) analysis and evaluation of specific indicators – “central data repository”. Each party should prepare a list of special criteria and objectives building on the general ones and each group should formulate subject criteria that must be reconciled with other groups. The project group, together with those responsible for the city’s development strategy, should draft a coordinated set of unitary criteria and goals for the assessment of components in the city nucleus and for the direction of individual components of the project.

General and detailed criteria and aims should be presented to the public on two levels: to city councillors and at a public hearing. Special forms of active public involvement could also be proposed. In addition to the proposed, but still overly general strategic directions regarding the requirement for reurbanisation, criteria and objectives must be agreed that will facilitate consistent work by the split project team across all the various thematic groups.

Data sources important for architecture and urban structures are primarily those that can be used directly for the preparation of the basic strategy and master plan for the revitalisation. Important are analyses of parts of the relevant nucleus of the city from the perspective of current situation, assessment and feasibility studies of development taking into account both heritage conservation and spatial and architectural circumstances.

3. **Determination of Specific Indicators**

Indicators of infrastructure and space are the indicators that generate(-ed) the role and relation of the selected area and of its infrastructure within range of town and region in physical meaning - evaluation from the point of view of natural and built circumstances (conditions). They are connected to the indicators of the state of general economic, socio-demographic, technical, physical, ecological (...) state of geomorphologic and built structures - evaluation on the level of town, selected area, groups of houses, infrastructure complexes (i.e. from retail, education, recreation, transport, to energy, communication complexes, etc.) and special geological or geomorphologic structures or indicators of positive or negative ecological conditions connected to the selected areas as well as to the
general state of art in the region, town and town centre (detailed selection depends on the local specifics).

Very specific are indicators of protected areas, heritage complexes, monuments and special constituents that are related to the selected area (cultural, symbolic, semantic, aesthetic, social, economic, demographic, etc.) - evaluation should manifest the expected role (influence) of these indicators within the planning and implementation of reurbanisation.

Indicators of technical and ecological conditions could be selected in different categories. Most general are actual technical conditions (actual state), characteristics and values of basic town structures - evaluation in comparison within selected area (communications, all kinds of supply structures - specifics of the town or selected area). Detailed are usually indicators of the technical state of built structures - the final aim should be a detailed documentation (data base) of every built structure; the actual expected aim is to get the data of characteristic (typical) groups of built structures that can be used to calculate the required financial and functional input, indicators of characteristic materials and technologies - survey and evaluation of historic, actual or expected use of specific material or technologies (within selected area, specific groups = types of buildings and in connection to the region), and special indicators of technical conditions of protected heritage or degraded structures of the selected area.

Indicators of economics must also be divided into special groups. General indicators of the actual economic state of selected area - in relation to the town, region or special administrative units, special indicators of characteristic economic structures (specially used or built for housing, trade, reproduction, education, culture, tourism, etc.) - within selected area and in relation to specific built structures/units on micro (= building, group of buildings) or macro level (selected area - in relation to the town or region), and economic indicators of positive or negative processes of evolution of the possibilities of positive development for the selected area - in relation to the development strategy of the town or special administrative unit and considering the socio-demographic and space indicators.

Indicators of socio-demographic conditions have to define positive and negative socio-demographic conditions - in relation between the selected area and the town or specific region, in time-section, social strata or specific problems, groups, etc.

Indicators of cultural conditions are very important. They define the evaluation of quality level of built cultural heritage - relation between the selected area and the town/region, relation between special (protected) groups of buildings or public spaces, etc. The indicators of culture of life define specifics and values of social, cultural, everyday life, providing the
degree of quality of individual houses, groups of buildings or spatial parts of the selected area; the evaluation of relations between existing state and expected changes and also the role and importance of cultural activities - within selected area in relation between different parts and in relation between selected area and the town/region, as well as the general cultural importance of the selected area - comparison and evaluation to the level of town, administrative unit, region, state, Europe, etc.

4. **Specifics of the Work Method**

The basic aims of the comprehensive reurbanisation are both general and specific. The general principles concern the overarching strategy for the physical organisation and development of the urban space, while the specific ones are focused on particular issues as part of the positive management of the available space, the existing settlement and building heritage, irrespective of their positive or negative value. Before the planning, next implementation of the measures must be offered:

a) incorporation of reurbanisation/revitalisation as a strategy in the city development plan, b) collection, unification and updating of previous documentary information (formation of a central data repository and monitoring,) c) coordination of the creation of the basic reurbanisation master plan, d) formation of appropriate expert, coordinating and civil groups in order to facilitate public involvement and for publicising intentions for the reurbanisation of the city centre.

There are different approaches and aims of typological research. Every profession uses its own system and they are many times incomparable between themselves. As the architects and planners need first of all such system of typological evaluation that can answer to the basic questions, a new and multidisciplinary typology should be created and used in every different case.

When there is the question of planning the strategy of reurbanisation (or revitalisation…) of existing built structures the most important problem is how to “measure” the feasibility of renovation of the researched area, selected complexes or of every single building. Comparing the existing practices (in Europe) it can be stated that generally such studies have been researched only for single buildings or small complexes and that in general the question of renewal feasibility is not part of the strategy or general planning at all. Of course, the most difficult problem originates when the built structure is at the same time evaluated as cultural heritage.
Strategic decisions for planning are based upon the evaluation of different types of buildings and open places. Differences between them can be the deciding factor for wrong realisation of the strategy many times. But the implementation of expected aims is always connected to the problem of investment acceptability. If a building is a cultural monument (but without suitable function for reurbanisation), or if it has some technical and functional qualities (but it is not listed as cultural heritage), there can be great differences of investment needs in favour of the second one – and the strategic decisions can not be realistic ones! Therefore the method of “measuring” the feasibility of renewal should connect and amalgamate different typologies in relation of the specifics of the researched town or part of it.

To be able to compare the feasibility of renewal of single buildings or complexes, a special method was developed. The results should help to the objectivity of decisions in the process of planning and during the realisation of rehabilitation and process of urban renovation. It can serve as one of expected tools in reurbanisation action. According to the specifics of selected areas, the built structure must be divided to different groups (following different typologies) that allow to elaborate comparable results. Within every specific group one typical building or typical area is selected and analysed in details – the results serve to create the list of average problems, possibilities and needs. When all the analysis are put together, the general evaluation of feasibility of renewal and possibilities of existing building structures (and/or typical small areas) must be presented on a system that is comparable to other analysis and data. Monitoring of changes is urgent at least every five years.

The algorithm shows the method of evaluation of feasibility of architectural and urban structures in reurbanisation. It is divided in 2 phases:

1st phase includes different expert evaluations and documentations, using general and/or detailed indicators as criteria and experts’ as well as public suggestions for the expected aims of improvements. The result can be made on a) general scale, on b) level of typological groups of buildings or parts of the town, or on c) detailed level of single buildings.

2nd phase is the evaluation analysis of the state of art, using proposed general values or special local values. It generates the final feasibility graph. It can be used as starting point of discussion, strategy, decisions or even expert support for owners/investors. The square of complete values is the maximum of possible values for part of town structures, for typological unit of buildings or for single building. By drawing the internal values, the figure shows the real needs and/or possibilities of existing structures in the future revitalisation process.
The state of art is divided into different categories: on the first level there are urban structures and urban values, on the second one there are architectural structures/values and building structures (technical conditions of existing architectural structures). Every category has its own specifics and expected results, but in the same time each category is connected to the proposed system of instruments/tools.

![Feasibility Algorithm]

Fig. 1: Feasibility algorithm
As samples there were results of such feasibility studies for case study of Ljubljana and Bologna, both elaborated in detail (single building, detailed field work), the case study of Leipzig about a selected part of the town, and case study of Leon on the general level (using existing formal data). Detailed results of the feasibility research were reported to the treated cities.

Fig. 2: Bologna, detailed study

Fig. 3: Ljubljana, detailed study
To adapt existing (special) typologies of specific built structures to proposed methodology of “renewal feasibility” supplementary field research is to be done. During theoretical and practical research special questionnaires should be created. Using them, the field research can be done in a relatively short time and by interdisciplinary groups of specialists (architects, technicians and other specialists – dependently to the quality of existing typological evaluations). Supplementary field research is based on the questionnaires on
two levels: first level is the analysis of selected sample - buildings), the second one is a
general evaluation of existing state of art of the built structure (see special publication!).

There are several steps of the research method. Special questionnaires and calculation
table were created and tested.

1st step: Selection of comparative areas of typical groups of buildings:

- Expected result: creation of compatible groups of buildings with expected similar
characteristics in the renewal process from the point of view of age, aesthetic evaluation,
heritage, etc., specific technical characteristics, expected possibilities or other special
characteristics. When the groups at the same time create special areas (region,
district...), the results can be used as general application.

2nd step: Detailed analysis of selected sample buildings.

- Groups of researched problems are: evaluation of functional units (typological groups, urban
structures), evaluation of “ability for living” (= objective standards + special values),
evaluation of architectonic/urban special values, list of technical problems.

- The instruments/tools should help to understand and to use properly the role of urban and
architectural structures within the expected goals and opportunities of reurbanisation that
are taking shape from the point of view of socio/demographic, economic, and other changes
inside the existing city centres or settlements. It is expected that architecture and urban
structures will offer through proposed tools special directions for general planning and for
proper developing of every single case as an essential part of final results as well as an
expected applicable issues of strategic or practical urban renewal.

Guidance of the reurbanisation process, connected to the proposed instruments must be
connected to the following conditions:

- incentives for reurbanisation – national, regional, local, individual level;
- improving environmental quality – on general and individual level;
- developing attraction of ambiental and housing types – due to specific or expected
socio-demographic structures;
- developing the functional diversity – connected to the expected specifics of each town
or case;
- preservation or improvement-revitalisation of local identity and cultural heritage
(monuments...);
- realistic evaluation of feasibility of existing structures to guide to the best economic,
technical and functional urban renovation.
BASIC CRITERIA FOR INSTRUMENTS AND TOOLS:

<table>
<thead>
<tr>
<th>TYPE</th>
<th>CRITERIA</th>
<th>SPECIFICS/IMPORTANCE</th>
</tr>
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<tbody>
<tr>
<td>urban structures</td>
<td>-central</td>
<td>-density of structures and population</td>
</tr>
<tr>
<td></td>
<td>-subcentral</td>
<td>-accessibility</td>
</tr>
<tr>
<td></td>
<td>-suburban</td>
<td>-share of utilities: important as criteria for strategic planning of comprehensive reurbanisation</td>
</tr>
<tr>
<td></td>
<td>-(other specifics)</td>
<td></td>
</tr>
<tr>
<td>urban values</td>
<td>-urban heritage/monument</td>
<td>-degree of formal values, protection</td>
</tr>
<tr>
<td></td>
<td>-basic urban structure</td>
<td>-infrastructural equipment</td>
</tr>
<tr>
<td></td>
<td>-secondary urban structure</td>
<td>-ecological and environment values</td>
</tr>
<tr>
<td></td>
<td>-degraded urban structure</td>
<td>-cultural conditions (quality of life) important as orientation in planning process</td>
</tr>
<tr>
<td>building structures</td>
<td>-residential</td>
<td>-m² per capita: total – according to specific groups,</td>
</tr>
<tr>
<td></td>
<td>-public</td>
<td>-building stock: total number of dwellings or parts of buildings, mean number of persons per dwelling, size of dwellings and other functional parts, vacant dwellings or parts of buildings important as criteria of recycling, developing or destroying - new building decisions</td>
</tr>
<tr>
<td></td>
<td>-commercial</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-productional (industrial...) (other specifics...)</td>
<td></td>
</tr>
<tr>
<td>architectonic</td>
<td>-architectural monument</td>
<td>-degree of formal values</td>
</tr>
<tr>
<td>structures</td>
<td>-architectural heritage</td>
<td>-fulfilling standardised conditions (regarding city's specifics or legislative norms)</td>
</tr>
<tr>
<td></td>
<td>-typical arch. structures</td>
<td>-technical state of art important as criteria for final decisions in detailed reurbanisation/building</td>
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<tr>
<td></td>
<td>-atypical structures</td>
<td></td>
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<tr>
<td></td>
<td>-negative/degraded structures</td>
<td></td>
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<tr>
<td>planning structures</td>
<td>-national/regional planning</td>
<td>-national/regional strategies include reurbanisation as basic part of plans</td>
</tr>
<tr>
<td></td>
<td>-urban planning</td>
<td>-urban planning starting from reurbanisation and including “open planning” (public) component</td>
</tr>
<tr>
<td></td>
<td>-architectural planning</td>
<td>-detailed decisions obligatory connected to the urban/regional strategy</td>
</tr>
<tr>
<td></td>
<td>-special planning</td>
<td></td>
</tr>
</tbody>
</table>

The proposed instruments represent common approach and method of work in a general and specific reurbanisation process from the point of view of architecture and urban structures (planning). They are developed from the specifics of the general situation in city centres in Europe and especially from the local specifics of the four case-cities. As the detailed tools for selected case studies can be recognised after the architectural charrettes
will be finished, and because other work packages often repeat the same proposals as it is expected to be done from the point of view of architecture and urban structures, only those tools are selected that can be recognised from the report of the selected settlement.

Levels of understanding and planning urban renovation are divided into 3 specific groups from the point of view of realistic way of research, planning and implementing the reurbanisation process for selected parts of a settlement: general strategic level, level of urban values and building structures and level of architectural values (connected to the existing built structure).

Because of great differences between national legislation concepts and postulations it is impossible to harmonise instruments and tools on the national level. Therefore the proposals can be on specific urban and architectonic level only – specially created for general use and for case studies. The proposed instruments are based upon the results of data collection and special researches of case studies, upon the reports of four cities (Leipzig, Leon, Ljubljana, Bologna), upon the existing results of other work packages (specially economics and urban sociology/demography), upon parallel methodology research studies of reurbanisation/revitalisation of architectural heritage and using the results of some best practices. (Single instruments are presented in the detailed studies.)

1st level: urban values and building structures:

Using proposed method of work from next “instruments” of “urban structures” “urban values”, “building structures” and “planning structures” (partly):
It is expected that the result should be the next tools:

- definition of the strategic importance of the reurbanisation process of the city centre,
- scenarios are included into the general strategy of the city development plans (special “master plan” is possible)
- specific deliverables and tools for each city (urban-strategy level).

2nd + 3rd level: building structures and architectonic values should result in:

- “expert support”
- “communities of special interests”
- “stimulative/destimulative action plan”
- “open planning”

It is expected that the result should be the next tools:

- Detailed recognition of real possibilities and evaluation of feasibility of reurbanisation on the level of housing-blocks and individual houses.
- Specific scenarios or recommendations for investors, owners, groups of special interests.
- Special plans and actions for implementation of reurbanisation process.
- Stimulative/destimulative action plans.
- Organisation of expert support.

5. Analysis of the Aims of Four Selected Cities: Leon, Bologna, Leipzig, Ljubljana

The most important aims were examined on four case-cities from the point of view of planning the sustainable reurbanisation of architecture and urban structures. Analysis was based upon the special reports of the cities (presented in the detailed study).

Two examples of case-studies for the feasibility of urban and architecture structures in planning the sustainable reurbanisation of city centres with marked case-buildings or complexes:
SAMPLE CASE-STUDY
BOLOGNA

(Map of detailed analysis of architectural values)

BOLOGNA – CASE STUDY “BOLOGNINA”

EVALUATION OF THE FEASIBILITY OF EXISTING
ARCHITECTONIC AND URBAN STRUCTURES IN
REURBANISATION PROCESS – GENERAL LEVEL, BLOCK “A”,
BUILDING

Fig. 7. Sample case study – feasibility, Bologna
Fig. 8. Sample case-study - results of feasibility analysis, Ljubljana
SAMPLE CASE STUDY
LÉON

(Map of significance of urban space)

Area of El Ejido

Area of «Old City»

SELECTED 2 AREAS INSIDE THE CASE STUDY OF LÉON – DATA GATHERED THROUGH THE «GIS» DATA REPOSITORY.

Fig. 9. Sample case-study – general feasibility, Léon
Bibliography (selected):


Leo van den Berg, etc. (2004), _National Urban Policies in the European Union_, Rotterdam, European Institute for Comparative Research (EURICUR) - Erasmus University Rotterdam.


Illustrations
