JESSICA

JOINT EUROPEAN SUPPORT FOR SUSTAINABLE INVESTMENT IN CITY AREAS

Implementing JESSICA in the South-East Cohesion Region, Czech Republic

EVALUATION STUDY

English version

May 2010

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Evaluation Study

JESSICA

eCBA s.r.o., 2010

Introduction

"JESSICA stands for Joint European Support for Sustainable Investment in City Areas. This initiative is being developed by the European Commission and the European Investment Bank (EIB), in collaboration with the Council of Europe Development Bank (CEB). Under new procedures, Member States are being given the option of using some of their EU grant funding, their so-called Structural Funds, to make repayable investments in projects forming part of an integrated plan for sustainable urban development. These investments may take the form of equity, loans and/or guarantees. JESSICA is not a new source of funding for Member States, but rather a new way of using existing Structural Fund grant allocations to support urban development projects." (EIB, Jessica 2008)

This Evaluation Study was prepared based on the contract of 11 November 2009 between the client and author. The text is based on documents and information available as of elaboration date hereof and shown in the secondary literature chart. The study reflects and states truly all relevant information known to the author on the topic. Nevertheless, the author shall not be liable for possible changes in parameters, information and/or forecasts in future or for possible damage incurred due to a decision of economic or non-economic nature based on the information named or not named in this Study.

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Content:

1 EXECUTIVE SUMMARY

The implementation of the JESSICA financial instrument started successfully in a number of European Union countries, including Germany, Portugal, Poland, Spain, Italy, United Kingdom and the Czech Republic. This means that there is a variety of studies dealing with JESSICA implementation for each respective European country or region. This Evaluation Study follows the experience from other regions and adds specific aspects of the urban, economic, legal and political environment in the NUTS2 South-East Region of the Czech Republic and suggests possible implementation solutions.

JESSICA

To facilitate understanding of the issues covered by this Evaluation Study, we describe the fundamental characteristics of the JESSICA instrument already in the executive summary and link them with the conclusions of the Study.

What is JESSICA?

JESSICA is an initiative of the European Commission and European Investment Bank (with the support of Council of Europe Development Bank) designed for using part of EU structural funds resources to support projects which generate financial returns and are part of an integrated plan for sustainable urban development. The aim is to support the realization of urban development projects which are eligible under a given Operational Programme, bring socio-economic benefits and, owing to their revenue-generating character, cannot or are not desirable to be funded through grants. Such projects can be funded through "revolving funds" (Urban Development Funds) which, thanks to the repayable character of the funding provided, may become long-term strategic investment instruments for city development. This means that a sustainability element will be present both in the quality of development projects and in their funding method (resources provided for investment into a project are subsequently repaid back into the fund).

What is the form of support from JESSICA?

Urban Development Funds can invest into projects through equity, loans or guarantees. This Study limits itself to providing examples of financing through preferential loans with an interest rate corresponding to the base reference rate of the European Commission and fixed throughout the payback period. The sum of the JESSICA loan and of a possible grant to the same project should, preferably, not exceed 75% of the eligible investment cost[1]. These are analytical limitations aimed at making result comparisons easier and calculations clearer, taking into account also the scope of the study.

[1] In line with art. 13 par. 6 of Commission regulation (EC) No. 800/2008

What projects can be supported?

The projects must meet the following criteria (in the context of the South-East Region and of the implementation solutions elaborated in this Study):

1. The project must be part of the Integrated Urban Development Plans of Brno;
2. The character of project holder must comply with ROP South-East requirements;
3. The project must ensure financial return;
4. The project must have a socio-economic benefit;
5. The project must not start before loan application is filled.[2]

Who provides the financial support?

Support is provided to projects through an Urban Development Fund (hereafter also "Fund" or "UDF"). The Urban Development Fund can be set up by the Managing Authority of the respective structural funds operational programme (e.g. Regional Council South-East). Alternatively, this Managing Authority can use (typically on a temporary basis) the services of a JESSICA holding fund for the purposes of setting up the UDF (see art. 44 of Council regulation (EC) No. 1083/2006).

What resources are administered by the Urban Development Fund?

The core resources of the UDF are resources contributed from operational programmes of structural funds. In our case, it is foreseen that resources from ROP NUTS2 South-East, support area 3.1, would be used, i.e. resources allocated for development of urbanization centres (cities with more than 50 thousand inhabitants). The existence of further contributors to the fund is not limited in any way – these can be state administration entities, banks and also other legal entities or natural persons.

Do any conditions apply to the release of resources from ROP into a UDF?

Yes. Alongside the Regional Council South-East, the fund must be contributed to by another public entity which will provide a minimum of 7.5% of the total resources released to the fund from the ROP. The Study elaborates two implementation options and foresees capital participation of the Statutory City of Brno or another entity which disposes of public resources (e.g. the South Moravia Region or the Czech Republic). The remaining 92.5% of resources released from ROP for the UDF come from the ERDF (85%) and the state budget (7.5%) through Regional Council South-East. This obligatory division follows the ROP South-East rules for drawing down ERDF resources.

[2] The condition is established in this study for the purpose of achieving compliance of the state aid provided through JESSICA loans with the conditions set out in the general block exemption regulation (Commission Regulation 800/2008). The condition is based on the general block exemption regulation 800/2008 (Article 8 and preliminary paragraphs 28 et seq.) and the rules for regional investment aid; it is related to the requirements for "necessity of aid" and "incentive effect" of aid. Aid schemes must contain express reference to both these requirements. If work on the project begins before the aid beneficiary has submitted an application for aid to the Member State concerned, conditions laid down in Article 8 are not fulfilled and the whole project cannot be eligible for regional aid under an aid scheme compatible with the internal market in the sense of Reg. 800/2008.

What would happen with the ROP resources if JESSICA was not implemented?
The resources would be spent in another way, probably as traditional ex-post, one-off grants. Unused resources would be returned to the European Commission in accordance with the automatic de-commitment rule ("n+3 / n+2 rule"). If JESSICA is implemented, ROP resources contributed into JESSICA funds have to be invested into projects by the end of 2015, otherwise they have to be returned to the European Commission.

How does the Urban Development Fund decide?
Steps to be taken by the fund and selection of supported projects are decided by a board consisting of the representatives of respective donors and/or the entities involved. The decision-making power is stipulated in the articles of association of the fund and stems from the Operational Agreement concluded between the fund and the Managing Authority in charge of allocating ROP South-East resources (Regional Council South-East). (EIB should be involved in the preparation of the Operational Agreement; its exact role in the process is to be defined.)

What are the fund management costs?
The management costs of the Urban Development Fund are set by the European Commission at max. 3% p.a. of the resources invested into the fund from operational programmes (Art. 43(4) of Commission Regulation (EC) 1828/2006). Given the proposed implementation structure and related savings, this Study calculated with costs of 2%.

Who are the key actors in the JESSICA implementation process?
The key actors are the Regional Council South-East as the entity responsible for ROP administration and the Statutory City of Brno as the entity responsible for the development of the urban area of Brno, for which the application of the JESSICA instrument has been analyzed. The South Moravian Region could play an important role as another potential contributor to the fund. The JESSICA implementation process is supported by the European Investment Bank as JESSICA Holding Fund manager or as provider of technical assistance services. The role of the financial institution engaged in UDF administration can be played e.g. by the Czech-Moravian Guarantee and Development Bank or by commercial banks. As concerns potential assistance with project preparation and marketing support of JESSICA, also the Regional Development Agency and the South-Moravian Innovation Centre should be mentioned.

Environment analysis

The city of Brno needs to tackle a number of development-related needs. These needs must be viewed from the point of view of city residents, entrepreneurs and investors, commuters and city visitors. The strategic documents of the city emphasize increased competitiveness of the city and the concept of a city with a high quality of life.

Based on strategic documents of the Statutory City of Brno, the Environment Analysis confirmed the existence of a number of urban development areas where JESSICA support might be directed. The main areas are:

- Transportation availability/usability;
- Connection of car traffic to public transportation;
- Availability of social services;
- Culture, sport and leisure facilities;
- Science and research and their involvement in entrepreneurial activities;
- Brownfields.

Resources for implementation of urban development projects in Brno are limited by the budgetary options of the city and by the availability of other funds from national and international sources. At present, a major source of finance for Brno's development are EU structural funds thanks to which a number of projects can be implemented. The city makes an effort to obtain from Operational Programmes direct grants for its intended projects. Many projects however depend on the activities of private investors. Where such projects involve public interest, they could be implemented in the form of a private and public partnership (PPP). In this context, Brno has recently seen discussions mostly on certain large projects: the football stadium and aquapark in the Ponava site and the Janáček Cultural Centre. The PPP model can be however also used for numerous smaller projects, such as parking facilities.

Demand

The Demand Analysis and Estimate assess projects currently included in some of the Integrated Urban Development Plans of Brno, projects from strategic documents of the South Moravian Region and further projects identified by the author.

The analysis of the Integrated Urban Development Plans of Brno (IUDP I and IUDP II) showed that the projects, as currently designed, are not at the moment in a sufficient stage of preparation to be able to receive support from ROP SE through the JESSICA instrument. For nine of the projects it may be assumed that, following project re-assessment (mostly based on developing the projects' revenue-generating potential), these projects can have the parameters required for preferential repayable funding. At this point a revision of projects currently included in the Integrated Urban Development Plan of Brno can be recommended and their funding through JESSICA considered, i.e. in a repayable way through an Urban Development Fund. To identify more projects suitable for financing under JESSICA, a re-examination of the investment plans of the Statutory City of Brno and of some projects not supported in the past can be carried out.

The strategic documents of the South Moravian Region contain a number of interesting projects in an early stage of preparation. From these, seven projects potentially meeting the criteria needed for support from the JESSICA instrument were identified.

The last group of projects are ten potentially suitable projects identified by the author of this Study, including parking facilities and infrastructure for business development.

Mapping out demand beyond the projects currently included in the Integrated Urban Development Plans of Brno is not always easy, mostly because the majority of projects emerge ad hoc, reflecting specific calls for projects. A similar ad hoc effect can be, however, expected also when an Urban Development Fund focused on repayable funding is set up: the existence of the fund will stimulate the preparation of a greater amount of revenue-generating urban development projects.

The Study concludes that there is sufficient demand for project funding through the JESSICA instrument. However, further work is required to advance project preparation and to include "Jessicable" projects into one of the Integrated Urban Development Plans of Brno. Especially the "start-up" period can take some time (many ready projects have been already given grants). Continuous work must be therefore done in terms of project preparation in order to achieve a sufficient number of projects by 2011 when the first call for projects from the side of a UDF can be expected to be officially announced.

Legal aspects

The issue of state aid is analyzed in multiple options. The author proposes the option to provide aid included in preferential loans in accordance with the general block exemption regulation 800/2008 and the rules for regional investment aid.

In order to provide a loan, different sorts of security may be required, including e.g. bank guarantee. It is however likely that projects would become more expensive for applicants if using bank guarantees and/or their implementation could be jeopardized by the need to obtain such a guarantee. Therefore, all projects should be sufficiently secured in the usual way, in the sense of the Communication from the Commission on the revision of the method for setting the reference and discount rates (2008/C 14/02).

Compliance with public procurement principles, be it from the perspective of the UDF itself or of the applicants, will be ensured by observing the public procurement law. In cases where the applicants are entities not subject to the public procurement law, the relevant ROP document on procurement procedures will be applied.[3]

[3] Binding procedures for placing public procurements co-funded from EU resources, not subject to application of Act. No. 137/2006 Coll. on public procurements, in the 2007 – 2013 programme period.

Implementation structure

Given the specificity of the South-East region (the dominance of the Brno among other urban areas in the region and the corresponding allocation of ROP resources), the present analysis of JESSICA implementation focuses only on the territory of the statutory city of Brno and on the creation of a single Urban Development Fund. For this reason, it was not considered necessary to utilize during JESSICA implementation the transitory structure of a Holding Fund but rather the options for the Managing Authority to establish directly an Urban Development Fund were explored.

Two Urban Development Fund options in terms of the legal and organizational form were elaborated:

- Option I: UDF set up as an association of legal persons between RC SE and the Statutory City of Brno and utilizing the services of a bank selected in line with the public procurement law;
- Option II: UDF set up as a separate block of finance (in the sense of Art. 44 of the General Regulation 1083/2006) under the management of a bank for which a tender would be announced in line with the public procurement law.

In both implementation options we assume the following capital participation of the fund participants:

- EUR 18.5 million from the Regional Council South-East (out of which EUR 17 million from ERDF and EUR 1.5 million from the state budget);
- EUR 1.5 million from another public entity (e.g. Statutory City of Brno, South Moravian Region, the state).

Taking into account the working discussions with the Brno municipality, we can recommend at this point that implementation option II should be pursued, i.e. the option not requiring the capital participation of the Statutory City of Brno in the Urban Development Fund. Option II is simpler in terms of the implementation structure and the required implementation steps. However, a very important factor may be whether decisive will is present on the part of the Statutory City of Brno to potentially co-fund (through the UDF) revenue-generating projects, located in the city's territory and tackling regional problems, which are owned by other entities than the city itself.

The UDF organizational structure under Option II includes:

1. Managing Board – a control body consisting of two representatives appointed by the Regional Council South-East, two representatives of another contributor and one representative of the bank responsible for the management of the fund.[4] The

[4] The composition of the Management Board may be different in case, for example, the bank would co-invest own capital into the UDF managed by it.

Managing Board Chairman is selected from members appointed by the Regional Council South-East. The Managing Board makes decisions on fund activities, approves strategies and calls and selects projects for support;

2. Bank – the executive body that prepares materials for the Board, undertakes the necessary administration related to calls, receives and evaluates project applications and manages the fund's operation. Furthermore, it is responsible for Treasury management, reviews projects from the financial point of view and for compliance with ROP SE, manages risks, monitors projects and negotiates investment contracts. This bank will have to be selected through a tender.

Implementation steps

The principal point for starting the implementation of the JESSICA instrument in the South-East region is to reach agreement among the key actors on the amount of investment into the Urban Development Fund and on the provision of 7.5% of the fund resources as the obligatory co-financing. The provision of the said 7.5% will pave the way to drawing down the corresponding 85% from ERDF and 7.5% from the state budget. Subsequently, the resources will be available in the fund ex ante, i.e. no pre-financing will have to be arranged for the individual projects.

The key to success appears to be the provision of sufficient information related to the rules and options of the JESSICA financial instrument and close communication between the key actors, banking institutions and the private sector with the potential of generating projects and/or participating in them.

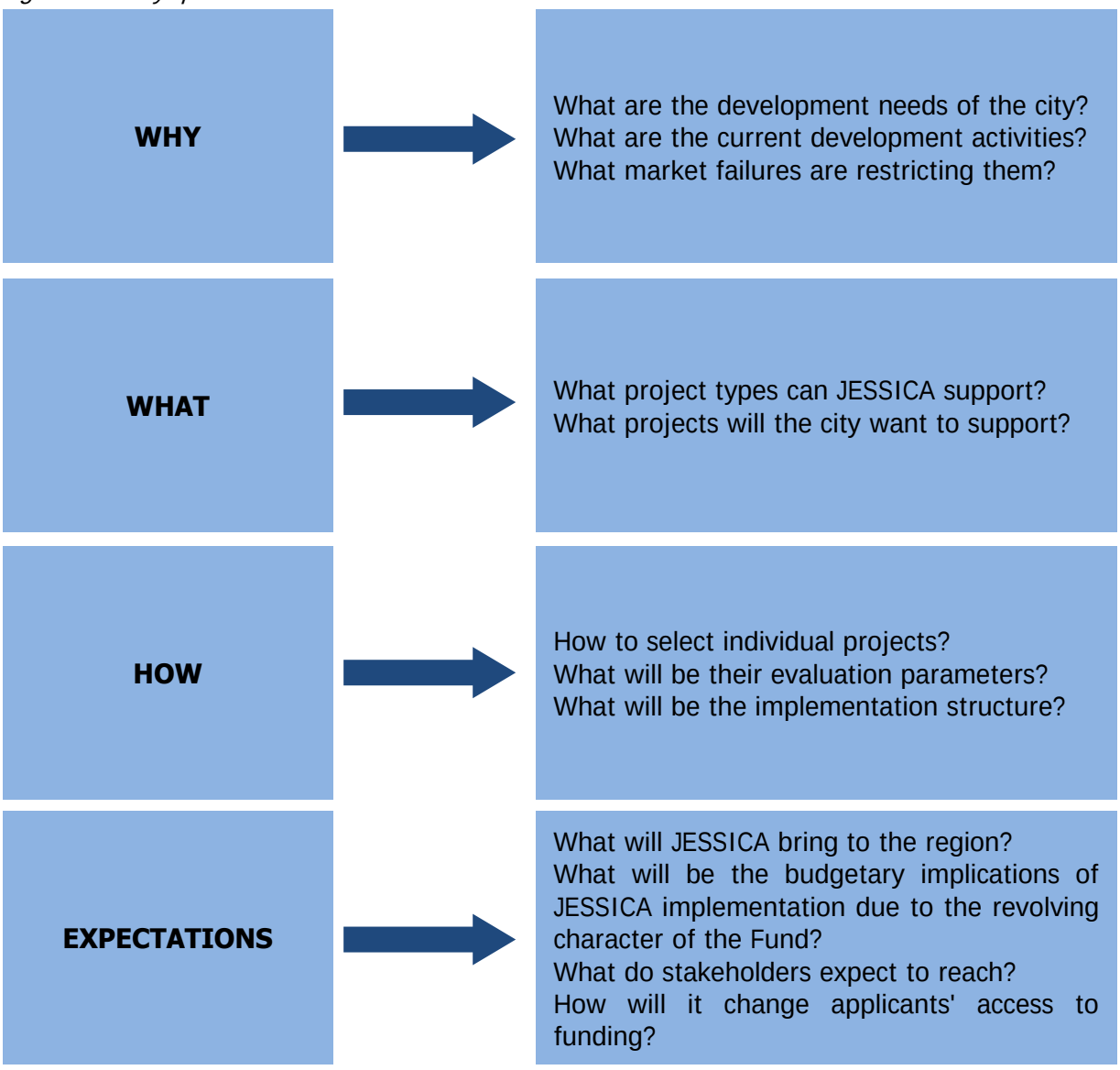
A critical point in the implementation process will be, besides the provision of the 7.5%-share, the tender for the bank involved in both Options. This tender must be undertaken carefully in order to avoid possible delays in implementation.

Depending on the options assessed, first projects could potentially be given financial support from the UDF at the end of 2011 / beginning of 2012.

2 GOALS, METHODOLOGY AND INPUT DOCUMENTS

The main goal of the study is to appraise the regional conditions and propose a structure for the implementation of the JESSICA instrument on the territory of the City of Brno in the NUTS II South-East Cohesion Region. The main questions to be answered are summarized in the figure bellow.

Figure 1.1: Key questions to be answered



Methodology

1. Collection and analysis of available data, consultations with key participants
2. Analysis of existing projects and identification of new, suitable projects (demand)
3. Draft methodology for project selection, testing of model projects
4. Draft implementation structure of JESSICA instrument
5. Legal assessment of proposed implementation structure
6. Discussion between key participants on proposed solution
7. Cash flow estimate and final implementation draft

Input Documents and Literature

The following is a list of the documents used for the preparation of the Evaluation Study.

- Strategy for Brno, approved by Brno Representatives on June 26, 2007
- City Economic Development Concept, the city of Brno, 2009
- Full wording of the Brno Master plan assignment, approved by Brno Representatives on 26 June 2007, the city of Brno, 2007
- Brno Residential Strategy, Update 2009, Residential Department of Brno City Council, 2009
- Approved Brno budget (excluding city districts) for 2010
    - Approved capital expenditures budget
    - Sources and use of funds and public collections of the city (FKEP)
- General Residential Plan of Brno, Update 2008
- General Development Plan for Sports Facilities in Brno for Professional Sports, Active Recreation and School Physical Exercise, Urbanismus Architektura Design – Studio, spol. s.r.o., for Brno City Council, 2007
- Development Programme for the South Moravian Region, Update 2009, http://vyzva.partnerstvi-jmk.cz/
- Strategic analysis of the scope and needs of statutory city of Brno and South Moravian region for the evaluation of possible construction of sports and leisure centre, PriceWaterhouseCoopers, 2007
- Brno Brownfield Map Update 2009, presentation, Kovoprojekta Brno, 2009
- Rehabilitation of Old Ponávka – project website at http://www.ponavka.brno.cz/
- Press Information – City of Brno at MIPIM 2009
- Brno South Centre – city developer organization – http://new.jcbrno.cz/
- Europoint Brno project – urban transformation of Brno railway junction and rehabilitation of Brno South Centre – http://www.europointbrno.cz
- Urbancentrum Brno – city development information office – http://urbancentrum.brno.cz
- Ponava project – project website at http://www.ponava.cz/
- Janáček cultural centre – http://www.atelierm1.cz

- Brno Metropolitan – official information periodical published by Brno, http://metropolitan.brno.cz/
- CEITEC – website of Central European Institute of Technology project – www.ceitec.cz
- ICRC – website of International Clinical Research Centre Brno project – http://www.fnusa.cz/icrc.php
- Integrated Urban Development Plan of Brno for programme period 2007–2013: Comprehensive redevelopment of the historical city centre, including development of tourism services
- Integrated Urban Development Plan of Brno for programme period 2007–2013: Increase in the quality of services for the public and extended civic amenities of the city (version 1.3)
- Brief feasibility studies for projects in IUDP provided by MMB (state as of 30 October 2009)
- Searching, mapping and choosing large projects in the South Moravian Region, prepared by EUROVISION, spol. s r. o., 2006
- JESSICA Evaluation Study – West Poland, Ove Arup & Partners, ltd., 2009
- JESSICA Evaluation Study – South Poland, Ove Arup & Partners, ltd., 2009
- Implementation of the JESSICA financial instrument in Moravia-Silesia, PWC, ltd., 2009
- JESSICA in Portugal, .ppt presentation Tinagli, A., 2009
- JESSICA, EIB, 2008
- Commission regulation (EC) No. 1828/2006 of December 8, 2006 setting the implementation rules for Commission regulation (ES) No. 1083/2006 on general provisions on the European Fund for Regional Development, European Social Fund and Cohesion Fund and for European Parliament and Council regulation (EC) No. 1080/2006 and European Fund for Regional Development
- Commission regulation (EC) No. 1083/2006 of July 11, 2006 on the general provisions on the European Fund for Regional Development, European Social Fund and Cohesion Fund and on the cancellation of regulation (EC) No. 1260/1999
- Communication from the Commission on the revision of the method for setting the reference and discount rates (2008/C 14/02)
- Commission regulation (EC) No. 800/2008 of August 6, 2008 declaring certain categories of aid compatible with the common market in application of Articles 87 and 88 of the Treaty (General block exemption Regulation)

3 KEY ACTORS

The fundamental factor for the success of the JESSICA instrument implementation is cooperation between the key actors in the entire process. An objective of this Study is to propose an implementation structure which would suit, to the maximum possible extent, all parties involved. For this purpose, the following key actors have been identified and their role and/or potential contribution to the implementation of the JESSICA instrument discussed.

Institute: **Regional Council of the South-East Cohesion Region (RC SE)**

Person: Marta Sargánková – Director of the Office of the Regional Council
Richard Hubl – Methodical Management Department officer

Role/contribution: The Regional Council for South-East Cohesion Region is the administrator of the Regional Operational Programme NUTS II South-East. This programme is designed for the South-East Cohesion Region and consists of the South Moravian Region and the Vysočina Region. Its focus lies on improvements in transport accessibility and regional interconnection, modernization of public transportation means, support of infrastructure and tourism growth, preparation of smaller entrepreneurial areas and improvements in living conditions in municipalities and in the countryside mainly through improvements in educational, social and health infrastructure.

RC SE considers the main reason for the implementation of JESSICA to be the preservation of continuous regional development after 2013, to which support of revenue-generating projects with socio-economic benefit will be conducive. They would prefer shifting as many projects with revenue-generating potential as possible from the grant funding regime into financing through the JESSICA instrument.

An allocation of EUR 18.5 million[5] may be released by RC SE into a JESSICA UDF from the support area 3.1 – Development of Urbanization Centres. At the same time, RC SE can make available some of its employees for the administration of the fund.

[5] The Regional Council South-East will thus provide only 92.5% of the total amount contributed to the fund under the ROP, i.e. the share of ERDF and the state budget. The remaining 7.5%, must be secured from other public resources.

Institute: **Brno Municipal Council (Magistrát města Brna)**

Person: Radek Řeřicha – Head of Department for Implementation of European Funding
Martin Rosický – Head of Department for Financing, Financial Assets, Debt and Property Participation

Role/contribution: The Statutory City of Brno is among the potential key beneficiaries of funding from the emerging Urban Development Fund (UDF). The city has established a Fund for Co-funding of European Projects (FKEP). The objective of this fund is financing of projects co-financed from EU resources and/or other supra-national sources of funding. The resources of this fund are made up primarily by regular annual transfers of resources from the Brno city budget totalling min. CZK 250 million. (At the moment there are no revenues generated by the projects and returning to the FKEP.) Part of FKEP resources could be used as a source for filling in a JESSICA UDF.

According to the Department for Funding, Financial Assets, Debt and Property Participation, FKEP has been fully allocated for the years to come. According to the Department for Implementation of European Funding, a shift of certain projects from FKEP into JESSICA can be considered, i.e. a transfer of financial resources allocated for these projects can be foreseen.

The proposed volume of the financial participation of the city in the Urban Development Fund is 7.5% of the planned contribution from ROP South-East into the UDF, which makes EUR 1.5 million. This amount has been proposed according to the NSRF rules for drawing down funding from EU structural funds, where 85% of the operational programme resources comes from the EU budget (here ERDF), 7.5% comes from the state budget and the remaining 7.5% has to be obtained from other public resources.

The chief motive for the city to enter the UDF is that the resources from the JESSICA instrument may be, unlike grant resources, drawn down from the very start of the project (ex ante) and hence fill the current lack of capital and help realize the projects of the city of Brno from IUDP on a continuous basis.

Another important motive for the city might be the benefit of focusing a relatively greater amount of available public resources towards funding (in a repayable way) revenue-generating projects, which would enable "recycling" of these public resources and their repeated investment. This would lead to higher effectiveness and sustainability of funding urban development projects and to better readiness for the possibility (or rather certainty) that less grant funding will be available in the future than at the present moment.

Institute: **South Moravian Region**

Person: Pavel Fišer – head of Department for Strategic Development

Role/contribution: The South Moravian Region belongs to other possible capital participants in the emerging UDF. The South Moravian Regional Authority considers Brno to be a driver of development and success of the whole region and welcomes initiatives for its development. Possible participation of the Region in the fund will have to be discussed at a top political level.

The following grant titles administered by the South Moravian Region may become sources of financing from the regional budget:

1. Support of new business activities, support of small and medium-sized businesses;
2. Support of infrastructure, services and activities for countryside development;
3. Support of population education and support of educational system development;
4. Development of health and social facilities networks and services;
5. Support of activities and infrastructure – culture, sport, leisure, natural and cultural heritage of the region;
6. Support of efficient water management;
7. Support of other technical infrastructure;
8. Mitigation of impact of human activities on the environment;
9. Support of conceptual land development.

Institute: **European Investment Bank**

Person: Christos Kontogeorgos – Head of Holding Funds and Advisory, South-Eastern and Central Europe, JESSICA and Infrastructure Funds Division
Lukáš Veselý – Junior Product Development Specialist, JESSICA and Infrastructure Funds Division

Role/contribution: The European Investment Bank provides Managing Authorities of operational programmes and cities with technical support with implementing the JESSICA instrument. In the pre-implementation phase this involves inter alia assistance with the search for suitable JESSICA implementation solutions and dissemination of experience from urban development financing across the European Union.

In the JESSICA implementation phase EIB usually acts as the JESSICA Holding Fund (HF) manager for the Managing Authority of the operational programme under which the JESSICA instrument is being used. (As of 1 April 2010 EIB manages 10 JESSICA holding funds in a total volume of over EUR 1 billion.) As the HF manager, EIB temporarily holds the OP resources designated by the respective Managing Authority for financing of revenue-generating urban development projects through JESSICA and transferred to the HF. In its capacity as HF manager, EIB selects in the respective country/region suitable managers (operators) of UDFs into which HF resources may be subsequently invested. EIB submits in this respect its proposals to the HF Investment Board whose members are appointed by the Managing Authority to which EIB provides the HF management service.

The resources in HF are not the EIB's own resources, as they come from the respective OP and EIB managing them for and on behalf of the Managing Authority.

If EIB administers the HF, EIB does not invest its own resources into this HF due to a potential conflict between its roles of an investor into the HF and the manager of the same HF.

Besides providing HF management services to the respective Managing Authority, EIB can provide (to cities, Managing Authorities, etc.) services of technical assistance nature during JESSICA implementation. Cities, Managing Authorities and other entities may be interested in using these EIB services e.g. for the selection of UDF(s) and preparation of the

Operational Agreement (contract with the UDF). Here is where we assume the main role of EIB to be in the process of JESSICA implementation in the South-East region.

In principle, EIB may give loans to individual UDFs (regardless of whether it had helped to choose these UDFs before). In any case EIB's considerations about investment to any UDF are subject to standard procedures and evaluations used by EIB in its lending activities. It is not assumed for this Analysis that EIB would provide its own resources for the Urban Development Fund in the South-East Region.

Institute: **Czech-Moravian Guarantee and Development Bank**

Person: Lubomír Rajdl – Director General of Strategic Department

Role/contribution: The bank provides mainly:

- support to small and medium-sized businesses in the form of guarantees and soft loans by using the resources of the state budget, structural funds and regions,
- support to owners of prefabricated concrete homes for reconstruction purposes,
- soft loans for water management structures.

The Czech-Moravian Guarantee and Development Bank may primarily play a role in acting as the banking institution involved in the implementation structure variants elaborated below. They consider the structure and management of the UDF mechanism to be a rather complex process and have their technology and administrative capacity ready to take on the administration of the fund. They have sizeable experience with revolving instruments with similar focus. At this point it should be pointed out that a tender will have to be announced for this role.

The Czech-Moravian Guarantee and Development Bank rules out any capital participation in the emerging UDF. On the other hand, it offers co-financing for JESSICA projects of up to 40%.

Their approach to project selection is apolitical. The only condition is an adequate return on investment.

Institute: **UniCredit Bank Czech Republic, a.s.**

Person: Martin Potůček – consultant (European Competence Centre)

Role/contribution: UniCredit Bank Czech Republic welcomes all activities in the field of seeking and implementing new development and financial instruments beyond the existing, almost exclusively grant instruments in the EU Structural Funds area and/or state budget and public law institutions resources. They view the JESSICA financial instrument as one of the few that are realistic and supported by European Union and European Commission bodies. As a bank, they are ready to participate in the preparation of JESSICA implementation in the South Moravian region and offer the experience of a specialized unit of the European Competence Centre with UniCredit Bank Czech Republic.

Institute: **Česká spořitelna, a.s.**

Person: Pavel Kváš – bank consultant (department for funding state and municipal sectors)

Role/contribution: Česká spořitelna is highly interested in participating in the JESSICA project. It can see its role primarily in treasury management and monitoring of financial performance of projects. Other activities (specific scope of cooperation) are subject to further discussion. ČS is ready to discuss possible cooperation in co-financing of JESSICA projects and of capital participation in the fund.

Institute: **Regional Development Agency of South Moravia**

Person: Vladimír Gašpar – director

Role/contribution: The Regional Development Agency of South Moravia is among the possible indirect participants (i.e. without financial participation). This agency can perform the function of JESSICA marketing and promotion and generate potential projects thanks to its vast experience in the regional development area, including profound knowledge of the region. Its sphere of activity extends from grant programmes to assistance to domestic and foreign investors.
An important area are brownfields where the agency has the executive function of the Brownfield Regeneration Unit of the South Moravian

Region. Besides brownfields, the Regional Development Agency of South Moravia would also prefer the infrastructure area.

Institute: **South Moravian Innovation Centre**

Person: Michal Kostka – deputy director
Radim Kocourek – project team manager

Role/contribution: The mission of the South Moravian Innovation Centre is to create the right environment for innovative start-ups and their further growth. The main tool for this are therefore incubators that offer rental premises and consultation services to companies under special conditions. They see the contribution of the JESSICA instrument in supporting cash-flow of specific projects.

The South Moravian Innovation Centre can participate in the JESSICA initiative indirectly through marketing and promotion and demand generation, but also directly as the incubator project holder, scientific and technical centre and/or science and research centre. Some of the projects under preparation were added to the demand mapping chapter.

Institute: **Czechinvest**

Person: Lucie Kuljovská – regional office director

Role/contribution: Czechinvest is the co-administrator of the Business and Innovation Operational Programme (OPPI) – singling out resources for JESSICA from OPPI is however not realistic (government approval would be needed). The major contribution of Czechinvest could be in creating demand and marketing support.

As for possible demand they have identified a gap between projects from ROP and OPPI (e.g. rehabilitation centres).

4 URBAN ENVIRONMENT ANALYSIS

City space development and its dynamism are generally defined in the Czech Republic by economic transformation processes and the transition from central planning to market principles. Urban spaces and large centres in particular are a meeting point among interests, where important entrepreneurial activities are concentrated. Economic transformation has therefore been accompanied by a transformation of the urban space. The generally accepted idea about large centres is that they are the driving force of development activities, even though this is accompanied by side effects that are often viewed negatively by local residents. The task of self-administration bodies is to prepare the right conditions for development activities and define, within their scope of power, borders for them. Besides a framework for private activities, self-administration must also ensure the availability of non-public assets (services) which are important from the point of view of land development and are needed by local residents, but are less attractive from the business viewpoint of current market conditions.

For the following urban environment characteristics of the city of Brno, we used existing texts and documents, particularly: Surveys and Analyses of the Brno Masterplan – Socio-Economic and Demographic Part (Průzkumy a rozbory k územnímu plánu města Brna – Socio-ekonomická a demografická část), Masaryk University in Brno, Centre for Regional Development, 2004; the study Demographic Development of the Residents of Brno and its Surroundings (Demografický vývoj obyvatelstva města Brna a okolí), Masaryk University in Brno, Centre for Regional Development, 2008 and Expert Analysis of the Development of the Number of Persons Officially Not Registered in the City of Brno (Odborná analýza vývoje počtu osob oficiálně neregistrovaných ve městě Brně), Masaryk University in Brno, Centre for Regional Development, 2008. Further information was obtained from open resources: see the links to these resources in the List of Secondary Documents.

4.1 Socio-Economic Profile of Brno

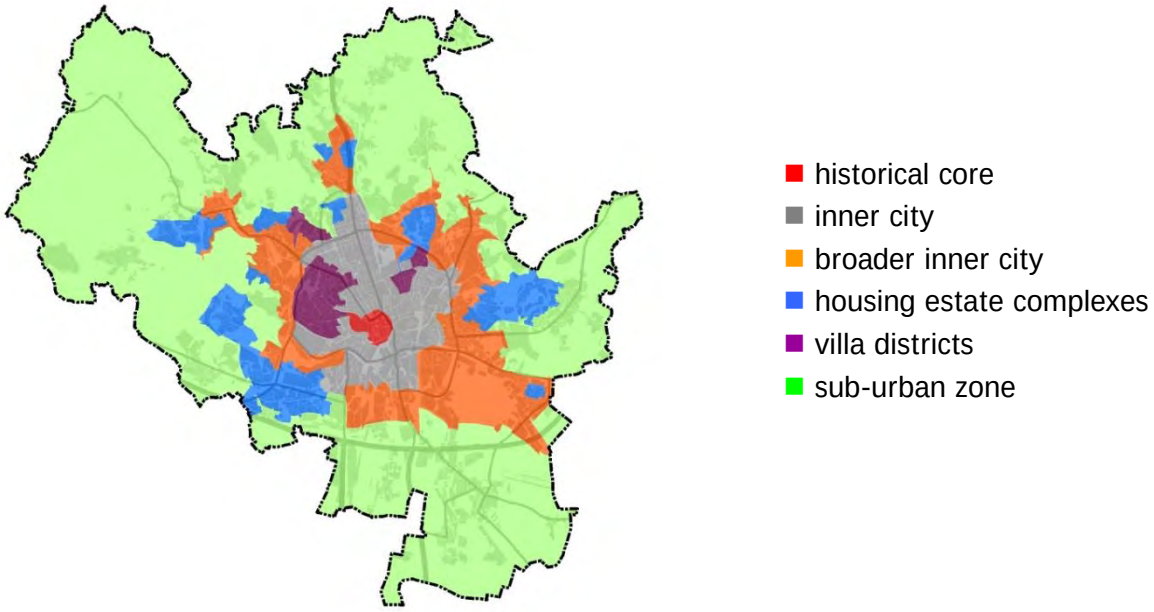
The history of the city of Brno can be charted from approx. the 11th century when Moravia was incorporated into the structures of the Czech state. From an ethnic point of view, Brno represented from the very beginning a space where different cultures, mainly Slavonic, German and Jewish were brought into contact with each other. It was probably the Brno-based Germans who mediated initial contacts with modernizing trends, elite knowledge and innovation. Industrial growth had a deep significance for space and regional administration. The shaping of the suburban industrial zone of the originally fortress town of Brno was accompanied by rapid population growth in suburban areas and a major transformation of the development character in emerging workers' peripheries. The agglomeration tendencies lead to a gradual administrative incorporation of suburbs into the city administration. In 1850 approximately 30 municipalities were incorporated and the so-called Greater Brno, a single local municipality, was created. The development mostly of the inner city was further eased

by a decision of 1852, by which Brno lost the status of an enclosed city and fortification structures were demolished. Profits from developing industrial production could now be accumulated in the inner city area. The period between 1910 and 1930 is marked by strong relative population growth in the Brno agglomeration. This growth was reflected in, among other things, the intense residential construction after the mid-1920s.

The key moments of the post-war (socialist) city development were the expulsion of the German population and centrally controlled socialist industrialization. Given its relatively diversified manufacturing base, Brno was not among the so-called "single resource" industrial cities, but the socialist industrialization in Brno proceeded, with certain exceptions, in the form of reconstructing and modernizing traditional industrial locations of the 18th and 19th century and intensified production resulted in serious spatial, environmental and hygienic conflicts. The main driving force of socialist urbanization was not the development of services, but rather industrialization.

The extensive character of residential housing estate caused investments in high-capacity transportation structures, but the traffic streams could be well managed thanks to clearly defined functional areas. The central character of the city core was indisputable. The city centre was not the focal point of retail functions and other tertiary functions. The concentration of civic amenities in the city centre and insufficient growth of secondary service centres lead approx. from the 1970s to urban congestion of the historical core.

Fig. 4.1: morphogenetic zones in Brno



Source: Surveys and Analyses of the Brno Masterplan – Socio-Economic and Demographic Part (Průzkumy a rozbory k územnímu plánu města Brna – Socio-ekonomická a demografická část), Masaryk University in Brno, Centre for Regional Development, 2004

4.1.1 Demographic growth and its consequences

The transition to the market economy, associated with more or less strong social implications and with new self-fulfilment opportunities, led to a change in demographic behaviour in the Czech Republic as a whole and naturally also in Brno during the 1990s. Increased opportunities for personal growth (self-fulfilment by education, career growth, travel, hedonistic lifestyle and the like), along with a partial drop in the scope of social securities (e.g. unemployment, poverty, problematic functioning of the residential market) showed in changes in reproductive behaviour, leading to an overall drop in the birth rate and fertility: the rapid drop in the first half of 1990s was followed by a stagnation of the birth rate after 1996 and growth in the total birth rate after 2000. The increased birth rate after 2000 is, however, only temporary (related to the deferred fertility of strong years born in the 1970s) and the total birth rate in Brno remains deeply below the hypothetical self-preservation line of 2.1. Also, the mortality rate improved thanks to a relatively fast rise in the medium life expectancy by almost 5 years between 1991 and 2007.

There was also a change in migration – important from this perspective was primarily the emergence of the suburbanizing process in Brno, through which the city has lost rather educated individuals with a higher social status to its outskirts, mainly to the "Brno-venkov" (urban areas) region. The intensity of this process is still accelerating, which can lead to certain problems for the central city, e.g. those associated with a higher concentration of the elderly and thus less mobile residents in the future.

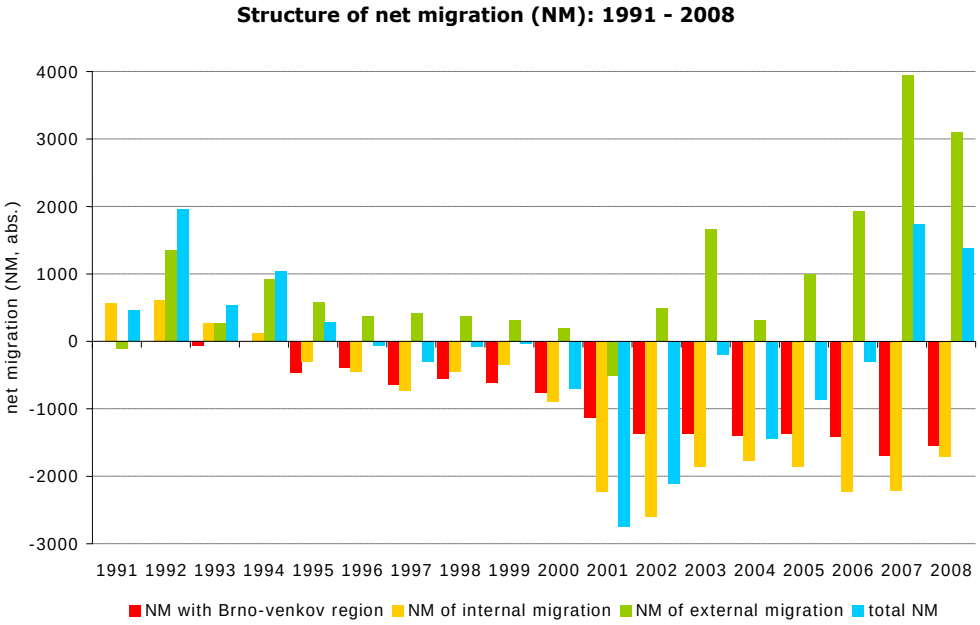
The overall picture of the migration context in Brno is however more complex, as multiple trends prevail in the overall migration stream: Brno is for example enjoying migration gains in terms of foreign migration and overall internal migration of so-called young adults, that is, individuals aged between approx. 20 to 34. The suburbanization process intensity and coexistence of a larger number of migration trends are illustrated in the following chart.

Trends of the reproductive behaviour in Brno are captured in the study Demographic Development of the Residents of Brno and its Surroundings, prepared by the Centre for Regional Development of Masaryk University for the needs of the Municipal Council in 2008. This study presents, among other things, several options for the prognosis of population development of the residents with permanent place of residence in Brno until 2051.

The most serious trend stemming equally from all prognoses is the deepening of the demographic ageing process. Up to 2051 there will be a major increase in the representation of the elderly strata of residents and, inversely, the size of the population in productive age categories will drop significantly. This will certainly go hand in hand with the claims of residents to pensions and other social systems. The demand for specific types of social services designed for the elderly is very likely to rise, with a similar development affecting

the demand for specific forms of living, such as nursing homes, pensioners' homes, etc. Currently however these systems are not sufficiently developed in Brno.

Chart 4.1: Migration of residents in Brno



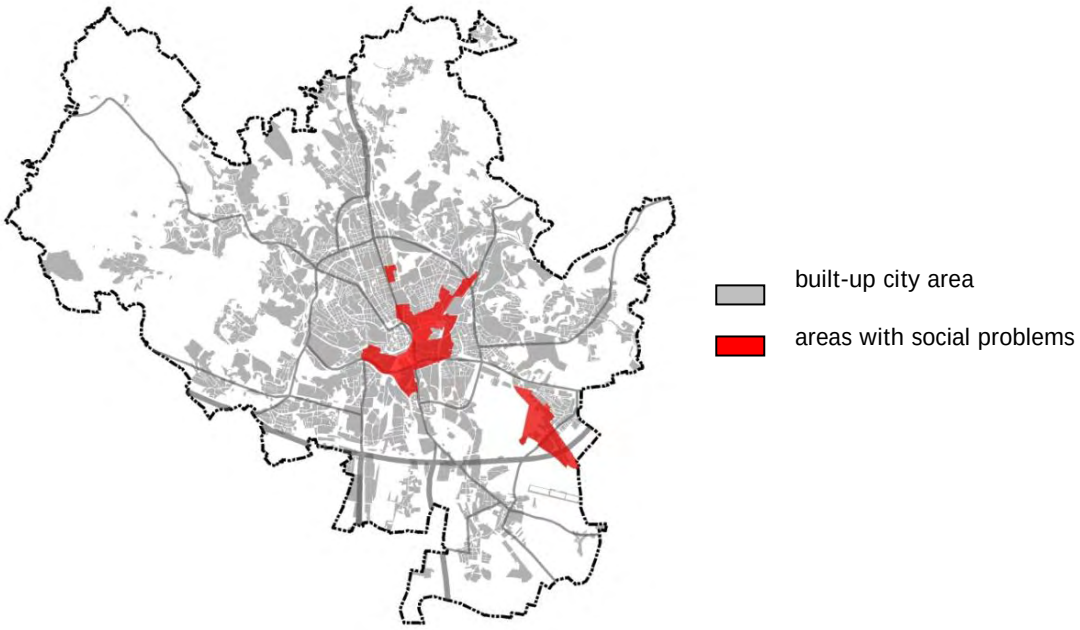
Source: Demographic Development of the Residents of Brno and its Surroundings (Demografický vývoj obyvatelstva města Brna a okolí), Masaryk University in Brno, Centre for Regional Development, 2008) – modified

In the first half of the 21st century the birth rate will continue fluctuating and so will the size of the child component of the population, meaning that the demand for facilities directly related to the life of younger and older children (e.g. maternity hospitals, kindergartens, primary schools, sports and leisure infrastructure, etc.) will undergo cyclical changes over time.

4.1.2 Residential

The residential resources in Brno include almost 40,000 homes with an average age of over 50 years. As for the construction period, one third of these homes date from between 1920 and 1945 and another third of the housing resources falls into the period of intense post-war socialist construction (until 1980). Of greatest age among the residential resources are the city parts concentrated in central Brno, while areas with extensive housing estate developments or the current suburban construction are among the more recent zones.

Fig. 4.2: areas with social problems in Brno



Source: Surveys and Analyses of the Brno Masterplan – Socio-Economic and Demographic Part (Průzkumy a rozbory k územnímu plánu města Brna – Socio-ekonomická a demografická část), Masaryk University in Brno, Centre for Regional Development, 2004

The indicators linked to permanent residents and/or to selected characteristics of the housing and residential resources enable capturing the spatial patterns of socio-economic status within the city area. Put simply, the city area can be divided in two parts: the residentially more attractive northern part with a residential environment of better quality and the southern part with a perceived lower status. The concentration of educational and professional factors in locations of Brno's northern edge and in the traditional residential areas of Stránice, Masarykova čtvrť district, Pisárky and Žabovřesky indicates a tendency towards a certain spatial segregation of higher income groups of the population. On the other hand, the spread of areas with social problems is linked mainly to the traditional industrial districts and to adjacent zones where originally workers were living, dating from the traditional industrialization era of Brno. These zones are distinguished by, along with the low quality of residential resources, a higher share of the Roma population. Here, we can point out an increased risk of socially conditioned segregation and/or spatial "lock-up" of certain economically weaker residential groups.

The current real estate development in Brno is closely related to economic and demographic processes. Unlike the socialist period, the intensity of new residential construction has dropped significantly; the last large housing estate was completed in 1991. Until about 2004, more significant intensities of new residential construction were almost exclusively related to residential suburbanization processes and it was only from the second half of the first decade of the 21 century that investors' interest has been turning to the inner city as well, with residential homes projects on offer.

A significant process with an impact on the current and prospective property rights structure of the residential resources is privatization. The privatization process of residential resources in Brno started after 1997 – in 2007 only about 25% of municipal flats of the initial count had been privatized. Over 75% of Brno residential resources are in private ownership.

The expansion of suburban living was indisputably the most visible process on the real estate market during the 1990s. The original north/north-west suburbanization direction was extended in the second half of 1990s to suburban construction in the south and south-east parts of the Brno agglomeration as well. The situation in this segment is currently rather unclear – a gradual overhang of supply over demand is being created to a certain extent, but in a number of locations the supply of disposable land has been exhausted. The prices of older real estate (family homes) in the narrower Brno area are stagnating or growing.

The intensity of new residential construction in the inner city area has been growing only since 2004–5. New residential home projects can be understood as the result of partial changes in the demand structure. The usual price per one square metre of a new flat oscillates between CZK 20,000 and CZK 30,000, with maximum values usually not exceeding CZK 35,000. An accompanying process on the residential market is a slow decrease in prices in housing estates with prefabricated concrete panel houses. The real estate market in "core Brno" was long dominated by demand for the smallest flat sizes, but currently the highest transaction volume on the apartment market is shifting towards and stabilizing in the medium-sized flats segment.

In the context of the trends indicated above, we can expect:

1. ongoing suburbanization related to a drain of the upper middle class from inner city areas, which will probably have more significant/concentrated impacts on the socio-economic spatial patterns than the influx of migrants to suburban areas, spread beyond the city border as well;
2. ongoing ageing and relative economic decline of selected housing complexes;

highly diversified development of current inner city residential areas with relatively high social homogeneity, i.e. sustained importance of enclaves of quality living (e.g. Žabovřesky, Stránice, Masarykova čtvrť district, Černá Pole) versus gradual deterioration of socio-economic indicators in lower quality/less prestigious locations (e.g. selected parts of Královo Pole, Ponava, Veveří).

4.1.3 Economy

The restructuring of the city economy is accompanied by processes typical of a number of European cities. De-industrialization connected with a drop in industrial output and labour cuts is accompanied by increased unemployment in the service sector. It was only by the end of 1989 that most labour was still concentrated in the secondary sector in Brno (124,000 persons, i.e. almost 50% of the entire Brno labour force). But already in 1991 it was the tertiary sector that took over the dominant position, with its share of total employment over 50 percent. In 2001 about 70% of the workforce was bound to the tertiary sector. In the physical city structure de-industrialization is demonstrated in vast brownfield areas, mostly in inner city parts. The existing and potential brownfields size in the city territory is estimated to be up to 500 ha (approx. 6% of the built-up Brno area; the estimates are inaccurate due to non-uniform approaches to the factual definition of the term "brownfield"). Regardless of their current unsatisfactory or insufficient use, these areas represent a significant land reservoir for further waves of investment, this time in the conditions of a post-industrial city.

In its first stage of transformation, Brno was the destination for so-called "branch-plant" investments using cheap labour (e.g. Flextronics). The support of these types of investment from the city was based on short-term strategies of increasing the number of job opportunities. The concept of competitiveness based on cheap labour has been abandoned to the benefit of other comparative advantages, such as qualified labour (related to the industrial tradition of the city) and a large concentration of educational opportunities in Brno. Within the Czech Republic, Brno is among the largest university centres. Along with Prague, two thirds of university students are concentrated here and its educational function exceeds five times its residential function.

Brno can be classified among cities benefiting from a combination of metropolitan characteristics (qualified labour, good communications level, university background, service offer, reference investors) and provincial characteristics (price of qualified labour, price of services, environmental qualities). This advantage can be described as the absence of negative externalities of the city size by currently preserving distinct agglomeration effects that do not have to rest upon the principles of spatial concentration of economic activities, but rather e.g. upon their availability through telecommunications. Brno has a certain potential to enter the European competitive environment as an alternative to bigger cities to be utilized through a specific type of investment ("back offices", virtual customer centres, prototype manufacturing, etc.). It is however difficult to define itself specifically against possible competitors from categories of comparable cities – Brno therefore is strengthening, in the same way as other European medium-sized cities, and presents general prerequisites for attracting investment, such as its strategic position, offer of suitable real estate and qualified labour.

The arrival of selected technological companies has been and will be increased by decentralization processes on the level of large metropolises, from which research and development type activities, customer services and so-called "back offices" (routine administration) are being pushed out under the pressure of rising costs.

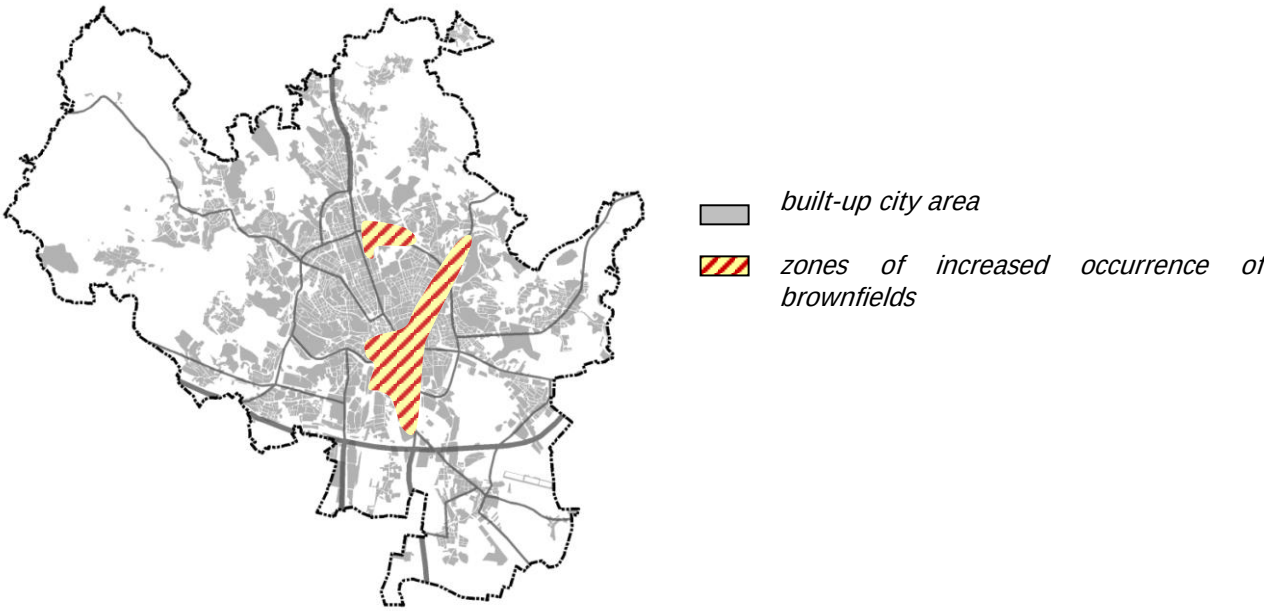
What has become a noticeable component of Brno's post-industrial development is the growth of consumer services. The growth in the share of consumption on the economic output of the city is becoming an apparent city-shaping factor, with impact on the urban spatial structure through varying mechanisms rather than (de)industrialization/tertiarization processes. While industrial activities produced a city with a relatively simple spatial and time plan, the emergence of consumption and diversified tertiary sector are creating a mix of overlapping consumption/manufacturing spaces and rhythms. It is mainly the retail segment that has undergone the most distinctive changes during the transformation period. Since the 1990s we can observe a lasting growth in the total sales area and the number of retail units in the Brno city retail network. The gradual compensation of insufficient retail amenities which was under way in the initial transformation stages, accompanied by retail unit privatizations and restitutions, was impacted dramatically by the arrival of international chains in the mid-1990s. The saturation coefficient in Brno (flat standard indicator – sales area per head) grew from 0.3 sq m in 1989 to 1.7 sq m in 2009, which is a value fully comparable with existing West European cities with a similar population. From the perspective of sales area accruals, the largest growth dynamism is logically concentrated in the category of large retail shops (over 5,000 sq m of retail space); in this size category one third of the total city-wide area is also concentrated.

Spatial analyses have confirmed the emergence of a minimum of two strong retail cores on the territory of Brno: the city centre and the south shopping zone. As a partial result of this arrangement, there have been changes to other parts of the city as well. Hypermarkets and large shopping centres are undoubtedly focal points of ever-increasing importance, impacting the "spatial retail behaviour" of residents which is based mainly on high individual mobility. Retail expansion in peripheral locations can apparently be attributed to a certain decrease in flat standards and qualitative retail indicators in the city centre.

The polarity between dynamic sectors of the city economy (represented mostly by tertiary activities) and traditional sectors being scaled down (mostly industrial ones) shows in the physical pattern of the city. Operation rationalization in a number of industrial firms leads to sales and/or lease of portions of their manufacturing and administration real estate. This fact is connected to abrupt changes in functional use. This applies especially to former industrial premises in central locations (warehouses, discount shops and distribution warehouses). It is the extensive, unused premises of industrial enterprises that bind the assortment of spatially extensive retail (car shops, furniture, etc.) on them. The distinct features of this utilization method are often only minimum real estate maintenance, unclear atomization of premises where multiple tenants operate and the frequency of replacement. There have been only

selective revitalizations of old industrial premises and generally only for non-manufacturing activities (Vaňkovka shopping centre, Moravan residential home, Roučka Slatina and the like).

Fig. 4.3: zones with increased occurrence of brownfields



Source: Surveys and Analyses of the Brno Masterplan – Socio-Economic and Demographic Part (Průzkumy a rozbory k územnímu plánu města Brna – Socio-ekonomická a demografická část), Masaryk University in Brno, Centre for Regional Development, 2004

4.1.4 Innovative infrastructure

Even though innovation is a standard and vital part of business, the support of innovation activities has become part of the policies of economic and social cohesion. This applies primarily to collaboration between science and research on one hand and industry on the other, as well as support for start-ups in hi-tech sectors. The situation in Brno is determined by a significant concentration of science and research capacities, whether within the Academy of Sciences, universities or other institutions. The conceptual base is formulated in the Regional Innovation Strategy of the South Moravian Region (www.ris3.cz), where the city of Brno plays an active role and is, along with the South Moravian Region, the key player on the side of public administration. The predominant part of the Regional Innovation Strategy is concentrated in the South Moravian Innovation Centre (www.jic.cz), maintaining three technological incubators which offer 4,310 sq m for incubated companies. Two incubators are located on the Brno University of Technology premises on the Palacký vrch hill and one biotechnological incubator is based on the new Masaryk University campus in Bohunice. There is one further entrepreneurial incubator run in Brno: Brno-South Business Incubator on the premises of the Research Institute for Building Materials in Komárov,

focused on the building industry and offering 455 sq m of space. Both of the two largest universities have their own units dealing with technology transfer, while other large projects, connected mostly to funding from EU structural funds, are under preparation.

The most significant project is CEITEC – Central European Institute of Technology (www.ceitec.cz) which will focus on top research in material sciences and technologies, in the natural sciences and in medicine. The aim of the project is to create the best conditions and environment for the development of research in biotechnology, biomedicine, advanced materials and technology. Masaryk University and Brno University of Technology, together with Mendel University in Brno, University of Veterinary and Pharmaceutical Sciences Brno, Institute of Material Physics of the Academy of Sciences of the Czech Republic, Institute of Scientific Instruments of the Academy of Sciences of the Czech Republic and the Veterinary Research Institute are collaborating on this project. The biggest share of funding is foreseen from EU funds from the operational programme Research and Science for Innovation (VaVpI) within the priority axis 1 – European Centres of Excellence.

Another large project is the construction of an International Clinical Research Centre (ICRC) on the premises of St. Anne's University Hospital in collaboration with the American Mayo Clinic. The focus of the research shall be primarily cardiovascular diseases, neuroscience and, in synergy with Masaryk Oncological Institute, also oncology. In addition to Masaryk University, the Czech Technical University in Prague (ČVUT) is also engaged. It is foreseen that collaborative research and construction will be funded in part from EU funds as a European Centre of Excellence within the Science and Research for Innovation operational programme. http://www.fnusa.cz/icrc.php

Other projects seeking to obtain EU funding are also in the pipeline: extension to the technological incubator, CERIT scientific park (Centre for Education, Research and Innovations in ICT) and a creative design incubator.

The availability of the internet as the basic means of communication can be regarded as part of the innovation infrastructure. Rapid technological progress in this area offers connectivity in any location thanks to the harsh competition between providers, particularly in large cities. High-speed internet (broadband) is less easily available and building capacities for backbone lines is among the priorities for the Regional Operational Programme South-East. For this purpose, documents were prepared for the Regional Council Body (URR) regarding the competitive environment of the provision of these services in the South Moravian Region. The documents defined an area which is partly or entirely disadvantaged by market failure and infrastructure can therefore be built only by using public resources. The city of Brno is classified as a location category with no anticipated market failure thanks to harsh competition.

4.1.5 Functional Brno city region

The Brno residential agglomeration currently finds itself in a transition from an industrial to a post-industrial development stage. In this transitional period, a major transformation of economic links between the city and its hinterland is occurring and a number of functions originally bound to the city core are being dispersed to suburban areas due to changes in consumer, residential and other localization preferences. The result of this are changes in the functional structure of the agglomeration as well in the mobility of individuals and goods both within the narrower agglomeration and within a wider commuting region.

Currently the functional Brno city region, i.e. the area with the most intense working links with Brno, totals approx. 530,000 permanent residents and 160,000 if Brno residents are not counted. If we extend the functional Brno city region to municipalities from which the major stream of working commuters is flowing and to the functional regions of nearby secondary cores of smaller working and servicing importance, we reach an estimate (without Brno itself) of 370,000 residents.

In 2001 over 65,000 individuals from the Czech Republic were commuting to Brno to work. These individuals represented approximately one third of all jobs in Brno.

The dominant position of Brno within the distinct monocentric metropolitan area leads to the fact that the actual number of residents present in the city is substantially higher than the number of individuals with permanent place of residence. This fact has rather serious implications for the intensity with which the civic, social, technical and traffic infrastructure of Brno is used.

The following number of individuals with permanent place of residence are present in Brno every day:

3. currently about 140,000 to 160,000 persons;
4. by 2020 this group will have reached approx. 150,000 to 170,000 persons;
5. the most numerous groups within the population present are (over the two horizons monitored, i.e. now and in 2020) the commuters to Brno to work, to school and foreign workers.

The implication of this high number of individuals present in Brno beyond the Brno population with permanent place of residence is a higher demand for transportation and for other civic, social and technical infrastructure. This condition is visible most clearly in e.g. the utilization of capacities of water lines, sewage lines, the waste water treatment plant and in transportation. An everyday occurrence in Brno is congestion of city roads (frequent congestion during rush hours) which brings individual and city-wide public transportation (trams, trolleybuses, buses), most of which operates on the surface on roads, to a crawl.

4.1.6 Traffic position and traffic situation

The city of Brno is the second most important residential area and thus the second most important traffic junction in the Czech Republic. The excellent position of Brno is demonstrated by the high concentration of radial long-distance road and railway transportation routes. Some of these routes even belong to trans-European transportation networks and to priority modernization projects of Europe-wide importance:

- railroad Athens – Sofia – Budapest – Vienna – Brno – Prague – Nuremberg / Dresden (priority project of trans-European transportation networks No. 22);
- railroad Gdańsk – Warsaw – Brno / Bratislava – Vienna (project No. 23);
- highway Gdańsk – Katowice – Brno / Bratislava – Vienna (project No. 25).

Brno also has its own international airport (Brno-Tuřany), but its incorporation into regular air travel schedules and networks has been, even in comparison with other residential areas of similar importance, rather limited.

Brno is the central point of the functioning and ever-growing Integrated Transportation System of the South Moravian Region (IDS JMK). The fundamental principle of this system is interconnectivity, connections and complexity of how the region is serviced by engaging different types of public transportation (railroads, buses and public transportation). The system offers a relatively efficient alternative to individual car transportation.

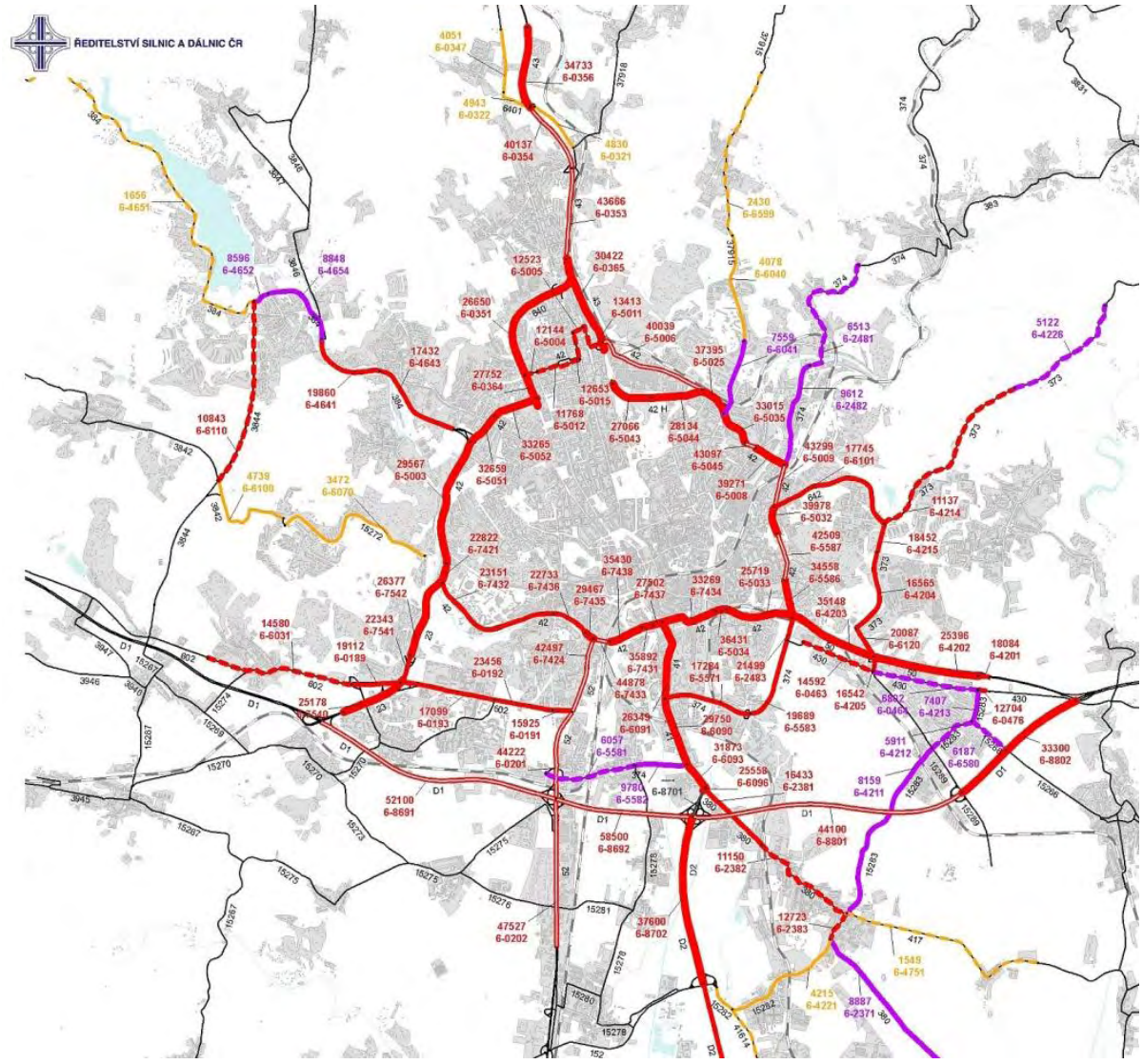
The currently most serious traffic-related problems of Brno can be formulated in the following theses:

- a strong growth of road traffic intensity leading to overloading of the existing traffic network and thus to the emergence of congestion – growth in intensity of road traffic is an implication of many factors; we can first of all stress the general transition to individual traffic after 1990 related to the start of the transformation of Czech society and change in lifestyle, further strengthened in Brno by a large pool of commuters from the outskirts of Brno (to work and school), including impacts of residential and commercial suburbanization, i.e. shifts of segments of residents and of certain economic and servicing functions to suburban city areas that are however still difficult to serve well by public transportation; a certain disadvantage of Brno in this respect is the fact that the shopping centres located to the south of the city centre are used to a large extent by residents from the northern parts of the city, as the north is not saturated by so many shopping centres;
- the overloading of existing road infrastructure in Brno is exasperated by the fact that existing traffic concepts designed to relieve certain routes currently exposed to heavy traffic have not been completed – these are primarily the incomplete Big City Ring, the incomplete R43 through highway and discussions on the need for building a new

highway by-pass to the south of Brno, because the existing D1 and D2 highways have been fully integrated into suburban traffic as part of the shopping centre construction;

- a matter related to the overloading of the road infrastructure with passenger traffic is insufficient parking capacity in the city centre and in major public transportation junctions on city edges; the construction of these capacities (e.g. in the form of parking facilities) may contribute to the growth of the Park & Ride system and to a subsequent decrease in the passenger traffic pressure on central city areas;

Fig. 4.4: Loading of roads in Brno in 2005



Note: the figures show the average number of vehicles per 24 hours in separate road sections
Source: Road and Motorway Directorate of the Czech Republic
*(*http://www.scitani2005.rsd.cz/mesta/jm/brno.jpg*)*

- elimination of the negative impact of passenger traffic on central city areas may be also achieved through further growth of the Integrated Transportation System of the South Moravian Region (IDS JMK), improved efficiency of the service and better organization of the system, as well as by continuous improvement of public transportation vehicles in use – this solution has the potential to influence individuals' decision-making of whether to travel by car or use the public transportation system;
- a specific traffic-related problem of the central Brno area is the long-awaited and intensively discussed relocation of the main railway station – under existing plans, the passenger station shall be moved to a new location about 1 km away to the south of the current main railway station (the new passenger station shall emerge behind the existing Zvonařka bus junction); based on existing plans, the relocation of the railway station shall bring growth to the currently unprosperous south centre, i.e. to a relatively vast space between the existing and the new location of the passenger station, with the existing passenger station being directly connected to the historical city centre; development in these locations may, in terms of the spatial context within Brno, contribute to a reiteration of the importance of the city centre and thus may partially weaken the current trend of dislocating attractive functions from this area to the suburban outskirts;
- from the point of view of Brno's international access, another problem is the relatively limited incorporation of the Tuřany airport into regular air traffic schedules (currently there are direct flights only to Prague, London and in low frequency to Moscow); these conditions may be regarded as a risk to Brno's ability to sustain and increase its importance in the Central European/European space, because poor air traffic availability may reduce its competitiveness and attractiveness; in the absence of growth in air traffic, Brno may lose some of its current functions (e.g. as exhibition centre and destination for branch offices of major global and European companies).

4.2 Strategic and concept documents – identification of the city's problems

The city of Brno has prepared a wide range of analytical and concept documents to be used for city management, area and sector coordination. These documents define numerous problems that the development of the city is facing. The concept (strategic) documents also show in detail possible solutions, including conclusions and recommendations. We assume that these documents capture the problems of the city as well as identify activities that should help solve these problems.

As the fundamental document on comprehensive city development, the Strategy for Brno must be regarded, while the technical conditions of area utilization are subject to Brno Masterplan. Other documents are more or less partial analytical or concept documents from which the Strategy for Brno and/or Brno Masterplan draw their input. For the purpose of this Study, we only state relevant priorities and/or activities.

4.2.1 City development strategy as the formulation of the development concept

The Brno Development Strategy document is the fundamental conceptual base for long-term formulation of the needs and development visions of Brno. In nature this document is based on broad consultations within task groups with the participation of the public. The actual discussion process is perceived as an important building block and a source of opinions, ideas and visions. The strategy is approved by city bodies and is the main document for formulating the position of the city within regional development documents on the regional level. The strategy for Brno was deepened in 2009 by adding a specific City Economic Growth Concept (KERM) that seeks specific solutions for the increased competitiveness of the city. The Strategy is also the basis for the Integrated Urban Development Plan.

The Strategy for Brno strives to be selective in the sense of defining a narrower circle of priorities that are principal for city development and that subsequent efforts can concentrate on. Partial activities, through which the strategic vision is achieved, are named in the so-called Strategic Framework. From the perspective of the objectives of the JESSICA study, we chose the following objectives and activities:

- Preparation of new development locations for manufacturing and services, acquisition of land and technical infrastructure
- Extension of areas for strategic services and innovative business, acquisition of land and technical infrastructure
- Support of new uses for unused (or inappropriately used) premises
- Prevention of emergence of new brownfields
- Construction of a cycling track network and tourist tracks on the territory of the territory, also with respect to protected land
- Support for establishing nature and thematic trails (Brno Trails projects) as well as other tourist attractions (e.g. Café Tram)
- Support of the Tuřany – Šlapanice zone development in synergy with the South Moravian Region
- Support of residential projects for specific groups of residents
- Support of projects converting brownfields to residential spaces
- Support of construction of playgrounds for everyday recreation for all age groups
- Support of the construction of sports premises for organized physical education, provision and pre-development of new development areas
- Support of the construction of sports premises for professional sport, provision and pre-development of new development areas
- Support of preservation of cultural sights (and/or new use)
- Provision and cultivation of cultural infrastructure (JKC)
- Support of construction of a system of walking trails and promenade pedestrian routes in built-up areas and rural zones
- Increasing the quality of amenities in public areas

- Support of protection and development of green areas
- Support of measures leading to reduced noise burden (noise barriers, plantings, etc.)
- Support of projects reducing emissions and immissions
- Support of expansion and establishment of scientific and technical parks, incubators and companies with great growth potential
- Participation in coordinating the innovative business support system (grants, loans for business expansion)
- Support of the execution of the Central European Institute of Technology (CEITEC) project
- Utilization of capacities of Brno-based universities and other institutes for development of the lifelong education system
- Support for increasing the attractiveness of science and research for children and young people (Science Museum)
- Transformation of unused structures into facilities for graduates, Ph.D. students and hosting professors (starting flats in houses of residence)
- Implementation of public transportation junctions
- Support of growth of environmentally friendly means of transportation
- Provision of efficient traffic organization (telematics)
- Completion of the Big City Ring
- Support for construction of parking structures and Park & Ride sites (automated parking facilities)
- Improving efficiency and coordinating the introduction of parking fees (progressive fees)
- Support of the network of alternative means of transportation
- Support for all types of measures for provision of traffic safety (pedestrians, cyclists)
- Resolving the connection of the Europoint project to the public transportation system
- Coordination between the Europoint project and the construction of connecting city infrastructure
- Completion of the renovation of backbone sewers on the territory of the city
- Completion of the sewage system on the territory of the city
- Support of activities leading to improved retention abilities of the landscape
- Renewal of the recreational function of Brno Reservoir
- Optimization of the renovation of the heat network and source of heat
- Improvement in utilization of heat energy from SAKO incinerator, central heating supply
- Initiating a system of compostable waste treatment, utilization of plastics in collaboration with SAKO

4.2.2 City Economic Development Concept (KERM)

The City Economic Development Concept seeks specific solutions for the increased competitiveness of the city by engaging experts to deal with issues identified in existing strategic documents relevant for Brno. In the Recommendations chapter it presents specific intentions that should be further elaborated. For the needs of this Study we choose the following:

- implementation of the pilot PPP project
- expansion of residential space in existing garden colonies and garages on land owned by the city
- Support of establishing accredited international secondary schools with lessons held in English
- Participation in implementation of the Creative Incubator project
- Ongoing support for the operation of the South Moravian Innovation Centre (JIC) providing specialized development-related services for innovative companies + execution of assessment analysis of the use of existing business incubators in Brno run by the South Moravian Innovation Centre

4.2.3 New Brno Masterplan

The Masterplan creates the basic framework for where structures shall be placed and how land shall be utilized. The existing and currently valid Brno Masterplan was prepared at the beginning of the 1990s and approved in 1994. However, the entire decade of the 1990s was a period of intense transformation processes that showed also in the requirements regarding land utilization. The Masterplan of 1994 is said to have not foreseen sufficiently the intensity of certain processes, of which the most important are:

- Rapid arrival of suburbanization in suburban city areas and municipalities on the outskirts of the city without any coordination of connections and the context (roads and networks capacity). Strong deconcentration tendencies within the city – disappearance of residential functions in the city core and the degradation of certain areas as a result of social segregation.
- A drop in job offers in manufacturing and a growth of employment in services with pressure on areas for services.
- Abandonment of existing manufacturing sites and inability to find a corresponding use for them; conversely, interest in new areas (greenfields) for production and logistics.
- Dramatic growth in car traffic with implications on roads and parking capacity.

In 2010 a new Masterplan is expected to be negotiated and approved. This Masterplan should overcome the above shortcomings and be flexible. The Masterplan concept shall reflect primarily the requirements regarding the following:

- Offer of development sites
- Sustainable mobility
- Environment and quality of life
- Protection of natural and landscape values
- Revitalization of neglected sites

By incorporating the above aspects, the city bodies should obtain a more flexible instrument for the implementation of development activities in compliance with the anticipated activities of the Strategy for Brno.

4.2.4 General Residential Development Plan – update 2008

This specific analytical document deals with issues related to living and to residential resources in the city of Brno. It states the following to be the most significant issues in this area:

- imbalanced and "distorted" real estate market (widening gap between the supply of rather large and luxurious flats and the demand for rather small and more affordable living),
- low number of free municipal flats,
- absence of affordable "starting flats" for the younger generation (individuals or families).

In addition to the prevailing and still topical issues, the General Development Plan also points to the segregation of residents based on their socioeconomic situation and the subsequent polarization of the city space. This involves the emergence of larger land units (ghettoes) where economically and socially weaker residents are concentrated and of new locations of family homes for high-income groups. In the former case the source of subsequent trouble is the accumulation of problematic residents and related problems in the form of rather neglected residential resources in decay, while in the latter case this is a certain "parasitism" on the amenities in smaller locations, e.g. civic amenities or public spaces. The issue is that these new residential complexes are designed only to meet the residential demands of richer clients and other living related functions are underestimated and/or absent.

4.2.5 Residential Development Strategy (2009)

The Residential Development Strategy is, unlike the General Residential Development Plan, conceptual material describing the vision of the development in Brno and steps to be taken to improve the quality of living in Brno. It is a instrument operating on the city level which

applies to specific city districts as well. It is designed primarily for the political representation of the city and city districts as well as experts to ease decision-making on changes leading to an improvement in the residential situation in Brno.

In the Residential Development Strategy the following objectives and sub-objectives are relevant:

- Support by all means available for investment in locations pre-developed by the private sector for new apartment construction.
- Support of public-private partnerships oriented on apartment construction.
- Support of new apartment construction for specific target groups in the form of subsidized social housing and starting flats for young families.
- Support of revitalizations and regenerations of existing built-up land (brownfields, gaps, frames) for new apartment construction projects in the private and rental sectors.
- Provision of living for specific groups in existing apartment buildings and in new apartment buildings.
- Establishment of "Supported Social Residential Resources" by singling out a part of existing residential resources and by new construction.

From the residential development perspective, we perceive to be most desirable those types of residential investments made for specific groups (socially weak residents, senior (nursing) homes). A possible form of implementing these projects is a partnership between the public and private sectors to overcome the lack of finance of the city.

4.2.6 General Development Plan for sports facilities in Brno (2007)

The focus of this document is the justification of different types of sports facilities and their importance for the population, mostly in the context of activities with a positive health effect. Based on a comparison between area indicators, it seeks to benchmark the sport infrastructure and identify the largest disproportions. The conclusions show that areas (facilities) for professional sport are in fact adequate in Brno, but there is a major lack of areas for active recreation and physical training for schools. The document does not deal with the quality of existing facilities, which is problematic for professional sport.

The analysis points out that the most distinct lack of facilities is in the recreational physical activities area. It refers to trends showing that the wealthier society has, after covering the basic needs, more financial resources and more free time. With the growing willingness of spending money on physical activities in one's free time, the demand and supply of recreational sports facilities will rise as well. Along with the demand, the quality requirements, i.e. facilities offering pleasant experiences with high benefit for the physical condition, will also grow. According to the study, such requirements are met in wellness

facilities thanks to the water element, mixed-use character and required availability. The General Development Plan indicates that wellness centres should slowly be incorporated into the primary infrastructure in the recreational physical activities segment and should be perceived as very basic civic amenities, easily accessible to the general population. The document mentions in a separate section devoted to wellness centres one possible source of funding – the JESSICA instrument – as well as the approximate cost of investment and operating expenses and income.

4.2.7 Development Programme for the South Moravian Region (update 2009)

The Development Programme for the South Moravian Region is a document prepared under law No. 248/2000 On Regional Development Support and is, together with the Development Strategy for the South Moravian Region, the fundamental document for the purposes of regional policies on the regional level and regional cohesion level (NUTS II). Covering the whole South Moravian Region, the programme presents urban space specifics and includes them into particular priorities defined for specific sectors. The document includes a chapter titled Area and Sector Disparities which, using numbers, tries to identify problematic areas within the region. As a result, regional policies should then be focused on these problematic areas.

The following measures and activities are relevant for tackling the current problems of the city of Brno:

- A.2.5 Creation of conditions for young general practitioners and dentists to open a practice.
- A.2.11 Provision of a necessary and balanced network of social services providers, including their comparable availability to citizens in different parts of the region, strengthening of their capacities (mostly by building a senior home on the premises of the Tomešova transfusion station in Brno, renovating the former long-term care hospital for senior citizens in Zastávka u Brna to another senior home pavilion and by building new senior homes).
- A.3.5 Support of operation and development of existing physical training and sports facilities for members and the public and construction of new ones.
- A.3.6 Support of building selected infrastructure for professional sport with supra-regional importance.
- B.1.2 Construction of additional incubators and scientific and technical parks to reach the critical level of this infrastructure in the South Moravian Region (particularly the CERIT Science Park, incubators and scientific and research parks in regional towns of South Moravia).
- B.1.3 Raising the funding for innovative companies (establishment of seed fond, growth in micro-loan fund, support of implementation of financial fora).
- B.2.3 Support of actions popularizing research, development and innovation (e.g. implementation of Moravian Science Centre project).

- B.2.8 Support of projects funded by the Research and Development for Innovation operational programme (mostly CEITEC and ICRC).
- B.3.7 Support of brownfield regeneration issues.
- C.1.6 Support of rapid completion of unfinished constructions and start of construction of other Big City Ring structures in Brno.
- C.1.9 Support of the relocation of Brno railway junction, modernization of through-track and Section I of passenger station.
- C.1.10 Support of area and design preparation of the North-South Rail Diameter in Brno.
- C.1.13 Support of a wider incorporation of the Tuřany airport into combined traffic.
- C.2.3 Preparation and establishment of Integrated Transportation System of the South Moravian Region (IDS JMK) junctions and connection to elements of pedestrian and cycling traffic.
- C.2.4 Support for construction of Park & Ride parking and the Bike & Ride system on Integrated Transportation System of the South Moravian Region junctions.
- D.4.4 Support for improving the condition of water bodies (natural and artificial) for outdoor swimming in the region, construction of supra-regional aquaparks and infrastructure for recreational sailing (support of extension to the Bat'a Canal on the confluence of the Morava and Dyje, including development of other water routes for recreational sailing).
- E.1.3 Introduction and optimization of separate waste collection of recyclable material components in municipal waste in all municipalities of the South Moravian Region.
- E.1.6 Support of projects of disposal of old ecological burdens.

4.3 Complex projects

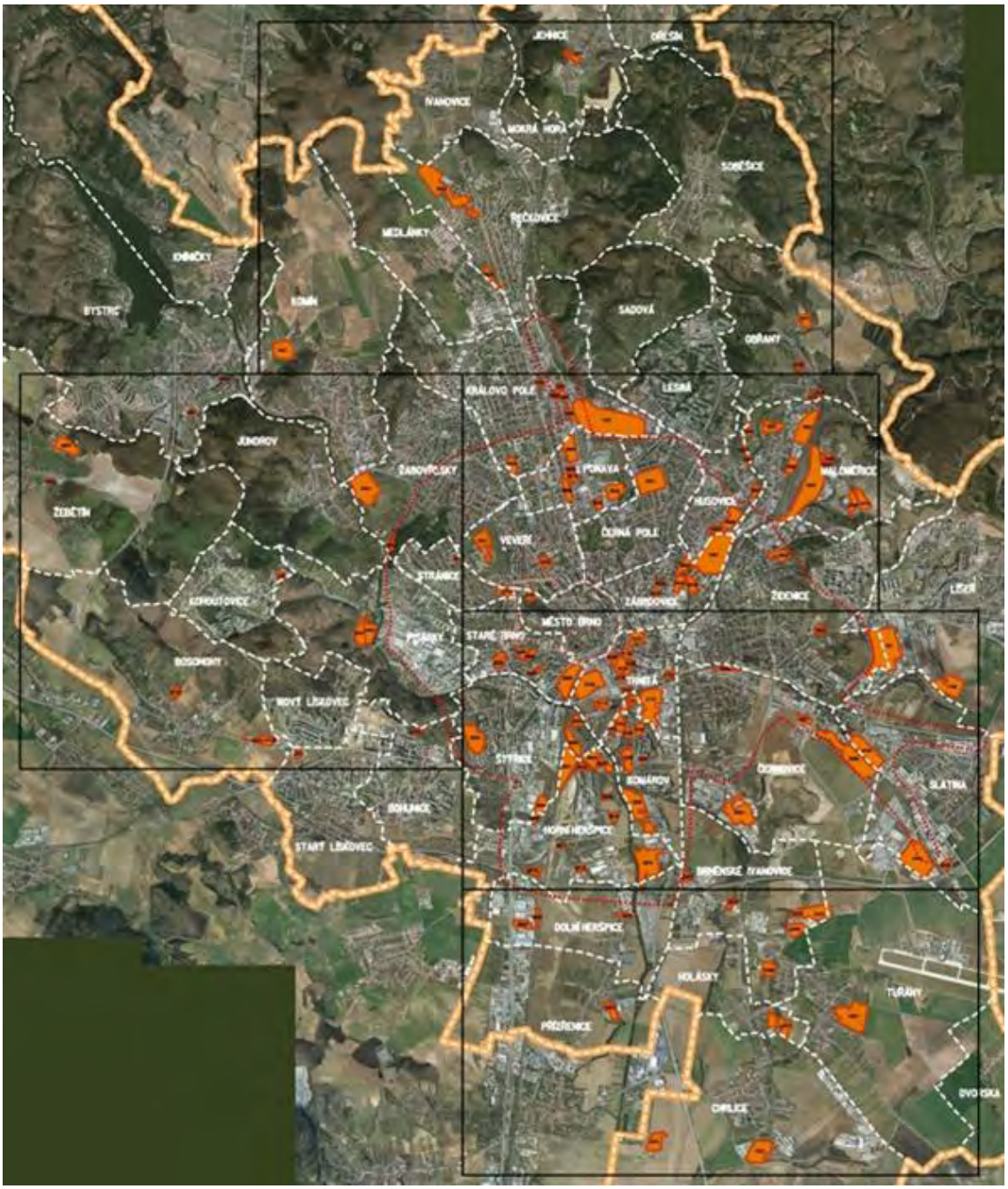
The city of Brno is preparing a number of complex regeneration projects for specific areas. Most of them are brownfields or land otherwise handicapped or neglected. The brownfield issues are high on the city's agenda indeed. Brno is working on a brownfield database and some regeneration projects have already taken place. The main role of the city is the preparation of regulations for urban planning documentation that will enable the private owners of neglected manufacturing premises to change to their use to e.g. residential or service areas.

4.3.1 Brno brownfields

Brownfields are defined as areas inside urbanized land that have lost their original function and are entirely or partly neglected or little used. They have a negative physical and economic impact on their surroundings and the result of their original use is often soil contamination or other devastation, which reduces their attractiveness for future use. In Brno brownfields are in the majority of cases, plots with an industrial past, most originally dating from the 19th century, and are scattered all over the city. The most problematic areas

include former industrial sites and neglected military premises. The reason why this issue has risen to the forefront was the change in political and economic conditions, accompanied by a scaling down of heavy industry and a default of large industrial enterprises after 1989. Brownfields have their own disadvantages, but they also have advantages. Investors view their possibilities with distrust, if compared with free "green field" type space. This is primarily due to incurring high starting costs e.g. of ecological clean-up and removal of undesirable structures. Despite this, these sites are of interest, such as through their proximity to the city centre.

Fig. 4.5: Brno brownfields



Brno Municipal Council tracks a total of 127 brownfield sites ranging from 0.5 ha in built-up city parts. In total brownfields occupy 556 ha. Only 19 sites are unused, while for 87 sites partial use has been found (use up to 30% of brownfield size) and in 21 sites 30–50% of their size is used. There are also 11 sites registered with revitalization pending. Brownfields represent 6.3% of the defined built-up land in Brno. The most extensive brownfields are located in the Maloměřice district, but here the biggest share are excess areas of the freight railway station and depot. Brownfields are also found in Královo Pole on the Královopolské strojírny machine works site and in the area around Trnitá street, related to the South Centre. Some brownfield sites have been revitalized and have found a new use, but the majority of them still await their investor.

Tab. 4.1: Size of Brno brownfields

City district	Size (ha)	Share in size of city district	City district	Size (ha)	Share in size of city district
Maloměřice	49.7	12.2 %	Husovice	10.1	7.7 %
Královo Pole	43.9	8.0 %	Pisárky	9.2	2.0 %
Trnitá	41.8	22.1 %	Veveří	8.1	4.1 %
Horní Heršpice	38.5	10.2 %	Komín	7.0	0.9 %
Zábrdovice	33.2	20.3 %	Holásky	6.0	3.3 %
Líšeň	32.9	2.1 %	Obřany	6.0	1.1 %
Černovice	31.0	4.9 %	Žebětín	6.0	0.4 %
Řečkovice	28.7	4.3 %	Dolní Heršpice	5.4	1.7 %
Slatina	28.6	4.9 %	Bosonohy	5.1	0.7 %
Komárov	26.5	15.9 %	Židenice	5.0	0.8 %
Brněnské Ivanovice	19.2	4.6 %	Stránice	3.4	3.6 %
Štýřice	19.1	5.7 %	Přízřenice	2.9	0.8 %
Ponava	18.2	11.4 %	Jehnice	1.9	0.5 %
Staré Brno	16.0	9.5 %	Město Brno	1.4	1.2 %
Chrlice	15.1	1.6 %	Starý Lískovec	1.3	0.4 %
Žabovřesky	14.5	3.3 %	Kohoutovice	1.2	0.5 %
Tuřany	14.5	1.5 %	Bystrc	1.1	0.0 %
Černá Pole	12.1	4.9 %			

4.3.2 South Centre

The most significant complex project is the urban transformation/revitalization of the so-called South Centre, related mainly to the construction of a new passenger station and the rebuilding of the entire railway junction in Brno (Europoint project – www.europoint.cz/). For the management and implementation of this project, Brno set up the Jižní centrum Brno joint

stock company. Its objective is to create conditions for further natural development of the city, construction of modern infrastructure and services in the affected city part and a convenient traffic connection with the centres of other European regions.

The South Centre site occupies approx. 106.7 ha, with the natural borders being the streets Nové Sady, Nádražní and Benešova from the north-west, streets Koliště and Dornych from the north-east, the body of the freight station in Komárov from the south-east and the river canal of Svratka from the south-west.

Fig. 4.6: South Centre

The first visible, implemented project on this site was the construction of the Vaňkovka shopping gallery on the site of a neglected plant of the same name. The owner is ECE Projektmanagement Praha s.r.o. and the city of Brno conditioned the construction through the preservation and reconstruction of the architecturally valuable machine works structure

(the Wannieck gallery is currently used for cultural events) and the administration structure. The shopping centre enjoys plenty of visitors, as it lies within walking distance from the city centre and the main public transportation junction (the main railway station) and is also the shortest link between this junction and the Zvonařka central bus station where, at one time in the past, almost all Brno-bound bus connections were terminated. This changed dramatically after the introduction of the Integrated Transportation System of the South Moravian Region (IDS JMK), as the idea was to terminate integrated bus traffic on city edges and allow only the public city transportation and/or railway into the city centre. Currently, preparations for other constructions are under way. Examples of them are the Aupark shopping centre and the ongoing demolition near the "lower" freight station. In 2009 part of the freight passage, the first stage of the urban transformation of the Brno railway junction, was completed.[6]

The transformation of the South Centre is driven by, besides purely commercial activities, the urban transformation of the Brno railway junction and the related relocation of the main railway station. The history of this plan is very long and dates back to the complex routing of railroads in the southern segment of Brno as a result of the historical development of railroad construction by selected companies. Its legacy is the main railway station which fails to meet the desired traffic technology standards but lies in a convenient location for the city centre. Despite these long-term preparations for the transformation, the rebuilding of the railway junction has become a politically sensitive topic and a point of conflict between different interests. The idea that EU funding will be obtained for the project from the programme period 2007–2013 is now slowly becoming a mirage due to delays in preparation procedures.

Fig. 4.7: Visualization of South Centre urban structure

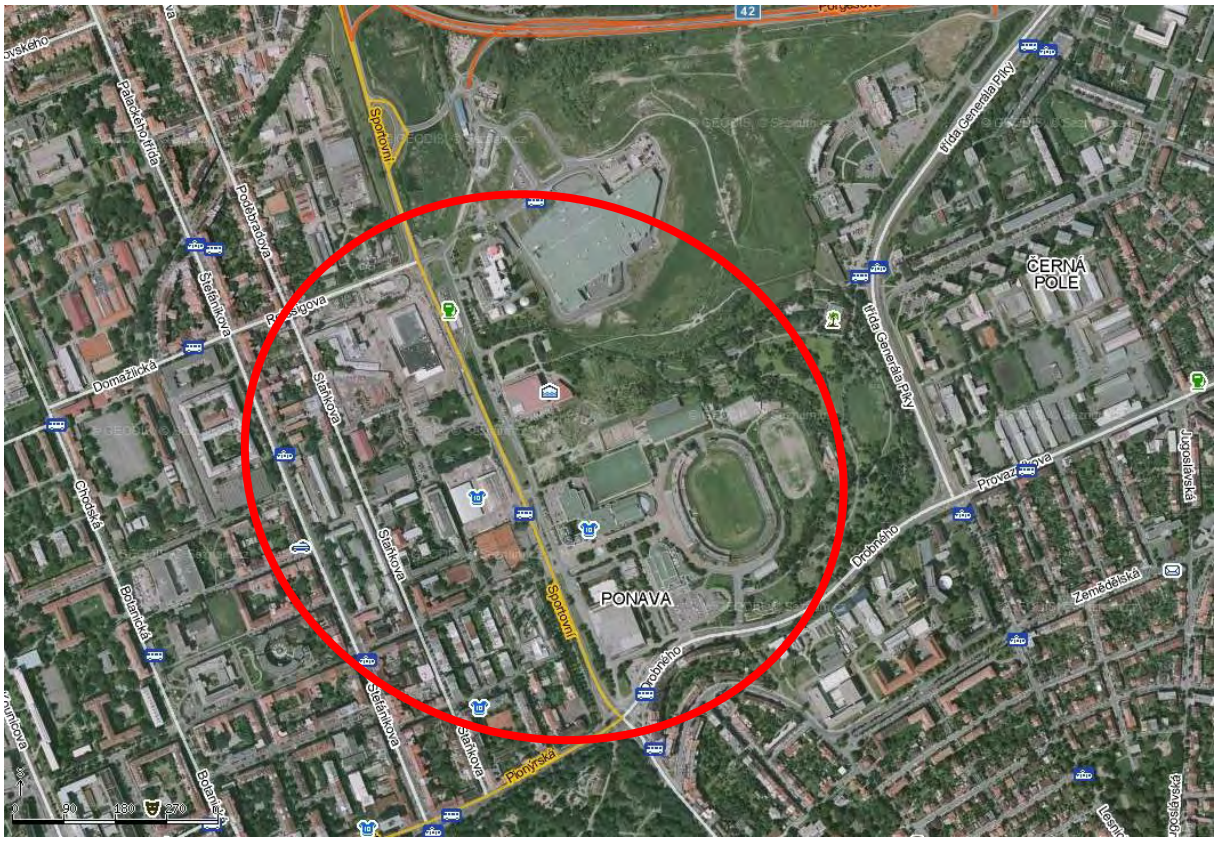
http://www.europointbrno.cz/index.php?nav01=6299&nav02=8069

[6] http://www.jcbrno.cz/rjb.php

4.3.3 Ponava

This large site lies in the city district of Královo Pole and spans 31.5 hectares. Structures of city-wide importance are located here: a swimming hall, the Boby entertainment centre, outdoor and roofed tennis courts and two, nowadays already roofed stadiums – a football stadium with a capacity for 50,000 spectators and an ice hockey stadium. This site connects to the Lužánky city park which is of great historical and ecological importance. The living environment in the Ponava location is of medium quality, fit for construction of sports and recreational amenities.

Fig. 4.8: Ponava



In the awareness of the city residents and residents of nearby municipalities, the area has historical links to sport and recreation, but currently it is not used this way. Ponava as it currently is can be characterized as a complex of numerous sports facilities in different building and technical shape, whose dominant features are the run-down football stadium, the winter stadium (already removed) and the swimming hall, the technical condition of which is at the end of its service life, on the verge of collapse. Also, we can find here various sports and shopping activities based either in the Boby Centre complex (a hotel complex and the Laser Show Hall entertainment complex) or in the Big Billa shopping centre. The premises also feature an underground garage and a car wash. As for sport and recreation, the tennis site adjacent to the football stadium plays a major role, as it is in good technical

shape. Opposite the swimming stadium an ice hockey training hall has been built. In the north of this area the Tesco and Kaufland shopping centres are located. Pending is the rebuilding of the devastated swimming hall to an aquapark. The city acquired the stadium and intends to carry out a comprehensive renovation through a pilot PPP project in cooperation with the Ministry for Regional Development and PPP Centrum.

The Ponava project was deemed important thanks to the PPP principle and an advisor was selected. On June 22, 2006 the consultation job on the Ponava project was awarded to a consortium between Pricewaterhouse Coopers Česká republika, s.r.o. and Pricewaterhouse Coopers LLP. The advisor elaborated a strategic analysis and a website www.ponava.cz (also in English) was set up for the project. At the MIPIM 2009 exhibition Brno introduced a project for the construction of a new football stadium for 30,000 spectators that shall be the pilot part of the Ponava project as the traditional centre for leisure activities. In the pipeline is the construction of the mixed-use Ponava Centre complex of Ponava Centrum, a.s. on the site of the former furniture operations Tusculum. It is becoming evident that the whole project must be done through different sub-projects and the vision for this city area can be only fulfilled step by step.

4.3.4 Revitalization of Old Ponávka

The city of Brno started preparations for a project that will turn a river bank back to an attractive environment. In the area adjacent to the city centre a site will be created, offering walks and space for spending time by the water and in adjacent parks. The project deals with the revitalization of the site around Old Ponávka with the aim of creating, along a nearly 4 km-long water canal, a promenade and leisure promenade, based on which this water course and its surroundings shall be reshaped into a "blue and green" axis fully integrated into the life of the city. The revitalization of Old Ponávka is the pilot project of the international REURIS project: "Revitalization of rivers and their surroundings in urbanized city areas" in which eight partners from six cities in Poland, Germany and the Czech Republic are engaged; this is funded by ERDF. Project website: http://www.reuris.gig.eu/en/home.html

The outcome of the project will be a comprehensive study of revitalization of the Old Ponávka water course in the context of the transformation of this city part. The northern part of the water course flows through an old industrial zone spanning multiple sites, for which the Ponávka used to be and still partly is the source of water. In the south this former race course passes mixed-use and residential land. The water course is in disrepair and in some sections it runs in pipes and is hardly accessible to the public. Besides the valid Masterplan there is no conceptual document dealing with the revitalization of this land in detail. Currently some industrial sites in this city zone are already being transformed. Subsequently, up to three stream sections will be selected in the design and refined into a detailed design as the basis for execution. Further output will include the papers Analysis of

Funding Options for Revitalization Measures and Assessment of Economic and Non-Economic Benefits of Water Course Revitalization in City Environment.

The project shall play a role in establishing a pedestrian and cycling connection between the Svitava and Svratka rivers, adjusting selected sections of the riverbank to public green spaces, improving the water-related conditions for recreation and tourism, enabling access to the shores and an ecological revival of the Old Ponávka course. An overall improvement in the attractiveness of adjacent land and in the quality of its living and working conditions is expected. An important element is an increase in public awareness of issues regarding urban water course revitalization.

4.3.5 Slatina Barracks

The Slatina Barracks site is situated by Řípská street in the cadastral district of Slatina, Brno municipality, in the eastern part of the city with the adjacent Černovice Terrace zone with a surrounding development of industrial (manufacturing and storage), administration and retail structures. This site was used for the needs of the Czech army. The entire military site is interconnected by a number of servicing roads and includes large parking areas and remnants of sports grounds. A meeting point (drill area) for soldiers is also located here. The whole site is fenced and connected to utility services. On the south-east side the site connects to a former military airport. In the proximity to the site lies the Brno airport and the site offers an excellent connection to the D1 highway, with a distance of only 1.5 km. The city district of Slatina with approx. 9000 residents is serviced by city public transportation to a sufficient extent and has its own train stop. The site served its purpose until 2004 and is not used at the moment.

4.3.6 Janáček Cultural Centre

This is a project of a new concert hall and headquarters for the Brno State Philharmonic called the Janáček Cultural Centre. An anticipated investment of CZK 1.2 billion will be co-funded by the state (CZK 600 million), by the city of Brno (CZK 200 million), by the South Moravian Region (CZK 300 million) and by private investors. The new concert hall will offer 1,600 seats in the auditorium, parking for 372 cars, space for congresses and other events, and restaurants. A planning permit design has been prepared so far.

Fig. 4.9: Exterior visualization

http://www.atelierm1.cz

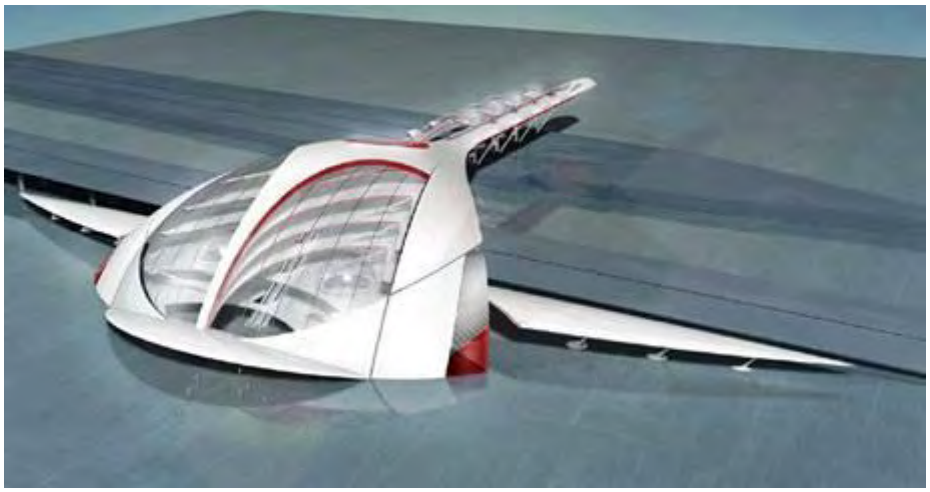
Fig. 4.10: Interior visualization

http://www.atelierm1.cz

4.3.7 Královo Pole Station

The expansion of the Integrated Transportation System of the South Moravian Region (IDS JMK) raised the importance of other passenger railway stations and stops connected to other public transportation types and having a potential for further development. The Královo Pole station is, after the main railway station, the most important passenger station on Brno territory and might be the junction station in the north of Brno.

Fig. 4.11: Study of Královo Pole station



http://zpravy.idnes.cz/kralovo-pole-ma-svuj-sen-o-nadrazi-ve-tvaru-vazky-fb3-/brno.asp?c=A100118_185223_brno_dmk

The condition of the existing station hall is not sustainable in the long run. This building has a high utilization potential for business development as passengers change between trains, trams and buses. In this respect, in December 2009, a study was prepared for the Královo Pole city district. This study proposes a generous concept and shape of the railway station in the context of its closest surroundings. The structure shall integrate all functions, i.e. traffic

and commerce. The expected investment costs are CZK 700 million. The current station is owned by Czech Railways and the renovation would assume the involvement of the city of Brno as well. Private equity is also expected. Given the need for extensive financial resources, the project stage (architectural study) and engagement of the city budget in other projects, the issue of the Královo Pole station is still rather subject to discussion.

4.4 PPP projects

The realization of projects in the form of PPP is often discussed but is rarely a reality. Besides former legislative hurdles, PPP projects are hampered first of all due to the varying ideas of municipalities and entrepreneurs, the future operators. There are opinions that PPP will be interesting from the business point of view only once margins from developer and building projects are comparable with the expected profit from involvement in PPP projects. The special entity PPP Centrum a.s. has been set up by the Ministry of Finance of the Czech Republic with the aim of improving the conditions for implementation of PPP projects. For entrepreneurs the PPP Association, joining business entities interested in PPP, is available. In general, experience with large PPP projects is still missing, as the image of PPP was impaired in the past by unsuccessful collaboration between the state and private entities. Central bodies and PPP Association initiatives provide case studies from abroad and the current lack of resources in public budgets, being the result of the slump in tax incomes, increasingly raises the issue of concessions within PPP again. On the other hand, however, the business sector will also be more cautious and conservative in assessing the potential of specific business plans.

As for PPP, the most frequently discussed PPP project is the aquapark and football stadium in the Ponava area and the Janáček Cultural Centre by Husova street.

The City Economic Development Concept (presented in December 2009) suggests creating a list of city projects carried out through PPP and preparing methodological procedures for PPP projects implemented by the city. The document says that what is desirable are those projects providing infrastructure or other services in constant and predictable demand. As examples the document lists road networks (footbridges, bridges, tunnels), technical infrastructure, administration facilities, hospitals, parking facilities, leisure centres, cultural facilities and certain transportation systems (cable railways, high-speed tracks).

4.5 Problems (market failures) in city development

Brno is facing a number of problems which must be tackled. As these problems have been identified and explained in concepts and strategies; now the optimum solution must be found and implementation ensured. We perceive the following to be the most serious problems:

Cost of rehabilitation of neglected and unused areas (brownfields) being the result of a demise or unenforceability of responsibility for the current state. Recommended projects: rehabilitation of sites with environmental damages, removal of old buildings.

Cost of capacity of related technical infrastructure in sites with intensive development where technical infrastructure limits further growth, e.g. sewage for new residential locations. Recommended projects: reconstruction and expansion of the primary sewage network.

Transportation availability/usability – the growing traffic (due also to new business and retail premises in the suburban zone) creates a need for building integrated backbone routes (rings) diverting transit traffic. Also, the city is clogged with cars and lacks parking capacities. In the city centre this may result in impaired attractiveness, with implications for retail and services. This fact is documented by the popularity of shopping centres on the edges of the city with good parking options. Recommended projects: construction of parking houses, completion of Big City Ring, Tram Diameter.

Interconnectivity between passenger traffic and public transportation (IDS) – due to growing passenger traffic and its density in the city centre, leading to congestion in the morning and evening rush hours, construction of capacity Park & Ride type parking in proximity to important public transportation or Integrated Transportation System junctions in peripheral, well-accessible city parts is desirable. This of course assumes sufficient capacities of public transportation vehicles during rush hours. Recommended projects: construction of parking houses and construction of Park & Ride type parking with a price that motivates using public transportation (IDS).

Threat of social segregation – economically stronger residents are leaving locations with low quality of life and unattractive surroundings. In these locations socially weak citizens are then concentrated, with a ghettoization tendency and subsequent degradation of the area. Recommended projects: construction of social housing to integrate socially weak residents.

Availability of social services – demographic population ageing and the loosening of the traditional family structure lead to higher demand for housing with associated care and/or assistance. The already outdated form of traditional senior homes is giving way to nursing homes where the client lives in a small apartment of his/her own and where medical and rehabilitation assistance, catering, hairdresser, etc. are available. Recommended projects are homes with nursing service.

Culture, sport and relaxation amenities – the city of Brno suffers from a lack of quality buildings for culture, sport and relaxation activities. The most important structures for sport built in the past (football stadium, ice hockey rink) belong to the past. There is only one

promising swimming hall located in Lesná. There is growing pressure on using school gymnasiums and sports grounds beyond physical exercise lessons. Plans have been introduced to build new sports grounds, such as a water canal, so far unknown in Brno. A complex plan, the Svratka Valley project, has been presented for the improvement of the city sports and recreational facilities. From the point of view of culture, there are shortcomings on the club level (space for smaller theatres and performances) and a lack of concert facilities; a building with sufficient capacity is still missing in Brno.

Failure to utilise the potential of schools, science and research for business development – the high concentration of universities, scientific institutes and the potential of qualified individuals forms a basis for the development of demanding research programmes and business with a high innovation share. In this respect, projects of scientific and research centres and other innovative infrastructure are emerging. Their aim is to raise the competitiveness of the city and the entire region.

5 DEMAND ESTIMATE

Since the market of projects qualifying for JESSICA has not been previously mapped, we base our demand estimate on the analysis of existing projects included in Integrated Urban Development Plans (IUDP) and extend our estimate to projects from strategic documents of the South Moravian Region and projects unsuccessfully applying for inclusion into Integrated Urban Development Plans, as well as other projects identified by the author of the study.

The individual projects are assessed for their potential of generating income sufficient for funding through JESSICA (return on investment). In the assessment the projects are divided into unsuitable projects (do not generate income/generate insufficient income) and projects fit for execution through JESSICA (suitable without reservation/after project re-assessment). A model example of project re-assessment and adaptation for JESSICA financing is shown further in the Study.

Projects labelled as "suitable" are recommended project types. The objective of the analysis was not to determine specific projects for funding through the JESSICA instrument, but to demonstrate that the respective project type qualifies under the return on investment requirement.

The assessment does not filter projects through any further exclusion/selection criteria proposed below in this Study for project selection (compliance with land development objectives, OP and IUDP; economic return; project holder character; stage of realization). For specific projects, these factors are difficult to analyse when it is not yet clear whether a system of financing revenue-generating urban development projects on Brno territory will be implemented. (The projects and IUDPs are currently dimensioned almost exclusively for receiving grants.) The Demand Analysis is therefore based on the assessment of the potential financial return of projects, which is the key factor for JESSICA. The complete set of recommended project selection criteria is elaborated on the general methodological level in chapter 6.

From the strategic urban planning perspective, two principal options exist for inclusion of new projects under JESSICA. Either existing Integrated Urban Development Plans (IUDP) shall be extended or a new Integrated Urban Development Plan, focused directly on JESSICA, shall be created. Thanks to the sufficiently elaborated structure of existing Integrated Urban Development Plans, the first option, i.e. extension of existing Integrated Urban Development Plans, can be recommended as this option involves lower administrative workload.

5.1 Integrated Urban Development Plans of Brno

An Integrated Urban Development Plan (IUDP) represents a set of interlinked actions implemented through individual projects in a geographically defined urban area or they cross-sectionally address certain problematic aspect/theme of the city's development.

IUDP may be supported from a single or from multiple operating programmes, such as from the Regional Operational Programme and Integrated Operational Programme, and/or from thematic operational programmes relevant for city development (e.g. Environment, Human Resources and Employment, Education for Competitiveness).

The statutory city of Brno currently has two IUDP for NUTS II South-East Regional Operational Programmes ready and one IUDP for the Integrated Operational Programme:

- Comprehensive redevelopment of the historical city centre, including development of tourism services (hereafter only "IUDP I"),
- Increase in the quality of services for the public and extended civic amenities of the city (hereafter only "IUDP II"),
- Integrated Urban Development Plan of Brno in problematic residential city zones (hereafter only "IUDP III").

5.1.1 IUDP I

The global objective of IUDP I is the rehabilitation of the old town by investing in city infrastructure and the rehabilitation of public space, support of new tourism products and services leading to a development in the tourism potential of the city. This funding has the following sub-areas and activities:

1. Rehabilitation of public areas and construction of new parking structures
    A. Redevelopment of public areas
    B. Construction of parking structures

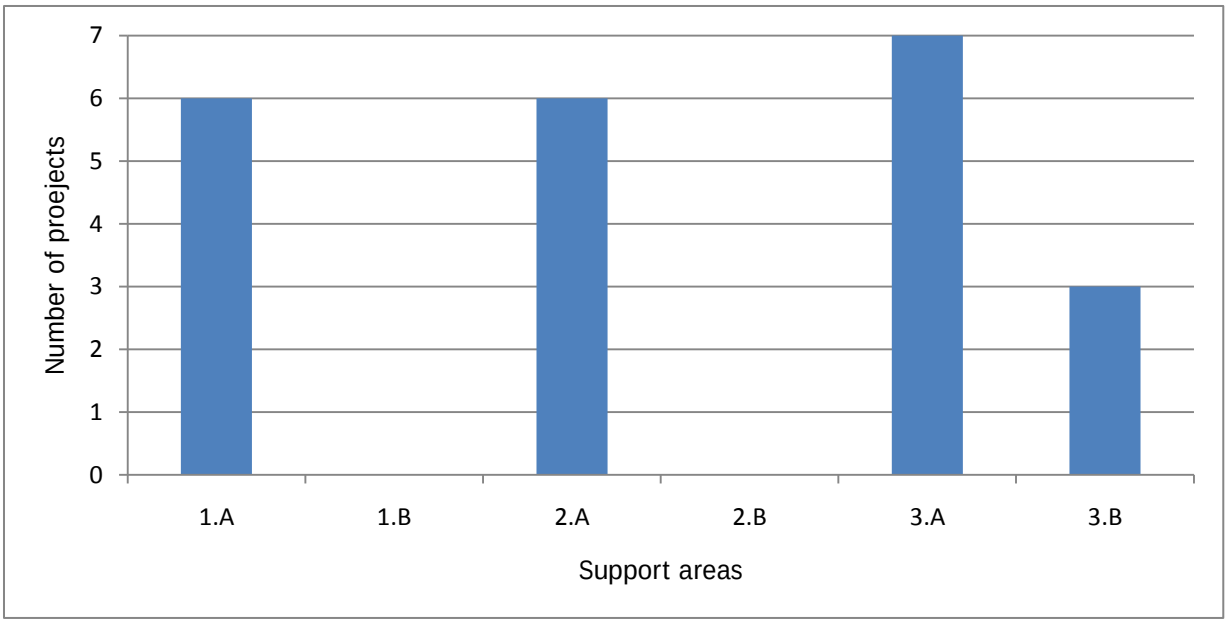
2. Redevelopment of city parks
    A. Redevelopment of parks in the Urban Monuments Preservation Zone
    B. Rehabilitation of buildings located in parks

3. Support of tourism products and services
    A. Support of development of new sustainable tourism products
    B. Support of innovative services for tourism growth

Currently 22 projects are included in IUDP I, falling into four out of the six funding sub-areas. No single project has been added to sub-areas 1.B and 2.B yet. Projects with content meeting the criteria of these sub-areas have a big potential for funding through the JESSICA

Urban Development fund (parking houses, real estate in parks providing services such as restaurants). These projects were probably not included into IUDP I for economic reasons (too high investment cost). Some possible projects of this type are shown in sections 5.3. and 5.4. of this chapter.

Chart 5.1 Number of projects qualified for IUDP I as per support area



The following chart shows the first project group qualified for IUDP I – projects from group 1.A. None of these projects can be recommended for execution through JESSICA, as they fail to generate income.

Tab. 5.1: Projects under area 1.A Rehabilitation of public areas and construction of new parking structures

Name of project	Brief description	Qualification for JESSICA	Justification
Petrov	park rehabilitation	unsuitable	project does not generate income
Joštova – section Moravské náměstí – Komenského nám.	rehabilitation of Joštova street and adjacent streets	unsuitable	project does not generate income
Moravské náměstí square	conversion of parking area into a park	unsuitable	project does not generate income
Zelný trh market	renovation of square	unsuitable	project does not generate income
Kobližná – area at the Centrum department store	rehabilitation of Kobližná street and adjacent square	unsuitable	project does not generate income
Joštova - section Moravské nám. – Údolní	rehabilitation of Joštova street and adjacent streets	unsuitable	project does not generate income

Another project group is represented by the sub-area 2.A. Not even in this group is there a project which would fulfil the revenue generation requirement.

Tab. 5.2: Projects under area 2.A Redevelopment of city parks

Name of project	Brief description	Qualification for JESSICA	Justification
Špilberk (Stage 3)	park redevelopment on western castle side	unsuitable	project does not generate income
Kapucínské zahrady gardens	garden redevelopment	unsuitable	project does not generate income
Studánka	park redevelopment	unsuitable	project does not generate income
Koliště III.	redevelopment of southern side of park	unsuitable	project does not generate income
Obilní trh	park rehabilitation	unsuitable	project does not generate income
Koliště II.	redevelopment of northern side of park	unsuitable	project does not generate income

The next chart shows a group of ten projects falling into category 3. Four projects were identified in this group for which we can assume that, upon review of their budget and financial model, they may generate revenue sufficient for their qualification for JESSICA.

Tab. 5.3: Projects under area 3 Support of tourism products and services

Name of project	Brief description	Qualification for JESSICA	Justification
Renovation of southern wing of Špilberk castle	Renovation of selected structures of Špilberk castle	unsuitable	project does not generate income
Making Brno underground accessible	Making large areas of the Brno underground accessible. Part of the spaces shall be used for expositions, part for exhibitions and another part for commercial events. Certain areas may be rented out as a wine gallery.	suitable subject to project re-assessment	
City armoury	Renovation of Měnínská brána gate and use for exhibition purposes.	suitable subject to project re-assessment	
Construction of a new information centre in Běhounská street	Construction of a tourist info centre with ticket pre-sale	unsuitable	project does not generate income
Informational and promotional materials for Brno	Creation of informational and promotional materials	unsuitable	project does not generate income
TRIALOG festival	Performance highlights of national theatres from the Czech and Slovak Republics.	suitable subject to project re-assessment	

Tourism Development Programme for Brno 2009–2015	Preparation of a concept document devoted to marketing for Brno tourism	unsuitable	project does not generate income
NA PRKNECH, DLAŽBĚ I TRÁVĚ (ON BOARDS, PAVEMENT AND GRASS) festival of street theatres	Provision of a mobile stage for the needs of the street theatre festival	unsuitable	project does not generate income
SUB praesidium Tuum – Life in baroque Brno	Exhibition of baroque culture in Brno in Špilberk castle	unsuitable	project does not generate income
JANÁČEK BRNO LETOPOČET (2010) international music festival	Implementation of art projects on a global scale with participation of leading Czech and foreign artists	suitable subject to project re-assessment	

Within the IUDP I analysis 22 projects were evaluated, out of which only four can be recommended for implementation through JESSICA subject to revision of the project concepts.

5.1.2 IUDP II

The focus of the second IUDP is "Qualify of life". It shall include the best possible offers of leisure activities, support neglected sports grounds and preserve and further develop cultural and historic heritage.

Its global objective is to remove the deficit in the civic amenities area, extend the range and quality of services provided to the public, leading to stronger cohesion, and improve the quality of life in the city.

The following sub-areas of support and corresponding activities have been defined:

1. Development of leisure activities of local importance accessible to the general public
   A. Technical assessment and construction of sports facilities improving the quality of education and accessible to the general public,
   B. Rehabilitation of public space for leisure activities of a non-commercial character with the potential of development of other leisure activities and supporting infrastructure,
   C. Rejuvenation and regeneration of city greenery for active leisure activities,
   D. Energy savings in infrastructure supporting public services for active leisure activities,
   E. Support of development of leisure services,

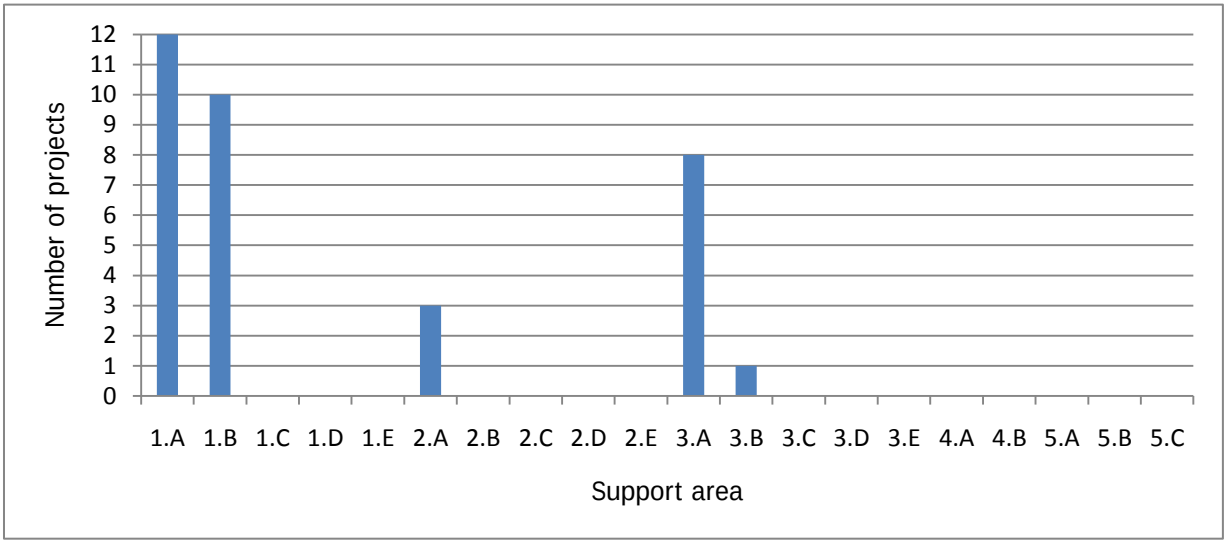
2. Growth of leisure activities of city-wide importance
   A. Construction and technical assessment of cultural education facilities of city-wide importance with the aim of improving service quality,
   B. Rejuvenation and regeneration of city greenery for cultural education activities,
   C. Energy savings in infrastructure supporting public services for cultural education activities,
   D. Support of cultural education services,
   E. Restoration of cultural landmarks,

3. Development of social and health services of city-wide importance
   A. Technical assessment and construction of infrastructure for social services in accordance with the Community Social Services Plan for Brno,
   B. Technical assessment of existing health infrastructure,
   C. Energy savings in infrastructure supporting social and health services,
   D. Support of social care services,
   E. Educational support for health personnel,

4. Development of instruments for efficient communication with authorities
   A. Technical assessment and/or construction of infrastructure for development of efficient communications instruments,
   B. Education of users in ICT,

5. Support of growth of science and research in the city
   A. Projects supporting the growth of science and research of extra-regional importance,
   B. Support of education,
   C. Application of scientific knowledge in business.

Chart 5.2: Number of projects qualified for IUDP II as per support area



IUDP II currently includes 34 projects. They projects fall only into five sub-areas out of twenty. A number of unfilled sub-areas might include various types of projects generating revenue (even if perhaps only to a certain degree) and might be therefore funded (co-funded) through the JESSICA Urban Development Fund. These sub-areas are e.g. 1.D, 2.C, 2.E, 3.C, 5.A and 5.C. The market with these projects has not yet been mapped and their structure is not yet clear either.

The following chart shows the first project group currently included in IUDP II – projects from sub-area 1.A. None of these projects can be recommended for execution through JESSICA, as they fail to generate sufficient revenue (while their investment costs are relatively high).

Tab. 5.4: Projects under area 1.A Technical assessment and construction of sports facilities improving the quality of education and accessible to the general public

Name of project	Brief description	Qualification for JESSICA	Justification
Multipurpose gymnasium (sports hall) at Otevřená primary school	Gymnasium (sports hall) construction at primary school	unsuitable	project does not generate sufficient income
Construction of publicly accessible playground at Kamínky primary school	Renovation and extension of existing playground at primary school	unsuitable	project does not generate sufficient income
Multipurpose gymnasium at Čejkovická primary school	Gymnasium construction at primary school	unsuitable	project does not generate sufficient income
Novolíšeňská primary school – All-ages sports centre	Renovation and extension of existing playground at primary school	unsuitable	project does not generate sufficient income
Gymnasium construction at Zeiberlichova 49 primary school and kindergarten	Gymnasium construction at primary school	unsuitable	project does not generate sufficient income
Úvoz 55 primary school – sports ground	Construction of outdoor sports and relaxation facilities for primary school of sports	unsuitable	project does not generate sufficient income
STARÁ ŠKOLKA (OLD KINDERGARTEN)	Renovation of leisure centre with sports, cultural, clubs and community activities	unsuitable	project does not generate sufficient income
Modernization of publicly accessible school playground of Svážná primary school	Renovation and extension of existing sports premises at primary school	unsuitable	project does not generate sufficient income
Sport and leisure centre Komín	Renovation and extension of existing sports premises at primary school	unsuitable	project does not generate sufficient income

Multipurpose gymnasium at Otevřená primary school	Gymnasium construction at primary school	unsuitable	project does not generate sufficient income
Construction of publicly accessible playground at Kamínky primary school	Renovation and extension of existing playground at primary school	unsuitable	project does not generate sufficient income

The next chart shows the projects currently included in sub-area 1.B. Out of the 10 projects, three were identified as potentially suitable for execution by using the JESSICA instrument. First, however, the project concept for all of them must be revised.

Tab. 5.5: Projects under area 1.B Rehabilitation of public space for leisure activities of non-commercial character with the potential of development of other leisure activities and supporting infrastructure

Name of project	Brief description	Qualification for JESSICA	Justification
SALVe – Salesian premises for Líšeň-based public – extension of offer of leisure and sports activities	Extension of multipurpose sports premises	suitable subject to project re-assessment	
Čertova rokle gorge – the heart of Lesná	Rehabilitation of recreational site	unsuitable	project does not generate income
"U Hrocha" sport and recreational premises	Construction of multipurpose sports centre	suitable subject to project re-assessment	
Leisure premises by Mírová street St. Florian spring	Construction of cycling track, publicly accessible playground and greenery modifications	unsuitable	project does not generate sufficient income
Regional biocentre island Cacovický ostrov – rehabilitation	rehabilitation of public areas for leisure activities	unsuitable	project does not generate income
Renovation of public sports ground behind building at Glinkova 13–17	renovation and adjustments of a public children's playground and ground for ball games, including adjacent public green areas	unsuitable	project does not generate income
Bubeníčkova park	rehabilitation of public areas for leisure activities	unsuitable	project does not generate income

Children's playground in Národního odboje park by Šelepova street, Brno	Renovation of children's playgrounds in a publicly accessible park	unsuitable	project does not generate income
Sports premises Brno – Útěchov	Construction of a multipurpose centre	suitable subject to project re-assessment	

In the following project group (area 2) two projects were identified such that, subject to a re-assessment/revision of the project concept, they can be recommended for implementation through the JESSICA instrument.

Tab. 5.6: Projects under area 2 Growth of leisure activities of city-wide importance

Name of project	Brief description	Qualification for JESSICA	Justification
Natural science exploratorium	Extension to observatory premises	suitable subject to project re-assessment	
Puppet museum	Puppet Museum as an extension to Radost theatre	suitable subject to project re-assessment	
Traffic education site	Construction of a new site for traffic education	unsuitable	project does not generate sufficient income

The sub-areas 3.A and 3.B currently do not include any project that would meet the income generation requirement, as detailed below.

Tab. 5.7: Projects under area 3.A Technical assessment and construction of infrastructure for social services in accordance with the Community Social Services Plan for Brno

Name of project	Brief description	Qualification for JESSICA	Justification
Plácky – low-threshold and activisation centres for children and young people endangered by socially pathological phenomena	Construction of youth centres for prevention of socio-pathological phenomena	unsuitable	project does not generate income

Integration services centre	Creation of a general unit dealing with issues of socially excluded (multi-ethnic) locations in Brno	unsuitable	project does not generate income
City centre for emergency social help for persons in extreme social distress	Construction of a new assistance centre	unsuitable	project does not generate income
Introduction of an emergency care service for seniors and physically handicapped citizens in Brno	Non-stop hotline for seniors with field service	unsuitable	project does not generate income
Magdalenium asylum home	Real estate acquisition and renovation as an asylum home for persons affected by domestic violence	unsuitable	project does not generate income
Extension of accommodation capacities for so-called socially unadjusted individuals in the attic of the Křenová Asylum Home	Asylum home extension	unsuitable	project does not generate income
Chceme být s Vámi (We Want to Be With You) – Centre of services for seniors suffering from communication disorders	Extension of centre for senior citizens	unsuitable	project does not generate income
Centre of social services for physically handicapped	Building renovation for development of services for individuals with a disability	unsuitable	project does not generate income

Tab. 5.8: Projects under area 3.B Technical assessment of existing health infrastructure

Name of project	Brief description	Qualification for JESSICA	Justification
Medical and social assistance centre for children with specific needs and their families	Renovation and extension of short stay hospital, new services	unsuitable	project does not generate income

Within the IUDP II analysis 34 projects were evaluated, out of which only five can be recommended for implementation through JESSICA subject to revision of the project concepts.

5.1.3 IUDP III

This plan is focussed on utilizing resources from the Integrated Operational Programme. The support is directed at the prevention of social decay, segregation and the emergence of ghettoes of secluded individuals in housing estates. The activities are aimed at selected problematic parts of larger cities with looming or accumulating social problems among their residents, such as long-term unemployment, increased criminality, etc. The sub-areas of this funding and their possible activities are described in the overview below.

1. Rehabilitation of public spaces aimed at:
   - modifications of housing estate areas, e.g. rehabilitation and/or planting of public greenery, increase in unpaved grass areas,
   - park adjustments, procurement and rejuvenation of street furnishings,
   - construction, renovation and repairs of traffic infrastructure (e.g. parking areas, pedestrian roads, pavements, cycling tracks, public spaces, construction of noise protection walls),
   - construction, renovation and repairs of technical infrastructure,
   - construction and/or modernization of non-commercial, freely accessible recreational sites, setting up and/or repairs of playgrounds, water areas and other spaces for leisure and sport for public use,
   - further improvement of public infrastructure within housing units.

2. Restoration of residential homes aimed at:
   - thermal insulation of external cladding and selected indoor structures,
   - removal of structural defects in load-bearing structures, repairs of foundations and waterproofing of substructure,
   - repairs and renovation of building technical equipment (e.g. modernization of heating system, replacement of heat, gas and water distribution lines, modernization of

ventilation, lifts, replacement and/or modernization of recessed balconies and balconies, including railing),

- provision of modern social housing for restorations of existing buildings.

IUDP III closed the application phase as of 30 November 2009 for applications accepted based on the call of 10 August 2009.

Only eight projects registered for this call, out of which only two passed the selection criteria and were included into the plan. These projects have a low investment amount (up to CZK 10 million), mostly for façade repairs. Because of this, we do not recommend funding these projects through the JESSICA instrument.

As the first round of the call was not successful, a new call can be expected in the near future. Despite the contents of IUDP III, we cannot rule out that some of the projects will meet the criteria for JESSICA, so we recommend a subsequent, deeper analysis of the projects received.

5.2 Resumption of IUDP Projects Recommended for JESSICA

The following chart summarizes the 9 projects currently included in IUDPs that could be implemented through the JESSICA instrument.

Project:	*Making Brno underground accessible*
Brief description:	Making large areas of the Brno underground accessible. Part of the spaces shall be used for expositions, part for exhibitions and another part for commercial events. Certain areas may be rented out as a wine gallery.
Project outcome:	Space made accessible – Zelný trh market, Mintmaster House cellars, relict of Běhounská brána fore-gate, underground corridors below Běhounská street, Charnel House at St. Jakub church
Cost estimate:	CZK 100 million
Project:	*City armoury*
Brief description:	Renovation of Měnínská brána gate, provision of equipment and use for exhibition purposes.
Project outcome:	Reconstructed exhibition areas with installed exhibition devoted to antique weapons and firearms
Cost estimate:	CZK 8.2 million

Project:	*TRIALOG festival*
Brief description:	Performance highlights of national theatres from the Czech and Slovak Republics in Mahen Theatre building.
Project outcome:	Five large performances p.a. small supporting productions
Cost estimate:	CZK 4.5 million
Project:	*JANÁČEK BRNO LETOPOČET (2010) international music festival*
Brief description:	Implementation of art projects on a global scale with participation of leading Czech and foreign artists
Project outcome:	14 large performances p.a.
Cost estimate:	CZK 4.5 million
Project:	*SALVe – Salesian premises for Líšeň-based public – extension of offer of leisure and sports activities*
Brief description:	Extension to multipurpose sports premises
Project outcome:	Playground – artificial grass (55×38 m) – small football, 3x tennis, 3x volleyball and/or footballtennis + roofed auditorium (2–3 rows of benches). Options will specified in the next design stage. Playground – concrete, asphalt (45×21 m) with side boards – hockey, street ball, basketball, small football. Children's playground with kerb – possibility of ice surface in winter. Children's playground – climbing frames, swings, sand pit, benches and trees. Spraying wall – integrated into the playground abutment wall. Free areas – space for winter sports + football playground.
Cost estimate:	CZK 40.9 million
Project:	*"U Hrocha" sports and recreational premises*
Brief description:	Construction of multipurpose sports centre
Project outcome:	Grass playground – cricket, football, softball, baseball Three courts for beach football Two courts for volleyball and footballtennis Ropeway (climbing wall) Air-supported hall with universal playground Children's playground with climbing frames Building – site administration, changing rooms, snacks Area for street sports and parking
Cost estimate:	CZK 40 million

Project:	*Sports premises Brno – Útěchov*
Brief description:	Construction of a multipurpose centre
Project outcome:	Gymnasium with facilities Backrooms for cyclists and cross-country skiers Snack bar
Cost estimate:	CZK 16.5 million

Project:	*Natural science exploratorium*
Brief description:	Extension of observatory premises (new lobby) and renovation of the 7 m dome
Project outcome:	Lobby extension to existing observatory building including sanitary facilities, changing rooms, snack bar and retail Thermal insulation of existing buildings Renovation of 7 m dome
Cost estimate:	CZK 44.1 million

Project:	*Puppet museum*
Brief description:	Puppet Museum as an extension to Radost theatre
Project outcome:	New building for puppet museum and storage
Cost estimate:	CZK 37 million

5.3 Strategy Projects of South Moravian Region

The demand created by projects of the South Moravian Region was captured in the study Searching, mapping and choosing large projects in the South Moravian Region, prepared by EUROVISION in May 2006 and commissioned by the Regional Council.
The study identified 83 projects divided into 7 logical units:

- Transportation 14 projects
- Integrated Operational Programme 41 projects
- Operational programme Environment 15 projects
- Operational programme Business and Innovation 7 projects
- Research, Development, Innovation 2 projects
- Education 3 projects
- Human Resources Development 1 project

The projects were selected based on the identification of distinct features for JESSICA type projects. The analysis identified 7 projects that can be preliminarily considered as suitable for realization through the JESSICA instrument (though only in part due to their large investment volumes). For better illustration, we list only projects screened as suitable and we show them per the respective unit.

IOP

Project:	*Janáček Cultural Centre*
Brief description:	This project is devoted to the construction of a concert hall with the possibility of symphonic music; the project is situated in the gap between Veselá street and the Hotel Internacional in Brno
Project outcome:	Two new concert halls with supporting facilities
Cost estimate:	CZK 1.2 billion

Project:	*Congress in Brno = All in one*
Brief description:	This project foresees the construction of a congress centre on the grounds of the Brno Exhibition Centre and features the following: congress centre for 2,500 people, restaurant and catering for 1,600 people, supporting facilities in congress areas, hotel and parking.
Project outcome:	Congress centre, hotel and parking
Cost estimate:	CZK 1.565 billion

Project:	*Vodova sports grounds*
Brief description:	This project concerns the extension of the sports grounds to other sports activities and construction of traffic and sports infrastructure.
Project outcome:	Tennis court and hall, multi-purpose building for small sports activities, bowling hall, roofed swimming pool, basketball and volleyball playground
Cost estimate:	CZK 0.35 billion

Project:	*Construction of roofed swimming hall*
Brief description:	This project presents the construction of a roofed swimming hall with a relaxation section for school swimming lessons and accessible to general public.
Project outcome:	Roofed swimming hall with relaxation section
Cost estimate:	CZK 0.1 billion

OPPI

Project:	*Rehabilitation of Černá Pole military barracks*
Brief description:	This project is devoted to the rehabilitation of this vast military site with numerous structures. The project assumes modifications to existing accommodation and office structures to accommodate activities of the respective city district. Some structures will be demolished, others renovated. Newly created areas will make space for new construction.

Project outcome: New residential units, new service, retail and sports premises
Cost estimate: CZK 0.24 billion

Project: *Military barracks at Slatina airport*
Brief description: Rehabilitation of a former military site into a mixed-use complex. This project foresees new residential construction, a mixed-use structure with offices and retail and construction of sports facilities and buildings with services.
Project outcome: New residential units, new service, retail and sports premises
Cost estimate: CZK 1.2 billion

Research, Development, Innovation

Project: *International technological centre Brno – Slatina*
Brief description: Utilizing the "Military barracks at the old Slatina airport" complex for a new International Technological Centre supporting industrial research and development in the Brno industrial agglomeration.
Project outcome: 20,000 sq m for international technological centre
44,000 sq m for comprehensive services for clients
Cost estimate: CZK 0.396 billion

5.4 Other JESSICA Type Projects

The following chapter includes projects not included in IUDP but meeting the main conditions for JESSICA financing and/or projects identified based on the author's own analysis, beyond IUDP.

Project: *Sokol sports grounds in Brno – Žabovřesky*
Brief description: Renovation of the Sokol sports union site in Žabovřesky, known as "the playground under the forest" or "the Rosnička ground".
Project outcome: tennis club with six clay courts
athletic ground with supporting facilities
multi-purpose playground
Club room and offices
Cost estimate: CZK 18 million

Project:	*Rehabilitation of sports grounds by Karkulínova street*
Brief description:	Renovation of sports grounds consisting of an outdoor bath with facilities, grass playgrounds for football and tennis courts.
Project outcome:	two swimming pools and wading pool changing rooms and sanitary facilities two multi-purpose playgrounds tennis courts
Cost estimate:	CZK 12 million

Project:	*Yoga exercises for the public*
Brief description:	Acquisition, renovation and equipment of building for yoga exercises.
Project outcome:	building with three exercise halls changing rooms and sanitary facilities
Cost estimate:	CZK 19.3 million

Project:	*Removal of barriers as part of senior guest house transformation into a senior home*
Brief description:	Renovation of lifts and barrier-free entrances. New lifts will enable placement of immobile seniors in the facility
Project outcome:	six lifts for manipulation bed one evacuation lift
Cost estimate:	CZK 16.5 million

Project:	*Digitalization of X-ray unit*
Brief description:	This project foresees the digitalization of the X-ray unit, a workplace where X-ray images are converted into a digital format. This change in technology leads to major operating savings.
Project outcome:	3 X-ray digitalization devices SONO facilities X-ray digitalization device for mammography
Cost estimate:	CZK 10.1 million

Project:	*Janáček theatre parking garage*
Brief description:	Two-storey underground garages to be used by visitors to the Brno centre as well as for the visitors of nearby theatres.
Project outcome:	400 parking places
Cost estimate:	CZK 523 million

Project:	*Panenská parking garage*
Brief description:	This eight-storey parking garage shall lie around the corner from the Brno New City Hall. Construction of the parking garage has been hampered by administrative delays. The original completion date was May 2010.
Project outcome:	450 parking places foreseen
Cost estimate:	CZK 170 million CZK

Project:	*Kopečná parking garage*
Brief description:	This parking garage shall be built below Husova street. It should be fully automatic, with cars parking in moving boxes.
Project outcome:	unknown
Cost estimate:	unknown

Project:	*Research and development centre*
Brief description:	A specialized centre for development of software solutions. The investment decision shall be taken around 2012.
Project outcome:	unknown
Cost estimate:	CZK 200 million CZK

Project:	*Applied research and development centre*
Brief description:	This is a joint project between the commercial and research sectors (multiple entities on both sides). The investment decision shall be taken around 2014.
Project outcome:	unknown
Cost estimate:	CZK 150 million CZK

5.5 Intersection between market failures and identified demand

The scheme presented on the next page shows the market failures identified in the chapter Urban Development Analysis, the corresponding IUDP sections (for their detailed description see chapter 5.1 IUDP) and corresponding sample JESSICA projects identified within the demand analysis. Besides this set, a number of projects were identified above that do not address the stated market failures, but could be included in an IUDP.

Fig. 5.1: Intersection between market failure and identified demand

Market failure	IUDP	Sample projects
Brownfields	1.1.A; 1.1.B; 1.3.A; 1.3.B; 2.1.A; 2.1.B; 2.1.E; 2.2.A; 2.2.B; 2.2.E; 2.3.A; 2.4.A; 2.5.A; 3.1; 3.2;	• International tech. centre – Brno Slatina • Military barracks on Slatina airport
Technical infrastructure	2.4.A; 3.1	not identified
Transportation availability / utilisability	1.1.B; 3.1	Janáček theatre parking house Kopečná parking house
Connection of car traffic to public transportation	1.1.B; 3.1	not identified
Social services and segregation	2.3.A; 2.3.C; 2.3.D; 3.1; 3.2	Removal of barriers as part of senior guest house transformation into a senior home
Culture and sport	2.1.A; 2.2.A	Construction of roofed swimming hall Janáček Cultural Centre
Science, Research for Business	2.5.A; 2.5.C	Research and development centre Applied research and development centre

As already mentioned above, projects eligible for implementation through the JESSICA instrument were not mapped in the past. Since demand is created ad hoc and in response to available financing, this Study determined the demand for JESSICA financing based on the analysis of projects eligible for JESSICA in terms of their potential financial return. The analysis did not analyze whether these income-generating projects are fully prepared for funding.

The following chart shows quantified rough demand for JESSICA funding, with division into separately analysed areas and assuming a loan of 50% of investment costs. It must be taken into account that in regional projects there are three projects exceeding CZK 1 billion, so the full funding of these projects by JESSICA cannot be expected. Among other identified projects are garage construction projects with a major impact on total investment costs.

Based on the analysis, we can say that there is sufficient potential demand for JESSICA funds.

Tab. 5.9: Rough demand estimate

Area	Number of projects	Total resources
Projects from IUDP	9	147 850 000 CZK
Regional projects	7	2 525 500 000 CZK
Other projects	10	559 450 000 CZK
TOTAL	26	3 232 800 000 CZK

5.6 Example of project concept revision

This section describes a model example of a revision of a project identified in the IUDP as "Suitable subject to project re-assessment" so that the project is adjusted to the implementation conditions of the JESSICA instrument. It is self-evident, however, that the project revision steps cannot be completely generalised. Each and every project must be assessed on a case-by-case basis by taking into account a range of factors that vary from project to project.

The "U Hrocha" multi-purpose sports ground and recreational premises project was chosen as an example for revision. The project is currently included in IUDP 2.1.B – Rehabilitation of public space for leisure activities of non-commercial character with potential development of other leisure activities and supporting infrastructure. As part of the project re-assessment we suggest moving the project to IUDP 2.1.A – Technical appreciation and construction of sports facilities improving educational quality and accessible to the general public. The source of project data is the Feasibility Study provided by the Brno City Council Department for Implementation of European Funding.

5.6.1 Project description

The "U Hrocha" (At the Hippo's) multi-purpose sports ground and recreational premises are devoted to sports and leisure activities for clubs, schools and the general public. The construction of the following features is foreseen in this project:

1. Grass playground – cricket, softball, baseball
2. Three courts for beach football
3. Two courts for volleyball and footballtennis
4. Climbing wall
5. Air-supported hall with universal playground
6. Children's playground with climbing frames
7. Building – site administration, changing rooms, snacks
8. Area for street sports and parking
9. Suburban camps
10. Dog yard

As currently designed, the project counts with an investment of CZK 40 million, out of which CZK 35 million should be covered by ROP South-east 3.1, point e) Technical infrastructure and sports facilities appreciation.

The project holder is Malá baseballová liga (Small Baseball League), a non-profit non-governmental organization. The City of Brno is a project partner providing most of the relevant land for the project realization (based on a partnership agreement).

5.6.2 Setting of project model

The City of Brno aims to tackle insufficient capacities of local sports facilities (as shown by the Feasibility Study) and to enable the utilization of currently ruderal areas by the general public. The City of Brno will take part in the decision process on the use of the area (setting of price policy, preferred segmentation, operating conditions for commercial spaces, operating hours, etc.) and partly also on the construction of the access road and parking facilities. In the operation phase and after payback of the provided loans there is a rent to be paid for the land use.

The motive for the project holder is the possibility of building a project on land with a perspective. The Small Baseball League, a state non-profit organization, aims at implementing sustainable projects and is not driven by profit.

The project holder anticipates maximum possible engagement of other entities, be this with respect to required funding amount or with respect to provision of necessary infrastructure enabling project implementation.

Since the project involves also the use of infrastructure, which is on the relevant market (Brno territory and surroundings) offered to third parties against payment, meaning that economic activities are run on such infrastructure, the project cannot be – in view of state aid rules – expected to be able to receive the expected grant worth CZK 35 million, which constitutes 87.5% of total investment costs. Another project risk is the legal form of the beneficiary (especially taking into account the grant amount). A negotiable solution can be the capital participation (max. 25%) or guarantee provided by the City of Brno. Creation of a new entity (Special Purpose Vehicle) is not possible because it is necessary to provide 2-years history at least when asking for support from ROP SE. The only considered option is Malá Basketbalová liga as the project holder.

For the above reasons, a possible grant would have to be reduced to 60% (based on the beneficiary size, in line with the intensity of regional investment support approved by Commission decision (EC) N 510/2006 of 24 October, 2006) should the grant provider fully rule out the risk related to the project holder's legal form.

5.6.3 Revision of investment costs, operating revenues and costs

Investment costs provided in the Feasibility study were partly revised based on a cost comparison with similar projects.

Tab. 5.10: Revision of investment costs

Investment cost	Original	Optimised	Justification
Incurred investment (relocation of utility networks)	1 500 000 Kč	1 500 000 Kč	
Grass playground – cricket, football, softball, baseball	3 700 000 Kč	3 000 000 Kč	comparison with similar projects
Three courts for beach football	1 000 000 Kč	1 000 000 Kč	
Two courts for volleyball and footballtennis	1 000 000 Kč	1 000 000 Kč	
Climbing wall and ropeway	1 000 000 Kč	1 000 000 Kč	
Air-supported hall with universal playground	6 500 000 Kč	5 200 000 Kč	comparison with similar projects
Children playground with climbing frames	350 000 Kč	350 000 Kč	
Building – site administration, changing rooms	11 000 000 Kč	7 000 000 Kč	comparison with similar projects
Sub-urban camps	500 000 Kč	400 000 Kč	comparison with similar projects
Dogs yard	300 000 Kč	250 000 Kč	comparison with similar projects
Parking + hard covers + "street" sports	3 000 000 Kč	1 000 000 Kč	co-funding by the city
Land acquisition	4 000 000 Kč	2 400 000 Kč	partly purchase (only not municipal)
Utility networks	2 150 000 Kč	2 150 000 Kč	
Design documentation	2 000 000 Kč	2 000 000 Kč	
Publicity	2 000 000 Kč	- Kč	not included in investment costs
TOTAL	40 000 000 Kč	28 250 000 Kč	

The underlying Feasibility Study contains only aggregated annual operating revenues and costs items. For the needs of this Study, we performed the following operating revenues estimate. We count on 60% occupancy, operating hours 12 per day and a seasonality coefficient which represents in months the ability of the respective sports facility to be utilized. The calculation also foresees renting commercial spaces out for a restaurant facility.

Tab. 5.11: Operating revenues calculation

	Number	Unit price	Unit	Occupancy	Seasonality	Annual income
Large playground	1	1 000 Kč	hour	60%	6	1 296 000 Kč
Beach football playground	3	200 Kč	hour	60%	6	777 900 Kč
Volleyball playground	2	200 Kč	hour	60%	6	518 400 Kč
Climbing wall	1	750 Kč	hour	60%	10	1 620 000 Kč
Hall with universal playgrour	1	600 Kč	hour	60%	12	1 555 200 Kč
Restaurant facility	1	40 000 Kč	month		12	480 000 Kč
TOTAL						6 247 500 Kč

Operating costs were taken over from the underlying Feasibility Study of the project and partly reduced following a cost comparison with similar projects. After payback of the loans proposed in Table 5.14 (i.e. after 2017 and 2021) the payment of rent for the use of land provided by the City of Brno is considered (amount 1,0 mil. Kč and 1,5 mil. Kč annually). The applicable conditions should be laid down in the partnership agreement (contract) between the city and the project holder.

Below is a chart showing an overview of revenues and costs prior to and after project re-assessment.

Tab. 5.12: Financial overview

		Investment expenses		Operating expenses		Project income	
Year	Phase	Original	Optimised	Original	Optimised	Original	Optimised
	preparatory	2 000 000 Kč	2 000 000 Kč				
1	implementatio	8 000 000 Kč	6 250 000 Kč				
2	implementatio	16 000 000 Kč	10 000 000 Kč				
3	implementatio	14 000 000 Kč	10 000 000 Kč				
1	operation			3 600 000 Kč	3 200 000 Kč	2 700 000 Kč	6 247 500 Kč
2	operation			3 800 000 Kč	3 200 000 Kč	2 800 000 Kč	6 247 500 Kč
3	operation			4 000 000 Kč	3 200 000 Kč	3 000 000 Kč	6 247 500 Kč
4	operation			4 200 000 Kč	4 200 000 Kč	3 500 000 Kč	6 247 500 Kč
5	operation			4 400 000 Kč	4 200 000 Kč	4 400 000 Kč	6 247 500 Kč
Total		40 000 000 Kč	28 250 000 Kč				

5.6.4 Considered options

The sheet below recapitulates the considered option of the project realization. The originally proposed option (as available in the underlying FS) is used as a base case for the evaluation. Other options involve the amount of support from ROP SE that can be realistically expected either when a combination of grant and JESSICA financing is used or when only grant financing is used.

The originally proposed option is not realistic as regards the requested grant support (state aid issues). Another critical point is also financing of the operation phase (there is a huge operating loss in the original project CF), yet the loans envisaged under this option cover only the realization phase. The combination of the grant and JESSICA preferential loan can

be considered as an optimal option with the minimal request for the use or commercial loans (modelled in all options with the interest rates 5,5% p.a.) and contemporaneously maximizing the financial return of the project. The option without JESSICA shows higher request for the commercial loans with relating risks and lower profitability.

Tab. 5.13: Recapitulation of the considered options

	Base (as in FS)	Grant + JESSICA	Grant (without JESS.)
Investment	40 000 000 Kč	28 250 000 Kč	28 250 000 Kč
Eligible costs	40 000 000 Kč	28 250 000 Kč	28 250 000 Kč
Support rate ROP SE	87,5 %	58,9% Kč	60,0%
Support amount (Kč)	35 000 000 Kč	16 642 801 Kč	16 950 000 Kč
JESSICA loan	0 Kč	4 520 000 Kč	0 Kč
Commercial loan (10 y.)	min. 15 000 000 Kč	7 062 500 Kč	12 000 000 Kč
Bridge financing	22 000 000 Kč	11 000 000 Kč	15 000 000 Kč
Own resources	0 Kč	0 Kč	0 Kč
FNPVk*	-10 648 494 Kč	5 366 072 Kč	4 662 874 Kč

** financial Net Present Valued considers all the financing items (loans, interests, grant, etc.), the potential project profit is to be reinvested (in accordance with NGO principles)*

5.6.5 Grant + JESSICA option

The applicant is assessed as small enterprise, because it meet the criteria defining small and medium-sized businesses listed in appendix I to Commission regulation (EC) No. 800/2008. Therefore, the applicant is entitled to a maximum state aid amount of 60% of eligible costs. The optional incorporation of the City of Brno (equity) should not exceed 25 %.

The maximum amount of grant from ROP SE is calculated as the difference between the possible maximum state aid amount and the Gross Grant Equivalent contained in a JESSICA loan. The Gross Grant Equivalent in a JESSICA loan is calculated as the difference in capital costs based on the reference rate of 3.39% p.a. (counted as the base rate + 1% margin corresponding to an applicant in good financial health and normal security for the loan [7]) and the capital costs based on the preferential rate of 2.39% p.a., multiplied by the unpaid portion of the loan principal.

With regard to Commission regulation (EC) No. 800/2008, the loan can be provided only in the amount of 15 % of the eligible costs in order to remain in compliance with the condition of using min. 25% of resources for the project without any public support (Art. 13 (6)).

The chart below shows the amounts of separate funding components. The grant total was adjusted by reflecting the gross grant equivalent contained in the preferential loan.

[7] The risk margin is determined in accordance with the Communication from the Commission on the revision of the method for setting the reference and discount rates (OJ 2008/C 14/02) and it depends on the security of the loan and on the financial health of the applicant.

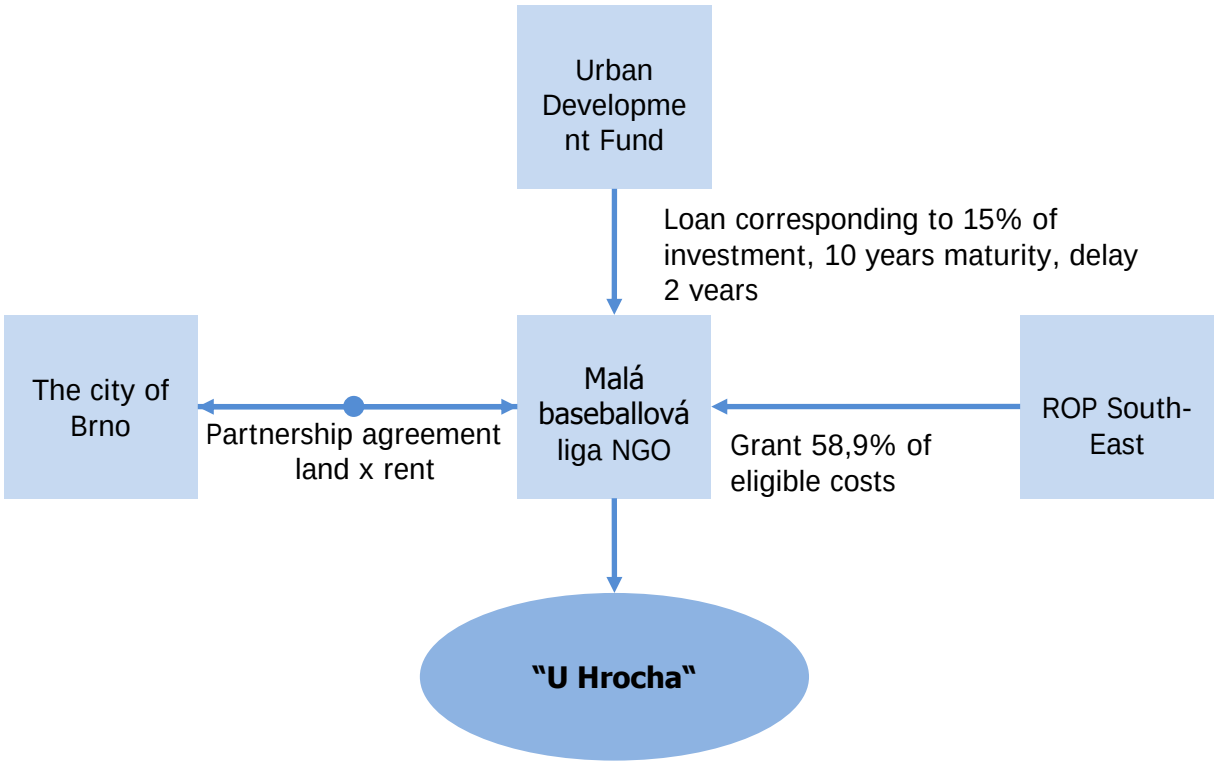
Tab. 5.14: Funding sources

Source	Amount
Grant (re-counted as per Gross Loan Grant Equivalent)	CZK 16 642 801
JESSICA preferential loan	CZK 4 520 000
Commercial loan	CZK 7 062 500
Bridge financing	CZK 11 000 000
Own resources required	CZK 0

5.6.6 Resulting financial indicators and project cash-flow

This project re-assessment consisted mostly in revising investment costs and operating revenues and costs and highlighting the revenue components of the project. A grant of 59 % of eligible costs, the JESSICA preferential loan amounting to 15% of investment costs and commercial loans were used for funding. The project is feasible from the financial point of view without requiring the investor's own resources.

Figure 5.2: PPP project "U Hrocha" sports centre



The next table recapitulates project cash flow in the individual years of the project evaluation (used parameters: discount rate 5,0 %; evaluation period 15 years; project start 2011).

Tab. 5.15: Project cash flow 2011-2018

Years	2011	2012	2013	2014	2015	2016	2017	2018
Investment (project budget)	8 250 000	10 000 000	10 000 000	0	0	0	0	0
Operating costs	0	0	0	3 200 000	3 200 000	3 200 000	4 200 000	4 200 000
Operating revenues	0	0	0	6 247 500	6 247 500	6 247 500	6 247 500	6 247 500
Grant total	0	4 860 287	5 891 257	5 891 257	0	0	0	0
Credits (income from loans)	9 520 000	6 000 000	7 062 500	0	0	0	0	0
Interests	383 028	713 028	1 101 466	618 882	574 344	445 250	313 999	262 981
Loans reimbursement	0	0	1 067 940	9 110 523	2 655 062	2 701 655	1 250 406	1 301 424
Financial Cash-flow (OP)	886 972	147 259	784 352	-790 648	-181 905	-99 405	483 095	483 095
Requirement of own financing	0	0	0	0	0	0	0	0
Discount rate	1,000	0,952	0,907	0,864	0,823	0,784	0,746	0,711
Discounted Financial Cash-flow	886 972	140 247	711 430	-682 992	-149 654	-77 887	360 493	343 326

Tab. 5.16: Project cash flow 2019-2025

Years	2019	2020	2021	2022	2023	2024	2025
Investment (project budget)	0	0	0	0	0	0	0
Operating costs	4 200 000	4 200 000	4 700 000	4 700 000	4 700 000	4 700 000	4 700 000
Operating revenues	6 247 500	6 247 500	6 247 500	6 247 500	6 247 500	6 247 500	6 247 500
Grant total	0	0	0	0	0	0	0
Credits (income from loans)	0	0	0	0	0	0	0
Interests	209 581	153 679	95 147	48 847	0	0	0
Loans reimbursement	1 354 824	1 410 727	841 819	888 120	0	0	0
Financial Cash-flow (OP)	483 095	483 095	610 534	610 534	1 547 500	1 547 500	1 547 500
Requirement of own financing	0	0	0	0	0	0	0
Discount rate	0,677	0,645	0,614	0,585	0,557	0,530	0,505
Discounted Financial Cash-flow	326 978	311 407	374 815	356 967	861 706	820 672	781 593

The below financial analysis indicators verified sufficient return for meeting the project financial return condition as well as the condition of a project being able to pay back a loan. Furthermore, the project operating cash flow enable the payment of the rent for the land use (after payback period of the provided loans).

Tab. 5.17: Resulting financial indicators

Net present value	CZK 5 366 072
Profitability index FNPVk/I	20,00 %
Internal profitability rate FIRR	not found*

** there are no own resources used for the project realization, the cash flow is positive during the investment phase*

6 SELECTION CRITERIA

This chapter speaks about the draft conditions which the projects applying for funding from the JESSICA funds should meet. The selection criteria will be applied on selected support areas and on model examples of potential projects in the next chapter.

To ensure basic characteristics of projects and their subsequent selection, a set of criteria has been proposed in order to maximise the objectives of key actors and ensure compliance with EU regulations and other relevant norms. The criteria are differentiated as "exclusion" and "evaluation" criteria. The exclusion criteria must be met in order for projects to be submitted for evaluation. The evaluation criteria are then applied for selection of projects from those meeting the defined exclusion criteria. Following an analysis of previous JESSICA studies and consultations with key actors, we propose the following criteria for the implementation of projects within the JESSICA instrument.

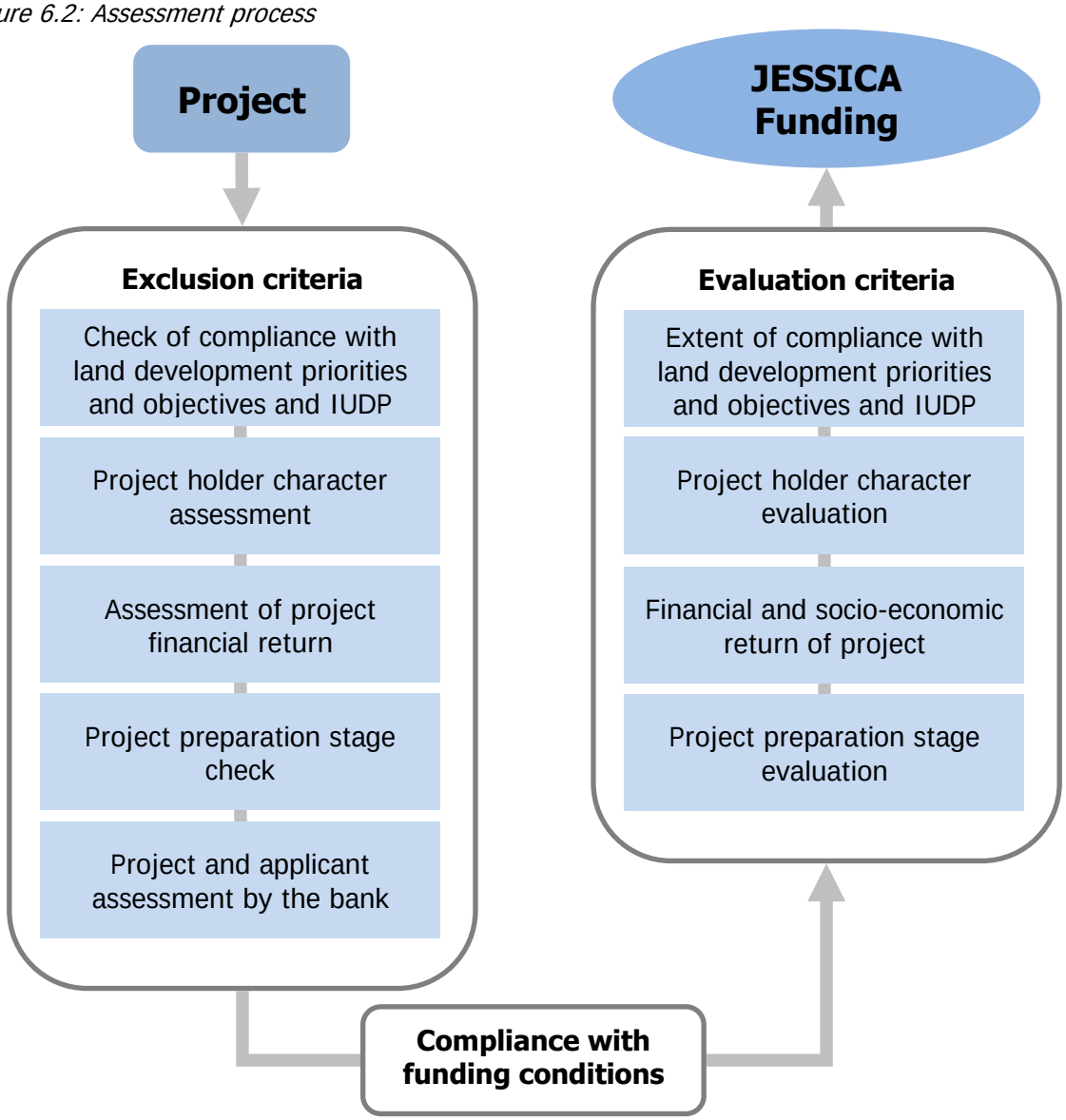
Figure 6.1: Criteria for project selection and evaluation

Compliance with land development objectives, with OP provisions and with IUDP	Necessity of ensuring compliance with the objectives of key actors and with relevant regulations and norms, including Operational Programme requirements. One of the vital conditions is project inclusion into IUDP to ensure its compliance with city development objectives.
Project holder character	A suitable character (legal form) of the project holder is vital for minimizing the risks related to the implementation of the project and for ensuring return on investment as well as sustainability of project results.
Financial and economic return on investment	The financial analysis results may be an important indicator of the ability of the project to generate revenue sufficient to ensure a return on invested resources. Similarly, socio-economic return on investment must be guaranteed.
Project preparation stage	Checking the project preparation state minimizes risks related to the possible allocation of resources to projects, the implementation of which is not sufficiently prepared for and ensured. Minimum requirements for project preparation must be defined.

Project and applicant assessment by the bank	This element in the project assessment process is exclusively an exclusion criterion. The project should undergo expert assessment concerning its ability to generate sufficient revenues for paying back the loan and concerning applicant-related risks.

The objective of the proposed criteria is to help set up the entire system in such a way that it can flexibly respond to regional needs and market options and reliably filter socially (in)appropriate projects, as well as enable the maximum possible transparency and simplicity in administrative procedures related to the JESSICA instrument implementation. Finally, permanent fund sustainability must be ensured, i.e. the ability of projects to pay back the funding provided.

Figure 6.2: Assessment process



6.1 Compliance with Land Development Priorities and Objectives and with IUDP

The inclusion of the project into an integrated plan of sustainable urban development is a necessary requirement for its implementation through the JESSICA instrument, as set out in Article 44 of Regulation 1083/2006. This prerequisite ensures that the project will respond to the current needs of the city and will comply with the strategy of the city.

The structural funds legislation for the programme period 2007-2013 does not include a definition and specific requirements regarding the "integrated sustainable urban development plan". This plan shall be defined by the member state and control bodies with respect to Article 8 of regulation (EC) No. 1080/2006 and the specific development, administrative and legal context of every region. (Guidance note on financial engineering, DG Regional Policy, 2007)

This fact means that existing "integrated urban development plans" (IUDPs), used for the planning of project for funding under measure 3.1 of ROP South-East, may be used in the JESSICA implementation process. In connection with the previous chapter, it must be noted that another IUDP will have to be created in Brno to enable drawing down of ROP resources (grants of repayable resources) beyond the framework of existing IUDPs and/or new projects will have to be added to the existing IUDPs. In order for the JESSICA instrument to be utilized within IUDPs, the relevant projects of the respective IUDP should meet the criteria defined in this chapter, especially that of a sufficient financial return. Should Brno create no additional IUDP for ROP South-East but rather decide to modify (extend) the existing IUDP I or IUDP II, the applicable procedures for IUDP modifications must be respected.

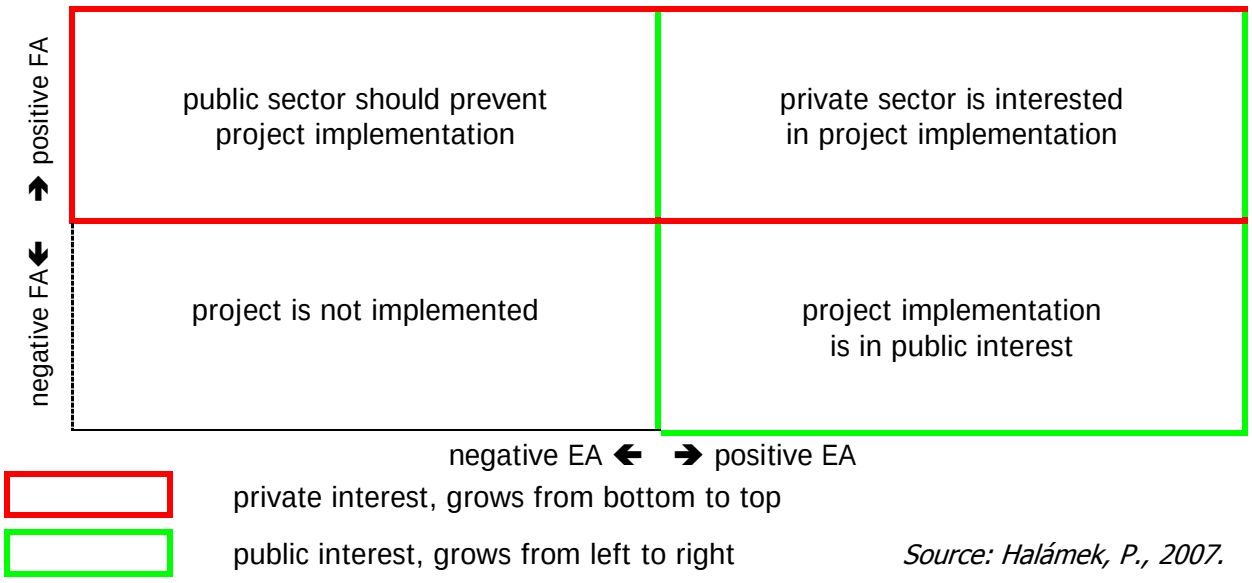
6.2 Financial and Socio-Economic Return

Cost-Benefit Analysis (CBA) has been selected as the tool for assessing the financial and socio-economic return on investment in projects. The choice was made in light of the need to verify the financial return of a project (financial analysis as a standard part of CBA), of the differing natures of the various projects (a wide range of supported areas can be expected) and also in light of the need for an ex-ante assessment of their potential impacts (socio-economic analysis). As bases for setting principal methodological parameters we have used publications of the European Commission, United Nations Industrial Development Organization (UNIDO) and the World Bank (Guide to Cost-Benefit Analysis of Investment Projects, DG Regional Policy, 2008; Belli, P., 2001; Boardmann, A.E. et al, 2001; Behrens, W., Hawranek, P. M., 2001; etc.).

The basic structure of a cost-benefit analysis consists of a financial and economic analysis, each performed in relation to an appropriate reference subject. The financial analysis is related directly to the project holder entity and records all cash flows that are related to the project execution and accrue to the holder. Financial analyses are usually prepared in the

private sector with the aim of evaluating the return or efficiency of resources invested into a project. The economic analysis extends the financial analysis results to the socio-economic impacts of a project, i.e. it assesses the overall implications of a project for the society. Positive financial analysis results (positive NPV, IRR > discount rate) indicate that the private sector might be interested in project implementation and no intervention by the public sector may be therefore needed. The public sector should only step in once a positive socio-economic impact is verified and when the private sector lacks interest in project execution (market failure). The cost-benefit analysis results may serve as a guideline for the decision whether a project should be implemented by the private or the public sector.

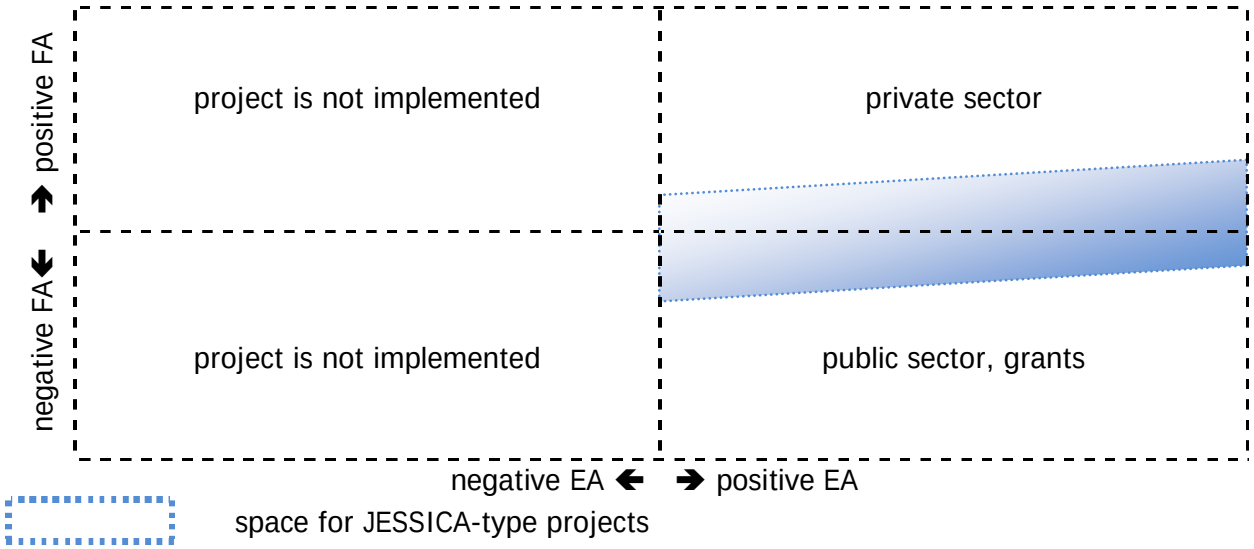
Figure 6.3: Financial and economic analysis in decision-making process



Source: Halámek, P., 2007.

Similarly, based on the financial and economic analysis results, the appropriateness of a project for funding by JESSICA can be verified. In order to ensure that the loan (with attractive conditions) taken is paid back, a vital prerequisite to verify the ability of the project to generate appropriate income. The upper limit of the financial analysis results is the reasonable profit line, which, if exceeded, indicates that the intervention of the public sector is undesirable. From the point of view of the socio-economic analysis results, positive results are always desired. Projects with negative impacts on society should not be implemented (with the well-known exception of existence of major non-quantifiable positive impacts). The space for JESSICA-type projects is represented graphically in the following figure.

Figure 6.4: JESSICA projects, FA and EA results



The financial analysis results should be applied exclusively as an exclusion criterion, defining the space for JESSICA-type projects both from bottom and from the top (project enables repayment of the investment but does not generate inadequate profit). The actual financial analysis calculation should be based on net cash flow, without considering the funding items, i.e. an efficiency evaluation of a project as an investment (financial return on investment). The evaluation of the financial return on capital by also reflecting possible soft loans can then be the indicator for determining the corresponding volume of the loan.[8] The economic analysis results serve first as an exclusion criterion (projects with a negative impact on society are not implemented) and then as a criterion for project comparison and selection.

Tab. 6.1: Results of FA and EA as the project selection criterion

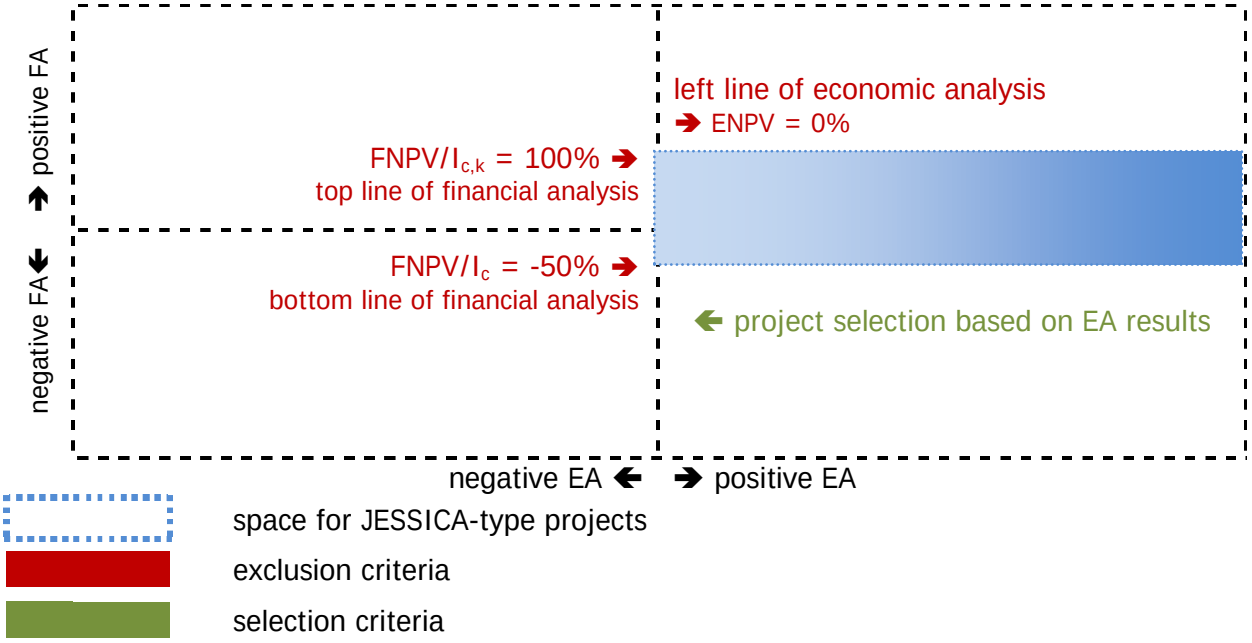
required value	comment
$FNPV/I_C > -50\%$	required minimum financial return value, loan repayment cannot be foreseen when below this line (the return of more than the half of the investment is not guaranteed)
$FNPV/I_C < 100\%$	maximum financial return line; when exceeded, the investment more than doubles
$FNPV/I_k < 100\%$	control value for determining the loan amount; the project must not exceed this line after taking into account public intervention and other funding items
$ENPV/I > 0\%$	all projects must establish positive economic analysis results, projects with negative results should be excluded as part of the acceptability check

[8] Cash flow construction follows the Guide to Cost-Benefit Analysis of Investment Projects, EC DG Regional Policy, 2008.

ENPV/I (x) > ENPV/I (y)	the economic analysis results may be used for comparing and selecting projects; the assessment must consider the quantification option (evaluation) of immaterial impacts in the respective area

The assessment uses profitability index values (NPV/I) mostly in view of the index's better telling value in comparison with the internal rate of return (IRR) and of the possibility to determine the profitability index for all projects (see traps of internal rate of return, etc.). The principal disadvantage of the NPV/I indicator is its dependence on the discount rate used. To ensure comparisons among projects, the same discount rate must be used. The proposed discount rate corresponds to European Commission recommendations and is 5.0% for the financial analysis and 5.5% for the economic analysis.[9]

Figure 6.5: JESSICA projects and results of FA and EA



The space for JESSICA projects identified in Figure 6.4 higher above reflects the social significance of projects, i.e. projects with major positive impacts are implemented directly through non-repayable capital funds. In a similar way, projects with low socio-economic return are left entirely to the private sector (upward-sloping curves define the bottom and top borders of results for JESSICA projects). While financial analysis results may be identified quite accurately based on market research and a quality marketing and operating plan, the socio-economic implications of a project are rather difficult to estimate and may be burdened by high subjectivity. For this reason, a rectangle, defined by the financial and economic analyses results as the evaluation criteria, is proposed for the practical definition of space for JESSICA-type projects (Fig. 6.5).

[9] EC DG Regional Policy, 2008

6.3 Project Preparation State

For project implementation using the JESSICA instrument, it is vital to not end the project preparation before JESSICA is implemented in the region. This prerequisite disables funding running projects.

The condition is established in this study for the purpose of achieving compliance of the state aid provided through JESSICA loans with the conditions set out in the general block exemption regulation (Commission Regulation 800/2008).[10] The condition is based on the general block exemption regulation 800/2008 (Article 8 and preliminary paragraphs 28 et seq.) and the rules for regional investment aid; it is related to the requirements for "necessity of aid" and "incentive effect" of aid. Aid schemes must contain express reference to both these requirements. If work on the project begins before the aid beneficiary has submitted an application for aid to the Member State concerned, conditions laid down in Article 8 are not fulfilled and the whole project cannot be eligible for regional aid under an aid scheme compatible with the internal market in the sense of Reg. 800/2008.

The project preparation state is an evaluation criterion where the project preparation phase can be assessed (investment project, feasibility study, CBA analysis, project documentation, etc.). For the assessment, we will take the following project preparation stages into account:

Idea:	Project can be consulted with UDF secretariat
Urban study:	Project can be consulted with UDF secretariat
Planning permit:	Negotiations on JESSICA funding can be opened
Building permit:	Project can be included into the selection and evaluation system
Running project:	Not subject to JESSICA funding
Completed project:	Not subject to JESSICA funding

6.4 Project Holder Character

For long-term sustainability of funding through JESSICA, it must be ensured that entities that receive soft loans will be able to pay back these resources entirely. What we see as substantial is a check of the history and financial health of applicants.

From the point of view of the legal form of the applicant, definitions of applicants may be taken over from ROP South-East. For the proposed legal forms, the suitability and possibility of funding through the JESSICA instrument will be reviewed. The legal forms of the applicant, as considered, include municipalities and subsidized organizations, the region and subsidized organizations thereof, non-governmental non-profit organizations and private legal entities (small, medium-sized and large businesses) and legal entities with participation

[10] In cases where JESSICA financing does not contain state aid this condition is not necessary.

of the municipality or region. Given the regional character of the instrument, neither the state nor state organizations are proposed as suitable applicants for funding.

6.5 Project and applicant assessment by the bank

The success and economic life of the JESSICA instrument depends first and foremost on the ability of selected projects to pay borrowed resources back into the fund. Therefore, we suggest that the project return and the applicant be verified by an independent bank entity. It can be expected that this role will be assumed by the bank engaged in the Urban Development Fund (see Implementation Structure below). This evaluation process feature has a positive impact on risk management. The project and applicant assessment criteria considered by the bank will have to be specified based on the urban development fund strategy and based on discussion between the Managing Authority and bank.

7 MODEL PROJECTS ASSESSMENT

The next subject of our project-side testing will be the assessment of a set of project concepts identified in the frame of demand analysis. The projects are classified into groups with similar characteristic features. Within each group one model project is tested in detail using the criteria elaborated in chapter 6 (except for the assessment by a bank).

7.1 Assessment Methodology

The objective of model project assessment is to check whether the project groups are suitable for the application of the JESSICA instrument (including a definition of priorities for a project call). The assessment of the respective projects therefore considers the following criteria for project selection:

- Check of project compliance with ROP SE and IUDP priorities
- Model financial and socio-economic analysis

Emphasis is placed on the ability of the project to generate sufficient income (revenue) and on the anticipated socio-economic impacts (a model cost-benefit analysis is undertaken). The character of the project holder and project preparation level can be considered purely individual features dependent on the specific plan. Therefore, the project holder character and project preparation assessments are not carried out for the model projects.

When checking project compliance, it is necessary to review whether the project is included in the existing IUDP structure and/or whether it complies with the Strategy for Brno. The project should also cover one of the topics identified in the Environment Analysis above, which in itself could serve as a background material for the definition of a call for projects in the framework of the UDF.

When dealing with model projects, a cost-benefit analysis is prepared using the eCBA[11] application that has been used successfully in the Czech Republic for the implementation of ROP South-East or OP Science and Research for Innovation. The basic parameters of the financial analysis model set are a 15-year evaluation period (n) and a financial discount rate[12] of 5.0% (r). The estimate of investment costs, spread evenly throughout the project implementation stage (usually two years), is used for data input. The operating cash flow estimate is based on the volume of anticipated income and on the volume of fixed and variable operating costs. The Financial Return on Capital analysis reflects only the possible preferential loan (no other funding or tax items are considered).

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11 The license for use of this application was provided by eCBA s.r.o. for the study preparation free of charge

12 Guide to CBA of investment projects, 2008, p. 57

The socio-economic analysis rests upon the estimate of anticipated impacts of the model projects. For the evaluation of these impacts, a set of 56 evaluated impacts is applied for regional development projects. These impacts were used for the implementation of ROP South-East, ROP Central Moravia and ROP Moravia-Silesia. The actual impact evaluation was elaborated by eCBA using a contingent evaluation technique (sociological research with 700 respondents carried out in December 2007 and 2008) and following expert (plug-in) techniques (statistics of Czech Statistical Office and selected ministries). A discount rate[13] of 5.5% is used for the economic analysis preparation and market prices are not rectified (recommended only for large projects).

For the individual model projects, a set of project efficiency evaluation indicators as an investment is set, as well as a set of capital return indicators to verify the ability of the project to pay back the loan taken. For a rough determination of the socio-economic potential of a project, standard economic analysis indicators are calculated. Selected indicators includes the net present value (NPV), profitability index (NPV/I), internal rate of return (IRR) and the static and dynamic payback period (d, payback period). Results required for the individual indicators are summarized in the following chart.

Tab. 7.1: Required results of financial and economic analysis

project efficiency as investment		**return on capital assessment**		**socio-economic return of project**	
$FNPV_c$	---	$FNPV_k$	---	ENPVc	> 0
$FNPV_c/I$	<-50%,100%>	$FNPV_k/I$	<-50%,100%>	ENPVc/I	> 0%
$FIRR_c$	<0%,2*r>	$FIRR_k$	<0%,2*r>	EIRRc	> r
d, static	---	d, static	d > (n/2)	d, static	< n
d, dynamic	---	d, dynamic	d > (n/2)	d, dynamic	< n

7.2 Model Projects Assessment

The following chapter describes model projects from four basic areas selected on the basis of the environment analysis and analysis of strategic documents of the city of Brno and the South Moravian Region. These areas include:

1. cultural centres,
2. sports centres,
3. traffic infrastructure,
4. social infrastructure.

[13] Guide to CBA of investment projects, 2008, p. 57

Specific examples verify the feasibility of the given project types in the framework of the JESSICA instrument. The projects will receive support in the form of a soft loan with the following parameters:[14]

- Loan covering 50% of investment costs;
- Maturity 10 years, 2 years grace period
- Interest rate 2.39% p.a. (set at the level of the base reference rate);
- The exchange rate is fixed throughout the loan period.

7.2.1 Cultural Centre

The first project tested is a Multi-Purpose Cultural Centre. The source data comes from the feasibility study and project documentation.

Name of project:	*Multi-purpose cultural centre*
Investor:	Private legal entity State aid rules must be applied
Brief description:	The project involves the construction of a multi-purpose centre consisting of four parts: a restaurant, hotel, mixed-use hall and underground parking. As a whole, the project offers comprehensive services, i.e. the possibility of using multi-purpose areas, residential premises, the possibility of eating in the restaurant and space for cultural events. The multi-purpose hall is specialized for music production and live music and may be used for theatre performances, conventions, etc. The project diversifies and develops all services in the location and creates a uniform tourism product. It substantially enhances some forms of tourism, focused primarily on culture, in the South Moravian Region.
Compliance with priorities:	In compliance with IUDP II, support area 2.A Construction and technical assessment of cultural education facilities of city-wide importance aimed at improvement of service quality
Investment volume:	CZK 306M (50% covered by JESSICA loan, i.r. 2.39% p.a.)
Operation:	The Feasibility Study shows the following cost and income estimate Operating costs: CZK 17M p.a. (staff, energies, material and services)

[14] The loan amount and maturity were determined on a model basis and can vary in practice depending on the specific project character

Operating revenues: CZK 55M p.a. (revenues from cultural performances, accommodation, catering)

Social impacts: The project has a positive impact on cultural and leisure infrastructure within the region. It also has the potential to attract domestic and foreign visitors. There is also a slight multiplication effect expected (not quantified for the analysis). The project will create about 30 new jobs.

Tab. 7.2: Results of financial and economic analysis

project efficiency as investment		**return on capital assessment**		**socio-economic return of project**	
$FNPV_c$	6 064 617	$FNPV_k$	19 215 167	ENPVc	99 431 597
$FNPV_c/I$	2,01%	$FNPV_k/I$	6,38%	ENPVc/I	33,07%
$FIRR_c$	5,31%	$FIRR_k$	6,42%	EIRRc	10,41%
d, static	11 let	d, static	11 let	d, static	9 let
d, dynamic	14 let	d, dynamic	14 let	d, dynamic	11 let

Assessment for JESSICA:

The project is fully suitable for JESSICA. Ability to repay the JESSICA loan has been verified. Indicators of the supported project lie in the reasonable profit range (return on capital, $FIRR_k$ 6.42%). The results of the socio-economic analysis confirm the positive impact of the project on regional development.

7.2.2 Sports Centre

As a model case of a sports centre, the project of a Sports and Regeneration Centre was selected. The source of data is the feasibility study.

Name of project: Sports and regeneration centre

Investor: Private legal entity
State aid rules must be applied

Brief description: The project foresees the construction of a complex of three pools (training pool, recreational pool and children's pool), a wellness section (saunas, whirlpools, massage), rehabilitation centre (including medical services), fitness centre and hotel with facilities.

Compliance with priorities: In compliance with IUDP II, support area 1.A Technical assessment and construction of sports facilities improving the quality of education and accessible to the general public.

Investment volume: CZK 260M (50% covered by JESSICA loan, i.r. 2.39% p.a.)

Operation: The Feasibility Study shows the following cost and income estimate
Operating costs: CZK 21M p.a. (staff, energies, material and services)
Operating revenues: CZK 51M p.a. (revenues from services connected to the sport/regeneration part, accommodation, catering)

Social impacts: The project has a positive impact on the sports infrastructure in the region. The project can be also expected to raise the visitor rate in the region. The project will create 31 new jobs.

Tab. 7.3: Results of financial and economic analysis

project efficiency as investment		**return on capital assessment**		**socio-economic return of project**	
$FNPV_c$	4 763 555	$FNPV_k$	15 722 346	ENPVc	78 944 598
$FNPV_c/I$	2.01%	$FNPV_k/I$	6.65%	ENPVc/I	33.69%
$FIRR_c$	5.35%	$FIRR_k$	6.89%	EIRRc	10.98%
d, static	12 years	d, static	13 years	d, static	10 years
d, dynamic	15 years	d, dynamic	14 years	d, dynamic	12 years

Assessment for JESSICA:

The project is fully suitable for JESSICA. Ability to repay the JESSICA loan has been verified. Indicators of the supported project lie in the reasonable profit range (return on capital, $FIRR_k$ 6.89%). The results of the socio-economic analysis confirm the positive impact of the project on regional development.

7.2.3 Traffic Infrastructure

For the traffic infrastructure area, the model project selected is the construction of a parking facility which matches entirely the needs of the city and can be expected to meet the evaluation criteria. The data was obtained from materials provided by Brno City Council, further revised for the needs of this Study.

Name of project:	Underground garages in Brno city centre
Investor:	PPP project State aid rules must be applied
Brief description:	Two-storey underground garages with 397 parking places. The parking house shall serve visitors to the Brno city centre and to adjacent cultural facilities. The garages are designed exclusively for passenger cars.
Compliance with priorities:	In compliance with IUDP I, support area 1.B Construction of parking structures.
Investment volume:	CZK 523M total investment (260M covered by JESSICA loan, i.r. 2.39% p.a.) The calculation assumes that part of the project will be designated for public spaces rehabilitation (reconstruction of statue, water features, staircase, landscaping) and funded by a grant of CZK 93 million.
Operation	The model calculates with the following operating revenues and costs: Operating costs: CZK 0.875M p.a. Cost breakdown into aggregated items: • Energy: 200 000 CZK/p.a. • Maintenance: 295 000 CZK/p.a. • Clean-up: 180 000 CZK/p.a. • Overheads: 200 000 CZK/p.a. Operating revenues: CZK 47.82M p.a. The revenue calculation rests upon the following assumptions: • Parking fee: CZK 30 for the first hour CZK 40 for each following hour • Average parking period: 3 hours • Average occupancy of one parking place: 9 hours per day
Social impacts:	The project has a highly positive impact on the traffic infrastructure in the area. Thanks to its location, the project addresses the lack of parking places in the city centre and dramatically shortens the time needed for parking one's vehicle. The project will create 3 new jobs.

Tab. 7.4: Results of financial and economic analysis

project efficiency as investment		return on capital assessment		socio-economic return of project	
$FNPV_c$	208 193	$FNPV_k$	19 057 315	ENPVc	229 505 273
$FNPV_c/I$	0.05%	$FNPV_k/I$	4.54%	ENPVc/I	54.80%
$FIRR_c$	5.01%	$FIRR_k$	6.03%	EIRRc	13.89%
d, static	12 years	d, static	12 years	d, static	8 years
d, dynamic	15 years	d, dynamic	15 years	d, dynamic	9 years

Assessment for JESSICA:

Project is fully suitable for JESSICA. Ability to repay the JESSICA loan has been verified. Indicators of supported project lie in the reasonable profit range (return on capital, $FIRR_k$ 6.03%). The results of the socio-economic analysis confirm the highly positive impact of the project on regional development.

7.2.4 Social Infrastructure

Finding a project in the social infrastructure area eligible for JESSICA funding is not easy, particularly due to the non-profit character of the projects. Given the high demand for social infrastructure services and the price influenced by high demand, though, some projects can be expected to meet the profitability criterion. A clear example is the following protected housing project. For the client, the cost of staying in this house is on average 50% higher, but we believe that the facility will be filled thanks to high demand.

Name of project: Protective housing

Investor: Private legal entity
State aid rules must be applied

Brief description: The project involves a vertical attic extension creating housing for physically handicapped persons. This is a form of supported housing giving the users a more natural way of living and an improvement in privacy. The project offers full-scale accommodation with sanitation and operating facilities (toilet, bathroom, kitchen, dining room, storage) and barrier-free access. Five rooms for two people and a total capacity of 10 users is foreseen.

Compliance with priorities: In compliance with IUDP II, support area 3.A Technical assessment and construction of infrastructure for social

services in accordance with the Community Social Services Plan for Brno.

Investment volume: CZK 8M (50% covered by JESSICA loan, i.r. 2.39% p.a.)

Operation: The Feasibility Study shows the following cost and income estimate
Operating costs: CZK 0.58M p.a. (staff, energies, material and services)
Operating revenues: CZK 1.4M p.a. (the revenues come from rental of reconstructed spaces; the rent for one bed including social services of medical staff and caretakers is CZK 11 666 per month)

Social impacts: The project has a positive impact on the social infrastructure in the region. In the area of protected housing and starting flats there is high demand against low supply. A clear benefit is the social inclusion of physically and mentally handicapped people into society.

Tab. 6.3: Results of financial and economic analysis

project efficiency as investment		**return on capital assessment**		**socio-economic return of project**	
$FNPV_c$	79 379	$FNPV_k$	430 060	ENPVc	6 981 858
$FNPV_c/I$	0.98%	$FNPV_k/I$	5.32%	ENPVc/I	86.33%
$FIRR_c$	5.15%	$FIRR_k$	6.21%	EIRRc	18.62%
d, static	11 years	d, static	12 years	d, static	6 years
d, dynamic	15 years	d, dynamic	14 years	d, dynamic	7 years

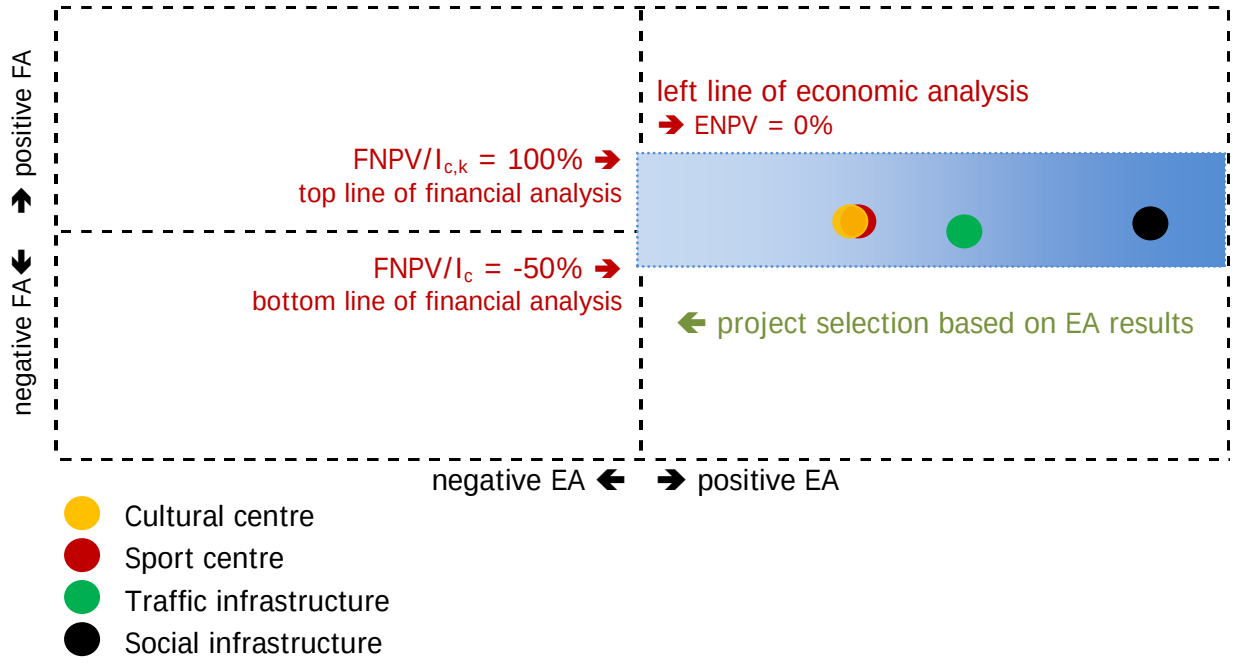
Assessment for JESSICA:

The project is fully suitable for JESSICA. Ability to repay the JESSICA loan has been verified. Indicators of supported project lie in the reasonable profit range (return on capital, $FIRR_k$ 6.21%). The results of the socio-economic analysis confirm the highly positive impact of the project on regional development.

7.3 Positioning

Next figure shows the positions of the four tested projects in the predefined frame for financial and economic analysis. All projects are located in the predefined frame. The social infrastructure project scores the best EA results, followed by the traffic infrastructure project. The last two places are occupied by the cultural centre and sports facility which show almost identical results.

Figure 7.1: Tested projects and results of FA and EA



From the financial and economic analysis point of view, all model projects can be recommended for support by the JESSICA instrument without reservation.

8 LEGAL IMPLEMENTATION PREREQUISITES

8.1 Issues of state aid

State aid is directly regulated by EU law. The legal basis of the state aid prohibition in primary EU law are articles 107 to 109 of the Treaty on the Functioning of the European Union (previously articles 87 to 89 of the Treaty establishing the European Community. Fundamental for the application of state aid rules is article 107 of the Treaty on the Functioning of the European Union (TFEU) which determines:

1. Save as otherwise provided in the Treaties, any aid granted by a Member State or through State resources in any form whatsoever which distorts or threatens to distort competition by favouring certain undertakings or the production of certain goods shall, in so far as it affects trade between Member States, be incompatible with the internal market.

2. The following shall be compatible with the internal market:
   a) aid having a social character, granted to individual consumers, provided that such aid is granted without discrimination related to the origin of the products concerned;
   b) aid to make good the damage caused by natural disasters or exceptional occurrences;
   c) aid granted to the economy of certain areas of the Federal Republic of Germany affected by the division of Germany, in so far as such aid is required in order to compensate for the economic disadvantages caused by that division.

3. The following may be considered to be compatible with the internal market:
   a) aid to promote the economic development of areas where the standard of living is abnormally low or where there is serious underemployment;
   b) aid to promote the execution of an important project of common European interest or to remedy a serious disturbance in the economy of a Member State;
   c) aid to facilitate the development of certain economic activities or of certain economic areas, where such aid does not adversely affect trading conditions to an extent contrary to the common interest;
   d) aid to promote culture and heritage conservation where such aid does not affect trading conditions and competition in the Union to an extent that is contrary to the common interest;
   e) such other categories of aid as may be specified by decision of the Council on a proposal from the Commission.

From the first paragraph we can identify four state aid features; in other words the paragraph determines what shall be always the character of state aid incompatible with the internal market. The subsequent paragraphs lay out exemptions from the state aid

prohibition that are applicable always (paragraph two) or to a specific extent following European Commission approval (paragraph three).

By way of introduction into the subsidies law, it must be also noted that the European Commission and European Court of Justice offer a very extensive interpretation of the word "aid", both in the case of entities giving aid (states, regional or local administration or self-administration bodies and other entities, particularly those being controlled directly and/or indirectly in a decisive manner by a state) and the aid subject as such (direct and indirect grants, exemption from fees, financial and natural allowances, provision of fulfilment under special conditions). Under these conditions, all advantages giving the beneficiary a certain economic advantage, given on a selective basis to certain undertakings and/or for certain products, may disrupt economic competition and have a negative impact on trade between member states, are generally regarded as state aid. These four prerequisites are cumulative and represent some kind of basic test of state aid.

Based on article 108 TFEU, the implementing regulation on state aid determined that all state aid and all plans of state aid provision must be reported to the Commission and the Commission must approve their implementation in advance. However, this principle cannot be applied to all state aid types without exception (e.g. so-called block exemptions). State aid is therefore regulated legally and practically on the European Union level and institutional supervision is also provided on the same level for the granting of aid in cases where exceptions stipulated in TFEU are fulfilled. This institutional supervision is provided by the European Commission.

State aid is without any doubt one of the few areas in which the member states have lost the maximum level of competence. They have transferred the authority in this area and the corresponding competence base to the European Union and simultaneously have lost a major part of their sovereignty concerning the power to decide on provision of state aid.

Article 107 par. 1 TFEU implies clearly that the form of state aid is fully irrelevant and that the essential factor is the source of aid, namely state (public) resources. Public resources may also include EU funding if used on the member state level. Under all circumstances, state aid must meet two cumulative prerequisites: existence of preference for an undertaking and funding of this preference from the state budget or from other public resources. If either of these prerequisites has not been met, this is no state aid in the sense of article 107 TFEU.

State measures resulting in financial or other aid to an undertaking and related improvement of the market position of such business, must be regarded as an economic advantage in the sense of article 107 par 1 TFEU as one of the conceptual features of state aid. According to the article quoted, we can speak about state aid only if it reflects a selective approach by the state towards a certain undertaking or sector. A selective approach means that the

advantage applies only to a certain enterprise or sector, while it does not cover any other business and any other sector. This way of state intervention creates undesirable imbalances on the relevant markets and leads to discrimination of other competitors.

As article 107 par. 1 TFEU shows, the state aid beneficiary must be a specific undertaking or economic sector. Even if state aid was directed at a particular sector, the specific beneficiaries would be, also in this case, undertakings. The term "undertaking" offers wide interpretation options in European Community law.

Based on the decision practice of the Commission and European Court of Justice, the definition of an "undertaking" includes any entity "performing economic activities". The term "undertaking" must be also understood not from the perspective of national law, but in the sense of article 107 TFEU. The definition of the applicant/beneficiary as an undertaking is not dependent on its legal status (whether such entity was established under public or private law) or economic nature (generates or does not generate profit). Essential for the beneficiary being regarded as an undertaking is the fact whether it performs economic activities, i.e. activities consisting in offering goods or services on a specific market (case 118/85, Commission vs. Italy [1987] Coll. of Decisions 2599, par. 7; case C-35/96 Commission vs. Italy [1998] Coll. of Decisions I-3851, CNSD, par. 36; case C-309/99, Wouters [2002] Coll. of Decisions I-1577, par. 46.). Undertakings are not only entities generating profit, but also ones acting on a specific market.

The definition of an undertaking involves the private and public sectors, but also profit and non-profit organizations. These may therefore be "undertakings" (state aid beneficiaries) provided they perform economic activities, e.g. interest groups or research centres. From the point of view of Community law, it is not essential that the affected non-profit organization does not perform economic activities directly, but only through an affiliated business company. The compatibility or incompatibility of aid with the internal market is given by the method in which aid can influence the trade exchange between member states and whether this may disrupt the economic competition on the internal market.

A negative effect on trade among member states is mostly given if the aid strengthens the position of a certain enterprise in respect of its competitors. This is also the case when liquidation or bankruptcy would have to be announced in the respective enterprise in the absence of aid. The thing is therefore not only the strengthening of the position of such undertaking on the market through state aid, but also the maintaining or mitigating of the loss of position of this undertaking on the market. State aid has no potential effect on competition and trade between Member States in cases where the respective domestic market on which the preferred undertaking operates has not yet been liberalised and competitors from other member states (or from the state itself) do not have free access to this market and where the preferred undertaking operates exclusively on this market. At first glance, there seems to be similar logic in the argument that trade between member states

cannot be influenced when the preferred enterprises operate merely on the territory of this member state where aid has been given and do not show any export activities. However, this argumentation does not hold, because e.g. the competing position of an undertaking (undertakings) is strengthened as a result of granted aid within trade on a domestic market, which, from the perspective of undertakings registered in other member states, makes exports to this market more difficult, i.e. trade may be influenced indirectly.

Compliance with state aid rules is achieved by a strict definition of permitted exemptions. Their existence is assumed in the very Treaty on the Functioning of the European Union. Besides the second paragraph of article 107 TFEU, the third paragraph of article 107 can be pointed out as well. This paragraph states those state aid types that may be regarded compatible with the Community internal market.

With regard to the existence of exceptions permitted by the EU law, it is useful to mention that article 107 designates the European Commission as the competent body for granting permissions on state aid. Through the Council Regulation No. 994/98 on the application of articles 92 and 93 (currently articles 107 and 108 TFEU) to certain categories of horizontal state aid, the European Commission was authorised to adopt, for the sake of simplification of the state aid granting and approving process, so-called block exemptions from prohibited state aid in the form of a regulation.

By approving a block exemption, the European Commission permits, under the presumption that the prerequisites set in the block exemption regulation are met, the provision of defined types (categories) of state aid. The current Commission Regulation (EC) 800/2008 declaring certain categories of aid compatible with the internal market in application of Articles 107 and 108 TFEU (General block exemption Regulation), governs the rules of block exemptions in different areas, e.g. regional aid, aid in favour of environmental protection, aid to small and medium-sized enterprises, etc.

Another category is so-called de minimis aid. This small-scale aid is not a permitted exemption from prohibited state aid, because in its size it does not match one of the state aid features – effect on trade between member states. A vital prerequisite for applying the de minimis institution is to ensure compliance with Commission Regulation (EC) 1998/2006. Therefore such aid is not regarded as state aid under Article 107 TFEU and may be granted without notification to the European Commission.

For de minimis aid on the territory of the Czech Republic a so-called De Minimis Aid Register was created in compliance with Act No. 215/2004 Coll. with effect as of 1 January 2010. Every aid provider and every aid beneficiary have the duty to register such aid in this register. In case of non-compliance with this duty, the body responsible for maintaining this registry – Office for the Protection of Competition may impose penalties of up to CZK 1 million for such breach.

State aid vs. JESSICA investment support

The cohesion policy initiative JESSICA is based on support of regional investment (sustainable city development). It is apparent that the state aid issue will have to be handled in respect of every individual project and in respect of the initiative as such.

Support from JESSICA will be granted in the form of preferential loans that will, in their effect, enable the realization of projects which the beneficiaries would implement sometime in the future or where the beneficiaries would hesitate with implementation due to the investment return period. Indirectly, a target area of the JESSICA instrument is defined, namely that the instrument should not be used for supporting projects where no return on investment can be ensured (due to a risk/certainty of failure to repay the loan) or projects where the return is so high that obtaining the loan under market conditions would be no problem (on one hand due to the loss of motivation effect and on the other hand due to the possible targeting of the programme to the loan market). This is why the above application of the JESSICA instrument is balanced in terms of fulfilling the motivation effect and having only minimum impact on the loan/credit market. A vital precondition for the implementation of this initiative in terms of state aid is to respect its objectives on the level of investments into projects.

As already said, aid should be granted in the form of preferential loans. It must be therefore assumed that the beneficiaries will be obliged to return the loans to the provider. This implies that eligible projects will have to generate net revenues/profit to be able to pay back the loan. It is very difficult to imagine projects generating net revenues/profit sufficient for paying back the loan within a reasonable period of time which are however free of any economic activities, i.e. do not offer of goods and services on the market. With a view to the project implementation place (statutory city territory), it can be deduced that the provision of any advantage (in the sense of state aid rules) from public resources for projects eligible for JESSICA would almost always constitute state aid.

To define "advantage" in the sense of state aid rules for aid in the form of preferential loans, the reference rate is key. This rate is the simplified representation of the average rate at which capital can be obtained in the respective member state under market conditions and which is used for setting the gross grant equivalent. (For instruments such as guarantees, loans and/or equity, the method determining the value of aid is through calculation of the amount corresponding to the subsidy).

Since 1 March, 2010 the base reference rate for the Czech Republic has been set by the European Commission at 2.39% p.a. To determine the resulting reference rate in line with the Communication from the Commission on the revision of the method for setting the reference and discount rates (2008/C 14/02), the margin representing risk (see the table below) and the base reference rate will be added up for every specific case (loan).

Based on the rating of the respective business and the guarantee offered, margins from the following table will be generally applied.

Chart 8.1: Basis points of loan margins

Rating category	Collateralisation		
	high	normal	low
Strong (AAA-A)	60	75	100
Good (BBB)	75	100	220
Satisfactory (BB)	100	220	400
Weak (B)	220	400	650
Bad/Financial difficulties (CCC and below)	400	650	1000[15]

This means that loans granted to beneficiaries/undertakings (regardless of their legal form of doing business) with an interest corresponding to (or higher than) the resulting reference rate do not represent any advantage and the features of state aid are therefore not fulfilled. In case of an intention to grant loans with a lower interest rate than the resulting reference rate, such loans would involve aid which might be granted e.g. in line with Commission regulation (EC) 1998/2006 on de minimis or Commission regulation (EC) No. 800/2008 on general block exemption where the amount of aid granted would correspond to the level of advantage (and would be calculated as the difference between the reference rate and the preferential loan rate, multiplied by the unpaid loan principal in time). For JESSICA implementation in the South-East region, this Study works with this very scenario (compliance of this aid and the de minimis or general block exemption regulation), i.e. it is assumed that where the beneficiary is an undertaking, the aid granted must be always compatible under either of the regulations mentioned.

When deciding which of these regulations should be applied for providing preferential loans, it must be taken into account that the aid granted on the de minimis basis would have to be recorded in the National Aid Register (in compliance with Act. No. 215/2004 Coll. as amended) and the undertaking's "free limit" of de minimis aid would need to be checked before granting a preferential loan. The advantage of de minimis application is its simplicity. The disadvantage is that certain entities might have their limit reduced due to earlier drawing of aid to the extent that they would be excluded from any further provision of this aid (min. for the next 2-3 years).

Alternatively, the Commission regulation (EC) 800/2008, general block exemption, might be applied. Here, however, contrary to the previously discussed Commission regulation on de minimis, the loan would have to be reported by the loan provider (Fund) to the European

[15] Subject to the application of the specific provisions for rescue and restructuring aid, as currently laid down in the Community guidelines on State aid for rescuing and restructuring firms in difficulty (OJ C 244, 1.10.2004, p. 2) and in particular point 25(a), which refers to "a rate at least comparable with the rates observed for loans to healthy companies, and in particular at the reference rates adopted by the Commission". Hence, for rescue aid cases, the 1-year IBOR increased with at least 100 basis points shall be applied.

Commission. The advantage is simpler subsequent administration and the disadvantage the fact that min. 25 % of costs in supported projects could not be covered by the above loan from the Urban Development Fund or other resources containing state aid (see art 13 par. 6 of Commission regulation (EC) 800/2008).

For projects combining grants with preferential loans a limit for using the investor's own resources would have to be applied as well. Granting funding from ROP SE on the NUTS 2 South-East territory where also the Brno territory belongs would, according to the rules for regional investment support (section 1 of Commission regulation (EC) No. 800/2008), oblige the investor to meet the 25% limit also in cases where loans would be granted under the de minimis rule. For this reason, it is recommended to apply the general block exemption, not the de minimis rule for preferential loans.

The loan issue is accompanied by the question of how to secure the loan. If the provider required the loan be secured e.g. by a guarantee, it is probable that if any of the market instruments was used (e.g. bank guarantee), the beneficiary would incur increased costs with obtaining the loan and the JESSICA application might be under threat. If any form of special guarantee (e.g. provided by the Czech-Moravian Guarantee and Development Bank within operational and national programmes) is used, the direct effect from the aid provided would be reduced.

To ensure the widest possible range of supported projects, it is desirable to enable the application of preferential loans for projects for which, besides the loan, also grants from ROP are provided and for projects for which no grant is foreseen. Both options have their pros and cons. If combined, the advantages would be a shortened return period and smaller risk for the creditor (Urban Development Fund), but for projects of this type the involvement of more public resources must be foreseen, which is not the case with projects without any grants. If only preferential loans are applied, multiple projects or bigger projects may be supported with the same volume of public resources, but the grant-free option is not always compatible with the economic acceptability of a project with regard to the recommended return-on-investment period of 10-12 years. This is why decision-making on the involvement of grants for projects should be left for the financial analysis/financial project assessment.

Conclusion and recommendations in terms of state aid

In light of the above assumptions, the recommended way for granting preferential loans is to follow Commission regulation (EC) No. 800/2008. The beneficiary must however provide min. 25% of project funding that does not contain any state aid. Fit for JESSICA are both projects with parallel support from a grant and projects that do not need any grant for implementation. The involvement of a grant and setting the amount granted should follow the financial assessment of the project. Projects with a maximum possible grant and a preferential loan that exceed the maximum return-on-investment period acceptable for the respective Urban Development Fund are not acceptable for JESSICA.

In case of following the above approach, a notice on the provision of aid under Commission regulation (EC) No. 800/2008 should be sent before the commencement of JESSICA implementation (the notice has no delaying effect in terms of JESSICA implementation).

8.2 Public procurement issues

As stated in the section devoted to state aid, the market protection tools include rules for public procurements stemming from directives adopted by the EU in spring 2004 – directive 2004/17/EC (for sector investors) and 2004/18/EC (for sector investors) and are regulated on the national level by law No. 137/2006 Coll. on public procurements (hereafter only "POL") which regulates separately the placing of public procurements and separately the proposal competition, and also the supervision over compliance with the law, conditions of keeping and functions of the list of qualified suppliers in the system of certified suppliers.

The actual existence of the law as of the obligatory standard on the territory of the Czech Republic ensures compliance with the transparency, openness and non-discrimination principles in all relationships between investors and suppliers subject to the law. Any provision of public resources always goes hand in hand with the condition of compliance with this law applying to public, sector and subsidised investors.

Put simply, a public contracting entity is the Czech Republic, a state allowance organization, a regional self-administration unit or an allowance organization in which the establisher function is performed by the regional self-administration unit or another legal entity if (i) it was founded or established for the purpose of satisfying public interests with no industrial or business character and (ii) it is funded predominantly by the state or another public investor or is controlled by the state or another public investor or the state or another public investor appoints or votes more than the half of its members in the statutory, administration, supervisory or control body.

A subsidised contracting entity is a legal or natural person organizing a procurement funded by more than 50 % from financial resources provided by a public investor, also through another person, if this is a public procurement for building work exceeding approx. CZK 125.5 million.

Sector contracting entities are persons performing any of the relevant activities in the area of gas engineering, heat engineering, electric power engineering, water management, running transportation networks providing a service to the public in the area of railway, tram, trolleybus and/or ropeway transportation or running public bus transportation, etc.

This means that POL does not affect all groups of entities that may apply for a loan from JESSICA. These are mostly non-public institutions (joint stock companies, limited companies,

etc.) which are obliged to comply with the principles of transparency, openness and non-discrimination only for the reason of receiving the grant. Since the provision of resources from ROP SE into the UDF is assumed to require also compliance with ROP SE, it will be provided that that all entities receiving funding from the UDF must comply to the transparency, openness and non-discrimination principles regardless of the legal form of the applicant or of whether the applicant was established under public or private law. This will be ensured through the "Binding procedures for placing public procurements co-funded from EU resources, not subject to application of Act. No. 137/2006 Coll. on public procurements, in the 2007 – 2013 programme period" approved by government decision No. 48 of 12 April 2009 and implemented under ROP SE.

Also the Urban Development Fund itself, subject to POL terms and conditions, will have to ensure compliance with these principles. This is why the Fund will have to select procedures in accordance with POL for enquiries for supplies, services and building work.

Realistically, we can expect that specific procurements on provision of banking services, administration of financial resources, legal services, preparation of expert opinions, etc. will be undertaken in line with the POL. Should an involvement of any bank into the "ownership structure" within consortiums of legal entities be foreseen, then the POL procedures would apply to such acquisition to the same extent to which this would be a "hidden procurement". If the bank participation in the Fund was only e.g. for the prestige, without any financial compensation, POL would not be applied. Option II, as proposed, counts with the UDF as a fund subject to bank management and requires the POL procedure to be applied. The implementation schedule counts with transparent, open and non-discriminatory execution of this procurement.

Depending on the implementation variant selected, a tender e.g. for Secretariat services may be considered. If the Secretariat services are provided by the staff of one of the founding members (e.g. staff of the Office of the Managing Authority), no tender needs to be announced and a "Contract on Provision of Staff", not subject to POL regime, can be concluded directly between the fund Administrator and Regional Council. The same applies to all labour-law relations and/or selection of employees; these must be hired by an open competition, on a transparent and non-discriminatory basis, but the procedure is regulated by the labour code.

Conclusions and recommendations for public procurements

The prerequisite for compliance with the transparency, openness and non-discrimination principles is preparation of conditions for commissioning public procurements for entities not subject to POL. As it was already the aid provider (Regional Council South-East) who was

obliged to deal with this situation, it is recommended to take over, to the full extent, the principles and procedures applied by this provider.[16]

The POL application will be required by the fund/administrator always when third party supplies and services will be requested. This group will include mostly the selection of the bank for financial resources administration (in case of Option I the legal form of the fund), legal services, preparation of expert opinions, etc. If Option II is selected (UDF as a separate financial block under bank management), a transparent selection of a bank under POL must be done by the Regional Council.

POL rules do not apply to the selection of staff employed based on a work contract.

[16] Binding procedures for placing public procurements co-funded from EU resources, not subject to application of Act. No. 137/2006 Coll. on public procurements, in the 2007 – 2013 programme period.

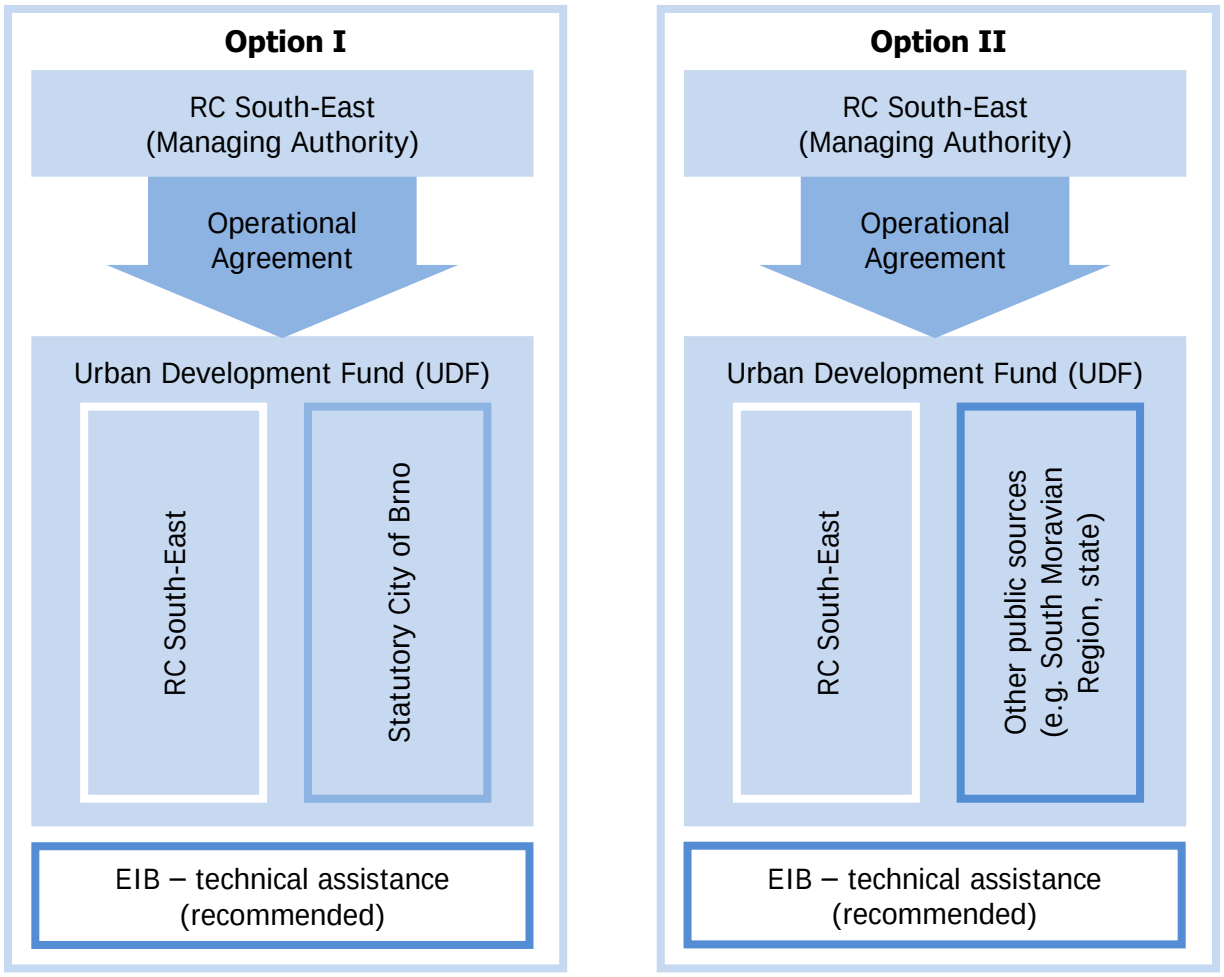
9 IMPLEMENTATION OF JESSICA INSTRUMENT IN SOUTH-EAST REGION

The proposed implementation structure is based on the analysis of JESSICA implementation studies elaborated in Poland and in the Czech Republic and on a separate legal analysis, reflecting the characteristics of the South-East Cohesion Region.

For setting up an Urban Development Fund and for releasing resources from the ROP, the key issue is to provide 7.5% of the fund resources as a necessary addition to the 85% of resources provided from the ERDF and the 7.5% covered by the state budget (i.e. 92.5% of resources provided through RC SE). This is why it is vital for another public entity to participate in the fund besides RC SE.

The Study presents two implementation options resting upon the standpoints of the key participants.

Fig. 9.1: Options for the structure of the JESSICA instrument in the South-East Region



Option I counts on 7.5% capital participation of Brno in the fund. The focus of the Urban Development Fund, as being prepared in the South-East region, is only on the territory of the city of Brno and on projects included in IUDPs of the city. The participation of the Statutory City of Brno therefore appears logical. The Urban Development Fund is created here as an independent legal entity.

Another solution is Option II where another entity with public resources at its disposal provides the 7.5% capital instead of the Statutory City of Brno. This option deals with the Urban Development Fund as a separate financial block managed by a bank.

Both options will be refined and detailed in the sub-chapters below.

Other possible participants

In practice there are lots of other options how the Urban Development Fund could be expanded. Banks and various private entities could qualify as possible additional contributors. It is, however, difficult to give exact figures on their potential contribution in the absence of a history of the Urban Development Fund. Provision of private capital can be expected mostly on the project level. A direct contribution from any of the thematic operational programmes appears to be theoretically possible, but the implementation structure would be inevitably more complex and it would have to be ensured that resources provided from the respective thematic operational programme are invested into projects fulfilling the conditions of this programme and that resources from various operational programmes are clearly identifiable in terms of accounting.

Implementation structure

The principal determinant in shaping an implementation structure for the South-East region is the fact that there is currently no economic potential here for the emergence of more than one Urban Development Fond (UDF) that is focused exclusively on the city of Brno. Other important cities in the region lack the required financial resources they could invest into a common fund.

For this reason, we do not see the emergence of a holding fund (HF) as necessary. Non-negligible savings can be achieved by establishing one UDF without a HF.

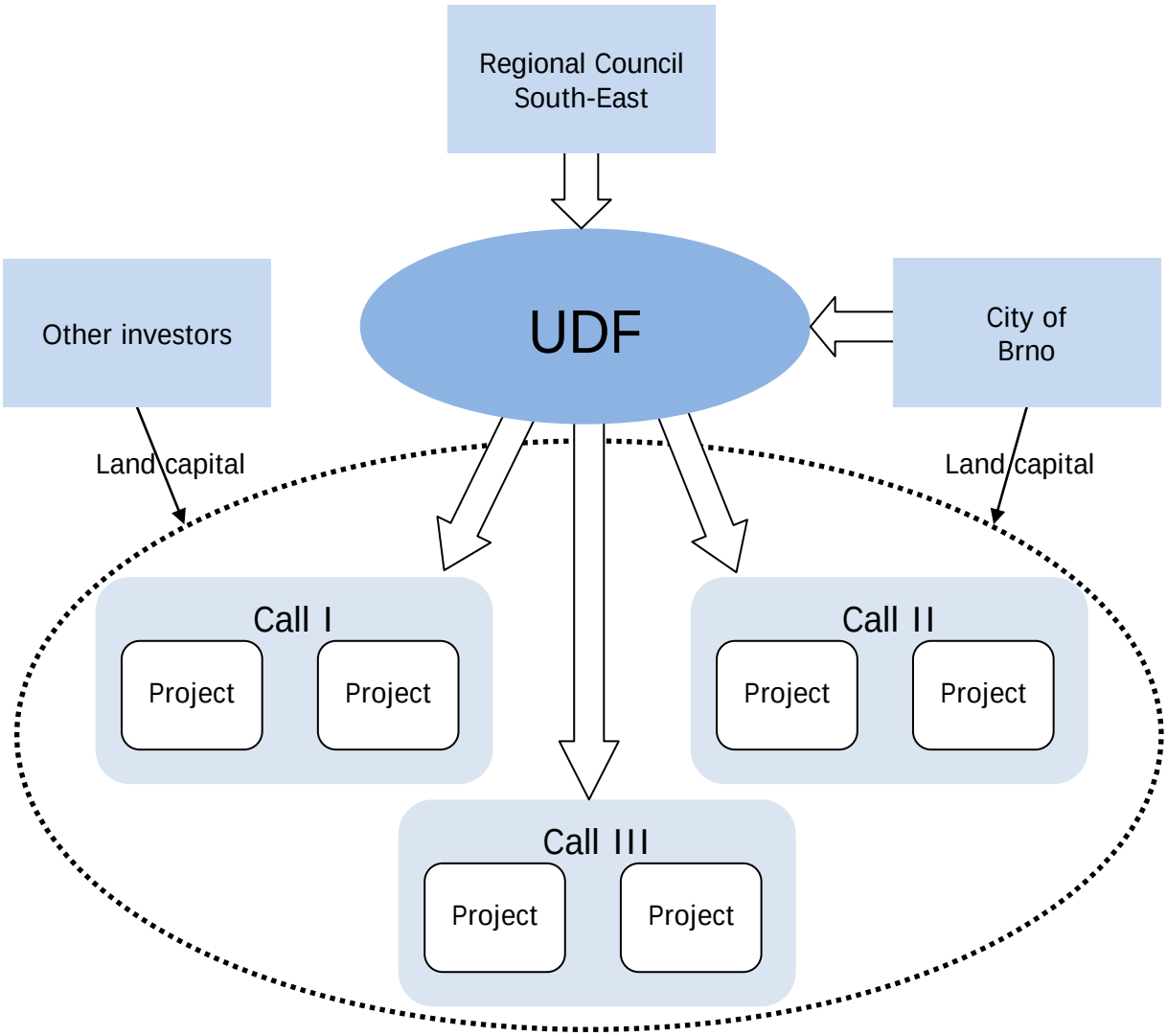
9.1 Option I: Urban Development Fund as an independent legal entity

As already said, Option I deals with the Urban Development Fund as a separate legal entity where the Statutory City of Brno and Regional Council South-East hold stakes. The city of Brno might have capacity in its budget mostly thanks to the existence of the Fund for Co-

funding of European Projects (FKEP) that it might be able to partly relocate to the UDF (along with certain projects).

The implementation structure of the JESSICA instrument in the South-East Region is described in the scheme below.

Fig. 9.2: Scheme of the implementation structure for Option I



9.1.1 Legal status of the fund

"Financial engineering instruments, including holding funds, shall be set up as independent legal entities governed by agreements between the co-financing partners or shareholders or as a separate block of finance within a financial institution." (Commission regulation (EC) No. 1828/2006, article 43)

In case of implementation Option I, we suggest the emerging fund to be established as an association of legal entities, i.e. as a new legal entity. The legal form was selected firstly due to economic efficiency and lower administrative burden. In the South Moravian Region this is used e.g. by the South Moravian Innovation Centre whose members include among others the Statutory city of Brno and the South Moravian Region.

An alternative legal entity may be any business firm, i.e. limited liability company ("společnost s ručením omezeným"), joint stock company ("akciová společnost") or cooperative ("družstvo"). All these legal forms assume registered capital from min. CZK 50,000 in the case of a cooperative to min. CZK 200,000 for limited liability companies and CZK 2-20 million for joint stock companies.

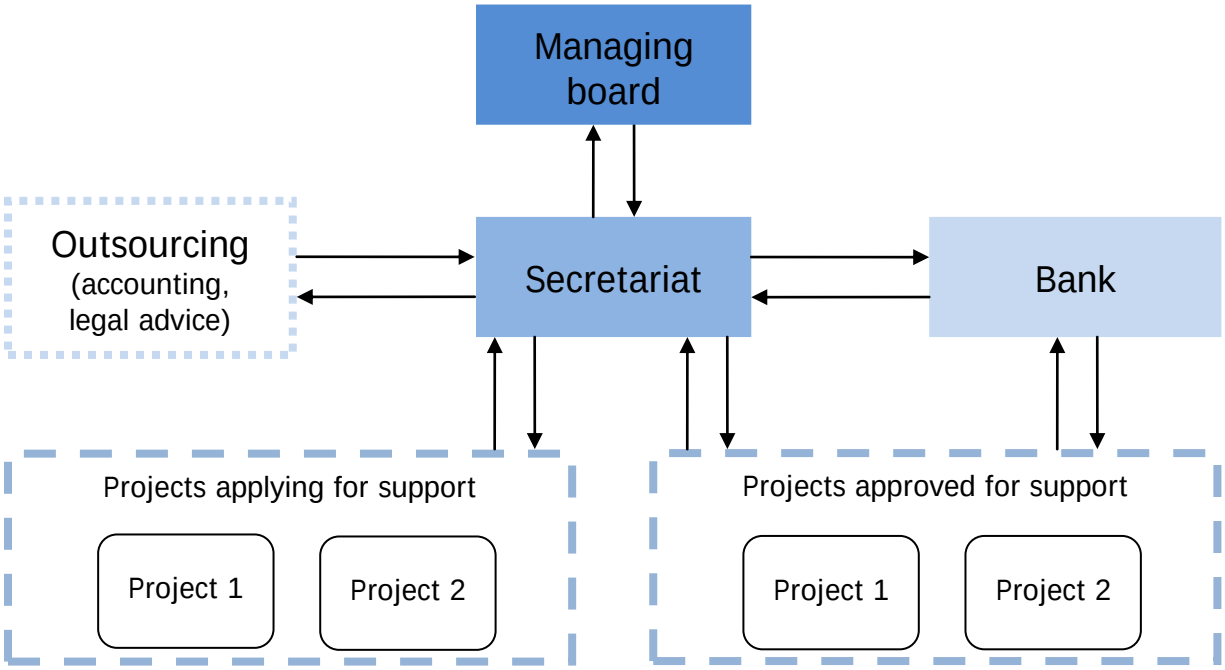
Along with registered capital, also the establishment of sub-bodies such as the supervisory board, board of directors and control commission is needed, which goes hand in hand with a relatively large agenda, not needed for the legal form proposed (association of legal entities). Of the same importance is the positive experience with this proposed legal form of the Statutory City of Brno and South Moravian Region.

9.1.2 Organizational structure of fund based on Option I

The organizational structure in this Study presents only one possible option of how the fund might work. The specific structure, determination of decision-making structure and weight of fund member votes will be set at the opening negotiations of the fund and reflected in the Operational Agreement made between the Fund and the Managing Authority.

The organizational structure of the fund is divided into three levels: managing level (Managing Board), executive level (Secretariat) and banking level (Bank).

Fig. 9.3: Organizational scheme of fund and information flows for Option I



The highest body of the UDF is the Managing Board consisting of representatives of institutions that have invested resources into the fund and/or invited independent experts. The Managing Board decides on loan allocation to specific projects. The weight of member votes will be governed by establishing documents.

Fig. 9.4: Function of Managing Board

Managing Board	Control body 5 members Structure: 2 members of Statutory City of Brno, 2 members of Regional Council South-East, 1 member – independent expert (urban planner/financial expert) Adoption of strategies and methodologies Approval of calls Final decision on grant allocation to projects

The executive unit is called the Secretariat. The Secretariat covers all activities of the fund related to development of strategies, announcements and processing of calls and preparation of input materials for decision-making by the Managing Board. Human resources for this unit are recommended from RC South-East's own resources under a Contract of Provision of Staff concluded between the Fund and RC South-East.

Fig. 9.5: Secretariat function

Secretariat	Executive body Managed by fund manager (overall fund management) Preparation of strategies and setting of priorities Call management and project assessment Consultancy to applicants Risk management Legal services Fund administration (IT, offices etc.) Internal audit Required workforce: 2–3 employees

The last element in the organizational structure is the banking institution, providing administration related to loans and guarantees. The bank is important in the project assessment process where it evaluates the project in terms of financial return, which substantially eliminates loan-related risks. A public tender must be announced for the bank selection.

Fig. 9.6: Bank function

Bank	Treasury management Project assessment in terms of return Preparation and negotiations of investment agreements for projects Examination of financial health of applicant Legal guarantee for loans Guarantee management Project monitoring (reporting to Managing Board)

9.1.3 Implementation action plan

The implementation process for Option I can be divided into the following steps (some of which could be performed in parallel):

1. The Regional Council SE will have to approve the relocation of a financial allocation for use within the JESSICA instrument through the Committee of the Regional Council (under §16 and subs. Act No. 248/2000 Coll. on regional development);

2. If a decision is made not to involve any holding fund into the JESSICA implementation structure, it can be recommended that EIB provides technical

assistance at least until first project calls are announced and assessed, which ensures a sufficient transfer of know-how;

3. Following the negotiations, an agreement will be reached between the Regional Council South-East and the Statutory City of Brno on the joint JESSICA initiative;

4. After that, articles of association of the future Urban Development Fund will be prepared and approved in collaboration with both establishers and it will be agreed who will be authorised to perform acts (in compliance with the civil code) related to the establishment of the Association of Legal Entities ;

5. In parallel with negotiating the articles of association, the Operational Agreement will be prepared and negotiated by the Managing Authority and the Urban Development Fund founders. This agreement must contain the required elements described in art. 43(3) of Commission regulation (EC) No. 1828/2006 (as amended by Commission regulation (EC) No. 846/2009) and a Business Plan of the fund, including investment strategy, must be an integral part of this agreement;

6. The Regional Council SE will have to approve the establishment of a new legal entity through the Committee of the Regional Council (under §16 and subs. Act No. 248/2000 Coll. on regional development);

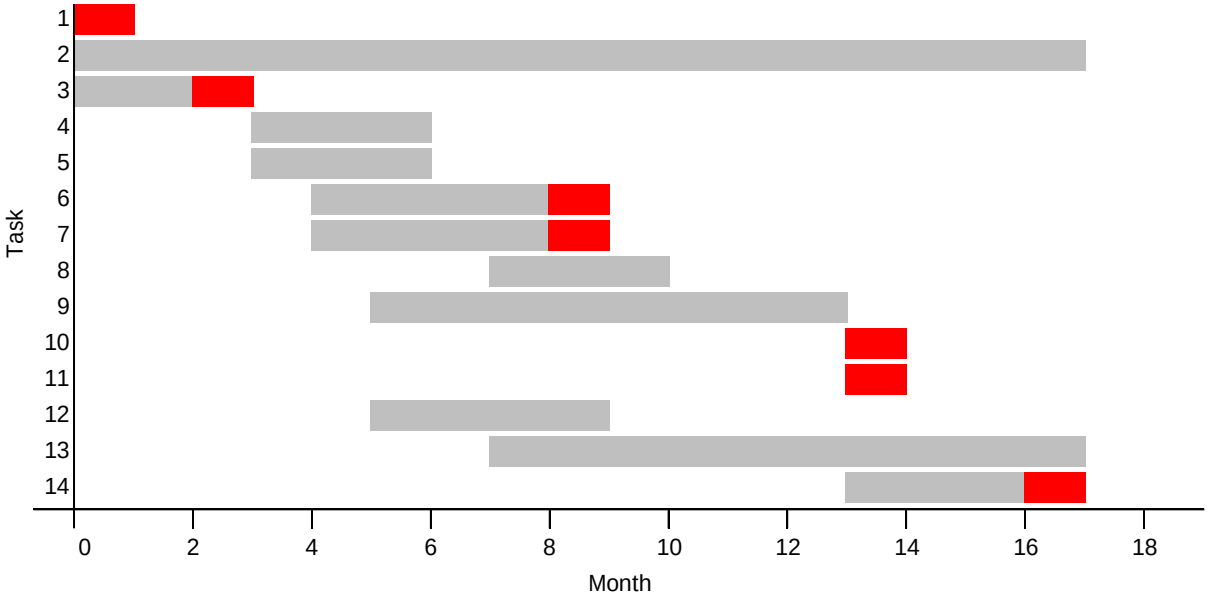
7. The city will have to approve the establishment of a new legal entity through its representatives (see § 84 par. 2 letter e) of law on municipalities) where the representatives must also approve in their resolution the deposit of assets into the Fund;

8. Then a Head of Secretariat will be appointed for the fund following a tender. This head will be in charge of Secretariat management and will be responsible for the preparation of documents for the Managing Board consisting, as we suggest, of representatives of establishers/donors and will be also responsible for communication with the bank. Resources from the Fund would be sent to the account established by this Head of Secretariat;

9. The preparatory team of the fund prepares the terms of reference for the bank which is to be entrusted with some of the tasks of the fund – inter alia accounts administration, examination of loan applicants, check of projects and preparation of loan contracts. The tender for the bank will be launched shortly after the fund has been established;

10. Transfer of financial resources to the bank;

Fig. 9.7: Approximate time needed for implementation



11. The Regional Council South-East will prepare application documents for the European Commission for an interim payment from ERDF (payment of 85% of resources invested into the Urban Development Fund);

12. The Secretariat will prepare the terms and conditions for project selection;

13. Start of marketing support and consultations with potential applicants by the Secretariat;

14. Announcement of calls, acceptance and evaluation of applications by the Secretariat. Assessment by the bank of the projects' ability to repay investment. Approval of supported projects by the Managing Board.

9.2 Option II. - Urban Development Fund as a separate block of finance within a bank

The second implementation option for the UDF is based on the assumption that the fund will operate as a special sub-account of a financial institution (bank) in line with art. 43 and 44 of Commission regulation (EC) 1828/2006 and art. 44 of Commission regulation (EC) 1083/2006. A tender will have to be announced for the bank under POL. The bank will manage the fund's operation on a comprehensive basis and will be remunerated for these services from resources allocated for fund administration (under art. 43(4) of Commission regulation (EC) 1828/2006).

This option does not assume any a priori capital participation of Brno in the Fund (although it does not exclude such participation) and counts on Brno mainly as a submitter of projects. The key feature in the implementation process of this option is the provision of 7.5% of the fund resources from another entity with public resources at its disposal. Besides the Statutory City of Brno, possible contributors may be e.g. the South Moravian Region and the Czech Republic. This option would certainly require political negotiations at the corresponding level.

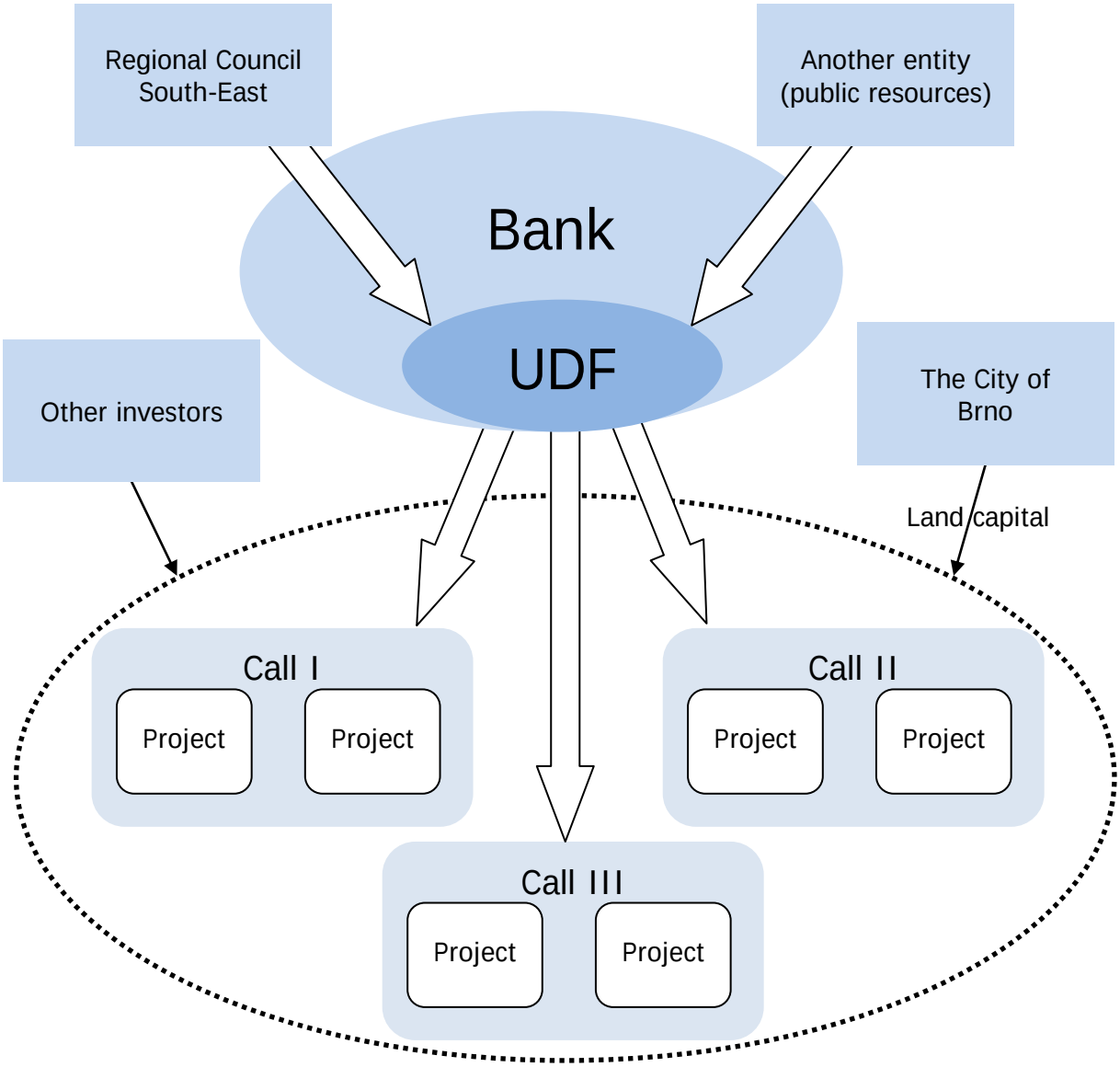
9.2.1 Legal status of fund

Financial engineering instruments, including holding funds, shall be set up as independent legal entities governed by agreements between the co-financing partners or shareholders or as a separate block of finance within a financial institution.

Where the financial engineering instrument is established within a financial institution, it shall be set up as a separate block of finance, subject to specific implementation rules within the financial institution, stipulating, in particular, that separate accounts are kept which distinguish the new resources invested in the financial engineering instrument, including those contributed by the operational programme (Commission regulation (EC) No. 1828/2006, article 43)

In case of Option II, the Fund is established within a financial institution.

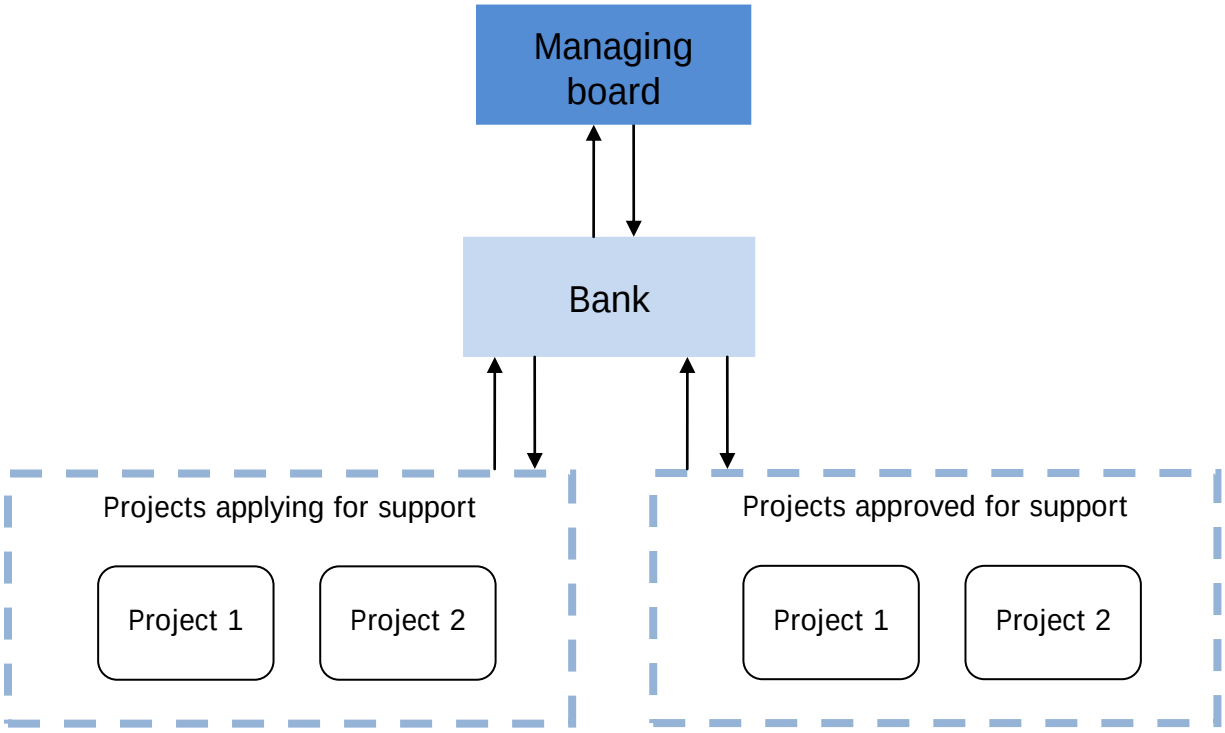
Fig. 9.8: Scheme of the implementation structure for Option II



9.2.2 Organizational structure of fund

Unlike the previous option, the organizational structure of Option II is narrowed as it lacks the Secretariat whose activities are fully taken over by the bank. The scope of activities, fund establishment costs and the terms and conditions of its operation will be specified more closely in the Operational Agreement between the bank and the Regional Council South-East as the Managing Authority.

Fig 9.9: Organizational scheme of fund and information flows for Option II



The Managing Board of the Fund is its highest body. The relationship between this board and the bank will be governed by the Operational Agreement. In Option II the board is proposed with five members, two of which are appointed by the Regional Council South-East, two by another contributor and one by the bank.

Fig. 9.10: Managing Board function, Option II

Managing board	• Control body • 5 members • Structure: 2 members of Regional Council South-East, one appointed as chairman 2 members of another participating entity 1 member of the bank • Adoption of strategies and methodologies • Approval of calls • Final decision on grant allocation to projects

In Option II the bank provides all executive tasks of the fund, from preparation of strategies to receipt of applications and evaluation to project monitoring. It has been checked in practise that banks are highly interested in participating in fund administration, providing its operation and that they also have sufficient capacity and experience to play this role.

Fundamental in this option is the Operational Agreement and related Business Plan prepared by the Fund. This means that technical assistance by the European Investment Bank can be strongly recommended, as EIB will help ensure that the fund system and the relationships and responsibilities are set in the right way.

Fig. 9.11: Bank function, Option II

Bank	• Executive body – comprehensive provision of fund activities • Preparation of strategies and priorities • Call management and comprehensive project evaluation • Consultancy to applicants • Risk management • Legal services • Internal audit • Treasury management • Preparation and negotiations of investment agreements for projects • Examination of financial health of applicant • Legal solutions for loans • Guarantee management • Project monitoring (reporting to Managing Board)

9.2.3 Implementation action plan

The implementation process can be divided into the following steps:

1. Search and selection of a possible contributor into the Fund for execution of Option II, i.e. the 7.5% share from public resources; failure to provide this share means the end for the implementation of this Option;

2. The Regional Council SE will have to approve the relocation of a financial allocation for use within the JESSICA instrument through the Committee of the Regional Council (under §16 and subs. Act No. 248/2000 Coll. on regional development);

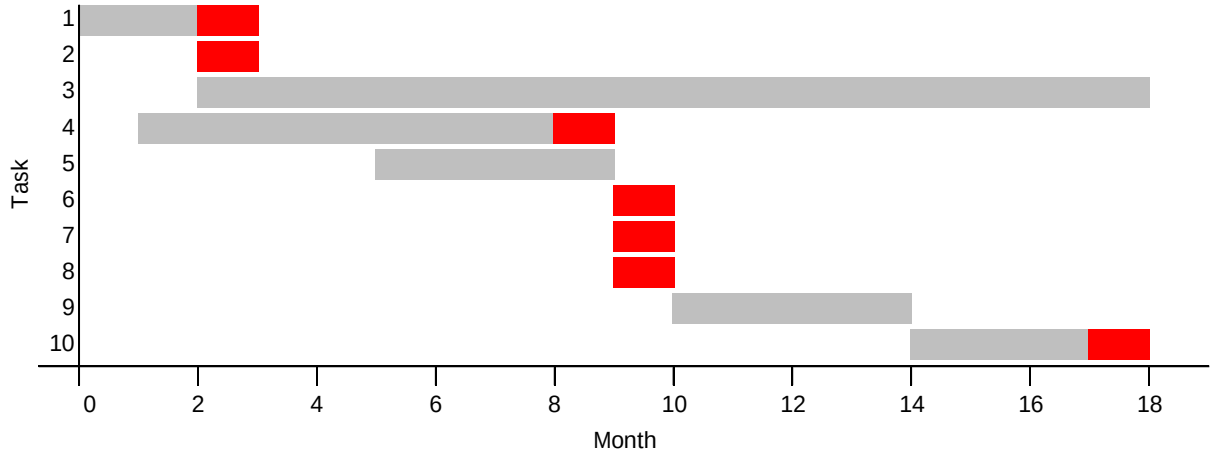
3. If a decision is made not to involve any holding fund into the JESSICA implementation structure, it can be recommended that EIB provides technical assistance at least until first project calls are announced and assessed, which ensures a sufficient transfer of know-how;

4. Tender for the financial institution – bank to which the entire Fund management and administration will be entrusted. The offers submitted must include a Business Plan of the fund, including fund strategy and priorities and the project selection criteria;

5. Preparation of the Operational Agreement by the Managing Authority of ROP SE, i.e. Regional Council South-East;

6. When the tender has been closed the Operational Agreement will be signed between the Managing Authority (Regional Council SE) as the establisher and the bank as the Fund administrator. This agreement must contain the required elements described in art. 43(3) of Commission regulation (EC) No. 1828/2006 (as amended by Commission regulation (EC) No. 846/2009) and a Business Plan of the fund, including fund strategy and priorities and the project selection criteria, must be an integral part of this agreement;

Fig. 9.12: Approximate time needed for implementation



7. Transfer of financial resources to the bank;

8. The Regional Council South-East will prepare application documents for the European Commission for an interim payment from ERDF (payment of 85% of resources invested into the Urban Development Fund);

9. Start of marketing support and consultations with potential applicants by the bank;

10. Announcement of calls, acceptance and evaluation of applications by the bank. Approval of supported projects by the Managing Board

9.3 Fund management costs

With regard to Commission regulation (EC) No. 1828/2006, article 43, annual fund management operating costs shall not exceed 3% of the capital accumulated in the fund from the operational programme.

With respect to the implementation structure proposed (absence of the Holding Fund feature and use of entity's own human resources for fund administration), the fund management costs are not expected to reach this limit. In practice, in both options, the bank tender will be of primary importance. Through the tender, the fund management costs can be expected to be reduced as much as possible.

In the cash flow model we calculate costs of 2%.

9.4 Possible project support through the fund

JESSICA rules enable in practice the following support methods:

- Debt financing
- Capital financing (equity)
- Guarantees

Debt financing

Debt financing is the basic possible project support type. Support through preferential loans is more advantageous if compared with a plain grant, because there is no systemic decrease in the volume of public resources involved, mostly in comparison with provision of grants. This "revolving" effect will be enjoying great appreciation mostly in the years to come as the volume of available grant resources will drop. Another advantage and limitation is the requirement regarding higher responsibility of applicants due to their obligation of returning borrowed funding.

Due to state aid related issues, loans can be provided with an interest rate matching the reference rate set by the European Commission for the respective year, with subsequent fixation throughout the pay-back period. This conduct offers the advantage that the base reference rate is used as the basis of the interest rate also for projects that do not constitute state aid (if any such projects occur) and subsequently a margin and/or resulting interest rate can be set for every applicant based on the rating of the respective applicant. This conduct is in line with the Communication from the Commission on the revision of the method for setting the reference and discount rates (2008/C 14/02).[17]

Equity financing

Equity financing entails a high risk rate that must be reflected in a high return rate. Use of equity capital financing is subject to considerations of the Managing Board of the fund. Given the character and return on the projects assessed, this cannot be recommended without a detailed risk management analysis being prepared for the fund.

[17] For the sake of simplicity and clarity, this Study calculated a loan with an interest rate matching the base reference rate.

Guarantees

For support through guarantees, the fund must have a history and a good name in the banking sector. As for guarantees, the selected implementation option is determining. While in Option II guarantees may be used instantly, in Option I the introduction of guarantees is recommended only after a successful allocation of loan resources, i.e. within the second round of financing.

9.5 Risk management

Risk management is an integral component in the process of setting the fund implementation structure. This Evaluation Study covers risks only on the general basis. The specific approach to risks will have to be determined based on the Fund Strategy prepared as part of the Business Plan to be negotiated between the Managing Authority (Regional Council SE) and the fund administrator.

Project related risks

Assessment of risks related to projects is an important component in the sustainability assessment of projects applying for support within the JESSICA instrument. Risks must be evaluated on a case-by-case basis by taking into account the parameters of every respective project presented. Risk assessment should be done by a person/institution with intimate knowledge of the local environment and market specifics. Of the same importance is the investment security assessment. Also the selection of the right partners as project holders/co-implementers is important and their financial health should be among the key criteria. For the purpose of assessing project related risks the SWOT analysis, for example, can be applied.

Risks related to return on capital and loan pay-back period

The general rule says that the longer the loan pay-back period, the greater the risk reflected by a higher guarantee. Since the focus of the JESSICA instrument may be on projects with a longer payback period than usually acceptable for commercial investors (depending on the strategic preference of the Managing Authority), we can expect a higher risk than what would be accepted in the commercial sector. The risk related to specific projects can be therefore recommended to be reviewed on a case-to-case basis, by taking into account possible project benefits.

Project targets related risks

Projects should have a synergy effect in covering multiple development needs set by the local self-administration. This can go hand in hand with increased risk related to project objectives, mostly in the short-time horizon. Accepting higher risk can however fill one of the biggest gaps on the financial market that is currently able to support only low-risk projects

without evaluating their added value. This very gap is represented by sustainable urban development projects with direct impact on residents (more jobs for local people, higher standard of living, environmental protection, etc.). If these projects with a higher risk stay unsupported, there is a threat stagnating or dropping competitiveness of the region, which may negatively affect the flow of investments. Higher risk can be therefore acceptable if the respective project responds to the current needs of the region and has greater positive socio-economic impact on the region.

9.6 Cash flow model of the proposed UDF

For cash flow modelling for the fund, the Study assumes that resources are invested by the Regional Council South-East from ROP measure 3.1 and, depending on the variant, either by the Statutory City of Brno or another entity with public resources at its disposal.

Chart 9.1: Fund replenishment

Fund participant	**Amount**
Regional Council of South-East Region	EUR 18.5 million
Statutory City of Brno/other entity	EUR 1.5 million

The amount provided by the Regional Council South-East includes the 85% contribution from ERDF and 7.5% co-funded from the state budget. The amount given by the Statutory City of Brno/other entity (7.5%) is crucial for the remaining 92.5% to be released. (The 85% contribution from ERDF and the state budget contribution are planned for as part of ROP SE. It is however not possible to apply to the European Commission for reimbursement of the 85% from ERDF without the contribution amounting to 100% of the fund size having been made first).

The cash flow model is based in the following presumptions (simplified):

- Only soft loans are granted as support;
- Loans are granted for 10 years with a 2-year deferral of instalments;
- Interest rates are set on the reference rate level[18]
    - In first and second call (2011 and 2012): 2,39% p.a.;
    - In third call (2019): 4.5% p.a.;
- The interest rate is fixed throughout the loan period;
- The initial contribution to the UDF is made in May 2011 and earns interest of 3% p.a.;[19]
- Deposits on the account earn a 2% interest p.a.;[20]
- The fund administration costs are 2% p.a. from the capital fund.

[18] Base reference rate as estimated for the respective years.
[19] Interest rate set based on bank indication as a 8 months' time deposit, i.e. the time when there is an entire amount of money on UDFs account.
[20] Interest rate set based on indications from banks.

Tab. 9.2: Cash flow fund estimate 2011–2016 (mil. EUR)

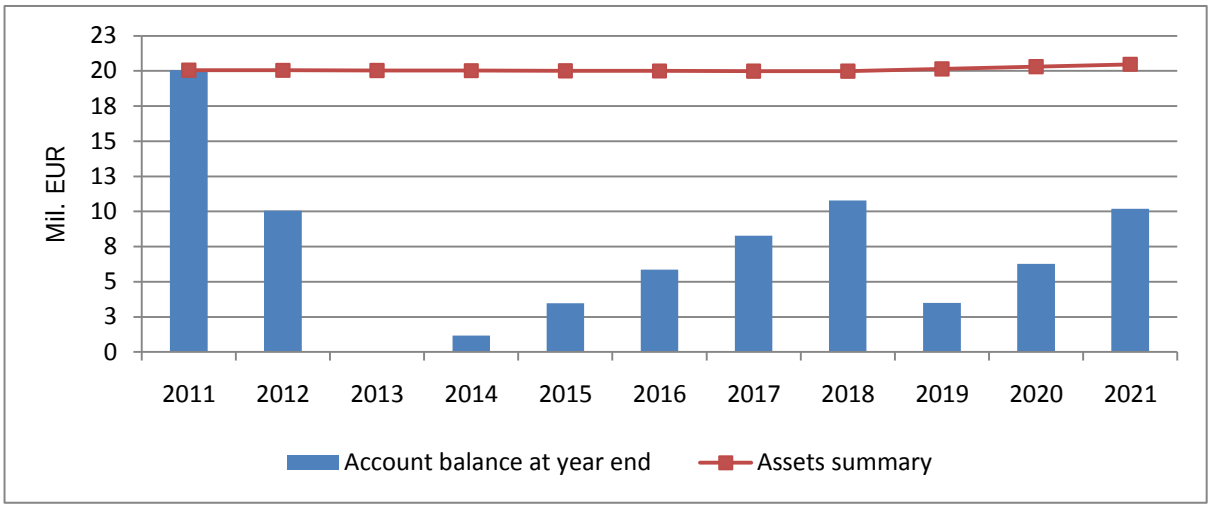
Year	2011	2012	2013	2014	2015	2016
Cash flow total						
Revenues	20,402	0,439	0,478	1,627	2,800	2,846
Costs	0,400	10,436	10,472	0,472	0,468	0,459
Account balance at year start	0,000	20,002	10,005	0,012	1,167	3,499
Account balance at year end	20,002	10,005	0,012	1,167	3,499	5,886
Assets summary	20,002	20,005	20,012	20,018	20,024	20,030
Cash flow from operating activities						
Revenues from founders	20,000	0,000	0,000	0,000	0,000	0,000
Revenues from deposits	0,402	0,200	0,000	0,000	0,023	0,070
Fund administration costs	0,400	0,400	0,400	0,400	0,400	0,400
Cash flow from financial activities						
Revenues – yield interests	0,000	0,239	0,478	0,478	0,451	0,395
Revenues – installments	0,000	0,000	0,000	1,149	2,326	2,381
Costs – granted loans	0,000	10,000	10,000	0,000	0,000	0,000
Costs – tax on financial activities	0,000	0,036	0,072	0,072	0,068	0,059
Unpaid debt	0,000	10,000	20,000	18,851	16,525	14,144

Tab. 9.3: Cash flow fund estimate 2017–2021 (mil. EUR)

Year	2017	2018	2019	2020	2021
Cash flow total					
Revenues	2,894	2,943	3,243	3,298	4,420
Costs	0,451	0,442	10,501	0,491	0,482
Account balance at year start	5,886	8,330	10,831	3,573	6,379
Account balance at year end	8,330	10,831	3,573	6,379	10,317
Assets summary	20,035	20,040	20,226	20,415	20,607
Cash flow from operating activities					
Revenues from founders	0,000	0,000	0,000	0,000	0,000
Revenues from deposits	0,118	0,167	0,017	0,071	0,128
Fund administration costs	0,400	0,400	0,400	0,400	0,400
Cash flow from financial activities					
Revenues – yield interests	0,338	0,280	0,670	0,609	0,546
Revenues – installments	2,438	2,497	2,556	2,617	3,746
Costs – granted loans	0,000	0,000	10,000	0,000	0,000
Costs – tax on financial activities	0,051	0,042	0,101	0,091	0,082
Unpaid debt	11,706	9,209	16,653	14,036	10,290

The chart below describes the estimated cash flow of the fund. With a current budget of EUR 20 million, further investments into the fund will be needed over the coming years to ensure its continuity. Should this not occur, the next call can be announced only in 2019 when the fund exceeds the EUR 10M threshold.[21]

Chart 9.1: Cash flow fund in first ten years of existence



9.7 Implementation impacts on the South-East Region

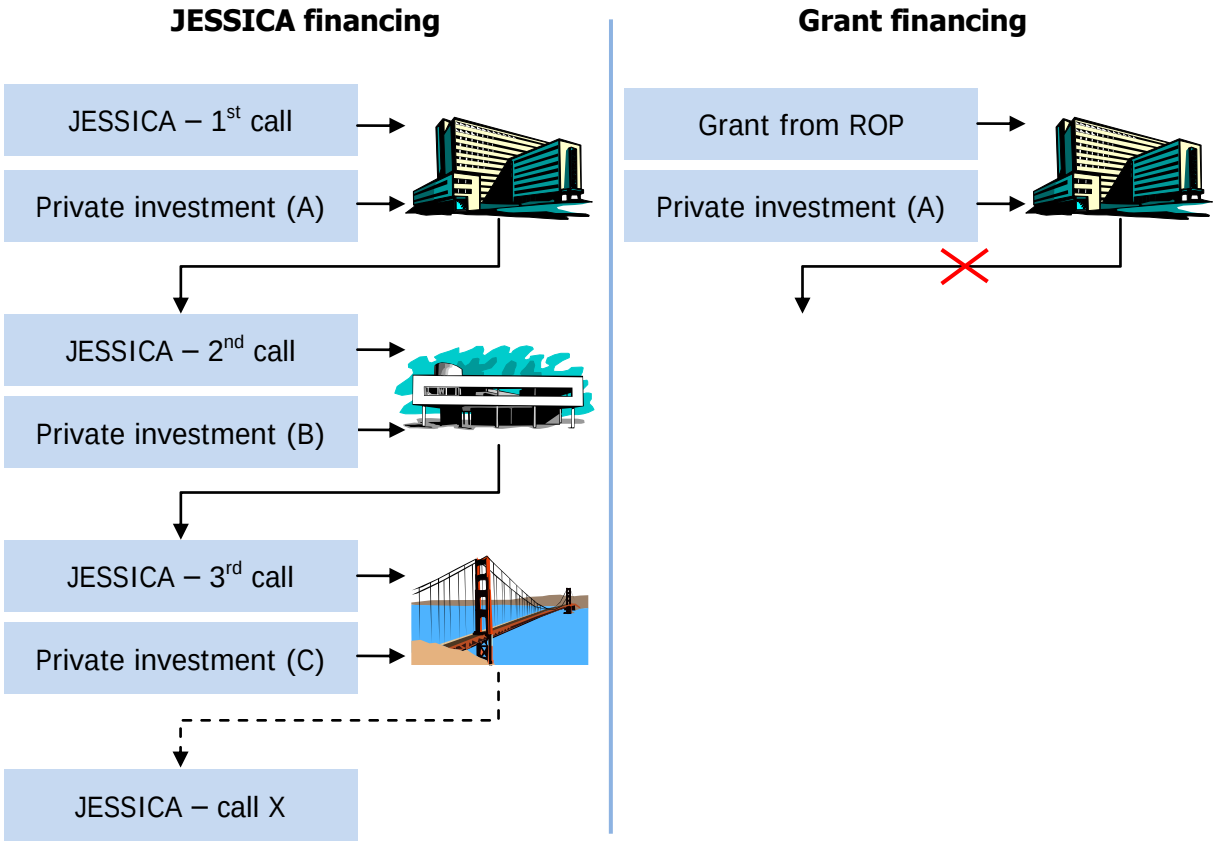
The biggest benefit of implementing the JESSICA instrument is closely related to its fundamental principle: the requirement of repayability of the resources provided. This significantly raises pressure on efficient use of investment resources (efficiency during project implementation) and on the need to generate profit in the operating phase. JESSICA can be of course used only for a limited segment of regional development and cannot fully replace traditional grant financing, but in selected areas its adoption can ensure permanent sustainability of the system of financing development of cities and suburban areas.

In view of the current situation in the South-East region, implementation of the JESSICA instrument amounts in fact only to a different use of financial resources that have been already allocated. This means that JESSICA does not bring new financial resources into the region, but can significantly raise the efficiency of how existing resources are spent in the region. One positive effect related to this is getting prepared for the subsequent programme period where a major decrease in support from structural funds can be expected. The possibility of transferring grant resources of ROP SE into the UDF is a unique opportunity of creating an instrument with permanent sustainability in which resources are designated for a specific purpose with a certain degree of certainty and independence of the political

[21] The threshold of when it makes sense to announce another project call will be in practice set based on the Fund strategy and project needs.

situation. Similarly, the leverage (additional acquisition of private and public capital thanks to the existence of a supporting instrument) of invested resources can be maximized.

Fig. 9.13: Difference between JESSICA and grant financing



Other benefits of the JESSICA instrument consist in the elimination of some limiting rules closely connected to utilization of SF resources. The most visible one is the effect of minimizing the time loss when drawing down committed resources with regard to the n+2 and n+3 rule by the Regional Council of South-East Cohesion Region (the resources are regarded as spent the moment they are deposited into the fund). An even bigger importance can be attributed to the absence of the need for applying article 55 of the general regulation on SF where expected operating income of supported projects is deducted from the grant, stays in the OP budget and if not spent again in the region in the current programme period, the allocation expires and the resources are returned into the EU budget.

The anticipated impacts of JESSICA implementation in the South-East region can be summarised for separate stakeholders. When making the decision on the possible implementation of the JESSICA instrument, emphasis should be put firstly on the interests of Brno residents and visitors as the key target groups. The interests of different key actors (Regional Council South-East, Brno City Council, etc.) must always be considered in relation to maximizing the utility of using the entrusted public resources.

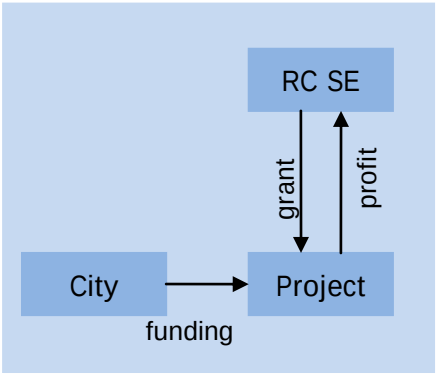
The primary implication of JESSICA for Brno residents and visitors as the key group is the expected increase in development projects (repeated use of public resources) and their realization in areas where a real use will be made of them by the public (only an actual utilization of the project outputs can ensure return on investment). A rather negative by-product is the fact that the public services provided must be paid for, which however usually also leads to a better quality of such services. From the point of view of NGOs and the entrepreneurial sector, a slight uneasiness about the reduced volume of disposable grant resources can be expected (transfer of resources from ROP SE into JESSICA). This should be however compensated sufficiently by easier access to and spending of the resources within the JESSICA instrument.

Tab. 9.4: Impacts of JESSICA implementation on target groups and key actors

target group / actors	**impact**	**rating**
Brno residents	more development projects	++
	only things that are actually used are financed	+++
	services must be paid for	-
NGOs in Brno	easier access to public resources	+++
	reduced grant financing	-
entrepreneurs in Brno	easier access to public resources	+++
	reduced grant financing	+
Statutory City of Brno	reduced grant financing	- -
	financial benefits of the JESSICA instrument	-
	ex-ante project financing	+
	elimination of application of article 55	++
	city development instrument with permanent sustainability	+++
Regional Council South-East	compliance with the n+2, n+3 rule	+
	increased efficiency of using ROP resources	++
	regional development instrument with permanent sustainability	+++

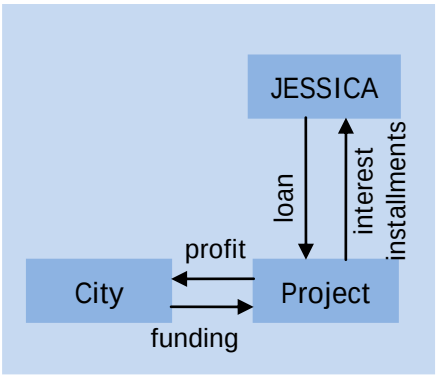
Considering the current situation in Brno, the implementation of the JESSICA instrument can also meet, to a certain degree, with a negative response, mostly in relation to the loss of a certain portion of grant financing (resource allocated within priority 3.1) and in relation to the currently favourable interest rates when obtaining external resources. The possible decision on adopting the JESSICA instrument must also respect other factors, such as the possibility of creating an instrument (fund) with permanent sustainability for funding development projects with income-generating potential, possible ex-ante financing of projects and last but not least elimination of article 55 (return of profits from supported projects). The following figure summarises the basic funding options for revenue-generating projects by using grants, the JESSICA instrument or a commercial loan.

Fig. 9.14: Differences in types of financing of revenue-generating urban projects[22]



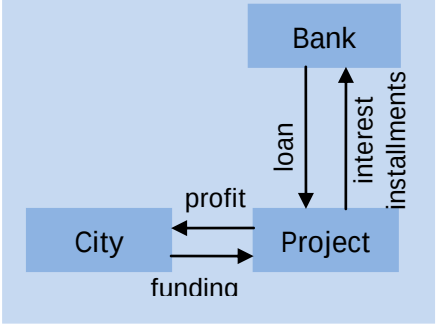
Grant financing

- Grant money "for free"
- Transfer of profit back to EC through RC SE
- Ex-post resources (pre-financing needed)



JESSICA financing

- Preferential loan fixed throughout pay-back period
- May be combined with grant financing
- Resources paid back into UDF may be re-invested into other urban development projects
- The city keeps the possible project profit
- Ex-ante resources (solve cash flow)



Debt financing – commercial bank

- Long-term loan with fixation from 4% p.a.
- The city keeps the possible project profit
- Ex-ante resources (solves cash flow)

In general, a big positive impact can be expected from the implementation of the JESSICA instrument on the territory of Brno. This impact may be counterbalanced by a painful transition from grant financing to loan financing. However, the Regional Council South-East offers in the JESSICA instrument the unique opportunity for the city of Brno to create a long-term and efficient tool for support of city and regional development projects.

[22] The interest rate of JESSICA financing depends on the loan agreement signature date. All funding types require the financial participation of the city or another applicant.

9.8 SWOT Analysis

Strengths

- Repeated use of financial resources – long-term effect of JESSICA instrument
- Better conditions compared with a traditional bank loan (lower interest, lower guarantees, deferral of instalments, higher loan, etc.)
- Expected leverage
- Fast access to financial resources
- Unlike ex-post grant financing, JESSICA ex-ante financing solves the cash flow problem for individual projects
- Flexible allocation of resources as per regional needs
- Strategy documents
- Available resources for investments from structural funds

Weaknesses

- The fund still has a small budget and therefore limitations on the number of implementable projects
- JESSICA has been implemented in practice only to a limited extent – only limited best practice from other countries is available
- Little experience of key actors in creation of loan funds
- In the South-East region there is no city strong enough, except for Brno, that could invest resources into the emerging fund
- Little experience of self-administration with PPP projects
- Scepticism of private investors in times of economic crisis

Opportunities

- Suitable timing of JESSICA with respect to the end of the programme period 2007–2013
- Relatively strong demand for financial resources by project holders
- Many projects do not reach grant resources
- Many projects can be unsuccessful when applying for a commercial loan due to low return on investment
- Leverage of private resources for projects in the public interest– potential for PPP projects
- Multiplicative effect of invested resources
- EIB know-how

Threats

- General unease of applicants about non-grant form of funding
- The current economic situation in the world and in the region does not create a pro-investment climate
- Mistrustful approach of self-administration to PPP projects