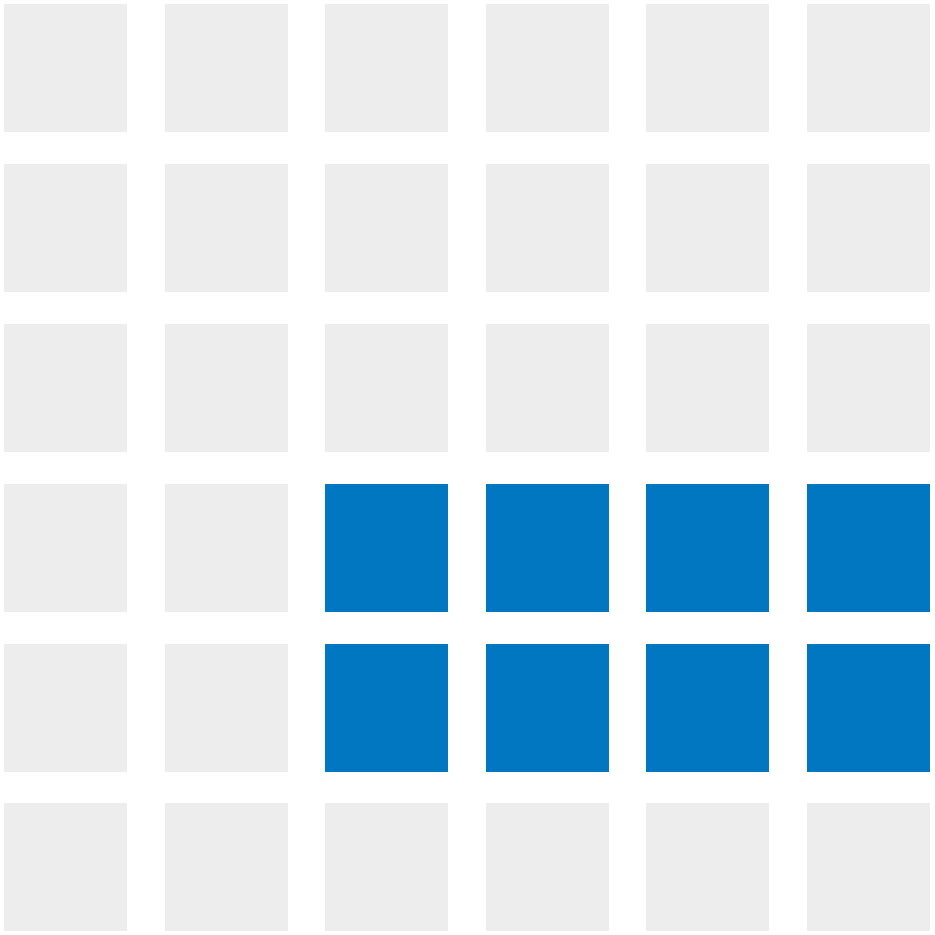
Defining, Measuring, Benchmarking and Representing Open Cities

A feasibility study for the British Council and URBACT

July 2009



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1 Executive Summary

The British Council and URBACT commissioned BAKBASEL to undertake a feasibility study on whether it is possible to measure the openness of cities (Index of Openness) and if so, how best to go about doing it.

What was the aim of the feasibility study? The feasibility study's main purpose was to examine the validity of the proposed concept of openness (cf. *Towards OPENCities*, 2008), including which indicators and data are relevant, available and internationally comparable to measure the openness of cities. The study was to develop and test approaches for measuring city openness and give advice on ways and possibilities for going forward with these approaches. After collecting the relevant data, the most effective methods of aggregating and presenting data were examined and recommendations for the main project were developed.

How can openness be defined? Open cities are, in this context, cities which aim to attract international populations and enable them to contribute to the cities' economic success. These cities need to fulfil the criteria which incite international populations to move to these cities and to remain there. The openness of cities can also be described as the provision of low barriers of entry and good opportunities for integration and participation. Yet an open city needs to be attractive for international populations. International populations were subdivided on the following groups: highly qualified migrants, less qualified migrants, students and retirees.

How can openness be measured? Openness is a multidimensional and complex phenomenon which has to be measured by more than one factor and also by a large number of individual indicators which measure different aspects of openness. Overall, it can be stated that openness can be measured using a multitude of indicators taking the multidimensional nature of the phenomenon of openness into account. The indicators can be grouped thematically into the following nine key factors: groups of international populations, governance and leadership factors, regulatory factors, economic factors, social and societal factors, cultural and amenity factors, internationalisation factors, connectivity and accessibility factors and environmental factors. Each of these key factors represents one of various dimensions of the quality of life of all inhabitants with special attention paid to international populations who are important for the attractiveness and openness of the city. The results of the data collection process have confirmed that sufficient internationally comparable data are available.

How can openness be presented? BAKBASEL recommends creating an Index of Openness with various sub-indices (a so-called index family). This index family can be created by aggregating individual indicators as a weighted average. In addition, participatory methods (surveys) are used to assign weights which incorporate the values of different stakeholders. An index family is an extremely flexible measuring instrument because the Index of Openness consists of a multitude of indicators which can be grouped by various aspects / factors of openness in order to analyse the cities' openness. Sub-indices can be created not only for the key factors, but also for other aspects of openness such as openness versus attractiveness. Benchmarking based on an index family makes it possible to divide the sample into comparable subgroups and to compare cities with homogenous or individually-defined benchmarking partners. The Index of Openness indicates how open a city is compared to a pre-selected sample of cities.

In addition, we propose to use two kitemarks to measure the commitment and the progress of the cities.

How can the Index of Openness be used? BAKBASEL recommends using a benchmarking tool. Cities can easily identify their strengths and weaknesses by using an index family. Cities can use the data results contained in the Index of Openness for individual peer reviews, to monitor their "openness" within their city but also to compare themselves with specifically-defined city types. Such a targeted analysis will give politicians the necessary information to improve their policies and will help the cities become truly open cities and economically more successful.

2 Introduction

In 2008, the British Council published a report entitled "Towards OPENCities" which was a preliminary methodological approach on how to define openness and what the opportunities for cities could be. In an international OPENCities conference held in Madrid in February 2008, experts discussed whether openness is measurable and how it can be measured. Given the scope and complexity of the subject, it was decided that a study should be undertaken to evaluate the feasibility of developing a tool to measure openness internationally. What are the characteristics of an "open" city and how can the "openness of cities" be measured and compared? The British Council, together with URBACT, commissioned BAKBASEL to conduct a feasibility study to answer these questions within the international OPENCities project.

Richard Florida, the author of the book "The Rise of the Creative Class" which became one of the most influential and popular tools for urban planners, suggests that economic prosperity is tied to tolerance, and openness is tied to diversity[1]. According to Florida, places are tolerant and open if there are "low barriers of entry for individuals". These places are open for new people and ideas and, therefore, will manifest a higher concentration of talent and higher rates of innovation. These international populations are seen as positive contributors to the labour force[2]. More importantly, according to the above-mentioned report, international populations improve the quality of life and the attractiveness of the city for international events, investors and visitors. Cities which intend to attract international populations should therefore be "open". Internationalisation and the resulting human diversity is a spur, via different channels, to the economic success of cities. If open cities are more successful than less open ones, cities will want to know how open they are in order to become more successful. Being able to compare their openness to that of other cities could be useful too.

The ambitious aim of the feasibility study was first to test the existing concept of openness and to set up a system of indicators to measure different aspects of the openness of cities[3]. The next step was to survey the availability and presentation of data. Is the concept presented in the British Council report feasible? Which indicators are available from which sources? Are they suitable for comparison on an international level? How can all the information which has been gathered be aggregated and presented (index, benchmarking, kitemark)? Based on this research, recommendations for the main study are outlined in this report.

The following cities were included in the study: Belfast, Bilbao, Bucharest, Cardiff, Dublin, Dusseldorf, Poznan, Gdansk, Sofia, Vienna, Madrid, Nitra, Manchester, Newcastle, Nottingham and Edinburgh (European cities), and a set of "international" mega-cities: London, New York, Sao Paolo, Singapore, Toronto.

[1] Florida, R. (2004): The Rise of the Creative Class and how it's transforming Work, Leisure, Community and Everyday Life. New York.

[2] Clark, G. (2008): Towards OPENCities. Published by British Council, Madrid: 11.

[3] In this report, the terms "aspects of openness", "openness factors" and "dimensions of openness" are basically used as synonyms.

BAKBASEL would like to express their gratitude to all the cities, experts, project managers and data experts for their collaborative support throughout the feasibility study. We are particularly grateful to the Content Management Group, the support of all participating cities and data gathering teams and to everyone who worked and participated in the survey.

This report presents the findings and conclusions of the feasibility study. Section 4 outlines the definitions used and the concept developed to measure openness for international populations. Section 5 shows which data were collected and how data were collected. Section 6 shows the results of the perception survey on openness. Section 7 outlines our proposal for data aggregation and how data could be presented. Finally, section 8 features our recommendations for the future, based on the results of this feasibility study.

3 Definition and Concept of Openness

3.1 Definition of Openness

3.1.1 What is openness?

In the first report published by the British Council in 2008, openness was defined as: "The quality and sum of the local conditions that attract and retain international populations over time".[4] Often, openness is considered as one of the contributing factors towards a city's attractiveness, but, in this project openness is given a more prominent role. Openness and attractiveness are both necessary factors which attract and retain international populations over time. Cities have to be attractive enough so that people want to go to them and open enough so that people are able to go to them. Openness in this study means low barriers of entry and easy integration and participation for international populations.

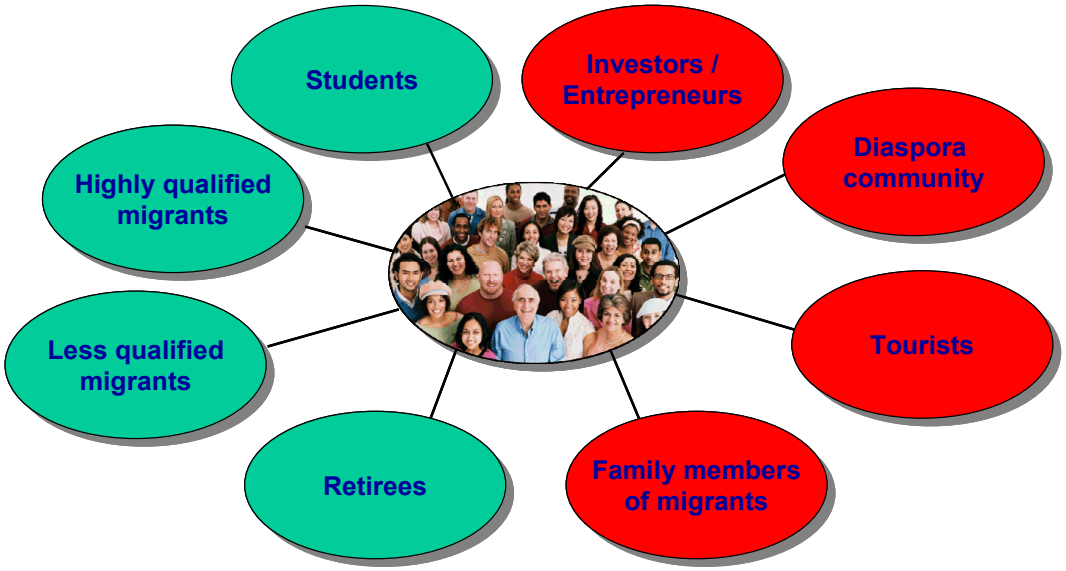
After discussions with a selected group of cities, the initial definition was modified to: *"Openness is the capacity of a city to attract international populations and to enable them to contribute to the future success of the city"*. The idea of "retaining" was eliminated and emphasis was placed on "attracting" and "enabling". The definition also highlights the fact that the focus is on the future success of the city. These definitions form the foundations for this feasibility study.

3.1.2 Open for whom?

Above all, it is important to know who the cities' immigrants are and which groups of international populations each city wants to attract (see Fig. 1). The OPENCities project focuses on international populations who move to live in a city for some time. After careful consideration and lengthy discussion, it was decided that city openness would attract four types of international populations, known as "status groups": Highly qualified migrants, less qualified migrants, students and retirees. Tourists and business travellers are not included because they do not stay long enough in the city. Retirees, however, are included because they often have a high level of disposable income and they can be economic actors, even though they are not directly relevant to the labour market. Investors / entrepreneurs, tourists, family members along with the diaspora community represent the activities of the status groups.

[4] Clark, G. (2008): Towards OPEN Cities. Published by British Council, Madrid: 12.

Fig. 1 Groups of International Populations



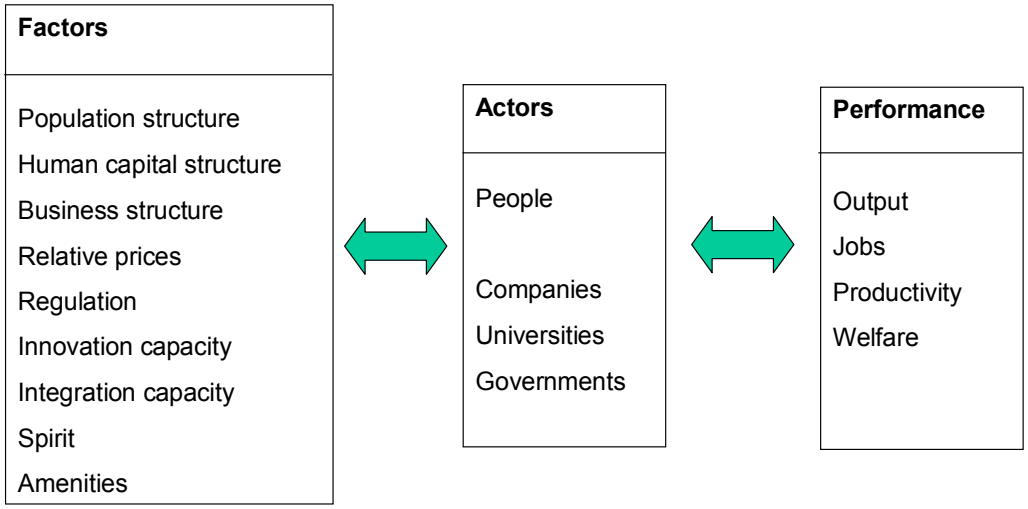
Source: BAKBASEL

3.2 Concept of Openness

3.2.1 Model for the long-term relationship between long-term economic performance, attractiveness and openness

What makes cities and regions successful? What is the long-term relationship between the economic performance of cities and other relevant factors?

Fig. 2 A Model for Long-term Economic Performance



Source: BAKBASEL

Cities are characterised by certain factors (endowment of the city) such as population, human capital and business structure, relative prices, regulations, innovation capacity, integration capacity, spirit and amenities. Population structure, for example, includes the age structure of the population, but also the existence of international populations in the city. The human capital structure is the qualification structure of the national as well as foreign population. Relative prices refer, for example, to the relation between wages and consumer prices in the city. Regulation includes the regulation of the product markets, the labour market, but also immigration laws etc.

Economic decisions are based to a large extent on these location factors. Economic actors or agents (people, companies, universities and governments) determine the economic performance of the city in terms of output, jobs, productivity and welfare. Fig. 2 below expresses the relationships in a flow chart. In the short term, factors influence and shape performance and the arrows point from left to right. In the long term, however, performance has a considerable effect on the actors and on most factors, the arrows therefore point from right to left. Thus, it is a mutually dependent process with forward and backward links and distinctive development cycles with both short and medium term processes.

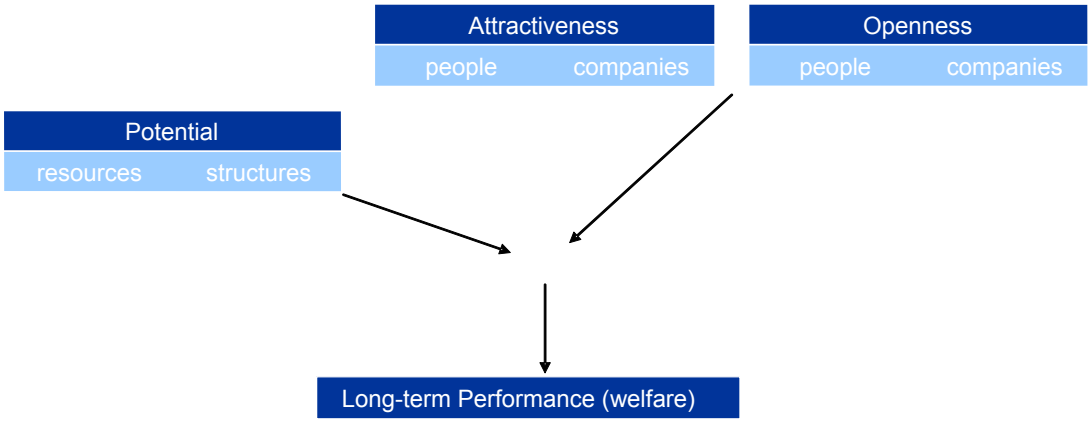
The output (X) of a city's economy depends on the amount of labour (L), the amount of physical capital (K)[5] and all other relevant factors (R), as can be seen in the following production function (where a , β , y are parameters):

$$X = c * L^{a} * K^{\beta} * R^{y}$$

For demographic reasons, the total work force will not increase in the next twenty years in most Western economies. The economic change towards service economies and the growth of knowledge-based industries means that physical capital is not the scarcest resource. The most valuable resource today is human creativity i.e. people who are able to create new ideas and apply knowledge in an economically-exploitable way. Knowledge (as part of the residual factor R) is more important as a production factor than the amount of labour or the amount of capital.

How can cities achieve long-term economic growth?

Fig. 3 How to achieve long-term performance



Source: BAKBASEL

The economic performance of a city depends on its potential, its attractiveness and its openness (see Fig. 3). Productive manpower and capital (resources) along with the portfolio of industrial and business sectors make up the economic foundation of a city (its potential). The capacity of a city to be successful in today's economy depends on its framework conditions for companies (business climate) and people (quality of life). In order to succeed, cities need these framework conditions to be attractive (appealing to both people and business) and open (accessible for both people and business). How easy is the access to all relevant goods and services in the cities? Cities should try to remove or reduce barriers for people entering, staying and / or eventually leaving. Moreover, the barriers for starting, conducting and closing a company should be as low as possible.

The OPENCities project focuses on cities' attractiveness and openness for people. These are two vital ingredients for the long-term performance of cities.

[5] Physical capital refers to any non-human asset made by humans and then used in production.

3.2.2 How can openness be measured?

Openness cannot be observed or measured directly. It is a multi-dimensional and very complex phenomenon. However, there are many aspects of openness that can be observed and measured.

This feasibility study aims to detect and evaluate suitable indicators to measure openness for people. It is helpful to group the indicators thematically. In the first OPENCities report produced by the British Council, the following eight key factors were proposed: economic factors, regulatory factors, cultural factors, amenity factors, connectivity and accessibility factors, internationalisation factors, leadership factors and risk factors.

After reviewing these key factors and discussing them with experts in the participating cities, the key factors were modified slightly. For example, more social factors were included and the environmental conditions of a city were taken into consideration. Moreover, to measure openness comprehensively, it seemed appropriate to add a detailed breakdown of the groups of international populations in the city as an independent key factor. Risk factors – such as crime, security, racism and xenophobia, etc., were not retained as an extra category. Instead, they were included in the safety component of the social and societal factors. Amenity factors and cultural factors were grouped together as one key factor.

Thus, openness is measured via international population groups and the following set of key factors:

- Governance and leadership factors.
- Regulatory factors.
- Economic factors.
- Social and societal factors.
- Cultural and amenity factors.
- Internationalisation factors.
- Connectivity and accessibility factors.
- Environmental factors.

For each of the proposed key factors, a set of indicators was chosen to measure the openness of cities. The measures tested were selected because they were:

- A good indication or proxy for the quality / factor sought.
- Generally available in most cities.
- Internationally comparable.
- Well understood by most people.
- Statistically robust.

This meant that we discarded many interesting alternative measures that may have proved interesting because they did not fulfil enough of the above criteria.

Some of these key factors were subdivided into various components. The selected indicators measure inputs / conditions as well as outputs / outcomes. They are mostly quantitative indicators, but some aspects such as governance / leadership or regulation are more qualitative. Al-

though most of the indicators are based on tangible evidence such as crime rates, some aspects of openness can only be reflected by indicators based on subjective perception. The focus is on the level of openness, data to measure the progress of cities towards openness will be available from repeated observation. The meaning of each of the key factors and how they could be measured is addressed below.

3.2.2.1 Groups of international populations

Cities with large and diverse international populations may attract human capital more easily which gives them a certain advantage. In particular, diversity is seen as a factor in the attraction of a highly qualified workforce (national as well as international)[6]. International populations enhance economic and cultural growth through the creation of employment and knowledge transfer. Through family reunification and network migration, the cities' current international populations also influence both the inflow and the composition of the cities' international populations in the future.

Possible indicators to measure diversity are the number of nationalities living in the city and the percentage of the top ten foreign nationalities of all foreigners in the city. The percentage of non-nationals or foreign-born populations in the city and the number of migrants per year reflect, respectively, the stock and flow of the city's migration. Furthermore, the indicators of openness for the various international population groups have to be considered (the percentage of foreign students out of the total student population, the percentage of highly qualified foreign-born people compared to the native population the percentage of highly, medium and less qualified foreign-born people and the number of foreign retirees).

3.2.2.2 Governance and leadership factors

Governance and leadership factors are action programmes of city governments to increase the attractiveness and openness of the city for international populations. There are policy strategies to produce openness and "good relations" in the social fabric of the city. Cities have different priorities and existing problems, so each city has to design a unique policy of "good relations". Possible strategies are to provide information and support in different languages to international populations, for example, the moment they arrive in the city. Another strategy is to establish a migration specific department with staff having, if possible, immigrant backgrounds and good foreign language abilities.

Indicators which reflect city governance and leadership factors are not available from published sources. There are no sources where these aspects have already been investigated in a quantitative way. Therefore, relevant data have to be collected for the first time and evaluated to see if it is possible to construct indicators based on the data.

[6] Alesina, A. and La Ferrara, E. (2004): Ethnic diversity and economic performance. NBER Working Paper No. 10313. Florida, R. (2005). Cities and the Creative Class. New York und London. Ottaviano, Gianmarco I.P.; Peri, Giovanni (2004). The economic value of cultural diversity: evidence from US Cities. NBER Working Paper No. 10904.

Possible indicators to research are:

- Languages which appear on cities' websites.
- Welcoming services: a welcoming service for international populations, an online information service; migration specific information policy costs as a percentage of the total expenditure of the cities' budget.
- Action to be taken by the City Council: the creation of a migration-specific administrative department, the employment of interpreters at the City Council and migrants working in the city administration as a percentage of overall sum of staff working in the city administration, special start-coaching programme for migrants, special actions to increase the feeling of belonging and integration of migrants.

3.2.2.3 Regulatory factors

Openness, regulation and integration are interrelated. Integration often depends on the concepts of equal opportunities and the rights of the population. Regulation refers to the legal and political framework for immigrants. The government can introduce or remove obstacles for certain groups of immigrants to strive for equality. They can reduce the barriers of entry for immigrants and thereby promote openness.

What is the legal and political framework for migrants? Can migrants vote? Does the state consult with or fund migrants' associations? How easily can immigrants (and their family members) become citizens of their resident country? How does one acquire nationality status? Must applicants renounce their original nationality? Is there an extensive legislative protection against discrimination? These qualitative aspects of openness are difficult to measure. To measure these legal aspects of immigration the MIPEX (Migrant Integration Policy Index) can be applied. The MIPEX is an ambitious measurement instrument which tries to evaluate the migration policies of the EU-countries (including Switzerland, Norway and Canada) based on the following six dimensions: access to the labour market, long-term residence, family reunification, naturalisation, participation and anti-discrimination[7].

Countries characterised by a high degree of freedom concerning political and civil rights are more attractive for all inhabitants, including potential migrants. Therefore, the Freedom House Index[8], which is a combined average rating of political rights and civil liberties, can be used as an indicator.

The legal framework for immigrants in a city is mostly determined by national regulations. Regulatory factors refer, therefore, primarily to national regulations on immigration. Nevertheless, the national framework should be complemented by the provisions of local law. It includes indicators measuring the access of immigrants to political participation, naturalisation, etc. Possible indicators (output-variables at the city level) are the percentage of migrants in the current city parliament or the percentage of naturalisations which are granted.

[7] The MIPEX provides a snapshot of the policy situation to raise standards of best practice, to generally improve policy across Europe and to set terms of legal and policy debates. "The combined set of the highest European standards serve as MIPEX's normative framework. 140 policy indicators are designed to bench-mark current laws and policies against these highest European standards". The indicator score in each dimension are averaged together to give a dimension score (0 = critically unfavourable; 100 = best practice).

[8] www.freedomhouse.org.

3.2.2.4 Economic factors

Good economic conditions are important in order to attract and retain human capital. They are necessary to grant migrants a certain standard of living. Migrants contribute as workers or employees towards the economic success of the city. They can, however, only contribute fully to the economic performance of the city if they are integrated into the local economy. Poor labour market integration amongst immigrants, for example, can lead to unemployed immigrants needing state benefits. This could lead to tensions arising between natives and unemployed immigrants. Integration in this field is therefore vital to build an open and tolerant city in the long term.

Economic factors determine the possibilities for income and consumption as well as regional labour market and housing market conditions. These, in turn, affect the specific economic circumstances of migrants. Do international populations have access to cities' housing markets, property markets and labour markets?

Economic indicators can be separated into three sections: income and consumption, the housing market and the labour market. Possible indicators are GDP per capita, wages, disposable income, personal income tax, welfare contributions, the consumer price index (income and consumption), the unemployment rate of non-nationals / nationals, participation rate by sex, number of work permits and the percentage of share of work permits which are issued, access to the labour market (labour market), a chance of buying property or rent a flat, average living area of non-nationals / nationals (housing market).

3.2.2.5 Social and societal factors

Social and societal factors include the availability of public goods and services, such as safety (including the stability of political and social life), the quality and quantity of health care and educational facilities. A tolerant attitude towards immigrants is a precondition for attracting and enabling the settlement of international populations. Thus, one component of the social and societal factors is how immigration is perceived.

The safety and stability of the local and political environment are important for both cities' openness and attractiveness. Addressing tensions effectively with genuine leadership is central to building long-term tolerance and openness. Racism is not only a problem for ethnic minority groups, but also for the development of an open city. Factors which promote ethnic persecution or discrimination have to be minimised in order to embrace international people. Possible indicators measuring the safety of the city's inhabitants and immigrants in particular are: the subjective perception of safety (the percentage of people who feel safe in the city), crime rates and number of crimes motivated by racism and xenophobia, acts of violence towards ethnic minority groups and the percentage of extreme right-wing parties in the city council.

Further, the openness and attractiveness of cities depend on their health systems. Is the health system well organized and do immigrants have easy access to the national and private health services? The quality of the health system can be measured through indicators such as the subjective perception of health services on a regional level, the number of hospital beds, doctors etc. The easy access of immigrants to health services includes the right to health insurance or the national health system. The ability of doctors and nurses to communicate in foreign lan-

guages is also important (or hospitals which provide interpreters). Unfortunately, qualitative aspects of the openness of the health system can barely be measured in a comparable way. Another important aspect of openness is that migrants should not only have easy access to social security institutions, but should also be able to leave the city (or country) without losing their social benefits. Policies vary considerably for the various population groups (depending on country of origin, status of migrant, etc.). For that reason, access to and transferability of social welfare benefits[9] cannot be measured.

Quality schools and universities with special provision for international populations is another important aspect of the social factors of cities' openness. The attractiveness and openness of the higher education system can be measured by the following indicators: quality of universities (Shanghai Index, Times Index[10]) and the availability of international campuses. The number of international schools within the city region is an important location factor in attracting and retaining international populations, particularly highly-qualified people. The proportional difference between the number of foreign students and native students in upper secondary education is an indicator of how integrated the children are in the school system.

The perception survey on openness (see below) confirms that tolerance is one of the most important aspects of openness. Tolerance, however, can scarcely be measured. A high number of marriages between people of different nationalities may indicate an open and tolerant climate of the city in question. The European Social Survey provides data on the perception of immigration on a regional level. The fourth component of the social and societal factors is the perception of immigration (various indicators can be taken from the European Social Survey) to understand the attitudes of the native-born population towards immigrants.

3.2.2.6 Cultural and amenity factors

Numerous studies point to cultural and leisure amenities and other consumer goods as important factors in the competition for highly qualified people[11]. 'Cultural and amenity factors' mean the degree to which services and private goods are made available to the population in the city. Cities are attractive if they have a wide range of cultural and leisure amenities (e.g. museums, cinemas, restaurants, TV channels, newspapers) and open if these are easily available to its international populations. Part of cultural openness involves the provision of multi-lingual events.

[9] Andrietti, V. (2001): Portability of supplementary pension rights in the European Union, International Social Security Review, Vol. 54, 1/2001, pp 59-83. Andrietti, V. and Hildebrant, V. (2001): Pension Portability and Labour Mobility in the United States. New Evidence from SIPP Data. SEDAP Research Paper No 42. EC (2004): The Community provisions on social security. Your rights when moving within the European Union. European Commission: 53. Holzmann, R., Koettl, J. and Chernetsky, T. (2005): Portability regimes of pension and health care benefits for international migrants: an analysis of issues and good practices.

[10] The quality of the university is measured by both "The Academic Ranking of World Universities" by Shanghai Jiao Tong University (Shanghai-Index) and the "THES-QS World University Ranking" (Times-Index). The Shanghai-Index, for example, compares the world's 500 best research universities on the basis of their mentions in scientific papers and of publications and Nobel prizes awarded to present and former professors. The results are converted into a ranking. The Shanghai-Index is somewhat biased towards natural sciences. Thus, the Shanghai-Index should be supplemented by the ranking according to the Times-Index.

[11] Glaeser, E., Kolko, J. and Saiz A. (2001): Consumer City. Journal of Economic Geography 1 (2001), p. 27-50. Shapiro, M.J. (2005): Quality of Life, Productivity, and the Growth Effects of Human Capital. http.//home.uchicago.edu/~jmshapir/history061505.pdf (download: January 2007). Clark, T.N. (2002): Urban Amenities: Lakes, Opera, and Juice Bars Do They Drive Development? http.//culturalpolicy.uchicago.edu/workshop/Juicebars.html (download: January 2007).

Possible indicators are: the number and quality of museums, cinemas (the number of cinemas, the percentage of movies in foreign languages), the number of international restaurants, the number of places of worship (for religious minorities), the number of libraries, the ethnic mix, cultural organisations, the percentage of television channels and radio stations in foreign languages and the number of international newspapers. The cultural openness of a city depends on the foreign language skills of the native population.

3.2.2.7 Internationalisation factors

Internationalisation factors mean the cultural, tourist and economic networks of the city which are crossing borders. The international factors are output-variables. They represent the current level of internationalisation and they show the attractiveness of the city for international events, companies, visitors, etc. Possible indicators are: the number of international companies / inflow of FDI (foreign direct investment), the number of international fairs, the number of international meetings, the number of tourists, the number of international institutions and organisations, the number of international conferences and congresses, the number of foreign embassies and the number of international festivals.

3.2.2.8 Accessibility and connectivity factors

Is the city well-connected to its surrounding areas and the world? Is it easily accessible by car, train, plane or ship? To attract international events, fairs, enterprises and visitors, it is also essential to easily and reliably communicate with the rest of the world. One indicator of connectivity can be the number of internet hotspots in the city per inhabitant.

Good transport links are particularly important for international populations because most of them frequently travel large distances in order to maintain their social contacts in their home country. In addition, the cities' gateways and ports determine their trading areas, trade partners and international populations.

An attractive city (or city region) also has to provide a good transport system within the city (or city region). Possible indicators could be commuting times and the size of the public transport system in question. Multi-lingual signage in the public transport system throughout the city is another indicator of openness.

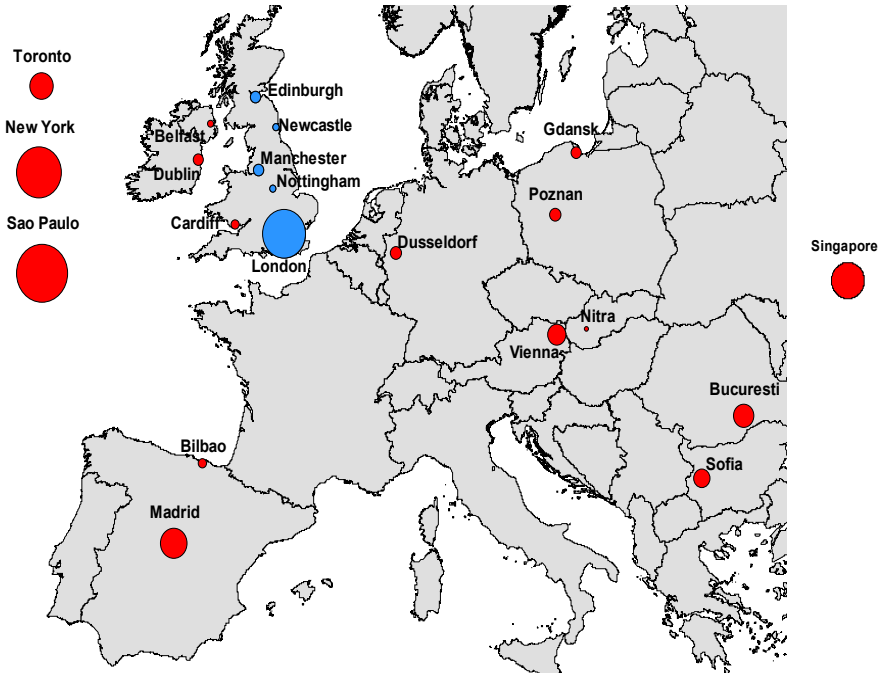
3.2.2.9 Environmental factors

Cities environmental factors are important when it comes to attracting international populations. Cities with a pleasant climate, an attractive location (near a sea, lake or mountains), clean streets and a low level of environmental pollution are desirable places to live. Possible indicators are average days of rain, the proximity of the city to water, air quality and the cleanliness of the streets.

3.3 Cities featured in our study

As part of the feasibility study, the indicators outlined above have been tested in the following cities:

Fig. 4 City sample



Source: BAKBASEL

We need to ascertain the availability of the proposed indicators, being important that they can allow international comparability. The cities included in the feasibility study consist of a sample of cities which can be arranged in three modules. The first module contains the following European cities (including the URBACT cities): Belfast, Bilbao, Bucharest, Cardiff, Dublin, Dusseldorf, Gdansk, Madrid, Nitra, Poznan, Sofia and Vienna. The second module consists of core UK cities such as Manchester, Newcastle, Nottingham and Edinburgh. The feasibility study demonstrated that the sample of European cities was a heterogeneous group. The cities featured in these two modules were examined for data which is readily available and internationally comparable. Data was evaluated and / or supplemented by the cities through a data gathering process and a survey on perception.

The third module consists of a sample of international cities (London, New York, Sao Paulo, Singapore, and Toronto). Data from these cities was examined only at the desk. These cities did not participate in the data gathering process or the survey because there were no contact persons available for these cities.[12] This group of international cities was too small for us to draw general conclusions for international cities from the feasibility study.

[12] The British Council, Greg Clark as well as BAKBASEL tried to find a contact person in these cities who would have like to participate in the feasibility study. Unfortunately, the people contacted during the feasibility study in these cities did not respond to emails or letters.

3.4 Summary

This chapter addressed the following questions: How can openness be defined? Why is openness an important location factor and how can openness be measured?

How can openness be defined? During the feasibility study the definition of openness was still under discussion. The latest definition was that "openness is the capacity of a city to attract international populations and to enable them to contribute to the future success of the city". Based on the discussions within the OPENCities project on how can openness be defined it was derived that "open" cities need to fulfil two main conditions. Firstly, they must be attractive enough so that foreigners will decide to move to the city and decide to remain. Secondly, they should be open so that foreigners, who have decided to move to the city can go and remain there. Openness is therefore both attractiveness and low barriers of entry.

Cities can be attractive and open for very different groups of international populations. In the focus of the OPENCities project are international populations who live at least some time in the city regardless their qualification or economic status.

Why is openness an important location factors? In a very general model of thinking, in the short run the location factors of a city or city region (such as its population and human capital) determine the economic agents' decisions and thus the economic performance of the city. In the long run there are substantial feedbacks from performance to population, human capital and most other location factors. In the long run, the economic performance of a city or region depends on its potential, attractiveness and openness. The potential is the economic foundation of the regional economy (such as the availability and structure of productive manpower and capital). For a cities' attractiveness, the current framework conditions and the quality of life are important. In addition, cities have to remove barriers for peoples' entry, staying and leaving as well for starting, conducting and closing a company. Through attractiveness and openness additional resources can be drawn thus the potential of the city increases and subsequently the economic performance of the city improves. Openness is therefore an important location factor and decisive for the cities long run economic performance. Regions and cities should provide a high quality of life for all inhabitants with special attention paid to international populations.

How can openness be measured? Openness is a multi-dimensional and very complex phenomenon. Openness cannot be observed or measured directly. There is no single indicator or variable measuring overall openness as it is the case with GDP which is a broad and broadly accepted measure of economic activity of a region. However, it is possible to identify indicators which measure certain aspects of openness. The indicators can be grouped thematically, for example, into the reviewed nine key factors. Each of these key factors represents one of various dimensions of the quality of life of all inhabitants with special attention to international populations which are important for the attractiveness and openness of the city. Openness can be measured through supplementing measures of cities quality of life with indicators measuring openness.

4 Collecting and Preparing the Data

4.1 Collecting the data (data gathering)

To quantify and measure the openness of cities, it was necessary to research a multitude of possible data and indicators concerning the openness of cities. BAKBASEL checked a large number of official sources (international, national, regional or city statistics) and surveyed and collected information from a wide range of other sources (embassies, private and public organisations etc.). Three categories of data emerged from the research undertaken:

- Internationally comparable data from official sources.
- Data collected by BAKBASEL research projects and from regional statistics.
- Missing data.

The internationally comparable data stem predominantly from official statistical sources such as Eurostat / Urban Audit, European Social Survey (ESS) and OECD. The methodology is therefore identical and the data are fully comparable for the EU countries. For cities which did not appear in the international statistics, data had to be collected from the respective national statistical offices and inputted into the database. This may have an effect on data comparability. For cities in the United States (New York), and Canada (Toronto), there were enough comparable data available. For cities on other continents (such as Sao Paulo), collaboration with local data experts will be required in order to find internationally comparable statistics on the city as well as national statistics. There was also a reasonable amount of global comparable data which were published by private and public organisations or companies (e.g. UBS, Heritage Foundation, International Baccalaureate and Airports Council International).

Some data were sourced from European organisations (such as the European Audiovisual Observatory), or publications with a limited regional coverage (mostly EU and US). The extension of the database to non-European cities might be feasible if there is collaboration with the above-mentioned institutions and data experts from respective cities. A collaborative project of this nature, however, can only be discussed sensibly if non-European cities are committed to the project.

Some data, such as places of worship, number of embassies, etc., were retrieved from online sources (e.g. the yellow pages) which are, of course, less reliable than the above-mentioned statistical sources. In order to improve the data results from these sources, BAKBASEL decided, first of all, to use the data they had obtained only within ranges. Secondly, it was decided to invite the various cities to evaluate and correct the figures which had been provided, when necessary. Information of various kinds (such as information on governance) could, however, only be obtained directly from the cities.

A data gathering and validation process was initiated in collaboration with the European cities with the aim of both checking the validity of the data which had been researched and filling data gaps. BAKBASEL therefore engaged with local data experts in the various European cities and sent them a data gathering tool (see Appendix 9.3) in February 2009. This tool included data / indicators which could only be supplied by local data experts. Internationally comparable data from official sources, for example, were not included except when data for a specific city

was missing. Until June 2009 eleven cities sent in the data they had collected.[13] BAKBASEL checked each city's input and validated these inputs with respect to their comparability.

Overall, the data research revealed that, for EU-cities, a large number of internationally comparable data to measure openness is available. The data availability and comparability is somewhat lower for non-EU-cities. Regarding the sample of EU-cities, the available, comparable and valid indicators measuring an open attitude towards international populations are shown below in the grey box. In the following pages, we describe the results of the data research and the difficulties encountered for each key factor.

Most data used to construct the indicators of the **groups of international population** are available from official sources (such as Urban Audit or the European Labour Force Survey). Some cities, however, were not included in these official statistics. These cities were asked to close the existing data gaps. Unfortunately, most of the cities concerned did not deliver the requested data. If an Index of Openness is to function successfully, cities which want to participate in the OPENCities Index project have to ensure that they deliver sufficient data to the official statistical offices.

Although BAKBASEL mainly used the statistical classifications defined by EUROSTAT, the data gathering process revealed that some cities prefer other definitions. BAKBASEL measured the international populations using the concept of "citizenship" which means international populations are defined as non-nationals of the country where they live[14]. Several city experts suggested that the international populations should be measured as foreign-born individuals instead of non-nationals[15], that indicators based on the "foreign-born concept" might be more meaningful. Therefore, indicators based on the concept of citizenship should be supplemented or replaced with "foreign-born" data when they are available and valid.

The percentage of foreign / international university students as compared to the total number of students in the city cannot easily be compiled from official statistics. Moreover, it is difficult to clearly define this group because higher education institutions vary widely between countries. In addition, the definition of international or foreign students is not satisfactory. If one is to use this as an indicator, it is important to create a clear and precise definition for the purposes of international comparability.

The indicators relating to international populations appear in the grey box. These indicators measure how successfully cities are able to attract and retain diverse international populations. They also indicate the degree of internationalisation which the city has already achieved. (Some indicators such as the percentage of highly qualified non-nationals compared to the percentage of highly qualified nationals give us a rough idea of what the contribution of immigrants towards a city's success will be in the future.) It should be born in mind that highly qualified migrants do not always work in highly qualified jobs because their qualification has not been legally recognised in the new country. Using labour force data the position in the labour market is decisive which makes sense if the city wants to know the contribution of international populations to the future success of the city.

[13] Because of various reasons, Bucharest, Sofia, Gdansk and Newcastle did not deliver data.

[14] For a full description of the indicators see Appendix 9.1.1 – 9.1.4.

[15] The international population figures can deviate from each other considerably. For example, in Germany there is a large group of immigrants called "Aussiedler" who have German passports, but they were born in the former Soviet Union and most of them do not speak German.

The number of non-EU-nationals is taken into account because this migrant group has considerably reduced rights in EU-countries. This should not be included in a global measure of openness.

The data gathering process revealed that in the case of **governance and leadership** most of the required data could be delivered by the cities. However, it was not possible to ascertain the migration-specific expenditures as a percentage of the total expenditure of the cities' budgets, as details relating to these costs are concealed under various budget items. Furthermore, the percentage of immigrants working for city councils compared to the overall number of staff could not be taken into account because the registration of people according to their ethnic background or origin varies widely among the participating cities. In particular, the cities in the UK did not deliver such data, presumably due to their data privacy policies.

The percentage of immigrants elected to the city council or parliament is a reflection of the diverse nature of the city council and the opportunity for immigrants (first and second generation) to take part in politics. The data gathering process showed that this information is available at city level, but putting it together needs a big effort from the cities.

The data gathering process revealed that cities could have provided further information for the feasibility study than was originally requested[16]. In short, can governance be gauged by asking which services the city council provides for international populations? However, it is practically impossible to gauge leadership since leadership refers mostly to actions and strategies to be implemented in the future such as, what the city council should do to become more open to international populations? Thus, the "openness benchmarking results" can serve as a starting point for the future development of leadership in this area.

BAKBASEL ascertained the availability and international comparability of the following components and indicators: the languages which appear on the official city webpage, welcoming services (the existence of a welcoming service for international populations and the existence of an online information service), and plans of action taken by the city council (such as the creation of a migration-specific administrative department, the employment of interpreters by city councils, a special coaching programme for immigrants and the resolve to increase the feeling of belonging and integration of migrants). The above relate to plans of action taken by cities to increase the attractiveness and the openness of the city in question for international populations.

[16] For example, it can be asked whether the city council consulted or funded migrant organisations as a measure for city action to increase participation capabilities of migrants.

Index of Openness: Key factors, components and indicators

International populations

- International population (change / inflow and stock)
- The total foreign labour force according to labour force qualifications (low skilled, medium skilled and highly skilled) as a proportion of the total non-national labour force, international students, international retirees (people over 65 years)
- The difference (in %) between a highly-qualified international population and the national population
- The diversity of the international population (top 10 foreign nationalities)
- Non-EU nationals as a proportion of the total population

Governance and leadership factors

- Languages which appear on the official city website (scores)
- The existence of a welcoming service for the international population, the existence of an on-line information service
- Plan of action taken by the city: setting up a migration-specific administrative department, the employment of interpreters, start-coaching programme, a migration integration policy
- The percentage of immigrants who have been elected to the city council / parliament

Regulatory factors:

- MIPEX (Migrants' Integration Policy Index): long-term residence, family reunion, political participation, anti-discrimination and naturalisation
- The granting of naturalisation rights (as a percentage of people born abroad)
- The Freedom House Index

Economic factors

- Income and consumption: disposable income, personal income tax (for high incomes)
- Housing: the rental of flats, average liveable area, access to property market
- Labour market: total unemployment rate, the difference (shown as a percentage) between the unemployment rate of non-nationals and nationals, the percentage of the total labour force with university education, access to the labour market (MIPEX), work permits for non-EU immigrants

Social and societal factors

- Safety: the feeling of safety, crime rates, the percentage of right wing parties (seats) in the city council / parliament
- Health: the subjective perception of health services
- Education: the proportion of foreign students in upper secondary education, the quality of universities and international schools
- How immigration is perceived: immigration & the economy, immigration & culture, the influence of immigrants on the country

Culture and leisure

- Museums, cinemas (the number of cinemas and percentage of movies in foreign languages), different places of worship (for minority religions), international restaurants, the percentage of television channels which are broadcast in foreign languages

Internationalisation factors

- International festivals, international fairs, consular and embassy representations, freedom of investment, international companies, international meetings, international organisations, number of tourists

Connectivity and accessibility factors

- Accessibility: global accessibility (average travel times), percentage of (international) airline passengers, passengers who have embarked and disembarked (maritime transport) and cargo freight, intra-metropolitan accessibility
- Connectivity: internet hotspots

Environmental conditions: Average days of rain, the proximity to water, air quality

Regulatory Factors refer to the national legal and political regulation framework for immigrants. They also include the idea of political freedom. The survey confirmed the importance of political freedom for openness. The indicators included in this factor are taken from three main available sources: The Migration Integration Policy Index (MIPEX), the naturalisation rate data[17] (OECD) and the Freedom House Index[18]. All these indicators were collected centrally. They are highly internationally comparably. In order to ensure that all cities (of a certain size) can participate to the OPENCities project, there should be an arrangement with the MIPEX team to extend the geographical scope to include countries from outside the EU, if there is demand for it. The MIPEX (respectively its sub-indices) are included as a measure of the legal and political framework that migrants face in the varying countries. While the MIPEX is a policy measure, the naturalisation rate is an output variable. How many migrants, in fact, acquire citizenship in a country? It is assumed that the higher the naturalisation rate in a country, the easier is it to acquire citizenship. Thus, a country with a higher rate is more open.

There was an attempt to collect data related to other indicators, for example, the application for naturalisation at city level. However, these data were not used for the Index of Openness because data delivered by the cities was insufficient and not comparable between cities. Overall, it seems that the regulatory factors for migrants in a city should only mirror what happens at a national level because the regulation at a city level may better belong to the leadership factors.

Economic factors are characterised by income and consumption as well as housing market conditions and the regional labour market. Disposable income per capita and personal income tax have been chosen as indicators for income and consumption. As consumption interests us more than economic performance, disposable income[19] was chosen as the indicator rather than the GDP. Consumption also depends on consumer prices. Consumer price indices can be obtained from several sources[20]. However, all these sources calculate the consumer price indices only for a number of cities. Moreover, the consumer price index depends on the consumption of the target group. Most of the consumer price surveys focus on the consumption of tourists or expatriate employees. This may differ from the consumption of the various international populations in a city. Therefore, purchasing power was not included in this factor. Moreover, highly-qualified international populations were considered vital to the openness of the cities (see the results of the survey). Since they usually earn good salaries, the taxation index of high incomes should be included in the Index of Openness.

Housing market conditions are determined by the following indicators: the average cost of renting a flat locally, average liveable area and access to the property market. Housing is an important aspect of the quality of life of the inhabitants in a city. High rentals can imply a shortage of good housing. A proxy to measure the quality of housing is the average living area per per-

[17] The naturalisation rate (percentage of foreign population) gives the number of persons acquiring the nationality of the residence country as a percentage of the foreign population at the beginning of the year (see also Appendix 9.1.2).

[18] Freedom House Index is an index which is a combined average rating of political rights and civil liberties.

[19] Disposable income corresponds to the primary income of the households, adjusted for taxes, social insurance contributions and social security benefits in Euros per capita and year.

[20] The UBS study "Prices and Earnings" shows the cost of a weighted shopping basked geared to Western European consumer habits containing 122 goods and services across 70 cities worldwide. Mercer's survey covers 143 cities across six continents and measures the comparative cost of over 200 items in each location, including housing, transport, food, clothing, household goods and entertainment. It is used to help international companies and governments determine compensation allowances for the expatriate employees. The Economist Intelligence Unit (EIU) City Data provides complete pricing information on 160 products and services across 123 cities in 79 countries. The meticulously researched prices range from the average electricity bill to the cost of rents in cities across the globe.

son[21]. An important and easily-available indicator is access to the property market (Can foreigners buy property without restrictions in the city?).

In order to measure the regional labour market, BAKBASEL used indicators such as the unemployment rate and the percentage of the total labour force with a university education as a measure of the attractiveness of the labour market in the city. Low unemployment rates mean good job opportunities. Highly-qualified individuals feel attracted to cities where highly-qualified people already live. Therefore, the total labour force with university education is taken into consideration. The access and integration of foreigners into the labour market of the city can be assessed by the following indicators: access to the labour market (MIPEX) and the differences in the unemployment rate between non-nationals and nationals[22]. The number of work permits which have been issued to non-EU nationals should be taken into account to gauge access to the labour market. However, the data gathering process indicated that if this indicator is used, its definition will have to be refined for the main project.

Social and societal factors are important for the quality of life of all inhabitants in a city. An attractive city should be safe and provide good health services and education facilities. Indicators to measure safety include the perception of safety, crime rates and the percentage of extreme right-wing parties (seats) in the city council / parliament. This last indicator is important for the openness of a city. The presence of extreme right-wing parties in the city parliament seems to be a feasible indicator if definitions can be made very clear with the help of municipal experts and scientific advice. Freedom from racism and xenophobia is a vital aspect of openness, but it is not internationally comparable or measurable[23].

The quantity and quality of the health system in the city region is assessed by the subjective perception of the health services by the population. Objective measures such as the supply of hospital beds or doctors were not used because they mainly reflect differences between international health systems. The provision of good schools and universities with special accommodation for international populations is another important aspect of the social factors of cities' openness. It is measured by the quality of universities and the number of international schools within the region in question. The proportion of foreign students in upper secondary education is an indicator of how international populations are integrated. This indicator is only available from the cities themselves. The cities mostly delivered reliable data for this indicator. However, the UK cities were the exception. They had problems with the definition of "upper secondary" (even though it is a definition which adheres to international classification). Furthermore, the perception of immigration has to be mentioned as another factor which contributes to the social climate of a city. This is subdivided into the following subgroups: immigration and the economy, immigration and culture, and the influence of immigrants on the country. Both desk research and the data gathering process demonstrated that comparable data about marriages between different nationalities are hardly accessible.

[21] BAKBASEL wanted to known from the cities the average living area of both the native and the foreign-born inhabitants. The question in the data gathering tool was, however, misleading. Thus the question could not be answered by the cities. Moreover, the UK statistics do not use the indicator: average living area. It is therefore necessary to infer this indicator from other available information of the housing censuses in the UK. Nevertheless, the indicator "average living area per person" should be included in an index of openness. A differentiation of this indicator by the origin of the inhabitants seems, however, not to be feasible.

[22] If possible, the indicators should also be created by using the concept of "foreign-born".

[23] European Monitoring Centre on Racism and Xenophobia (2005): Racist Violence in 15 EU Member States: A Comparative Overview of Findings from the RAXEN National Focal Points (NFP) Report 2001-2004.

The number of indicators used to measure **culture and leisure** were substantially reduced in the course of the feasibility study because there are no central or official sources for most of these indicators. In addition, it turned out that the data collection was very time-consuming. During the data gathering process, these data could have been evaluated by the cities - which some cities have done. For the main project, the definitions for some of the indicators such as places of worship and international restaurants have to be much more detailed than within the feasibility study. Intensive research showed that there are no sources available to measure the language abilities of the cities' inhabitants in a reliable and meaningful way.

The remaining indicators relating to culture and leisure appear in the grey box. The number of museums and cinemas can be used both as a sample and as a central indicator for the cultural offerings in the cities. The percentage of non-dubbed movies in cinemas, the number of international restaurants and the number of places of worship (for minority religious groups) should determine the amount of cultural and leisure facilities aimed at international populations (e.g. immigrants or tourists). Multi-language media are gauged by the percentage of television channels which broadcast in foreign languages as a sample indicator.

Indicators measuring the cities' level of **internationalisation**, such as the number of international fairs, consulates and embassies, international companies, international events / festivals, international meetings, international organisations and number of tourists, are included in the Index of Openness. Some of these indicators stem from well-known sources (for example the international companies were taken from the Fortune Global 500), while some indicators (e.g. embassies) had to be collected from various sources. Therefore, some of the indicators were part of the data gathering tool and the cities were invited to evaluate them. The cities expressed concerns about the fact that, within the data gathering process, some cities might overstate their level of internationalisation. Therefore, it is important to use clear definitions. Moreover, the indicators should be based on ranges and not on exact values. The above mentioned indicators measure the level of internationalisation of the city. A policy indicator has been added to supplement these outcome variables. Freedom of investment scrutinizes each country's policies toward the free flow of investment capital in order to determine its overall investment climate which is important to attract FDI (foreign direct investment).

Desk research confirmed that there are a number of internationally-comparable indicators available to measure **accessibility** (see grey box). It is important that global accessibility is attractive to all international population groups (gauged by the index of global accessibility). Moreover, cities which have an international transport hub (airport or port) are not only easily accessible, but are also characterised by intensive exchange relationships with other countries (measured by the percentage of international airline passengers and the number of embarked and disembarked passengers as well as cargo freight).

Good urban accessibility is also an important component of the quality of life of a metropolis. Intra-metropolitan accessibility is gauged by the commuting times within the city region. Comparable information on multilingual signage in public transport systems, however, could not be collected. **Connectivity** is measured by the number of internet hotspots. The feasibility of this indicator has been confirmed by the data gathering process.

Regions are rated as attractive if they have a pleasant climate and scenic attractions (lake, sea, mountains, etc.) within a short distance. Therefore, the average rainfall and the proximity of a city to water are included in the key factor: **environmental factors**. Furthermore, low levels

of pollution in cities are also attractive. However, there are neither survey results nor statistics available concerning the cities' cleanliness. The air quality is taken into account and measured through the number of days when the air is polluted (OZONE; PM 10). Air quality data are taken from the European air quality database. The availability and validity of similar data have to be proven for the international cities (from the US or other continents).

The selected indicators together with a short description appear in the Appendix 9.1.1. In the table, we provide the geographic delimitations for each indicator. The **geographic delimitations** of the cities vary depending on the indicator. This is due to the fact that some relevant data were not available for the city region in question or it was not appropriate to use the city region. The geographical area attributed to an indicator varies therefore from a narrow delimitation to larger administrative units. Most of the indicators refer to the administrative boundaries of the city.

Functional Urban Regions and the definition of city regions (or metropolitan regions)

A Functional Urban Region is an area building a common economic unit. What exactly forms a common economic area is, of course, open to interpretation. More often than not, the labour market is used to define this area. The number of commuters from outside the area should be relatively small. But even this definition leaves room for different solutions and results. The definition can be narrowed further by using the jurisdiction boundaries of administrative regions. Using administrative regions is also necessary for data reasons because data are normally only available for administrative regions. Still, the main source for the definition should always be the commuting pattern.

In the case of certain aspects of quality of life, it is sufficient to compare core cities because most of the cultural offerings, for example, are concentrated in the city centre.

The data situation at the level of Europe's regions (especially at the NUTS 2 and NUTS 3 levels) is not satisfactory. There are clearly some difficulties with the definitions of city regions because the definition of city regions has to follow data availability, and data are only available for administrative units. The NUTS 2 level for Madrid, for example, is the Comunidad de Madrid which can be used as a city region. However, there are two NUTS 2 areas in London (Inner and Outer London). To compare London with other city regions, it is appropriate to use Greater London (NUTS 1). In the case of Bilbao, the NUTS 2 level refers to Pais Vasco which is clearly too large for the comparison of the city region of Bilbao. In the case of Bilbao, the NUTS 3 level which refers to Viscaya should be used. For the comparison of city regions using administrative boundaries, the most appropriate NUTS level should be chosen. However, sometimes only data for the NUTS 2 and NUTS 1 levels are available so it should be kept in mind that the results might be somewhat biased.

Table 5-1 shows the indicators which were collected during the feasibility study in percentage of all indicators of the Index of Openness for all participating cities.

Tab. 4-1 Data coverage

City sample	Indicators collected (as % of 68 indicators)
Belfast	82
Bilbao	76
Nottingham	72
Cardiff	82
Dublin	76
Dusseldorf	84
Edinburgh	75
Poznan	75
Vienna	87
Madrid	87
Nitra	82
Manchester	74
Bucharest	49
Gdansk	57
Sofia	53
Newcastle	32
London	66
New York	32
Sao Paolo	21
Singapore	19
Toronto	31

Source: BAKBASEL.

As we can see from Tab. 4-1, data coverage is best for Vienna and Madrid. These cities have only nine indicators missing. The reasons for missing values can differ according to the cities. Not all cities are represented area-wide in internationally comparable statistics. Furthermore, data gathering within the cities was not always filled in completely.

There are currently eight indicators missing for all cities. These are: international students, diversity of international populations, percentage of immigrants elected to the city council, work permits, seats of members of extremely right-wing parties in the city council, quality of universities, international organisations and air quality. Some data were not used at all because their definitions have to be improved to ensure comparability between the cities (e.g. international students). Some data, such as the quality of universities, have not yet been collected since there is no doubt about their availability. Other data, such as intra-metropolitan accessibility, have been randomly tested. With exception of Belfast, which delivered a lot of information through the data gathering tool, the UK cities have slightly more missing values. One reason is that the values for these cities are sometimes missing from the European statistics (e.g. average living area). Sofia and Bucharest are not yet covered in all European statistics. Often they have to make an extra effort in order to deliver valid and comparable data.

The situation for the international cities is slightly different. As Tab. 4-1 shows, their data coverage is substantially lower than that of the twelve European cities. This is due to several reasons. First of all, there was no data gathering within those cities. Then, language barriers complicated contact with potential data experts in cities like Sao Paolo. Furthermore, a number of data are available on the international level, but have simply not yet been collected (e.g. intra-metropolitan accessibility, quality of universities, international schools etc.) meaning there are more data available than have, in fact, been collected, as shown in Tab. 4-1.

4.2 Preparing the data

After collecting the data and setting up the database, the next step is to prepare the data. The work involved varies according to the sources in question.

Data which stem from official sources or other reliable databases

Data extracted from official sources (e.g. the European Labour Force Survey) or reliable private databases (BAKBASEL, MIPEX etc.) can be directly used or indicators can be easily computed (e.g. the percentage of foreign low-skilled workers compared to the percentage of the total foreign labour force). When values are missing for certain cities, these cities were requested to provide this information via the data gathering tool.

Data collected from the cities or data which were evaluated by the cities (data gathering tool)

The main steps to prepare these qualitative / quantitative data are:

- The elimination or correction of obviously wrong answers (if possible).
- If the data were evaluated, the revised data would have to be recorded (including data explanations such as names of the places of worship, festivals, right-wing parties etc.). Recording the explanations is important to ensure comparability and to avoid repetition.
- The correction of the initial values if a city delivers other plausible data (data evaluation). For example, a city has more synagogues than the value stated in the data gathering tool.
- Closing data gaps (missing values). To solve the problem of missing values, the following steps are required:
    1. Data sets relating to the cities have to be grouped by country in order to see whether the gaps are a problem pertaining to a particular city or whether various cities from one country all have the same problem.
    2. The number of missing values was recorded for each indicator and for each city to find out whether the problem was related to a particular question or to the city itself.
    3. Contact an expert in data from the city in question to clarify the reasons for missing values (for example to explain exactly what the question means, and which answers are to be expected in order to ensure comparability).
    4. In some cases relating to qualitative data, a missing value can be interpreted, and in fact was interpreted as a negative response. For example, if an answer was not

supplied for the following question: "Does the city have a welcoming service?" it was decided that the city does not provide such a service otherwise it would have been known by the expert in data from that particular city.

5. In some cases relating to quantitative data, a missing value can be reasonably estimated (by BAKBASEL).
6. In other cases, if a reasonable estimation cannot be provided for a missing value, the gap in the data is still obvious. Nevertheless, the Index of Openness and its sub-indices will be prepared in such a way that the data gap does not distort the index value of that city. Sofia and Bucharest, for example, are not included in the MIPEX and there is not enough information available to give a plausible estimation of how these cities score in the MIPEX. Therefore, the gap in the data is still there, but it does not affect the scoring of Sofia and Bucharest in the index.

- Calculating indicators (quantitative data) or coding (qualitative data):

1. Some indicators such as "the number of cinemas per number of inhabitants" can easily be calculated, whilst other indicators are more demanding. To obtain a meaningful indicator, the number of languages which appear on a city's website, for example, has to be converted into scores because the importance of the languages in question has to be weighed. Therefore, some languages receive a greater weight than others (according to an article by Weber[24] about world languages).
2. Coding means assigning values to qualitative data (answers to questions in the data gathering tool). Answers in favour of openness obtained higher values than answers indicating restrictions. For example, if a welcoming service exists, the coded value is one. A city which does not provide a welcoming service received a zero value.
3. The exact values were not recorded for various data. The data are only placed in ranges. In order to construct indicators, these data were codified in a similar way to the qualitative data. It is assumed that cities having a greater number of festivals, embassies etc. are more open. Thus higher numbers (e.g. a higher number of international festivals) receive higher values. If a city has no festivals, embassies etc. the coded value is zero.

4.3 Summary of lessons learned from data gathering

Before turning to the results of the survey and the best way to aggregate and present data, the experiences of the data gathering and data preparation process will be summarised. What can we learn from it and apply to the main project?

- A lot of data can be obtained from internationally-comparable sources and databases. These data should be collected centrally to ensure comparability.
- Some of the international comparable data were taken from databases with limited geographical coverage. Thus, some cities which feature in the sample of cities, including cities which plan on participating in the future, do not appear. Therefore, it is necessary to have somebody who can conduct negotiations with the owners of the databases and a municipal representative/delegate in order to determine how a city can be integrated

[24] Weber, G. (1999): Top languages: The World's 10 most influential Languages. National Bulletin, vol. 24, 3:22-28.

in the future. Is it possible to include a certain city and what are the conditions (time, money etc.)?

- Openness has many qualitative aspects (such as governance and leadership factors or access to the property market etc.). In order to obtain this qualitative data, the cities can contribute considerably via the data gathering questionnaire and this information is available worldwide. A problem within the feasibility study was that so far no transnational comparative studies about the qualitative aspects of openness exist. For example, there were no studies on cities' strategies for promoting the participation and integration of foreigners or for promoting the settlement of foreigners. Nor were there studies regarding available and successfully-used policy instruments for the internationalisation of cities, etc. Such instruments are already used in part by the cities participating in the feasibility study. Therefore, it would be reasonable for the main project to integrate the existing knowledge of the participating cities in order to have a better grasp of the qualitative aspects of openness. Such an exchange would provide a stronger and better quantification of the qualitative aspects, and the significance of the Index of Openness would be strengthened.
- There are also a number of quantitative data which have to be collected or evaluated by the cities. The cities had more problems in delivering the quantitative data because they are more time-consuming to collect. In addition, there were more problems with definitions. Exact definitions are required for the collection of quantitative data. At the moment, a number of indicators have been included to measure openness which can only be used if the definition is refined. For example, there is not a clear definition of an "extreme right-wing party" which has been agreed upon. Nonetheless, all the cities did name the parties. Therefore, it is possible to discuss the results with experts on this subject to assure comparability and to work out a refined definition. Therefore, an international group of experts should be brought on board.
- Each city should provide an expert in data for the collection of data.
- Some data were not available for various cities within one country. Thus, it would be efficient for these cities to delegate one expert in data to find a way to close the gap between them all. The solution should apply to all cities within that particular country because it is a nationwide problem.

Overall, it can be concluded that there are enough valid and meaningful indicators available to measure openness. Nevertheless, there are challenges in obtaining globally comparable data in certain aspects of openness. The indicator set, as depicted above, covers a wide range of indicators measuring or proxying many features of the multidimensional phenomenon of "openness". However, it focuses on facts, either political activities or outcomes of the openness process. Therefore, it seems reasonable to also include a range of perception variables asking what people in the city think about openness and what some key results of openness are.

Given that such information is not yet available on an internationally comparable basis, one could suggest requesting each participating city to conduct a survey with its own population. Such a survey could consist of two parts:

(1) Survey of the national population in the city about their views on openness.

(2) Survey of the international population in the city about their views on openness.

The questions of the survey should be identical for all participating cities and should include a minimal and representative number of completed questionnaires. This survey should be repeated at the same intervals as the updates of the statistical data set. It is important to realise that openness is not only about facts, but also about perception of the people living in the city.

Questions for both subgroups might include:

- Did you know that our city wants to be an open city?
- Do you think that our city is already an open city?
- Do you think that openness is an asset for our city?
- Do you think that there are too many / too few international people in our city?
- Etc.

Questions for the national population only might include:

- Do you think that international populations increase the problems in our city?
- Do you think that international populations increase unemployment in our city?
- Etc.

Questions for the international populations might include:

- Would you like to be better integrated into our city?
- Where do you think that our city could improve its openness (could be more open to international populations)?
- Etc.

There should not be too many questions so that cost efficient telephone interviews may be conducted.

5 Perception survey about the importance of openness

To assess how different factors of openness are viewed, BAKBASEL conducted a survey between February 16th and March 30th, 2009. The survey was carried out among 140 selected respondents in 16 cities. This survey was intended to complement and to weight the indicators that would be applied to measure the openness and attractiveness of a city.

5.1 Methodology

The survey was conducted as an on-line interview on a password protected website of Konso Ltd., Institute for consumer and social research. Respondents had to devote about 15 minutes to complete the questionnaire.

The questionnaire design was fully structured with closed, open ended and scaled questions specifically adapted to the particular content of the study (see Appendix). Konso's on-line survey system offers a large degree of flexibility to the respondents in how they fill out the survey and how their answers are registered.

The cities had the possibility to use a paper version of the questionnaire and to interview the experts personally. Some cities translated the questionnaire which was validated by BAKBASEL.

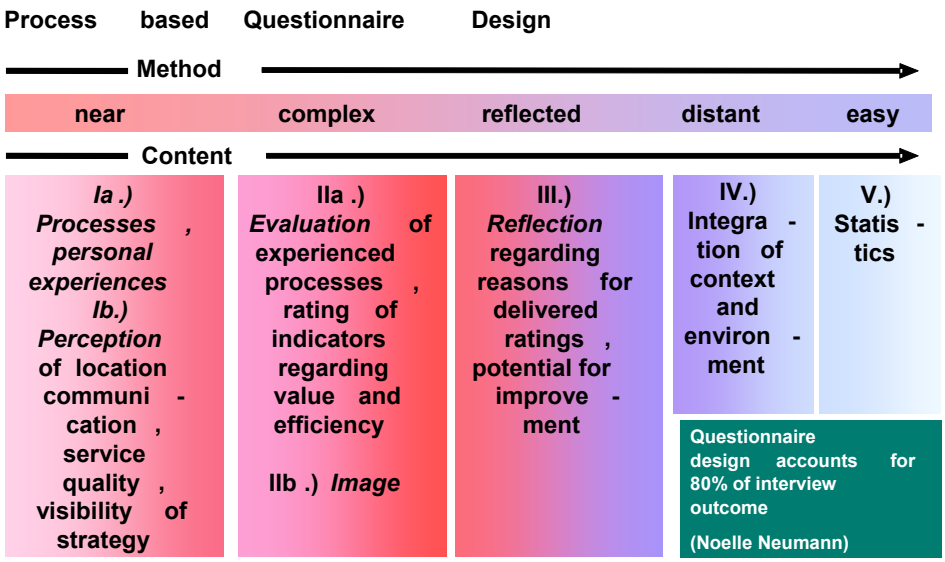
5.1.1 Questionnaire Design

Konso's questionnaire design aims at catching the respondent's everyday experiences rather than asking them to evaluate the topics abstractly. The design is called "process based" and it yields more realistic and true-to-life feedback by the respondents. After the interviews are completed, the statistical treatment of the data provides the consolidated, more abstract view. Furthermore, questions are placed in a sequential order which tends to follow an accepted conversation pattern. Respondents follow the questions from less complex to more complex topics and from more personal experiences to more abstract and generalized views. This questionnaire design of Konso has been applied successfully to location attractiveness and satisfaction surveys.

In terms of its interviewing and evaluation technique, Maslow's hierarchical model of human needs and Herzberg motivation factors theory were applied. Positive values are given to mostly emotional and social factors known as "satisfiers" or "motivators", such as how warmly migrants are welcomed.

Negative values are given to so-called "dissatisfiers". These are factors that are expected to reach a certain level and are more or less taken for granted. They are perceived in a negative way only if they fall short of expectations. If these factors attain an expected level they evoke no particular satisfaction. For example, if people expect clean streets then it strikes them in a negative way if the streets don't reach the "expected" quality. However, if streets are as clean as expected, no particularly positive values are attributed.

Fig. 5 Process based Questionnaire Design: Konso



Source: Konso

5.1.2 Scale

For better differentiation of so called "satisfier" or "dissatisfier" factors and because respondents tend to occupy middle positions in smaller scales, e.g. 4 or 6 point scales, a 10 point scale was used in this survey. A wide differentiation is necessary because details counting location openness and attractiveness. Fine distinctions are likely to arise between the values of 7 and 10, which, when using in a 6-point scale, would all be levelled out at scale levels 5 to 6.

5.1.3 Stakeholders

After discussions with the steering group, it was decided to focus on a target group that stays in a city for at least a few months. That's why tourists and business travellers are generally excluded from the sample. Business travellers, in particular, usually do not even choose the city they travel to. However, students and retirees are included because they are a very important migrant group in some regions.

At this stage, the survey is about quickly getting first perceptions from a feasibility perspective. For a full study, one would need to undertake a survey of a much larger scope with a representative number of potential migrants or international students, workers and retirees worldwide. Knowing how time-consuming and how expensive this would be, for the feasibility study, it was decided to interview a group of so-called proxy[25] stakeholders more easily reached than the migrants themselves. These proxy stakeholders are also involved in the process of openness; for example, they are representatives of the cities. These stakeholders were briefed by BAKBASEL about the concepts and definitions, in order to assure that they were qualified to fill out the questionnaire.

The following stakeholders participated:

- 22 representatives of the cities
- 8 politicians
- 19 members of the academic community
- 16 members of a chamber of commerce

Further 61 people with an international background:

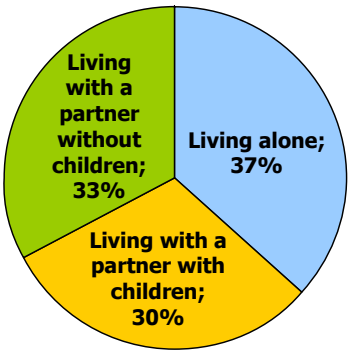
- 18 international students
- 43 international employees

Although, for this feasibility study, international retirees or, for example, lower skilled workers couldn't be included in the sample, the 140 "proxy" respondents produced broad qualitative and, to a certain degree, even quantitative feedback regarding the survey topics.

5.2 Results

52% of the participants are males, 48% females. Also the household structure is spread homogeneously: 37% live alone, 33% with a partner without children and 30% with children.

Fig. 6 Perception survey: Household structure of the respondents

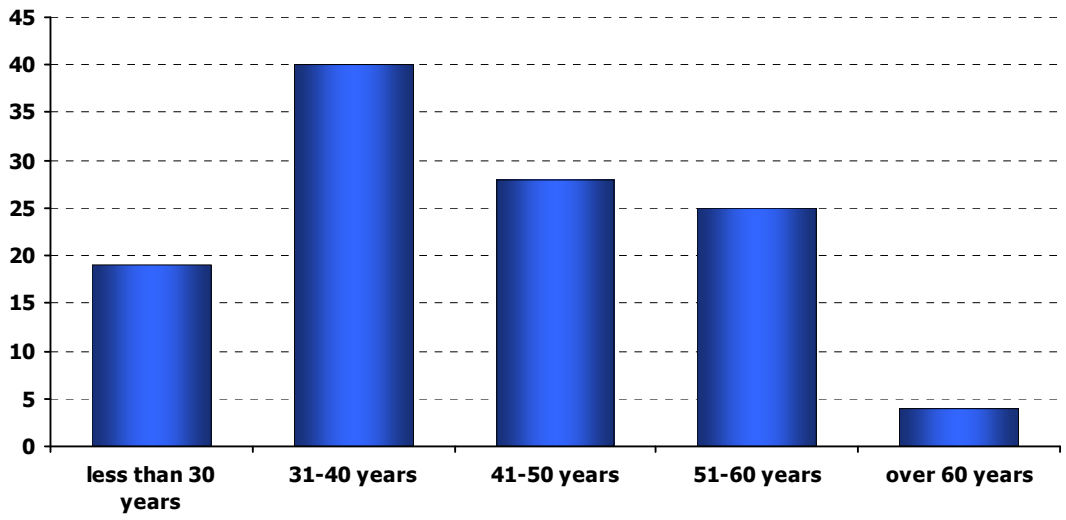


Source: BAKBASEL

Most of the participants (80%) have completed a higher education like a university. 13% are still students. A third is between 30 and 40 years old. Only four people are over 60 years old.

[25] In primary research, "proxy" means that instead of the targeted stakeholders substitute stakeholders are interviewed. They are close (proximity!) enough to the topic in order to produce relevant feedback.

Fig. 7 Perception survey: age structure of the respondents



Source: BAKBASEL

The 140 participants have 30 different nationalities, but are mostly European. 15% are British, 12% Spanish, 12% Irish and 10% Bulgarian. 71% were not born in the city where they live now. About 15% are of African or Asian origin. Reasons for moving to their current location are job offers, studies or family reasons. 57% of the respondents who were not born in the city have lived there for more than five years. More than half of all participants have lived in more than one country.

Locations and stakeholders position account for most of the differences observed between results originating from the different segments. Family structure, gender and age of the respondents differentiate less.

At the beginning of the survey, BAKBASEL asked about the importance of openness for a city. 95% think it is important, 5% do not. These 5% are international students and young employees.

BAKBASEL wanted to discover how respondents see the contribution of different segments of the population towards the success of a city. Respondents were asked to rate their views based on a scale of 1-10. A "10" always means "Absolutely essential", "1" means "Not important at all":

Tab. 5-1 International populations

	Mean
International workforce with university education	8.85
International workforce with vocational skills	8.17
International students	8.05
International workforce with basic skills	6.28
International retirees	5.05

Source: BAKBASEL

The participants rate a highly skilled workforce as the most important factor for the successful development of a city. Since almost all of the participants have a university education themselves, this result is no surprise.

In the survey BAKBASEL wanted to classify the role and importance of different factors regarding the openness of cities. The mean[26] in the brackets is calculated out of the means of the indicators. This procedure was verified in a statistical analysis[27]. This analysis also shows that the grouping of the indicators makes sense.

- Economic factors (8.10)
- Leadership factors (8.30)
- Regulatory factors (8.40)
- Social and societal factors (8.60)
- Cultural and amenity factors (7.60)
- Internationalisation factors (7.80)
- Connectivity and accessibility factors (8.20)
- Environmental factors (7.00)

For the participants, the social and societal factors are the most important (total mean value = 8.60), followed by the regulatory (8.40) and the leadership factors (8.30).

The factors which are the least important for the respondents are the environmental factors (7.00).

The most important indicators are the high tolerance towards migrants (9.04), political freedom (9.02), freedom from racism and xenophobia (9.01) and extensive legislative protection against any discrimination (9.00).

Rated as not very important are multi-lingual signage throughout the city (6.97) and a particularly sunny and warm climate (6.04). These findings could be different if retirees were included in the survey.

The indicators concerning the labour market are the most important economic factors for the participants, followed by the property market. Altogether, taxes are less important, but there are big differences by city and by occupation. For politicians, for example, taxes have a higher relevance (mean = 8.00).

[26] Before the calculation of mean values a Chi-Quadrat-test was carried out. This test analyzes the distribution structure of the responses. In this survey the indicators have a so-called even distribution so that mean values represent the results correctly.

[27] Factor analysis: Statistical procedure to reduce the number of variables. Thus overlaying factors bundle a multitude of individual factors and consequently reduce complexity in order to explain findings in a more comprehensive way.

Tab. 5-2 Economic factors

	Mean
Generally attractive labour market conditions	8.90
Equal access to the labour market	8.90
Availability of attractive housing	8.19
Equal access to the property market	8.10
High income	7.49
Low taxes	7.03

Source: BAKBASEL

The programmes and activities provided by city governments for migrants are perceived as motivators or satisfiers with mean values between 8.30 and 8.50. The language of the city website (7.88) is only important for non-English speaking cities.

Tab. 5-3 Leadership factors

	Mean
City programs to promote a multicultural environment	8.54
Actions of city governments to attract international populations	8.39
Language courses to facilitate participation and integration	8.33
City programs to provide the basis for belonging and inclusion of international populations	8.32
The official city website is available in foreign languages	7.88

Source: BAKBASEL

Political freedom (9.02) and protection against discrimination (9.00) are very important for all the stakeholders.

Tab. 5-4 Regulatory factors

	Mean
Political freedom	9.02
Extensive legislative protection against any discrimination	9.00
Assured security of the residency status	8.61
Easy naturalization process for everybody	7.77
Very high political participation rights for non-citizens	7.66

Source: BAKBASEL

The "soft factors" of the social and societal factors have a very high relevance for the openness of a city. Especially the tolerance towards migrants (9.04) and the absence of racism and xenophobia (9.01) have both been rated above 9.

The younger the respondent, the more important are international schools. While the total mean rating for a generous supply of international school is 7.71, the 18 students attribute it with a mean value of 8.35 and the members of the chambers of commerce give it even 8.5.

Tab. 5-5 Social and societal factors

	Mean
High tolerance towards migrants	9.04
Freedom from racism and xenophobia	9.01
Easy access to the formal education system	8.90
Positive perception of immigration	8.81
Easy access to the public health system for everybody	8.76
High standard of health services	8.66
Very high quality of universities	8.58
High integration of international population	8.38
Easy portability of social benefits between countries	8.18
Particularly low crime rates	8.18
Generous supply of international schools	7.71

Source: BAKBASEL

A wide cultural and amenity offer is rated quite important by politicians (8.63) and representatives of the cities (8.29). In general, the factors concerning multiple languages are less important for the cities in the UK.

Tab. 5-6 Cultural and amenity factors

	Mean
Particularly wide cultural and amenity offerings (e.g. museums, cinemas)	8.01
Ability of host population to communicate in common international languages	7.76
Wide international media offerings (e.g. TV, newspapers)	7.72
Wide cultural offerings in multiple languages	7.56
Easy access to different places of worship	7.36
Large selection of international gastronomy	7.19

Source: BAKBASEL

Hosting many international companies is very important for politicians (9.34) and members of the chambers of commerce (9.15). For members of the academic community this factor is less important (7.24).

There is wide disagreement among the respondents if a city should be popular with tourists. The cities rate this factor between 5.00 and 9.33. For politicians (9.00), tourism is very important, whereas for academics (6.60) and employees (6.90), it's not so important.

Tab. 5-7 Internationalisation factors

	Mean
Hosts many international companies	8.22
Wide range of international events, fairs and conferences	7.74
Complete consular and embassy representation	7.61
Popular tourism destination	7.59

Source: BAKBASEL

International transportation hubs such as airports or ports have a higher relevance for natives than for migrants. All four of the participants over 60 years rate this factor at 10 points.

Excellent international transportation links are much more important to politicians (9.63) and members of the chambers of commerce (9.36) than to the international workers (8.28). The same tendency appears for "short commuting times" within the city. There is a wide range of ratings regarding multi-lingual signage throughout the city. Participants of one city rate this at 3.63, others at 8.67.

Tab. 5-8 Accessibility and connectivity factors

	Mean
Existence of a international transport hub (airport, port)	8.75
Excellent international transport links	8.72
Good quality broadband access	8.51
Short commuting times within the city	8.09
Multi lingual signage throughout the city	6.97

Source: BAKBASEL

Environmental factors are rated as less important than other factors. A particularly warm climate doesn't seem to be very important. This factor, however, is most important to students (6.71).

Tab. 5-9 Environmental factors

	Mean
Very low levels of pollution	7.37
Very clean streets	7.26
Existence of natural amenities nearby (e.g. lake, sea, mountains)	7.15
Particularly sunny and warm climate	6.04

Source: BAKBASEL

5.3 Summary and discussion

With the aim of developing a measuring instrument for openness, an assessment was made of the importance of the various aspects of openness through a survey in which experts from each city were questioned about their view of openness. This survey, prepared in 2008 and conducted in February / March 2009, resulted in 140 responses from 16 European cities which provided a broad qualitative and quantitative view of the subject. Most of the respondents have completed a higher education. Although, less skilled workers and international retirees are important groups of the OPENCities project, they did not participate in a significant number.

The overwhelming majority states openness as important for a city. An exception thereby make students and young workers. As most important for the success of the city the participants consider a highly skilled workforce. Since almost all of the participants have a university education themselves, this result is no surprise. Social and societal factors, especially the so-called "soft factors" (e.g. indicators such as tolerance towards migrants and absence of racism and xenophobia) are the most important one, followed by regulatory factors as well as leadership factors. The valuation of the various aspects of openness does not vary significantly with the lifecycle of the respondents. The valuation varies more between respondents living in different cities and/or having different stakeholder positions.

The analysis of the survey shows that the grouping of the indicators into the nine key factors makes sense. The survey allowed us to classify the role and the importance of the various aspects of the openness of cities. It was thus possible to derive a preliminary weighting scheme for the measurement of openness from the survey.

How should the project proceed with the issue of weighting? It is important that the weighting scheme is fixed at the beginning of the main project and is not changed often. Indeed, it would be optimal to keep the chosen weighting scheme for many years. Otherwise, it will be difficult to explain changes in the data over time because there will be the cumulative effects from changing indicators and changing weights. Therefore, it is worth spending a few moments reviewing options for producing a lasting weighting scheme.

Options:

- Continue to work with surveys with a sufficiently large and well-enough stratified number of participants to guarantee an unbiased estimate of the true perception of the underlying population. There is a variety of options for who should answer the survey: politicians, experts, international populations (migrants/expats) or native inhabitants (locals). Note that the perception of what is relevant not only depends on the group (see above), but also on timing (e.g. in a recession people may perceive things differently) and on the country or continent (people in Latin America may have different perceptions than people in Eastern Europe). Moreover, there is a potential bias in the results if most answers come from highly qualified people (politicians, experts or highly qualified expats) and only a few answers come from less skilled people because they tend to be much less interested in the issue and less likely to be familiar with filling out complex questionnaires.
- Interviews with a small number of international experts. Weights are then calculated from mean values of the interview partners.
- Weighting scheme is fixed by one expert, e.g. the index producer (i.e. BAKBASEL).

There is also the option of hybrid solutions. For example, we could start with the currently available weighting scheme and discuss it with an expert panel (e.g. the international OPEN-Cities advisory board) and modify it until there is a consensus in the panel.

Note that the different options imply different costs. A large survey in many countries on different continents is still very expensive, primarily because of language problems. A two-hour discussion with the advisory board, however, is relatively cheap.

We suggest following the hybrid solution. The combination of input from an actual small survey and an expert panel promises the best cost-benefit relation.

6 Data Aggregation and Presentation

One task of the feasibility study is to find the best form of both presentation and aggregation of the data. Should the cities' openness be compared by using kitemarks or benchmarking? Is it better to use a single index or an index family? The various possibilities of data presentation will be discussed in the following chapter.

6.1 Options for data presentation

Openness can be presented as an index, a kitemark or within benchmarking. Through the review of already existing examples, these three options will be evaluated in this chapter in order to identify the best option for data presentation.

6.1.1 Index

The first option for data presentation which will be examined is the **index** in its "fixed" form as it is used in the Anholt City Brand Index, the Mercer Human Resources 'Quality of Living Index' or Robert Huggins Associates 'World Knowledge Competitiveness Index'. The Anholt City Brands Index is an annual ranking of cities around the globe which is compiled from the results of a survey conducted online among 17'502 men and women aged from 18 to 64 in 30 cities in 18 countries. Data are grouped according to a hexagon: presence (the city's international status and standing); place (people's perceptions about the physical aspect of each city); potential (the economic and educational opportunities that each city is believed to offer to visitors, businesses and immigrants); pulse (the appeal of a vibrant urban lifestyle), people (people's impression of the inhabitants, community and safety) and prerequisites (people's perceptions of the basic qualities of the city).

An index ranks units by comparing factors and criteria as well as by using weighted factors and indicators. It uses aggregated qualitative and quantitative data and helps to create a reliable description of reality. Indices are the easiest and most fundamental way of comparing entities in the case of differing criteria. City indices are helpful when pointing out where city leadership should focus interest and expand policy, but they do not offer complete solutions. City leaders cannot be certain that indices will indicate which judgement is the best for their city and its requirements. "But city leaders can use the city indices to help them observe what other players think about their cities and to be informed about how their perceived performance will be presented and judged".[28]

Even if indices can be used as an information source for different target groups like, for example, enterprises, individuals or city administrations, some disadvantages of this form of data presentation should be mentioned. Indices sometimes have deficits in transparency and validity when choosing geographical units, when collecting qualitative and quantitative data, and when aggregating and weighting indicators and factors. Using scales can increase or reduce the differences of the real values. To interpret the index results accurately, the methodology has to be

[28] Clark, G. (2008): City Success: What do the global indices tell us? Senior Fellow, ULI, EMEA / India: 64.

considered. Sometimes the problem with an index is the fact that the results are presented in a ranking. This means, that all information is aggregated into a single measure (the index), which in practice usually is reduced to the ordinal information (the ranking). Such a ranking neglects the richness and cardinal information of the data behind. Moreover, it does not incite most of the involved cities to make changes and to progress because those at the top of the list have no objective reason to improve their performance since they are already among the best. Whereas, those at the bottom of the list do not want to be evaluated in future rankings for fear of further bad results. In addition, it seems impossible for them to catch up with the leaders in the foreseeable future.

6.1.2 Kitemark

The second option for data presentation is within a **kitemark**. A kitemark represents a standard or quality which should be reached for a specific indicator or issue in a specific field. Examples for kitemarks are claims such as "family-friendly city" or "having not more than 5% unemployment rate". A kitemark is connected with a specific image. To illustrate this alternative, we look at the climate group: "Low Carbon Leader Cities Report". This report identifies those cities which have taken active measures to reduce greenhouse gas emissions. It outlines the measures taken by each city, the effects these measures have had on reducing emissions and any future targets the cities have set. The kitemark makes qualitative assessments of each city's experience. Statements of success and failure are only made on a case-by-case basis; there is no overall assessment of the different methods cities have utilised. The advantage of a kitemark is that it can easily be used by the city marketing department. However, city comparison is difficult. The disadvantage is that the "necessary" standard of quality must first be adequately defined. Kitemarking includes judgements and is thus never neutral.

6.1.3 Benchmarking

What about **benchmarking**, a systematic and quantitative comparison of data? The comparison is usually done relative to a group of competitors. A good example to illustrate this form of data presentation is BAKBASEL Economic's International Benchmarking. International benchmarking compares data over time and across cities and regions (more than 1000 regions are covered in this example). A series of reports provides a comprehensive analysis of global regional performance (value added, employment's productivity). Thereby, a number of factors for regions' or cities' success or failure are important: innovation resources (availability of human capital, quantity and quality of university research, expenditures on R&D), regulation of markets (product markets, labour markets), taxation (company taxation, taxation of highly qualified manpower) connectivity (global accessibility) and further attributes.

Benchmarking is a tool for systematic comparison. In the case of BAKBASEL, benchmarking is used to compare systematically economic indicators of regions across Europe. Using the background of a long-term endogenous growth model, the benchmarking analysis looks both at economic performance and the relevant location factors behind. The comparison to a relevant peer group allows the identification of current strengths and weaknesses and indicates opportunities and threats for the future (a so called SWOT analysis).

The advantages of benchmarking and the mode of operation can be illustrated by an already implemented benchmarking instrument: a management information tool called "BAK DESTINATIONS MONITOR" for touristic destinations and regions. This is a benchmarking tool which has been developed to support the touristic sector of Switzerland in order to enhance the competitiveness of touristic destinations. The "BAK DESTINATIONS MONITOR" is a strategic and decision-making instrument in electronic form. The Excel-based tool allows for international benchmarking and graphical illustration of performance and the competition factors. Thus, the destinations can determine their own strengths and weaknesses. Furthermore, BAKBASEL provides annual updates of all information.

This tool covers six central elements: benchmarking (comparisons between regions), profile (summary of the most important characteristics of the benchmarking destinations), ranking (top 15 destinations), regions (graphics and analyses about the comparative development of the touristic destinations in the alpine region), importance-performance-analysis (compact representation of the strengths and weaknesses of a destination) and report (tourism-relevant studies and reports which are central bases for the Swiss tourism industry and supply important information for the improvement of their competitiveness). More than one hundred destinations within the European alpine region are covered. Besides performance indicators, the analysis tool covers numerous internationally comparable indicators about competitiveness (more than 60 characteristic numbers). The monitor allows a selection of benchmarking partners as well as a number of data. Annual updates ensure that the effects of implemented measures can be constantly supervised. The tool is suitable not only for analyses, but also as a support instrument for checking processes.

The "BAK DESTINATIONS MONITOR" is divided into three modules. The module "alpine destinations" covers characteristic numbers and evaluations of alpine holiday destinations (e.g. Zermatt, Gröden, Arosa). The module "alpine regions" is concerned with the holiday regions of the European alpine region. It offers, for example, the possibility to compare the Bernese Oberland with the South Tyrol. The module "city destinations" contains a multitude of data about cities from within Switzerland and other countries.

There are several objectives and benefits of such a benchmarking tool. The first objective is the systematic measuring and analysis of the tourism-destinations' economic performance. The second objective is the improvement of the competitiveness of tourism-destinations by comparative analyses of the success and the competitive factors: "Learning from the best". Moreover, there are some additional benefits of the benchmarking tool. Primarily, it allows better knowledge of the competitive position: "How do we perform compared to our competitors?" Secondly, it points out market potential and potential for growth: "What are our strengths?" Thirdly, the need for action can be identified: "Where do we need to improve?" and finally, the chosen measures' success can be monitored and checked: "Do our measures stand the test?"

6.1.4 Conclusion

After reviewing the various options for data presentation, the idea of a **hybrid form of data presentation** - which groups together all strengths from each of the three options presented above - was created. Indices are quantitative, but primarily ordinal (rankings matter). They allow using qualitative information and merging different information in a single, general meas-

ure. Kitemarks are qualitative and judge by the use of threshold values. Benchmarking uses quantitative data and is primarily cardinal (distances matter). Thus, an Index of Openness (respectively a whole index family) covering all aspects of the multidimensional concept of openness will be created. Such an index family (an index with various sub-indices) makes it possible to divide the sample into comparable sub-groups and to compare cities with homogeneous or individually defined benchmarking partners. The method of benchmarking will be used to analyse the strengths and weaknesses of the individual cities (individual peer review, comparing and monitoring their openness). This tool can have an educational aspect. Rankings can be used to promote investments. Progress in developing actions plans, strategies or investment decisions of cities can be judged and benchmark reports can highlight problem areas or underline particular successes.[29] The clear commitment of the involved cities can be taken as a kitemark. In addition, the progress of cities in terms of openness can be benchmarked and also used as a kitemark.

The possibilities of benchmarking as well as the construction and application of an Index of Openness will be discussed in the next section. The exact definition and implementation of kitemarks is not part of the feasibility study.

[29] Clark, G. (2008): Towards OPENCities. Published by British Council, Madrid: 85.

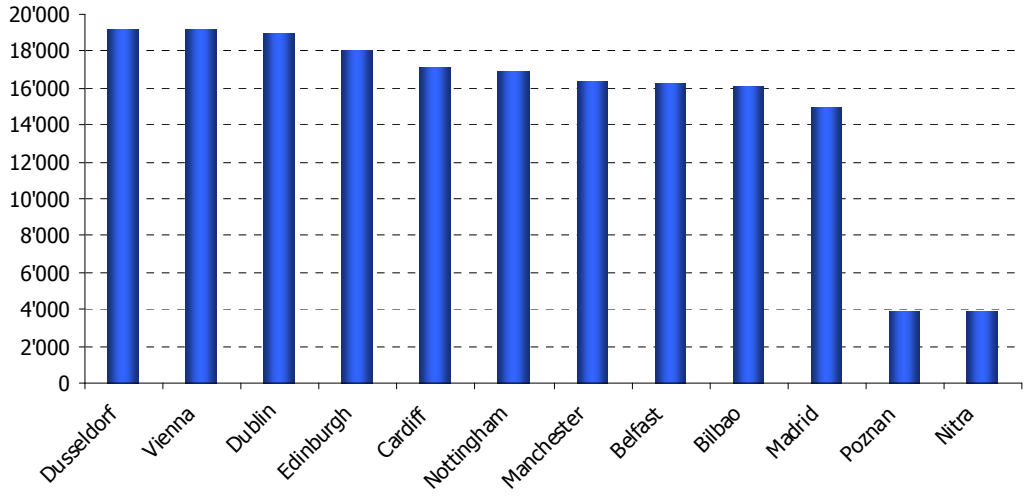
6.2 Benchmarking and indexing city openness

The following section demonstrates how the openness of a city can be benchmarked and how an index of openness (with various sub-indices) can be developed.

6.2.1 Benchmarking based on single indicators

Benchmarking can be done for a single indicator across many cities or for one city across many indicators in a full city profile.

Fig. 8 Disposable Income per Capita, 2005, European city sample

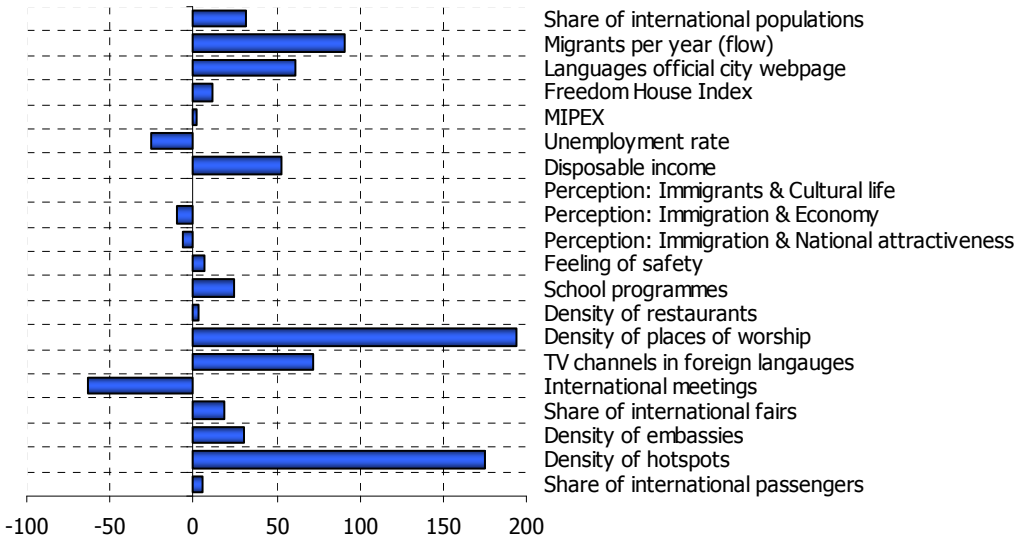


Note: This data is for use in the feasibility study only and not for general publication.
Source: BAKBASEL

Fig. 8 is an example of benchmarking for one indicator across several cities. It illustrates disposable income per capita for a European city sample. It can be seen that disposable incomes per capita of more than 18,000 EUR per year are highest in Dusseldorf, Vienna and Dublin, while the selected Eastern European cites have less than 4,000 EUR per year.

This kind of benchmarking allows cities to get information about both their absolute position and their relative position regarding one indicator. However, openness cannot be measured with a single indicator. It is a multidimensional phenomenon which consists of various key factors and a multitude of indicators. The next chart demonstrates how a city can judge its relative position (compared to the mean of a city sample) for one or two indicators of each key factor. In technical terms, an average value for each indicator is computed as well as the proportional deviation from the average value for each indicator and for each city. The results for one city are graphically represented as follows:

Fig. 9 Example of a City Profile (using indicators): Dusseldorf



Note: This data is for use in the feasibility study only and not for general publication.
Source: BAKBASEL

This example demonstrates how the evaluation of the city sample takes place. The "city profile" describes the results for Dusseldorf[30]. The results can then be compared with other cities (European city sample) since the deviation from the arithmetic mean of the European city samples is computed for each indicator.

Let us have a more detailed look at some of the results for Dusseldorf. The city has an above average disposable income and does well concerning its cultural and amenity factors. Moreover, the city is generally well connected as well as easily accessible. In summary, it can be said that Dusseldorf is an internationalised city. However, the city has an above average unemployment rate and a negative perception of the influence of migration on national economics, culture and attractiveness.

This example compares Dusseldorf to the mean of the European city sample. Dusseldorf could also be compared with other city samples, e.g. cities with an already high level of internationalisation to get more information about its relative position compared to its closest competitors[31].

Overall, it can be seen that the city gets more information than in the first example and it can judge its position in a much more useful way than by using only one indicator. However, some information is lost because the absolute position cannot be assessed anymore. In addition, this method of data presentation is not useful if the number of indicators is very large. It is therefore necessary to condense the available information. The best way to do that is to use an index with various sub-indices (benchmarking indices).

[30] Thereby all key factors were considered with the exception of environmental conditions: international populations, leadership, regulatory, economic, social and societal, cultural and amenity, internationalisation as well as connectivity and accessibility factors.

[31] The results of a city can then be compared with other cities (capital city sample), as the deviation from the arithmetic mean of the capital city samples is manufactured for each indicator.

6.2.2 Benchmarking based on aggregated information

6.2.2.1 Data aggregation

To construct a composite Index of Openness (overall index and its sub-categories) the individual indicators can be aggregated as weighted averages in four steps. The technical details are described in the grey box below.

Step 1: Standardising the indicators

(Obtaining indices with an mean value of 100 and a standard deviation of 10)

The indicators have to be transformed to indices which can be added. There are mainly two possibilities. The first one is to transform the data into a scale ranging from 0 to 100 (with 0 = lowest value and 100 = best value). For this version, it is necessary to define best outcomes. However, for many indicators, we do not know much about best outcome in terms of openness. Thus, this method would rely on arbitrary decisions which is not desirable.

The second method is the transformation of the data in such a way that the average score is 100. Thus, values above 100 are above average. Values below 100 indicate that a city scores in a certain field (or indicator) below average. The advantage of this method is that it is not necessary to define best outcomes. However, the results depend greatly on the sample of selected cities. When different cities are selected and the sample changes, the rankings of the cities may also change even though nothing has changed in the cities' real situation. This problem should be kept to a minimum because the final openness analysing tool should allow cities to choose their benchmarking cities sample from a pre-defined selection which will not change often. Therefore, the second method is preferred.

Some indicators have wider variances than others and can dominate an index. Therefore, it is necessary to ensure that all indices have the same standard deviation (10 in this sample). After transforming the indicators into indices with a mean value of 100 and a standard deviation of 10, the weights assigned to each indicator can be calculated.

Step 2: Computing of the weights from the perception survey results

Principally there are two methodological approaches for weighting results although the literature offers quite a rich menu of alternative statistical weighting methods. Statistical models such as factor analysis could be used to group individual indicators according to their degree of correlation. Alternatively, participatory methods that incorporate the subjective valuation of experts / population groups can be used to assign weights. Within this study, the method of expert-valuation was used because the Index of Openness should reflect the subjective perceptions of the international populations as well as the expert opinion. Statistical methods such as factor analysis can also be applied if the sample of participatory cities is large enough. The results of the perception survey about the importance of the various aspects of openness are outlined in Chapter 5.1.4.

A weighting scheme for the index construction can be derived through transforming the mean values of the different components of openness into weights. It was assumed that aspects of openness which received a mean value of five are not important. Therefore, aspects which were rated with an average value of five obtain little weight. Most aspects were rated between six and nine. The average across all aspects is 8.10. Values below 8.10 should therefore receive

less weight and values above 8.10 should obtain more weight. For a weighting scheme, the range of the grades in the survey is somewhat too narrow. The weights were stretched by a factor of 30.

The weights were calculated so that they always add up to 100% to make sure that all indicators of the Index of Openness can be aggregated to various sub-indices. The calculation formula can be seen in the grey box. The assessed weights for the key factors and the indicators can be seen from Fig. 11 and in the Appendix.

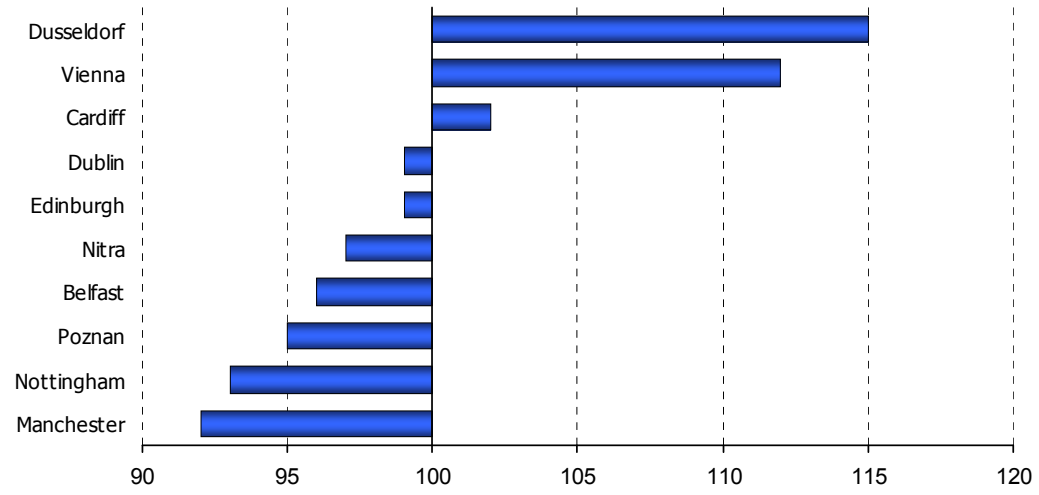
Step 3: Aggregation of the Indices

After computing indices and weights, the indices can be multiplied with the weights and aggregated to a weighted average.

In this way, a sub-index of openness for the governance and leadership factor was computed. Eight indicators[32] were transformed to indices and aggregated to the weighted sub-index governance and leadership. The results are shown for a number of cities. As it can be seen from Fig. 10, cities with values over 100 score well compared to the sample in terms of governance and leadership and vice versa.

The other sub-indices (key factors) can be constructed in the same way.

Fig. 10 Sub-index Governance and Leadership



Note: This data is for use in the feasibility study only and not for general publication.
Source: BAKBASEL

[32] Some cities are not included because they had not returned the data gathering tool by early April when we started to analyse the data. It should be kept in mind that these results are based on preliminary data which should be revised and checked for the main project.

Step 4: Aggregation of the sub-indices to an Index of Openness

Finally, the sub-indices can be aggregated to the Index of Openness as a weighted average.

Index of Openness: Technical Details

Nomenclature:

x_i Indicator i i = 1…n

w_i Weight of i

I Index

σ Standard deviation $= \sqrt{\sum \left(x_i - \bar{x}\right)^2 / n}$

Step 1:

Standardize all indicators to I_i

with mean 100 and a standard deviation of 10

$$I_i = \left[\left(x_i * 100 / \bar{x} - 100 \right) * \bar{x} / 10 * \sigma \right] + 100$$

Step 2:

Computation of the weights

Definition of a neutral note = 8.1 and a stretch factor = 30

v_i = (Note; -8.1) * 30 + 100

$$w_i = v_i / \sum v_i$$

Step 3:

Aggregation to a Sub-Index

$$I_{sub} = \sum w_i * I_i / \sum w_i$$

Step 4:

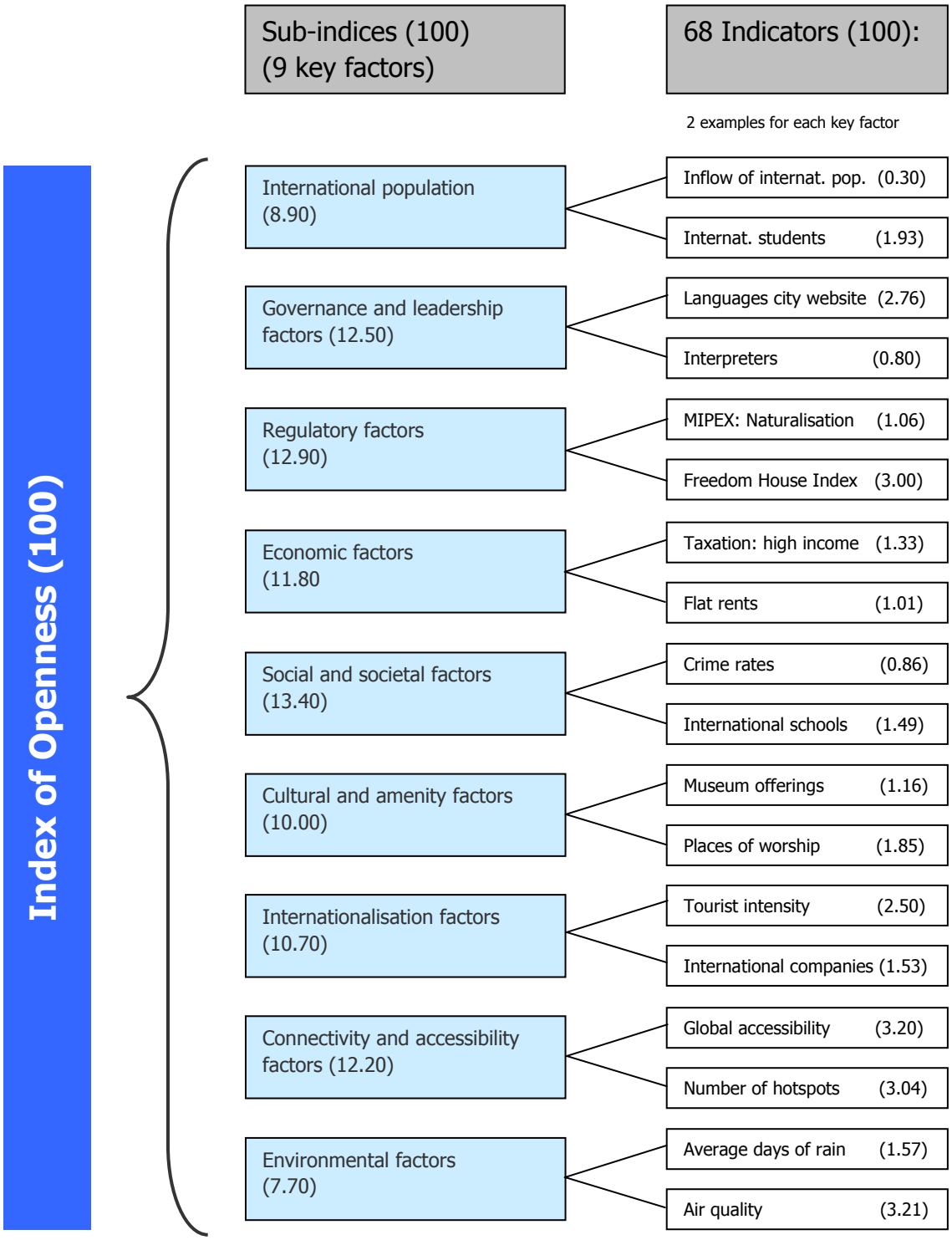
Aggregation to an Index of Openness

$$I = \sum w_i * I_{sub} / \sum w_i$$

6.2.2.2 The Index of Openness as part of an index family

Because openness is a multidimensional concept it can barely be observed. However, many single observable aspects are gathered systematically. The measured information can be aggregated to an Index of Openness. Such an index, together with various indicators representing different aspects, forms a model of reality as it is shown in Fig. 11.

Fig. 11 Structure of the Index of Openness



Notes: Numbers in parentheses indicate the weights of the different variables. The weights of all 68 variables add up to 100 for the nine sub-indices. The weights of the indicators shown above do not add up to 100 because only a sample and not all 68 indicators are shown.

Source: BAKBASEL

Fig. 11 illustrates the Index of Openness and its sub-indices (index family) which is based on 68 indicators. The Index of Openness indicates the degree of openness a city has achieved compared to its peer group. The city can attain values above or below 100. Values below 100 indicate that the city is less open than the chosen city sample. Values above 100 signal that the city is more open than its peer groups' average.

The Index of Openness is split into nine sub-indices (key factors) which are weighted differently (on the basis of the survey): International population groups, governance and leadership factors, regulatory factors, economic factors, social and societal factors, cultural and amenity factors, internationalisation factors, connectivity and accessibility factors as well as environmental factors. These factors are measured by various indicators selected by availability and validity. The key factors are decisive for the analysis of the openness of cities. The indicators differ with regard to their significance and quality, but together they form a meaningful entity for the measurement and benchmarking of the respective key factors of openness.

An index family can be created using the existing key factors as well as for different aspects of openness such as internationalisation, integration and leadership. It can be examined whether a city is more attractive than open or vice versa. Cities can also assess whether they are strong or not in aspects of openness which can be influenced by policy. Is the city attractive for international populations because of its offerings (public and private goods / services)? Or is the city attractive for international populations because of its high degree of internationalisation (aggregation of output-variables such as the indicators belonging to international population groups and internationalisation factors)?

The 68 indicators comprising the index of openness can be grouped under various headings to form different criteria to analyse different dimensions of the openness of a city. The different options are shown in Tab. 6-1. As seen, the indicators can be grouped into the already well-known nine key factors. Another possibility is to put the indicators under the heading "openness versus attractiveness". Attractiveness refers to indicators reflecting the conditions which are relevant for attracting and retaining both nationals and non-nationals. Openness refers to indicators reflecting the conditions which are particularly relevant for attracting and retaining non-nationals. The indicators can be categorized into three key themes: internationalisation, integration as well as governance and leadership. Internationalisation refers to indicators reflecting the presence of international actors (population, companies, etc.) in the city and the connection (trade, transport etc.) of the city to the world. Integration refers to indicators reflecting the access and inclusion of international populations. Governance and leadership refers to indicators of the respective key factor.

It might also be interesting to analyse input versus output variables. Input variables might refer to the public and private goods and services offerings of the city, while output variables are indicators which can be interpreted as results of the cities' openness and economic success in previous periods. For policy actions an important question is whether a certain aspect can be influenced by city policy. It is assumed that the city can influence the public goods / services offering, while the private goods / services offerings can only be partly influenced by the city. Most of the accessibility factors can only partly be influenced by the city policies because accessibility depends partly on the geographical location of the city. In addition, the indicators can be grouped according to their qualitative versus quantitative nature. It will also be interesting to draw correlation diagrams of, for example, qualitative vs. quantitative or attractiveness vs.

openness data. Do both categories cover more or less the same picture of openness (high correlation) or rather do they cover different aspects of openness (low correlation)?

In the same way, we also can introduce new dimensions such as, for example, perceptual vs. factual data (see table 9.1.4 in the appendix). Perceptual data are probably more relevant for attracting people (in the sense of the reputation the city has abroad), whereas for retaining people, people are no longer dependent on reputation and hearsay but rather can base their decisions on facts.

Table 7-1 illustrates the relationship between the various dimensions, such as, for example, between the three key themes (column 5) and the 9 key factors (column 3).

Tab. 6-1 Index of Openness: Index Family

No.	Indicator	Key factors (1-9)	Attractiveness (A) Openness (O)	Internationalisation (IN); Integration (GR); Governance & Leadership (GL)	Input (I) Output (O)	Policy control: YES / NO / National / Partly	Qualitative QL Quantitative QT
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**
1	Inflow of international population	1	O	IN	O	NO	QT
2	Stock of international population	1	O	IN	O	NO	QT
3	Low qualified foreign labour force	1	O	IN	O	NO	QT
4	Medium qualified foreign labour force	1	O	IN	O	NO	QT
5	High qualified foreign labour force	1	O	IN	O	NO	QT
6	International students	1	O	IN	O	NO	QT
7	Difference highly qualified international / national population	1	O	GR	O	NO	QT
8	International retirees	1	O	IN	O	NO	QT
9	Non EU international population	1	O	IN	O	NO	QT
10	Diversity of international population	1	O	IN	O	NO	QT
11	Languages city website	2	O	GL	I	YES	QT
12	Welcome service	2	O	GL	I	YES	QL
13	Online information service	2	O	GL	I	YES	QL
14	Migration department	2	O	GL	I	YES	QL
15	Interpreter	2	O	GL	I	YES	QL
16	Start-coaching programme	2	O	GL	I	YES	QL
17	Integration actions	2	O	GL	I	YES	QL
18	Immigrants in the city council	2	O	GL	I	YES	QT
19	MIPEX: Long- term residence	3	O	GR	I	Nat.	QL
20	MIPEX: Family reunion	3	O	GR	I	Nat.	QL
21	MIPEX: Political Participation	3	O	GR	I	Nat.	QL
22	MIPEX: Anti- discrimination	3	O	GR	I	Nat.	QL
23	MIPEX: Naturalisation	3	O	GR	I	Nat.	QL
24	Granted naturalisations	3	O	GR	O	Nat.	QT
25	Freedom House Index	3	A		I	Nat.	QT
26	Income per capita	4	A		O	NO	QT

No.	Indicator	Key factors (1-9)	Attractiveness (A) Openness (O)	Internationalisation (IN); Integration (GR); Governance & Leadership (GL)	Input (I) Output (O)	Policy control: YES / NO / National / Partly	Qualitative QL Quantitative QT
1	2	3	4	5	6	7	8
27	Taxation (high income)	4	A		I	YES	QT
28	Flat rents	4	A		O	NO	QT
29	Living area (average)	4	A		O	NO	QT
30	Access to property market	4	O	GR	I	YES	QL
31	MIPEX: Labour market access	4	O	GR	I	Nat.	QL
32	Total unemployment rate	4	A		O	NO	QT
33	Difference unemployment rate	4	O	GR	O	NO	QT
34	Highly skilled labour force	4	A		O	NO	QT
35	Work permits	4	O	GR	O	Nat.	QT
36	Feeling of safety	5	A		I	YES	QL
37	Crime rates	5	A		I	YES	QT
38	Right wing parties in the city council	5	O	GR	I	YES	QT
39	Subjective perception of health services	5	A		I	YES	QL
40	Foreign students in upper secondary education	5	O	GR	I	YES	QT
41	Quality of universities	5	A		I	YES	QT
42	International schools	5	A	IN	I	YES	QT
43	Perception: Immigration & economy	5	O	GR	O	Partly	QL
44	Perception: Immigration & cultural live	5	O	GR	O	Partly	QL
45	Perception: Immigrants influence on the country	5	O	GR	O	Partly	QL
46	Museum offerings	6	A		I	YES	QT
47	Cinema offerings	6	A		I	Partly	QT
48	Share of movies in foreign languages	6	O	IN	I	Partly	QT
49	Places of worship (minority)	6	O	IN	I	Partly	QT
50	International restaurants	6	A	IN	I	Partly	QT
51	International TV channels	6	O	IN	I	Nat.	QT
52	International festivals	7	A	IN	O	Partly	QT

No.	Indicator	Key factors (1-9)	Attractiveness (A) Openness (O)	Internationalisation (IN); Integration (GR); Governance & Leadership (GL)	Input (I) Output (O)	Policy control: YES / NO / National / Partly	Qualitative QL Quantitative QT
1	2	3	4	5	6	7	8
53	International fairs	7	A	IN	O	Partly	QT
54	Embassies	7	O	IN	O	Partly	QT
55	Tourists intensity	7	A	IN	O	Partly	QT
56	International companies	7	A	IN	O	Partly	QT
57	Freedom of investment	7	O	IN	I	Nat.	QL
58	International meetings	7	A	IN	O	Partly	QT
59	International organisations	7	A	IN	O	Partly	QT
60	Global accessibility	8	A	IN	I	Partly	QT
61	International passengers (flight)	8	O	IN	O	Partly	QT
62	Passengers (ships)	8	O	IN	O	Partly	QT
63	Cargo freight	8	O	IN	O	Partly	QT
64	Intra-metropolitan accessibility	8	A		I	YES	QT
65	Number of hotspots	8	A	IN	I	YES	QT
66	Average days of rain	9	A		I	NO	QT
67	Proximity to water (km)	9	A		I	NO	QT
68	Air quality	9	A		I	YES	QT

Notes: In column 3 are the numbers of the key factors 1 to 9: 1 = international population groups, 2 = governance and leadership factors, 3 = regulatory factors, 4 = economic factors, 5 = social and societal factors, 6 = cultural and amenity factors, 7 = internationalisation factors, 8 = connectivity and accessibility factors as well as 9 = environmental factors.
Column 4 shows if an indicator refers to attractiveness of openness: Attractiveness refers to indicators reflecting the conditions which are relevant for attracting and retaining nationals and non-nationals. Openness refers to indicators reflecting the conditions which are particularly relevant for both attracting and retaining non-nationals.
Internationalisation in column 5 refers to indicators mirroring the presence of international actors (population, companies, etc.) in the city and the connection (trade, transport etc.) of the city to the world. Integration refers to indicators mirroring the access and inclusion of international populations. Governance and Leadership refers to indicators of the key factor 2.
Column 6 contains input variables which refer to the public and private goods and services offerings of the city. The output variables in the same column are indicators which can be interpreted as results of the cities' openness and economic success in previous periods.
In column 7 the following question is asked: Can this aspect be influenced by the city policy? YES, NO, PARTLY or mostly influenced by the national level = Nat. It is assumed that the city can influence the public goods / services offering, while the private goods / services offerings can only be partly influenced by the city. Most of the accessibility factors can only partly be influenced by the city policies because accessibility depends partly on the geographical location of the city.
Column 8 finally states about if the indicators are qualitative data or quantitative: Indicators which are marked as QL reflect qualitative aspects of openness, while indicators marked with QT reflect quantitative aspects of openness.
Source: BAKBASEL

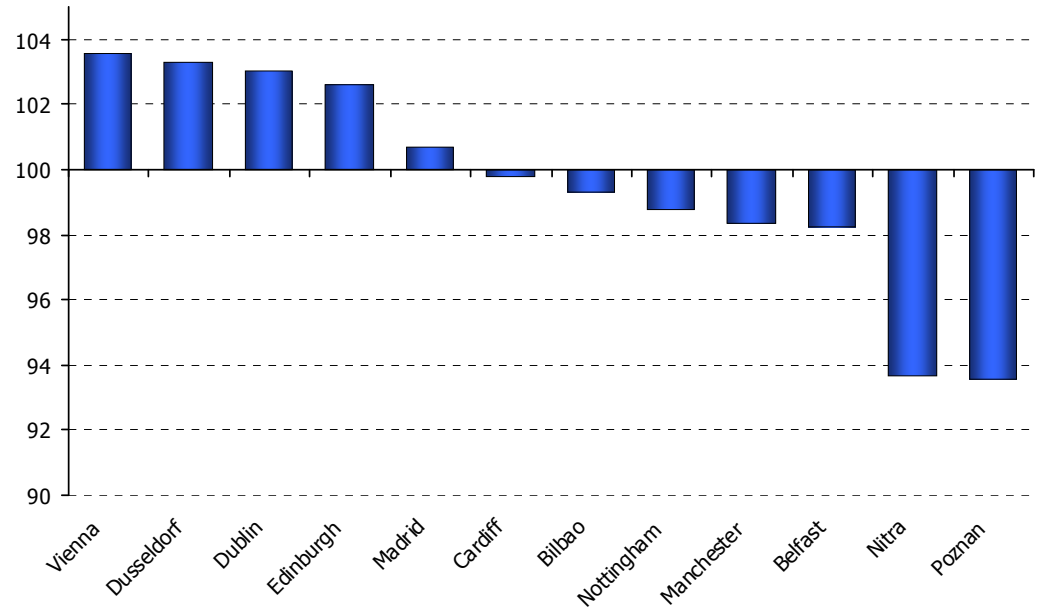
6.2.2.3 Benchmarking indices

Similar to the data presentation based on indicators, benchmarking can be done for an index (respectively one sub-index) across many cities or for one city across many indices (city profile).

Cities might be interested to assess their overall degree of attractiveness and openness to foreign populations. Cities find out their ranking positions with benchmarking across many cities for one index. Fig. 12 illustrates the **Index of Openness** which covers different aspects of the multidimensional nature of openness.[33]

An index value above 100 indicates that the city is more open than the chosen city sample. The comparison based on the Index of Openness shows the following: Vienna, Dusseldorf, Dublin and Edinburgh are quite attractive and open cities for foreigners. Madrid, Cardiff and Bilbao are positioned in the middle. The Eastern European cities Nitra and Poznan are less attractive and open to international populations compared to the selected Western and Southern European cities.

Fig. 12 Index of Openness, selected European cities



Note: This data is for use in the feasibility study only and not for general publication.
Source: BAKBASEL

Sometimes cities might not be only interested in their overall ranking position, but also in their rank in a certain aspect of openness, such as their degree of internationalisation. Fig. 13 demonstrates an example for **benchmarking one sub-index** across many cities. In this case, the benchmarking of the key factor "internationalisation" across the selected European city sample is shown. In attempting to attract international populations, the cultural, economical and tourist

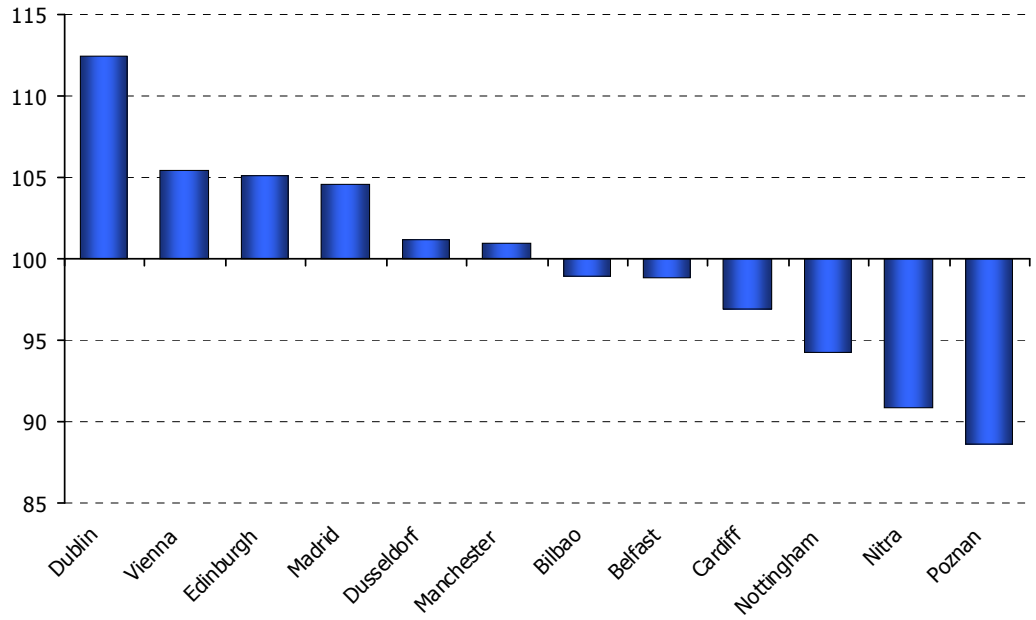
[33] Note that the Index of Openness does not cover the definitive data. We rather used all data available from the data collection (data gathering and desk research) and filled all data gaps technically in such a way that the picture of the existing data (per city) is not distorted. The 12 cities in the graph have been chosen because they returned their data gathering sheet, thus their data has been considerably more complete. This refers to all presented data of this chapter.

network of a city is decisive. International populations from around the world like to go and live in places where other international people are already living (which is measured by the key factor "international populations"), but also where they are going to find an attractive international environment. Are there big international companies and institutions located in the cities which attract employees from all over the world? Are there international meetings, fairs and festivals? The number of visitors is an indicator for the overall size of the international network, but also for overall attractiveness of the cities. In addition, cities which are tourist magnets receive international recognition.

It becomes obvious from Fig. 13 that Dublin scores best in the key factor "internationalisation", while again the Eastern European cities are below average. Dublin is, for example, a tourist magnet. It has a high number of international festivals. There are many embassies located in Dublin as the capital city of Ireland. In addition, the business climate in Ireland is very good as measured by the Index of Freedom of Investment. Vienna and Madrid, also capital cities, score well in terms of internationalisation, but also Edinburgh has an above average degree of internationalisation. There are three big international companies (according to the Global Fortune 500) and a lot of international fairs and meetings. Moreover, Edinburgh attracts a lot of tourists.

Taken as a whole, these examples show that an index provides useful information about the overall position of cities in terms of openness as well as in the certain areas of openness.

Fig. 13 Benchmarking indices: Internationalisation factor, selected European cities



Note: This data is for use in the feasibility study only and not for general publication.
Source: BAKBASEL

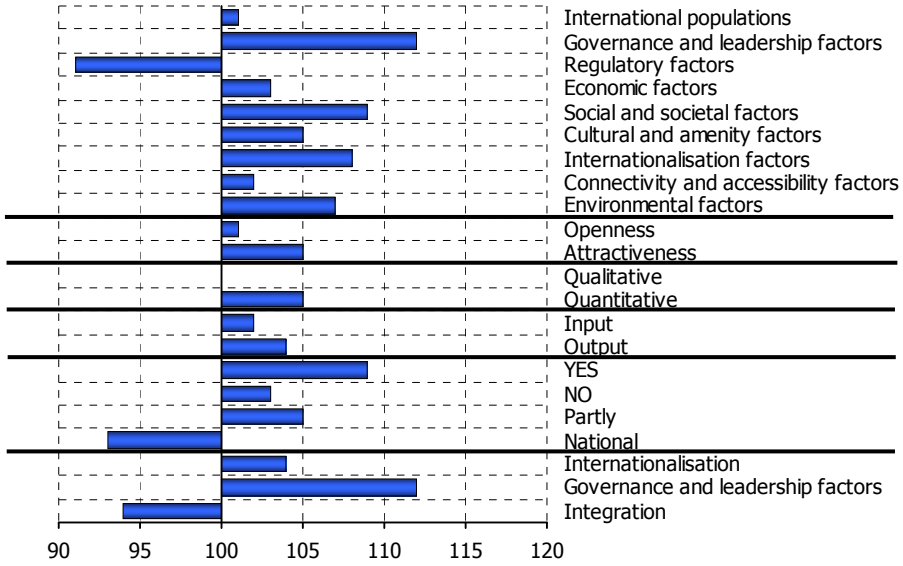
To identify a city's strengths and weaknesses, it is more instructive to **benchmark a city across many sub-indices**, as shown in Fig. 14 and Fig. 15. The aim of this is to show what a sample based on indices could look like. Every indicator is compared to the main value of the selected cities, weighted and aggregated according to various aspects of openness. One can see if the particular city is above or below average. Cities can easily find out in which key factors they score well or not. Then the city is compared to the others in the various dimensions of openness. A city, for example, might be very open, but the national regulations are unfavourable. Moreover, a city gets evaluated in terms of qualitative and quantitative aspects or input or output oriented indicators. Taxation and access to property market, for example, are policy inputs, whereas unemployment rates or the number of international companies are outputs. Additionally, cities can analyse if an aspect of openness is policy controlled or not and when those aspects are only partly controlled by the city's policy (e.g. places of worship) or when the policy control is mostly on the national level as is the case for work permits, freedom of investment or the MIPEX indicators.

City profiles based on indices can be generated for benchmarking groups according to various attributes. If a city wants to benchmark itself to cities in the same geographical area, it can choose only cities which fulfil this condition. Further criteria for the selection of the benchmarking cities can be cities with similar economic situations, best performing cities including the criteria economic success (similar growth rate of real GDP), cities with similar goals or cities with similar economic systems (Anglo-Saxon, Continental and Nordic). Other criteria are population size, share of international populations, function or structure of the city and many other specifications which play a part in every city's optional selection and can be determined by each city individually. Actually, it does not make much sense for a small city to compare itself to a large global city if the two do not have anything in common. One should compare similar to similar. Moreover it can be interesting and profitable for cities to compare themselves to potential competitors. The final set of benchmarking groups has to be defined according to the cities currently and potentially participating.

The comparison of the benchmarking results over time (from year to year) allows the cities to monitor their performance relative to their benchmarking partners. Moreover, a city can prove it has made progress in terms of openness. The results of such a change can also be assessed by comparing past and present city rankings. A city's benchmarking results from year to year showing whether or not it made progress in the aspects of openness which a city can influence (at least partly) may also be part of the qualification for a kitemark as an "open city".

Fig. 14 and Fig. 15 show two examples of city profiles based on indices. This first example for a city profile illustrates the preliminary results for data from Vienna in comparison to the average of 12 European cities[34]. Looking at the key factors, a slightly above average value for international populations can be observed. Indeed Vienna seems to be a rather attractive place for international migrants given its stock of non-nationals, for example, is about 15% above average. However, if we survey the qualifications of its international population we recognise that Vienna is below average regarding highly skilled foreign labour force.

Fig. 14 Vienna: City Profile (sample based on indices)



Note: This data is for use in the feasibility study only and not for general publication.
Source: BAKBASEL

Governance and leadership factors are noticeable because they score fairly well. Vienna shows a favourable degree of openness through its welcome services and city council actions for international populations. Indeed their official city website is translated into four languages (German included). The city offers a welcome service for international populations and an online information service with a wide range of information for foreigners such as local community centres, events and meetings, as well as migration-specific information for daily life. Furthermore, Vienna has a migration-specific administrative department; the city council provides interpreters and a special start-coaching programme for migrants (language or integration courses, as well as assessment centres for labour market integration). In contrast, the regulatory factors are far below average (93%). Indeed, regulatory factors reflect, for the most part, the scores from MIPEX where Vienna shows comparatively low scores. Only with the naturalisation rate (in % of the foreign born population) and the Freedom House Index is Vienna able to keep up with the average.

Better results are achieved for the further key factors. The results produced by benchmarking social factors indicate that Vienna is a relative secure place to live. It also provides good health services as the benchmarking comparison suggests. Another important factor in the competition to attract people from around the world is the existence of international schools. The number of

[34] Belfast, Bilbao, Nottingham, Cardiff, Dublin, Dusseldorf, Edinburgh, Poznan, Vienna, Madrid, Nitra and Manchester.

international school programmes in Vienna is above average. The perception indicators on immigration are slightly above average, too.

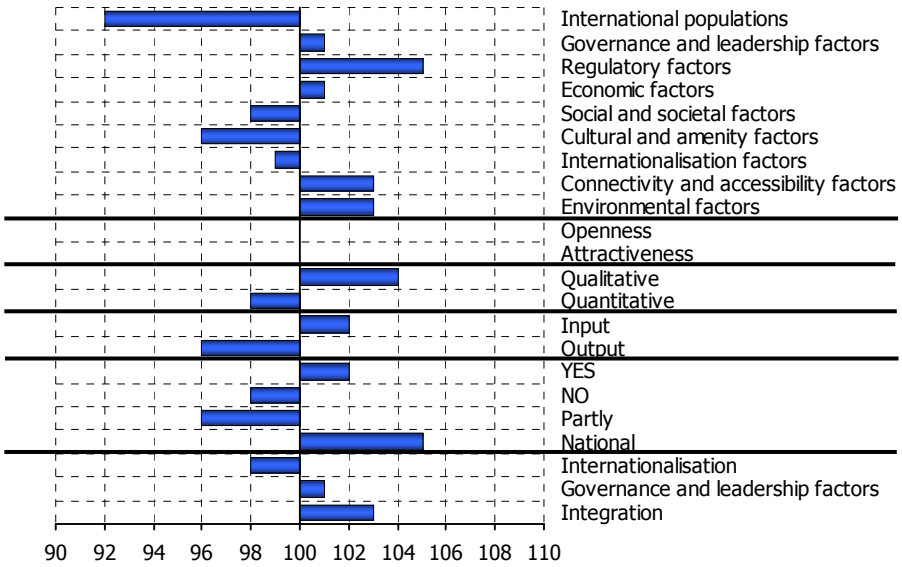
The cultural and amenity factors are also slightly above average mainly because of the excellent museums Vienna offers and its numerous and diverse restaurant offerings. Vienna exactly keeps pace with the average in terms of environmental factors, although, at the moment, they reflect only Vienna's natural amenities as a city (climate and location). Vienna is both more attractive and more open than the average of all participating cities. The qualitative indicators are exactly average. Vienna scores very well in some qualitative indicators such as governance, but also scores poorly in others such as regulatory factors which are mostly qualitative. Input and output variables show above average results for Vienna. Input variables refer to public and private goods and services offered in the city. Output variables are indicators which can be interpreted as results of the cities' openness and economic success in previous periods.

What is interesting to analyse as well is that Vienna scores well on indicators which are policy controlled which means that this aspect can be influenced by city policy. However, the scores are poor for indicators with a national policy control. Indeed it is not possible for the city to directly influence these aspects such as, for example, all indicators within the regulatory factors or freedom of investment.

When looking at the key themes, it becomes obvious that Vienna does rather well in the key theme internationalisation. As already mentioned, the stock of international population as well as the provision of international schools is superior to average. For cultural and amenity offerings like international restaurants, international TV channels or international festivals and meetings the city also scores well. There are also a considerable number of available hotspots in Vienna and the number of visitors is about 11% above average.

Further, the city has exceptional results in governance and leadership as we already observed for the respective key factor. Progress should be made with the integration of international populations. Vienna's mediocre performance is principally due to its rather low MIPEX scores which are categorised within the theme integration. For long-term residence (which reflects information about eligibility, acquisition conditions, security of status and rights associated) and antidiscrimination, Vienna obtains scores of 53 and 42 respectively which can be classified as "half way to best practise". The national framework conditions for immigrants of non-EU-countries in the areas of family reunion, political participation and antidiscrimination can, however, be judged as slightly unfavourable. Since these indicators are under national policy control, Vienna has no direct influence on them. A further integration variable is the difference between the unemployment rate of nationals and non-nationals where Vienna scores only very little above average.

Fig. 15 Cardiff: City Profile (sample based on indices)



Note: This data is for use in the feasibility study only and not for general publication.
Source: BAKBASEL

The second city which will be profiled is Cardiff. It can be observed from fig. 15 that there is a large variation among the individual key factors. First of all, the percentage of non-nationals living in Cardiff city is only half of those living in Madrid, Vienna, Dusseldorf or Manchester. The majority of the international populations in Cardiff belongs to the less qualified workforce. In contrast, Cardiff obtains very good values for the regulatory factors. Additionally, Cardiff's city council provides good public services for immigrants as measured by governance and leadership factors. Because of that, Cardiff's qualitative aspects of openness are above average. Cardiff's Waterfront contributed to the positive scoring of Cardiff in terms of environmental factors. In addition, it is part of the reason for its good performance in terms of accessibility and connectivity.

Interestingly, Cardiff scores adequately well in the policy areas which are under the control of both the city and the country. However, it performs rather unfavourably in some aspects which cannot be controlled by policy such as climate.

Unlike the case of Vienna, Cardiff reaches a value above average for qualitative data and below for the quantitative ones. Cardiff is perceived as a safe place with good health services. Nevertheless, there are areas which also can be improved such as its international schools offerings. The contributions of immigrants are not perceived as positive as in most of the other selected cities. The benchmarking reveals that the cultural and amenity offerings of Cardiff can be improved. All indicators reach only values slightly below average.

Concerning the key themes, there is no surprise for the first one since governance and leadership factors refer again to the respective key factor. Integration related variables however score above average because, apart from the perception indicators, Cardiff has good results for the integration variables such as MIPEX or access to the property market. The last result could also be correlated to the fact that the difference between the unemployment rate of nationals and

non-nationals is rather small. However, the internationalisation of Cardiff is in almost all areas (international population, international firms, meetings, festivals etc) below average.

Overall, it becomes obvious that benchmarking a city across sub-indices is a very useful instrument for cities diagnosing their own openness. Cities get important information concerning their respective strengths and weaknesses within the different categories. The method of benchmarking actually brings an overview of openness factors which could or should be improved in order to allow the city to achieve a more pronounced degree of openness with the purpose of attracting international human capital and enabling them to contribute to the city's success. After a city compares itself with others based on aggregated information, it may turn out to be interesting to undertake an analysis of some individually chosen indicators. A special web-based tool is proposed which would permit the cities to analyze themselves separately and autonomously according to their individual requests (see Appendix 9.4: Index of Openness Tool: Monitoring the Openness of Cities[35]). This tool would allow the production of specific city reports selecting data from the complete schedule of potential indicators, indices and city samples. The tool should allow not only a wide range of analyzing opportunities, but also the visualisation of the results in the form of charts, maps, tables, figures, etc.

6.3 Summary

This chapter was concerned with the subject of data presentation: Should cities' openness be compared using an index, a kitemark or benchmarking? How can an Index of Openness be constructed? How can cities' openness be benchmarked and how can an Index of Openness be used? To answer these questions the different options of data presentation were discussed. The resulting favoured solution is a hybrid form of data presentation which combines the strength' of all three options. Firstly, create an Index of Openness as an index family covering the various aspects of openness. Secondly, use the method of benchmarking to analyse strengths and weaknesses of the individual cities and thirdly, establish a kitemark standard that cities can choose to participate in.

Benchmarking can be done by using single indicators. To capture the multidimensional nature of openness, a large number of indicators should be applied to mirror the various dimensions of openness. Benchmarking with single indicators, however, is not useful if the number of indicators is very large. Then it is necessary to condense the available information. The best way to do that is to use an index with various sub-indices reflecting the different aspects of openness.

The Index of Openness and its sub-indices (index family) indicates the degree of openness a city has achieved compared to its peer group. Values above 100, for example, signal that the city is more open than its peer groups' average. The 68 indicators comprising the Index of Openness can be grouped under various headings to form different categories to analyse different dimensions of the openness of a city. The Index of Openness can be split into various groups, for example, into nine sub-indices (key factors) which are weighted differently. These different aspects of openness such as the key factors are measured by various indicators selected by availability and validity. The indicators differ with regard to their significance and quality, but together they form a meaningful entity for the measurement and benchmarking of the respective aspect of openness.

[35] Please note that this tool is a preliminary version which does not yet include the functions to benchmark indices.

An index family is a flexible instrument to assess a city's openness. It can be constructed for the various key factors or different aspects of openness such as internationalisation, integration, and leadership. It can be examined whether a city is more attractive than open or vice versa. Moreover, cities can assess whether they are strong or not in aspects of openness which can be influenced by policy, etc. Benchmarking using an index family helps to identify a city's strength and weaknesses in the various aspects of openness compared to its peer group.

Demonstrating the utility of city benchmarking, two city profiles (Vienna and Cardiff) based on the Index of Openness as an index family were presented. It should be kept in mind, however, that these city profiles are based on preliminary and incomplete data. In addition, the informative value of the city profiles would be higher by using carefully selected benchmarking partners instead of selecting cities according to data availability.

A core element of benchmarking is the selection of cities compared. It makes no sense to compare a city in question with all other cities. It is more useful to restrict the comparisons to a specific "league" of regions, for example, ones that are of similar size, have a similar degree of internationalisation or are specialised in the same business sectors (such as knowledge centres, visitor destinations) and spatial economic functions. The final set of benchmarking groups has to be defined according to the cities currently and potentially participating.

City benchmarking and continuous comparison facilitates the development and ongoing review of a city's visions and actions to become more open. Over time, the benchmark results can also help define the progress that a city should make in order to call itself an "open city" as a kitemark.

7 Recommendations

The following recommendations for the "Index of Openness Project" are based on the results of the feasibility study.

7.1 General Comments about the Index of Openness

- **Initiate the Index of Openness as soon as possible.**
- **Ensure that there is a clear commitment of all participating cities.**
- **The project should have a solid base (intellectual, financial and organisational including the role of the cities).**

The results of the feasibility study demonstrate that it is only possible to create an Index of Openness if there is a sound project structure and if there is a clear commitment of the participating cities. If one takes into account the results of the feasibility study, there are two main reasons why the Index of Openness project should be initiated as soon as possible. Firstly, at the moment the cities are well-informed about the Index project and the detailed project breakdown thanks to the data gathering process, the survey and the meetings which have taken place. This momentum for the project is an important condition for its success. Each city now has more than one expert who can be easily contacted about the main project. For the URBACT participants, this is even more important since they have created, within their approved project, local support groups which are a good basis for an expert network for the main project. The second reason is that most of the data research results are now up-to-date, even if they need refining. It is therefore highly recommended that the Index continues, in order to avoid losing the existing data results.

7.2 Definition and Concept of Openness

- **Ensure the definition of openness is valid yet flexible enough to include various aspects of openness and develop gradually.**

According to the 2008 British Council report on openness, the concept was defined as follows: "Openness is the quality and sum of the local conditions that attract and retain international populations over time"[36]. This initial definition of openness was discussed by the steering group during the feasibility study and eventually modified as follows: "Openness is the capacity of a city to attract international populations and to enable them to contribute to the future success of the city". The word "retain" was taken out and "attract" and "enable" were stressed, giving the definition a more active meaning. The current definition also highlights the fact that the focus lies on the future success of a city. In addition, various cities stressed the importance of the integration of immigrants.

Overall, the definition still needs developing so that it can provide a framework for the Index of Openness in a way that fosters meaningful communication about a city's openness.

[36] Clark, G. (Ed.): Towards OPENCities. Published by British Council 2008: 12.

In the course of the feasibility study, it became clear that both the integration and contribution of international populations to a city's success are especially important. International populations can contribute to cities' successes in various ways. For example, districts with a high percentage of immigrants are often perceived as an integration problem. However, such districts can at the same time contribute to the city's diversity and thus to the city's success. Aspects relating to openness such as integration, internationalisation, diversity, etc., do not always go hand in hand and might even appear to contradict each other.

Thus, whilst aiming for a clear and concise definition of openness, the definition should be flexible enough to include the various aspects which relate to openness.

- **Produce a glossary of all relevant terms to ensure everyone understands the terminology.**

Discussions with municipal experts about the definition of openness revealed that it is important to have a common understanding of the terms involved such as openness, integration, internationalisation, etc. BAKBASEL therefore recommends preparing an "Openness Glossary" to ensure there are uniform definitions.

- **Measure openness multi-dimensionally.**

The concept of openness is multi-dimensional and a very complex phenomenon. Nevertheless, openness can be measured by using identify various indicators which measure certain aspects of openness. The indicators can be grouped thematically, for example, into the reviewed nine key factors. Each of these key factors represents one of various dimensions of the quality of life of all inhabitants with special attention to international populations which are important for the attractiveness and openness of the city. Openness can be therefore measured through supplementing measures of cities quality of life with indicators measuring openness.

7.3 Data Gathering

- **Allow the database to be as large as possible (featuring as many indicators as possible).**

Developing an objective measure of openness is a demanding task. Openness cannot be observed or measured directly. There is no single indicator or variable telling you all about openness as it is the case with GDP which is a broad measure for the economic activity of a region. However, there are various indicators which measure certain aspects of openness. Note that each single indicator per se only covers a small section of the whole picture called openness. Thus, it can be said that the higher the number of indicators the more likely all aspects of openness are taken into account - hence the higher the quality of the overall presentation of the Index of Openness.

- **Define all indicators as precisely as possible.**

The cities participating in the feasibility study have emphasised the need for valid definitions and meaningful indicators. BAKBASEL suggests that the definitions for some indicators should be refined with the collaboration and involvement of the participating cities. More international cities should also contribute so that both the definition and indicators are internationally comparable. In addition, an international expert group should be set up to complement this. Overall, the process of defining meaningful indicators in collaboration with the cities is important, as this creates a mutual understanding of both the meaning of openness and the explanatory power of the Index of Openness.

- **Use indicators even if they are not fully comparable.**

It is important to measure as many aspects of openness and use as many indicators as possible, as mentioned above. BAKBASEL is well aware that some of the indicators cannot be observed perfectly (stochastic errors in variables). In addition, some of the indicators are not perfectly comparable on an international scale. For single indicators, there might even be a systematic bias (distortion) for specific countries. Using a large number of indicators will make up for any deficiencies and ensure that there is no systematic bias in the index values computed from the original data.

- **Collect the indicators centrally (whenever possible) and collect all other indicators directly from the cities.**

It was necessary to research a multitude of possible data and indicators to be able to quantify and measure the openness of cities. BAKBASEL checked out a large number of official sources (international, national, regional or municipal statistics). Furthermore, BAKBASEL surveyed and collected information from a wide range of other sources (embassies, private and public organisations etc.). Based on this research, three categories of data emerged:

- Internationally-comparable data from official sources.
- Data collected via BAKBASEL research projects and from regional statistics.
- Missing data.

Since data are retrieved from a variety of sources, it is vital be able to collect and organise the data centrally in order to ensure its quality control and comparability. Various data (for example, relating to governance) can, however, only be obtained from the cities directly. To assure the validity of the researched data and to fill in gaps in the data, a data gathering and validation process was initiated in collaboration with the European cities. BAKBASEL collaborated with local data experts in the European cities and sent them a data gathering tool in February 2009. This tool only included data / indicators for which the help of the local data experts was required. For example, internationally comparable data from official sources were not requested during the data gathering process except when data for a specific city were missing.

In March 2009, the cities sent in their data gathering tools. BAKBASEL verified the input of each city and validated the inputs with respect to their comparability. The results of that "data gathering process" revealed that most cities can contribute substantially to close the previous existing data gaps. Thus, it is possible to collect data from the cities and create internationally com-

parable indicators. Secondly, as mentioned previously, clear and precise definitions have to be set up in cooperation with the cities (including international cities). Thirdly, data collection for an Index of Openness requires additional resources (personal, financial, etc.) from the cities (see below).

Overall, data research revealed that a lot of internationally-comparable data to construct indicators measuring openness are available for the EU cities. The availability and comparability of the data are somewhat lower for Non-EU cities. For EU-city samples, available, comparable and valid indicators measuring openness towards international populations are shown in the grey box in chapter 4.1.

- **Define both the final set of indicators and their weights with the help of an international expert group.**

At the beginning of the main project, the procedure and, in particular, the set of indicators and the weights of all indicators will have to be fixed. This will have to be done before the data gathering process (including a potential perception survey with the population) starts. Keeping in mind the long discussions about indicators and weights we had during the feasibility study, we suggest defining a group of people who will define the set and the weights. The feasibility study shows how openness can be measured, aggregated and presented. BAKBASEL is open to any set and any weighting scheme. The feasibility study shows how openness can be measured, aggregated and presented.

The weighting scheme can be determined using extensive surveys with large groups of experts and affected people. However, it should be noted that a larger set of indicators in general is better than a small set because each indicator only measures one single aspect of openness. The more indicators we use, the more aspects will be covered and the more complete the picture of openness becomes. If there is an international board of experts to the project, this board would be an ideal body to define both the set of indicators and their weights. The same board could also decide on the presentation of the results. For economic reasons it would be helpful if this body is not too large.

- **Initiate perception surveys in the participating cities.**

The indicator set as depicted above covers a wide range of indicators measuring or proxying many features of the multidimensional phenomenon of "openness". However, it focuses on facts, either political activities or outcomes of the openness process. Therefore, it seems reasonable to also include a range of perception variables asking what people in the city think about openness and what some key results of openness are.

Given that such information is not yet available on an internationally comparable basis, one could suggest requesting each participating city to conduct a survey with its own population. Such a survey could consist of two parts:

(1) Survey of the national population in the city about their views on openness.

(2) Survey of the international population in the city about their views on openness.

The questions of the survey should be identical for all participating cities and should include a minimal and representative number of completed questionnaires. This survey should be repeated

at the same intervals as the updates of the statistical data set. It is important to realise that openness is not only about facts, but also about perception of the people living in the city.

7.4 Data Presentation

- **Use a hybrid form of data presentation: An Index of Openness for indexing and benchmarking city openness supplemented by kitemarks.**

One of the questions which was posed at the beginning of the feasibility study was regarding the technique, presentation and aggregation of the data results. Suggestions included kitemarks (so-called quality standards), indices and benchmarking. After taking into account the work undertaken on the data, discussions with the steering committee and various meetings with all the cities, it turned out that it would be useful to have a kitemark and an Index of Openness which is mostly a benchmarking project using an index family. The cities clearly stated they were not keen on a ranking system, but, at the same time, they wanted to assess their own openness. Thus we recommend creating an Index (with various sub-indices) covering all aspects of the multidimensional concept of openness. The method of benchmarking will be used to analyse the strengths and weaknesses of the individual cities (individual peer review, comparing and monitoring their openness). In addition, it is suggested to use two kitemarks the clear commitment of the cities involved and their progress towards becoming more open.

- **Aggregate the indicators to the indices.**

Since single indicators only relate to one aspect of openness, BAKBASEL recommends benchmarking only aggregate information and not single indicators. BAKBASEL proposes computing indices for various aspects of openness. This will also minimise all problems related to stochastic or measurement errors in the database.

- **Create an index family with various dimensions (e.g. key factors, attractiveness vs. openness).**

An index for openness can be created with sub-indices. This is called an 'index family'. An index family allows cities to identify their strengths and weaknesses. Some cities might have a high degree of internationalisation and/or a high score in the indicators relating to governance, but its international populations are not very integrated. Another city may be very open, but not so attractive. Other cities may have good economic conditions, but immigration is perceived by the native population as a threat.

An index family can be created with the existing key factors. It is a flexible instrument used to assess a city's openness. An index family can be constructed for different aspects of openness such as internationalisation, integration, and leadership. It can be examined whether a city is more attractive than open or vice versa. Moreover, cities can assess whether they are strong or not in aspects of openness which can be influenced by policy. Is the city attractive for international populations because of its public and private goods / services or is the city attractive for international populations because of its high degree of internationalisation (aggregation of out-

put-variables such as indicators relating to international population groups and internationalisation factors)?

- **Compute the indices for the entire sample of cities and also for various city sub-samples (e.g. regarding size, degree of internationalisation).**

A benchmarking index family enables us to divide the sample into comparable sub-groups and to compare cities with homogeneous or individually-defined benchmarking partners. It also enables us to compile detailed information about each city as well as specific guidance for the cities. Indices can be created, for example, for the following predefined benchmarking groups:

- Location (such as European Cities, Eastern European Cities, Anglo-American Cities …).
- Size of population of the core city or the functional region.
- The percentage of international populations.
- The function of the city (capital city etc.).

The definition and composition of the benchmarking groups can be easily adapted to new cities.

- **Create and implement a web-based benchmarking tool.**

A specially-designed web-based benchmarking tool should facilitate the creation of individually-designed reports, by selecting information from the complete set of indices and cities. Hence, it provides a platform for analysis, and the results can be viewed in various formats - via charts, maps or tables which feature the various cities' strengths and weaknesses.

- **Update the Index of Openness regularly.**

The data set (statistical indicators and perception survey results) should be updated regularly. This will allow the monitoring of changes over time. Having different sub-indices will yield interesting patterns of change.

The data situation will not change dramatically from one year to the next which means updating the data every two years would suffice. However, an annual update would be appropriate if we want both the politicians and the public in the cities involved to be aware of the subject of openness.

- **Supplement the Index of Openness (and its sub-indices) with kitemarks.**

During the course of the feasibility study there were lengthy discussions about benchmarking and kitemarking. In this light and in addition to the index of openness described above, two kitemarks can be defined:

- Kitemark 1: A city commits to be open. This can me "measured" by the fact that a city is a full participant in the OPENCities project.
- Kitemark 2: A city improves its openness over time. This can be "measured" using a limited set of indicators to define the openness position of a city over time. Such a sub-index will only include data and indicators that are at least under partial control of the city and its politicians.

7.5 Requirements for the Participating Cities

- **Ensure that the cities participating in the main project have a strong political commitment and top political support.**

A strong political commitment and top political support are essential for internal staff to commit the necessary amount of time to work on the Index of Openness project. Top political support will ensure that participation in the Index of Openness goes beyond ranking; it is essentially a benchmarking exercise which helps to assess the degree of openness a city already has or otherwise intends to achieve.

- **Ensure sufficient funding is allocated to the project.**

Funding is needed, for example, for expert work to be undertaken, data gathering and validation, the implementation of web-based platforms and the perception surveys conducted in the city. Quality tools for communication are also essential so that each city can disseminate the Index to the appropriate international populations. As with all international projects, the financial contribution and the initial effort to establish the project within a city will be higher and more time consuming in the first year and then less so in the consecutive years.

A participating city will be responsible for

- internal contributions (e.g. for data collection, for setting up, using and communicating the Index of Openness, for travel costs to conferences and taking the perception surveys etc.).
- financial contribution to the "Index of Openness diagnostic tool" (see below).
- financial contribution for the overall project coordination.

7.6 Organisation of the Project

The feasibility study proved more intensive than expected in terms of communication as well as content. It is therefore important to:

- **Create a clear structure with defined roles and functions:**
  - The steering committee oversees the project, makes all important decisions (content, finance, time schedule, participants, contracts).
  - Data warehouse: coordinates all data-related activities, collects the data, computes all indices and approves the quality of the index.
  - Network: a communications' platform for all people who are both involved and interested in the project (regular conferences, web-based exchanges).
  - The International Expert Group (such as the OPENCities International Expert Group) makes important content decisions on the Index of Openness (final set of indicators and their weighting, final version of data presentation, etc.) and validates the scientific nature of the project.

- **Ensure there is sufficient coordinated communication.**
  - The cities need to be enabled to interact with all relevant persons / partners in the other cities. Language barriers have to be addressed.
  - The project needs a yearly press conference in which progress is highlighted. At the same time the participating cities should all make their communication measures on the web-based platform available.
  - All project documents and project developments should be well noted and documented so that personnel replacements do not lead to a knowledge loss.

7.7 Thoughts on how to start the main project

- **Which cities should be included?**

It would be best to start with a group of about 20 cities which ideally fulfil the following characteristics:

- Are rather homogeneous in size (not Nitra or London, but e.g. Dublin and Dusseldorf).
  The participating cities should have at least 120.000 inhabitants in the core city and a minimum of 300.000 people living in the metropolitan region.
- Do not have a language barrier (can easily communicate in English).
- Are included in international databases (OECD, Eurostat etc.).
- Are able to support the data gathering process actively.

Moreover, one should think about the possibility of including certain (but few) cities, even if they are not willing to contribute actively to the project. From the point of view of attractiveness of the project, this might be a reasonable step. However, there are three major disadvantages: (1) If there is no commitment, it will be difficult to fill the database (especially the perception data) for such a city. (2) When there is no commitment to the concept of openness, it is difficult to call them "open cities" even if the benchmarking "qualifies" them as open. (3) When the contributing cities realise that they are subsidising "free riders", it might cause severe problems for the contributing cities. Some contributing cities might even think about remaining in the group passively, even after they stop funding the project. Since this is a difficult path, we suggest starting with the exclusive group of contributing and committing cities only. At a later stage of the project, this view might be revised. Moreover, we should be confident enough that this is a good project, attractive enough to entice interesting and interested cities.

Proposal for a Business plan

What is the minimum number of cities required to start the project?

It is assumed that at least 20 cities should participate from the beginning of the main project.

Which cities might be interested in taking part?

To start the main project, choose cities which are already informed about the project. In addition, give priority to those cities which actively participated in the data gathering process of the feasibility study. This procedural method saves costs – communication costs as well as data collection costs (see calculation below). The following cities should therefore be asked to take part in the first round of an Index of Openness: Belfast, Bilbao, Cardiff, Dublin, Dusseldorf, Madrid, Nitra, Poznan, Vienna, Nottingham and Edinburgh. From our experience, we would suggest that other European cities which are most probably interested in joining the project are: Basel, Oslo, Gothenburg, Milano, Brussels, Berlin, Lyon, Amsterdam, Helsinki, Frankfurt, Munich, Geneva, Barcelona, Copenhagen and Prague.

From a data point of view, non-European cities shall be included in the main project in a next step. It seems most feasible to include Canadian cities (such as Toronto) first, followed by cities in the US (e.g. New York, San Francisco or Miami) and Australia (e.g. Perth). In this phase, it is also recommended to include European cities such as London and Paris to compare international "mega-cities".

How long should the commitment of the cities be?

BAKBASEL recommends a commitment of at least 3 years to the project to ensure its longevity. The longer commitment should also allow better cost division over the project's duration. Monitoring over time allows a city within a dynamic process to observe the progress and variation of its degree of openness. Only then, will it be able to apply the necessary policies in order to become a (more) open city. In addition, only then, can a kitemark for the improvements in cities' openness over time be established.

How much does the Index of Openness cost?

The following cost calculations are based on at least 20 cities participating.

The costs for the creation of an "Index of Openness diagnostic tool" for a city which already actively took part in the feasibility study are the following:

5,000 €	Data collection and calculation of indicators
2,500 €	Index calculation
3,000 €	Production of a diagnostic tool (as a CD delivered to the British Council which might provide it as a web-based tool)
2,500 €	Presentation of the results in the city by one person in English (excl. travel costs)
13,000 €	**Total**

The costs for the creation of an "Index of Openness diagnostic tool" for a European city are:

First year:

12,500 €	Data collection and calculation of indicators
5,000 €	Index calculation
3,000 €	Production of a diagnostic tool (as a CD delivered to the British Council which might provide it as a web-based tool)
2,500 €	Presentation of the results in the city by one person in English (excl. travel costs)
23,000 €	**Total**

Annual update:

5,000 €	Data collection and calculation of indicators
1,000 €	Index calculation
1,000 €	Production of a diagnostic tool (as a CD delivered to the British Council which might provide it as a web-based tool)
7,000 €	**Total**

The costs for the creation of an "Index of Openness diagnostic tool" for Non-EU cities will be slightly higher depending on the geographical location and the accessibility of international data for these cities. The costs for the data collection and data gathering might increase by between € 2.000 and € 5.000 depending on data availability.

In addition, the participating cities have to provide some data (data which are only available in the cities or missing data from international statistics) to create the Index of Openness. The time the city needs to collect these data and send it to the "data warehouse" depends on the available conditions in the respective city council: whether the data can be delivered by a statistical office or whether they have been collected by different boards of the city administration.

Note that the calculated costs above only include costs which are necessary to create the Index of Openness. Additional resources which are necessary for the OPENCities project coordination etc. are not included.

7.8 Summary

A) General

- Initiate the Index of Openness as soon as possible.
- Ensure that there is a clear commitment of all participating cities.
- The project should have a solid base (intellectual, financial and organisational including the role of the cities).

B) Definition and Concept of Openness

- Ensure the definition of openness is valid yet flexible enough to include various aspects of openness and develop gradually.
- Produce a glossary of all relevant terms to ensure everyone understands the terminology.
- Measure openness multi-dimensionally.

C) Data Gathering

- Allow the database to be as large as possible (featuring as many indicators as possible).
- Define all indicators as precisely as possible.
- Use indicators even if they are not fully comparable.
- Collect the indicators centrally (whenever possible) and collect all other indicators directly from the cities.
- Define both the final set of indicators and their weights with the help of an international expert group.
- Initiate perception surveys in the participating cities.

D) Data Presentation

- Use a hybid form of data presentation: An Index of Openness for indexing and benchmarking city openness supplemented by kitemarks.
- Aggregate the indicators to the indices.
- Create an index family with various dimensions (e.g. key factors, attractiveness vs. openness).
- Compute the indices for the entire sample of cities and also for various city sub-samples (e.g. regarding size, degree of internationalisation).
- Create and implement a web-based benchmarking tool.
- Update the Index of Openness regularly.
- Supplement the Index of Openness (and its sub-indices) with kitemarks.

E) Requirements for the Participating Cities

- Ensure that the cities participating in the main project have a strong political commitment and top political support.
- Ensure sufficient funding is allocated to the project.

F) Organisation of the Project

- Create a clear structure with defined roles and functions.
- Ensure there is sufficient coordinated communication.

G) Thoughts on how to start the main project

- Which cities should be included?
- Proposal for a Business plan.

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9 Appendix

9.1 Indicators

9.1.1 Indicators: Overview

	Indicator name	Indicator (exact value)	Value	Main source	Year	Regional coverage
International Population						
1	Inflow of international population	Proportion of nationals from other countries that have moved to the city during the last two years, as a proportion of total population.	%	Urban Audit	1999-2002 2003-2006	Core city
2	Stock of international population	Nationals from other countries as a proportion of total population.	%	Urban Audit	1999-2002 2003-2006	Core city
3	Low qualified foreign labour force	The foreign total labour force (age 15+) according to the low skilled qualification level as a proportion of the total not national labour force. The qualification level is defined as follows: low = lower secondary. The definition follows the European labour force survey.	%	Eurostat: European Labour Force Survey	2005/2006	Nuts 2
4	Medium qualified foreign labour force	The foreign total labour force (age 15+) according to the medium skilled qualification level as a proportion of the total not national labour force. The qualification level is defined as follows: medium = upper secondary. The definition follows the European Labour Force Survey.	%	Eurostat: European Labour Force Survey	2005/2006	Nuts 2
5	High qualified foreign labour force	The foreign total labour force (age 15+) according to the high skilled qualification level as a proportion of the total not national labour force. The qualification level is defined as follows: high = third level. The definition follows the European Labour Force Survey.	%	Eurostat: European Labour Force Survey	2005/2006	Nuts 2
6	International students	Total number of foreign (non-national) students, exchange students or free-moving students enrolled in any kind of university study programmes as a proportion of total students. Foreign students do not have the same citizenship as the native students and do not live in the city for longer than their time in school (ISCED level 5 and 6).	%	Cities	2007/2008	City
7	Difference highly qualified international population and national population	Difference in % between the foreign and the native total labour force (age 15+) according to the qualification level. The qualification level is defined as follows: high = third level. The definition follows the European Labour Force Survey.	%	Eurostat: European Labour Force Survey	2005/2006	Nuts 2

	Indicator name	Indicator (exact value)	Value	Main source	Year	Regional coverage
8	International retirees	Total number of foreign (not nationals) retirees living in the city as a proportion of the total population. Foreign retirees are a specific group of the international population stock within the city. Foreign retirees are defined by their status being a foreigner and their belonging to the age-group over 65 years.	%	Eurostat: European Labour Force Survey	2005/2006	Nuts 2
9	Not EU international population	Not EU-nationals as a proportion of the total population.	%	Urban Audit	1999-2002 2003-2006	Core city
10	Diversity of international population	Top 10 largest and most relevant foreign nationalities as % of total international population	%	Cities (if possible)	2007/2008	City
Governance and Leadership factors						
11	Languages city website	Number of languages which are available for all sites and functions of the official city website. If only a few sites or pages are translated, the language is not counted. Weighted with the importance of the language according to Weber.	Score	Websites of the city councils	2008	City
12	Welcome service	Does a welcome service for international populations exist? YES=1, NO=0.	0/1	Cities	2008	City
13	Online information service	Does a migration specific administrative department exist? YES=1, NO=0.	0/1	Cities	2008	City
14	Migration department	Does a migration specific administrative department exist? YES=1, NO=0.	0/1	Cities	2008	City
15	Interpreter	Does the city administration (city council) provide interpreters if necessary? YES=1, NO=0, staff with foreign language abilities=0.5.	0/1	Cities	2008	City
16	Start-coaching programme	Does the city have a special start-coaching programme for migrants? YES=1, NO=0.	0/1	Cities	2008	City
17	Integration actions	Does the city initiate or participate in special actions? YES=1, NO=0.	0/1	Cities	2008	City
18	Immigrants in the city council	Percentage of elected city representatives who are immigrants (first and/or second generation).	%	Cities	2008	City
Regulatory factors						
19 - 23	MIPEX	Evaluation of migration policy of the EU-countries: 0 Critically unfavourable, 1–20 Unfavourable, 21–40 Slightly unfavourable, 41–59 Halfway to best practice, 60–79 Slightly favourable, 80–99 Favourable, 100 Best practice in the components: long-term residence, family reunification, naturalization, participation, anti-discrimination.	0/100	MIPEX	2007	Country
24	Granted naturalisations	The naturalisation rate (% of foreign population) gives the number of persons acquiring the nationality of the country as a % of the stock of the foreign population at the beginning of the year. Naturalisation is a process by which citizenship is conferred upon a foreign citizen if he or she fulfils special requirements.	%	OECD	1996-2005	Country

	Indicator name	Indicator (exact value)	Value	Main source	Year	Regional coverage
25	Freedom House Index	Freedom House Index is an indicator which is a combined average rating of political rights and civil liberties.	Index	Freedom House Index	2008	Country
	Economic factors					
26	Income per capita	Disposable annual income per capita, defined as income after taxes, social security contributions and transfer payments.	%	Eurostat	2005	Nuts 2
27	Taxation (high income)	Effective average tax rate for single persons with an income of 100'000 EUR.	%	BAKBASEL Benchmarking Database	2006	Metropolitan region
28	Flat rents	Average costs of rental housing per month which a renter would expect to pay on the free market at the time of the survey (in EUR).	in EUR	UBS: Preise und Löhne: Ein Kaufkraft- und Lohnvergleich rund um die Welt / Ausgabe 2007	2006	City
29	Living area (average)	Average living area per person (in m^2).	m^2	Urban Audit	1999-2002 2003-2006	Core city
30	Access to property market	Are foreigners allowed to buy property in the city for resident purposes? If yes, what are the restrictions? YES=1, NO=0, restrictions=0,5.	0/1	Cities	2009	City / Country
31	MIPEX: Labour market access	Evaluation of migration policy of the EU-countries: 0 Critically unfavourable, 1–20 Unfavourable, 21–40 Slightly unfavourable, 41–59 Halfway to best practice, 60–79 Slightly favourable, 80–99 Favourable, 100 Best practice in labour market access.	0/100	MIPEX	2007	Country
32	Total unemployment rate	Unemployment rate.	%	Eurostat	2005	Nuts 3
33	Difference unemployment rate	Difference between the unemployment rate of nationals and not nationals.	%	Eurostat: European Labour Force Survey	2006	Nuts 2
34	Total labour force with University education (in %)	Total labour force with university education (in %).	%	Eurostat: European Labour Force Survey	2006	Nuts 3
35	Work permits	Granted work permits per not European immigrants.	%	Cities	2008	City
	Social and societal factors					
36	Feeling of safety	Subjective perception of safety. % of people who feel safe or very safe walking alone in a local area after dark.	%	European Social Survey	2004	Nuts 2
37	Crime rates	Number of all incidents that happen within the "city" limits and are reported to and logged by the police or another official body which are considered crimes in the national legal framework.	‰	Urban Audit	1999-2002 2003-2006	Core city

	Indicator name	Indicator (exact value)	Value	Main source	Year	Regional coverage
38	Right wing parties in the city council	Total number of seats represented by extreme right-wing parties and/or nationalist parties in the city council as a proportion of total number of seats.	%	Cities	2009	City
39	Subjective perception of health services	Satisfaction with the health system: What do you think about the overall state of health services (in Nuts 2 regions)?	%	European Social Survey	2004	Nuts 2
40	Foreign students in upper secondary education	Share of foreign (non-nationals) students in upper and higher education (ISCED level 3 and 4) of total non-national students (in %).	%	Cities	2008	City
41	Quality of universities	Rank of the best local university in the Shanghai Index plus rank of the best local university in the Times Index.	Sum of ranks	Shanghai Index, Times Index	2008	City region
42	International schools	International schools by age groups (primary years programme, middle years programme and international diploma).	Number	www.ibo.org	2008	City region
43	Perception: Immigration & Economy	Is immigration bad or good for the country's economy?	%	European Social Survey	2004	Nuts 2
44	Perception: Immigration & Cultural live	Is the country's cultural life undermined or enriched by immigrants?	%	European Social Survey	2004	Nuts 2
45	Perception: Immigrants influence on the country	Do immigrants make the country a worse or a better place to live?	%	European Social Survey	2004	Nuts 2
	Cultural and amenity factors					
46	Museum offerings	Number of museums (per 1'000 inhabitants).	‰	Urban Audit	1999-2002	Core city
47	Cinema offerings	Number of cinemas (per 1'000 inhabitants).	‰	Cities; Web search	2008	City
48	Share of movies in foreign languages	Share of movies in foreign languages (in %).	%	Cities; Web search	2008	City
49	Places of worship (minority)	Number of places of worship (minority religions).	Ranges	Cities; Web search	2008	City
50	International restaurants	Number of international and / or cultural specific restaurants in the city.	Ranges	Cities; Web search	2008	City
51	International TV channels	TV channels which are available in the country but not in the main language of the country.	%	MAVISE database	2008	Country
	Internationalisation factors					
52	International festivals	Number of international festivals in the city which celebrate an international culture and/or attract international populations and/or invite internationals actors.	Ranges	Yellow pages	2008	City
53	International fairs	Total number of fairs with foreign exhibitors and/or visitors (per 1.000 inhab.).	‰	AUMA.de	2005-2008	City

	Indicator name	Indicator (exact value)	Value	Main source	Year	Regional coverage
54	Embassies	The number of embassies, consulates as well as general and honorary consuls.	Ranges	Cities; Web search	2008	City
55	Tourists intensity	Number of tourist overnight stays in registered accommodation per year per resident population.	%	European Cities Tourism	2006	City
56	International companies	Number of companies in the cities which are ranked by revenue by the Fortune Global 500 (per 1.000 inhab.).	‰	Fortune Global 500	2008	City
57	Freedom of investment	Investment freedom includes, among others, whether there are restrictions on access to foreign exchange, whether foreign firms are treated the same as domestic firms under the law, etc.	Index	Index of Economic Freedom	2009	Country
58	International meetings	Number of international association meetings (per 1'000 inhabitants) which must be attended by at least 50 participants, must be organised on a regular basis (one-time events are not included), must move between at least 3 different countries.	‰	ICCA International Association Meeting Market 2007	2007	City
59	International organisations	Number of hosted international institutions and non-governmental organisations. International institutions are defined as intergovernmental and supranational political institutions between at least two states and their ability to act in different political fields. Non-governmental institutions are concentrated on political/ economic/ social/ environmental/ humanitarian work-areas and handle global themes.	Ranges	Cities	2008	City
	Connectivity and accessibility factors					
60	Global accessibility	Global accessibility (Index, Enlarged Alpine Space 2002 = 100).	Index	BAKBASEL Benchmarking Database	2006	City
61	International passengers (flight)	International airline passengers (arriving and departing).	%	World Airport Traffic Report	2006	City region
62	Passengers (ships)	Total passengers embarked and disembarked (maritime transport).	Persons	Eurostat	2003/2006	Nuts 2
63	Cargo freight	Maritime transport of freight at regional level. Total goods loaded and unloaded.	1000 tons	Eurostat	2007	Nuts 2
64	Intra-metropolitan accessibility	Sum of commuting times within the city region (individual traffic and public transport).	Minutes	Michelin: "Routenplaner" and online information of public transport	2009	City

	Indicator name	Indicator (exact value)	Value	Main source	Year	Re-gional cover-age
65	Number of hotspots	Number of hotspots is the total availability of WLAN points in the cities combining both free public points by the cities and commercial points by hotels, airports, trains stations and fairs. These wireless local area networks make it possible to join the internet in these areas in a fast and consumer-friendly way.	Ran ges	Several Websites	2009	City
		Environmental factors				
66	Average days of rain	Number of days of rain with more than 1.0 mm of precipitation, on average in the last 30 years.	Days	wetter.com AG: "Klimadaten-bank"	2009	City
67	Proximity to water (km)	Distance in kilometres to a lake or a sea, larger than 20 km^2.	Km	Michelin: "Routen-planer", viamich-elin.com	2009	City
68	Air quality	Number of days Ozone (O3) exceeds 120 microgram/m^3. Number of days per year when particulate matter PM10 concentrations exceed 50 micro-gram/m^3.	Days	European Air Quality Report	2007	City

9.1.2 Indicators: Description

International Population[37]		
1	Inflow of international population	Share of nationals from other countries who have moved to the city during the last two years, as a proportion of the total population (change / flow). The total population is defined as the resident population.
2	Stock of international population	Non-nationals within the city as a proportion of the total population (stock).
3	Low qualified foreign labour force	The foreign total labour force (age 15+) according to the low skilled qualification level as a proportion of the total non-national labour force (%). The qualification level is defined as follows: low = lower secondary. The definition follows the European labour force survey.
4	Medium qualified labour force	The foreign total labour force (age 15+) according to the medium skilled qualification level as a proportion of the total non-national labour force (%). The qualification level is defined as follows: medium = upper secondary. The definition follows the European labour force survey .
5	Highly qualified labour force	The foreign total labour force (age 15+) according to the highly skilled qualification level as a proportion of the total non-national labour force (%). The qualification level is defined as follows: high = third level. The definition follows the European labour force survey.
6	International students	Total number of foreign (non-national) students, exchange students or free-moving students enrolled in any kind of university study programmes as a proportion of total students. Foreign students do not have the same citizenship as the native students and do not live in the city longer than their time in school (ISCED level 5 and 6). Part-time and full-time students are considered.
7	Difference highly qualified international population and national population	Difference in % between the foreign and the native total labour force (age 15+) according to the qualification level. The qualification level is defined as follows: high = third level. The definition follows the European labour force survey.
8	International retirees	Total number of foreign (non-nationals) retirees living in the city as a proportion of the total population. Foreign retirees are a specific group of the international population stock within the city. Foreign retirees are defined by their status being a foreigner and their belonging to the age-group over 65 years.
9	Non-EU international population	Non-EU-nationals as a proportion (%) of the total population.
10	Diversity of international population	The top 10 foreign nationalities are the most relevant foreign nationalities within the city. The foreign population are residents who are not citizens of the resident country.

[37] Attempts should be made to obtain this data defining international populations as residents who are foreign-born. The foreign population is defined as residents who are foreign-born and / or not citizens of the resident country.

Governance and leadership factors		
11	Languages city website	Number of languages which are available for all sites and functions of the official city website (scores). If only a few sites or pages are translated, the language is not counted. Weighted with the importance of the language according to Weber.
12	Welcome service	Does a welcome service for international populations exist? Welcome services usually provide a wide range of information for foreign people who are new to the city. This information concerns civic, political and cultural life of the country and the city as well as information about regulations for migrants (access to permanent residence, labour market, recognition of qualifications). Welcome services also include welcome letters for new immigrants which provide information about first administrative steps and important contacts in case of migration-specific questions.
13	On-line information service	Does an on-line information service exist? An on-line information portal provides a wide range of information for the foreign population such as local community centres, events and meetings, as well as migration-specific daily life information.
14	Migration department	Does a migration-specific administrative department exist? A migration-specific administrative department coordinates and manages all immigration and diversity affairs, provides information offers and consulting services.
15	Interpreter	Interpreters in the city administration: The city administration (city council) provides interpreters if necessary.
16	Start-coaching programme	Special start-coaching programme for migrants: Start-coaching programmes can be language and/or integration courses as well as assessment centres for labour market integration for migrants. The target groups of these programmes are disadvantaged groups of immigrants.
17	Integration actions	Special actions to increase the feeling of belonging and integration of migrants: Actions to increase belonging and integration can be one-time events as well as general strategies.
18	Immigrants in the city council	Number of elected city representatives who are immigrants (first and/or second generation) as a proportion/share of the total elected city representatives (council/parliament).
Regulatory factors		
	MIPEX	The MIPEX evaluates the migration policy of the EU-countries (also including Switzerland, Norway and Canada) according to six dimensions (see below): It provides a snapshot of the policy situation to raise standards of best practice in order to improve policy across Europe and set terms of legal and policy debates. "The combined set of the highest European standards serve as MIPEX's normative framework. 140 policy indicators are designed to benchmark current laws and policies against these highest European standards". The indicator scores in each dimension are averaged together to give a dimension score (0 = critically unfavourable; 100 = best practice).
19	MIPEX: Long-term residence	Eligibility, acquisition conditions, security of status, rights associated.
20	MIPEX: Family reunion	Eligibility for sponsors, eligibility for family members, acquisition conditions (for sponsors and/or family members, security of status, rights associated.
21	MIPEX: Political Participation	Electoral rights, political liberties, consultative bodies, implementation policies.
22	MIPEX: Anti- discrimination	Definitions and concepts, fields of application, enforcement, equality policies.
23	MIPEX: Naturalisation	Access to nationality, eligibility, acquisition conditions, security of status, dual nationality.

24	Granted naturalisations	The naturalisation rate (% of foreign population) gives the number of persons acquiring the nationality of the country as a % of the stock of the foreign population at the beginning of the year. Naturalisation is a process by which citizenship is conferred upon a foreign citizen if he/she fulfils special requirements.
25	Freedom House Index	Freedom House Index is an indicator which is a combined average rating of political rights and civil liberties.
	Economic factors	
26	Income per capita	Annual income of a household in EUR per person from income from work (wages and salaries, self-employment income), private income (property income, capital income, private transfers) and social transfers (old-age and survivors' pensions, unemployment benefits, family related benefits, sickness / invalidity benefits, education related benefits, housing allowance, social assistance and other benefits).
27	Taxation (high income)	Effective average tax rate for single persons with an income of 100'000 EUR.
28	Flat rents	Average costs of housing per month which a renter would expect to pay on the free market at the time (in EUR).
29	Living area (average)	Average living area per person (in m^2).
30	Access to property market	Are foreigners allowed to buy property in the city for resident purposes? If yes, what are the restrictions?
31	MIPEX: Labour market access	Eligibility, labour market integration measures, security of employment, associated rights.
32	Total unemployment rate	Unemployed = total number of residents above 15 and under 65 years old who are without work and who are available and/or looking for paid employment or self-employment in % of the total labour force.
33	Difference unemployment rate	Difference between the unemployment rate of nationals and non-nationals: Unemployment rate of nationals (number of national residents above 15 and under 65 years old who are without work and who are available and/or looking for paid employment or self-employment) minus unemployment rate of non-nationals.
34	Total labour force with university education (in %)	The total labour force (age 15+) according to the qualification level (university education) as a proportion of the total labour force. The qualification level is defined as follows: high = third level. The definition follows the European labour force survey.
35	Work permits	Total number of work permits granted to non-EU immigrants. This number includes renewals as well as new permits. A work permit is a legal authorization which allows a person to take employment. It is most often used in instances where a person is given permission to work in a country where he or she does not hold citizenship.
	Social and societal factors	
36	Feeling of safety	Subjective perception of safety. Percentage of people who feel safe or very safe walking alone in a local area after dark (Nuts 2 regions).
37	Crime rates	Number of all incidents (per 1'000 inhabitants) that happen within the "city" limits and are reported to and logged by the police or another official body which are considered as crime in the national legal framework.
38	Extreme right-wing parties in the city council	Total number of seats represented by extreme right-wing parties and/or nationalist parties in the city council as a proportion of total number of seats. Right-wing and/or nationalist parties, when analysing the openness of cities, are characterised as parties which strive against a multicultural and diverse international population in their cities.
39	Subjective perception of health services	Satisfaction with the health system: What do you think about the overall state of health services (in Nuts 2 regions)?

40	Foreign students in upper secondary education	Share of foreign-born students in upper and higher education (ISCED level 3 and 4) per 1'000 students.
41	Quality of universities	Sum total score of the Shanghai Index and the Times Index. The quality is defined as the sum of scores of all local universities as scored in the "Academic Ranking of World Universities" (the so-called Shanghai Index) by the Institute of Higher Education of Shanghai Jiao Tong University. Rank of the best university in the Times Index. Times higher education supplement (News international Ltd.)
42	International schools	Schools which are registered for the International Baccalaureate (IB-schools). International schools were counted by age groups (primary years programme, middle years programme, international diploma).
43	Perception: Immigration & Economy	Is immigration bad or good for the country's economy? (scale 0-10; 0=bad, 10=good for the economy) (average).
44	Perception: Immigration & Cultural live	Is the country's cultural life undermined or enriched by immigrants? (scale 0-10; 0=cultural life undermined, 10=cultural life enriched) (average).
45	Perception: Immigrants influence on the country	Do immigrants make the country a worse or a better place to live? (scale 0-10; 0=worse, 10=better place to live) (average).
	Cultural and amenity factors	
46	Museum offerings	Number of public and private museums per 1'000 inhabitants.
47	Cinema offerings	Number of cinemas per 1'000 inhabitants.
48	Share of movies in foreign languages	The proportion of movies which are not dubbed to the total number of movies in the cities' cinema programme (in %).
49	Places of worship (minority)	The number of places of worship and religious centres of the minority religion groups living in the city.
50	International restaurants	Total number of international cuisines. To ensure comparability within the cities, a list of all kinds of international restaurants will be established.
51	International TV channels	Share of free and pay broadcast channels which are mainly available in the country but not in the official language of the country, of the total number of TV channels.
	Internationalisation factors	
52	International festivals	Total number of international festivals in the city which celebrate an international culture, attract international populations, and/or invite international actors.
53	International fairs	The number of fairs between 2005 and 2008 (per 1.000 population). International fairs are defined as fairs with foreign exhibitors and /or foreign visitors.
54	Embassies	The number of embassies, consulates as well as general and honorary consuls.
55	Tourist intensity	Number of tourist overnight stays in registered accommodation per year per resident population.
56	International companies	Number of international companies in the cities which are ranked by revenue by the Global Fortune 500 (per 1.000 population).

57	Freedom of investment	Investment freedom includes, among other issues, whether there is a foreign investment code that defines the country's investment laws and procedures; whether the government encourages foreign investment through fair and equitable treatment of investors; whether there are restrictions on access to foreign exchange; whether foreign firms are treated the same as domestic firms under the law; whether the government imposes restrictions on payments, transfers, and capital transactions; and whether specific industries are closed to foreign investment.
58	International meetings	Number of international association meetings (per 1,000 inhabitants) which must be attended by at least 50 participants, must be organised on a regular basis (one-time events are not included), must move between at least 3 different countries. These association meetings (the largest segments) are scientific; other academic; trade organisations; professional bodies; social groupings. These meetings can differ in types of budget, duration and complexity.
59	International organisations	Number of hosted international institutions and non-governmental organisations (per 1'000 inhabitants). International institutions are defined as intergovernmental and supranational political institutions between at least two states and their ability to act in different political fields. Non-governmental institutions are concentrated on political/ economic/ social/ environmental/ humanitarian work-areas and handle global themes. Establish a list of all international organisations
Connectivity and accessibility factors		
60	Global accessibility	The global accessibility (average travel times) measures the connection of the region to regions on other continents.
61	International passengers (flight)	The share of international airline passengers in relation to the total airline passengers (domestic, international and direct transit passengers) which are arriving at and departing from the cities' airport(s).
62	Passengers (ships)	The total of passengers who arrived (embarked and disembarked) in the city and departed by ship (maritime transport) in a specific time period.
63	Cargo freight	The total cargo freight in tons.
64	Intra-metropolitan accessibility	Intra-metropolitan accessibility is measured by how much time a person needs, on average, to travel by public transport or by private transport (cars) within a city region. The commuting time takes into account the geographical area of the metropolitan region and the average travel times by both public and private transport between the edge of the agglomeration and the centre. The commuting time by public transport is integrated into the indicator with the same weighting as the commuting time by private transport.
65	Number of hotspots	The number of hotspots is the availability of WLAN points in the cities combining both free public points by the cities and commercial points by hotels, airports, trains stations and fairs. These wireless local area networks make it possible to join the internet in these areas in a fast and consumer-friendly way.
Environmental conditions		
66	Average days of rain	Number of days of rain with more than 1,0 mm of precipitation, on average in the last 30 years.
67	Proximity to water	Distance is kilometres to a lake or a sea, larger than 20 km^2.
68	Air quality	Number of days Ozone (O3) exceeds 120 microgram/m^3. Number of days per year when particulate matter PM10 concentrations exceed 50 microgram/m^3.

9.1.3 Indicators: Sources

International Population		
1	Inflow of international population	Urban Audit National Statistics: www.neighbourhood.statistics.gov.uk UK Census 2001, Key statistics for local authorities in England and Wales. Office for National Statistics, London: TSO New York: Statistical Yearbooks: United States. Department of Homeland Security Yearbook of Immigration Statistics: 2007. Washington, D.C U.S. Department of Homeland Security, Office of Immigration Statistics, 2008. London: National Health Service Central Register and International Passenger Survey, Office for National Statistics; General Register Office for Scotland; Northern Ireland Statistics and Research Agency; Home Office; Irish Central Statistical Office
2	Stock of international population	Urban Audit National Statistics: www.neighbourhood.statistics.gov.uk UK Census 2001, Key statistics for local authorities in England and Wales. Office for National Statistics, London: TSO New York: Statistical Yearbooks: United States. Department of Homeland Security. Year-book of Immigration Statistics: 2007. Washington, D.C U.S. Department of Homeland Security, Office of Immigration Statistics, 2008 And Fedstats; American Community Survey and http://www.dhs.gov/xlibrary/assets/statistics/yearbook/2007/immsuptable2dfy07.xls. London: NOMIS; Data Management and Analysis Group Greater London Authority Sao Paolo: IBGE; http://www.sidra.ibge.gov.br/bda/tabela/protabl.asp?z=t&o=22&i=P Singaore: UN Country Profile Toronto: http://www12.statcan.ca/english/census06/data/trends/Table_1.cfm?TID=0&T=CSD&PRCODE=35&GEOCODE=20005&geosubCSD=Submit&GEOLVL=CSD
3	Low qualified foreign labour force	Eurostat: European Labour Force Survey (LFS) Data gathering information from the cities returned until the 6th of April: Poznan: Central Statistical Office Nitra: Headquarter of Labour, Social Affairs and Family New York: US Census Bureau- American Fact Finder Sao Paulo: IBGE Toronto: Canada Statistics
4	Medium qualified foreign labour force	Eurostat: European Labour Force Survey (LFS) Data gathering information from the cities returned until the 6th of April: Poznan: Central Statistical Office Nitra: Headquarter of Labour, Social Affairs and Family New York: US Census Bureau- American Fact Finder Sao Paulo: IBGE Toronto: Canada Statistics
5	High qualified foreign labour force	Eurostat: European Labour Force Survey (LFS) Data gathering information from the cities returned until the 6th of April: Poznan: Central Statistical Office Nitra: Headquarter of Labour, Social Affairs and Family New York: US Census Bureau- American Fact Finder Sao Paulo: IBGE Toronto: Canada Statistics
6	International students	Data gathering information from the cities returned until the 6th of April: Belfast: DEL/HESA Cardiff: University Websites Dublin: International Education Board Ireland (IEBI) Dusseldorf: LDS NRW Poznan: Poznan City Hall Vienna: http://www.wien.gv.at/statistik/daten/rtf/universitaeten-studierende.rtf; http://www.wien.gv.at/statistik/daten/rtf/unis-auslaender.rtf Nitra: Institute of Information and Prognosis of the system of Schools Nottingham: HESA Edinburgh: Scottish Government / Individual universities

7	Difference highly qualified international population and national population	Eurostat: European Labour Force Survey (LFS) Data gathering information from the cities returned until the 6th of April: Poznan: Central Statistical Office Nitra: Headquarter of Labour, Social Affairs and Family
8	International retirees	Eurostat: European Labour Force Survey (LFS)
9	Not EU international population	Urban Audit
10	Diversity of international population	Data gathering information from the cities returned until the 6th of April. Dublin: Central Statistics Office Ireland, Census Dusseldorf: City of Dusseldorf, population register Nitra: Regional Database Nitra County-Nuts IV Edinburgh: Census 2001 Poznan: Central Statistical Office New York: U. S. Census Bureau, Census 2000, special tabulation. Metropolitan New York Area, United States. Country and Metropolitan Stats in Brief (2005) Toronto: Metropolitan Toronto Area, Canada. Country and Metropolitan Stats in Brief (2001) London: Metropolitan London Area, United Kingdom Country and Metropolitan Stats in Brief (2001)
Governance and Leadership factors		
11	Languages city website	Belfast: www.belfastcity.gov.uk Bilbao: www.bilbao.net Bucharest: www1.pmb.ro/pmb Cardiff: www.cardiff.gov.uk Dublin: www.dublincity.ie Dusseldorf: www.duesseldorf.de Poznan: www.poznan.pl Gdansk: www.gdansk.pl Sofia: www.sofia.bg Vienna: www.wien.gv.at Madrid: www.esmadrid.com/es/portal.do Nitra: www.nitra.sk Manchester: www.manchester.gov.uk Newcastle: www.newcastle.gov.uk Nottingham: www.nottinghamcity.gov.uk Edinburgh: www.edinburgh.gov.uk London. www.london.gov.uk New York: www.nyc.gov Sao Paulo: www.capital.sp.gov.br Singapore: www.gov.sg Toronto: www.toronto.ca
12	Welcome service	Data gathering information from the cities returned until the 6th of April: Belfast: Good relations unit - City Council Bilbao: City Council Poznan: City Hall Vienna: www.start-wien.at Nitra: www.nisys.sk; official website of the city
13	Online information service	Data gathering information from the cities returned until the 6th of April: Belfast: Good relations unit - City Council Bilbao: City Council Poznan: City Hall Vienna: www.start-wien.at Nitra: www.nisys.sk
14	Migration department	Data gathering information from the cities returned until the 6th of April: Belfast: City Council Vienna: www.wien.gv.at/verwaltung/personenwesen/index.html; www.wien.gv.at/integration; www.wien.gv.at Nitra: official website of the city

15	Interpreter	Data gathering information from the cities returned until the 6th of April: Belfast: City Council Poznan: City Hall Nitra: City office of interior affairs
16	Start-coaching programme	Data gathering information from the cities returned until the 6th of April: Belfast: Good relations unit - City Council Poznan: City Hall Vienna: www.startwien.at Nitra: official website of the city
17	Integration actions	Data gathering information from the cities returned until the 6th of April: Belfast: Good relations unit - City Council Poznan: City Hall Vienna: www.wien.gv.at/integration/arbeits.html Nitra: official website of the city Nottingham: information from New & Emerging Communities officer
18	Immigrants in the city council	Data gathering information from the cities returned until the 6th of April: Belfast City Council Dusseldorf: City Nitra: City office of interior affairs
Regulatory factors		
19	MIPEX: Long- term residence	British Council- Migrant Integration Policy Index www.integrationindex.eu
20	MIPEX: Family reunion	British Council- Migrant Integration Policy Index www.integrationindex.eu
21	MIPEX: Political Participation	British Council- Migrant Integration Policy Index www.integrationindex.eu
22	MIPEX: Anti- discrimination	British Council- Migrant Integration Policy Index www.integrationindex.eu
23	MIPEX: Naturalization	British Council- Migrant Integration Policy Index www.integrationindex.eu
24	Granted naturalisa-tions (as a % of for-eign born people)	OECD: http://ocde.p4.siteinternet.com/publications/doifiles/812008071P1T030.xls. www.oecd.org
25	Freedom House Index	Freedom House Index www.freedomhouse.org
Economic factors		
26	Income per capita	Eurostat
27	Taxation (high income)	BAKBASEL: "International Benchmarking Database", BAK Basel Economics, 2008.
28	Flat rents	UBS- Prices and Earnings 2006 and information from the cities
29	Living area (average)	Urban Audit Data gathering information from the cities returned until the 6th of April: Belfast: Eurostat Bilbao: Eurostat Dublin: www.cso.ie, Urban Audit Dusseldorf: City of Dusseldorf, Statistical Office Poznan: City Hall, GUS Vienna: www.wien.gv.at/statistik/daten/rtf/bev-fortschreibung.rtf Madrid: City Nitra: Regional Directorate of Alien Police Nitra Nottingham: ONS Mid-Year Edinburgh: General Register Office Scotland Census 2001

30	Access to property market	Data gathering information from the cities returned until the 6th of April: Belfast: Housing Rights Dublin: www.globalpropertyguide.com/Europe/Ireland Poznan: City Hall Vienna: www.wien.gv.at/verwaltung/personenwesen/einwanderung/grunderwerb/index.html; http://www.wien.gv.at/recht/landesrecht-wien/rechtsvorschriften/html/b1200000.htm; City administration, MA 35 Nitra: Ministry of Inter.
31	MIPEX: Labour market access	British Council- Migrant Integration Policy Index www.integrationindex.eu
32	Total unemployment rate	Urban Audit; Eurostat: European Labour Force Survey (LFS) Eurostat: Regional statistics
33	Difference unemployment rate	Eurostat: European Labour Force Survey (LFS)
34	Total labour force with university education (in %)	Eurostat: European Labour Force Survey (LFS) Data gathering information from the cities returned until the 6th of April: Poznan: Central Statistical Office Nitra: Headquarter of Labour, Social Affairs and Family
35	Work permits	Data gathering information from the cities returned until the 6th of April: Belfast: Home Office/NISRA Dublin: employmentpermits@entemp.ie; http:/www.entemp.ie/labour/workpermits/statistics.htm Vienna: www.iambweb.ams.or.at/ambweb/AmbwebServlet?trn=start Nitra: Department of Labour, Social Affairs and Family Nottingham: Department of Work and Pensions
Social and societal factors		
36	Feeling of safety	EUROPEAN SOCIAL SURVEY (ESS) (2004); GENERAL SOCIAL SURVEY (GSS)
37	Crime rates	Urban Audit Nottingham: UK Crime Census
38	Right wing parties in the city council	Belfast: City Council committee Bilbao: Elmundo Online; City Council Bucharest: Election results: Wikipedia; Classification of the political parties: Konrad Adenauer Stiftung, Bayerische Landeszentrale für politische Bildung Cardiff: City Council Dublin: City Council Dusseldorf: City; Wahlergebnisse: Stadt Dusseldorf, Einordnung der REP in das rechte Spektrum:Bundesverfassungschutzbericht 2005 Poznan: City Council, City Hall Gdansk: City Council Sofia: Election results: Classification political parties: Hans Seidel, Stiftung Zentrale Wahlkommission 2007 Vienna: Ergebnisse Wahlen: Stadt Wien, Einordnung in die Parteienlandschaft: POLIXEA Informationsdienst für Politik Madrid: Information portal Berlin, Presentation of the city partners Sofia: Election results: Statistical Office of Bulgaria Nitra: official website of the City Manchester: City; LA website Newcastle: City Nottingham: City; City Council website; political foundations; online newspapers Edinburgh: City London: BBC, Classification of the party BNP through the magazine "Das Parlament", Bundeszentrale für politische Bildung
39	Subjective perception of health services	EUROPEAN SOCIAL SURVEY (ESS)

40	Foreign students in upper secondary education	Data gathering information from the cities returned until the 6th of April: Belfast: DEL / HESA Bilbao: Ikuspegi Dublin: www.education.ie Dusseldorf: City; Statistical Office Nitra: Institute of Information and Prognosis of the system of Schools
41	Quality of universities	Shanghai Index (2007): Shanghai Jiao Tong University (2007): "Academic Ranking of World Universities" Times Index: "THES-QS World University Ranking"
42	International schools	International Baccalaureat: "IB-World School", http://www.ibo.org
43	Perception: Immigration & Economy	EUROPEAN SOCIAL SURVEY (ESS); GENERAL SOCIAL SURVEY (GSS)
44	Perception: Immigration & Cultural live	EUROPEAN SOCIAL SURVEY (ESS); GENERAL SOCIAL SURVEY (GSS)
45	Perception: Immigrants influence on the country	EUROPEAN SOCIAL SURVEY (ESS); GENERAL SOCIAL SURVEY (GSS)
Cultural and amenity factors		
46	Museum offerings	Urban Audit
47	Cinema offerings	Sources and data validation trough data gathering information from the cities returned until the 6th of April: Belfast: www.yell.com/find/s/Arts-and-Culture/Cinemas/UK/County-Antrim/Belfast,-County-Antrim Bilbao: www2.bilbao.net/bilbaoturismo/ingles/qhacer/dncines.htm Bucharest: www.entertainmentbucharest.com/cinemas.htm http://www.inyourpocket.com/romania/bucharest/entertainment_events_concerts_music_cinema/category/2743-cinemas.html Dublin: www.entertainment.ie/cinema/display.asp Poznan: Stat. Amt Polen: www.stat.gov.pl/cps/rde/xbcr/poznan/ASSETS_07m10_06.pdf Vienna: www.apps.vienna.at/tools/kino/search.aspx?sort=film&exactDate=2008-11-21 Newcastle: www.aboutbritain.com/cinemas/cinemas-in-newcastle-upon-tyne-page1.asp Toronto: www.google.ch/movies?hl=de&near=toronto&dq=cinema+toronto&sa=X&oi=showtimes&ct=title&cd=1 Singapore: Department of Statistics

48	Share of movies in foreign languages	Belfast: www.google.ch/movies?sc=1&hl=de&near=Belfast&rl=1 Bilbao: www.google.ch/movies?sc=1&hl=de&near=Bilbao&rl=1 & http://www.cinesrenoir.com/cartelera.php?ciudad=bilbao&sala=33 Bucharest: www.programecinema.cinemagia.ro/program_cinema.php Cardiff: www.google.ch/movies?hl=de&near=cardiff&dq=Cinema+Cardiff&sa=X&oi=showtimes&ct=title&cd=1 Dublin: www.dublinevents.com/dublin-movies; www.entertainment.ie/cinema/display.asp Dusseldorf: www.google.ch/movies?hl=de&near=d%C3%BCsseldorf&dq=Kino+D%C3%BCsseldorf&sa=X&oi=showtimes&ct=title&cd=1 Gdansk: www.google.ch/movies?sc=1&hl=de&near=Gdansk&rl=1 Poznan: www.google.ch/movies?hl=de&near=poznan&dq=Cinema+POznan&sa=X&oi=showtimes&ct=title&cd=1 Sofia: www.programata.bg/?sel_date=2008-11-19&sel_time=&c=1&p=30 Vienna: www.apps.vienna.at/tools/kino/search.aspx?sort=film&exactDate=2008-11-21 Madrid: www.google.ch/movies?sc=1&hl=de&near=Madrid&rl=1 & http://www.cinesrenoir.com/cartelera.php?ciudad=madrid&sala=39; www.cines-verdi.com/madrid/whats-on/ Manchester: www.google.ch/movies?hl=de&near=manchester&dq=Cinema+Manchester&sa=X&oi=showtimes&ct=title&cd=1 Newcastle: www.my247.com.au/films.aspx?cityid=18 Nottingham: www.google.ch/movies?hl=de&near=nottingham&dq=Cinema+Nottingham&sa=X&oi=showtimes&ct=title&cd=1 Edinburgh: www.google.ch/movies?sc=1&hl=de&near=Edinburgh&rl=1 Toronto: www.google.ch/movies?hl=de&near=toronto&dq=cinema+toronto&sa=X&oi=showtimes&ct=title&cd=1 New York: www.google.ch/movies?sc=1&hl=de&near=New+York&rl=1 London: www.google.ch/movies?sc=1&hl=de&near=London&rl=1 Singapore: www.google.ch/movies?sc=1&hl=de&near=Singapore&rl=1 Sao Paulo: www.google.ch/movies?sc=1&hl=de&near=Sao+Paulo&rl=1
49	Places of worship (minority religions)	Sources and data validation trough data gathering information from the cities returned until the 6th of April: Belfast: Youth Council for Northern Ireland Bilbao: City Council Dublin: www.isjm.org/country/ireland.htmno answer; www.en.wikipedia.org/wiki/Islam_in_the_Republic_of_Ireland; www.en.wikipedia.org/wiki/Hinduism_in_Ireland Dusseldorf: City Poznan: Central Statistical Office; City Hall Nitra: database of the city Manchester: LA websites Nottingham: From Muslim Community Facilitator's database New York: http://www.ecben.net/nysynagogues.shtml http://newyork.citysearch.com/yellowpages/directory/New_York_NY/210/393/page1.html http://en.wikipedia.org/wiki/List_of_Buddhist_temples#New_York http://www.garamchai.com/templesNJNY.htm Sao Paolo: http://www.mavensearch.com/synagogues/C3363Y41869RX http://www.waymarking.com/cat/details.aspx?f=1&guid=1df701b6-9f4d-464a-a45a-d8f22532c781&lat=-23.885279&lon=-46.643849&t=3&id=sao+Paulo http://www.buddhanet.info/wbd/search.php?keyword=&search=Begin+Search&country_id=11&province_id=75&offset=25 http://www.waymarking.com/cat/details.aspx?f=1&guid=3e40df61-2a37-4f82-a1d7-70168e356afe&lat=-23.885279&lon=-46.643849&t=3&id=Sao+Paulo Singapore: http://www.jewishvirtuallibrary.org/jsource/Judaism/synSingapore.html http://www.streetdirectory.com/asia_travel/travel_sites/whats_nearby/cat/63/church/p8 http://www.shaivam.org/siddhanta/toi_singapore.htm Toronto: http://yellowpages.ca/search/si/1/synagogques/toronto/rca-01267400-Synagogues%B2rci-Toronto http://yellowpages.ca/search/si/1/mosques/toronto/rci-Toronto http://www.buddhanet.info/wbd/search.php?keyword=&search=Begin+Search&country_id=1&province_id=18&offset=75

50	International restaurants	All cities: Yellow pages Data validation trough data gathering information from the cities returned until the 6th of April: Belfast: Yellow pages Dublin: www.homeinsight.com/home-value/OH/dublin.asp; www.menupages.ie/Dublin/city_centre.aspx Poznan: City Hall, International Networks Nitra: tourist information office of the city
51	International TV channels	European Audiovisual Observatory (MAVISE database)
Internationalisation factors		
52	International festivals	All cities: Hotel guides; tourist information, city pages; travel guides Data validation trough data gathering information from the cities returned until the 6th of April: Belfast: City Council Poznan: City Hall Nitra: websites
53	International fairs	AUMA.de and data validation trough data gathering information from the cities returned until the 6th of April: Poznan: City Hall Nitra: Agrocomplex - fair centre Manchester: Tourist office
54	Embassies	Information by hosted embassies; embassy.com Belfast: Foreign embassies and High Commissions; American Consulate Bilbao: www.embassyworld.com Cardiff: Foreign embassies and High Commissions; Cardiff Council Dublin: Embassy of Switzerland Dusseldorf: www.duesseldorf.de/wirtschaftsfoerderung/pdf/standortprofil.pdf; www.konsulate.de Poznan: www.embassyworld.com; MSZ Dansk: www.gdansk-life.com/poland/gdansk-consulates Sofia: www.embassyworld.com Vienna: www.bmeia.gv.at/fileadmin/user_upload/oracle/gesamtliste_de.pdf Madrid: www.embassyworld.com Nitra: www.embassyworld.com; official website of the city Manchester: Consular Association Newcastle / Nottingham / Edinburgh: Foreign Office: www.fco.gov.uk/en/about-the-fco/what-we-do/building-strong-relationships-ol/foreign-embassy-uk London: www.s.p10.hostingprod.com/@spyblog.org.uk/ssl/litvinenko/2007_fco_pdf_londondiplomaticlist.pdf New York: Consulate General of Switzerland Sao Paulo: Consulat général de Suisse, Martin Zaugg (EDA-Vertretung Sao Paulo) Singapore Ministry of Foreign Affairs Singapore: www.mfa.gov.sg Toronto: Consulate General of Switzerland
55	Tourist intensity	European Cities Tourism and data gathering information from the cities returned until the 6th of April: Belfaste: NITB Bilbao: Conventio 2008 Cardiff: Staying visits by inbound visitors, International Passenger Survey, Office for National Statistics Dusseldorf: City; Statistical Office Poznan: Central Statistical Office Vienna: www.wien.gv.at/statistik/daten/rtf/gaesteankuenfte.rtf Nitra: information office Edinburgh: Office of National Statistics
56	International compa-nies	Global Fortune 500
57	Freedom of invest-ment	Index of Economic Freedom. Methodology for the 10 Economic Freedoms. 2009 www.heritage.org/Index/PDF/Index09_Methodology.pdf

58	International meetings	ICCA International Association Meeting Market 2007
59	International Organisations	Data gathering information from the cities
Connectivity and accessibility factors		
60	Global accessibility	BAKBASEL: "International Benchmarking Database", BAK Basel Economics, 2008
61	International passengers (flight)	Airport council international: World Airport Traffic Report
62	Passengers (ship)	Eurostat
63	Cargo freight	Eurostat
64	Intra-metropolitan accessibility	Michelin: "Routenplaner", www.viamichelin.com, online information of the public transport companies of the selected cities
65	Number of hotspots	All cities: myhotpots.com; totalhotspots.com; hotspot-location.com Data validation trough data gathering information from the cities returned until the 6th of April: Belfast: www.broadbandni.com/wireless.php Dusseldorf: hotspot.portel.de Poznan: City Hall Nitra: websites Nottingham: Accelerate Nottingham
Environmental conditions		
66	Average days of rain	www.wetter.com AG: "Klimadatenbank"
67	Proximity to water	Michelin: "Routenplaner", www.viamichelin.com
68	Air quality	European air quality report

9.1.4 Indicators: Technical classification

Number	Indicator	Meaning / Note	Weighting in % [E = 100%]	Fact (F) / Perception (P)	Number (level, size) / Share (rate, %) Index Score	Data quality: good (G) / to verify (V)	Definition should be revised
	International Population	**7.28**					
1	Inflow of international population	7.28	0.30	F	Share	G	*
2	Stock of international population	7.28	0.30	F	Share	G	*
3	Low qualified foreign labour force	6.28	0.89	F	Share	G	*
4	Medium qualified foreign labour force	8.17	2.00	F	Share	G	*
5	High qualified foreign labour force	8.85	2.40	F	Share	G	*
6	International students	8.05	1.93	F	Share	V	*
7	Difference highly qualified international population and national population	7.28	0.30	F	Share	G	
8	International retirees	7.28	0.17	F	Share	V	*
9	Not EU-nationals international population	7.28	0.30	F	Share	G	
10	Diversity of international population	7.28	0.30	F	Share	V	*
	Governance and Leadership factors	**8.3**					
11	Languages city website	7.88	2.76	F	Score	G	*
12	Welcome service	8.39	0.80	F	Index	G	
13	Online information service	8.39	0.80	F	Index	G	
14	Migration department	8.32	1.57	F	Index	G	*
15	Interpreter	8.39	0.80	F	Index	G	*
16	Start-coaching programme	8.39	0.80	F	Index	G	*
17	Integration actions	8.32	1.57	F	Index	G	*
18	Immigrants in the city council	8.54	3.34	F	Share	V	*

Number	Indicator	Meaning / Note	Weighting in % [E = 100%]	Fact (F) / Perception (P)	Number (level, size) / Share (rate, %) Index Score	Data quality: good (G) / to verify (V)	Definition should be revised
	Regulatory factors	8.4					
19	MIPEX: Long- term residence	8.61	1.36	F	Index	G	
20	MIPEX: Family reunion	8.61	1.36	F	Index	G	
21	MIPEX: Political Participation	7.66	2.05	F	Index	G	
22	MIPEX: Anti- discrimination	9.00	2.99	F	Index	G	
23	MIPEX: Naturalization	8.61	1.06	F	Index	G	
24	Granted naturalisations	8.61	1.06	F	Share	G	*
25	Freedom House Index	9.02	3.00	F&P	Index	G	
	Economic factors	**8.1**					
26	Income per capita	7.49	1.60	F	Share	G	
27	Taxation (high income)	7.03	1.33	F	Share	G	
28	Flat rents	8.19	1.01	F	Level	G	
29	Living area (average)	8.19	1.01	F	Level	G	
30	Access to property market	8.10	1.97	F	Index	G	
31	MIPEX: Labour market access	8.9	0.81	F	Index	G	
32	Total unemployment rate	8.9	1.22	F	Share	G	
33	Difference unemployment rate	8.9	0.81	F	Share	G	*
34	Total labour force with university education (in %)	8.9	1.22	F	Share	G	
35	Work permits	8.9	0.81	F	Share	V	*

Number	Indicator	Meaning / Note	Weighting in % [E = 100%]	Fact (F) / Perception (P)	Number (level, size) / Share (rate, %) Index Score	Data quality: good (G) / to verify (V)	Definition should be revised
	Social and societal factors	**8.6**					
36	Feeling of safety	8.18	0.86	P	Share	G	
37	Crime rates	8.18	0.86	F	Share	V	
38	Right wing parties in the city council	9.01	2.15	F	Share	V	*
39	Subjective perception of health services	8.66	1.97	P	Share	G	
40	Share of foreign students in upper secondary education	8.9	2.10	F	Share	V	*
41	Quality of universities	8.58	1.93	F	Level	G	
42	International schools	7.71	1.49	F	Level	G	
43	Perception: Immigration & Economy	8.81	0.68	P	Share	G	
44	Perception: Immigration & Cultural live	8.81	0.68	P	Share	G	
45	Perception: Immigrants influence on the country	8.81	0.68	P	Share	G	
	Cultural and amenity factors	**7.6**					
46	Museum offerings	8.01	1.16	F	Share	V	
47	Cinema offerings	8.81	1.16	F	Share	V	
48	Share of movies in foreign languages	7.56	2.00	F	Share	V	
49	Places of worship (minority)	7.36	1.85	F	Level	V	*
50	International restaurants	7.19	1.73	F	Level	V	*
51	International TV channels	7.72	2.11	F	Share	G	
	Internationalisation factors	**7.8**					
52	International festivals	7.74	0.66	F	Share	V	*
53	International fairs	7.74	0.66	F	Share	V	*

Number	Indicator	Meaning / Note	Weighting in % [E = 100%]	Fact (F) / Perception (P)	Number (level, size) / Share (rate, %) Index Score	Data quality: good (G) / to verify (V)	Definition should be revised
54	Embassies	7.61	2.51	F	Level	V	*
55	Tourist intensity	7.59	2.50	F	Share	V	
56	International companies	8.22	1.53	F	Level	V	*
57	Freedom of investment	8.22	1.53	F	Index	G	
58	International meetings	7.74	0.66	F	Level	V	
59	International organisations	7.74	0.66	F	Level	V	*
	Connectivity and Accessibility factors	**8.2**					
60	Global accessibility (average travel times)	8.72	3.20	F	Index	G	
61	International passengers (flight)	8.75	1.08	F	Share	G	
62	Passengers (ships)	8.75	1.08	F	Level	G	
63	Cargo freight	8.75	1.08	F	Level	G	
64	Intra-metropolitan accessibility	8.09	2.69	F	Level	V	
65	Number of hotspots	8.51	3.04	F	Level	G	
	Environmental conditions	**7.0**					
66	Average days of rain	6.04	1.57	F	Level	G	
67	Proximity to water	7.15	2.94	F	Level	G	
68	Air quality	7.37	3.21	F	Level	V	

9.1.5 Indicators: Surveyed but not included in the Index of Openness

Indicator	Reason
International Population	
Total number of different nationalities living within the city	Some cities delivered data but problems concerning the data availability and the geographical area (comparability).
Number of PhD awarded to migrant population	Not available
Number of international population working in R&D centres	Not available
Asylum applications	Asylum seekers were not a target group.
Governance and leadership factors	
Migration specific information policy costs (share) of total expenditure of the cities budget	Not available
Immigrants working in the city administration in % of all staff	Not available
Number of language courses	Languages courses are sometimes compulsory and therefore the interpretation of this indicator is not unambiguous.
Programmes to attract tourists	Tourists were not a target group.
Programmes to attract firms	Firms were not a target group.
Regulatory factors	
Total number of applications for naturalisations (city level)	Not available
Economic factors	
GDP	Disposable income is more meaningful.
Gross and net hourly wages	Wages are difficult to measure comparably because of the wages differentials between branches.
Social security contributions	Social contributions mostly measured as difference between gross and net wages; problems see above.
Participation rate (migrants, gender)	Ambiguous interpretation
Percentage of people living in migrants homes	Not available
Percentage of foreign-born people depending on benefits	Not available
Freedom of trade	Mostly no differences between countries.
Average local rent for a 4-room apartment	Data stem from a UBS publication which has only data for a few cities. Data could not be supplemented by the cities because the definition is not clear enough.
International campuses of universities	No precise definition available
Social and societal factors	
Crime incidence motivated by racism and xenophobia	No comparable data available

Acts of violence towards minority ethnic groups	No comparable data available
Access to public health service	Not measureable
Number of beds in hospitals	No clear interpretation possible
Access to the pension system	Not measureable
Cultural and amenity factors	
Marriages among different nationalities	Not available
Spoken languages	Not meaningful
Official languages	Not meaningful
Languages competences	Not available
Foreign languages in daily life	Not available
Number of libraries and number of book stores having books in foreign languages	Too time-consuming to count
International pharmacies	No clear definition available
Neighbourhood mix	Not meaningful , ambiguous interpretation
Number of cultural organisations	No clear definition available
Number of interest groups and community organisations	No clear definition available
Diverse ethnic retail trade	Too time-consuming to count
Share of international radio channels	No reliable data available
Internationalisation factors	
Flow of foreign direct investment	International comparable data are not available for cities / regions.
Total number of international conferences and congresses	No clear definition available
Total number of international institutions and non-governmental organisations	No clear definition available
Connectivity and accessibility factors	
Total number of Signage (in non-official languages) in the public transport system	Not available
Number of public transportation migrant users	Not available
Length of public transport system	Problems concerning the geographical area and the comparability.
Environmental conditions	
Freedom of pollution	Only for few cities available

Source: BAKBASEL

9.2 Survey

Weighting Survey

For the survey the following letter was atttached:

Ladies and Gentlemen

The British Council and URBACT (EU-commission) have commissioned BAK Basel Economics to conduct a feasibility study on how to measure the openness of cities. This study is taking place within the international OPENCities project (www.opencities.eu).

BAK Basel Economics are economic experts in benchmarking and the development of indicators located in Basel, Switzerland.

The underlying concept of the open cities project is that cities that are more 'open' to international populations are cities that have increased levels of economic successes and prosperity.

Openness has up to now been defined as follows:

"Openness is the capacity of cities to attract international populations and enable them to contribute to the future success of the city".

If a city wants to attract international populations, it needs to be open as well as attractive. A key question for this project is, therefore, how to measure openness. This survey intends to complement the development of indicators and indices that will be applied to measure the openness of a city.

Your opinion is very important to us. We would be very grateful if you could devote 15 minutes to completing this survey. For technical reasons the completion of the questionnaire should not be interrupted for more than half an hour.

Please note that the results of this survey or parts thereof will not be published, but used by BAKBASEL as an input for the calculation of the weighting of the key factors that make up openness.

If you have any queries, please contact eva.scheller@bakbasel.com

Thank you in advance for taking part in this survey!

Eva Scheller

Survey Manager

OPENCities **Questionnaire**

A) For which city do you reply to the questionnaire?

_____

B) Were you born in this city?

☐ Yes ☐ No

If you were not born in this city:
C) Why did you move here?
Please explain in a few words:

_____

If you were not born in this city:

D) How long have you lived in this city?

☐ Less than 1 year

☐ 1-2 years

☐ 2-5 years

☐ more than 5 years

E) Have you lived in more than one country?

☐ Yes ☐ No

F) Are you…

(Multiple denomination possible)

- ☐ a politician
- ☐ a representative of the city
- ☐ a member of the academic community
- ☐ a member of a chamber of commerce / business community
- ☐ an international student
- ☐ an international employee
- ☐ an international retiree

☐ a member of the TN2020 network

☐ other, please specify:

_____

If you are a representative of the city:
What are you in charge of?

_____

Openness is defined as follows:
"Openness is the capacity of cities to attract international populations and enable them to contribute to the future success of the city."

1) Do you think openness is important for your city and why?

☐ Yes ☐ No

Please explain in a few words:

_____

_____

Cities may be interested in attracting and retaining different groups of international populations.

2a) In your opinion, which of these population groups can contribute best to the city success?

Please grade on a scale of 1-10. A "10" always means "Absolutely essential", "1" means "Not important".

	10	9	8	7	6	5	4	3	2	1
International students	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
International workforce with university education	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
International workforce with vocational skills	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
International workforce with basic skills	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
International retirees	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

☐ I cannot judge because I have not lived here long enough.

2b) Are there any other groups of international populations that should be considered for your city success and why?

_____

_____

_____

☐ None

☐ I cannot judge

Openness is the capacity of cities to attract international populations and enable them to contribute to the future success of the city.

3) For a city to be open, which of the following aspects are important?

Please grade on a scale of 1-10. A "10" always means "Absolutely essential", "1" means "Not important". "Not aware" means that you cannot judge.

Economic aspects:	10	9	8	7	6	5	4	3	2	1	*not aware*
High income	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Low taxes	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Availability of attractive housing	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Equal access to the property market	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Generally attractive labour market conditions	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Equal access to the labour market	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

Leadership aspects:	10	9	8	7	6	5	4	3	2	1	*not aware*
Actions of city governments to attract international populations	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
The official city website is available in foreign languages	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Programs of the city to provide the basis for belonging and inclusion of international populations	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Language courses to facilitate participation and integration	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Programs of the city to promote a multicultural environment	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

Regulatory aspects:	10	9	8	7	6	5	4	3	2	1	*not aware*
Very high political participation rights for not-citizens	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Extensive legislative protection against any discrimination	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Easy naturalization process for everybody	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Assured security of the residency status	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Political freedom	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

Social and societal aspects:	10	9	8	7	6	5	4	3	2	1	*not aware*
Particularly low crime rates	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Freedom from racism and xenophobia	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
High standard of health services	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Easy access to the public health system for everybody	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Easy access to the formal education system	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Very high quality of universities	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Generous supply of international schools	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
High integration of international population	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
High tolerance towards migrants	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Positive perception of immigration	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Easy portability of social benefits across countries	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

Cultural and amenity aspects:	10	9	8	7	6	5	4	3	2	1	*not aware*
Particularly wide cultural and amenity offer (e.g. museums, cinemas)	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Wide cultural offer in multiple languages	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Wide international media offer (e.g. TV, newspapers)	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Large selection of international gastronomy	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Easy access to different places of worship	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Ability of host population to communicate in common international languages	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

Internationalisation aspects:	10	9	8	7	6	5	4	3	2	1	*not aware*
Wide range of international events, fairs and conferences	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Hosts many international companies	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Complete consular and embassy representation	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Popular tourism destination	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

Connectivity and accessibility aspects:	10	9	8	7	6	5	4	3	2	1	*not aware*
Excellent international transport links	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Existence of a international transport hub (airport, port)	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Good quality broadband access	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Short commuting times within the city	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Multi lingual signage throughout the city	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

Environmental aspects:	10	9	8	7	6	5	4	3	2	1	*not aware*
Particularly sunny and warm climate	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Very clean streets	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Very low levels of pollution	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Existence of natural amenities nearby (e.g. lake, sea, mountains)	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

4) Are there any other relevant aspects of openness?
If yes, please give details:

If you are a representative of a city:

5) Which of the aspects of openness described in this questionnaire will be the most important for your city success in the next two years?

Other comments:

Please provide the following information about yourself:

The information that you provide on this form will be used for the purpose of improving the statistical analysis. We will always treat this data anonymously.

Gender:

- ☐ Female
- ☐ Male

Age:

- ☐ <30 years
- ☐ 31-40 years
- ☐ 41-50 years
- ☐ 51-60 years
- ☐ more than 60 years

Nationality:

Structure of household:

- ☐ Living with a partner with children
- ☐ Living with a partner without children
- ☐ Living alone

Education:

☐ In education

Highest level:

☐ Basic education

☐ Vocational education

☐ Higher education

☐ Other:

Thank you for taking part in the survey!
Please send the questionnaire to eva.scheller@bakbasel.com
or if you like to fax it use this number: +41 61 226 96 20.

9.3 Data gathering

To prove the validity of the researched data and to fulfil data gaps, a data gathering and validation was initiated by BAKBASEL in February 2009. Within this process, we collaborated with local data experts in the cities and sent them a data gathering tool (in excel) which consisted of the following three parts:

- Data gathering tool description
- Data gathering sheet (example)
- Geographical units for the data gathering

9.3.1 Data gathering tool description

BAKBASEL has researched the availability and quality of data for your city. Based on first results we can distinguish three data categories:

1. Internationally comparable data from official sources.

2. Data collected by BAKBASEL research projects and from regional statistics.

3. Missing data.

The purpose of this data gathering tool is both to collect missing data and to check the validity of the data sets with local expertise.

Please note that the data gathering sheet does therefore only include indicators for which the help of the local data experts is necessary. Internationally comparable data from official sources are not included in the data sheet, except in the case that data from one specific city is missing in these official sources. The purpose of this tool is in the first place to fill data gaps. In the second place, the data collected by BAKBASEL (research projects and / or regional statistics), should be evaluated by the city data experts to increase its reliability of the data.

The design of the data gathering tool is as follows:

In the first column of the sheet the indicator groups and variables are listed. It can be clicked on the indicator to get the explanations of the variables (glossary).

In the four columns (B, C, D and E) you find the data filled in by BAKBASEL, if the data should be evaluated by the city data experts. In column B the numbers are given (absolute or in ranges). In column C the geographical unit (area) is given. It can be clicked on the given geographical unit to get the explanations of the used geographical delimitation. In column D the year is shown and in column E the source(s) is given.

If the city should close data gaps, in the Field: DATA by BAKBASEL no data are available (n.a.) is written. In column C, D and E the area and the year for which data are requested are written down. In the case that the data come from international sources and only the data of your city are missing, the source is given. In the columns (F, G, H, I, J and K) the city can fill in the requested data.

How to fill in new data?

In column F data can be filled in. The requested year and geographical area is given in the Field: DATA BY BAKBASEL. If cities do not have any data for the requested year or geographical unit, but for other dates or areas they can specify year and area in the fields I and J (drop-down-function). The chosen year and chosen area in column L ("Notes by city") should be added. For some data BAKBASEL need additional information, this is explicitly marked in column H.

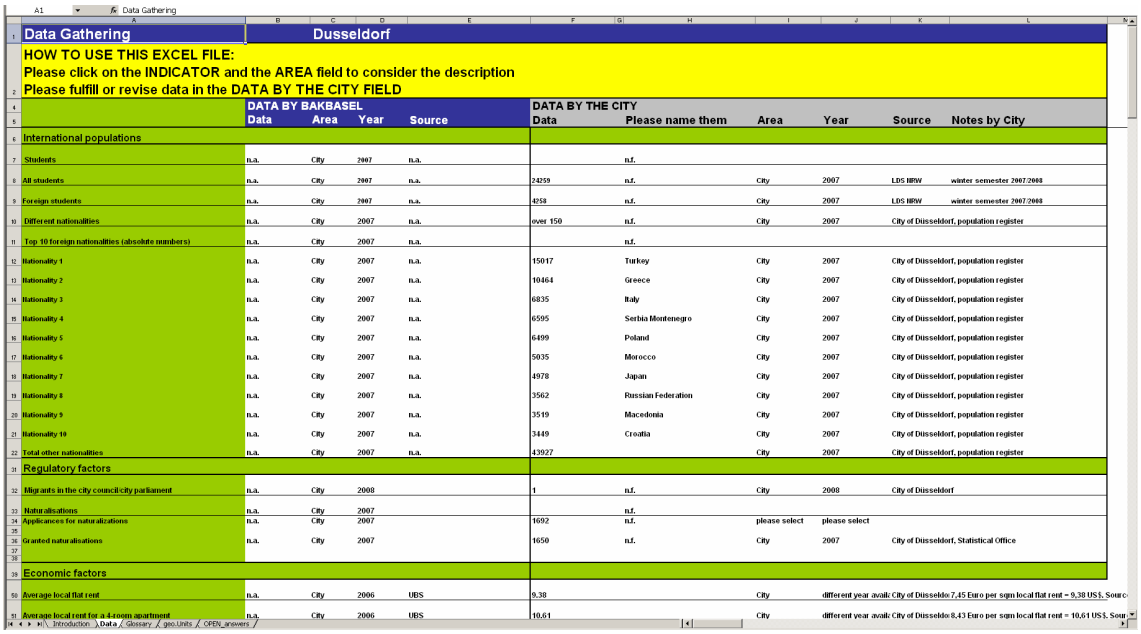
If we do not need additional information, it is marked with n.f. (do not fill out).

If cites do not have the requested information, they fill in n.a. (not available).

If the cities do have information on the requested subject, but not the exact values, they inform BAKBASEL in the excel sheet marked "open answers" about your sources which we will take into account.

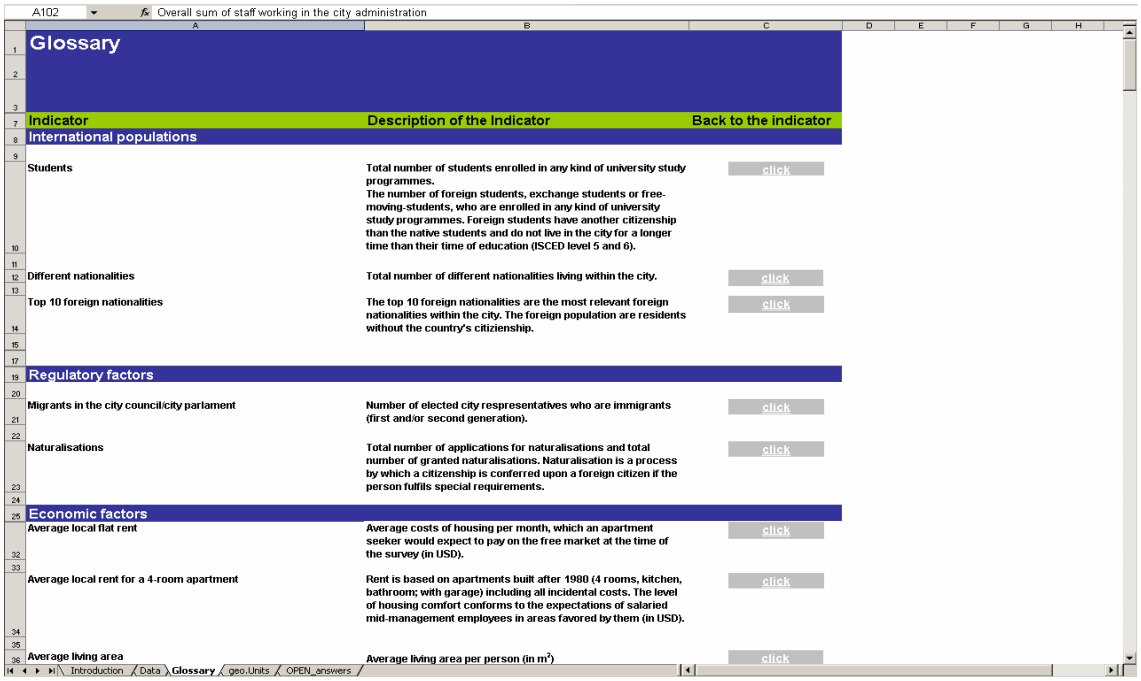
9.3.2 Data gathering tool

DATA



Data Gathering	Dusseldorf										
HOW TO USE THIS EXCEL FILE:											
Please click on the INDICATOR and the AREA field to consider the description											
Please fulfill or revise data in the DATA BY THE CITY FIELD											
	DATA BY BAKBASEL				DATA BY THE CITY						
	Data	Area	Year	Source	Data	Please name them	Area	Year	Source	Notes by City	
International populations											
Students	n.a.	City	2007	n.a.		n.f.					
All students	n.a.	City	2007	n.a.	24259	n.f.	City	2007	LDS NRW	winter semester 2007/2008	
Foreign students	n.a.	City	2007	n.a.	4258	n.f.	City	2007	LDS NRW	winter semester 2007/2008	
Different nationalities	n.a.	City	2007	n.a.	over 150	n.f.	City	2007	City of Düsseldorf, population register		
Top 10 foreign nationalities (absolute numbers)	n.a.	City	2007	n.a.		n.f.					
Nationality 1	n.a.	City	2007	n.a.	15017	Turkey	City	2007	City of Düsseldorf, population register		
Nationality 2	n.a.	City	2007	n.a.	10464	Greece	City	2007	City of Düsseldorf, population register		
Nationality 3	n.a.	City	2007	n.a.	6835	Italy	City	2007	City of Düsseldorf, population register		
Nationality 4	n.a.	City	2007	n.a.	6595	Serbia Montenegro	City	2007	City of Düsseldorf, population register		
Nationality 5	n.a.	City	2007	n.a.	6499	Poland	City	2007	City of Düsseldorf, population register		
Nationality 6	n.a.	City	2007	n.a.	5035	Morocco	City	2007	City of Düsseldorf, population register		
Nationality 7	n.a.	City	2007	n.a.	4978	Japan	City	2007	City of Düsseldorf, population register		
Nationality 8	n.a.	City	2007	n.a.	3562	Russian Federation	City	2007	City of Düsseldorf, population register		
Nationality 9	n.a.	City	2007	n.a.	3519	Macedonia	City	2007	City of Düsseldorf, population register		
Nationality 10	n.a.	City	2007	n.a.	3449	Croatia	City	2007	City of Düsseldorf, population register		
Total other nationalities	n.a.	City	2007	n.a.	43927		City	2007	City of Düsseldorf, population register		
Regulatory factors											
Migrants in the city council/city parliament	n.a.	City	2008		1	n.f.	City	2008	City of Düsseldorf		
Naturalisations	n.a.	City	2007			n.f.					
Applicances for naturalizations	n.a.	City	2007		1692	n.f.	please select	please select			
Granted naturalisations	n.a.	City	2007		1650	n.f.	City	2007	City of Düsseldorf, Statistical Office		
Economic factors											
Average local flat rent	n.a.	City	2006	UBS	9,38		City	different year avail	City of Düsseldo	7,45 Euro per sqm local flat rent = 9,38 US$, Sourc	
Average local rent for a 4-room apartment	n.a.	City	2006	UBS	10,61		City	different year avail	City of Düsseldo	8,43 Euro per sqm local flat rent = 10,61 US$, Sour	

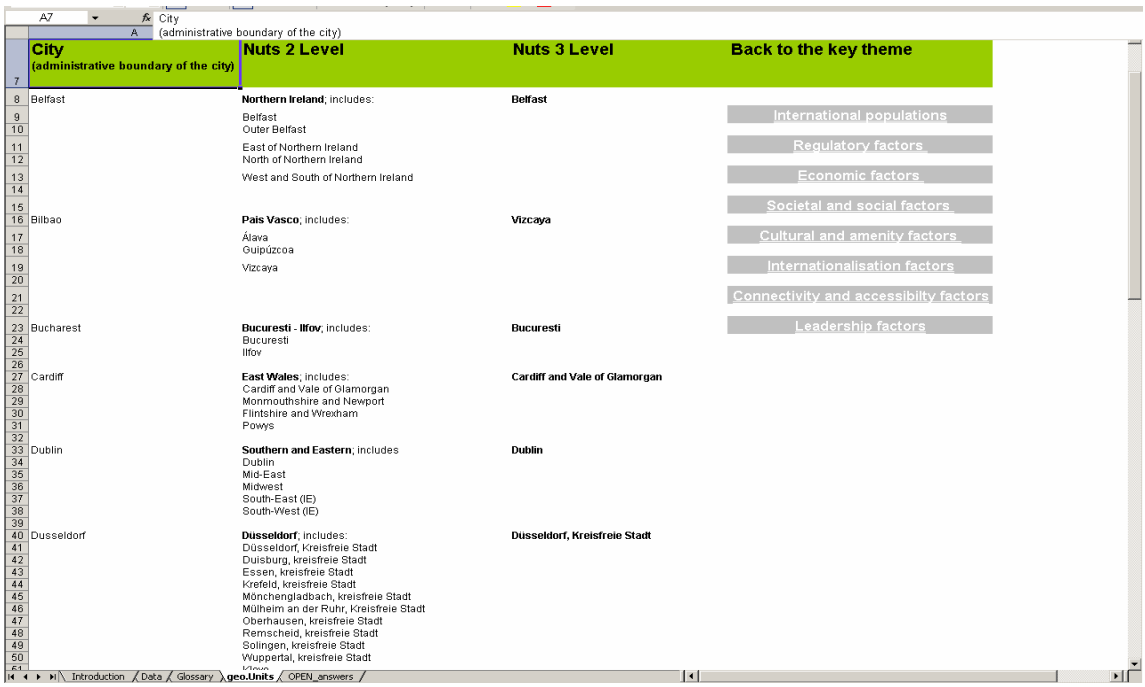
GLOSSARY



Glossary

Indicator	Description of the Indicator	Back to the indicator
International populations		
Students	Total number of students enrolled in any kind of university study programmes. The number of foreign students, exchange students or free-moving-students, who are enrolled in any kind of university study programmes. Foreign students have another citizenship than the native students and do not live in the city for a longer time than their time of education (ISCED level 5 and 6).	click
Different nationalities	Total number of different nationalities living within the city.	click
Top 10 foreign nationalities	The top 10 foreign nationalities are the most relevant foreign nationalities within the city. The foreign population are residents without the country's citizienship.	click
Regulatory factors		
Migrants in the city council/city parlament	Number of elected city respresentatives who are immigrants (first and/or second generation).	click
Naturalisations	Total number of applications for naturalisations and total number of granted naturalisations. Naturalisation is a process by which a citizenship is conferred upon a foreign citizen if the person fulfils special requirements.	click
Economic factors		
Average local flat rent	Average costs of housing per month, which an apartment seeker would expect to pay on the free market at the time of the survey (in USD).	click
Average local rent for a 4-room apartment	Rent is based on apartments built after 1980 (4 rooms, kitchen, bathroom; with garage) including all incidental costs. The level of housing comfort conforms to the expectations of salaried mid-management employees in areas favored by them (in USD).	click
Average living area	Average living area per person (in m^2)	click

GEOGRAPHICAL UNITS



City (administrative boundary of the city)	Nuts 2 Level	Nuts 3 Level	Back to the key theme
Belfast	**Northern Ireland**; includes:	**Belfast**	
	Belfast		International populations
	Outer Belfast		Regulatory factors
	East of Northern Ireland		Economic factors
	North of Northern Ireland		Societal and social factors
	West and South of Northern Ireland		Cultural and amenity factors
Bilbao	**Pais Vasco**; includes:	**Vizcaya**	Internationalisation factors
	Álava		Connectivity and accessibilty factors
	Guipúzcoa		Leadership factors
	Vizcaya		
Bucharest	**Bucuresti - Ilfov**; includes:	**Bucuresti**	
	Bucuresti		
	Ilfov		
Cardiff	**East Wales**; includes:	**Cardiff and Vale of Glamorgan**	
	Cardiff and Vale of Glamorgan		
	Monmouthshire and Newport		
	Flintshire and Wrexham		
	Powys		
Dublin	**Southern and Eastern**; includes	**Dublin**	
	Dublin		
	Mid-East		
	Midwest		
	South-East (IE)		
	South-West (IE)		
Dusseldorf	**Düsseldorf**; includes:	**Düsseldorf, Kreisfreie Stadt**	
	Düsseldorf, Kreisfreie Stadt		
	Duisburg, kreisfreie Stadt		
	Essen, kreisfreie Stadt		
	Krefeld, kreisfreie Stadt		
	Mönchengladbach, kreisfreie Stadt		
	Mülheim an der Ruhr, Kreisfreie Stadt		
	Oberhausen, kreisfreie Stadt		
	Remscheid, kreisfreie Stadt		
	Solingen, kreisfreie Stadt		
	Wuppertal, kreisfreie Stadt		

9.3.3 Geographical units for the data gathering

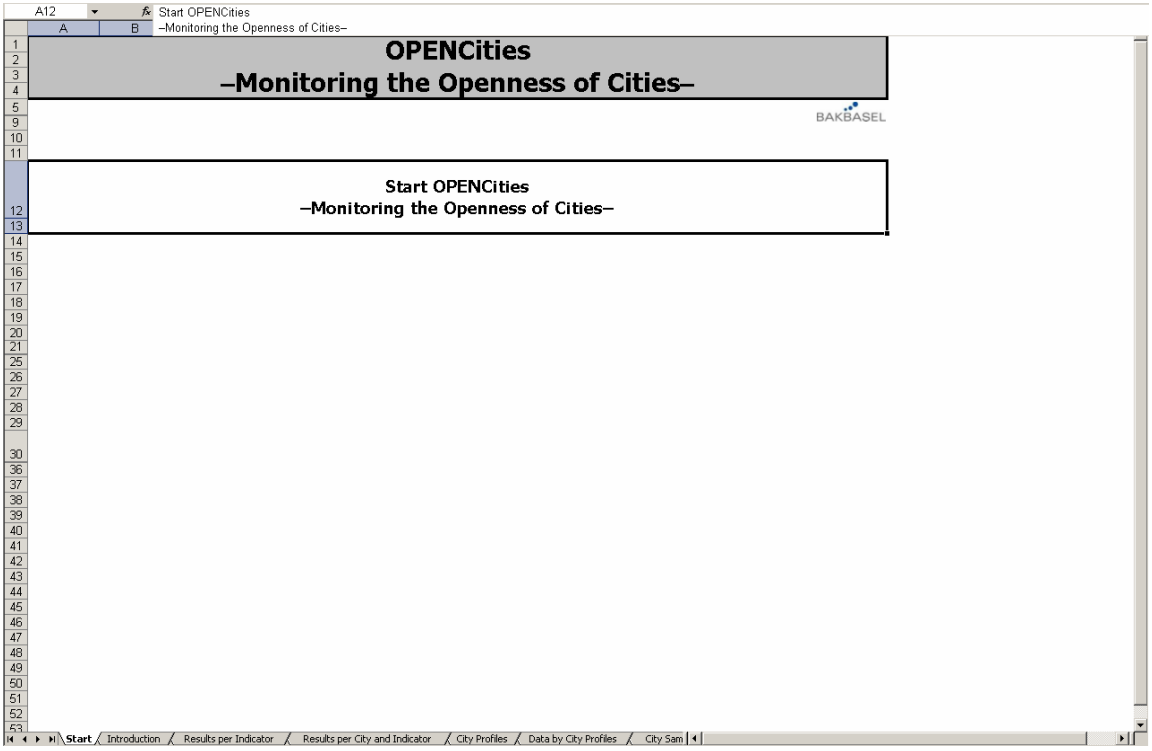
Core City (administrative boundary of the city)	**Nuts 2 Level**	**Nuts 3 Level**
Belfast	**Northern Ireland**; includes: Belfast, Outer Belfast, East of Northern Ireland, North of Northern Ireland	**Belfast**
Bilbao	**Pais Vasco**; includes: Álava, Guipúzcoa, Vizcaya	**Viscaya**
Bucharest	**Bucuresti-Ilfov**; includes: Bucuresti, Ilfov	**Bucuresti**
Cardiff	**East Wales**; includes: Cardiff and Vale of Glamorgan, Monmouthshire and Newport, Flintshire and Wrexham, Powys	**Cardiff and Vale of Glamorgan**
Dublin	**Southern and Eastern**; includes: Dublin, Mid-East, Midwest (IE), South-West (IE)	**Dublin**
Dusseldorf	**Dusseldorf**; includes: Dusseldorf, Kreisfreie Stadt (KS), Duisburg (KS), Essen (KS), Mönchengladbach (KS), Mülheim an der Ruhr (KS), Oberhausen (KS), Remscheid (KS), Solingen (KS), Wuppertal (KS), Kleve, Mettmann, Rhein-Kreis Nuess, Viersen, Wesel	**Dusseldorf, Kreisfreie Stadt**
Edinburgh	**Eastern Scotland**; includes: Eastern Scotland, Angus and Dundee City, Clackmannanshire and Fife, East Lothian and Midlothian, Scottish Borders, City of Edinburgh, Falkirk, Perth and Kinross and Stirling, West Lothian	**City of Edinburgh**
Gdansk	**Pomorskie**; includes: Slupski, Trojmeiejske, Gdanski, Starogardzki	**Gdanski**
Madrid	**Comunidad de Madrid**	**Madrid**
Manchester	**Greater Manchester**; includes: Grater Manchester South, Greater Manchester North	**Greater Manchester (South and North)**
Newcastle	**Northumberland and Tyne and Wear**; includes: Northumberland, Tyneside, Sunderland	**Tyneside**, **Tyneside Sunderland**

Core City (administrative boundary of the city)	**Nuts 2 Level**	**Nuts 3 Level**
Nottingham	**Derbyshire and Nottinghamshire**; includes: Nottingham, Derby, East Derbyshire, South and West Derbyshire, North Nottinghamshire, South Nottinghamshire	**Nottingham**
Nitra	**Západné Slovensko**; includes: Trnavský kraj, Tencianský kraj, Nitrianský kraj	**Nitransky kraj**
Poznan	**Wielkopolskie**; includes: Miasto Poznan, Pilski, Poznanski, Kaliski, Konin-ski	**Miasto Poznan**
Sofia	**Yugozapaden**; includes: Sofia, Sofia (stolitsa), Blagoevgrad, Pernik, Kyustendil	**Sofia**
Vienna	**Wien**	**Wien**

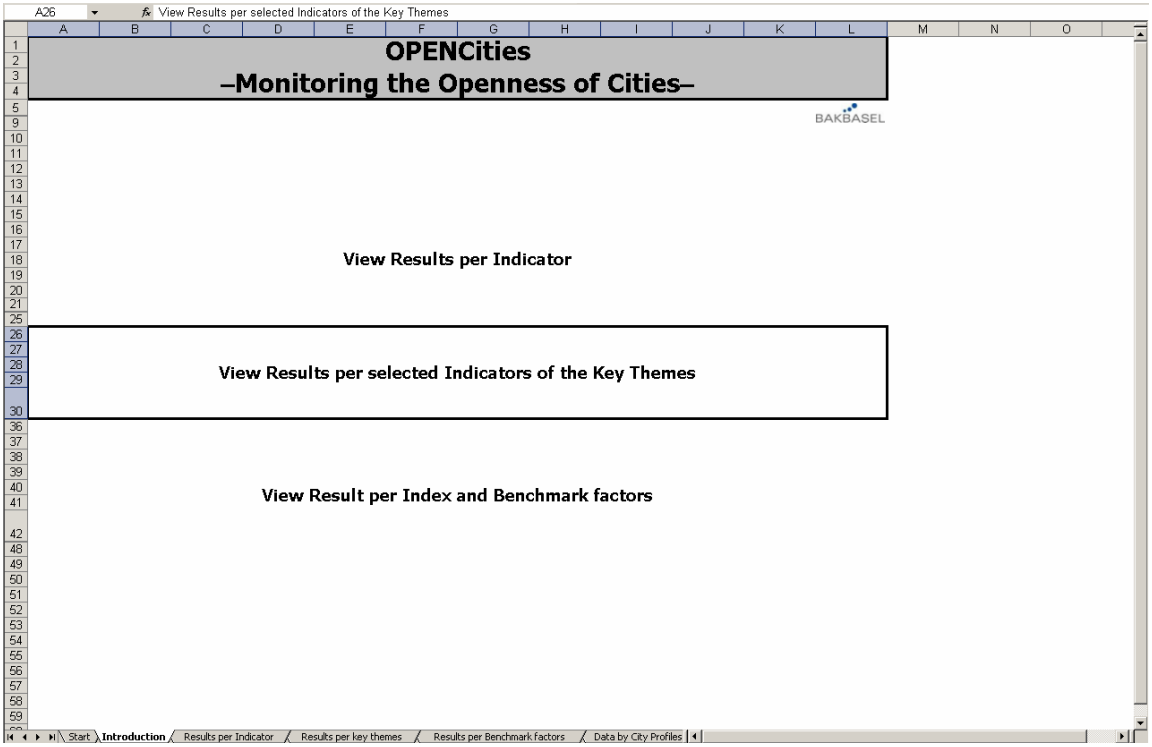
9.4 Index of Openness Tool: Monitoring the Openness of Cities

To monitor the openness of the cities, BAKBASEL developed Index of Openness. The Excel based tool can be programmed into a web 2.0 based platform. The tool consists of different parts which are illustrated below: It supports the monitoring and benchmarking activities of the cities.

START

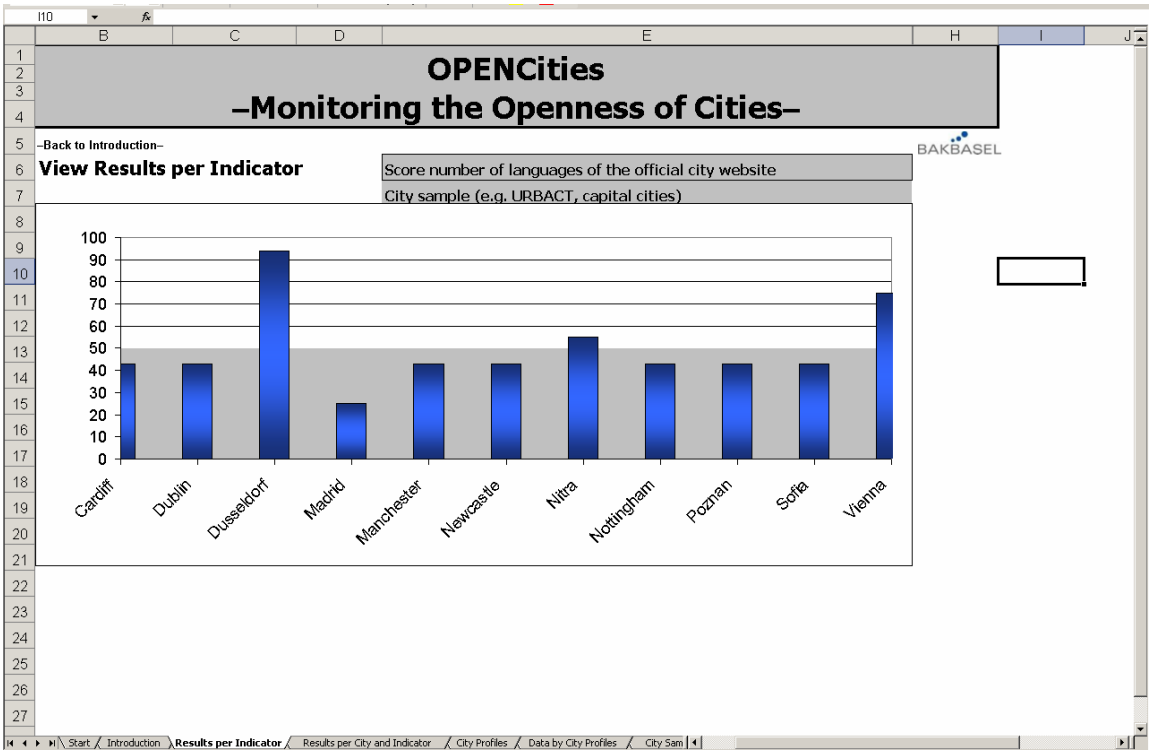


INTRODUCTION



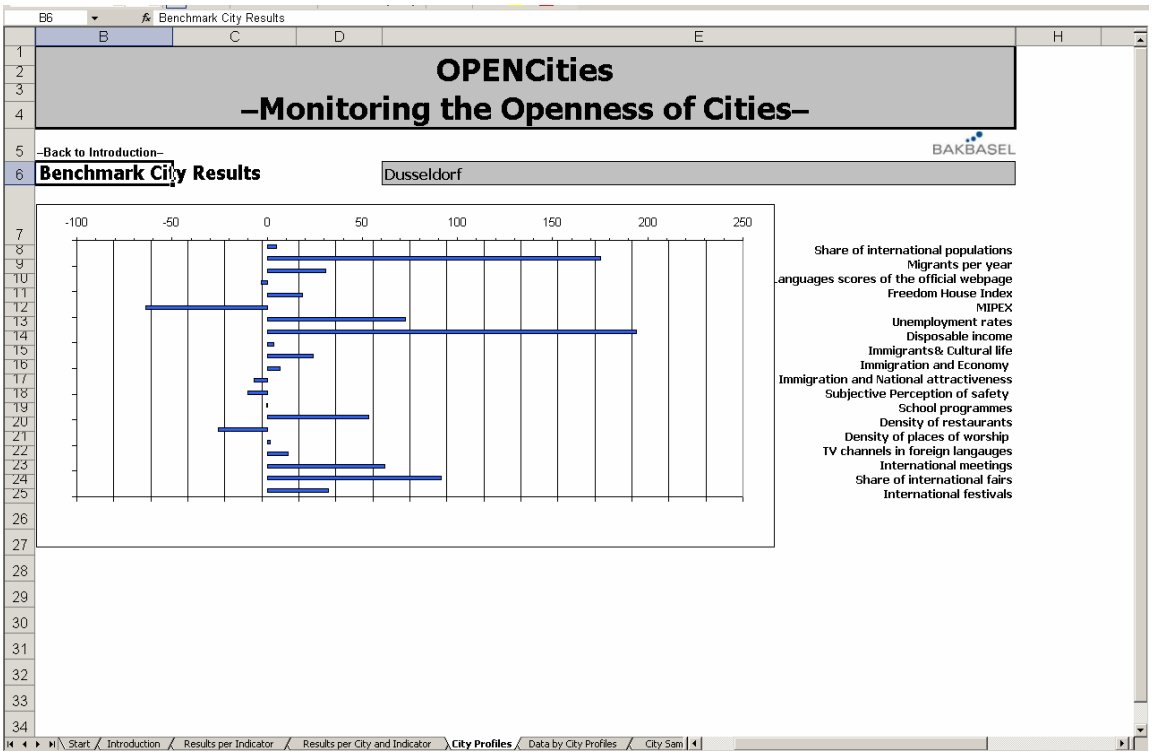
Upon entering the tool, cities can select on the Introduction page the different functions of the tool: View Results per Indicator, View Results per selected Indicators of the Key Themes and View Results per Index and Benchmark factors.

RESULTS PER INDICATOR



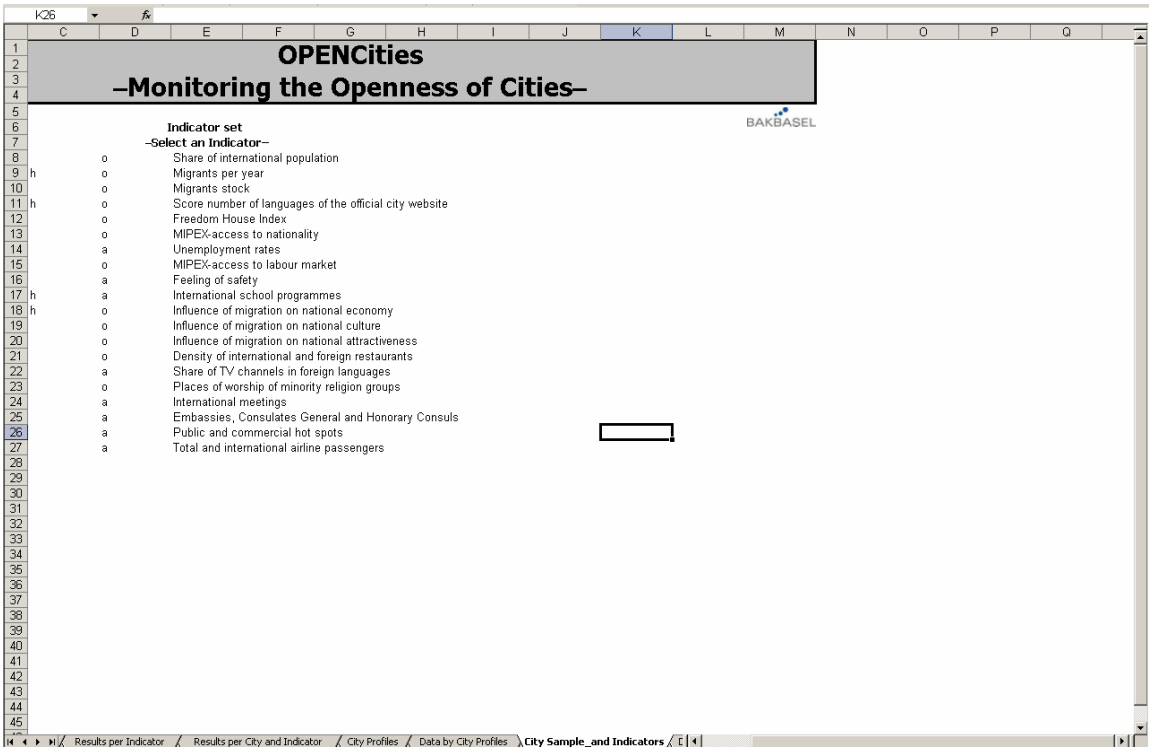
Under View Results per Indicator, the benchmarked city has the possibility to select either one or more indicators and to compare the results with other cities, or however, proceed according to the city sample (e.g. URBACT, capital cities). This ensures that the city compares itself to cities which are relatively similar so that benchmarking makes sense.

BENCHMARK CITY RESULTS



As soon as the results of the selected indicators are prepared, they can be represented graphically.

CITY SAMPLE AND INDICATORS



OPENCities
–Monitoring the Openness of Cities–

BAKBASEL

			Indicator set
			–Select an Indicator–
		o	Share of international population
h		o	Migrants per year
		o	Migrants stock
h		o	Score number of languages of the official city website
		o	Freedom House Index
		o	MIPEX-access to nationality
		a	Unemployment rates
		o	MIPEX-access to labour market
		a	Feeling of safety
h		a	International school programmes
h		o	Influence of migration on national economy
		o	Influence of migration on national culture
		o	Influence of migration on national attractiveness
		o	Density of international and foreign restaurants
		a	Share of TV channels in foreign languages
		o	Places of worship of minority religion groups
		a	International meetings
		a	Embassies, Consulates General and Honorary Consuls
		a	Public and commercial hot spots
		a	Total and international airline passengers

Results per Indicator | Results per City and Indicator | City Profiles | Data by City Profiles | City Sample_and Indicators

10 Glossary of the feasibility study

Term	Description
Attractiveness	Cities are attractive when international populations want to come and live there.
Cities	Cities within their administrative boundaries.
City regions / Metropolitan regions	City regions refer to the functional urban area around the core city.
Feasibility Study	The Feasibility study investigates whether an Index of Openness is possible and recommendable.
Indicator	Indicators are presentations of measurements. They are bits of information that summarize the characteristics of systems or highlight what is happening in a system.
International populations	International population refers to migrants (non-nationals or foreign-born people).
Main study / Main project	Main study or main project refers to the OPENCities Index project.
NUTS	NUTS is the abbreviation for the Nomenclature of Territorial Units for Statistics.
OPENCities	OPENCities is a British Council project in partnership with cities around the world.
OPENCities city partners	The following cities are OPENCities city partners and have participated in the study: Belfast, Sofia, Dublin, Vienna, Dusseldorf, Bilbao, Bucharest, Gdansk, Nitra, Poznan, Cardiff and Madrid.
Openness	Openness is defined as the capacity to attract international populations and enable them to contribute to cities' success. Thus, cities have to be attractive, such that international people want to go and stay there, and open, such that international people can go and stay there.
Project	Project refers to the OPENCities project.
Proxy	A proxy is an indirect measure which represents a phenomenon in the absence of a direct measure [38]
Stakeholders	Stakeholders participating in the survey are: Politicians, representatives of the city, members of the academic community, members of a chamber of commerce / business community, international students, international employees, international retirees.
Study	Study refers to the Feasibility study.
URBACT	URBACT is the abbreviation for European Programme for Urban Sustainable Development. The OPENCities project receives EU funding under the URBACT II programme (led by Belfast City Council).
URBACT cities	The following cities are URBACT cities and have participated in the study: Belfast, Sofia, Dublin, Vienna, Dusseldorf, Bilbao, Bucharest, Gdansk, Nitra, Poznan.

[38] http://www.businessdictionary.com/definition/proxy-indicator.html (10.07.2009)