URBAN-NET

Deliverable 2.5

A comparative analysis of national and regional urban research programmes in Europe

Prepared by Nicis Institute

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PP	Dissemination restricted to programme participants (including EC)	
RE	Dissemination restricted to groups specified by the consortium (including EC)	
CO	Confidential, only for members of the Consortium	

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CHAPTER 1
INTRODUCTION TO URBAN-NET

Some 80% of the European Union's population lives in urban areas, where the effects of many environmental, social and economic problems are felt most strongly. The high level of urbanisation in Europe means that there is a strong urban dimension to many of the European Community's environmental policies. Consequently, the urban environment is increasingly discussed as a subject in its own right.

Sustainable urban development requires an integrated approach. This is where urban research is relevant: in simultaneously tackling related issues such as urban management and governance, integrated spatial planning, economic wellbeing and competitiveness, social inclusion, and environmental stewardship.

URBAN-NET has the aim to structure and coordinate this type of research on urban sustainability in Europe. It does so by identifying and addressing transnational requirements for research and sharing of good practice, in order to support the implementation of the European Research Area (ERA) in the urban research field, as well as other European legislation, policies and strategies related to sustainable urban development. URBAN-NET is focused on coordinating the funding of research for sustainable urban development (also referred to as urban sustainability).

There are 16 Partners involved in URBAN-NET. The partners are programme owners and programme managers from Austria, Bulgaria, Cyprus, France, Germany, the Netherlands, Portugal, Romania, Spain, Sweden, Turkey, and the United Kingdom as well as one world-wide organisation (UN-HABITAT). A list of all URBAN-NET partner organisations and a short summary of their activities can be found in Annex I.

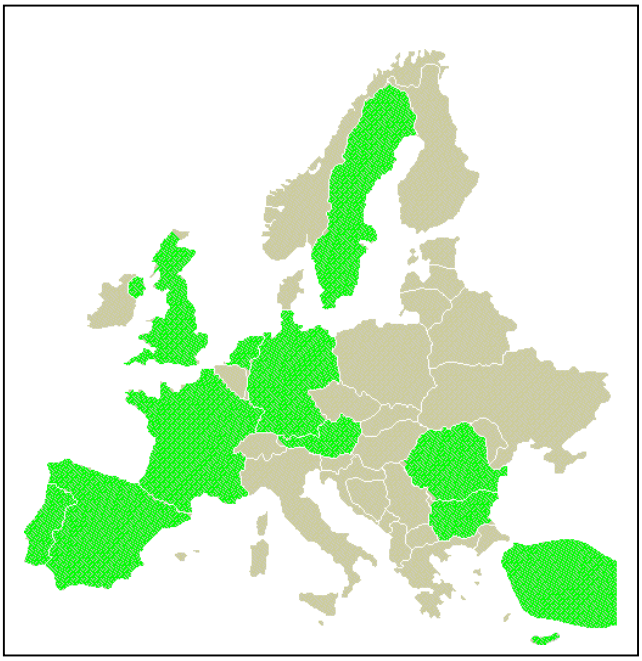


Figure 1: Countries represented in URBAN-NET

CHAPTER 2
WORK PACKAGE 2

The activities of URBAN-NET are divided into five Work Packages. Work Package 2 (WP2) is dedicated to the exchange of information and good practice between the project partners. This process is supported by the appointment of regional coordinators from among the URBAN-NET partners to coordinate the mapping of research activities and identify examples of good practice in their home country as well as surrounding countries.[1]

WP2 is a critical driver of URBAN-NET. Access to up-to-date information on past and ongoing urban research in European countries represents an important precondition for effective collaboration and a key input for the identification of strategic themes for cooperation. Accordingly, this work package has an important function in disseminating knowledge between the URBAN-NET Consortium and other stakeholders.

The Nicis Institute coordinates WP2. The tasks within WP2 are designed to explore and define the crucial information that needs to be exchanged and to summarise the key indicators that will allow comparison of research programmes on urban sustainability in Europe.

Within WP2, the URBAN-NET project creates a database of recent and current research programmes on urban sustainability issues. WP2 analysed the research programmes in this database, to establish similarities, differences and gaps in research. Subsequently, a more subjective analysis of national programmes was undertaken to establish criteria for success (e.g. examining the quality of programme outcomes, multidisciplinarity and flexibility to adapt to future challenges in urban sustainability). This report provides the reader with an overview of the results of this process.

[1] The regional coordinators are the following: SenterNovem for The Netherlands, Belgium, Luxembourg, Sweden, Denmark, Finland, Lithuania, Latvia, Estonia and Norway; TÜV and MEEDDAT for Germany, France, UK, Ireland, Austria, Czech Republic, Poland, and Switzerland; IPA and ASDE for Romania, Bulgaria, Hungary, Slovakia, Slovenia, and Croatia; MEEDDAT and RPF for Spain, Portugal, Cyprus, Turkey, Italy, Malta, and Greece.

CHAPTER 3
METHODOLOGY

3.1 Preparation

To be able to compare and identify national or regional research programmes, the URBAN-NET partners agreed that three clusters of definitions and nine cross-cutting dimensions of urban sustainability form the basis for the definition of urban sustainability used in URBAN-NET project.

Figure 2: The conceptual relationship and interactions between the clusters and dimensions of urban sustainability. Please refer to Annex V for an explanation of the way in which this taxonomy was created.

WP2 had as a task to set up knowledge validation procedures, rating documents on practical usability and quality for users. Aiming to depart from a common basis of comparison for the data and information from the individual URBAN-NET partners, the consortium ensured a uniform and systematic survey of data. A research template and a quality check procedure were designed and agreed upon by all partners to ensure the above. These are described below.

3.2 The template

The final questionnaire template comprised the following topics:

1. Number of parties involved in setting up the research programme;
2. Number of research projects funded by the programme;
3. Number of applications received after an open call for research;
4. Main and sub themes of the research;
5. Geographical reach of the research programme;
6. Societal issues addressed by the programme;
7. Theoretical issues addressed by the programme;
9. Parties involved in the establishment of the research programme;
10. Research personnel involved in the programme;
11. Financial resources of the programme;
12. Total budget in euros;
13. Organisational structure of the programme;
14. Decision makers of focus area(s) of the programme;
15. Identification of gaps in former research;
16. Possibility of changing the thematic area(s) of the programme;
17. Decision makers on changes in thematic areas;
18. Commissioning of research projects;
19. Type of assessment procedure for applications for funding;
20. Criteria for granting applications for funding;
21. Evaluation of the programme throughout its duration;
22. Criteria used for evaluation of the finalized programme;
23. Number of applications/proposals received;
24. Number of applications/proposals granted;
25. Level of dissemination of programme outcomes;
26. Dissemination target groups;
27. Main conclusions of the evaluation of the programme;
28. Groups benefiting from the research outcomes;
29. Name of the organisation that set up the programme;
30. Type of organisation that set up the programme.

3.3 Research programmes or projects?

Early in the process of collecting information for the database, it appeared that in many EU countries, urban research is not managed in ‘research programmes‘ as defined by the European Commission:

Research programmes carried out at national or regional level should be understood as entire research programmes, or parts of such programmes, or similar initiatives. Such programmes should have all of the following characteristics:

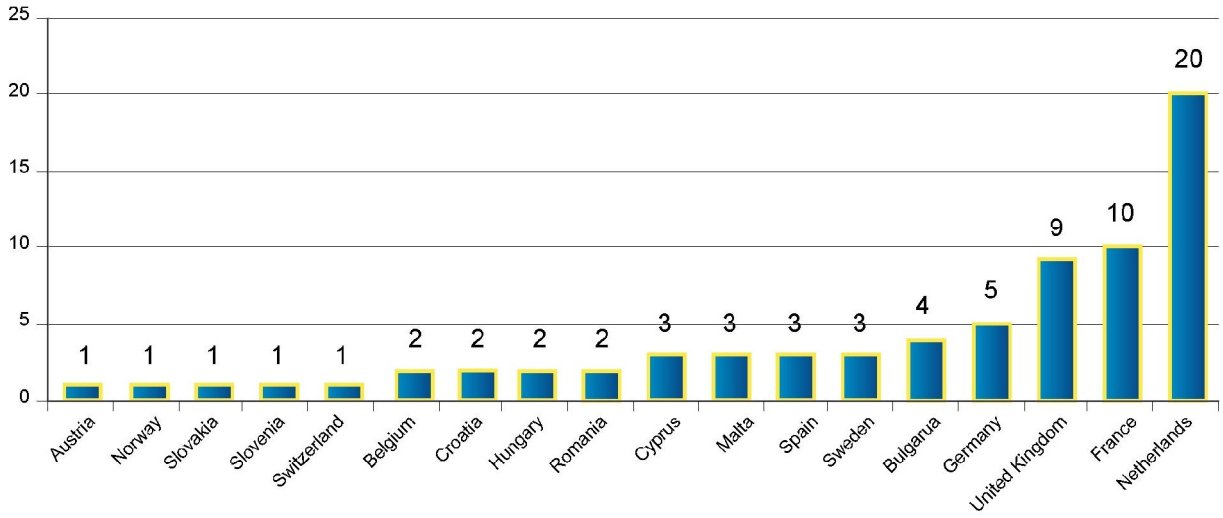
1. *be strategically planned, i.e. be composed of number of research projects focused on a defined subject area or set of problems, that are scheduled to run for a set period of time and that have a coordinated management,*
2. *be carried out at national or regional level, and*
3. *be financed or managed directly by national or regional public bodies, or by structures (e.g. agencies) closely related to or mandated by public authorities."*[2]

Aiming not to exclude any countries from the analysis on the basis of the definition provided above, reports were drafted describing the research landscape in all EU countries plus Turkey. The overviews concentrate on actors, research programmes and topics in urban research in the given countries.

3.4 The database

In March 2008, the URBAN-NET database consisted of 74 completed descriptions of national research programmes on urban sustainability issues. This analysis is based on these 74 research programmes. The countries represented in the database, and thus in this report, are the following:

Figure 3



Number of responses received per country. Countries absent in the graph did not submit any templates.

While reading this document, it is important to keep in mind that all information presented is an overview of the state of the art in the above-mentioned countries at the closing of the research, which was February 2008. The research programmes surveyed can be found in Annex II.

[2] Quoted from: "ERA-NET actions - Provisions for the preparations of ERA-Net actions and their practical implementation." Version: 21 Dec 2006

CHAPTER 4
THE EUROPEAN URBAN RESEARCH LANDSCAPE

4.1. COUNTRY PROFILE: AUSTRIA

Overview of actors

Austrian research related to urban sustainability is promoted by a wide range of institutions and players e.g. the federal ministries, the federal states, municipalities, industrial and private institutions and funds. The main competence for promoting research is concentrated on the level of the ministries. This is why the federal states and the municipalities of Austria tend to be more involved in promoting research infrastructure and transfer of knowledge between science and economy.
Other institutes that conduct urban research are the Jubilee Fund of the National Bank (OeNB), the Austrian Academy of Science (ÖAW), the Ludwig Boltzmann Association, the Friedrich-Schiedel-Foundation of Energy Management, the Austrian Electricity Industry Public Company, and the Environmental Support Schemes of the Kommunalkredit Public Consulting.
Another important urban research actor in Austria can be found at the local level. For example, the Municipality of Vienna is closely and intensively working together with scientists from natural, cultural, social and economic sciences. The Municipality of Vienna is divided into 71 departments, of which several promote research projects related to urban sustainability.
Urban research projects are generally performed at universities and research institutes. Examples of such institutes are the Austrian Research Centres (ARC) or the Austrian Academy of Sciences, where e.g. the Institute for Urban and Regional Research is located.

Main Research Programmes

Generally, Austrian research projects are directly promoted in the form of contract research. Otherwise, the research projects are bundled in programmes, some of which are thematically focused and some topically open:

- The national research programme proVISION is part of the Austrian research initiative for sustainable development (FORNE) and it supports the implementation of the strategic goal for a “Sustainable Austria” promoted by the Ministry of Science and Research (bmwf).
- The Program on Technologies for Sustainable Development is a five-year research and technology programme and contains the research programmes Building of Tomorrow, Factory of Tomorrow and Energy Systems of Tomorrow. It has been developed by the Austrian Federal Ministry of Transport, Innovation and Technology (bmvit).
- PFEIL 10: The Austrian Federal Ministry for Agriculture, Forestry, Environment and Water Management (bmlfuw) has organized research conducted in state owned institutions as well as commissioned research in four strategy fields: Rural areas, farming and food, water, environment and waste management. PFEIL 05 (2002-2005) aims at building and focusing research activity in defined thematic fields; at making research more efficient through interdisciplinary work, cooperation and controlling; and at applying the results in order to ensure the quality of life in Austria. PFEIL 10 (2006-2010) continues PFEIL 05 and aims to intensify research on three strategic fields: basic life resources, living space and food.

All three research programmes have sub-themes that deal with questions related to urban sustainability issues.

Topics in urban research

- Vulnerability of water resources caused by fluctuations in precipitation and other climate change induced parameters;
- preservation of peri-urban biosphere reserves;
- energy efficient construction and refurbishment methods;
- increasing traffic on the infrastructure in alpine regions.

The Austrian research surveyed within the URBAN-NET project has environmental sustainability as its main theme. Education and quality of life are the two sub themes named in the URBAN-NET research on Austria.

4.2 Country profile Belgium

Overview of actors

Belgium shows a unique feature; it is the only country where research policies are fully decentralized across several governments, each enjoying complete autonomy of decision and power in these matters. The primary jurisdiction for research policy is within the three Regions and three Communities, while the federal state retains some competences as an exception to this rule.

The Federal Government finances multi-annual research programmes to strengthen the scientific knowledge in Belgium, and to support scientific policy executed by the federal authority. The research areas that are chosen are part of the horizontal research priorities of the Government and should contribute to the debate and solutions on societal issues and developments.

A large part of urban research in Belgium is carried out in universities, which are major actors in the urban research landscape. They depend on the Communities for their funding and management, and are given a lot of autonomy. They also have access to funding sources on the federal and regional levels. The main academic institutes covering urban research in Belgium are:

- The Department of Architecture, Urbanism and Planning of the Catholic University of Leuven
- The Centre for Sustainable Development of the University of Gent

Main Research Programmes

- Sustainable development (Federal Government research programme). This socio-economic programme covers a range of subjects including drug issues, participative democracy and the modernisation of the administration of authorities. *
- Research Programme of the Department of Architecture, Urbanism and Planning of the Catholic University of Leuven *

Topics in urban research

- Underprivileged neighbourhoods,
- social cohesion,
- housing and redesigning public spaces,
- reinforcing local infrastructures and amenities.

The URBAN-NET research on Belgian research programmes concentrate on planning and environmental sustainability as main themes. The Belgian sub themes are far more diverse:

* included in URBAN-NET database

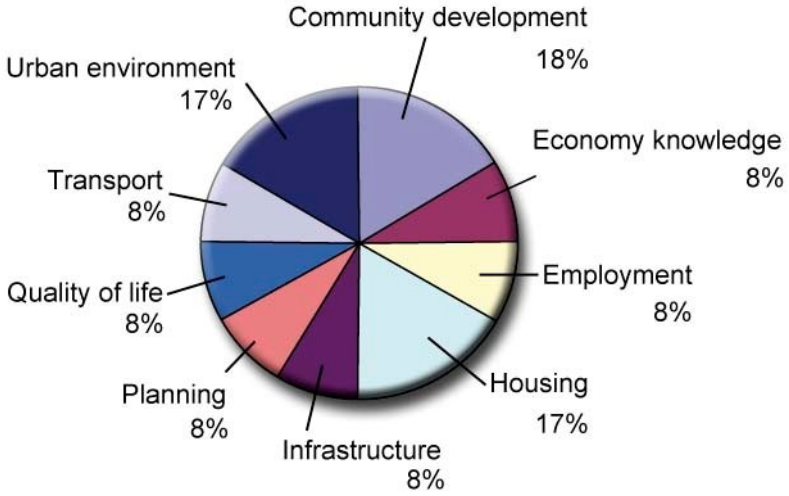


Figure 4:
Belgian research sub themes named in URBAN-NET research. Based on two research programmes.

4.3 Country profile Bulgaria

Overview of actors

The Bulgarian research system is dominated by the Bulgarian Academy of Sciences (BAS). Universities, which were primarily education institutions in the past, have increasingly embarked on research initiatives, but still have limited capacity.

The state budget is the main source of financing for research in Bulgaria. There are three strands of financial flow from the state budget:

- Direct subsidies to public research performing organisations – the Bulgarian Academy of Sciences and accredited universities;
- subsidies to the ministries who have research performing organisations within their structures;
- subsidies to the Ministry of Education and Science and the Ministry of Economy and Energy for developing programme financing through the National Science Fund and the National Innovation Fund.

However the research activities related to urban sustainability is promoted by a wide range of institutions like Ministries, Municipalities, industrial and private institutions and funds as the sector is one of the fast developing areas in the country and from major importance for the infrastructure. The main competence for promoting research is concentrated on the level of the Ministries – Ministry of education and science, i.e. the national Science Fund, part of the Ministry and the Ministry for regional Development and Public Works.
Other institutes that conduct urban research besides the Ministries are the Agency for Sustainable Development and Eurointegration – Ecoregions (ASDE), the BAS, the University for Geodesy, Architecture and Civil Engineering, etc.

Another important urban research actor for the future development and especially for the implementation of the operational programmes under the Structural funds in this area is the Municipalities.

Main Research Programmes

The system is primarily based on direct budget support for research projects. Competitive research programmes, though active since 1990, have increased their weight in the system only in the past 2-3 years. Two of these competitive programmes (with a focus on urban sustainability) are:

- National Research Programme “Dynamic Cities Atlases”*
- National Research Programme Estimation of Potential Losses from Seismic Risk in Urban Areas *

Topics in urban research

- Town/Spatial planning,
- Risk management
- Integrated governance
- Environmental protection
- Brownfield regeneration,
- Revitalization of deprived neighbourhoods and public spaces.

The URBAN-NET research in Bulgaria brought the following main themes to the fore:

* included in URBAN-NET database

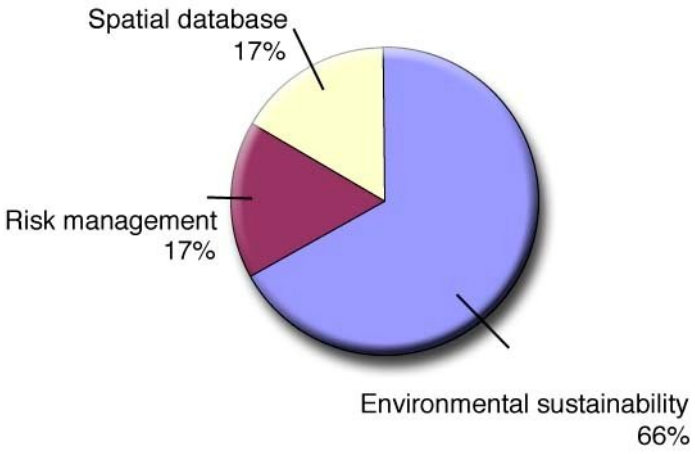


Figure 5: Main research themes in Bulgaria as concluded from URBAN-NET research. Based on four research programmes.

These are complemented by the following sub themes:

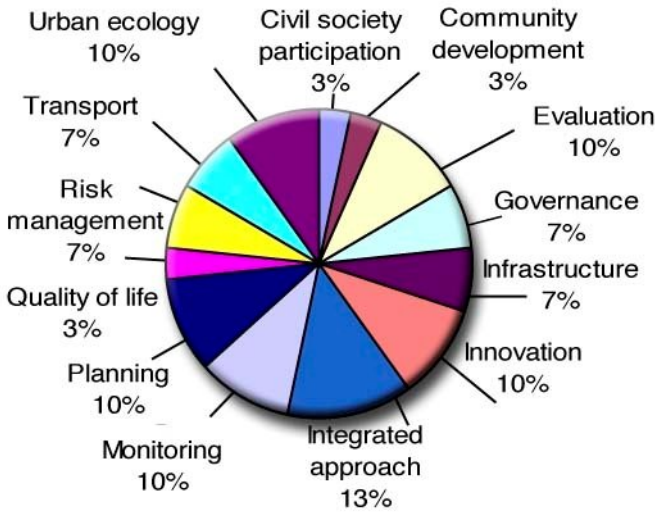


Figure 6: Research sub themes in Bulgaria as concluded from URBAN-NET research. Based on four research programmes.

4.4 Country Profile Cyprus

Overview of actors

Urban Sustainability Research in Cyprus is coordinated by the Research Promotion Foundation (RPF), which is the only organisation responsible for funding and coordinating research in Cyprus.

The Research Promotion Foundation is an independent organisation established by the Government of the Republic of Cyprus (1996) and governed by a twelve-member Board of Directors, appointed by the Council of Ministers. The Foundation serves as the only national organisation for the promotion of scientific and technological research in Cyprus. The main activities of the Research Promotion Foundation fall into two broad categories: the launch of national programmes/schemes for the funding of applied research projects and the coordination of activities relating to the participation of Cyprus in European programmes and international cooperation in the areas of research and technology (FP7, EUREKA, COST, ESF, INTAS).

Urban sustainability research is undertaken by the University of Cyprus, the University of Nicosia, the Frederick University, the Cyprus University of Technology, as well as other academic institutes such as the Cyprus International Institute for the Environment and Public Health or The Cyprus Institute. Governmental authorities, enterprises and environmental practitioners are also involved in urban sustainability research.

Main research programmes

RPF owns all specific research programmes on urban sustainability issues. The RPF's FP 2003-2006 consisted of three activity areas. Each activity area consisted of a number of research programmes. The three activity areas were:

A: "Multi-thematic Research Development", which aims at the implementation of multi-thematic research projects.

B: "Applied Research Development", which aims at the development of new products and services for the benefit of Cypriot enterprises in all economic sectors.

C: "Infrastructure Development and Research Support", which aims at helping the upgrading of the research infrastructure, the promotion of research collaborations and the exploitation of human research potential of Cyprus.

In total, RPF's FP 2003-2006 included eleven research programmes including the following:

- Sustainable Development*;
- Programme for the Support of Young Researchers*;
- Research for Enterprises*.

Topics

- Waste management/recycling;
- sustainable buildings;
- sustainable transport;
- preservation of the cultural heritage.

* included in URBAN-NET database

URBAN-NET research showed that research on Cyprus is focused on spatial ecology. The following two main themes emerged from the survey:

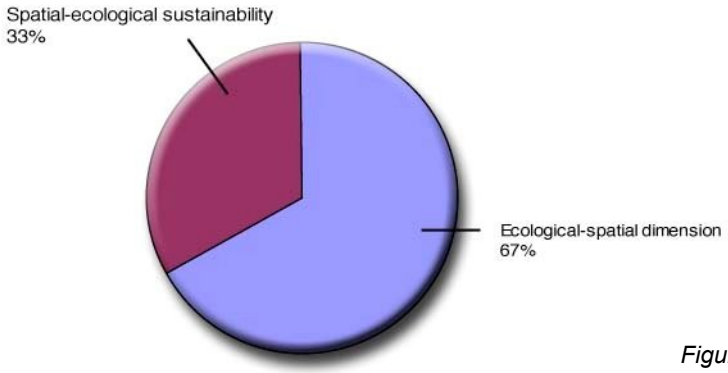


Figure 7: Main research themes that emerged from URBAN-NET research on Cyprus. Based on three research programmes.

In addition the following sub themes were brought to the fore:

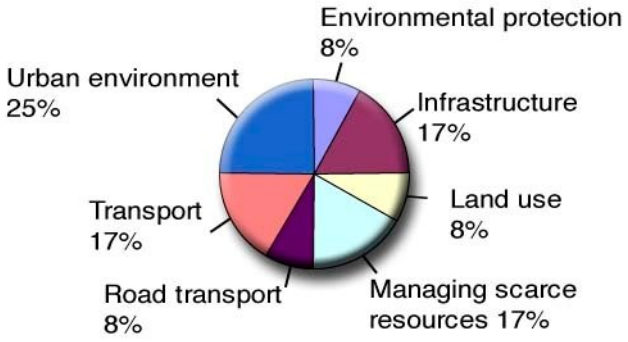


Figure 8: Research sub themes as concluded from URBAN-NET research on Cyprus. Based on three research programmes.

4.5 Country profile Czech Republic

Overview of actors

In the Czech Republic, the Council for Research and Development prepares proposals for allocating public funds for research. Upon approval by the government, the Ministry of Finance allocates the funds to individual providers, i.e. the Ministry of Education, other ministries, the Academy of Sciences and the Czech Science Foundation.

The Institute of Sociology of the Academy of Sciences is most involved in urban issues. Its department 'Local and Regional Studies' focuses its research on the connections between territory specific factors and processes of social change, including the local and regional formation and functioning of socio-spatial configurations, institutional structures, civic participation and the formation of values, attitudes and political orientations. The research also encompasses the sociological aspects of local and regional politics.

Another important group of actors are formed by the 25 public universities and 39 private entities providing tertiary education in the Czech Republic. Among these are some actors specialized in urban research:

- The Department of Human Geography and Regional Development of the Charles University in Prague has two branches of scientific and research interest. The first is specialized in a multilateral approach on regional development. It combines branches of human geography – particularly public administration, marketing of the city, geography of tourism, geography of transportation, social geography, urban and rural geography, and GIS. Secondly, the political and cultural geography branch specializes in political and economic geography, geopolitics, applied sociology, sociology of ethnicity and nationalism, ethnic minorities, cultural geography, historical geography and regional studies with a focus on cultural and political aspects.
- The Department of Environmental Geography of the Institute of Geonics[3] studies environmental and landscape issues in urban and rural regions with respect to the European integrating processes.

Main research programmes

The Czech Science Foundation and the Academy of Sciences both launch programmes that are not specified according to a thematic area. Researchers in urban sustainability can thus only apply for funds for individual urban research projects within these broader programmes. Academic institutes do not have their own research programmes either.

Topics in urban research

- Environmental hazards;
- environmental impacts of economic restructuring.

[3] Geonics stands for an area of geosciences focused on processes induced by human factors.

4.6 Country profile Denmark

Overview of actors

The Danish urban research area is largely dominated by research institutes that are mostly agencies of the relevant Ministries. The Danish Building and Urban Research Institute (SBI) is the national institute for building and urban research in Denmark. The National Environmental Research Institute (NERI) is an agency under the Ministry of Environment and Energy, which main responsibility is the surveillance and research of environmental issues in Denmark. The Danish Forest and Landscape Research Institute (DFLRI) is a research institute under the Ministry of the Environment in Denmark. The Department of Urban and Regional Planning within this institute is engaged in the research, development, consultation and dissemination of knowledge on planning and land management, aiming to contribute to the sustainable development of urban and rural areas.

Universities are another important group of actors in Danish urban research. Examples of university institutes focused on urban affairs are:

- The Department of Development and Planning of the University of Aalborg;
- The University-Network Exchange on Urban Sustainability (U-NEXUS) consisting of the Aalborg University, Denmark's Technical University, Roskilde University Centre, Royal Danish School of Architecture and Copenhagen Business School.

Main programmes

- Welfare Research Programme;
- Danish Environmental Research Programme launched by the Danish Research Council under the Ministry of Science;
- The Urban Planning and Mobility Research Programme focused on cities, mobility, networked infrastructures, and planning – established by the University of Aalborg.

Topics in urban research

- Governance;
- social inclusion;
- crime and security.

The current emphasis in urban research is more on social-economic issues and not so much on ecological issues.

4.7 Country profile Estonia

Overview of Estonian actors

In Estonia the urban planning field is coordinated by two ministries - the Ministry of Economic Affairs and Communications, and the Ministry of Interior Affairs. The government is the main financial provider through the Ministry of Education and Research (partly allocated to the Estonian Science Foundation) on the bases of evaluation of individual projects (smaller grant projects or broader research projects).

The Institute of Geography of the University of Tartu is the main performer of urban research. The Institute has carried out several research projects on urban mobility patterns (commuting, housing mobility patterns, etc) by using census data, individual questionnaire-based data collection and mobile positioning techniques. This research is carried out withfunding from the Estonian government (on the bases of research applications).

Local and regional governments carry out some practical research on e.g. impact assessments for master plans, research and/or population prognoses for designing local or regional development plans, etc. This kind of research is normally outsourced and funded by local or regional governments or other interested institutions.

Main research programmes

In Estonia, there are no research programmes on urban issues. This is partly because urban issues are not considered to be a national political priority, and partly because there are no research programmes on the local level.

There is no widespread practice of research programmes in any subject in Estonia. Mostly, the research funding is distributed on the basis of individual funding applications, which are evaluated by committees formed for the evaluation of projects from different fields. For policy making, national and local government bodies normally outsource particular studies which are planned in their budgets on a yearly basis. There is not much practice of long-term research programmes in different fields.

Topics in urban research

- Sustainable development in general;
- impacts of suburbanization;
- transportation planning and infrastructure development;
- urban mobility patterns and their regional impacts;
- population trends.

4.8 Country profile Finland

Overview of actors

The Academy of Finland is the leading organisation in research funding and science policy in the field of urban policy in Finland. The Academy is an agency of the Ministry of Education. In 1997, it started an urban studies research programme focused on globalization of cities (see below). The Academy of Finland recently began financing research carried out by cities, while it previously financed research mostly done in universities.

The main organisations that conduct research are universities, national public research institutes, local public research institutes, private research organisations and business enterprises. The Finnish research system is quite decentralised, as there are 20 universities, 31 polytechnics and 20 government research institutes in Finland.

One of the most important (local) research institutes involved in urban research is the City of Helsinki Urban Facts Institute. It collects, analyses, stores and distributes knowledge about past, present and future of Helsinki and its districts. The Urban Research Unit conducts applied urban research for the administration of the City of Helsinki, for the citizens and for enterprises located in Helsinki. The aim of the research activity is to analyze contemporary urban phenomena from various perspectives. Research and statistical areas include knowledge on population, housing, living conditions, regional and municipal economy, business, employment, city administration and civic participation, urban culture and urban environment

Main research programme

- The Academy of Finland started The Urban Studies research programme focused on globalization of cities, interaction between cities and their neighbourhoods, new use of urban space, risks and possibilities in cities, cities as innovative milieus, new urban economy and urban policies.

Topics in urban research

- Segregation;
- scattered urban structure and transportation;
- urban economics.

44.9 Country profile France

Overview of actors

In France, public research is traditionally funded through contracts between the state and research institutions such as Universities and public research organisations (PROs). Along direct funding, the Government has developed new instruments to fund research on the basis of projects irrespective the institutional affiliation of the researchers. The National Agency for Research (CNRS) was created in 1939 to finance fundamental research on a project basis. From an institutional point of view, CNRS is under the aegis of the Ministry of Higher Education and Research. However, the Ministry of Education, the Ministry of Health, the Ministry of Finance and the Ministry of Industry are represented in its executive board.

The National Research Agency (ANR) was created in 2005 to activate French research and to better link the research to societal needs. ANR works with calls, providing researchers with supplementary means for a relatively short period of time. In 2008 ANR has issued a call on the topic of sustainable cities.

The Urban Development, Construction and Architecture Plan Institute (PUCA) has an inter-ministerial vocation, coordinating various research programs on urban development, construction and architecture. The institute was created by the French Ministry of Public Works in order to advance knowledge of territories and cities and to shed light on public action. Its research agenda is elaborated by a board of stakeholders, chaired by a mayor. It leads and organizes calls for research and demonstration proposals from scientific and technical bodies, while monitoring the programmes and highlighting their value by publishing the results of the work undertaken. PUCA works now under the umbrella of the Ministry for ecology, energy, Sustainable development and territorial planning, created April 1 2008.

The Ministry has created a *Commissariat au développement durable* which supports applied research on environment, including applied research on water and aquatic ecosystems (Service de recherché et de prospective, SRP). In the CDD the Direction for research and innovation defines and implements research, development and experimentation policies mainly in the field of transport, but on all competencies of the Ministry also.

A specific institute for urban research in France is the Scientific and Technical Construction Centre (CSTB). CSTB is specialised in building materials and techniques, equipment, safety, thermology, acoustics, aerodynamics, lighting, environmental and health issues, advanced communications technology, as well as economics and sociology.

Furthermore, several universities and local governments in France are involved in urban research. Universities mainly act as research performers and local governments have increased their role as urban research funders in the past 10 years. CNR has research laboratories in social science departments of the bigger universities. In addition, urban research is carried out in a few engineering and architectural schools.

Main research programmes

Three research programmes in the field of urban sustainability that were initiated by PUCA:

- Territorial policies and urban sustainability*;

* included in the URBAN-NET database

- The city for all: urban social polarization and public utilities*;
- Mobility and urban territories*.

Topics in urban research

- Social cohesion;
- critical urban areas;
- integration of immigrant populations;
- economic opportunity zones.

The topics named above are valid mainly for the Ministry of City Policy. In the different bodies of the Ministry of Ecology, Energy, Sustainable Development and Spatial Planning (MEEDDAT) all themes related to sustainable development are studied. The urban sustainability themes are found within PUCA, the other sustainability related themes are dealt with by the Commissariat au développement durable.

URBAN-NET in France showed environmental sustainability, social sustainability and the integrated approach to be the leading main themes in French urban sustainability research programmes.

The same research showed a large diversity of sub themes in French urban sustainability research:

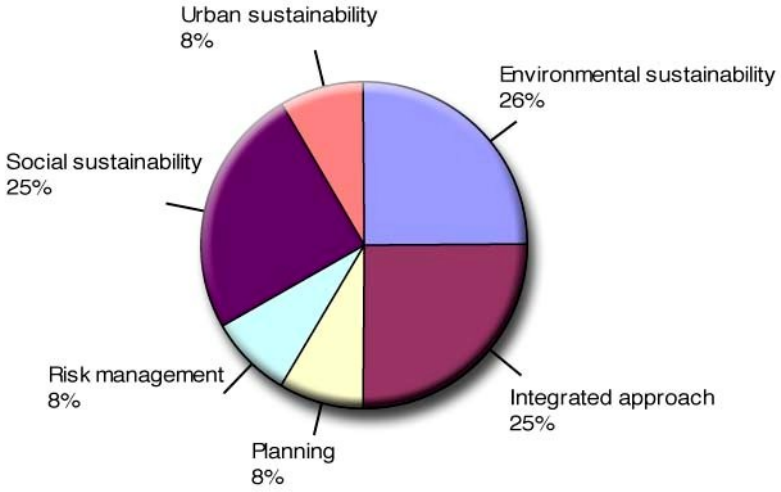


Figure 9: Main research themes as concluded from URBAN-NET research in France. Based on ten research programmes.

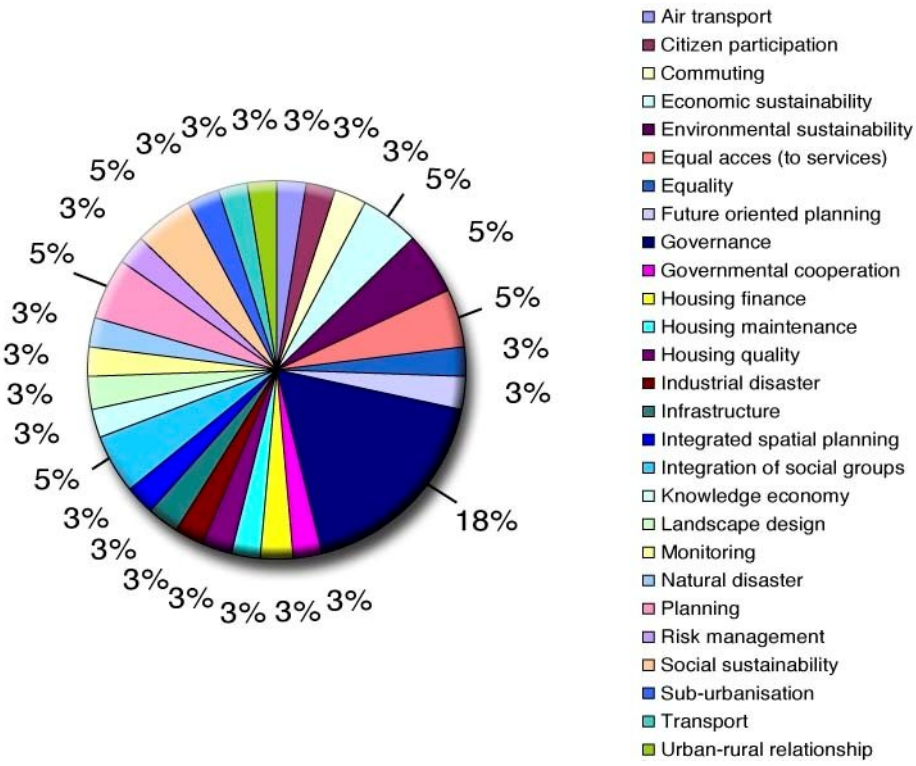


Figure 10:
Sub themes gathered through URBAN-NET research on urban sustainability programmes in France. Based on ten research programmes.

4.10 Country profile Germany

Overview of actors

Urban research and research promotion in Germany involves a large number of actors, programmes and subjects that both compete with and complement each other. To make this complex structure of actors in urban research visible and to keep it simple at the same time, the following clusters can be distinguished:

- Federal ministries (as owners and managers they are responsible for several promotion and research programmes).
- The federal states (*Länder*) of the Federal Republic of Germany. (Urban development and housing are *Länder* issues. However, they run very few independent regional research programmes).
- Cities (political institutions and self-governing municipal administrations with decision-making powers).
- Foundations (some have their own research programmes and/or are involved in network projects).
- Universities and university departments (as project implementers, advisory units and networks within the research community).
- Private-sector research and consulting institutions (project implementers and/or advisory units).
- Research centres/multipliers (as project implementers, advisory units and network hubs within the research community).
- European institutions and initiatives (as project implementers and partners for European activities and initiatives).

In Germany, urban development and housing are the responsibility of the *Länder*, the regional and sovereign administrative bodies. Although their focus tends to be more on the promotion of urban development, it makes sense to explore urban research in the wider sense at *Länder* level in consideration of Germany's federal structure.

Main research programmes

- Experimental housing and Urban Development/ExWoSt*;
- Urban mobility and transport research programme/FOPS;
- Building and housing for the 21st century, especially the idea competition and research compound "City 2030" *;
- Megacities*;
- Sustainable land use/Refina*.

In addition, there are other programmes at the Federal level that are relevant for URBAN-NET: the BMVBS demonstration projects on spatial planning (MORO) and the initiative for multi-generation houses run by the Federal Ministry for Family Affairs, Senior Citizens, Women and Youth (BMFSFJ).

Topics

- Housing;
- sustainability indicators;

* included in the URBAN-NET database

- transport;
- renewal in Western and Eastern Germany.

URBAN-NET research on research programmes in Germany showed that the themes integrated approach and innovation take the lead among the main research themes:

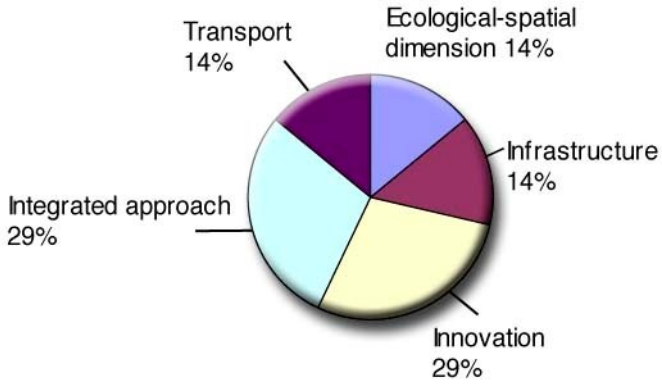


Figure 11: Main research themes in German urban sustainability research programmes. Based on five research programmes.

Like in France, the surveyed research programmes in Germany also show a large diversity of research sub themes:

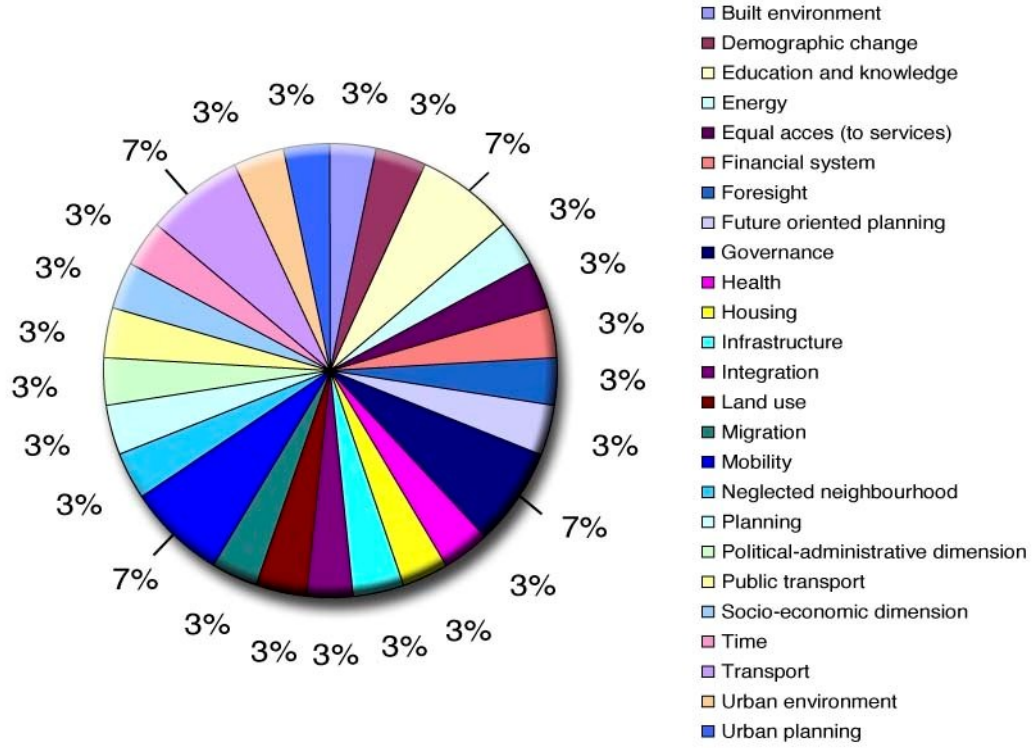


Figure 12: Sub themes in URBAN-NET surveyed urban sustainability research programmes. Based on five German research programmes.

4.11 Country profile Greece

Overview of actors

In Greece, the two dominant characteristics of the national research system are the funding from the public budget and the universities' role in implementing research activities. Universities were traditionally focused on teaching, but started to implement small research projects a few decades ago, funded by the General Secretariat for Research and Technology (GSRT) of the Ministry of Development, while remaining under the formal supervision and funding of the Ministry of Education.

Public research centres perform one fifth of the research in the country. Most of them fall under the GSRT. The public research centre for social research houses an institute specialized in urban studies:

- The Institute of Urban and Rural Sociology is based within the National Centre for Social Research. Its research covers several areas including social geography of urban and rural areas, family, sex, labour, rural society and social exclusion.

Some universities have developed special research institutes for urban issues such as:

- The Urban and Regional Innovation Research Unit (URENIO) is a university laboratory for the promotion of research and supply of scientific and technological services. URENIO is affiliated to the Department of Urban and Regional Planning and Development in the Faculty of Engineering, Aristotle University of Thessaloniki.
- The Research Institute of Urban Environment and Human Resources is affiliated to the Panteion University of Social and Political Sciences in Athens. The aims of the Institute include the promotion of scientific knowledge through interdisciplinary research and applied projects (field work analysis), as well as the consultative support for decision making procedures in the fields of urban and regional development, environmental policies and human resources management.

Main research programmes

There are no specific research programmes on urban issues in Greece. Research is mostly carried out within individual projects instead of in the framework of a programme.

Topics in urban research

- Traffic control;
- cultural heritage;
- digital cities;
- urban sprawl.

4.12 Country Profile Hungary

Overview of actors

The main actor in research in Hungary is the Hungarian Academy of Sciences (MTA). The institutes of the MTA are financed through the central budget, distributed by the headquarters of MTA, as well as by funds raised through successful applications for domestic and international grants. MTA operates 38 research institutes, covering all fields of sciences. MTA also supervises the activities of the Hungarian Scientific Research Fund, supporting basic research projects, young researchers' projects as well as R&D infrastructure development on a project base. There is no MTA institute that focuses on urban research.

Several ministries provide funding for research activities in various ways: by running their own research institutes, by offering a mix of core funding and competitive grants for researchers, or by only providing competitive grants to research units, regardless of their owners. Research activities conducted at universities are financed through that is, institutional funding and various governmental funds, e.g. the Higher Education Research Fund, on the basis of competitive grants.

Several non-profit and independent research institutes form another group of research actors in Hungary. Some of these are specifically dealing with urban affairs:

- The Hungarian Non-profit Company for Regional Development and Town Planning (VÁTI) is an institute specialised in urban studies. The activities of this institute cover the full scope of research, planning and consultation activities related to regional development, town planning, as well as the protection and reshaping of the built environment.
- The Metropolitan Research Institute (MRI) is an institution working in the areas of housing policy and urban development as well as local government finance research in Hungary. The institute undertakes research and consultancy assignments, organises conferences and provides training.

Main research programmes

There are no specific research programmes on urban issues in Hungary. Urban research is mostly carried out within individual projects instead.

Topics

- National heritage;
- social challenges;
- renewal of large housing estates.

URBAN-NET research shows quality of life to be the main theme in the research programmes surveyed in Hungary:

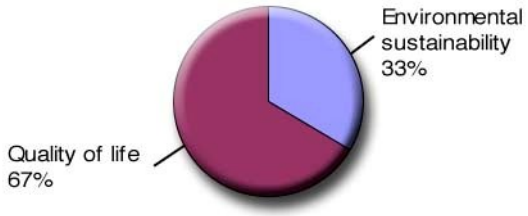


Figure 13: Main themes as emerged from URBAN-NET research in Hungary. Based on two research programmes.

Six sub themes each turned out to take a roughly equal share in the surveyed research programmes:

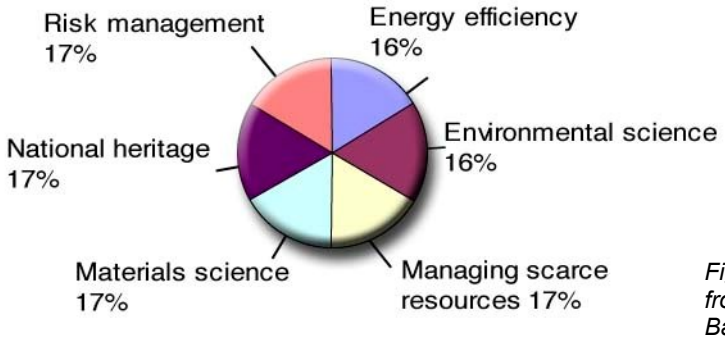


Figure 14: Sub themes that emerged from URBAN-NET research in Hungary. Based on two research programmes.

4.13 Country Profile Ireland

Overview of Actors

There is a number of research funding bodies in Ireland. The three main sources of funding for urban research are:

1. National funding from The Environment Protection Agency (EPA);
2. European funding from The European Commission under the Framework Programmes;
3. European funding through Structural funding streams e.g. INTERREG IIb.

There is some funding for urban sustainability projects coming from the Irish Research Council For The Humanities and Social Sciences and the Royal Irish Academy. In addition, Sustainable Energy Ireland includes funding streams for the built environment, e.g. energy efficient buildings, etc. There is collaborative research activity between Northern Ireland and Ireland that has a "single island" focus.[4]

The EPA is a government agency. Among its functions is a range of responsibilities in relation to environmental research. The Department of the Environment and Local Government (DoELG) provides a budget for environmental research. This budget forms part of the Irish government's programme for Environmental Research, Technological Development and Innovation (ERTDI). Its multi-annual research programme has four elements:

1. Environmentally Sustainable Resources Management;
2. Sustainable Development;
3. Cleaner Production;
4. National Environmental Research Centre of Excellence.

Currently, the EPA have moved onto their next funding programme; STRIVE (Science, Technology, Research & Innovation for the Environment) 2007- 2013. At the time of writing there had been no specific calls on urban sustainability issues, but elements are found within the climate change and biodiversity calls as well as through individual researcher/fellowship grants. It is not clear yet which other topics will be included as the programme is rolled out over the next six years.

Main research programmes

There are no research programmes specifically on urban issues in Ireland. There does not seem to be an explicit urban focus to funding, though the urban dimension is well represented at the researcher level (UCD Urban Institute, University College Dublin, and also to some extent Cork and Limerick Universities and Centre for Urban and Regional Studies, Trinity College Dublin). However, urban research is considered an important topic in Ireland. Researchers are engaged with UK and European partners in a number of networks and collaborations.

Topics in urban research

Urban sustainability is mainly environmental related. Social and economic issues are fragmented within other programmes. To some extent, urban research is carried out in other ways, though economic and socially focused urban issues seem to be not well very well

[4] The http://www.answer-online.org/project_search.asp database.

covered as “urban” topics. The important topics of urban research are thus mainly environmental:

- Air quality and transport;
- socio-economic housing;
- sustainability indicators;
- land use patterns;
- urban sprawl;
- community development;
- public participation;
- regeneration;
- brownfield site development.

4.14 Country Profile Italy

Overview of actors

Italian research is extremely dispersed, both from the geographical and institutional perspective. Funding sources are diverse (national, European, regional, local, or private). The National Research Council (CNR) is the main funder of research in Italy.

Many universities and research centres seem involved in urban and sustainable development research in Italy:

- The *Centro di Ecologia Umana*, in Padua, conducts interdisciplinary research on environmental issues;
- The Faculty of Architecture of the University of Rome 3 has a department of urban studies;
- The private research organisation, the *Fondazione Eni Enrico Mattei* (FEEM) is actively involved in international and multidisciplinary applied research on sustainable development;
- The University of Milan and the Polytechnic University of Naples both have research centres on urban related studies.

Main research programmes

In Italy, there is no specific programme for urban sustainable development research in CNR. However, CNR indirectly funds research projects on this theme, notably through urban growth and competitiveness programmes. It seems that the theme of urban sustainable development has decreased in popularity in Italy. Nonetheless, some urban programmes can be identified among universities and private organisations:

- The research programme of the Polytechnic University of Milan;
- The research programme of the department of Architectural and Environmental Conservation of the University of Naples.

Research topics

- Environmental economics;
- impact assessment methodologies;
- good governance;
- competitiveness of the cities;
- heritage and more particularly architecture conservation.

4.15 Country Profile Latvia

Overview of actors

The Latvian research system has undergone a considerable transformation over the last 15 years - from a socialist science and technology system under a planned economy to the contemporary research system under market conditions. As a consequence of the Soviet research policy the majority of research institutions were separated from the higher education system. There were 33 specialized research institutes in Latvia in 1990. During the last 15 years, national research institutes and their staff have been involved in universities with the aim of modernizing and strengthening the research capacity of universities and improving the quality of study programmes.

An important role is played by the Latvian Council of Science, which distributes research funding and offers advice and expertise on research policy-making. Nowadays, the main research performers are the universities and public research institutes. Under the planned system, important research activities were undertaken by the institutes of the Latvian Academy of Sciences. However, nowadays most of these institutes are integrated at the University of Latvia. Some of these institutes are closely related to urban sustainability issues:

- The Advanced Social and Political Research Institute;
- The Institute for Environmental Science and Management;
- The Institute of Philosophy and Sociology.

The Riga Technical University is the only university in Latvia that has a specific faculty for urban issues: the Faculty of Architecture and Urban Planning. This faculty undertakes scientific research, and completes contractual projects on urban issues. It does not have its own framework research programme.

Main research programmes

There are no specific research programmes on urban issues in Latvia. The research programme “Information technologies” (launched by the Ministry of Education and Science) and the research programme “Basic and Applied Research Projects” (launched by the Latvian Council of Sciences) both funded some projects related to urban sustainability issues.

Topics in urban research

In Latvia, the concept of an integrated approach on sustainability is only slowly gaining recognition. At the time of writing, the transformation of local government, urban waste water, and renovation of dwellings are topics that received much attention in research in Latvia.

4.16 Country Profile Lithuania

Overview of actors

Science and technology policy making is the prerogative of the Lithuanian Science Council and the Ministry of Education of Science (Department of Science and Studies). The latter has established an institutional structure of research funding and research support (consisting of institutional funding and competitive funding, administrated by Lithuanian Science Foundation). This structure is supported by the International Science and Technology Programmes Development Agency.

Researchers working at Latvian Universities conduct research by assignment. The volumes of work have grown considerably in recent years. There are two universities in Lithuania that have research departments on urban issues:

- The Vilnius Technical University investigates the objects and design methods of architecture and urban planning, systems of building and territory planning in the context of social and economical transition. It houses two specialised research institutes, the Research Institute of Territorial Planning and the Institute of Architecture.
- The Institute of Architecture and Construction of the Kaunas University of Technology analyses energy saving problems in buildings, climate durability and strength, and the reliability of building structures.

Some other, independent institutes involved in urban research are:

- Research Institute of Territorial Planning;
- Transport Research Institute;
- Research Laboratory of Urban Analysis;
- The Architects Association of Lithuania (AAL).

Main programmes

There are no research programmes in Lithuania that are especially involved with urban issues. Some programmes have funded specific projects on urban sustainability issues, such as the High Technology Development Programme that is coordinated by the Lithuanian State and Study Foundation.

Topics in urban research

- Sustainable urban heritage management;
- urban transport;
- urban environment conservation.

4.17 Country Profile Luxembourg

Overview of actors

Luxembourg's research system is characterized by strong research activities in the private sector undertaken by a few big companies and a low level of public research expenditure. Since urban sustainability research is traditionally an area that is mainly funded by public authorities, urban policy does not receive much funding in Luxembourg.

An increase in the support for research in the public sector began in 1987 with the set up of three public research centres. The first Minister of Research was appointed in 1999, together with the creation of the National Research Fund. Luxembourg's research system is currently composed at the government level of 2 key ministries: The Ministry of the Economy and Foreign Trade responsible for the research policy in the private sector and the Ministry of Culture, Higher Education and Research responsible for research policy in the public sector and university. Besides these ministries, The National Research Fund (FNR) is the only organisation which provides public funds for research. It finances public research projects through multi-annual priority programmes.

The main research performing actors in Luxembourg are companies, the three Public Research Centres and the new University of Luxembourg (established in 2003).

Main research programmes

Since 2000, the FNR has launched nine research programmes in specific domains. Two of them are related to, but not completely focused on, urban sustainability:

- Sustainable management of water resources;
- Socio-economic science: Living tomorrow in Luxembourg.

Research topics

On the national level urban issues have generally been handled within the larger context of spatial development. Issues such as social segregation and integrated approaches of urban and regional development were the main research issues for the past five years.

4.18 Country Profile Malta

Main actors

The Malta Council for Science & Technology (MCST) is the leading agency on scientific and technology research. It is responsible for the management of the national research programme. In 2006, the MCST launched the National Strategy for Research and Innovation for 2007-2010, entitled 'Building and Sustaining the Research and Innovation (R&I) Enabling Framework'. The sectors within this strategy are environment and energy Resources, ICT, value-added manufacturing services and health-biotech. Within the MCST, there is no division or department dealing with urban issues.

The Institute of Conservation and Management of Cultural Heritage was established under the auspices of the University of Malta. This Institute deals partly with urban research. Another institute within the university, which also deals with urban research questions, is the Mediterranean Institute.

Main research programmes

Two programmes of the University of Malta focus on urban sustainability research:

- Environment and Society Research Programme:
  This programme of the University of Malta focuses on the various aspects dealing with human geography.
- Research Programme on Walled Towns in Malta:
  The Walled Towns Research Programme of the University of Malta is made up of five-components: demographic aspects, population mobility, housing, transport and coastal zone management.

The MCST only grants funds for urban projects via the National Strategy. However, urban research is not a specific sector within this strategy.

Research topics

- Heritage conservation;
- sustainable tourism development;
- transport.

URBAN-NET research showed that the surveyed research programmes' main themes are roughly equally divided over economic, social and environmental sustainability:

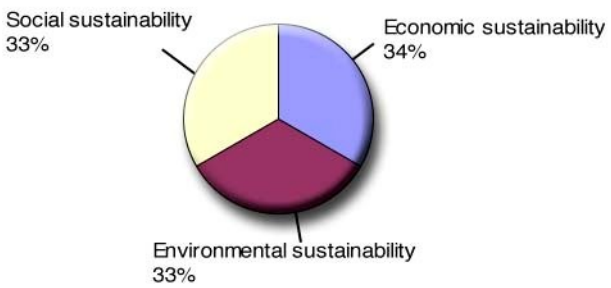


Figure 15: Main themes in URBAN-NET surveyed research programmes on Malta. Based on three research programmes.

Like in the cases of France and Germany, there also exists great variety in the surveyed research programmes sub themes on Malta:

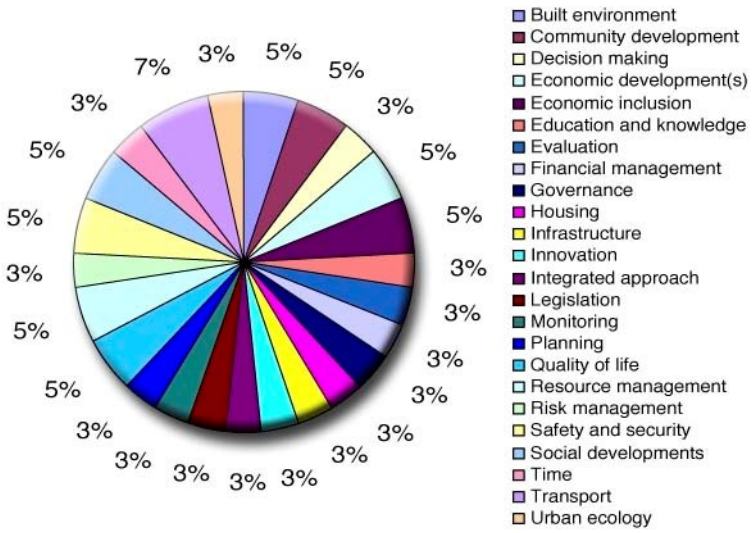


Figure 16: Sub themes in surveyed urban sustainability research programmes on Malta. Based on three research programmes.

4.19 Country Profile the Netherlands

Overview of actors

Urban research in the Netherlands is embedded in a variety of institutions and programmes. Much research on urban issues is carried out by private sector research institutes that focus on the built environment, urban economics and social research, or urban policy. Some of these institutes have programmes that are realised with other big actors in the urban arena: the publicly funded knowledge institutes. These are mainly university institutes, but also subsidised bodies with a special task.

The largest of the public institutes is the Netherlands Organisation for Scientific Research (NWO). NWO receives the research budget from the central government for allocation to scientific research and organises competitions or calls for research proposals with that purpose. In the urban sphere, almost all available projects funded by NWO are allocated to university researchers. NWO develops general programmes for research at various levels, normally organised per area of science (urban research can be found under the umbrella of the social sciences), as well as special programmes, such as the social cohesion programme, or the programme on urbanisation and urban culture.

Other institutes include those that have been developed especially to stimulate research in specific fields in which urban or related issues are central, the most important of them being Nicis Institute. The aim of Nicis Institute is to stimulate (scientific) urban research and make it available to cities. The Institute works with a co-financing model in which one third of the research costs is covered by the municipalities, one third by the universities and one third by Nicis Institute. Other examples of research organizations include the Habiforum network organisation that co-ordinates large special research programmes. SenterNovem, the Dutch agency for innovation and sustainable development is another governmental agency that performs much urban research. It co-operates with the private sector, non-profit organisations, governmental bodies and research institutions. SenterNovem manages and co-ordinates contracts in the fields of urban built environment and infrastructure.

The universities in the Netherlands play a substantial role in urban research. In at least six universities specific urban research is a focus of attention. Disciplines in which urban issues are central points of attention include urban geography, urban planning, urban sociology, urban economics and economic geography, but also architecture, urban governance and policy studies, urban history, and infrastructure planning. The researchers in these disciplines receive money directly from the university, and supplement the research budgets and personal capacity with funding from NWO programmes, and other special programmes, including EU programmes. The vast majority of urban researchers in the Netherlands are organised in the Netherlands Graduate School for Housing and Urban Research (NETHUR).

Main research programmes

- NWO research programmes that provide substantial opportunities for urban research include: Shifts in Governance, Social Cohesion. Urbanization and Urban Culture*;
- The programme on system innovation, regional land use and area development;
- The urban innovation programme/STIP* focuses on the following themes: the organisational capacity of the city, physical and social renewal processes in the city,

* included in the URBAN-NET database

* included in the URBAN-NET database

societal security in the city, changes and opportunities in the city, urban development as a co-production, urban citizenship;

- Universities/NETHUR*: Urban research that is carried out at one of the universities in the Netherlands, to a large extent takes place within the framework of the inter-university Netherlands Graduate School for Housing and Urban Research. The umbrella research programme of NETHUR is called “Innovations and dynamics in the physical, economic, socio-cultural and governance aspects of urban and regional systems”.

Topics

- Integration;
- energy efficiency;
- revitalizing deprived neighbourhoods;
- sustainable housing.

The Dutch programmes surveyed by the URBAN-NET researchers show variety in main themes:

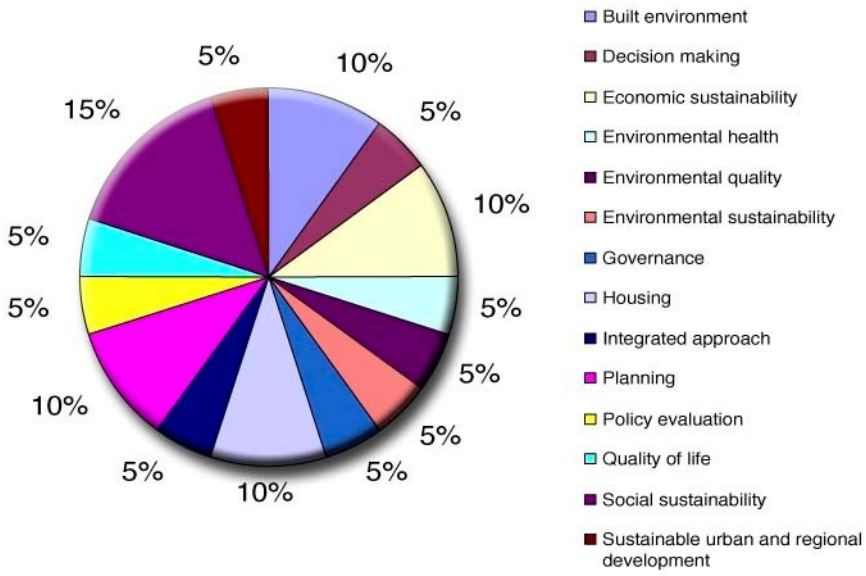


Figure 17: Main themes in Dutch urban sustainability research programmes as surveyed by URBAN-NET. Based on twenty research programmes.

Like in the cases of France, Germany and Malta, there also exists great variety in the surveyed research programmes sub themes in the Netherlands:

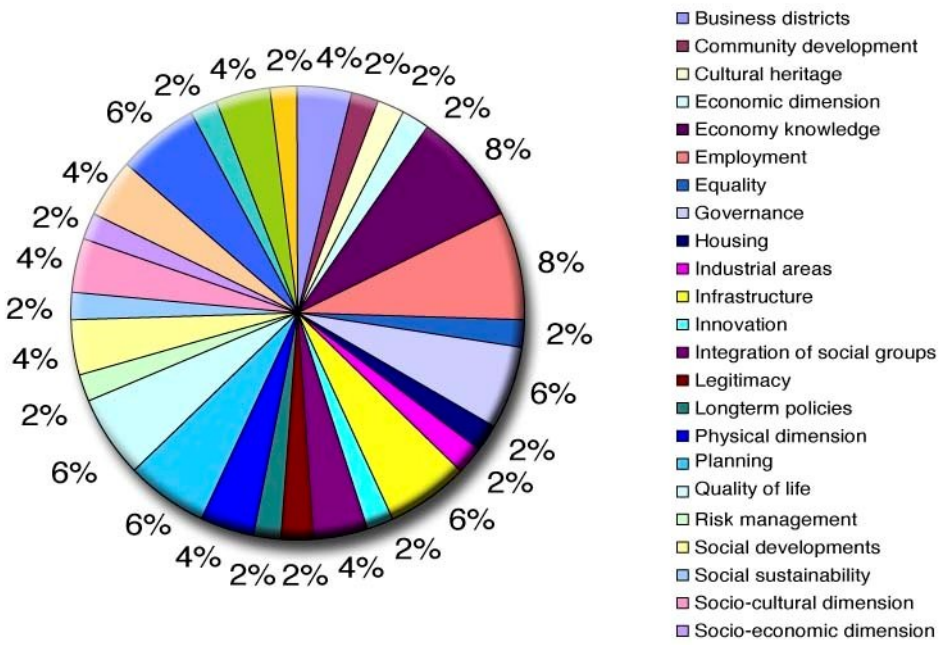


Figure 18: Sub themes of urban sustainability research programmes in the Netherlands as surveyed by URBAN-NET. Based on twenty research programmes.

4.20 Country Profile Poland

Overview of actors

The Ministry of Scientific Research and Information Technology (MSRIT) is mainly responsible for research funding and international research cooperation in Poland. Some research funding initiatives are coordinated between MSRIT and other ministries such as the Ministry of Infrastructure, the Ministry of Economy and Labour as well as the Ministry of Environment. From 1991-2003 the State Committee for Scientific Research (KBN) was responsible for the Polish research policy. It was also the main funding organisation. When MSRIT was formally established in April 2003, KBN was reassigned under the roof of the ministry. Today KBN continues its activities on behalf of MSRIT. The Minister of Science is the chairman of KBN.

The Ministry of Scientific Research and Information Technology provides institutional research funding as well as programme/ project funding. The funding budgets are earmarked in the national research funding budget. Evaluation plays an important role. For the twelve research areas the total amount of institutional funding in 2004 was around €350 Mio. Particular funding budgets are assigned to other Ministries (e.g. the ministry of infrastructure). Twice a year open calls for tenders are initiated, funding grants for individual researchers and research teams. KBN also funds strategic research projects through calls for tenders. KBN accepted around 200-300 research projects in the last years for funding and was initiating up to 30-40 strategic research projects a year.

Main programmes

The Polish research funding system does not provide strategic-thematic programmes as they are known in other European countries. Instead the country offers the National Framework Programme (NFP) which defines priority research fields. The National Framework Programme was introduced in 2005. It was developed by experts and administrators to define the country's research and development priorities. It serves as a fundamental instrument of the country's research policy.

The Minister of Science and Higher Education announced a call for proposals related to the URBAN -NET objectives on 15 September 2006. The title of the call was the following: Revitalisation of Polish cities as the way to protect their heritage and the factor of their sustainable development. The objective of the projects that were financed under this topic was to create the model for the revitalisation of the Polish cities.

Research topics

For many years the term 'sustainable development' was interpreted as 'eco-development', which has a strong accent on the natural environment. As a consequence most of the research on sustainable development focuses on environmental aspects. The majority of Polish research regarding sustainable development in the cities are concerned with ecological problems: protection and planning of natural environment in the cities; diminishing burdensome activities like industry. inner city and transit transport; or protection of air and water.

4.21 Country Profile Portugal

Overview of actors

With increasing funds available, a proper academic research system has emerged in recent years in Portugal. The basic managing machinery of this system has been set up, with an organization working as the research council (FCT). The FCT provides the basic funding for the research units for periods as long as five years and organises regular evaluations. However, the development of the academic system has not been even. In what concerns the research on the private business sector, the situation is characterized by a very low involvement of firms in research activities.

The first level of actors in urban research is the policy level: The Higher Education Ministry and the Ministry for the Economy and Innovation. The second level is an operational level. The main operational programmes finance the research system together with the major executive agencies. Finally, the third level consists of actors that actually perform research activities, which are the research centres at universities, several non-profit RTOs, public laboratories and private businesses.

Specific actors in the field of urban sustainability studies include:

- The *Centro de Estudos de Urbanismo e de Arquitectura*, a Portuguese university research institute specialised in urban studies.
- The *Centro de Investigaçao do Território, Transporte e Ambiente* belongs to the University of Porto. Its research areas cover planning and environmental evaluation, urban planning, transport and transport management systems.
- The *Centro de Estudos de Sistemas Urbanos e Regionais* forms part of the Technical University of Lisbon. The center concentrates on urban planning, urban management, spatial dynamics and environment, as well as transport and infrastructures.
- The *Centro de Estudios Geograficos*, part of the University of Lisbon, has research programmes on physical geography and environment, human geography, regional geography and coast dynamics.
- The *Centro de Estudos para a Intervenção Social* (CESIS) is a non-governmental, independent organisation of researchers from a range of disciplinary backgrounds concerned to promote evidence-based, policy-relevant research at both the national and European level. Among the areas of research that have secured the continuity of programmes and projects are urban related areas such as poverty in degraded urban areas, migrants and ethnic minorities, and ageing and older people.
- The *Laboratório de Urbanismo e de Arquitectura* at the Technical University in Lisbon is an institute that conducts research on the topics of urban design, urban and spatial planning, urban renewal, housing policy, vulnerable neighbourhoods, landscape and urban heritage.
- The *Laboratório Nacional de Engenharia Civil*, or the Civil Engineering National Laboratory, is a public institution oriented for studies on large public infrastructures, transport and transport management. It also has a small research unit on housing issues related to urbanism.
- The *Instituto de Ciências Socias da Universidade de Lisboa* is the Social Sciences Institute of the University of Lisbon. The institute offers post-graduate degrees and conducts multidisciplinary research, including sociology, anthropology, history, political science, social psychology, human geography and international relationships.
- The *Grupo de Ordenamento do Território do Departamento de Ciências e Engenharia do Ambiente da Faculdade de Ciêmcas e Tecnologia da Universidade Nova de*

Lisboa is the Land Management / Spatial Planning Group of the Sciences and Environmental Engineering Department of Science and Technology Faculty of the New University of Lisbon. This group does research on the environment and participatory models in land management. It has a working group that studies and follows Agenda 21.

Main programmes

- Sustainable Energy Systems programme from MIT Portugal involves topics such as Sustainable Energy Development at Regional & Urban Scales and Urban Metabolism.

Other research programmes in Portugal can be classified as general programmes where calls for proposals are issued without specific reference to urban research.

Topics in urban research

- Imbalance of the urban system;
- Spatial and urban planning**;**
- Urban rehabilitation;
- Urban regeneration;
- Housing policy;
- Environmental planning and management;
- Demography;
- Historical urban areas;
- Urban and cultural heritage.

4.22 Country Profile Romania

Overview of actors

The Ministry of Education and Research (MER) has the main responsibility for the design and implementation of research, development and innovation policies, through its specialised structure, the National Authority for Scientific Research (NASR). For the implementation of government policies in the research area, MER collaborates with other ministries. There are two funding agencies in Romania. First, there is the National Centre for Programme Management – for research programmes coordinated by the Ministry of Education and Research. Secondly, the Executive Unit for Funding Academic Research, for research programmes in universities, focuses on the development of scientific careers and academic research capacity.

Another important actor is the Romanian Academy, which has 14 scientific divisions specialized in technical sciences, fundamental research and socio-humanistic sciences. The division Economic Sciences, Juridical Sciences and Social Sciences studies the economic, social and juridical transition of Romanian society to a special type of social community, appropriate to the nature, inclinations and traditions of the Romanian people. This is the division most relevant for urban sustainability topics.

Some privately financed institutes in Romania also have an important role in urban research:

- SC IPA SA is a research institute that studies, amongst other areas, environmental protection issues;
- The Soros Foundation Romania is a NGO that performs several research studies and programmes on Romanian society.

Main Research Programmes

- Urbanism, spatial planning, construction and transports Programme*;
- Environment, Energy, Resources Programme*.

The programmes above are set up and managed by SC IPA SA.

- Migration and Local Development aims to identify the integration models of the external migration, as well as its effects on the central and local authorities' policy and to promote the models, which allow minimizing the negative effects and maximizing the positive ones (set up by the Soros Foundation).

Other funding programmes in Romania seem to be unspecified and general in terms of topics and areas.

Topics in urban research

- Renovation and upgrading of derelict neighbourhoods;
- Transport;
- transition of the economy;
- ethnic minorities.

From the URBAN-NET research in Romania environmental sustainability emerged as the main research theme. The number of sub themes in the research are more diverse:

* included in the URBAN-NET database

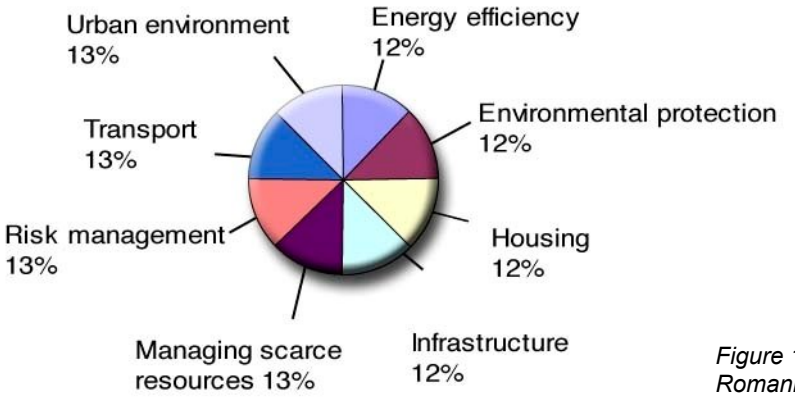


Figure 19: Sub themes in Romanian urban sustainability research as shown in URBAN-NET research. Based on two research programmes.

4.23 Country Profile Slovakia

Overview of actors

The Ministry of Education is the central body for science and technology in the Slovak Republic. The Slovak Republic Government Board for Science and Technology is an advisory body of the Slovak Government for preparation and execution of the state-governed policy for science and technology, related to economic, social and cultural development of the Slovak Republic. The Slovak Research and Development Agency (APVV) was created in 2005. APVV is the only instrument for distribution of public finances for research and development on a competitive basis in Slovakia. APVV is responsible for the execution of the public research financing, for professional and independent selection process of projects and programmes as well as the monitoring of the research implementation.

Universities are the main research performers in Slovakia. The Institute of Spatial Planning and Urban Design of the Slovak University of Technology conducts research activities aiming at the optimal integration of the principles and methods of urban design, landscape architecture and planning, as well as spatial and land-use planning in relation to current trends and requirements of sustainable development. It does not have its own research programme. The Institute of Towns and Regional Development of the Matej Bel University in Banská Bystrica researches issues like integration of economic and environmental aspects into regional strategic development, as well as municipal and regional economy and administration.

Main research programmes

The interdisciplinary research programme Life Quality consists of five sub-programmes. One of these sub programmes is related to urban issues, and is called “Impacts of constructing materials, constructions and geological factors on quality of life”. This sub programme was funded and managed by the Ministry for Construction and regional development. Other programmes in Slovakia are not particularly focused on urban sustainability issues.

Topics

- Urban economics in transformation;
- renovation of large housing estates;
- public space.

The Slovakian research programme surveyed by URBAN-NET is focused on the economic dimension. This programme is divided over four sub themes:

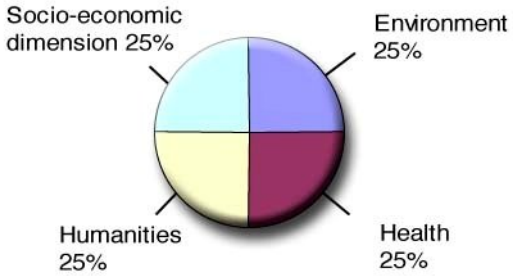


Figure 20: Sub themes in Slovakian research programmes as surveyed by URBAN-NET. Based on one research programme.

4.24 Country Profile Slovenia

Overview of actors

In 2004, the Slovenian Research Agency was established, taking over many of the operational tasks of the Ministry of Science. This agency is the main implementation body for public research and distributes the financial resources. In 2006, these included support programmes in the following fields: technology centres, innovation organisations, and development projects. These programmes do not define specific thematic priorities.

In Slovenia research executives are predominantly public research organisations as universities are still very focused on education. The Urban Planning Institute is such a public research organisation, recognised and partly financed by the Slovene government. Its activities include research and expert development work in the fields of urban and regional planning and related disciplines.

Some universities have created research centres on urban studies. An example is the University of Ljubljana which has a research centre on urban studies: the Centre for Spatial Sociology in the Faculty of Social Sciences. Private companies also perform research activities in Slovenia. The Ljubljana Urban Institute is a private company dealing with spatial planning and related activities.

Main Programmes

Public research funding in Slovenia emphasises scientific excellence per se. Consequently, priority setting is avoided. A more targeted funding mode is used for commissioning research assisting public policy. These schemes are known as Target Research Projects. The largest recipients of the funds in 2006 were the social sciences, since the majority of the target fields related to societal issues (human resources and social cohesion, balanced regional development, economic competitiveness, information society, etc.).

Topics

- Spatial planning;
- regional development;
- housing;
- urban design.

The Slovenian research programme surveyed by URBAN-NET has sustainable development as its main theme. This programme is divided over five sub themes:

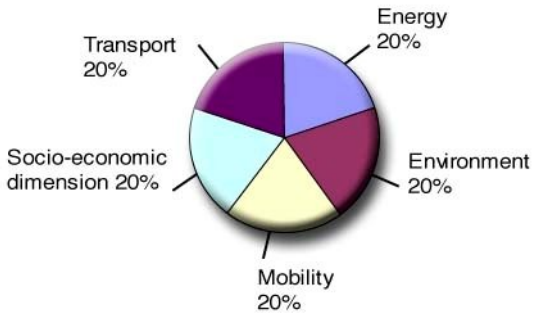


Figure 21: Sub themes in Slovakian research programmes as surveyed by URBAN-NET. Based on one research programme.

4.25 Country Profile Spain

Overview of actors

The Spanish National Plan for Scientific Research, Development and Technological Innovation (R&D&I) is the General Administration's main tool for research in Spain. It was elaborated by the Ministry of Education and Science in cooperation with other Ministries and the regional authorities, with the approval of an Inter-ministerial Commission.

In Spain, several Ministries promote research in urban issues. The Ministry of Education and Science is, primarily through the research institution *"Consejo Superior de Investigaciones Cientificas"* (CSIC) that funds various research programmes via specific institutes, involved in applied research. The Ministry of Housing, the Ministry for the Environment and the Ministry of Public Works fund different research projects with urban themes.

Among them, the Ministry of Housing has a more integrated perspective, funding research activities related to sustainable urban development in which the social, economical and environmental aspects are considered. As such, urban sustainability constitutes a research priority in Spain for the General Administration of the State.

As far as university research is concerned, the different regions (Autonomous Communities) establish their specific regulation and priorities.

Finally, some private foundations and institutions participate actively in urban research, filling in a certain way the institutional gap regarding urban sustainability research in Spain. For instance, the *Fundacion Entorno* is an important private foundation involved in applied research on sustainable development.

Main programmes

Whereas the current Spanish National Plan for R&D&I does not consider urban sustainability as an specific area, the Plan contains some sub themes that are closely related to sustainable urban development: architecture and urban planning, environmental, social and economic subjects; etc. The CSIC has no specific programme regarding urban sustainable development either, but it has programmes relevant to this topic concerning urban competitiveness, urban immigration, and built heritage conservation. For example, the research programme of the CSIC' Instituto de Economia y Geografia (IEG) or the interdisciplinary thematic network for Historical and Cultural Heritage established by CSIC and the Ministry of Education and Science.

The Spanish National Plan for R&D&I for the period 2008 - 2011 contains a specific research line on Building, Spatial Planning and Cultural Heritage that includes the question of the new sustainable urban patterns.

The Ministry of Housing leads many research activities related to sustainable urban development through its Urban Information System, building sustainability and energy efficiency, housing and the land market, etc.

Concerning university research, some research programmes are relevant to URBAN-NET. For example, the sustainable development programme of the University of Barcelona. Within the academic context, some research institutions also address the question of urban sustainability, for example, the Pascual Madoz Institute of Territorial, Urban and Environmental Studies (Carlos III University of Madrid), and the Observatory of Sustainability (University of Alcalá de Henares).

Topics in urban research

- Urban planning;
- Architecture;
- Environment;
- Information society;
- Built heritage conservation;
- Immigration;
- Urban development and land use.

The Spanish research programmes surveyed by URBAN-NET show 3 main themes:

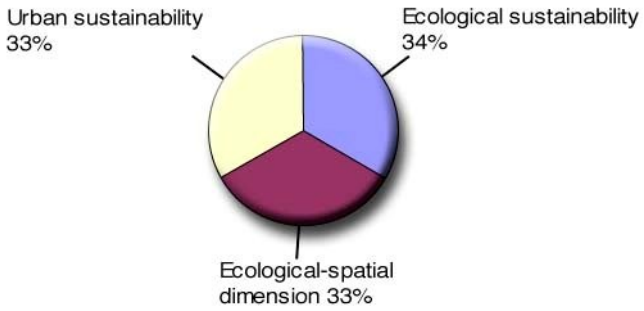


Figure 22: Main themes in Spanish research programmes as surveyed by URBAN-NET. Based on three research programmes.

The number of sub themes in the surveyed Spanish research themes is higher:

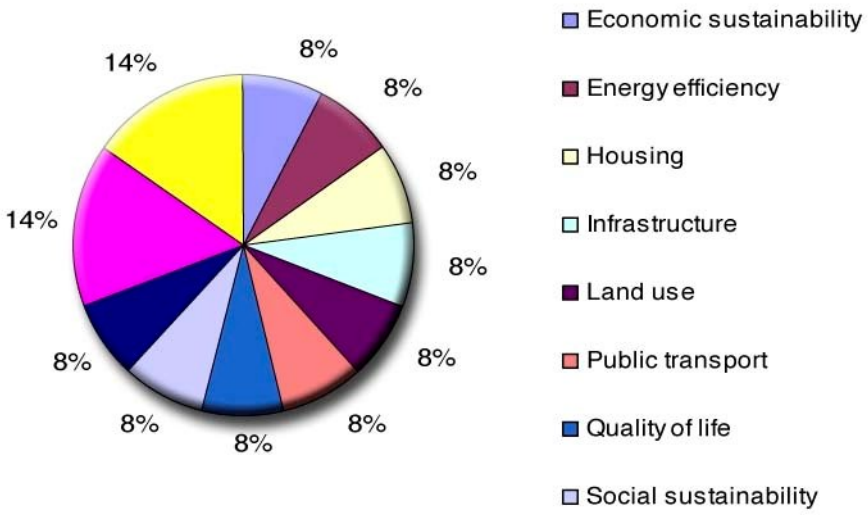


Figure 23: Sub themes in Spanish research programmes as surveyed by URBAN-NET. Based on three research programmes.

4.26 Country Profile Sweden

Overview of actors

The Swedish Ministry of Education, Research and Culture has the responsibility for the coordination of research policy in Sweden. Public resources for research have traditionally gone straight to the universities. In the 1940s, however, a system of research councils gradually began to take shape in Sweden. Nowadays, state research funds are allocated both by means of direct appropriations to higher education institutions and by means of appropriations to research councils and sectoral research agencies. The national research councils allocate their funding on the basis of open calls in the framework of research programmes. The councils consist of representatives from the research community, as well as representatives of the general public appointed by the Swedish government.

The following research councils are relevant to urban research:

- The Swedish Research Council provides support for basic research in all academic disciplines. It is a government agency under the Ministry of Education and Research.
- The Swedish Research Council for Working Life and Social Sciences promotes both basic research and needs-based research relating to welfare, public health, social services, the labour market, work systems and the working environment.
- The Swedish Research Council for the Environment, Agricultural Sciences and Spatial Planning (FORMAS) promotes research on ecological sustainable development, natural resources, land and water resources, and their sustainable utilization.
- The four universities of technology in Stockholm (KTH), Göteborg (Chalmers), Lund (LTH) and Luleå (LuTH) perform multidisciplinary research with relevance for urban sustainability at the departments of architecture and civil engineering.

The bulk of government-financed research takes place at Sweden's universities and other higher education institutions. At the time of writing Sweden counted 13 state-owned universities and 23 other state-owned higher education institutions (university colleges and professional schools). We will only name here some of the most relevant for urban sustainability research:

- The Institute for Housing and Urban Research is a multidisciplinary social science research centre of Uppsala University.
- The Centre for Housing and Urban Research at the Örebro University performs research on the processes and outcomes related to the interplay between society, nature and the built environment.

Another important actor in Swedish urban research is the Centre for Regional Science (CERUM). It was established by the government in 1983 with the mission to initiate and carry out multidisciplinary research projects and to spread knowledge on research findings to various public interests.

Main programmes

- The FORMAS research programmes: "Sustainable city", "Public space" and "Liveable cities" [*].

[*] included in the URBAN-NET database

Topics in urban research

The Swedish government has proposed a concentration of research funds focused on three broad areas: life science, engineering and sustainable development. Within the sustainable development area, the following themes are mentioned: health, biodiversity, cultural/historic values, ecological productivity and the management of natural resources. These themes are in line with the contents of the Swedish environmental goal 'a good built environment'. Broad interdisciplinary approaches including social, economic and ecological dimensions are recommended. The next proposition is due in 2008.

The URBAN-NET research showed different main themes in the surveyed Swedish research programmes:

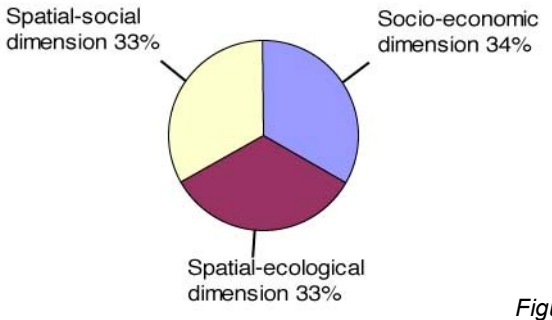


Figure 24: Main themes in Swedish urban sustainability research as surveyed by URBAN-NET. Based on three research programmes.

As in the cases of France, Germany, Malta and the Netherlands, there also exists great variety in the surveyed research programmes sub themes in the Sweden:

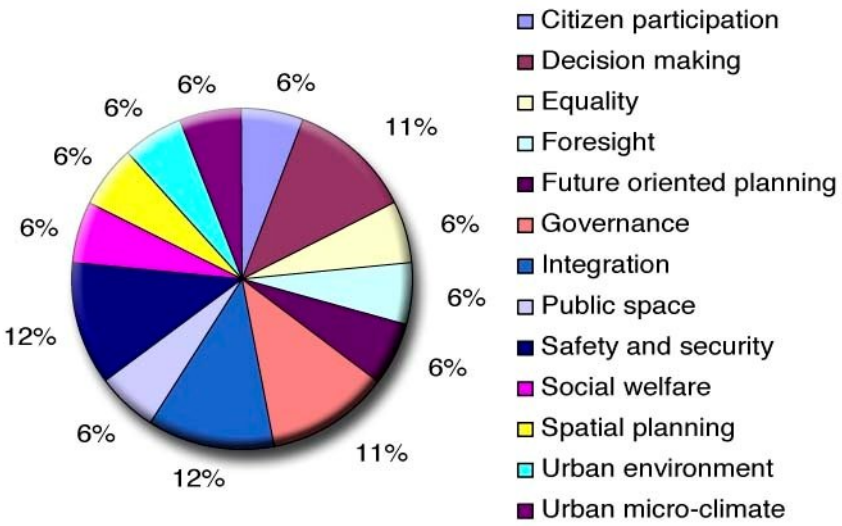


Figure 25: Sub themes in Swedish research programmes as surveyed by URBAN-NET. Based on three research programmes.

4.27 Country Profile Turkey

Overview of actors

The main research funding body in Turkey is the Scientific and Technological Research Council of Turkey (TUBITAK). TUBITAK is also responsible for designing research and innovation policies as well as developing and managing main research programmes.

The most important research performers in Turkey are the universities. Established in 1961, the Department of City and Regional Planning at the Middle East Technical University (METU) is the first and one of the largest schools of planning in Turkey. It has played a key role in the education of planners and educators, and in development of urban research. Other universities involved in urban sustainability studies are:

- Istanbul Technical University, Faculty of Architecture, Department of Urban and Regional Planning;
- Bilkent University, Faculty of Art, Design and Architecture, Interior Architecture and Environmental Design;
- Gazi University, Faculty of Engineering and Architecture, Department of City and Regional Planning;
- Izmir Institute of Technology, Department of City and Regional Planning;
- Mersin University, Faculty of Architecture, Department of City and Regional Planning;
- Yildiz Technical University, Department of Urban and Regional Planning.

The Turkish Academy of Sciences (TÜBA) is also active in environmental and sustainability research. TÜBA's fellowship programme provides support for doctoral and post-doctoral research on urban issues. There are also non-governmental research organisations and urban research institutes active in this research field. Two of these organizations are:

- The Economic Policy Research Foundation of Turkey (TEPAV) is an independent, non-governmental think-tank, established in October 2004. TEPAV contributes to policy discussions in Turkey and aims to remove the gap between academic research and policy implementation.
- Urban and Environmental Planning and Research Centre at the Istanbul Technical University is a multidisciplinary centre which contributes to research activities, provides and coordinates communication between researchers and public and private sectors, and collaborates with other institutions at the national and international level.

Main Programmes

There are no research programmes specific to urban issues in Turkey. The Turkish research funding system has open-theme research programmes. Projects that focus on urbanisation and urban sustainability are financed through these programmes.

Topics in urban research

Urban research includes a range of issues from transformation of urban spaces to socio-spatial processes in urban areas. Urban research is also carried out as focused more on economic and social issues. The main topics in urban research are: risk management, urban

poverty and social exclusion, air quality and transport, energy use and infrastructure, sustainable housing and urban management.

4.28 Country Profile United Kingdom

Overview of actors

In the UK most research funds are derived from and accessed through two main routes:
1) Indirectly from the government Department for Innovation, Universities and Skills via the seven research funding councils or
2) Directly from the many government departments.

The research councils tend to fund original or 'blue sky' research to be carried out by universities. Three research councils fund research relevant to issues relating to urban sustainability: the ESRC (Economic and Social Research Council), the EPSRC (Engineering and Physical Sciences Research Council) and the NERC (Natural Environment Research Council). Since the beginning of the 1990s, when sustainable development became a top priority for the UK government agenda, the profile and level of activity of urban sustainability research has increased through many programmes and collaborative actions.

Programmes of the government departments tend to be more directly applied to policy formulation and the programmes that have a close fit to urban sustainability issues tend to be mainly under the programmes of the Communities and Local Government Department, and to a small extent the Department for Transport.

University research is very well developed in the UK with many research activities being undertaken that are part of programmes and projects of interest to URBAN-NET. Collaborations between UK universities on integrated approaches are very common, as is the stakeholder participation of public, private and commercial bodies. An example of this is the Sustainable Urban Forms Consortium which is a collaborative cluster of projects under the Infrastructure and Environment sub-programme of the EPSRC, between The Oxford Institute for Sustainable Development of Oxford Brookes University, School of the Built Environment of Herriot Watt University, Department of Animal and Plant Sciences of Sheffield University, Department of Civil Engineering of University of Strathclyde University and of DE Montfort University and a number of public and private stakeholders included in the consortium.

Many UK universities have an involvement in urban sustainability research of interest to URBAN-NET. These are too many to list in detail here and some of these have academic and research departments dedicated specifically to urban related topics.

Main programmes

Current and recently completed programmes and their sub programmes of central interest to URBAN-NET can be browsed through the online databases of the main research organisations already mentioned and include the following:

ESRC (Economic and Social Research Council)

- Skills and Knowledge for Sustainable Communities*;
- Towards the Civilized City and Cities: Competitiveness and Cohesion*;

* included in the URBAN-NET database

* included in the URBAN-NET database

EPSRC (Engineering and Physical Sciences Research Council)

- Infrastructure and Environment Sub-programme includes: Implementation Strategies for Sustainable Urban Environment Systems, Sustainable Urban Environment*; Sustainable Urban Form Consortium, Urban sustainability for the twenty-four hour city, Strategies and Technologies for sustainable Urban Waste Management';
- Climate Change Sub-programme includes: Sustainable Cities-Options for Responding to Climate Change Impacts and Outcomes, Sustaining Knowledge for a Changing Climate;
- Sustainable Environments and Communities Sub-programme includes: Accessibility and User Needs for sustainable Urban Environments, An Integrated Approach to Sustainable Urban Redevelopment, Pollutants in the Urban Environment, Sustainable Regeneration, Future Urban Technologies, Regional Visions of Integrated Sustainable Infrastructure Optimised for Neighbourhoods.

NERC (Natural Environment Research Council)

- Urban Regeneration and the Environment*;
- Engineering Cities*.

Communities and Local government

- Sustainable Communities;
- Local and Regional Government;
- Neighbourhood Renewal;
- Social Exclusion;
- New Horizons.

Department for Transport

No specific programme, but many projects of a number of programmes are relevant.

Research topics

Research projects of central significance are often fragmented and can be found in programmes and sub programmes that are not intuitively urban-related but have interest to URBAN-NET. Topics include: urban form; planning, modelling for planning decision support tools, regeneration, quality of life; impacts of and adaptation to climate change; skills and knowledge for sustainable communities, homelessness, green spaces, access and mobility, sustainable transport, urban pollutants, socio-environmental dimensions of the city; rural-urban relationships, energy consumption patterns, carbon footprint, integrated infrastructure, local government, regional governance, citizen participation, local services delivery, neighbourhood deprivation, urban poverty, social cohesion, social inclusion/exclusion, housing.

Half of the surveyed research programmes in the UK indicated social sustainability to be their main theme. In addition three other main themes came to the fore:

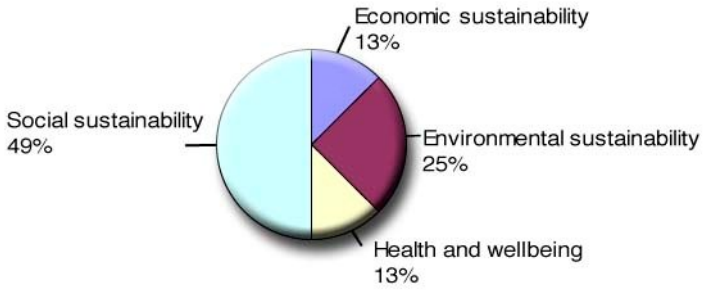


Figure 26: Main research themes in UK research programmes as surveyed by URBAN-NET. Based on nine research programmes.

As in the cases of France, Germany, Malta, the Netherlands and Sweden, there also exists great variety in the surveyed research programmes sub themes in the UK:

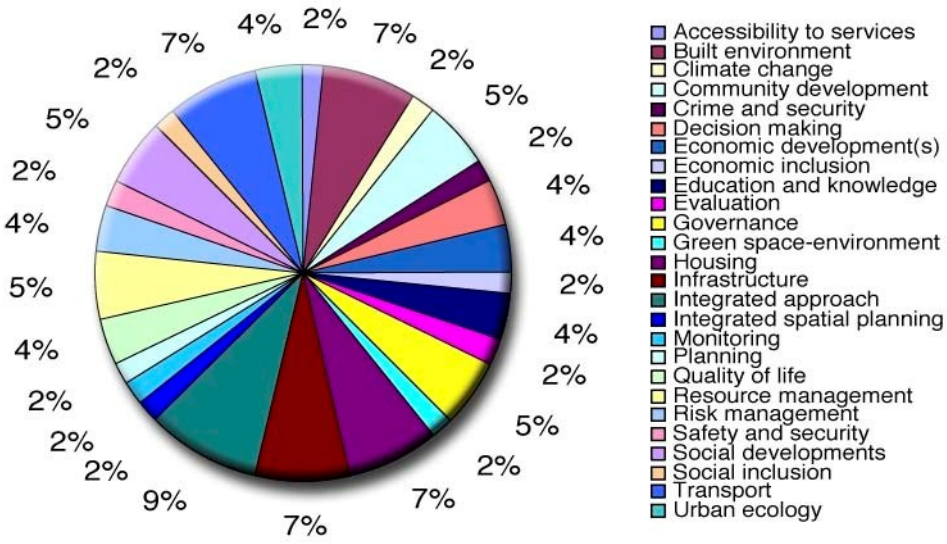


Figure 27: Sub themes in UK research programmes as surveyed by URBAN-NET. Based on nine research programmes.

CHAPTER 5
COMPARISON OF THE PROGRAMMES IN THE DATABASE

5.1. Research programme themes

5.1.1. The URBAN-NET taxonomy

In order to learn about the themes of the different programmes surveyed, two questions were included in the research template. These questions were based on a taxonomy designed by the URBAN-NET consortium prior to the survey:

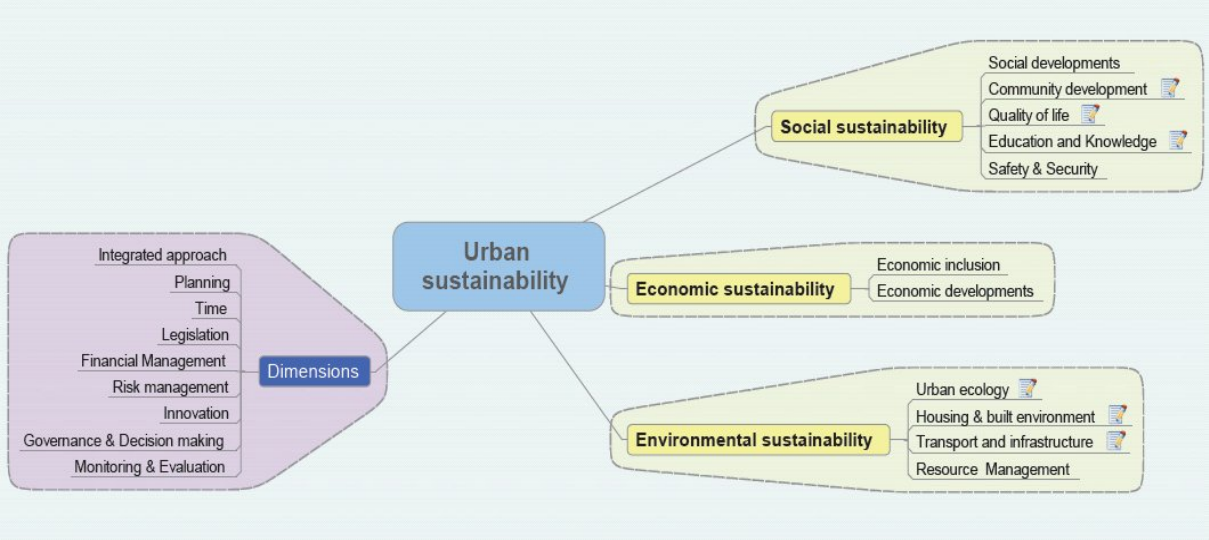


Figure 28: Initial taxonomy (Figure 2 on page 6 shows an alternative depiction). Please refer to annex V for an explanation of the way in which this taxonomy was created.

Social, economic and environmental sustainability were taken as the three main topics of urban sustainability, with subdivisions in each. Alongside, overarching dimensions that could potentially be valid for a research programme no matter which of the topics it referred to were determined. Respondents were asked to, first, indicate under which of the three main topics the research programme fell and, secondly, to specify the sub-themes of the main themes and the dimensions that applied to the programme.

The approach mentioned above led to the following results. Over half of the respondents[5] to these questions indicated environmental sustainability as the main topic of their research programme, followed by social sustainability in the second and economic sustainability in the third place.

[5] In first instance only the responses that matched the categories set out on the URBAN-NET taxonomy were counted. The response rate amounted to 59%. As such the figures mentioned in this paragraph apply to this 59% of the respondents only.

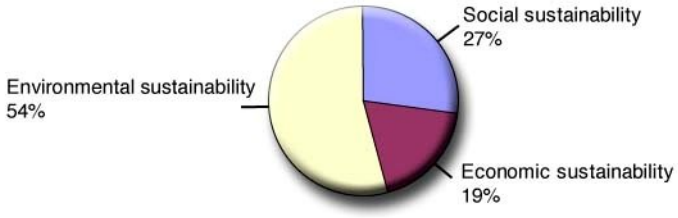


Figure 29: Division of programmes surveyed along main topics. Response rate: 59%

Within these three main topics the following sub-themes were indicated.

Environmental sustainability	
Sub-themes	**% of total responses in the category environmental sustainability**
Transport & infrastructure	40
Housing & built environment	36
Urban ecology	13
Resource management	11

Social Sustainability	
Sub-themes	**% of total responses in the category social sustainability**
Quality of life	42
Community development	23
Social developments	16
Education & knowledge	13
Safety & Security	6

Economic sustainability	
Sub-themes	**% of total responses in the category social sustainability**
Economic developments	71
Economic inclusion	29

In addition respondents indicated that the following dimensions are applicable to the surveyed research programmes:

Research programmes' dimensions	
Dimension	**% of total responses in the category dimensions**
Governance & decision making	26
Integrated approach	21
Planning	21
Risk management	12
Monitoring & evaluation	7
Innovation	5
Time	5
Financial management	2
Legislation	1

5.1.2. A new taxonomy

However, a substantial number of respondents (41%) did not follow the method set out in the questions on the main thematic areas, sub-themes and dimensions. Instead, sub-themes were sometimes indicated as main themes; dimensions turned out to be sub-topics of the programmes; respondents filled out terms that had not been foreseen in the taxonomy; etc. By altering or adding main themes and sub-themes, the respondents put down the framework for a different taxonomy[6], which will become apparent in the following pages. A stock-taking of the terms filled out as main themes of the research programmes leads to the terms displayed in figure 6. The size of the words indicates their relative importance with respect to one another[7], that is the relative difference between the number of times a term was mentioned by the respondents. The sub-themes mentioned by the respondents are displayed in the same way in figure 7.

[6] When looking at the new taxonomy, it is important to take into account that respondents were not invited to offer their own taxonomy terms in the questionnaire. However, quite a few chose to do so. Consequently, the taxonomy that appears is 'a product of stubbornness' rather than a full overview of all terms respondents would have chosen were they invited to do so. Notwithstanding, the changes indicated by the respondents who chose to fill out altered terminology provides an indication of the scope and diversity of the research programmes surveyed.

[7] For the exact count, please refer to Annex III.

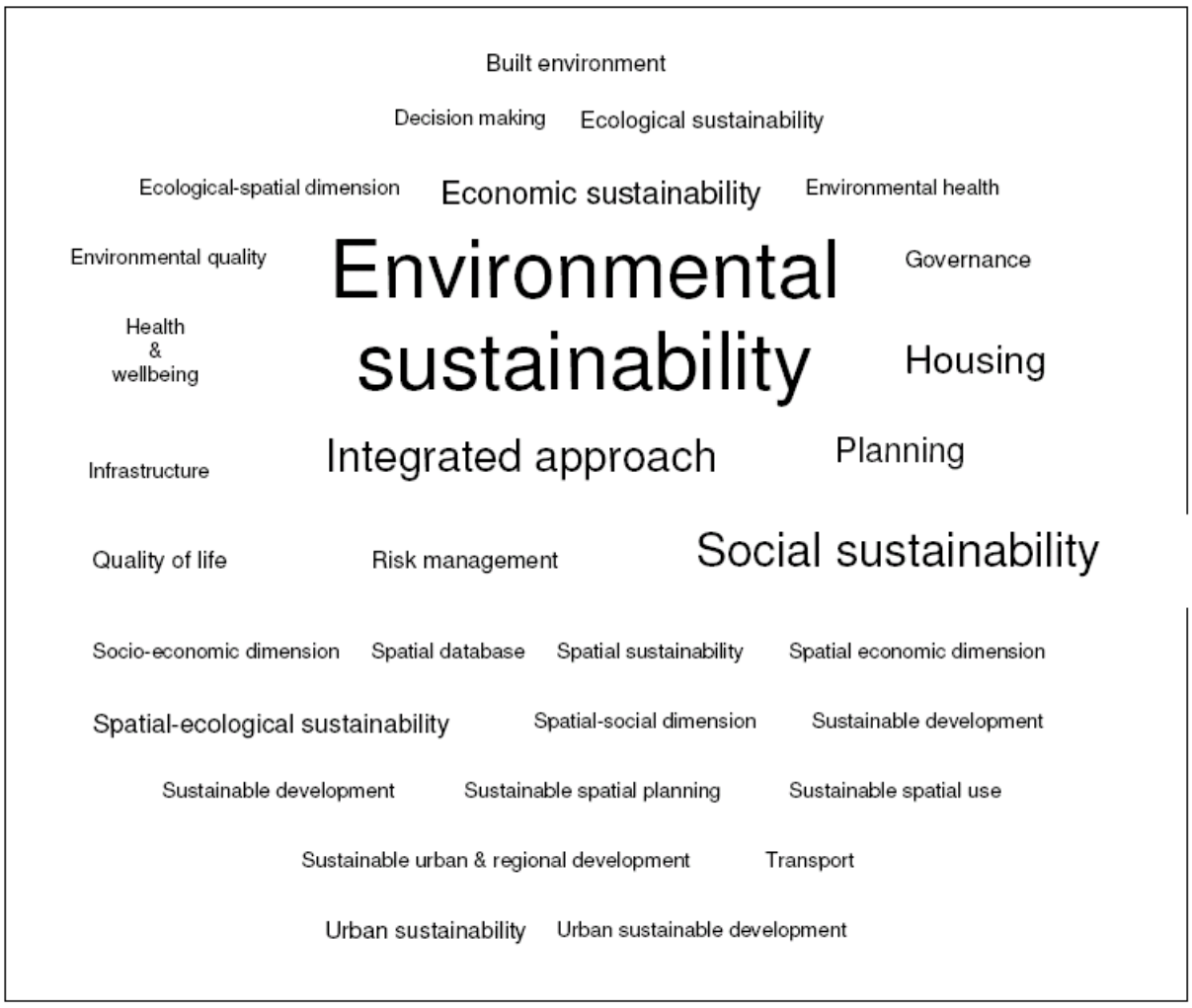


Figure 30: Terms indicated as main research programme themes by respondents. Image based on a 93% response rate. (Exact count indicated in Annex III.)

Figure 31: Terms indicated as research programme sub-themes by respondents. Image based on a 89% response rate. (Exact count indicated in Annex III.)

Before the research started, the URBAN-NET consortium designed a taxonomy[8] that reflected the premise that a sustainable urban research programme is based in the integration of clusters of social, economic and environmental sustainability. Nine cross-cutting dimensions (planning, time, legislation, financial management, an integrated approach, legislation, risk management, innovation, governance & decision making, as well as monitoring & evaluation) enforced the clusters.

The stock-taking of answers provided by respondents, reveals a different image. When the new main and sub themes are placed into a taxonomy, each bearing their relative importance within their own category expressed in the font size, a new taxonomy of a different magnitude appears. This taxonomy is represented in figure 8.

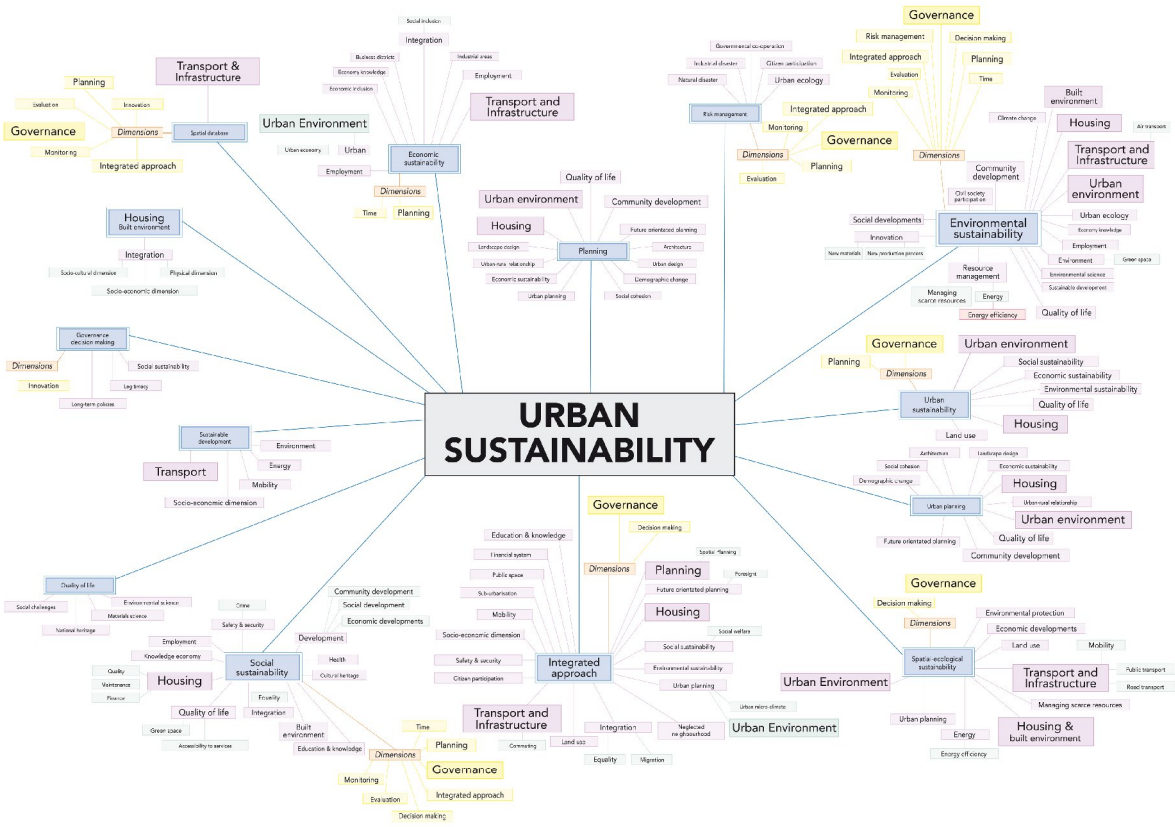


Figure 32: Overview of new taxonomy.
Due to the size of the chart it is recommended to view this page at 200% or print the page on A3 format.

Environmental sustainability emerges as the most prevalent theme among the surveyed programmes. This theme is closely followed by social sustainability and the integrated approach. The stock-taking of the terms used to describe the sub-themes (see figure 7) leads to different results. Here transport emerged as the most prevalent sub-theme. It is followed by governance, infrastructure and housing.

[8] Please refer to figure 4.

5.1.3. The taxonomies compared

When compared with the original taxonomy drawn by the URBAN-NET consortium (please refer to figure 4), this new taxonomy leads to the following conclusions. In the new taxonomy, the three main themes most often mentioned by respondents are: environmental sustainability (54%), social sustainability (24%) and integrated approach[9] (22%).

Consequently, the theme economic sustainability, which the URBAN-NET consortium supposed to be a main constituent of urban sustainability research, is less present in the research programmes surveyed than expected. This might indicate that economic sustainability is either a theme to which relatively little importance is attributed within the area of urban sustainability research or that it is a theme that is underrepresented in urban sustainability research programmes.

The three areas indicated as the most important main themes among the research programmes surveyed each have their own sub themes attached. In order to gain more insight into these sub-themes and to take into account the original taxonomy designed by the URBAN-NET consortium, new diagrams were developed for each of the three most important main themes. These diagrams (figures 9,10 and 11) exist of different rings around a circle. The outer ring is divided into economic, social and environmental realms. The sub themes placed in this outer ring[10] are either of an economic, social or environmental nature, or can be placed within two of these realms at the same time. The inner ring represents the dimensions, as was the case in the original diagram designed by the URBAN-NET consortium (please refer to figure 2). These dimensions can be seen as the instruments that facilitate or enable research outcomes. The sub themes placed in the circle in the middle belong to the economic, social and environmental sustainability realms at the same time.

[9] The term integrated approach refers to an integrated approach of the research at hand, in contrast to the traditional disciplinary approach that reduces the integrated, complicated reality into one dimension.

[10] The sub-themes were placed in the diagrams on the basis of research programme descriptions provided by the questionnaire respondents.

Figure 33: Division of the sub-themes within the main theme ´Integrated approach´

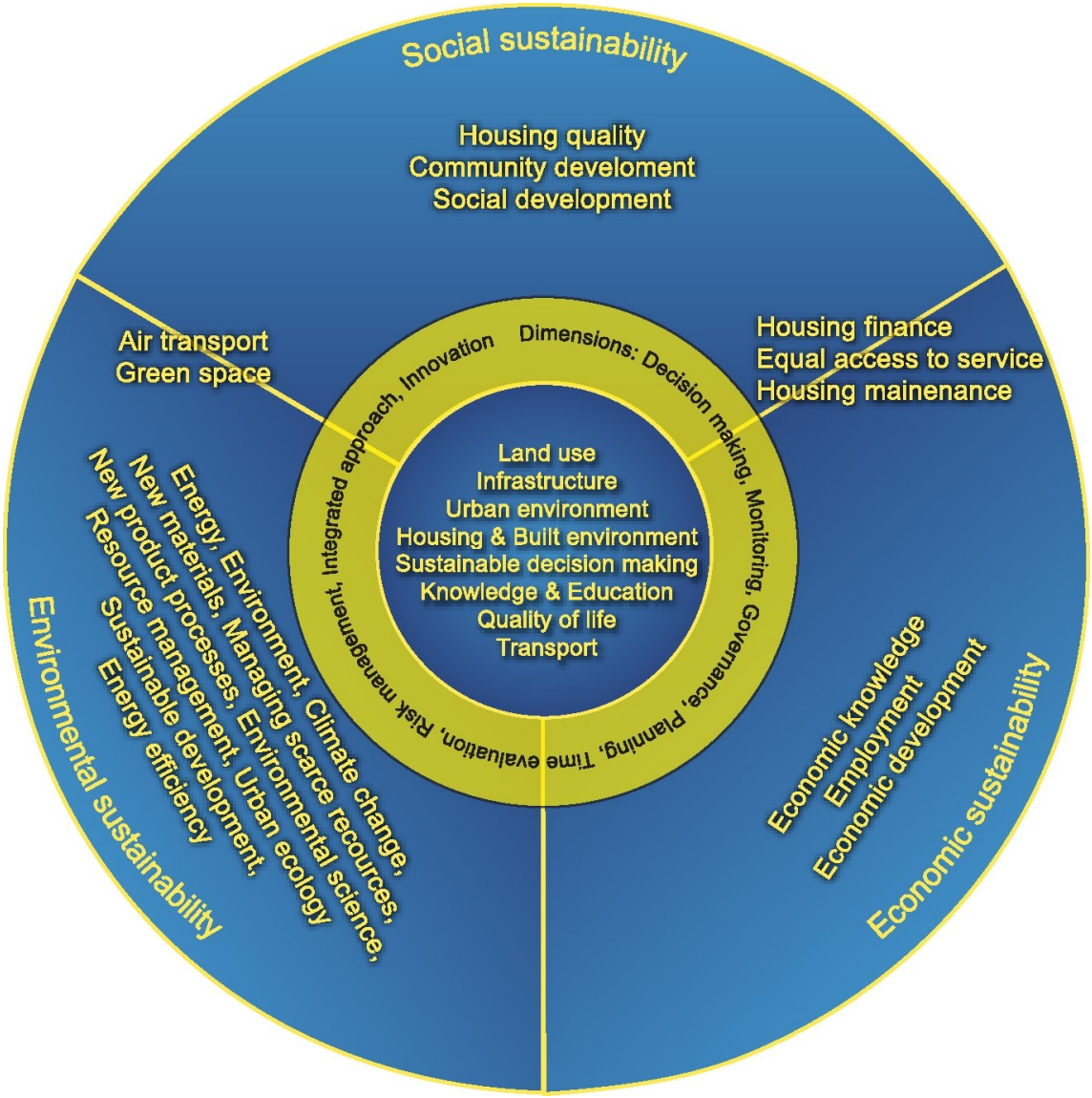


Figure 34: Division of the sub-themes within the main theme ´Environmental sustainability´

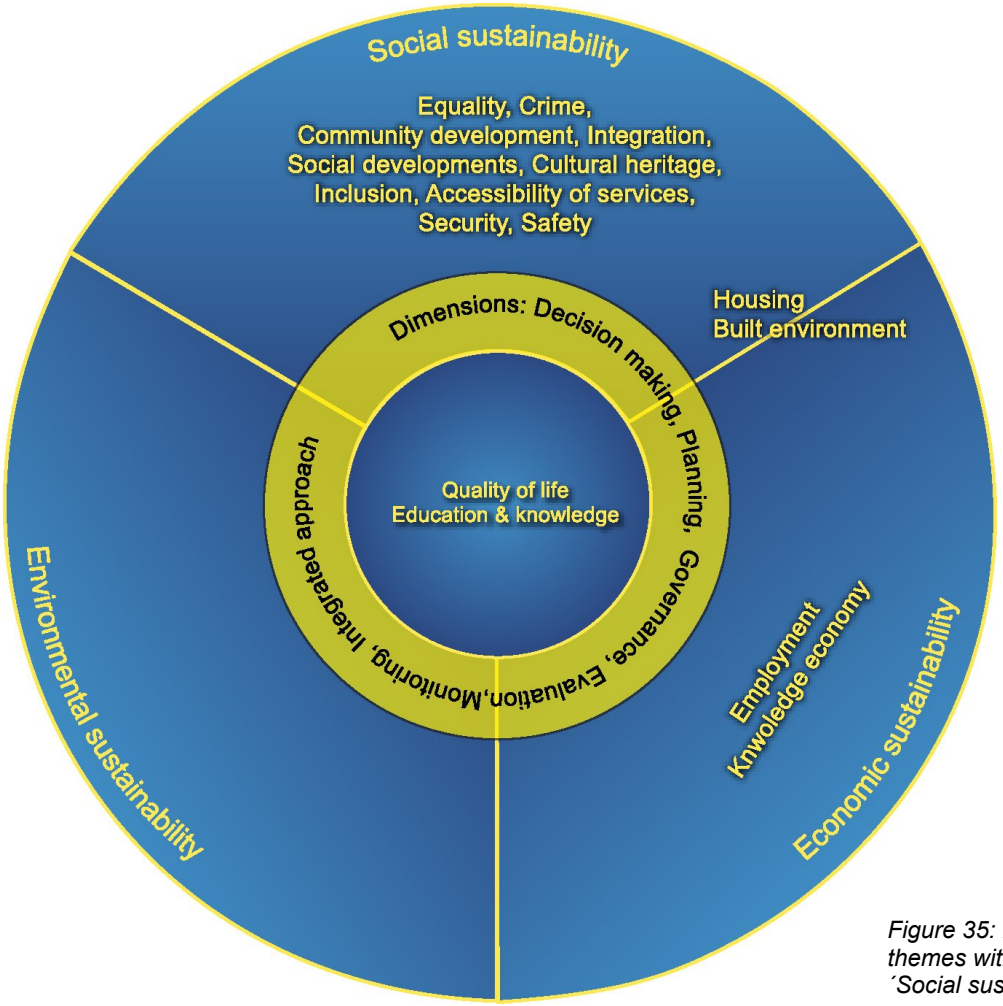


Figure 35: Division of the sub-themes within the main theme ´Social sustainability´

Examination of these diagrams brings forward another set of conclusions with regard to the research programmes surveyed. First of all, when looking at the main theme 'integrated approach'[11], it is apparent that the large majority of the sub-themes can be found in the social realm and the inner circle. Among the research programmes surveyed, those aiming at an integrated approach are predominantly focused on either social sustainability or the combination of social, economic and environmental sustainability. The dominant presence of the social topics in the integrated approach main theme, indicates the existence of a strong connection between the integrated approach and the realm of social sustainability in the research programmes surveyed. This certainly is not the case in the realms of environmental sustainability or economic sustainability. As such it might be beneficial for urban sustainability research programmes to work towards an integrated approach in the fields of economic and environmental sustainability as well.

When, secondly, looking at the main theme 'environmental sustainability', it is not surprising that the large majority of the sub themes can be found in the sub division environmental

[11] The term integrated approach refers to an integrated approach of the research at hand, in contrast to the traditional disciplinary approach that reduces the integrated, complicated reality into one dimension.

sustainability. Still, it is important to notice that all sub categories (be it social sustainability, economic sustainability or the inner circle) are reasonably filled. From this one might conclude that urban sustainability research focused on environmental sustainability, is not exclusive of the social and economic realms.

Another striking feature of the main theme 'environmental sustainability' is the absence of certain sub-themes among the programmes surveyed. Water management (e.g. water retention, inundation, drought, etc.) and waste management (e.g. waste water treatment, waste streams, etc.), two themes that can be judged as of primordial importance to urban sustainability, are not mentioned among the sub-themes of the environmental sustainability research programmes surveyed. This might indicate that water and waste management research are largely underrepresented, maybe completely absent, in the field of urban sustainability research.

Looking, thirdly, at the main theme 'social sustainability', there are other elements that come to the fore. It is not surprising to see that most of the sub-themes fall within the social sustainability realm. On the contrary, the absence of any sub-themes in the environmental realm is more striking. This can be taken as an indication that research on urban social sustainability lacks a relation with environmental sustainability, which is all the more astonishing considering that research focused on environmental sustainability does include the social realm.

Fourthly, the inner ring of the diagrams displays the dimensions that are applicable to the research. Here one observes that not all dimensions are mentioned in each diagram. None of the main research themes comprises research on all the dimensions originally set out in the taxonomy made by the URBAN-NET partners (see figure 2). Financial management and legislation are never mentioned as dimensions of social sustainability, environmental sustainability or integrated approach focused research on urban sustainability. As such appears the question whether urban sustainability research is sufficiently connected with the financial and legal practicalities of urban sustainability.

5.2. Actors

Figures 12 and 13 show that the surveyed programmes are most frequently set up by national governments. Half of the respondents indicated their programmes have a national scope, which indicates a relation with the fact that national governments most often set up a research programmes. 49% of the respondents indicated their programme has a regional or local scope. However, local and regional governments do not have the second and third leading roles in programme establishment. After national governments, academic partners from various disciplines and research organisations are most often set up a research programme.

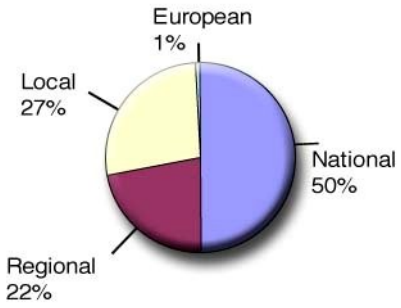


Figure 36: Geographical nature of the programme. Response rate 96%. Respondents could give more than one answer.

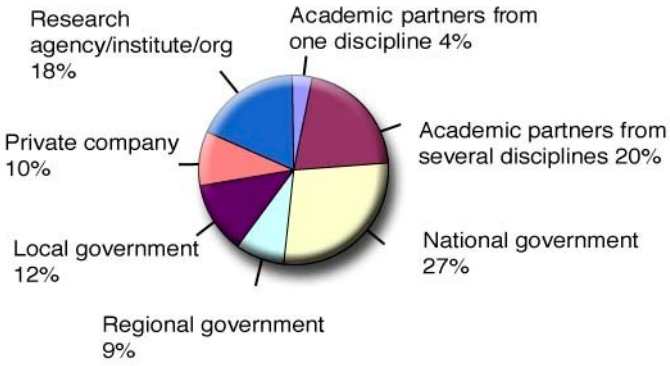
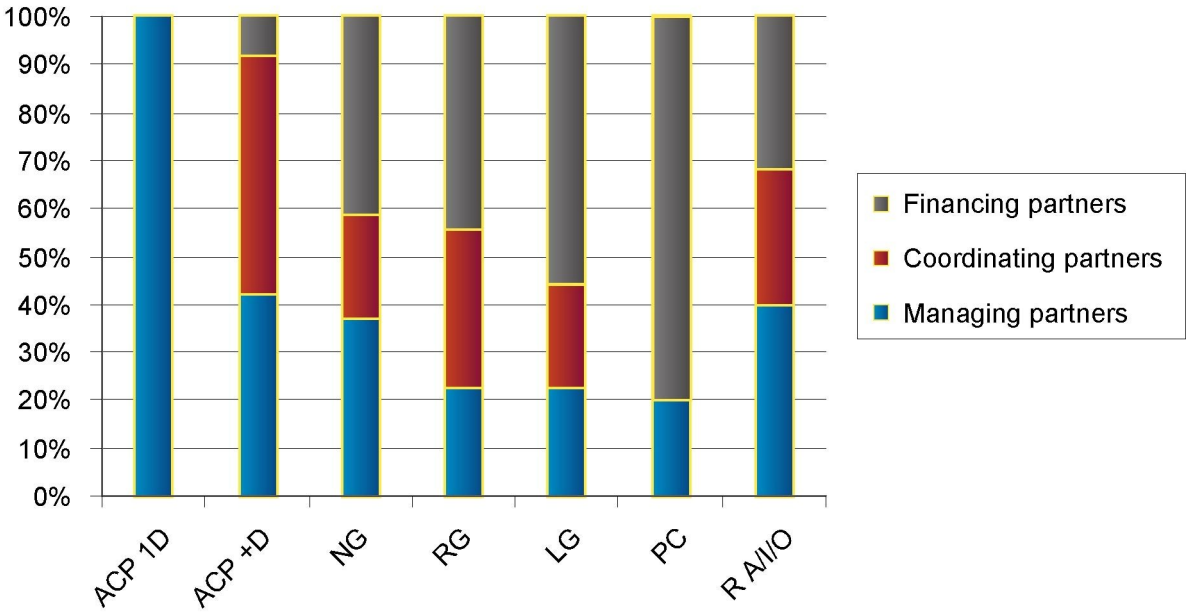


Figure 37: Actors involved in the establishment of the programme. Response rate: 99%. Respondents could give more than one answer.

The survey shows that national governments most frequently take the lead in the management (45%), coordination (35%) and financing (53%) of programmes. Academic partners from several discipline and research organizations also frequently play a role in the management and coordination of the research programmes. Diagram 14 shows a relative comparison between the roles taken up by the different organisations involved in the surveyed research programmes.

Figure 38



ACP1D = Academic partners from 1 discipline; ACP+D = Academic partners from more than one discipline; NG = National government; RG = Regional government; LG = Local government; PC = Private company; R A/I/O = Research agency/institute/organization

Figure 38: Relative comparison of roles played by different partners involved in the surveyed programmes.

5.3. Programme organisation

Of the 68 respondents (92% of the total respondents) 54 indicated their research programme focus or thematic area(s) were decided by more than one actor. In 14 programmes (19% of the responses) only one actor decided on the focus or thematic areas. In these cases, the national government would most often take this decision.

Figure 14 shows which actors were able to decide on the thematic area of a programme at its inception. National governments are most frequently able to decide on the programme focus at its start, followed by academic partners from several disciplines and research organisations.

In addition, 72% of the survey respondents indicated that it was possible to change the programme focus or themes during the course of the programme. Again, the national government was most frequently able to decide on the programme focus.

Within the surveyed research programmes, research projects were commissioned via open calls for tenders (51%), directed commissioning to research bodies (13%) or a combination of both (36%). The applications for funding were assessed by external reviewers (41%), internally (14%) or through a combination of internal and external reviews (45%).

At a response rate of 69% (51 of the total 74 respondents), the majority of the programmes (70%) were subjected to both a mid-term and a final evaluation. In 6% of the cases no evaluation was carried out at all.

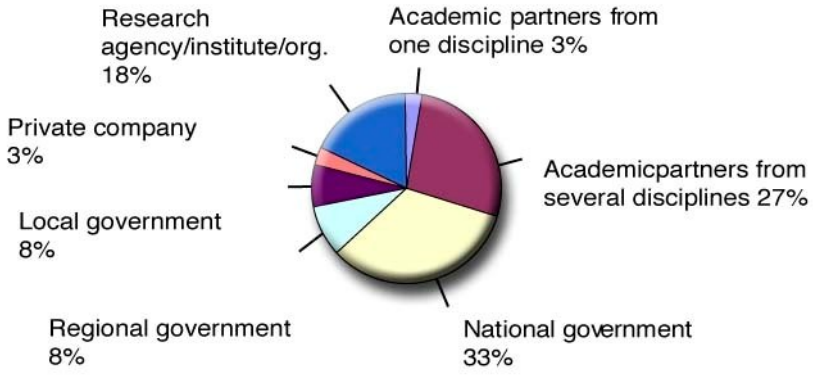


Figure 39: Research programme focus decision makers. Response rate: 92%. Respondents could give more than one answer.

5.4. Programme financing

For each research programme in the database the financial resources and the total budget available for the programme were identified. The latter will not be described in this comparative chapter, since the total budget of a programme can only be understood in the (national) context of a programme. The budgets for the research programmes in the database vary greatly, ranging between 15.000 and 72 million euro.

However, the nature of the financial resources used is more interesting for this statistical comparison. Please note that most research programmes in the database have more than one source of finances. This means that one single programme can receive funding from all financiers mentioned in figure 15.

42% of the programmes received part of their funding from national research budgets. Academic subsidies account for another 17% of the programme financing. The diagram also shows that co-financing (19%) is a more common funding stream than match funding (6%) for third parties that are not involved as actors in a programme. Furthermore, it shows that European funds (9%) and private companies (7%) are not commonly used as financial resources for research programmes in the URBAN-Net database.

By comparing figure 16 with figures 13, 14 and 15 we obtain a deeper insight into the role of the main actors in urban research programmes:

- Graph 13 shows that national governments are involved in 27% of the establishments of research programmes surveyed whereas graph 16 indicates that 56% of the programmes are financed by the national government. From figure 15 follows that national government decides on changes in programme focus in 33% of the cases. As such, national government plays a major role in the financing of and decision making on programmes, whereas (as graph 14 shows) the coordination of these programmes is left with other organisations. Nonetheless, national governments have a major influence on the urban research programmes surveyed.
- Next to the national governments, the academic community holds major influence on urban research programmes. In 24% of the cases, academic partners are involved in the establishment of such a programme (figure 13). Respondents also indicated that the

academic community is involved in changes of programme focus areas at a 30% rate. Finally, the academic community finances 17% of the programmes surveyed. This shows that the academic community holds most influence in the management and coordination of the programmes, while being less influential through programme finance.

- In terms of influence, the third party involved in the programmes are the research organisations (agencies, institutes). While the provenance of the research organisations financial resources did not become clear through the research carried out, these organisations are clearly present as financing partners (graph 16). Their role in the management and coordination of urban research programmes is also undeniable.

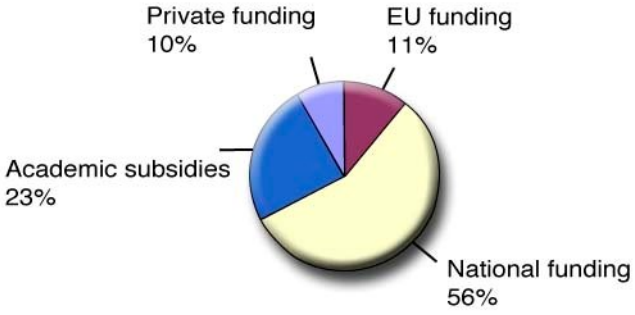


Figure 40: Sources of programme financing. Response rate: 95%. Respondents could give more than one answer.

5.5. Commissioning and assessing research project

Figure 17 shows how research projects were commissioned in the programmes surveyed.

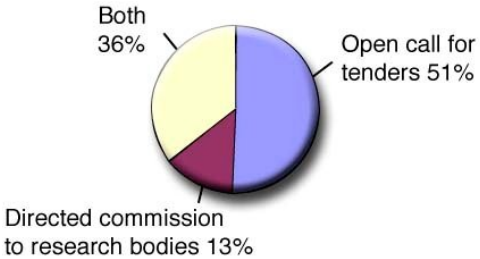


Figure 41: Ways of commissioning research projects. Response rate: 96%. Respondents could give more than one answer.

About half of the programmes surveyed (51%) issues open calls for tenders to commission research programmes. A substantial number of programmes (36%) combines open calls for tenders and the direct commissioning of research. The sole use of direct commissioning is the least used method.

In case of open calls (or both open calls and direct commissioned research), the programmes set up an assessment procedure for the research applications. Figure 18 indicates how the assessments were organised.

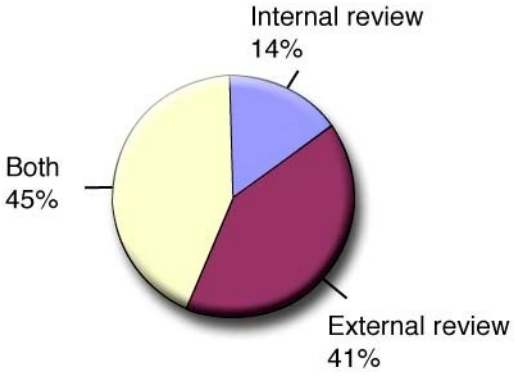


Figure 42: Means of research project review. Response rate: 86%. Respondents could give one answer only.

It shows that a small majority of the programmes (45%) uses a mixed assessment procedure: both members of the commissioning organisation (internal review type) and independent experts (external review type) examine the projects. Most of these programmes divide tasks between internal reviewers and external reviewers. Furthermore, the diagram shows that external review is practiced in 41% of the cases, and that 14% of the programmes choose for an entirely internal review procedure.

When asked what criteria are used to grant research proposals, the following requirements were cited most often:

1. Adequacy of budget or resources required;
2. Methodology;
3. Quality of the consortium;
4. Scientific quality and/or excellence;
5. Degree of innovation.

When asked for the criteria used to assess the research projects or programmes at their end, the following points were brought forward:

1. Adequate management / use of the resources provided;
2. Scientific and technological outcomes benefitting society;
3. Overall quality;
4. Whether project results are in line with national priorities and governmental strategy;

5. Societal relevance and impact.

5.6. Dissemination

The following diagram shows at which level the dissemination of the programme's outcomes was organised.

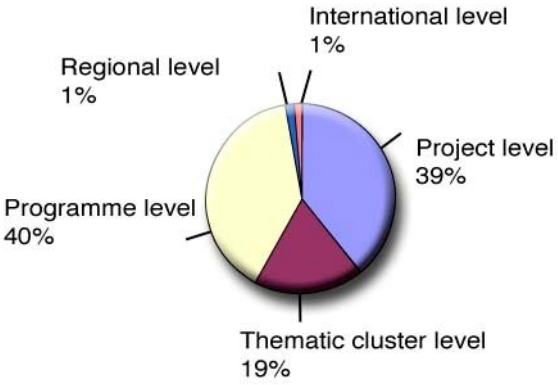


Figure 43: Programme outcomes dissemination organisational levels. Response rate: 91%. Respondents could give more than one answer.

The dissemination of programme outcomes tends to be organised on the programme and/or project levels. Results are either distributed centrally through the programme or in a decentralized manner through the research project groups.

The dissemination targets different groups, which are outlined in figure 20.

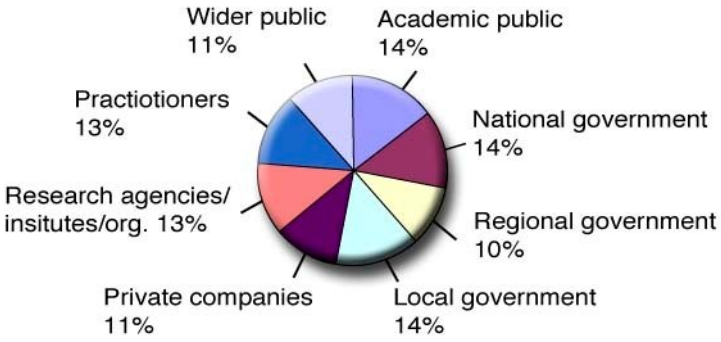


Figure 44: Dissemination target audiences. Response rate: 88%. Respondents could give more than one answer.

Considering the prominent roles played by national governments and the academic community in the financing, establishment and management of these programmes, it is not surprising to see these two appear among the main target groups. The frequent appearance of the local government as a target group can be explained through the subject matter of the research – urban sustainability. The results will, logically, be distributed at the local level, which will often be a municipality or metropolitan area.

The dissemination to research organisations is, like it was the case for the national governments and academic community, related to the role these organisations play in the financing, coordination and management of the programmes. The distribution to practitioners will most likely involve individuals working at governmental or municipal levels.

Four means of communication figured prominently in the research results. These are displayed in figure 21.

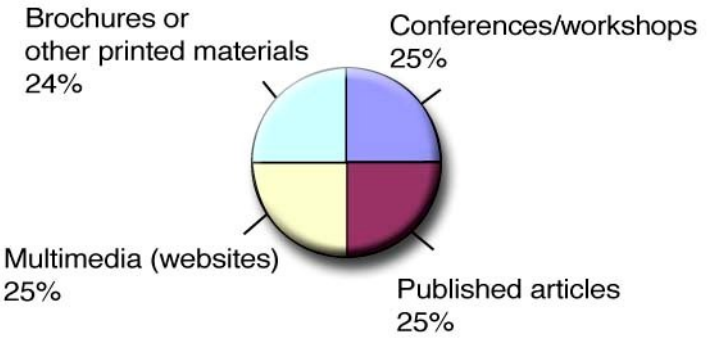


Figure 45: Means of dissemination. Response rate: 92%. Respondents could give more than one answer.

As the diagram shows, almost all programmes used *all four* possible ways to disseminate research results to their target groups. Some programmes also use other dissemination methods, such as:

- A training programme for civil servants,
- Teaching,
- Information booths,
- A TV documentary,
- Face to face meetings,
- Letters,
- Excursions,
- A best practice database, and
- In-company training.

CHAPTER 6
GOOD PRACTICE

One of the tasks of WP2 is to undertake a subjective analysis of national programmes to establish criteria for success, the so-called good practices of research programmes. In this chapter, the good practices are divided by their distinct aspects: thematic area, actors, organisation, commissioning and assessing projects, dissemination, and impact. Finances were kept out of this analysis, since this particular aspect depends heavily on national contexts and is not suitable for a European review.

6.1. Research programme themes

Continuing competitiveness and sustainable development in European urban areas will depend on the success or failure of cities, towns and metropolitan areas in adopting a holistic approach to policy making, planning and management. Although some aspects of the issues in urban areas can be tackled on a sectoral basis, this is not an adequate approach on its own. Sustainable urban development requires an integrated approach. This is where urban research is relevant: in simultaneously tackling related issues such as urban management and governance, integrated spatial planning, economic wellbeing and competitiveness, social inclusion, and environmental stewardship. However, the urban decision makers and managers rarely possess the required knowledge or capacity to react to or cope with such pressures and impacts in an integrated way, even though their role in such a process will be central. For this reason, research programmes that contribute to the ability of cities to adopt a holistic approach are defined as good practices.

Although the URBAN-NET research has surveyed neither the research methods used in the research programmes nor the successfulness of specific research methods with regard to holism in sciences investigating urban sustainability, there still are premises that can be made on this topic. The fragmentation born from the application of reductionism in science has been extremely beneficial in learning to control and manipulate the natural world, enabling technological and scientific progress. However, the effectiveness of reductionism in research fields that depend on a holistic approach is highly doubtful.

Urban sustainability depends on a set of complex systems that govern the different realms of the urban environment, e.g. the economic, social and environmental spheres. These systems tend to be based in organised complexity with emergent properties: their whole is greater than the sum of their parts. As such, the application of systems theory (and in particular complex adaptive systems theory) to the various systems found in urban sustainability is likely to provide insight into the attributes and linkages in the systems, as well as the relations between the different systems. Therefore it would be interesting to examine to what extent systems theory is applied in research programmes on urban sustainability to determine whether, in the field of urban sustainability research, reductionism is sufficiently complemented by holism.

This also implies that the integrated approach, brought forward in this document as a dimension of urban sustainability research, should be treated as a research method as well as an object of research. The application of an integrated approach in urban sustainability research should preferably be preceded by the full understanding as to what conditions are needed to establish an integrated approach in this field.

6.2. Actors

As mentioned in Chapter 5, many different actors are involved in the research programmes in the URBAN-NET database, of which the most important and powerful actors are national governments, academic partners and research agencies/institutes.

In a much smaller number of programmes, the local government organised the establishment of the programme or acted as a consortium member. Nevertheless, the involvement of local government can be regarded as good practice since local government is the most important end-user of the knowledge generated in the programme. Local governments' involvement secures the practical usability and availability of the generated knowledge. It can set the standards to which the commissioned projects should comply with in order to be useable for practitioners and local policy-makers. Besides, their involvement automatically implies direct dissemination and makes the knowledge generated available on the local level, especially when the local government is a (financial and legal) co-owner of the programme's outcomes.

However, programmes that do not involve actors on the local government, can also generate practical knowledge that is available and usable for local decision makers and practitioners. This good practice is closely linked to the question which actors can decide on the focus of a programme. Please refer to the section below for more information about this topic.

6.3. Programme organisation

Programmes often have a duration of just over five years in average. During this time, new developments can take place, such as a changing political context, emergent research needs from local practitioners, altered insights and theoretic frameworks in the academic community, etc. It can therefore be considered as good practice for a research programme to incorporate a certain degree of flexibility regarding the focus area(s) and research question(s).

Many programmes in the database have the possibility to change the programme's focus throughout the duration of the project. Among the projects surveyed, national government and research project partners are the two actors who most often act in this capability. Some of the programmes mentioned specific conditions for a shift in focus. These should be mentioned here as good practices:

- In the Swedish research programmes, an adjustment in the focus area or in the research questions of a programme is possible when an evaluation (often a mid-term evaluation) has proved that a change could be desirable or necessary for a successful further implementation of the programme.
- In the UK, several research programmes organise consultation sessions with stakeholders in which new relevant areas of research can be identified. These new areas can then be incorporated in the programme's focus areas.

This is closely linked to a second organisational good practice that concerns the local government as co-decision maker. As explained in the sections above, local government is an important end-user of the knowledge generated by the research programmes. To ensure that a programme's focus areas are tailored to the needs of this specific group, it is advisable to include this actor through a co-decision structure for the identification of the focus area(s) of a programme.

The same accounts for the flexibility of a programme to adapt to specific challenges of urban practitioners. If a programme includes local government officials in the decision-making structure that is able to modify the programme throughout its duration, it will more likely succeed in generating knowledge that is required for coping with these specific challenges. This is also the case when programmes develop other methods to adapt their focus areas to the needs of practitioners.

6.4. Commissioning & assessment

Regarding the commissioning and assessment of research projects within a research programme, no particular good practices could be identified for urban research. However, based on the premises made in paragraph 6.1, it would be advisable to examine whether a particular research project contributes to a holistic approach within the larger research programme and to take this aspect as a funding criterion.

Among the programmes surveyed, one stood out in terms of practical contribution to the field. In Scotland, the Scottish Community Action Research Fund (SCARF) gives community groups support to improve their skills and confidence to carry out their own research. The fund helps them to plan a project, collect information and understand it, use the information, and learn from the experience. SCARF thus provides funding for research by community organisations in order to help communities get actively involved in decisions that affect them and to improve their circumstances. This is the only research programme in the URBAN-NET database in which community groups are eligible for funding. We can regard SCARF as good practice for its innovative and demand-driven approach in which grass-roots level applicants carry out their own research.

6.5. Dissemination

The dissemination methods and practices of the research programmes in the URBAN-NET database are rather similar. Conferences/workshops, scientific and popular science articles, multimedia communication, and printed materials such as leaflets are all common among the current research programmes in Europe. Nowadays, multimedia communication (including web based dissemination) are considered as common as other dissemination methods mentioned.

Some programmes developed other dissemination methods, parallel to the ones mentioned above. One of these can be regarded in particular as a good practice: Organising lectures or other teaching structures and in-company trainings for end-users. This method is a very direct form of dissemination. It also forces the programme managers and researchers who train the end-users (in this case mostly local government officials) to reformulate the outcomes of the programme in practical and usable terms.

6.6. Impact

Regarding the usability of the gathered knowledge for policy makers and practitioners in cities, it must be said that many of the programmes in the database are not yet finalised. Therefore, it is hard to identify the impact a programme has made. However, below are some programmes that have been (at least partly) finalised and that can be regarded as good practice in terms of practical usability. These programmes were based in innovativeness to ensure the practical usability of their knowledge:

- The programme “Territorial policies and urban sustainability” helped practitioners, working for local governments, to discover different and new methodologies for urban sustainability planning.
- The programme “The city for all” had very valuable outcomes for practitioners since it changed the vision on urban polarization, and introduced new possibilities for policy-makers by explaining the changing relationships between public utilities and users.
- The programme “Sustainable Housing Transformations” was at the forefront of advising local and national government. A large number of housing agencies received the required knowledge in the field of strategic management in relation to efficiency and profitability from this programme.
- The “Amtrans: Urbanism, spatial planning, construction and transports” programme resulted in some very practical solutions for urban issues, such as: solutions for preservation of the cultural and urban heritage, models of rehabilitation and territorial development, specific information systems and data bases on spatial data, etc.
- The “Urban Transport and Mobility” programme generated applied knowledge for decision-makers in the field of urban and regional traffic. The funded projects dealt with typical factual issues, whose solution or clarification were to be implemented in different cities and regions.

CHAPTER 7
THEMATIC GEOGRAPHY

This part of the research analysis aims to give more insight into the geographical distribution and weight of the research themes that came to the fore in the survey carried out by the URBAN-NET project. It takes a closer look at the three most highly prioritized main research themes encountered in the research programmes.

While reading this chapter, it is important to keep in mind that all information presented is an overview of the state of the art in the surveyed countries at the closing of the research, which was February 2008[12]. The maps used in this chapter show the countries participating in the URBAN-NET research in grey; all other countries were blackened for the convenience of the reader.

7.1) Geographical distribution of main themes

Environmental sustainability, social sustainability and the integrated approach came to the fore as the three most important main themes in the research programmes surveyed. These will be examined underneath in order of importance.

7.1.1) Environmental sustainability

Environmental sustainability appeared as a main topic in surveyed research programmes in the following countries:

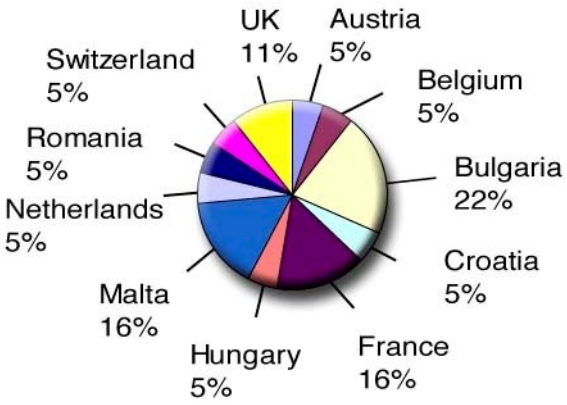


Figure 46:
Appearance of the main theme 'Environmental sustainability'. Total countries surveyed: 18. Total times theme was named within the countries to the right: 19.

[12] Please refer to annex II for an overview of the countries and research programmes.

Laid out on the map, this shows us the following image:

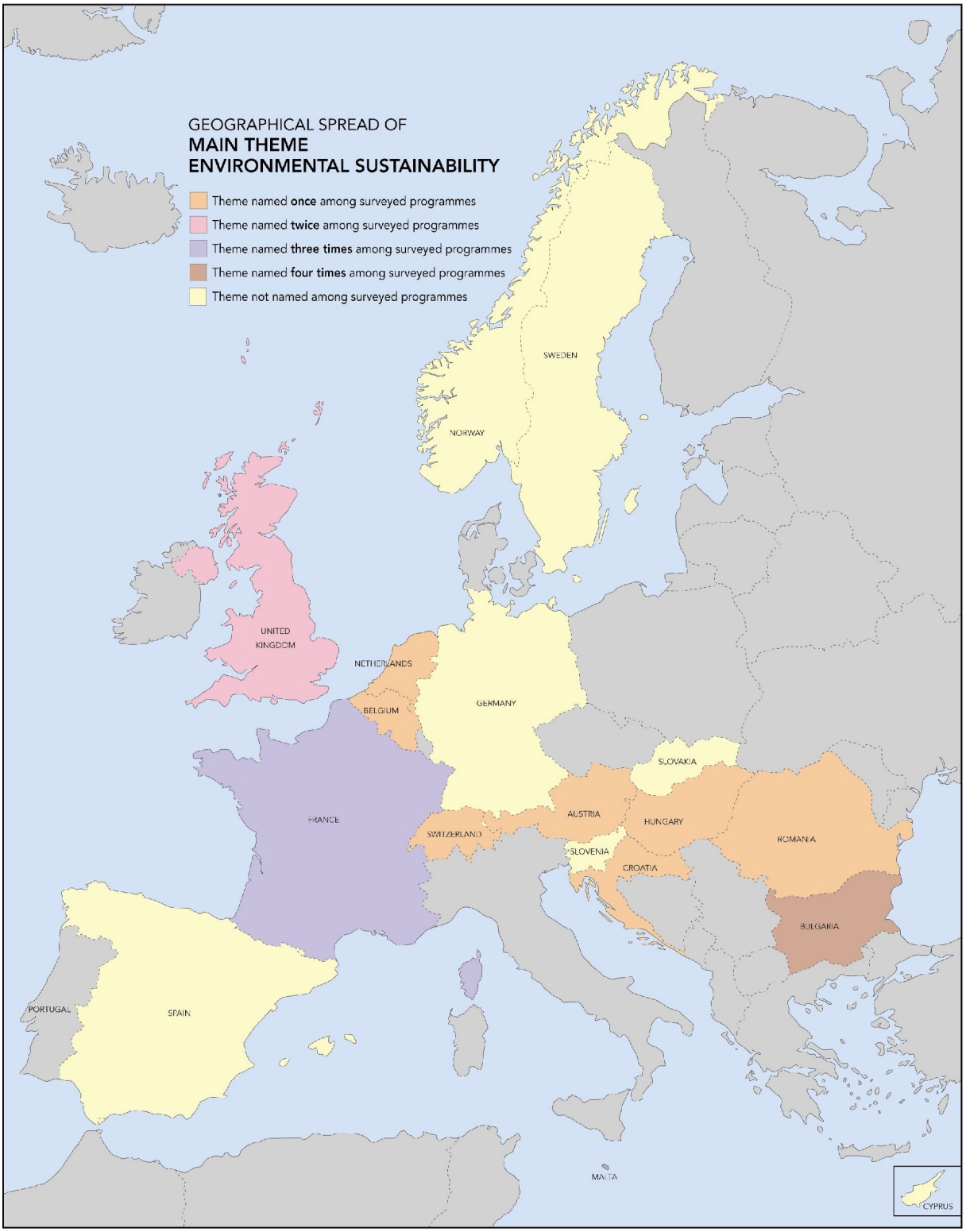


Figure 47: Main theme 'Environmental sustainability' on the map of Europe. Based on a survey among 18 European countries. Total times theme was named within the countries on the map: 19.

In order to complement the image above, the appearance of environmental sustainability as a sub theme is laid out on the map underneath:

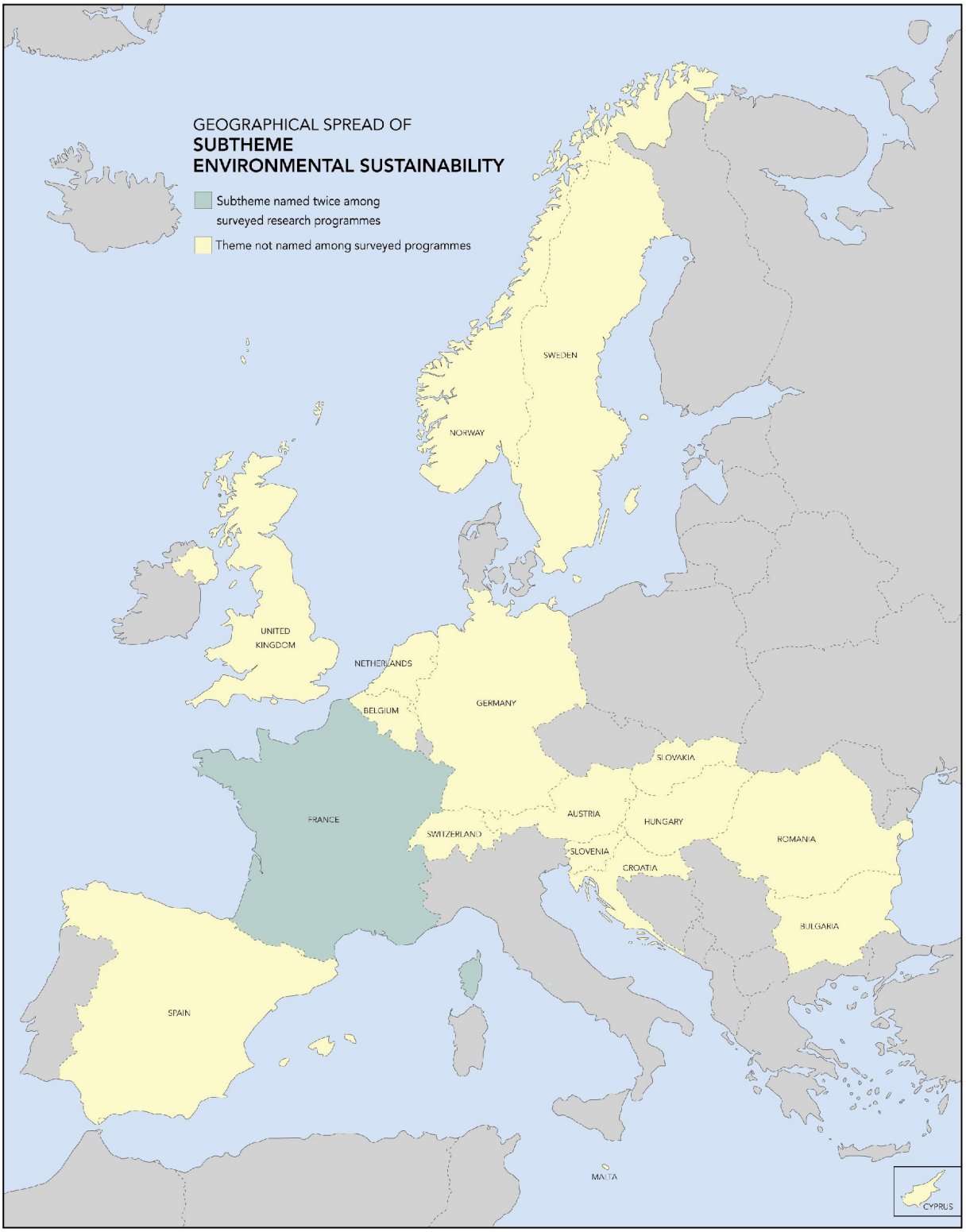


Figure 48: Sub theme 'Environmental sustainability' on the map of Europe. Based on a survey among 18 European countries. Total times theme was named within the countries on the map: 2.

Considering the longstanding tradition of environmental issues in the field of urban sustainability[13], it is surprising that within the URBAN-NET research the environmental sustainability theme appearance seems to be limited to a west-east corridor stretching from the UK to Romania and Bulgaria. It seems particularly astounding that the topic was not named by any of the Scandinavian countries or Germany, which are reputed to perform strongly in the field of environmental sustainability.

7.1.2) Social sustainability

The main theme social sustainability appeared less frequently than the theme environmental sustainability:

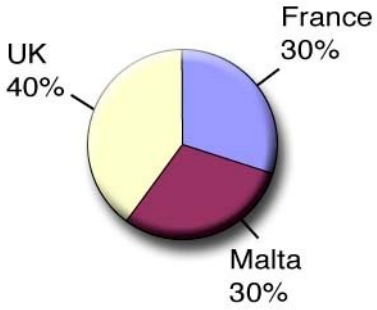


Figure 49: Appearance of the main theme 'Social sustainability'. Total countries surveyed: 18. Total times theme was named within the countries to the right: 10.

[13] The concept of sustainability has evolved over the years. It dates from the post-WWII period, when the utopian view of technology-driven economic growth gave way to the perception that the quality of the environment was linked closely to economic development. Interest grew sharply in the 1960s, when the environmental movements raised public awareness of this issue. During this period, sustainability was very narrowly defined as environmental protection. This narrow definition was gradually broadened, although there is no world-wide consensus on which issues should be included in the concept of sustainability.

Laid out on the map, this shows us the following image:

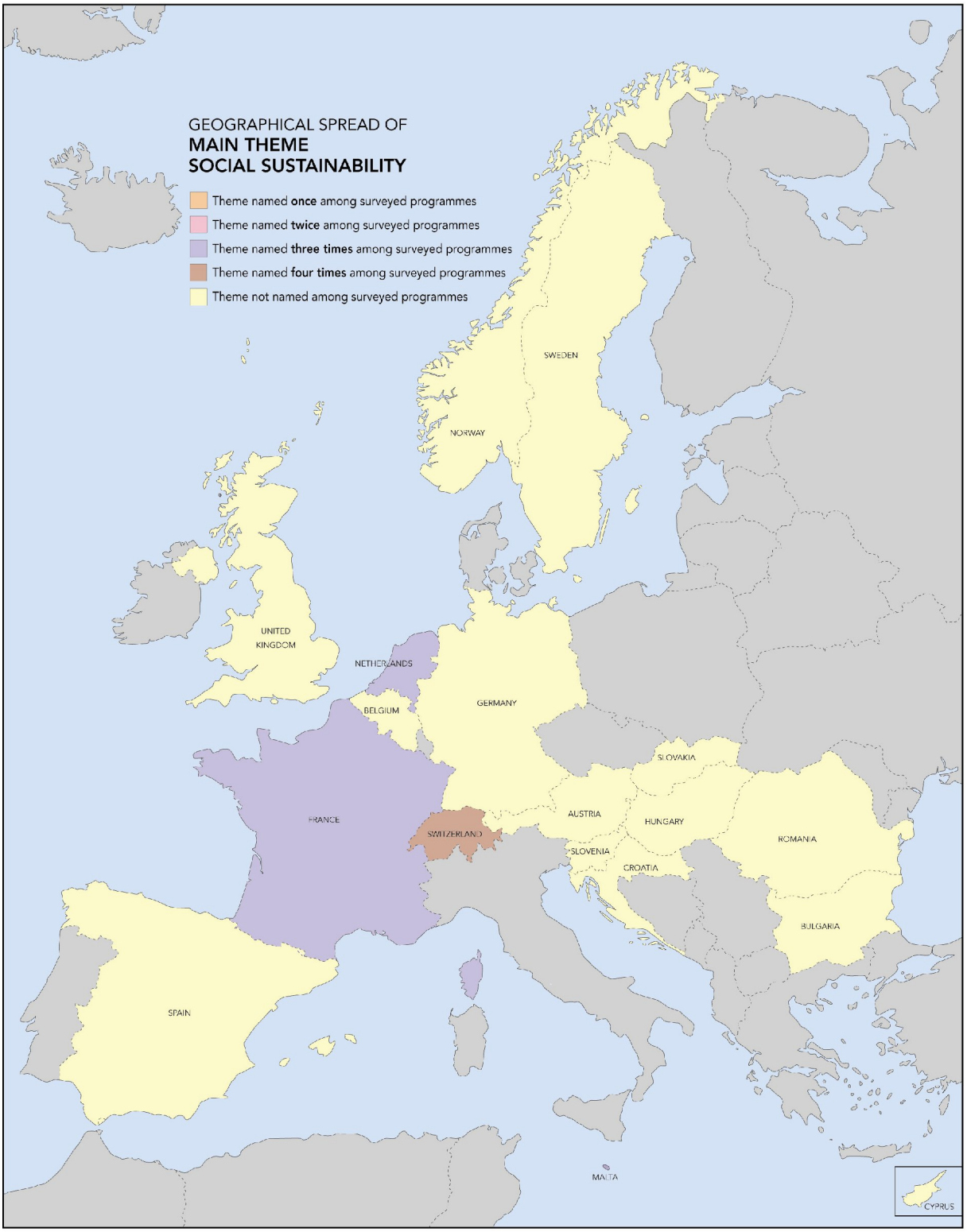


Figure 50: Main theme 'Social sustainability' on the map of Europe. Based on a survey among 18 European countries. Total times theme was named within the countries on the map: 10.

In order to complement the image above, the appearance of social sustainability as a sub theme is laid out on the map underneath:

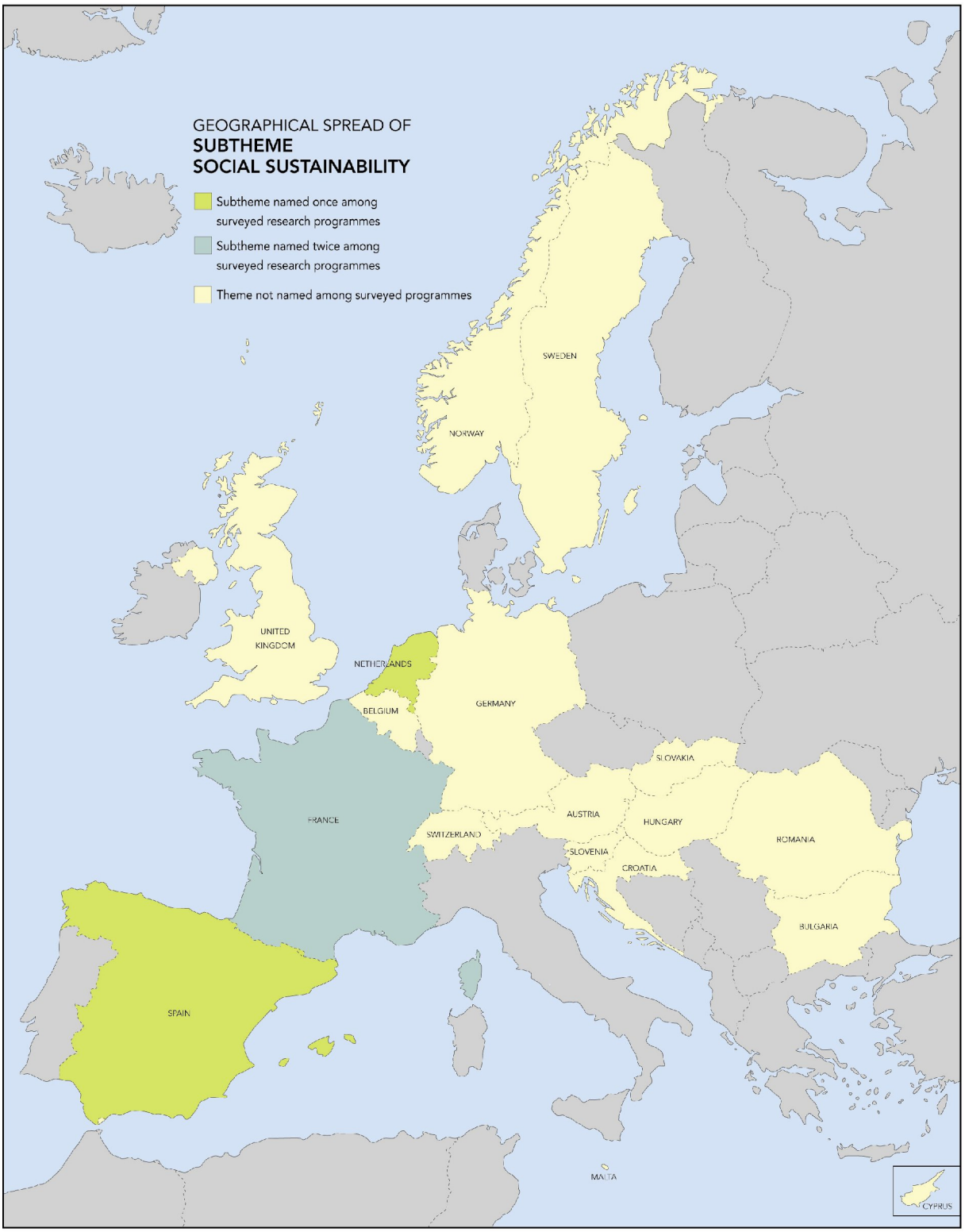


Figure 51: Sub theme 'Social sustainability' on the map of Europe. Based on a survey among 18 European countries. Total times theme was named within the countries on the map: 7.

Among the surveyed countries, the theme social sustainability is largely concentrated in the Western European countries. It is striking that research programme managers in none of the Scandinavian, Central European or Eastern European countries named social sustainability as a main theme in their research programmes.

7.1.3) Integrated approach

The integrated approach is the third main research theme that came to the fore in the URBAN-NET survey. It appeared as follows:

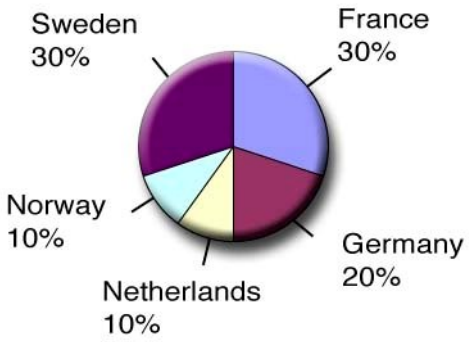


Figure 52: Appearance of the main theme 'Integrated approach'. Total countries surveyed: 18. Total times theme was named within the countries to the left: 10.

Laid out on the map, this shows us the following image:

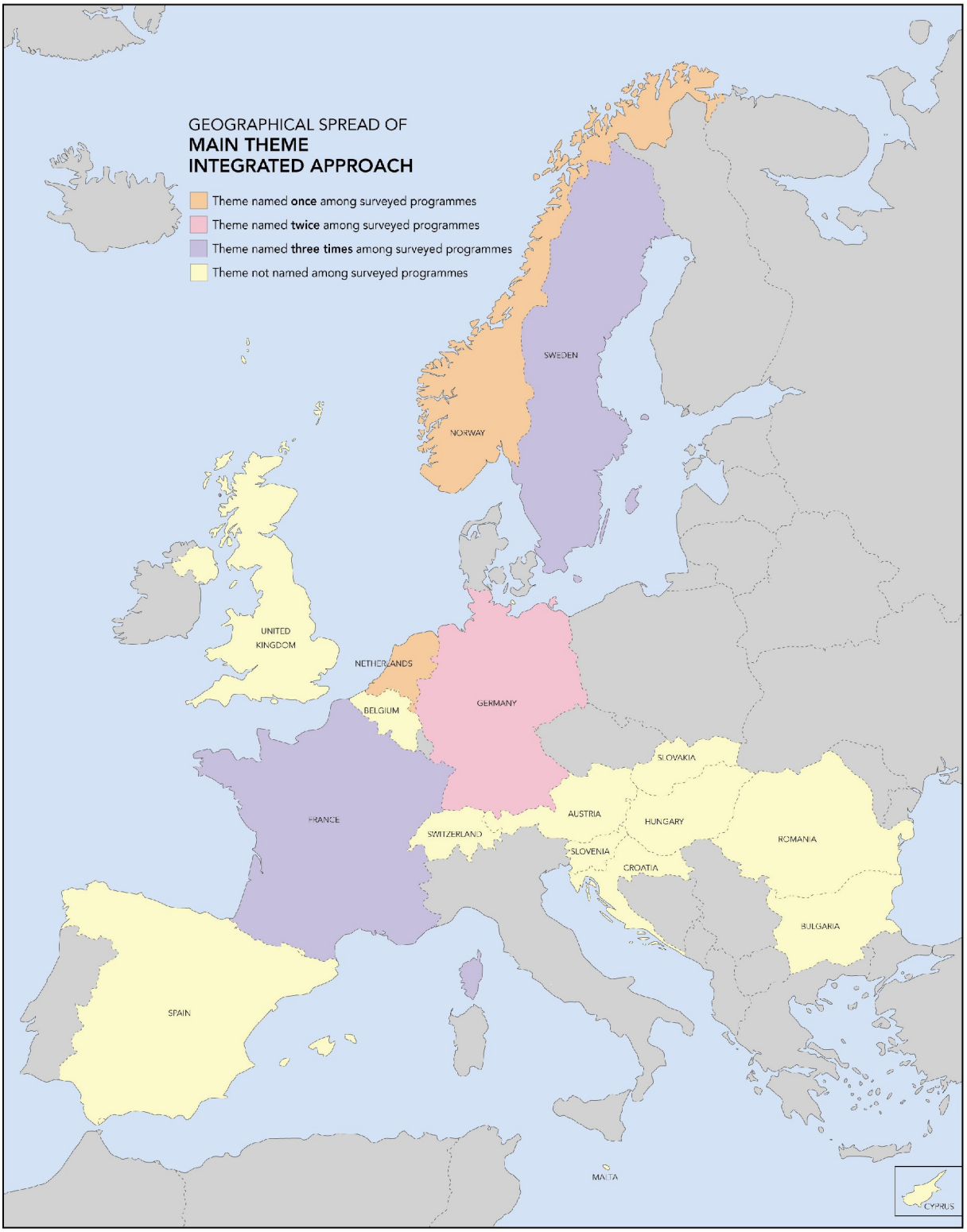


Figure 53: Main theme 'Integrated approach' on the map of Europe. Based on a survey among 18 European countries. Total times theme was named within the countries on the map: 10.

In order to complement the image above, the appearance of integrated approach as a sub theme is laid out on the map underneath:

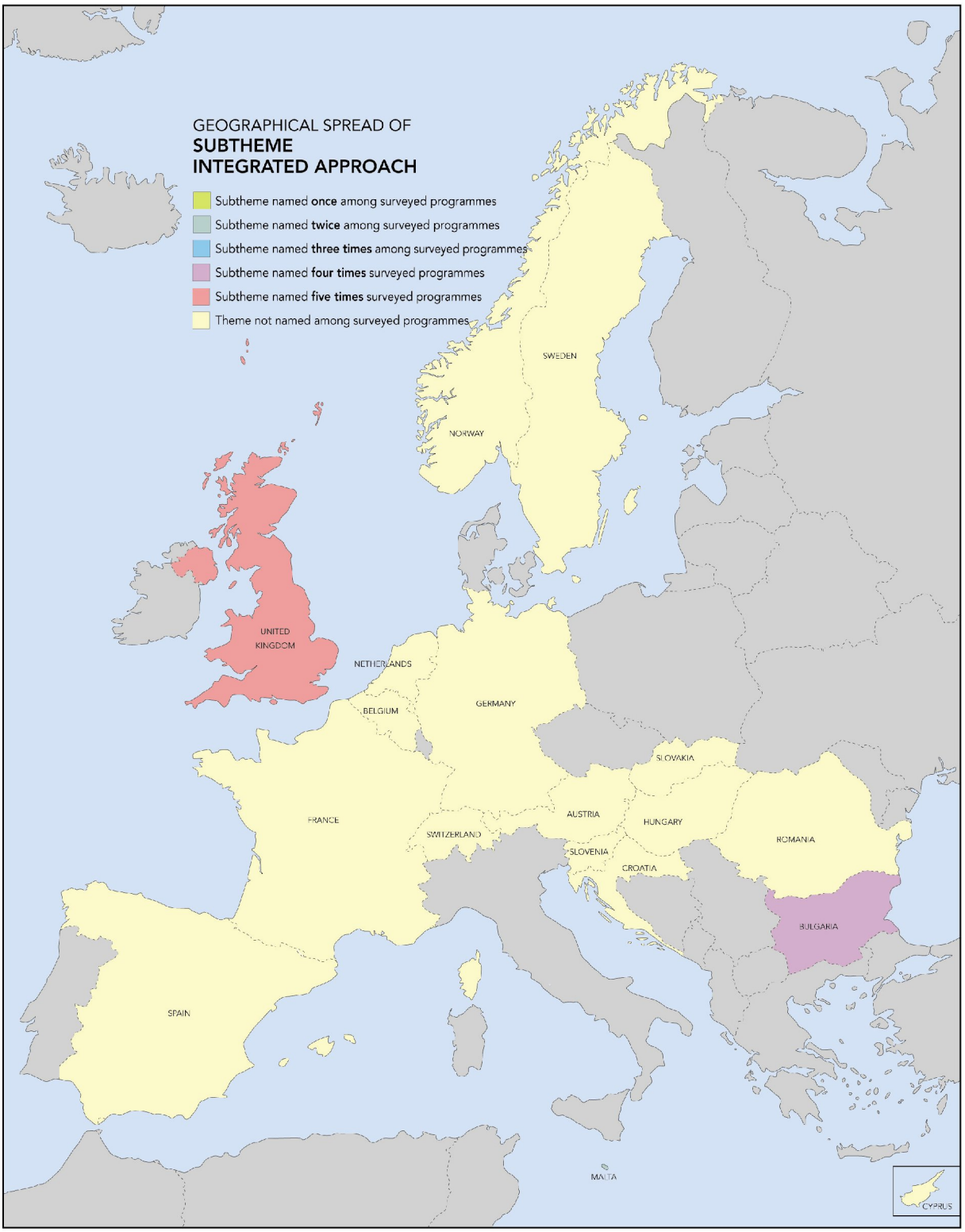


Figure 54: Sub theme 'Integrated approach' on the map of Europe. Based on a survey among 18 European countries. Total times theme was named within the countries on the map: 11.

The theme integrated approach is found mainly around a north-western European centre of gravity as well as in Bulgaria and on Malta. The appearance of this topic as a main theme was – as stated before – surprising and consequently it is interesting to see that it comes forth from a specific European areas.

7.2) Conclusion

Once the main themes had been mapped out, the scattered nature of the theme's appearance became obvious. Irregular patterns are also visible among the most important sub themes, which can be found in annex VII. None of the themes covered, be it main or sub themes, appears in all the countries surveyed. As such the URBAN-NET research has not found one theme that is unanimously indicated as being a main research theme in all participating countries.

It might be due to the way in which the URBAN-NET study was set up that the outcomes on geographical theme appearance are limited. The survey did neither focus on research themes solely, nor did it offer the respondents an unlimited choice of themes. This might explain why, for example, the theme 'environmental sustainability' did not appear as a main theme in responses from the Scandinavian countries. In addition, there is the possibility that on the national level certain themes are not treated in research on urban sustainability, but have their own specific research programmes and/or appear in research programmes with a focus other than urban sustainability.

The URBAN-NET research did not survey the reasons for the themes appearance in specific countries or regions. It would, however, be advisable to set out research on the reasons for thematic appearances in specific locations. Such a survey would preferably be complemented by research on thematic appearance in other research programmes to find out where cross-fertilization is possible.

Paragraph 6.1 brought the importance of the holistic approach in urban sustainability research programmes to the fore. In terms of research themes, the holistic approach an overarching view of the way in which one theme interlocks with another. The URBAN-NET project Work Package 3 was designed to take a more in-depth view of prioritised research themes in the field of urban sustainability, at the same time the project is advised to continuously keep the broad view and interrelations between all the themes in mind.

ANNEX I
URBAN-NET PARTNER ORGANISATIONS

SNIFFER (Scotland Northern Ireland Forum for Environmental Research) funds and manages research programmes on behalf of its members (Scottish Government; Scottish Environment Protection Agency; Environment and Heritage Service (Northern Ireland); Scottish Natural Heritage; and Forestry Commission) and other stakeholders. SNIFFER is the URBAN-NET project Coordinator.

Nicis Institute is an independent foundation created by 31 cities and nine Ministries in the Netherlands. Nicis Institute generates innovative knowledge to address national and international issues, operating as a center of excellence for cities.

TÜV-Rheinland Consulting GmbH is the German partner. Projektträger Mobilität und Verkehr, Bauen und Wohnen (PT MVBW) is part of the research management division (Zentralbereich Forschungsmanagement) within TRC.

MEEDDAT (Ministère de Transport, de l'Equipement, du Tourisme et de la Mer) is the French ministry that has been the leading French administration for funding urban research since 1970.

FORMAS (the Swedish Research Council for Environment, Agricultural Sciences and Spatial Planning) is a governmental research-funding agency with national responsibility, funded by the Ministries of Environment, Agriculture and Industry, Employment and Communications.

SenterNovem (Netherlands Agency for Innovation and sustainable Development) promotes knowledge of innovation, energy, climate, the environment and living for Dutch industry.

MVIV (Ministerio de Vivienda), the Spanish Ministry of Housing, has national competencies to conduct urban research programmes in Spain.

ASDE (Agency for Sustainable Development and Eurointegration) is an official partner to the Bulgarian Ministry of State Administration.

IPA (Romanian national institute for research and development, design, execution, and service for automation and IT) manages the funds of the Ministry of Education and Research.

RPF (Research Promotion foundation of Cyprus) is the competent authority responsible for the development, implementation and management of all national research programmes in the Republic of Cyprus.

Bmwf (Ministry of Science and Research) is the Austrian government institution responsible for educational issues, reform of the university system, research policy and scientific research programmes, as well as for the larger thematic area of cultural heritage.

TUBITAK (Scientific and Technological Research Council of Turkey) is the central organisation in charge of promoting, organising and coordinating scientific research and technological development in various fields of natural sciences in line with the national economic development targets.

The Scottish Government develops policies and advises Scottish Ministers in the areas of Health and Wellbeing, Rural Affairs and Environment, Justice and Communities, Finance and Sustainable Growth, and Education and Lifelong Learning.

UN-HABITAT is the Secretariat of the United Nations Human Settlements Programme. It focuses on the coordination of international efforts towards the attainment of two goals: 'adequate shelter for all' and 'sustainable human settlements development in an urbanising world'.

FCT (the Foundation for Science and Technology) is Portugal's main funding agency for research. It has the status of a public organisation with administrative and financial autonomy, under the aegis of the Ministry of Science, Innovation and Higher Education.

UBA-A (Federal Environment Agency of Austria) supports the bmwf partner. Its role in URBAN-NET is to identify and analyse national research programmes in Austria and to coordinate national input to the development and funding of common calls for research. Ultimate decisions about the direction and funding of research calls will be taken on behalf of Austria by bmwf.

ANNEX II
RESEARCH PROGRAMMES SURVEYED

Legend:

Actors involved
A = Academic partners from one discipline
B = Academic partners from several disciplines
C = National government
D = Regional government
E = Local government
F = Private company
G = Research agency/institute/organisation
H = Other

Resources
A = European funded programmes
B = Nationally funded programmes
C = Academic subsidised programmes
D = Private companies funding
E = Match Funding
F = Co-financing by partners
G = Other

Commission Research:
Both = Open call for tenders and direct commissioning
A **=** By organizing conferences and/or workshops
B = By publishing articles
C = By using multimedia communication (website, etc.)
D = By publishing brochures or other printed communication materials
E = Other

	Name research programme	*Main Organisation(s)*	*Main themes*	*Sub-themes*	*Actors involved*	*Resources*	*Commission research*	*Evaluation*	*Dissemination methods*
AT	proVISION	Ministry of Science and Research	Environmental sustainability	Quality of life, education and knowledge	B,C,D,E,F,G	B,F	Both	no	A,B,C,D,E
BE	ASRO	University of Leuven	Planning	Community development, quality of life, urban environment, housing, planning	B,D,E,F,G,H	A,B,C	Both	no	B,C
BE	Standing Conference on Territorial Development	Wallon Region of Belgium	Environmental sustainability	Housing, transport and infrastructure, urban environment, economic knowledge, employment, community development	B,D	G	Direct commissioning	yes	A,B,C,D,E
BG	Dynamic Cities Atlases	ASDE; Ecoregions and Minister of State Administration	Environmental Sustainability of Urban Areas	Integrated approach, urban ecology, monitoring and evaluation, planning, innovation, risk management	B,C,E,F,G,H	B,D,F,G	Both	yes	A,B,C,D

BG	Estimation of Potential Losses from Seismic Risk	The State Agency for Information Technology and Communications	Environmental Sustainability, Risk management	Integrated approach, urban ecology, monitoring and evaluation, planning, innovation, risk management	B,C,E,F,G	B	Both	yes	A,B,C,D
BG	BNSDI	The State Agency for Information Technology and Communications	Environmental Sustainability and Spatial Database	Integrated approach, transport and infrastructure, governance, monitoring and evaluation, planning, innovation	B,C,E,G	B	Direct commissioning	yes	A,B,C,D
BG	Sustainable Sofia	The Alliance for Environment	Environmental Sustainability	Integrated approach, governance, community development, quality of life, urban ecology, civil society participation	B,C,E,G	B	Both	yes	A,B,C,D
CH	Sustainable Development of the Built Environment – NRP 54	Swiss National Science Foundation	Environmental sustainability	Planning, urban environment, transport, infrastructure, green environment	B,E,G	B,F	Open call	Yes	A,B,C,D,E
CY	Research for Enterprises	Research Promotion Foundation	Ecological and spatial sustainability	Urban environment, environmental protection, management of scarce resources, transport and infrastructure, road transport	B,C,H	B,C,G	Open calls	no	A, B, D, E
CY	Thematic Actions	Research Promotion Foundation	Ecological and spatial sustainability	Land use, urban environment, transport and infrastructure	B,C,H	B,C,G	Open calls	no	A, B, D, E
CY	Programme for the Support of Young Researchers	Research Promotion Foundation	Ecological and spatial sustainability	Urban environment, environmental protection, management of scarce resources	B,C,H	B,C,G	Open calls	no	A, B, D,E
FR	Ageing and Housing	NEDAD - PUCA	Social sustainability	Equal access to services, housing maintenance, housing quality, quality of life, housing finance	B,C,E,G,H	B,C,F	Open calls	Yes	A,B,C,D
FR	Concertation, decision, environment (CDE)	MEEDDAT	Environmental sustainability	Governance	A,B,C,G	B,F	Open call	Yes	A,B,C,D,E
FR	Cultures, cities and social dynamics	PUCA-MEEDDAT	Social sustainability	Planning, governance, integration of social groups, cultural heritage, knowledge economy	B,C,D,G,F,G	B,C	Open call	Yes	A,B,C,D
FR	Territorial policies and urban sustainability	PUCA-MTETM, University François Rabelais of Tours	Integrated approach	Governance, social sustainability, environmental sustainability	A,B,D,E,F	B,C	Both	Yes	A,B,C,D
FR	Mobility and urban territories	PUCA-MTETM and DRAST-MTETM	Integrated approach	Transport and infrastructure, commuting, sub-urbanisation, governance	B,C	B,C	Both	Yes	A,B,C,D

FR	Landscapes and sustainable development	MEEDDAT – SRP	Planning	Future oriented planning, landscape design, urban-rural relationship, economic sustainability	B,C	B,C	Open call	Yes	A,B,C,D
FR	PRIMEQUAL	MEEDDAT, ADEME	Environmental sustainability	Air transport, monitoring, risk management	B,C,D,G	B,F	Open call	Yes	A,B,C,D
FR	Risks, choices, territories	MEEDDAT	Risk management	Industrial disaster, natural disaster, citizen participation, governance, governmental cooperation	B,C,D,F,G ,H	B,C,D,F,G	Open call	Yes	A,B,C,D,E
FR	The city for all	MTETM and Education Ministry	Social sustainability	Equality, integration of social groups, equal access to services	B,C	B,C	Both	Yes	A,B,C,D
FR	Interdisciplinary programme for sustainable urban development	MEEDDAT-PUCA	Integrated approach	Social sustainability, economic sustainability, environmental sustainability, governance, planning	B,C,G	B,C	Open call	Yes	A,B
DE	Megacities	Federal Ministry of Education and research	Ecological-spatial dimension	Ecological-spatial dimension, housing and built environment, transport and mobility, infrastructure, energy, urban environment, planning, social-economic dimension, economic development, education and knowledge, health, governance, time	C	B,C,D,E,F	Open calls	No	A,B,C,D
DE	Building and Housing in the 21st Century	Federal Ministry for Education and Research en TÜV Rheinland Consulting GmbH	Integrated approach	Housing, future oriented planning, foresight, urban environment, negelected neighbourhood, integration, migration	A,C,G	B,D,F	Both	Yes	A,B,C,D
DE	Urban Transport and Mobility	Federal Ministry BMVBS, Federal States and Städtetag und Gemeindebund	Transport and Infrastructure	Mobility, transport, public transport, demographic change, equal access	B,C,D	B	Both	Yes	A,B,C,D
DE	REFINA	BMBF/PTJ with contribution of BMVBS, BMU, BBR, UBA, BfN	Integrated approach	Land use, urban planning, urban environment, transport, mobility, education and knowledge governance, financial system	C,D,H	B,F	Open calls	No	A,B,C,D,E
DE	ExWoSt	BMVBS, BBR	Planning	Housing, urban planning, architecture, urban design, social cohesion, demographic change	B,C,D,E,G	B,F	Both	Yes	A,B,C,D
ES	Agencia d'Ecologia	Ministry of Housing	Ecological sustainability	Public transport, urban	B,C,D,E,F ,G	A,B,C,D,E, F	Both	Unknown	A,B,C,D

	Urbana de Barcelona			environement, sustainable decision-making energy efficiency					
ES	Studies and research projects related to urban planning policies	Ministry of housing – DG Urban Planning and Land Policy	Urban sustainability	Social sustainability, quality of life, economic sustainability, urban environment, housing, land use	A,B,C,D,E ,G	A,B,F	Both	Unknown	A,B,C,D
ES	OSE	Ministry of Housing	Ecological and spatial sustainability	Housing, land use, transport and infrastructure	B,C,G	B,C	Both	Unknown	A,B,C,D
HR	Research Projects	MSES	Environmental sustainability	Environment, energy	C	B	Open call	Yes	A,B
HR	Partnership in Basic Research	National Foundation for Science, Higher Education and Technology Development	Environmental sustainability	New materials, new production processes, environmental science, sustainable development	B,C	B,F	Open call	Not available	A,B,C,D
HU	Application-oriented co-operative RTD activity	Agency for Research Fund Management and Research exploitation	Environmental sustainability	Risk management, energy efficieny, managing scarce resources	C	B,F	Open call	Yes	A,B,C,D
HU	The National Research and Development Programmes of the Széchenyi Plan	National Office for Research and Technology (NKTH)	Quality of life	Environmental science, materials science, national heritage, social changes	C,G	B	Open call	Unknown	A,B,C
MT	Structure Plan Review	MEPA	Social, economic and environmental sustainability	All sub-themes	B,C,	C	Direct commissioning/ in-house research	Unknown	A,B,C,D
MT	State of the Environment Report	MEPA	Environmental sustainability	Urban ecology, housing and built environment, transport and infrastructure, resource management	A,C	B	Both/in/house research	Unknown	B,C,D
MT	Integrated Heritage Management (IHM)	MEPA	Environmental sustainability	Resource management, housing and built environment, transport and infrastructure	B,C,E,F,G	B,D,E	Both	Unknown	B,C,D,E
NL	Sustainable Urban Quality	Environmental Asessment Agency (MNP)	Environmental quality, Environmental health, Quality of life, Sustainable urban and regional development, Policy evaluation	Governance, risk management, urban environment, quality of life, transport and infrastructure	A,B,C,G	A,B,C	Direct commissioning	Yes	A,B,C,D
NL	Sustainable Land Use	University of Utrecht	Environmental sustainability	Governance, planning, urban environment, time	B,G	B,C	Both	Yes	A,B,C,D
NL	Urban social divisions, housing and culture	Faculty of Geoscience, University of Utrecht	Social sustainability	Equality, integration of social groups, housing, economy knowledge, employement, governance	B,C,E,F,G	Unknown	Both	Yes	A,B,C,D

NL	Real Estate Management and Project Management	Department of Real Estate and Housing, University of Delft	**Unspecified**	Unspecified	B	B,C	Not applicable	Yes	A,B,C
NL	Transport Geography	University of Utrecht	Environmental sustainability	Transport, infrastructure. Urban environment, quality of life, planning	B,C,D,E,F ,G,H	A,B,C,E	Unknown	Yes	A,B,C,D
NL	Space and Economy	University of Amsterdam	Economic sustainability	Knowledge economy, employment, transport and infrastructure, urban economy, planning, time, integration of social groups	B,C,D,G	A,B,C	Both	Unknown	A,B,C,D
NL	Multi Actor Systems (MAS)	Delft Research Centre, University of Delft	Unspecified	Unspecified	B,G	Unknown	Unknown	Unknown	A,B,C
NL	Environmental Design	Department of Urbanism, University of Delft	Unspecified	Unspecified	B	C	Unknown	Unknown	Unknown
NL	Social Cohesion	Netherlands organisation for scientific research (NWO) and 4 Ministries	Social sustainability	Social developments, community development	F,H	B,E	Open calls	Yes	A,B,C,D
NL	Urban Innovation Programme (STIP)	Nicis Institute and NWO	Governance and decision making	Social sustainability, long-term policies, innovation	B,C,G	B,G	Open calls	Yes	A,B,C,D
NL	The Urbanisation and Urban Culture programme	NWO	Social sustainability	Quality of life, social developments	H	B	Open calls	Yes	A,B,C,D
NL	Urban Renewal and Housing	OTB Research Instiute of the University of Delft	Housing and built environment	Unspecified	B,C	B,C,E	Direct commissioning	Yes	Unknown
NL	Sustainable Housing Transformations	OTB Research Institute and the Faculty of Architecture of the Delft University	Housing	Unspecified	B	A,B,C,D,E	Both	Yes	A,B,C,D
NL	Urban Systems and Territorial Governance	OTB Research Institute	Planning	Unspecified	B	C	Both	Yes	A,B,C,D
NL	Network Cities	Faculty of Architecture of the Delft University	Planning	Unspecified	A,C,E	A,B	Direct commissioning	No	A,B,C
NL	NETHUR	Netherlands Graduate School of Urban & Regional Research	Integrated approach	Governance, physical, economic, socio-cultural aspects	A,C,E,F,G ,H	B,C,D,E	Both	Yes	A,B,C,D
NL	Economic Evolution in Space	Urban & Regional research centre Utrecht	Economic sustainability	Knowledge economy, employment, industrial areas, business areas	B,C,D,E,F ,G	A,B,C,E,F	Both	Yes	A,B,C,D
NL	Vitality, Legitimacy and Multiplicity	Tilburg School of Politics and Public Administration	Governance	Legitimacy	A,C,E,F,G	A,B,C,D	Direct commissioning	No	A,B,C,D
NL	System innovation urban and regional land use and area development	Habiforum	Unknown	Unspecified	B,C,D, E, F,G	A,B,D,F	Unknown	Yes	A,B,C,D,E
NL	Corpovenista	Housing associations, Aedes, Research institute OTB	Housing and built environment	Integration of physical, socio-economic, socio-cultural aspects of urban renewal	B,G,H	B,C,F,G	Direct commissioning	Yes	A,B,C,E

NO	Urban Development	Research Council of Norway	Integrated approach, planning, economic sustainability	Urban planning, governance, decision making, housing, economic developments	B,C,G	B	Open calls	No	unknown
RO	The Amtrans Programme	Ministry of Education and Research and the National Agency for Scientific Research	Environmental Sustainability	Transport and infrastructure, housing, urban environment	C,G	B,F	Open calls	Yes	A,B,C,D
RO	The Mener Programme	Ministry of Education and Research and the National Agency for Scientific Research	Environmental Sustainability	Environmental protection, risk management, energy efficiency, managing scarce resources	C,G	B,F	Open calls	Yes	A,B,C,D
SE	Sustainable city	Swedish Research Council for Environment, Agricultural Sciences and Spatial Planning (FORMAS)	Integrated approach, Spatial-ecological dimension	Foresight, future oriented planning, density, spatial extension, urban environment	G	B	Open calls	Yes	A,B,C,D,E
SE	Public space	FORMAS	Integrated approach, Spatial-social dimension	Public space, governance, decision making, equality, integration, safety, security, urban micro-climate	B,G	B	Open calls	Yes	A,B,C,D,E
SE	Liveable cities	FORMAS	Integrated approach, Social economic dimension	Social welfare, safety, security, equality, integration, citizen participation, spatial planning	G	B	Open calls	Yes	A,B,C,D,E
SI	Target Research Programme	Slovenian Research Agency	Sustainable development	Environment, energy, mobility, transport, socio-economic sciences	C,G	B,D,F	Open calls	Yes	A,B,C,D
SK	Life Quality	Slovak Academy of Science	Interdisciplinar y reseach	Health, environment, socio-economic developments, humanties	C	B,F	Open calls	Unknown	A,B,C,D
UK	Cities: Competitiveness and Cohesion	Economic and Social Research council	Economic sustainability	Economic inclusion	B,G	B	Open calls	Yes	A,B,C,D
UK	Engineering Cities	Tyndall Centre	Environmental sustainability	Economic developments, urban ecology, housing and built environments, transport and infrastructure, risk management	B,G	B	Open calls	No	A,B,C,D
UK	Glasgow Centre for Population's Health's Programme on Healthy Urban Planning	Glasgow City Council, NHS Greater Glasgow and Clyde, University of Glasgow	Social sustainability	Integrated approach, integrated spatial planning, social developments, social inclusions, quality of life, accessibility of services, green space, safety and security, crime	B,C,D,E	B,F	Both	Yes	A,B,C,D,E
UK	GoWell: Glasgow Community Health and Wellbeing	Glasgow Centre for Population Health, University of Glasgow,	Social sustainability	Community development, quality of life, housing and built	B, G, H	F	Unknown	Unknown	A, B, C, D

	Research and Learning Programme	Medical Research Council, Glasgow Housing Association, Communities Scotland		environment, integrated approach, monitoring and evaluation					
UK	Skills and Knowledge for Sustainable Communities	Economic and Social Research Council and Academy for Sustainable Communities	Social sustainability	Community development, education and knowledge	G,H	F	Open calls	No	unknown
UK	Urban Regeneration and the Environment	Natural Environment Research Council	Environmental Sustainability	Integrated approach, urban ecology, resource management, governance, decision making	B,C,D,E,F,G	A,B,C,D,E,F	Both	Yes	A,B,C,D
UK	Scottish Community Action Research Fund	Communities Scotland and Community Development Foundation	Social sustainability	Community development, social development, education and knowledge, governance, decision making	C	B	Open calls	No	unknown
UK	Sustainable Urban Environment (SUE) Phase 1	Engineering and Physical Sciences Research Council	Environmental Sustainability	Integrated approach, housing and built environment, transport, infrastructure, resource management, governance	B,C,E,F,G	B	Open calls	Yes	A,B,C,D
UK	Sustainable Urban Environment (SUE) Phase 2	Engineering and Physical Sciences Research Council	Environmental Sustainability	Integrated approach, transport and infrastructure, resource management, economic developments, social development	B,C,E,F,G	B	Open calls	No	unknown
UK	Building Knowledge for a Changing Climate (BKCC)	Engineering and Physical Sciences Research Council and UK Climate Impacts Programme	Environmental Sustainability	Housing and built environment, transport and infrastructure, risk management, climate change	B,G,H	B	Both	Yes	A,B,C,D

ANNEX III
THEMES COUNTS

Main themes	
Theme	**Times chosen**
Built environment	2
Decision making	1
Ecological sustainability	2
Ecological-spatial dimension	1
Economic sustainability	5
Environmental health	1
Environmental quality	1
Environmental sustainability	24
Governance	2
Health & wellbeing	1
Housing	8
Infrastructure	1
Integrated approach	10
Planning	6
Policy evaluation	1
Quality of life	2
Risk management	2
Social sustainability	11
Social-economic dimension	1
Spatial database	1
Spatial sustainability	1
Spatial-ecological dimension	1
Spatial-ecological sustainability	3
Spatial-social dimension	1
Sustainable development	1
Sustainable spatial planning	1
Sustainable spatial use	1
Sustainable urban & regional development	1
Transport	1
Urban sustainability	2
Urban sustainable development	1

Sub-themes	
Sub-theme	**Times chosen**
Accessibility to services	1
Air transport	1
Architectural design	1
Architecture	1
Built environment	8
Business districts	1
Citizen participation	2
Civil society participation	1
Climate change	1
Community development	8
Commuting	1
Crime & security	1
Cultural heritage	1
Decision making	5
Demographic change	2
Economic developments	5
Economic dimension	1
Economic inclusion	2
Economic sustainability	3
Economy knowledge	1
Education & knowledge	5
Employment	4
Energy	3
Energy efficiency	3
Environment	3
Environmental protection	3
Environmental science	2
Environmental sustainability	2
Equal access	3
Equality	4
Evaluation	5
Financial management	1
Financial system	1
Future oriented research/ foresight	1
Governance	20
Governmental cooperation	1
Green space/environment	2
Health	2
Housing	17
Housing finance	1
Housing maintenance	1
Housing quality	1
Humanities	1
Industrial areas	1
Industrial disaster	1
Please turn over for continuation	

Infrastructure	19
Innovation	4
Integrated approach	10
Integrated spatial planning	1
Integration	7
Knowledge economy	4
Land use	4
Landscape design	1
Legislation	1
Legitimacy	1
Long-term policies	1
Managing scarce resources	4
Materials science	1
Migration	1
Mobility	4
Monitoring	6
National heritage	1
Natural disaster	1
Neglected neighbourhood	1
New materials	1
New production processes	1
Physical dimension	2
Planning	12
Political-administrative dimension	1
Public space	1
Public transport	2
Quality of life	11
Resource management	6
Risk management	9
Safety and security	3
Social challenges	1
Social cohesion	1
Social developments	6
Social inclusion	1
Social sustainability	4
Social welfare	1
Socio-cultural dimension	1
Socio-economic dimension	4
Spatial database	1
Sub-urbanisation	1
Sustainable decision-making	1
Sustainable development	1
Time	4
Transport	22
Urban design	1
Urban ecology	7
Urban economy	1
Urban environment	17
Urban micro-climate	1
Urban planning	4
Urban renewal	1
Urban-rural relationship	1

ANNEX IV
LIST OF ABBREVIATIONS USED

A

AAL	Architects Association of Lithuania
AMTRANS	Romanian research programme
ANR	French Nation Agency for Research
APVV	Slovak Research and Development Agency
ARC	Austrian Research Centres
ASC	UK Academy for Sustainable Communities
ASDE	Bulgarian Agency for Sustainable Development and Eurointegration - Ecoregions
ASRO	Belgian Department of Architecture, Urbanism and Planning

B

BAS	Bulgarian Academy of Science
BKCC	UK Building Knowledge for a Changing Climate
BMBF	German Federal Ministry of Education and Research
BMFSFJ	German Federal Ministry for Family Affairs, Senior Citizens, Women and Youth
bmlfuw	Austrian Federal Ministry for Agriculture, Forestry, Environment and Water Management
BMVBS	German Federal Ministry of Transport, Building and Urban Affairs
bmvit	Austrian Federal Ministry of Transport, Innovation and Technology
bmwf	Austrian Ministry of Science and Research
BNSDI	Bulgarian National Research Programme for National Transport Systems

C

CERUM	Swedish Centre for Regional Science
CESIS	*Centro de Estudos para a Intervenção Social*, Portugal
CNR	Italian National Research Council
CNRS	French National Centre for Scientific Research
COST	European cooperation instrument in the field of scientific and technical research
CPDT	*Conférence Permanente du Développement Territorial*, Standing Conference on Territorial Development, Walloon Region, Belgium
CSIC	*Consejo Superior de Investigaciones Cientificas*, Spanish research institute
CSTB	French institute for urban research (Centre Scientifique et Technique du Bâtiment

D

D4E	French Department of Economic Studies and Environmental Assessment
DFLRI	Danish Forest and Landscape Research Institute
DoELG	Irish Department of the Environment and Local Government
DRAST	French Administration of Research, Scientific and Technical Affairs

E

EPA	Irish Environment Protection Agency
EPSRC	UK Engineering and Physical Sciences Research Council
ERA	European Research Area
ERTDI	Irish governmental programme for Environmental Research, Technological Development and Innovation
ERA-NET	European Research Area Networks
ESF	European Social Fund
ESRC	UK Economic and Social Research Council

EU	European Union
EUREKA	Pan-European network for market-oriented, industrial R&D
ExWoSt	German experimental Housing and Urban Development research programme

F

FCT	Portuguese Foundation for Science and Technology
FEEM	*Fondazione Eni Enrico Mattei*, Italian private research foundation
FNR	Luxembourg National Research Fund
FOPS	German Urban Mobility and Transport research programme
FORMAS	Swedish Research Council for Environment, Agricultural Sciences and Spatial Planning
FORNE	Austrian research initiative for sustainable development
FP5 or 5FP	EU Fifth Framework Programme
FP6 or 6FP	EU Sixth Framework Programme
FP7 or 7FP	EU Seventh Framework Programme
FP 2003 - 2006	

G

GIS	Geographic Information System
GSRT	Greek General Secretariat for Research and Technology

I

ICT	Information and Communication Technology
IEG	*Instituto de Economia y Geografia*, Spanish CSIC institute
INTAS	International Association for the promotion of co-operation with scientists from the New Independent States of the former Soviet Union (NIS)
INSPIRE	Infrastructure for Spatial Information in Europe
INTERREG IIb	European Community initiative to support the regions on the inner and outer borders of the Union to cope with difficulties caused by their geo-specific situation
IPA	Romanian National Institute for Research and Development, Design, Execution, and Services for Automation and IT
IT	Information Technology

K

KBN	Polish State Committee for Scientific Research
KCGS	Former name NICIS Institute
KTH	Stockholm University of Technology, Sweden

L

Länder	German federal states
LTH	Lund University of Technology, Sweden
LuTH	Luleå University of Technology, Sweden

M

MCST	Malta Council for Science & Technology
MER	Romanian Ministry of Education and Research
METU	Middle East Technical University
MORO	BMVBS demonstration projects on spatial planning
MRI	Hungarian Metropolitan Research Institute
MSRIT	Polish Ministry of Scientific Research and Information Technology
MTA	Hungarian Academy of Sciences
MTETM	*Ministère de Transport, de l`Equipement, du Tourisme et de la Mer*, France
MVIV	*Ministerio de Vivienda*, Spain

N

NASR	Romanian National Authority for Scientific Research
NERC	UK Natural Environment Research Council
NERI	Danish National Environmental Research Institute

NETHUR	Netherlands Graduate School for Housing and Urban Reserach
NFP	Polish National Framework Programme
NGO	Non-Governmental Organisation
NICIS Institute	Dutch Knowledge Centre for Major Towns and Cities
NIS	New Independent States of the former Soviet Union
NWO	Netherlands Organisation for Scientific Research

O

ÖAW	Austrian Academy of Science
OeNB	Jubilee Fund of the Austrian National Bank
OSA	
OTB	Research Institute, Delft University, Netherlands

P

PFEIL 05	Research programme (2002-2005) from bmlfuw
PFEIL 10	Research programme (2006-2010) from bmlfuw, continuation of PFEIL 05
PROs	Public Research Organisations
ProVISION	Austrian national research programme, part of FORNE
PT MVBW	*Projektträger Möbilität und Verkehr, Bauen und Wohnen*, Germany
PUCA	French Plan Urbanisme Construction Architecture

R

R&D	Research & Development
R&D&I	Research, Development and Technological Innovation
REFINA	German Programme Research for the Reduction of Land Consumption and fro Sustainable Land Management
R&I	Research & Innovation
RPF	Cypriot Research Promotion Foundation
RTOs	Research and Technology Organisations

S

SBi	Danish Building and Urban Research Institute
SCARF	Scottish Community Action Research Fund
SC IPA SA	Romanian private research institute
SG	The Scottish Government
SenterNovem	Netherlands Agency for Innovation and Sustainable Development
SNIFFER	Scotland Northern Ireland Forum for Environmental Research
SRP	Service de la Recherche et de la Prospective
STIP	Dutch Urban Innovation Programme
STRIVE	EPA funding programme Science, Technology, Research & Innovation for the Environment
SUE1	UK Sustainable Urban Environment Programme 1
SUE2	UK Sustainable Urban Environment Programme 2

T

TEPAV	Economic Policy Research Foundation of Turkey
TUBA	Turkish Academy of Sciences
TÜBITAK	Scientific and Technological Research Council of Turkey
TRC	TÜV-Rheinland Consulting GmbH, Germany

U

UBA-A	Austrian Federal Environment Agency of Austria
UCD	University College Dublin
UK	United Kingdom
UKCIP	UK Climate Impacts Programme
UNDP	United Nations Development Programme
UN-HABITAT	United Nations Human Settlements Programme
U-NEXUS	Danish University-Network Exchange on Urban Sustainability
URBAN-NET	Urban ERA-NET – Coordination of the funding of Urban Research in Europe

URENIO	Greek Urban and Regional Innovation Research Unit
URGENT	UK Urban Regenration and the Environment Programme

V

VÁTI	Hungarian Non-Profit Company for Regional Development and Town Planning

W

WP2	Work Package 2 of the URBAN-NET project

ANNEX V
THE SCOPE OF URBAN SUSTAINABILITY
(URBAN-NET deliverable 2.1)

A wide variety of different types of urban research programmes currently exist. This diversity is a valuable resource. It is not the intention of URBAN-NET to dictate which topics urban research programmes should cover, but to use existing knowledge to determine good practice in planning and delivering a research programme – i.e. how urban research can be funded effectively and efficiently. However, urban sustainability is a much debated concept and therefore the URBAN-NET partners need to agree on a common definition. Network Meeting 1[14] was dedicated to the identification of topics falling within the broad and deep lines that URBAN-NET has adopted.

In preparation of Network Meeting 1, Nicis Institute invited experts in the field of urban sustainability for an expert session on this topic. These experts were Prof. Han Verschure (University of Leuven), Mr. Peter Schuthof (Advisor Sustainable Urban Development for SenterNovem) and Dr. Heleen Weening (Programme Manager Nicis Research). During this session, the experts were asked to give their view on the scope of urban sustainability. The experts stated that there are many different definitions. The concept of sustainability has evolved over the years. It dates from the post-WWII period, when the utopian view of technology-driven economic growth gave way to the perception that the quality of the environment was linked closely to economic development. Interest grew sharply in the 1960s, when the environmental movements raised public awareness of this issue. During this period, sustainability was very narrowly defined as environmental protection. This narrow definition was gradually broadened, although there was no world-wide consensus on which issues should be included in the concept of sustainability. In 1987, the United Nations Brundlandt report defined sustainable development as that which "meets the needs of the present generation without compromising the ability of future generations to meet their own needs".[15]

One definition does not have to exclude another definition. Rather, definitions are complementary. Together, they form the scope of the concept of urban sustainability. The main definitions used in the current debates on urban sustainability are the following:

- Urban sustainability is carefully managing scarce resources in urban areas.
  The measure by which a human activity can be continued without relying upon limited resources, such as fossil fuels, or by leaving waste behind, and also giving nature the chance to replenish itself.[16]

- Urban sustainability aims to improve working and living conditions in urban areas. This is both a concept and a strategy by which communities seek economic development approaches that benefit the local environment and quality of life. Sustainable development provides a framework under which communities can use resources efficiently, create efficient infrastructures, protect and enhance the quality

[14] Held on 14 February 2007 in Amsterdam, the Netherlands.
[15] UN Brundtland Report, *Our Common Future*, Oxford University Press, 1987
[16] Ecohealth

of life, and create new businesses to strengthen their economies. A sustainable community is achieved by a long-term and integrated approach to developing and achieving a healthy community by addressing economic, environmental, and social issues. Fostering a strong sense of community and building partnerships and consensus among key stakeholders are also important elements.[17]

- Urban sustainability is meeting the needs of the present generation without compromising the ability of future generations to meet their own needs in urban areas.[18]

- Urban sustainability is ensuring that environmental protection and economic development are complimentary rather than antagonistic processes. It is an economic state where the demands placed upon the environment by people and commerce can be met without reducing the capacity of the environment to provide for future generations.[19]

- Urban sustainability is planning in urban areas with the long term in mind. Decisions should be made with a consideration of sustaining activities into the long-term future.[20]

- Urban sustainability is ensuring an equitable future for all people living in cities. Creating a just, inclusive society for all and creating equal opportunities for all without limiting the quality of life for the future.[21]

- Urban sustainability is the simultaneous pursuit of economic prosperity, environmental quality and social equality.[22]

- Urban sustainability is planning in cities with integrated environmental, social, human and economic goals. This means that sustainable planning should have three overarching objectives: (1) eradicating poverty, (2) protecting natural resources, and (3) changing unsustainable production and consumption patterns.[23]

- Urban sustainability is focused on the development of programmes that promote social interaction and cultural enrichment in cities. The need for sustainability is not only about retaining industries and jobs and local services, it is also about sustaining our values as people. This deals with sustaining culture, identity, and sense of place.[24]

- Urban sustainability emphasises protecting the vulnerable in cities. It respects social diversity and ensures that we all put priority on social capital.[25]

These definitions can be clustered in three different groups:

- *An environmental sustainability cluster*

[17] Academy for Sustainable Communities
[18] UN Brundtland Report, *Our Common Future*, Oxford University Press, 1987
[19] Paul Hawken, *The Ecology of Commerce,* Harper Collins, 1993
[20] DANTES project, European Union
[21] Equality Commission United Kingdom
[22] United Nations World Summit on Social Development 1995
[23] United Nations World Summit on Social Development 2002
[24] Australia Council
[25] City of Vancouver

This includes issues and concepts such as managing scarce resources, environmental protection, urban renewal, cultural heritage, housing, transport, infrastructure and services & amenities.

- *An economic sustainability cluster*
  This includes issues such as equal access to basic needs, employment, business, competitiveness, training, working patterns, research and innovation and digital services.
- *A social sustainability cluster*
  This includes issues such as equality, community development, inclusion, skills improvement, social services, health, integration, vulnerable groups, crime and crime prevention, safety and education.

From these definitions and the expert session it emerged that within the scope of urban sustainability there are also dimensions that cut across these clusters. These dimensions are perspectives from which one can analyse the above-mentioned issues in the clusters.

The following perspectives or dimensions cut across the clusters:

1. *An integrated approach dimension*
   Concerns the integration of the separated components into a holistic concept of urban sustainability.
2. *A time dimension*
   Concerns the long term perspective of urban sustainability: planning without compromising the ability of future generations to meet their own needs.
3. *A governance dimension*
   Concerns the perspective of sustainability in decision-making and governance.
4. *A planning dimension*
   Concerns spatial issues such as land use and design.
5. *A legislative dimension*
   Concerns issues such as environmental justice.
6. *A risk management dimension*
   Concerns issues such as disaster management.
7. *A financial management dimension*
   Concerns issues such as municipal finance.
8. *A monitoring dimension*
   Concerns the monitoring concept in sustainable urban development.
9. *An innovation dimension*
   Concerns all issues on innovative concepts in urban sustainable research.

After the expert session, a discussion paper on the scope of urban sustainability was drafted and circulated to the URBAN-NET partners and national experts. Nicis Institute collected and grouped the feedback received and incorporated these into a final draft of the discussion paper. The discussion paper formed the basis for the discussions during Network Meeting 1 of the project partners. Diagram 1 below, presented at Network Meeting 1 was broadly adopted by the partners to represent the relationship between the clusters and dimensions described above.

Diagram 1: The relationship between the clusters and dimensions in urban sustainability

The discussion paper also dealt with the meaning of 'urban'. It suggested that the scope of the term 'urban' should not be limited quantitatively by e.g. numbers of inhabitants etc, because these vary greatly across European countries. Instead, the suggestion was that the concept of 'urban' should be relating to or concerned with a city or densely populated area. Should a partner doubt whether a programme is focused on urban areas, it is advised to use the definition of urban that is used in the originating country of the programme. When defining 'urban' one could think of criteria like density of the population, several socio-economic functions in the area or the number of inhabitants of the area.

During Network Meeting1, the URBAN-NET partners agreed that the three clusters of definitions and the nine dimensions form the basis for the scope of urban sustainability in URBAN-NET. It was also agreed that the suggested scope of the term 'urban' is a workable one.

The URBAN-NET partners also decided that the relationship between the clusters and dimensions in urban sustainability (see diagram 1) should be worked out in a taxonomy to be used for the filing of documents in the database. The knowledge on research programmes in the URBAN-NET database will be classified according to this central taxonomy. The taxonomy supports the unambiguous naming of the knowledge. This allows users from different countries and backgrounds to start off from a common base.

ANNEX VI
URBAN-NET RESEARCH TEMPLATE

The template underneath was used to gather information among urban sustainability research programme managers in Europe. It has been at the basis of the research report at hand.

Title	1. Name the research programme – max. 15 words + country in which the programme is based.	M[26]
Contributing partner	2. Name of the URBAN-NET partner that is providing the template.	M
Duration	3. Indicate the start and end date of the programme. *(Please note that the end date of the programme should be after 2001.)*	M
Main thematic area	4. Select the main thematic area to which this research programme belongs - choose **one** taxonomy term from the URBAN-NET taxonomy. (*One main thematic area needs to be selected due to technical restrictions – sub-thematic areas to which the programme belongs can be selected in question 5.)*	M
Sub thematic areas	5. Select the sub thematic area to which this research programme belongs - choose **maximum of five** taxonomy terms from the URBAN-NET taxonomy.	M
Introduction	6. Describe the main objectives of the research programme (max. 100 words). 7. What are the societal issues[27] addressed by the programme? (max. 50 words.) 8. What are the theoretical issues addressed by the programme? (max. 50 words.) 9. Are there other issues addresses by the programme? (max. 50 words.)	M M M O[28]
Summary	10. Provide an additional summary of the content of the research programme (max. 100 words). *Briefly summarize the scope and organisation of the programme.*	M

[26] M = Mandatory
[27] Issues of or relating to the structure, organization, or functioning of society.
[28] O = Optional

Background information	11. What is the geographical level of the research programme? Please choose from the following options: a. National b. Regional c. Local	M
	12. Which of the following parties are involved in the establishment of the research programme? Choose one or more from the following options d. Academic partners from one discipline e. Academic partners from several disciplines f. National government g. Regional government h. Local government i. Private company j. Research agency/institute/organisation k. Other (Specify)	M
	Briefly specify the role of each partner in the programme. You can choose from the following options: a. Management role b. Coordinating role c. Financial partner role d. Other (Specify)	M
	13. Which and how many of the following research personnel are involved in the programme? a. Research associates b. Post – Doctorates (PhD's) c. PhD candidates d. Senior researchers	O
	14. What resources are used to finance the programme? Please choose from the following options: a. European funded programmes b. Nationally funded programmes c. Academic subsidised programmes	M

	d. Private companies funding e. Match funding[29] f. Co-financing by partners g. Other (Specify) 15. What is the total budget of the programme in euros including any match funding?	 M
Methodology	16. Who decides the focus area(s) of the programme? Choose one or more from the following options a. Academic partners from one discipline b. Academic partners from several disciplines c. National government d. Regional government e. Local government f. Private company g. Research agency/institute/organisation h. Other (Specify) 17. Is identifying gaps in former research part of the identification of the programme framework? Yes/ No 18. Is it possible to modify the programme's focus area(s) throughout the duration of the programme? If so, which parties were able to decide? 19. How are research projects within the programme commissioned? Choose from the following options: a. Open calls for tenders b. Directed commission to research bodies c. Both 20. What type of assessment procedure for the research applications is	M O M M M

[29] European Structural Funds will only meet a proportion of the costs of any project. The proportion not met by Structural Funds is known as match-funding. Match funding can be either public funding or a combination of public and private funding. Co-financing organisations are able to provide match funding on behalf of the applicant.

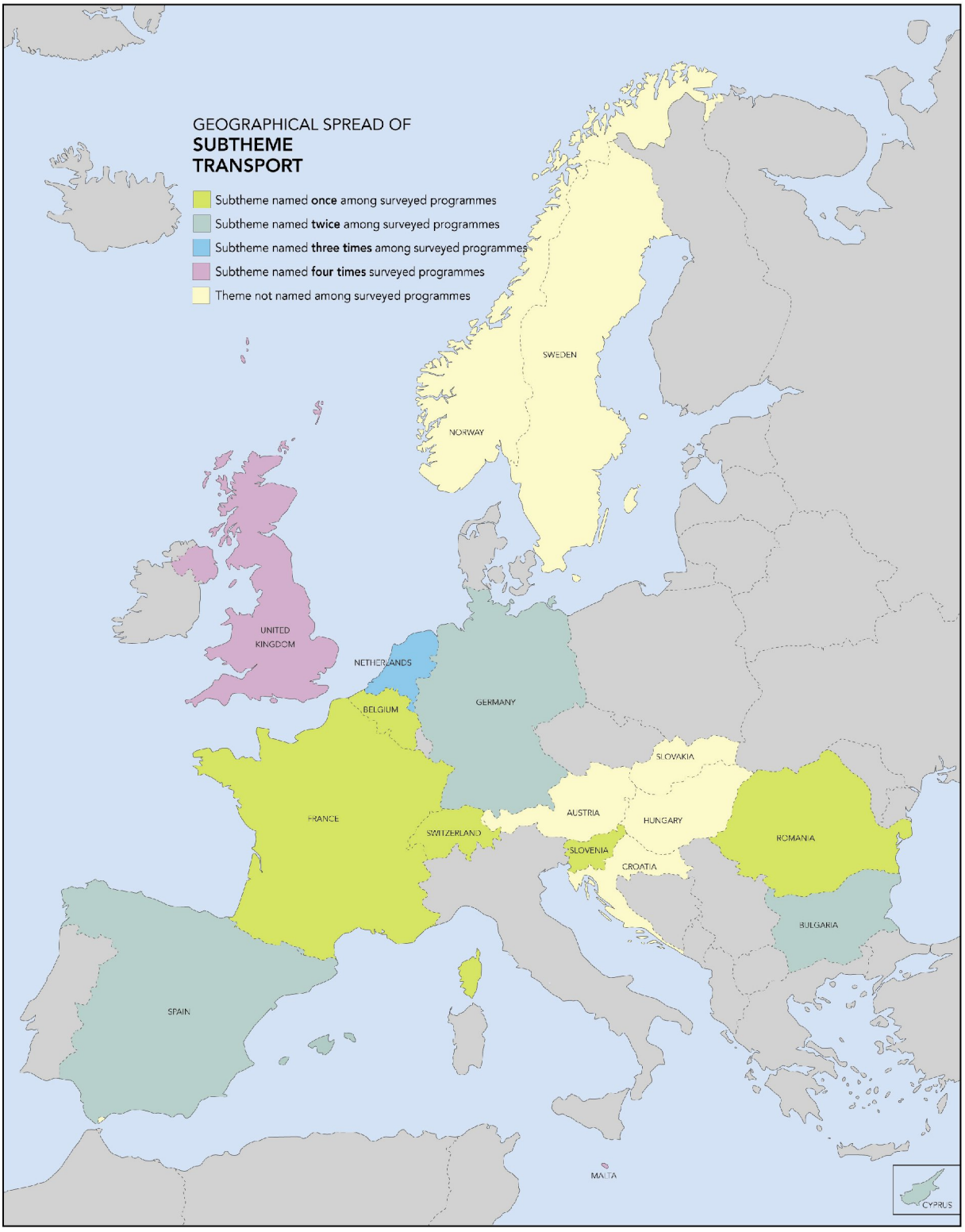
	conducted? Choose from the following options: a. Review by members of the research organisation (internal review) b. Independent experts review (external review) c. Both	
	21. What criteria are used for granting research applications? Briefly list these criteria. (Max. 200 words).	M
Evaluation	22. What criteria are used to evaluate the programme throughout the duration of the programme (mid-term evaluation)? Briefly list these criteria (max 200 words).	O
	23. What criteria are used to evaluate the finalized programme? Briefly list these criteria (max 200 words).	O
	24. What are the main conclusions of the evaluation of the programme? (max 200 words).	O
	25. How many applications/proposals were received?	O
	26. How many applications/proposals were granted by the programme?	O
Dissemination	27. At which level was the dissemination of the programme outcomes organised? Choose from the following; a. At project level b. At thematic cluster level c. At programme level d. Other	M

	28. What was the target group for disseminating the research results? Choose one or more from the following options: a. Academic community b. National government c. Regional government d. Local governments e. Private companies f. Research agencies/institutes/organisations g. Practitioners h. Wider public i. Other (Specify)	M
	29. Please specify in what way the target groups were reached. Choose from the following options: a. By organizing conferences and/or workshops b. By publishing articles c. By using multimedia communication (website, etc.) d. By publishing brochures or other printed communication material e. Other	M
Impact	30. Summarise the results of the programme (75 – 100 words)	M
	31. For which groups were the outcomes valuable? Choose from the following options: a. Academic community b. National government c. Regional government d. Local governments e. Private companies f. Research agencies/institutes/organisations g. Practitioners h. Wider public i. Other (Specify) Please specify in which way the outcomes were valuable.	O
	32. Are there any follow on programmes or other activities as a direct result of this programme? If so describe here (max. 100 words)	M

	33. Are there any other direct consequences as a result of this programme? If so describe here (max 100 words)	M
Organisation	34. What is the name of the organisation that set up the programme? If there was more than one organisation involved, please list them all.	M
	35. How can this/these organisation/s be classified? Choose from the following options: a. Academic institutions b. National government c. Regional government d. Local government e. Private company f. Research agency/institute/organisation g. Other (please specify)	M
Contact person	36. Provide the name of a person (within one of the parties of the research programme) who can be contacted to obtain more information on the research programme. Start with Ms/Mr/Mrs.	M
Function	37. Function of the contact person	O
Phone	38. +<country code><area code><number>	O
E-mail	39. Provide an e-mail address, either of the organisation or the contact person.	M
Links	40. Website address	O

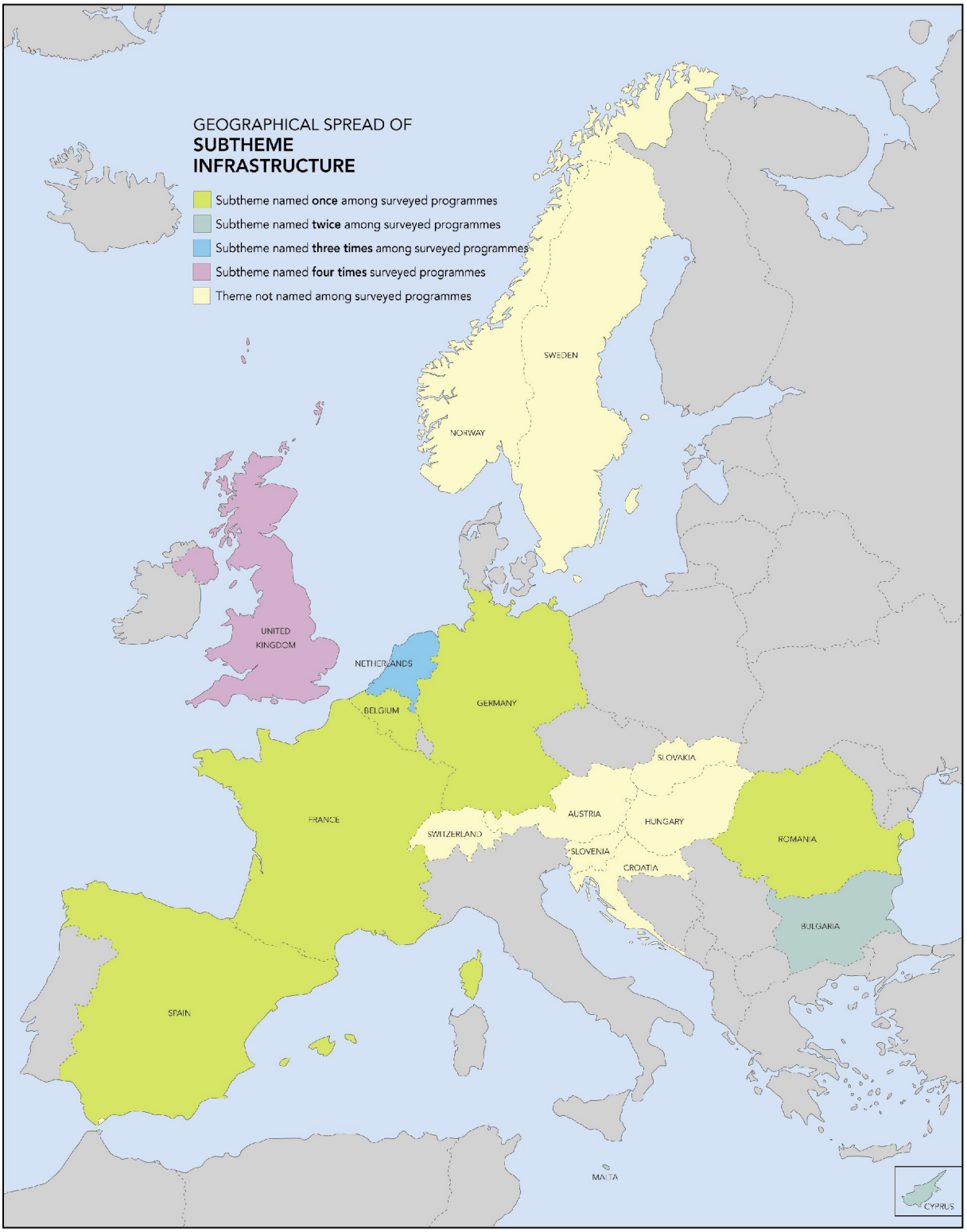
ANNEX VII
GEOGRAPHICAL APPEARANCE OF MOST NAMED SUB THEMES

1) Sub theme transport:



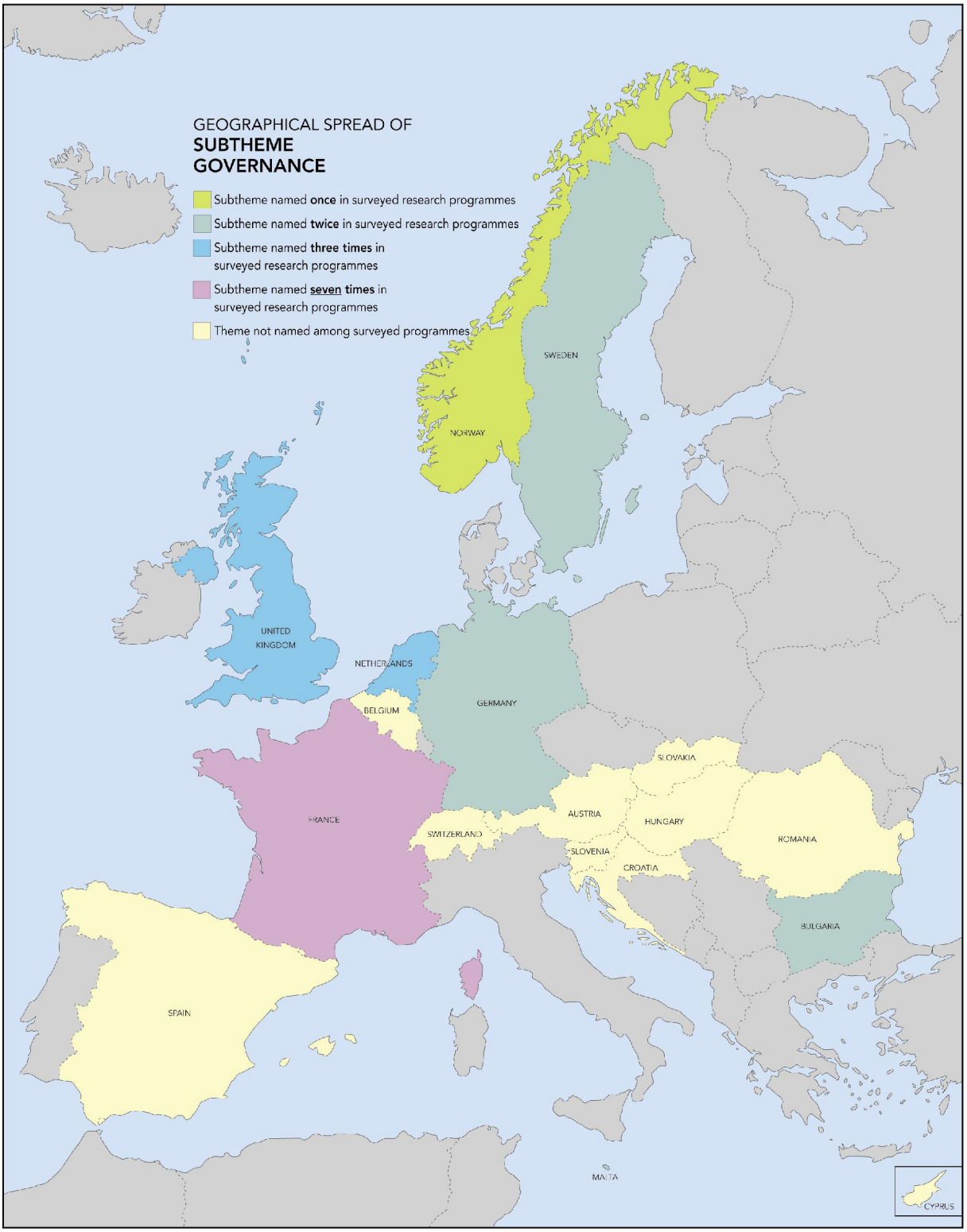
Sub theme 'Transport' on the map of Europe. Based on a survey among 18 European countries. Total times sub theme was named within the countries on the map: 24.

2) Sub theme infrastructure



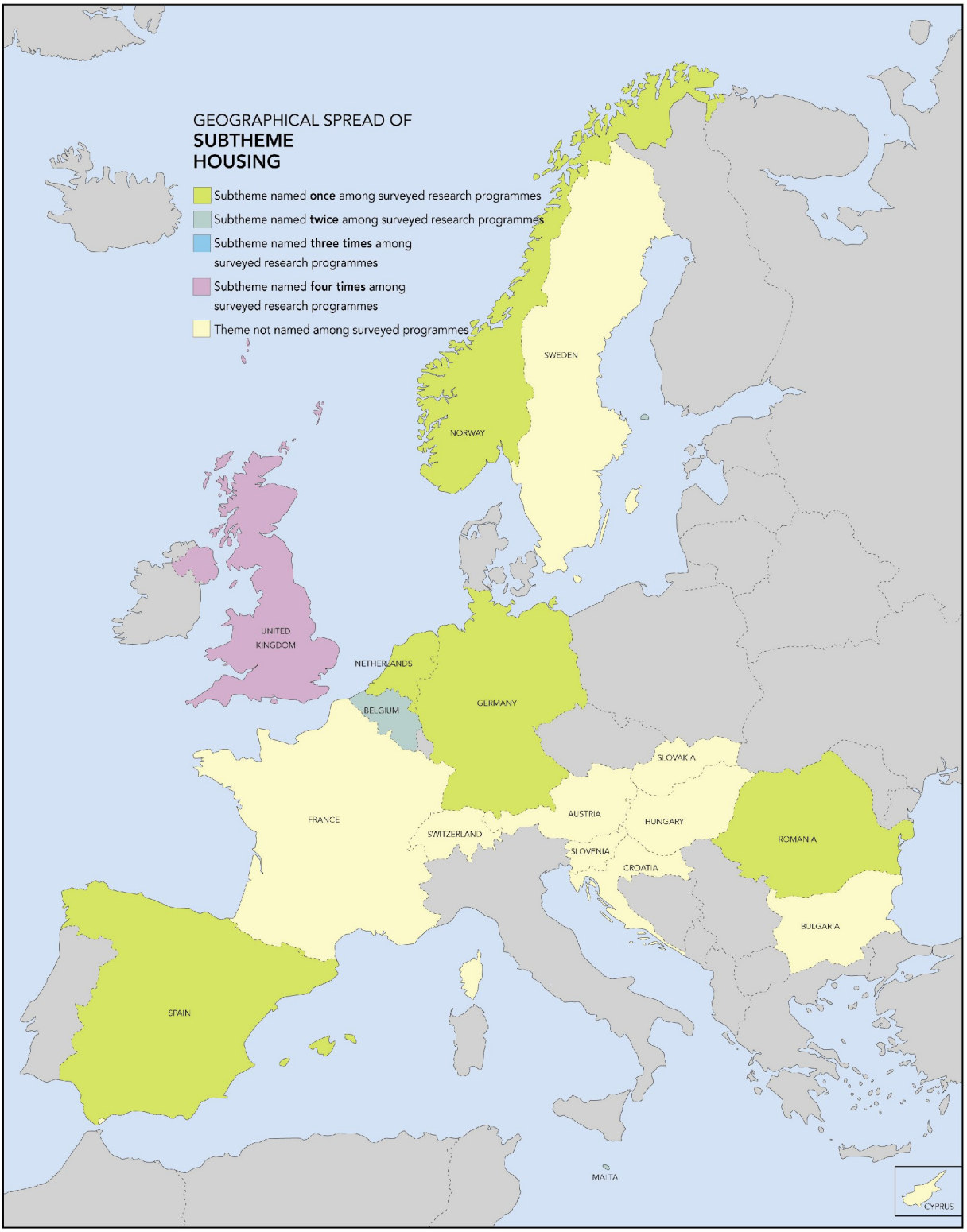
Sub theme 'Infrastructure' on the map of Europe. Based on a survey among 18 European countries. Total times sub theme was named within the countries on the map: 18.

3) Sub theme governance



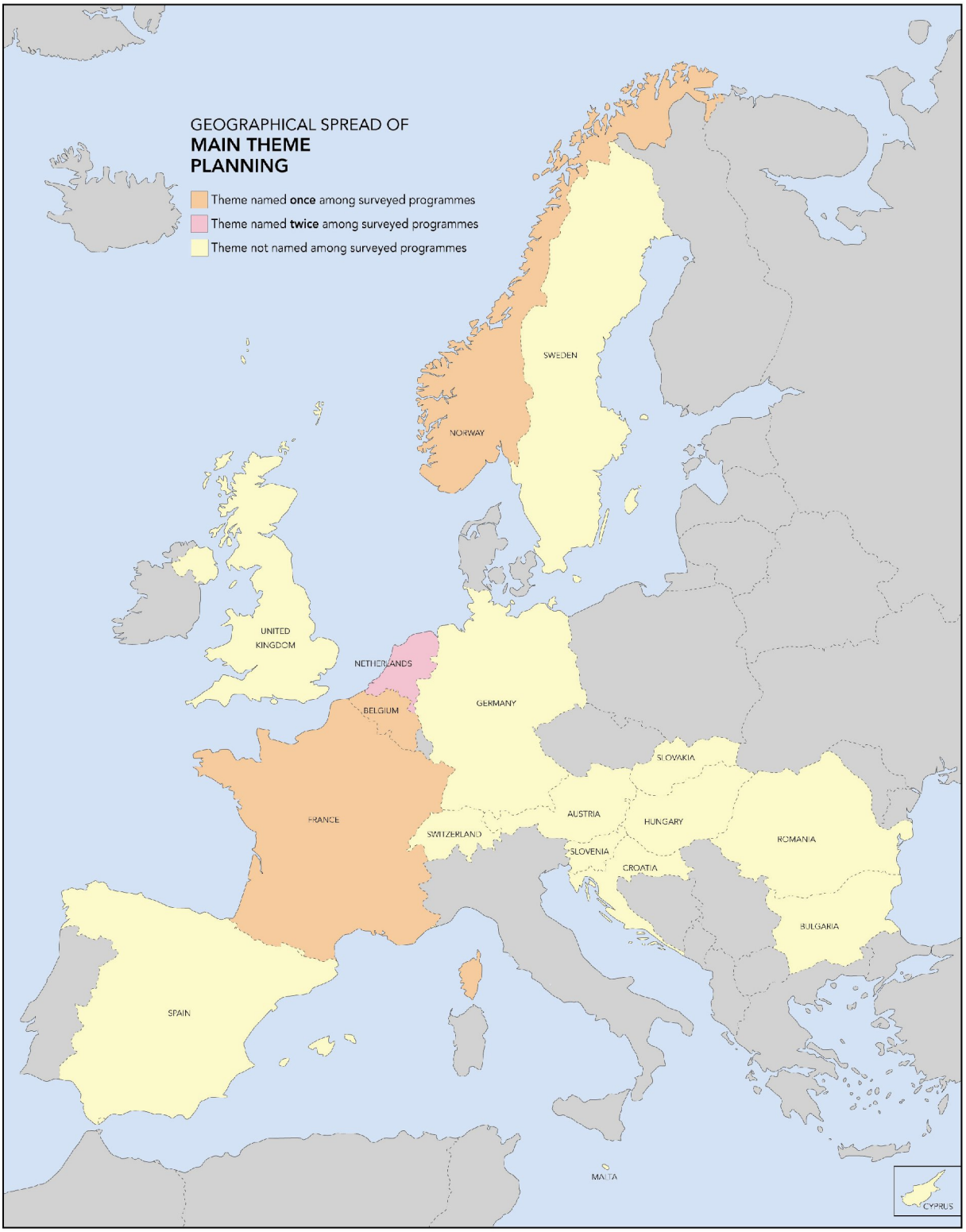
Sub theme 'Governance' on the map of Europe. Based on a survey among 18 European countries. Total times sub theme was named within the countries on the map: 22.

4) Sub theme housing



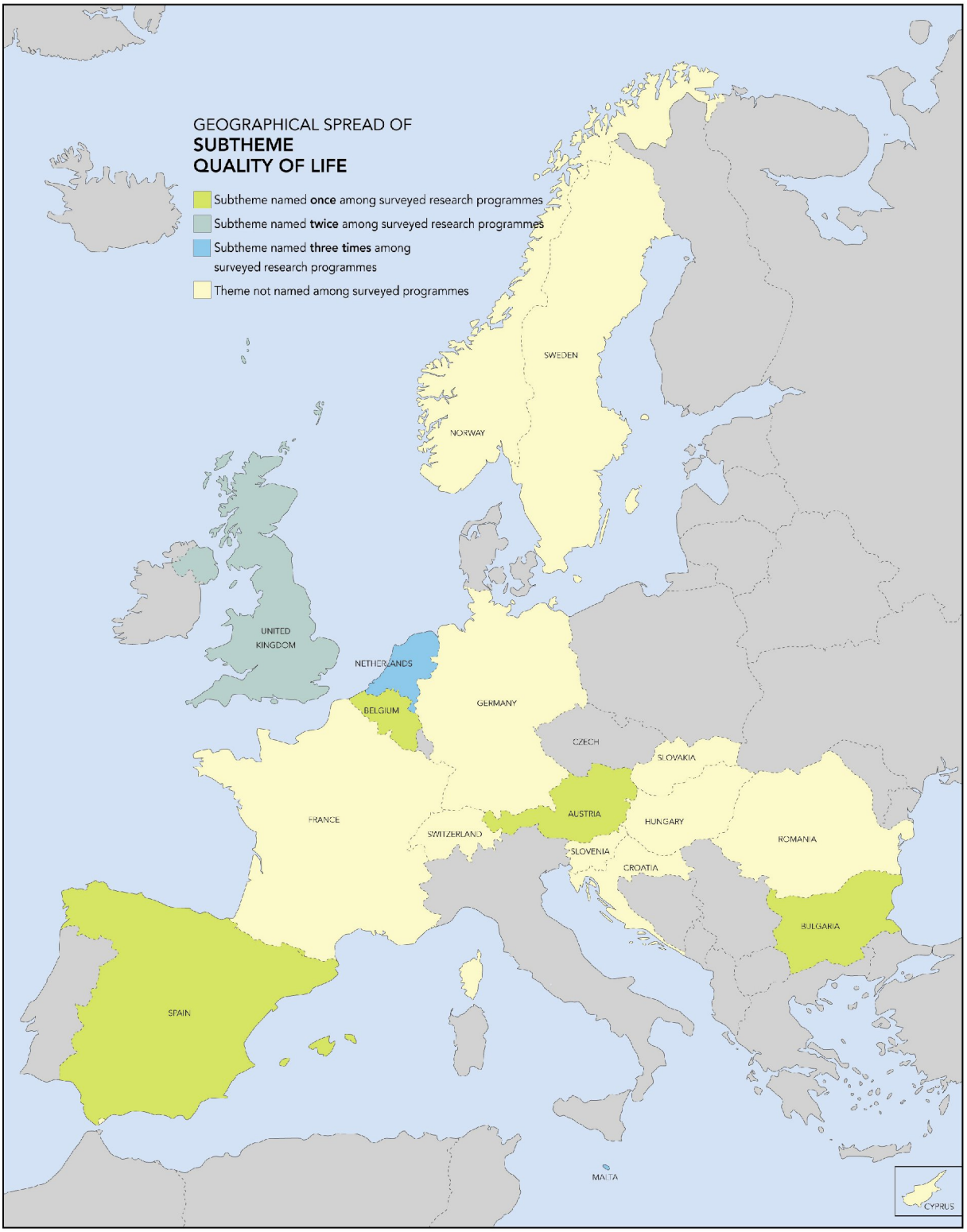
Sub theme 'Housing' on the map of Europe. Based on a survey among 18 European countries. Total times sub theme was named within the countries on the map: 14.

5) Sub theme planning



Sub theme 'Planning' on the map of Europe. Based on a survey among 18 European countries. Total times sub theme was named within the countries on the map: 14.

6) Sub theme quality of life



Sub theme 'Quality of life' on the map of Europe. Based on a survey among 18 European countries. Total times sub theme was named within the countries on the map: 12.