BERLIN, GERMANY

Case Study City Portrait; part of a GREEN SURGE study on urban green infrastructure planning and governance in 20 European cities

In cooperation with

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INTRODUCTION

This case study portrait is part of a series of 20 case studies on urban green infrastructure planning and governance in European cities, undertaken in the course of the GREEN SURGE project. GREEN SURGE is a trans-national research project funded through the European Union’s 7th Framework Programme. GREEN SURGE is an acronym for “Green Infrastructure and Urban Biodiversity for Sustainable Urban Development and the Green Economy”. The project is identifying, developing and testing ways of connecting green spaces, biodiversity, people and the green economy, in order to meet the major urban challenges related to, e.g., climate change adaptation, demographic changes, human health and well-being.

Each portraits has the following content:

- **INTRODUCTION** – which contains location and green structure maps as well as basic information on the city-region (core city and larger urban zone).

- **URBAN AND REGIONAL PLANNING CHARACTERISTICS** – which describes the main characteristics of the planning system including instruments for the protection and enhancement of green space and objectives, achievements and challenges in urban green space planning.

- **EXPERIENCES WITH INNOVATIVE GOVERNANCE PRACTICES** – which outlines how, in the views of selected actors, ‘traditional’ government-driven steering of green space planning and management on the one hand, and emerging forms of governance with a greater role for non-government actors on the other, play out in different cities.

- **URBAN GREEN INFRASTRUCTURE (UGI) THEMES AND STRATEGIES** – which considers the main themes about planning and how this relates to the concept of UGI as well as policy concepts. Furthermore, implementation and evaluation of planning instruments are discussed.

- **URBAN GREEN SPACES: LINKAGES BETWEEN BIODIVERSITY AND CULTURE** – which is about the linkages between cultural diversity and biological diversity and how these impact on urban green spaces and urban green structures. Urban biocultural diversity is a recent concept emphasizing the links between biological diversity and cultural diversity. Research and policy directed at biocultural diversity can focus on the roles of ethnic or other groups, the role of a great range of cultural practices (which may or may not be connected to certain groups), and to physical objects or species bearing a relationship with specific cultural-historical practices.

- **CONCLUSION** to wrap up the main findings

A report with all case studies and more detailed background information can be found on the project’s website http://greensurge.eu.
### 1) INTRODUCTION: Facts and Figures

<table>
<thead>
<tr>
<th>Core city</th>
<th>Berlin</th>
<th>Biogeographic region</th>
<th>Continental</th>
</tr>
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<tbody>
<tr>
<td>Region</td>
<td>Berlin-Brandenburg Metropolitan Region</td>
<td>Planning family</td>
<td>Central/Regional economic planning</td>
</tr>
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| Area               | • Core city 88,966 ha  
                  | • Larger urban zone 1,746,975 ha | Population (2012) | 3,501,872  
                  |                                  | • Core city  
                  |                                  | • Larger urban zone 5,097,712  
| Average annual population change rate (1992-2012; Core city) | 0.05 | Public recreational green space per capita (2006, Core city; m² per inhabitant) | 16.82 |

#### Location Map

Berlin is Germany’s largest city and centre of the Berlin-Brandenburg Metropolitan Region. Located in north-eastern Germany, Berlin is the capital and also one of the 16 States of Germany. Berlin lies in the lowlands of northern Germany, in a landscape characterized by river valleys and plateaus shaped by the last Ice Age. Berlin encompasses large green and blue areas. Parks, forests and water bodies sum up to nearly 40% of the total city area.

Unlike other parts of former Eastern Germany, whose population declined after the reunification, the number of inhabitants in Berlin’s metropolitan area has remained relatively stable. Nevertheless, the metropolitan area has experienced uneven growth, resulting specifically from a population increase within the city and suburbanisation around the city of Berlin, while other parts of the Metropolitan Region have been steadily shrinking. These disparities in development are expected to increase (SenStadt UD and MIR 2009).

Berlin is considered to be a hub for creativity and culture and a popular international tourist destination.
2) URBAN AND REGIONAL PLANNING CHARACTERISTICS

General description of the planning system
Berlin conducts regional planning in cooperation with the surrounding State of Brandenburg (Joint Spatial Planning Berlin-Brandenburg). The joint department of the two federal States operates on the basis of a State treaty. The State Development Programme for the Berlin-Brandenburg Region (LEPro 2007) is the overall planning strategy for the region, including the development of open space. The State Development Plan Berlin-Brandenburg (LEP 2009) is a specification of the LEPro and provides the framework for regional spatial development. It defines the spatial structure and contains objectives for the development of open space and built areas. Both instruments are legally binding and eventually be a point of departure for decision-making on behalf of the municipal authorities in the Berlin-Brandenburg area.

Due to Berlin’s status as a German State the Senate Department for Urban Development and the Environment also represents a regional planning body. Therefore, some of the planning instruments differ from other German cities as they combine the regional (state) and city level. The Land Use Plan (FNP 1994 with several adjustments) is a strategic urban planning instrument and is binding for public authorities. The Urban Development Plan 2030, however, is an informal planning process that formulates the main topics for the long-term development of Berlin.

The German planning system is characterised by formal plans and regulative instruments. Interestingly, to tackle Berlin’s evolving challenges, a number of non-statutory plans have been recently agreed upon, namely the Urban Development Plan Climate, the Biodiversity Strategy and the Urban Landscape Strategy.

Berlin’s districts have their own departments for urban development.

Instruments for the protection and enhancement of urban green space
At the regional level, the LEP defines objectives for the development of cultural landscapes and open spaces. Additionally, in 1998 a “chain” of eight regional parks was established to protect the peri-urban landscape surrounding Berlin against sprawl and to conserve landscape areas for recreational purposes.

The public authority responsible for green space planning at city level as well as for the execution of nature protection laws is the Department for Urban Planning and Open Space Planning, which is part of the Senate Department for Urban Development and the Environment. The Landscape Programme/Species Protection Programme (LaPro 1994/2004) is the strategic landscape planning instrument that is coordinated with the FNP and contains environmental protection requirements and measures. An update of the LaPro is in progress and a draft will be published in 2015.

While the LaPro ensures the long-term environmental quality of the city, the non-statutory plans mentioned above focus on particular green space-related issues, such as further development of urban green space based on evolving societal needs, the protection of biodiversity, or adaptation to climate change.

At district level, the departments for urban development are responsible for the planning and management of urban green space and elaborate the LaPro for their areas in the form of district landscape plans. These landscape plans are ordinances.

Objectives, achievements and challenges in urban green space planning
During the last decade, Berlin has successfully protected and transformed vacant lands such as railway areas or airports into public parks, with the former Tempelhof Feld airport (300 ha) as the most prominent example. To improve the green space network in terms of recreation and to preserve biodiversity, the impact mitigation and com-
pensation regulation under the Federal nature protection law is particularly valued by city officials. Though not as strictly binding in urban areas as for the countryside, this instrument ensures that loss of open space through development is partly compensated and allows the city administration to engage developers to raise funds to improve the habitat and recreation network.

Following the improvement of connectivity, the city’s focus is on securing the existing qualities and maintenance of Berlin’s urban green. Due to restricted financial resources conserving the status quo is perceived as a major challenge.

The need to further adjust Berlin’s green arises from the diversification of society in terms of lifestyles and demands as well as the expected effect of climate change. In social terms, city officials aim at the promotion of cultural diversity and a variety of lifestyles through urban green space but are aware of the challenge to accommodate multiple demands and interests in a limited space. Both social and environmental challenges are also addressed in Berlin’s planning strategies, such as the Urban Landscape Strategy.

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**Berlin’s major challenges** (from left to right): The general tight budget of the city combined with a highly intense use of green spaces represents a challenge for the maintenance of parks, such as Tilla-Durieux-Park (photo: Senatsverwaltung für Stadtentwicklung und Umwelt). -- To tackle the upcoming challenges of climate change the city has developed a strategy for adaptation and mitigation focussing on the role of urban green space (image: Senatsverwaltung für Stadtentwicklung und Umwelt).

**Berlin’s major achievements** (from left to right): The impact mitigation and compensation regulation enables the city to strategically plan for and implement projects to further develop the green space network consisting of two rings and two axes (image: Senatsverwaltung für Stadtentwicklung und Umwelt). -- Through the conversion of vacant lots Berlin’s citizens and visitors can enjoy new parks, such as Tempelhofer Feld (photo: Tempelhof Projekt GmbH, www.tempelhoferfreiheit.de).
3) EXPERIENCES WITH INNOVATIVE GOVERNANCE PRACTICES

Government ideas and practices regarding participation

Participation in city-wide planning processes in Berlin is partly characterised by formal participation based on legal requirements. For example, the development of the Landscape Programme included information and the participation of citizens and stakeholder consultation involving NGOs, while final decisions were made by the city’s government and parliament. The Urban Landscape Strategy was mainly developed by bodies of experts, with the consultation of selected stakeholders and two public discussions. For park projects, such as Gleisdreck and Tempelhofer Feld, the city pursued higher levels of participation (see below).

Additionally, Berlin has a City Forum (Stadtforum Berlin), lead by an expert panel, that regularly holds events where the city’s main planning strategies and projects are discussed publicly. This includes the discussion of the relatively new non-statutory strategies, such as the Urban Landscape Strategy. The City Forum also maintains a digital pinboard where everybody can comment on Forum themes, suggest new ones, and add to the completed discussion events (Senatsverwaltung für Stadtentwicklung und Umwelt 2014a).

In regard to green space implementation and maintenance, the city aims at high levels of participation and shared responsibilities. Financial restrictions as well as a strong desire of Berlin’s inhabitants to influence urban development have been mentioned as reasons for this shift. The concept of “productive landscape” in the Urban Landscape Strategy includes the involvement of non-governmental and private initiatives such as allotment gardens, subsistence farming and (commercial) urban agriculture, interim-uses, and the creation of social learning areas. The city encourages semi-private and temporary uses of public green spaces, named “urban pioneers”. Another example of increased participation is the campaign “Urban trees for Berlin”, an initiative to raise funds for 10,000 additional trees in the city. If requested, donors can give money for a specific location, e.g. in their neighbourhood.

For the future, city officials see the potential to increase interdepartmental cooperation and participation of business communities and individual citizens.

Local initiatives

Berlin is known not only for pioneer uses on vacant lots, like the nomadic community garden Prinzessinnengarten (see also Senatsverwaltung für Stadtentwicklung 2007), but also for protests and resistance against development plans, with some non-governmental groups being active for decades (Lachmund 2013). Organised protest groups have been successful in conserving vacant inner-city areas, such as Schöneberger Südgelände or Gleisdreieck. Tempelhofer Feld became known as the most recent example of anti-development protests. A housing development was planned on the edges of the former airport, but a strong civil opposition arose and requested a public referendum in which the citizens decided against any development within the area.

The project “20 green main paths” followed a collaborative approach from the beginning. It was founded in 2004 by two associations, one for nature conservation and one for walking, together with the Senate Department for Urban Development and the Environment. More than 100 volunteers contributed to a plan to improve the path network.

Supporting and hindering factors in participation as perceived by city officials

According to city officials, Berlin’s administration has put a lot of effort into establishing efficient and professional participation processes. Participation is seen as supporting planning and design processes and as an opportunity to improve results. It is also considered as promoting acceptance of new projects and as allowing the city authority to
better adjust green space to the demands of citizens.

Openness of planners and politicians, professional process management as well as a good culture of discussion are considered as crucial factors of success. However, in Berlin participation processes are partly affected by strong opposition and polarisation of non-governmental actors that hinder compromises.

Personal and financial resources are perceived as a general factor determining successful or inefficient participation processes. For large projects, such as Tempelhofer Feld, considerable funding is available and the project team aims to overcome the mistrust of citizens by testing new inclusive approaches such as the participatory development of a management plan, including an online dialogue (Senatsverwaltung für Stadtentwicklung und Umwelt 2014b).

### Examples of initiatives coming from local stakeholders

**Schöneberger Südgelände**

The former railway area Schöneberger Südgelände is an internationally known example of conservation of an inner-city wasteland as an urban wilderness. It is considered to be unconventional, because it is one of the first parks that integrated spontaneously grown vegetation instead of replanting the area with traditional park vegetation.

The area had been closed for decades and was supposed to be redeveloped. However, a citizen group advocated for conservation and had organized protests since 1980. When they succeeded after several years, artists designed the park with careful interventions to keep the appeal of an urban wilderness. Financial support was provided by a German environmental foundation. Since 1999, Schöneberger Südgelände is a public park and also a venue for art events.

![Schöneberger Südgelände](photo: Rieke Hansen, 2011)

**Park am Gleisdreieck**

Park am Gleisdreieck was also built on a former railway land in a central district. A citizen group protested for decades against traffic and housing developments, and the public pressure they created contributed significantly to the decision for conservation as a green space.

The eventual planning of the park was lead by the city administration. Citizens participated, for example, through surveys, discussions and in a work group. However, transformation into a public park for highly intense use was not welcomed by all activists. Some would have preferred to conserve the wasteland in its original state with less conventional park elements and facilities.

Since its opening in 2011, Gleisdreieck has become a popular park for sports activities and recreation.

![Park am Gleisdreieck](photo: Holle Thierfelder, 2012)
4) URBAN GREEN INFRASTRUCTURE (UGI) THEMES AND STRATEGIES

Main themes related to urban green space

Important themes in Berlin’s green space planning are the protection of biodiversity and the creation of habitat networks (LaPro and Biodiversity Strategy), as well as adaptation to climate change (Urban Development Plan Climate). Attention is also paid to the social relevance of urban green space and new strategies for increasing the quality and robustness of urban green space (e.g., Urban Landscape Strategy, Programme for Mixed Forests).

The Landscape Programme (LaPro), which is binding for public authorities, is a strategic landscape plan based on thematic programme plans: (1) Ecosystem and Environmental Protection, (2) The Protection of Biotopes and Species, (3) Landscape Scenery, and (4) Recreation and the Use of Open Space. Since 2004 it also contains the General Urban Mitigation Plan which defines priority areas for compensation measures.

The non-statutory Urban Landscape Strategy aims at improving urban green in Berlin in a socially and environmentally conscious way. It communicates the value of urban green and provides visions for three themes: (1) Beautiful City, (2) Productive Landscape, and (3) Urban Nature.

New themes on the rise are park restoration and water management. Especially in regard to climate change themes such as infiltration, storage and use of precipitation water gain importance.

Understanding of UGI and representation of UGI principles

The concept of UGI is mentioned in the Urban Landscape Strategy and in other recent planning documents but is not discussed in detail. However, urban green space is considered as a network. In the LaPro urban green space is described as an "open space system" that consists of two "park rings" and two "green axes" in the form of a cross. The city’s Biodiversity Strategy shall help to build a habitat network.

Related to the concept of multifunctionality the provision of several biotic, abiotic, and cultural functions and benefits is also described. For example, the LaPro highlights functions such as climate regulation, drinking water provision, habitat, and recreation opportunities. The Urban Landscape Strategy aims at promoting awareness of the multiple benefits that urban green space provides and at improving the quality and usability of urban green space.

The Urban Landscape Strategy also embraces an integrated approach. It emphasizes the importance of linking transport planning, mobility and traffic management, and urban and open space planning. The concept of "multicoding" of green space is defined in the Strategy as "[…] the overlay of inter-
ests and functions; instead of a mono-functional juxtaposition it creates space that is usable in different dimensions." This definition is similar to the concept of multifunctionality.

### Implementation and evaluation
Concerning implementation of green space plans the city officials highlighted the lack of funding as a major concern. Political support was mentioned among the factors promoting implementation. Furthermore, the city obtained positive outcomes after testing new creative approaches that were able to convince, encourage and engage actors as well as to change their perspectives. The Urban Landscape Strategy lists and describes a number of implemented and planned projects within the city that could be inspiring and instructive for others.

In regard to funding the Urban Landscape Strategy is an exception; its municipal budget was used for a tree planting campaign and for forest conversion and beacon projects. Additionally, the city aims at sponsoring for implementation (tree planting campaign) and EU funding.

Due to linkages with the Land Use Plan, the LaPro is mainly implemented through planning and regulation instruments on subordinate planning levels, such as local development plans, which need to consider the objectives and measures suggested in the landscape programme. The “General Urban Mitigation Plan” is implemented and financed through the impact mitigation and compensation regulation.

A challenge for implementation of city-wide planning is the adoption of strategies on a local scale. Oftentimes, the districts are responsible for implementation. To ensure this, the themes and objectives need to be communicated well and understood and accepted in the district administrations.

According to city officials monitoring and evaluation could be increased. However, lack of funding affects not only implementation measures but also the monitoring and evaluation as well as maintenance of existing green space.

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<thead>
<tr>
<th>Urban Landscape Strategy Berlin</th>
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<tr>
<td><strong>Original title:</strong> Strategie Stadtlandschaft Berlin</td>
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<td><strong>Date:</strong> 2012</td>
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<tr>
<td><strong>Responsible department(s):</strong> Senate Department for Urban Development and the Environment</td>
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<tr>
<td><strong>Spatial scale:</strong> City</td>
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<td><strong>Legal status:</strong> Non-binding, but approved by politics</td>
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**Main themes**
- Quality of life and horticultural heritage
- Social functions of urban green space
- Productive urban landscape; DIY culture and creativity of citizens
- Nature experience
- Water management and Biodiversity

**Parallels with GREEN-SURGE policy concepts**
- Green economy
- Social Cohesion
Views of what Biocultural Diversity is referring to and how it is addressed in policy

Cultural diversity and biological diversity are both important issues for the city of Berlin. However, in green space plans and strategies the linkages between both concepts have been limited so far. The Urban Landscape Strategy considers urban green space strongly from a social perspective and aims at promoting cultural diversity by maintaining green spaces, for example, as semi-private areas that are designed and managed by non-governmental initiatives. For biodiversity the city has a separate Biodiversity Strategy that places biodiversity protection under the responsibility of society as a whole; it does not further specify how the ecological services offered by biodiversity are valued and used by different user groups in culturally specific ways. Both strategies put emphasis on accessibility of urban nature and the creation of facilities for nature experiences for all people. In doing so, care must be taken to accommodate new forms of nature experiences and recreational demands. For instance, at present there is a need for new barbecue areas that serve as meeting places for larger groups of people who often do not own their own gardens. Some parks include gathering spaces for ethnic minorities; for instance, in Preußenpark there is a food market for Thai people.

At the local level there are several examples of the promotion of culturally specific approaches towards maintaining biodiversity and offers for nature experiences, such as stimulation of temporary vegetation on derelict sites, maintenance of community gardens and specific intercultural gardens.

The need to consider cultural diversity in green space planning is well recognized by city officials, but it is acknowledged that not every urban green space can accommodate all the diversity in its use and the related facilities. Parks, such as Gleisdreieck, attract different social groups because they offer sports facilities, dog runs, places for contemplation, nature experiences, and allotment gardens, while some parks are less usable for certain social groups. For example, Tempelhofer Feld lacks facilities for children and the elderly. For this particular park, a visitor survey revealed that the largest group of users are young and middle-aged adult males practicing sports.

Recently, new types of urban green spaces in the form of urban wilderness parks and landscape parks have been developed. Both include innovative approaches towards combining biodiversity conservation and cultural heritage conservation. The urban wilderness parks have been developed on former railway areas. In these parks the conservation of industrial heritage objects is combined with new forms of ecological development of these typical urban biotopes. They may include non-native new species; provided that these species are not harmful they may enrich biodiversity. Several of these species are tolerant to the specific conditions (e.g., heat and drought) of these urban biotopes and may therefore be adaptable to climate change effects.

Bioculturally significant places

Examples of biocultural significant places include urban wilderness parks, allotment gardens, landscape parks and recreational farms.

The urban wilderness parks, such as Schöneberger Südgelände, Park am Nordbahnhof or Park am Gleisdreieck, are examples of conversion of former railway areas into public parks that integrate remnants of former use and spontaneously grown urban nature. Schöneberger Südgelände is a nature conservation area inhabited by rare species. The park is accessible through the design of elevated paths, but sensitive areas are forbidden.
Landschaftspark Herzberge is an example of a landscape park that combines extensive urban agriculture with biodiversity protection and improved habitat quality. The farmland that formerly belonged to a hospital is now managed by sheep grazing.

Lichterfelde-Süd farm is an example of an urban farm that integrates biodiversity conservation with historically developed forms of agrobiodiversity. The farm is located in a former military area characterised by high biodiversity. It is currently used for horse keeping and provides horse riding facilities for people who cannot afford to own horses.
6) CONCLUSION

Green space planning in Berlin is characterised by a combination of statutory and non-statutory planning instruments. While the statutory planning aims at securing the city’s environmental quality, the non-binding strategies aim at innovative solutions for upcoming challenges such as social diversification, climate change or biodiversity loss. These non-binding strategies include integrated approaches to strengthen cooperation between different sectors of administration, to enhance cooperation with non-governmental actors and enable multiple uses of urban green space.

The city aims at improving the green space network and applies legal impact mitigation and compensation regulation for gradually completing the networks for recreational uses and habitat. While vacant lands have been transformed successfully into urban parks, the focus is now on maintaining quality and responding to social demands. Due to a tight city budget combined with highly intense use and the presence of multiple and relatively large urban green and blue spaces within the city, keeping quality standards represents a major concern.

Restricted financial resources also pose an argument in favour of sharing responsibilities with non-governmental actors. In terms of governance and participation, the city promotes green space design and management such as interim-uses and community gardens through non-governmental actors. Citizens also often have a prominent role in protecting vacant lands, such as Schöneberger Südgelände or Tempelhofer Feld, from redevelopment and have successfully lobbied for their conversion into public parks. In city-wide statutory planning, participation is mainly based on legal requirements. Non-statutory green space plans have mainly been developed in cooperation with expert groups and selected stakeholders and also included public discussions in the City Forum. On the project-level, the city tests new approaches for participatory planning such as for the management plan for the Tempelhofer Feld, including online-participation.

Cultural diversity and biodiversity are important themes in Berlin’s green space planning. However, in city-wide planning explicit linkages between both are rare, while at project level several examples (e.g., intercultural gardens) can be found that combine cultural diversity and biodiversity.
LINKS AND REFERENCES

Websites of municipality and core organizations

- Joint Spatial Planning Berlin-Brandenburg: www.berlin-brandenburg.de
- Umbrella Association for the Regional Parks of Brandenburg and Berlin: www.regionalparks-brandenburg-berlin.de/
- Senate Department for Urban Development and the Environment Berlin: www.stadtentwicklung.berlin.de

References

For facts in Introduction:

- **Area core city and larger urban zone**: Urban Atlas.
- **Population core city and larger urban zone** (2012 or latest): mainly Urban Audit. Note: in a few cases the population numbers have been provided by researchers based on statistical data
- **Average annual population change rate** (Core city; 1990-2012 or similar): calculated $\frac{((100*\text{population number last year} \div \text{population number first year}) - 100)}{(\text{last year} - \text{first year})}$ based on Urban Audit.
- **Public recreational green space** (Core city; m² per inhabitants; 2006): based on Urban Audit and Urban Atlas. Urban Atlas defines urban green space as “public green areas for predominantly recreational use”. Peri-urban natural areas, such as forests and agricultural land, are mapped as green urban areas only in certain cases. In general, peri-urban green areas are not counted. Private green and blue areas are also not included. Further, green spaces with less than 250 m² are not mapped as well. This leads to deviation with per capita green space values used by city officials
- **Map of Larger Urban Zone**: based Urban Atlas.


For the rest:

- **Interview** with Holle Thierfelder, Senate Department for Urban Development and the Environment of Berlin; Department of Urban and Open Space Planning; Leader Programme for Ecosystem and Environmental Protection, on 4th June 2014.

- **Senatsverwaltung für Stadtentwicklung und Umwelt** (2014a): *Stadtforum Berlin*. Available from...
http://www.stadtentwicklung.berlin.de/planen/stadtforum/index.shtml; accessed 07/01/2015


Planning and policy documents


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