

3. Availability of green areas open to the public

1. Please describe the present situation and the development over the last five to ten years in relation to the percentage of citizens living within 300 m from public green areas and the total of square metres of public green areas (max. 1,000 words):

Hamburg has a total area of 75,524 ha and, with 6,800 ha of public green areas (9% of total area), is one of the greenest cities in Europe. Over and above this are the 3,432 ha of wooded area owned by the city (5% of total area) and 6,123 ha of nature reserves (8% of total area), as well as the 13,750 ha "Nationalpark Hamburgisches Wattenmeer" (Hamburg Wadden Sea National Park), which is situated outside Hamburg.

1.1. Public green areas

Hamburg's networked system of open spaces is a comprehensive urban open space concept and a prerequisite for ecological and social development of the city as well as for maintenance of the city's unique structural qualities in terms of natural landscape. Radial landscape axes and the two tangential green rings form the principal structural elements of the open space network. This basis is supplemented by recreational hubs serving half-day and all-day recreation: district parks, regional parks and local recreation areas. In order to sufficiently provide the population with green and open areas for leisure, sport and recreation within an appropriate distance of residential areas, the landscape axes and green rings are complimented with a compact open area structure comprising individual spaces such as parks, playgrounds, sports fields and allotments. These individual areas are interlinked with each other as well as with the landscapes axes and green rings via a network of green corridors and paths.

Green area utilisation in Hamburg (As at 1 January 2004)

Type of use	Area in ha	% of total green area
Parks	3,000	43

Allotments	1,915	28
Cemeteries	900	13
Sports fields	600	10
Playgrounds	270	4
Bathing areas	65	1
Other	50	1
Total	6,800	100

Statistically speaking, the population of Hamburg is well provided for in terms of public parks: 17 m² per capita. Alone the parks with at least 1 ha of area make up 57% of the total park area (1,687 ha of 2,958 ha or 9.7 m² per capita - as at 1 Jan. 2007). According to a study based on statistical areas, 1, 541,823 inhabitants, or approximately 89% of Hamburg's population, live within a maximum distance of 300 metres from a park (300 m as the crow flies from the apartment building - not the actual apartment - to the park, ignoring barriers such as canals, railway lines and industrial estates).

Many of the gardens and parks are historically important. A total of 57 public green areas are classed as worthy of conservation in accordance with the Hamburg Conservation of Monuments Act (Denkmalschutzgesetz), while a further 45 properties are significant from a cultural history perspective. Hamburg's parks are protected by the Park Act (Grünanlagengesetz) and Park Ordinance (Grünanlagenverordnung). In addition, with 245,000 trees lining the roads, Hamburg maintains an exceptionally large tree inventory. An estimated additional 150,000 individual trees are situated within public parks, which are complimented by the woodland-like tree inventories in the large parks and other woodland parks (not including forests within the meaning of the Hamburg State Forestry Act [Landeswaldgesetz]).

Small bodies of water are frequently an integral element of the parks. For administrative reasons, larger category 2 bodies of water are not classed as part of the actual parks, even where they border the parks. From the perspective of the population, however, every body of water is a component of the recreational area. Particularly in Hamburg, many parks encompass or are adjoined by canals, which make them appear larger and more interesting.

A special characteristic of the lakes and waterways in Hamburg is their general accessibility. The banks of the river Elbe within the Hamburg area are all publicly accessible, while the banks of the Alster and other

smaller rivers are accessible to the public on at least one side. The lakes formed by the Alster and its tributaries have been totally accessible to the public since 1953, in particular the "Outer Alster" and "Inner Alster", which form two lakes covering an area of 184 ha in the very heart of Hamburg.

1.2. Protected areas

Hamburg has 29 nature reserves, whereof 16 are wholly or partially protected areas in accordance with the Fauna, Flora and Habitats Directive (FFH Directive) and 6 are wholly or partially EU Special Protection Areas (SPAs) for wild birds. In total, this equates to 6,123 ha or practically 8% of Hamburg's area, a higher figure than any other German federal state. In 1998, 4,318 ha or just short of 6% of Hamburg's area was nature reserve; in 2003, that figure was 5,490 ha or just over 7%. Since 2004, a new nature reserve has been formed (Hummelsbütteler Moore) and three others were considerably enlarged (Mühlenberger Loch, Raakmoor and Schnaakenmoor), representing an expansion of approximately 11,5%.

Furthermore, Hamburg has 36 landscape protection areas with a total area of 14,563 ha (19% of Hamburg's total area). Landscape protection areas serve to comprehensively protect cultural landscapes with their typical regional characteristics, landscape features and ecosystems.

1.3. Forestry

Hamburg has 4,400 ha of forestry within the meaning of the Hamburg Forestry Act (Waldgesetz), of which 3,400 ha are owned by the city - for the greater part for hundreds of years - and 1,300 ha are located in nature reserves and FFH areas. In addition, Hamburg owns a further 1,600 ha of forestry in outlying areas of the adjacent Federal States Schleswig-Holstein and Niedersachsen that can be used by the population for recreational purposes. Regional forestry in Hamburg is classed as recreational woodland and can be used by everyone for recreational purposes (Sections 8 and 9 HmbWaldG (Hamburg Forestry Act)). These forests are visited 50 million times annually and feature 500 kilometres of forestry tracks and hiking paths as well as 100 kilometres of bridle paths. The number of trees in Hamburg's private gardens has been estimated to be at least 500,000, while Hamburg's forests encompass approximately 300,000 trees.

2. Please describe the measures implemented during the last five to ten years aimed at increasing the size and quality of public green spaces (max. 1,000 words):

2.1. Ongoing measures with regard to green space inventory and maintenance

A focal point of urban renewal in Hamburg is the improvement and sustainable development of open and green areas in disadvantaged districts of the city. Hamburg develops concepts and programmes to cater appropriately for the needs of the population in terms of green and recreational areas. The provision of parks is founded on guide ratios derived from area utilisation planning, the landscape programme and the green area global directive: 6 square metres per capita of parkland in close proximity to dwellings (up to 500 m walking distance), plus 7 square metres per capita of principal parkland, which equates to 13 per capita.

Within the scope of project-based population participation processes, measures for improving or creating open spaces are being supported in 30 development areas. On the basis of integrated neighbourhood development concepts, projects are being prepared and implemented in both private properties and public areas. Local housing companies, schools and residents are important partners for restructuring the residential environment and improving playgrounds and schoolyards.

Within the scope of urban renewal, 3-4 million euros of subsidies are being invested annually in implementing green and residential environment measures. Typical measures (implemented or being planned) are:

- Creation of new parks
- Restructuring of open and recreational areas in close proximity to dwellings
- Maintenance and improvement of squares and roadside areas
- Maintenance and improvement of parks
- Restructuring of school playgrounds
- Sports facilities
- Principal green corridors/n

Exemplary measures that have been subsidised in recent years or are currently being planned:

- Social urban development: improvement and networking of open and green areas in "socially disadvantaged city neighbourhoods", for example: Altona old town, Billstedt
- User programmes in open areas for children, young people, senior citizens, less mobile people: basic renovation of 81 playgrounds, creation of 6,000 m² annually for use by senior citizens
- Improvement of parks with the following objectives:
 - ecological management concepts for 36 woodland parks (approximately 700 ha)
 - garden conservation
 - (partial) re-landscaping
- Improvement of the quality of cycle paths in public green areas, for example: signposting 2nd green ring, development of 14 km of principal cycle paths in green areas from 2005 to 2010
- Networking of green areas, for example to promote hiking, cycling and the natural propagation of flora and fauna in the city
- Conservation of public green areas, preservation and development of living space and use of environment-friendly technology and materials within the meaning of Agenda 21 (application of technical directives such as tree maintenance guidelines, natural maintenance guidelines and landscaping calculation principles)
- Development and management of programmes for safeguarding the valuable tree inventory on streets and in parks (e.g. digital tree register, tree management guidelines)
- Preservation of allotments as an integral city component, in order to enhance the quality of living for families and senior citizens (safeguarding the quantity of allotments through the so-called "10,000 Contract" between the Free and Hanseatic City of Hamburg and the "Landesbund der Gartenfreunde in Hamburg e.V.", which stipulates the preservation of nearly 36,000 allotments in Hamburg and the replacement of such allotments, which must be removed due to legally binding changes in land utilisation.

2.2. Protected areas

In recent years, Hamburg has undertaken exceptional efforts to protect and develop the city's bio-diversity

and hence preserve the rich variety of animal and plant life. Within the "Natura 2000" areas, targeted maintenance and development measures have been implemented to preserve Europe-wide protected endangered species of flora and fauna, for example: new habitats for the great-crested newt in the "Stellmoorer Tunneltal" nature reserve, for the corn crake in the "Moorgürtel" nature reserve and for hemlock water dropwort in the Elbe FFH area.

For the protection and advancement of wild birds, amphibians and wild flora, the Contractual Nature Conservation Programme in cooperation with farmers (for approximately 25% of Hamburg's green areas) has been in place for more than twenty years. This involves concluding contracts with farmers to farm green areas using conservation-friendly methods. The promotion of nature conservation in the countryside through the corresponding farming methods encompasses an area of 1,700 ha. Large-scale improvement schemes create new valuable habitats (for example, comprehensive wet habitats in new territories) and implement targeted measures for the protection of endangered species (for example, protection of amphibians).

2.3. Forestry management measures

Natural forestry management has been in place for three decades in Hamburg: measures for natural regeneration and increasing the quantity of deciduous trees aim at stabilising the forest, while avoiding deforestation and pesticides. The Hamburg forestry was the first forest enterprise in Germany to be awarded the internationally recognised Forest Stewardship Council (FSC) label for sustainable forest management. The objective of Hamburg's forestry administration is to establish, cultivate and maintain locational, functional and healthy forest habitats as naturally as possible; habitats that are as resilient as possible to external influences and burdens on account of their size, diversity and age structure. This objective is to be achieved with a minimum of expenditure by benefitting from natural development processes, including self-development of the forest itself. This objective, which was established almost 30 years ago within the "Silviculture General Framework" (Waldbauliche Rahmenrichtlinien) of 1980, is the guiding principle of Hamburg's forest management. In order to achieve this goal, the framework encompasses the following principles of action that are binding for all foresters:

- Establishment of new forest areas
- Forest rejuvenation

- Development of stable mixed forests by promoting naturally grown mixed trees. Intervention only where the existence or qualitative development of the main tree types are under threat; whereby forest maintenance is only to be implemented outside periods of planting and shoot development. Where possible, felled trees are to be shifted to nearby tracks by horse. Machines and special forestry hauling vehicles are only permitted on the designated maintenance breaks and tracks.
- Biotopes and protection of endangered species
- Leaving deadwood and old tree groups in situ

3. Please describe planned short- and long-term measures for the establishment of green areas open to the public (Max. 1,000 words):

3.1. Planned measures for the networking, improvement and management of green areas.

The planned measures primarily are a continuation of the ongoing measures described under 2., in order to preserve and improve the successes already achieved in the area of green space acquisition, networking, improvement and management.

The following specific projects are currently being implemented or planned:

- Selective upgrading of - and bridging gaps within - the green and open areas significant to the city as a whole.
- Qualitative improvement of parks and other public open areas
- Specific park planning of a city-wide park concept and global directive for Hamburg's districts

Planned measures (in thousand euros):

	2009	2010	2011	2012	2013
Parks and playgrounds, new and redesigned	5,750	6,650	3,150	4,607	3,930

Allotments	700	880	880	880	880
Street trees	1,250	1,350	1,350	1,350	1,350
Planten un Blomen" Park	600	750	350	350	350
Neugraben- Fischbek Park	578	0	0	300	644
Ecological maintenance measures, redevelopment of woodland inventory in parks	750	750	750	750	750
Total	9,628	10,380	6,480	8,237	7,904

3.2. igs 2013 - In 80 gardens around the world

Between April and October 2013, Hamburg will be hosting an International Garden Show. The igs 2013 is not only about gardens and flowers - the aim is to create a 21st-century public park on the Elbe island of Wilhelmsburg, Europe's largest river island. The choice of location itself reveals that Hamburg's appealing combination of water and green areas will play a significant role here, too. In addition to the water, Wilhelmsburg is also characterised by an international population and the nearby port. This has inspired the exhibition motto "In 80 gardens around the world". At the exhibition site in Wilhelmsburg, a range of show gardens and virtual travels will transport visitors to other worlds. With its team of professionals, igs hamburg 2013 GmbH has been tasked with skilfully implementing the project since the beginning of 2007. An investment budget of 77.65 million euros has been allocated up to 2013 for the design of the park - planned as a permanent structure - and other necessary infrastructure facilities.

3.3. Nature reserves

In order to preserve and upgrade the typical Hamburg landscape in terms of ecosystem and recreation, further areas need to be protected. Hamburg needs natural environments and landscapes, not only as habitats for wild plants and animals, but also as recreational and experiential spaces for the city's population. Hamburg's expansive cultural landscapes, such as the marshlands, geestlands and waterways, need to be

sustainably managed and their functions maintained and strengthened.

In the coming years, the Hamburg Senate plans to approve two new nature reserves (Flassbargmoor and Rothsteinmoor) and also expand the following nature reserves: Wittenbergener Heide, Die Reit, Westerweiden / Alte Süderelbe, Rodenbeker Quellental. This will increase the total area of Hamburg's nature reserves by approximately 60 ha.

By 2010, the registered expanse of protected landscape areas will amount to approximately 25,300 ha (ca. 35% of Hamburg's total area). An extensive zone of 500 ha of protected landscape is planned for the district of Wilhelmsburg, with the aim of securing the ecological balance and providing a recreational area for the population. The completion of a biotope networking system scheduled for the coming years will strategically avoid cutting into habitats and create new structural links in the future.

The Nature Conservation Act (Naturschutzgesetz) is currently being amended, with particular emphasis on the habitat system, enabling better protection of riverbanks, hedgerows and structural aspects of the landscape. The habitat system is to encompass 15% of Hamburg's total area - including bodies of water; however, excluding those in the Nationalpark Hamburgisches Wattenmeer.

4. Please describe how the above issues can be documented in case your city is short listed to participate in the second phase of the evaluation (Documentation should not be forwarded in this phase) (max. 600 words):

The information can be documented using archived geographical map illustrations (GIS), aerial imagery (total coverage of Hamburg at a scale of 1:5000).

• Public green areas: see attachment "Parktypisierung",
<http://www.hamburg.de/contentblob/154134/data/faltplantextneu>

<http://www.hamburg.de/contentblob/154154/data/erlaeuterungsbericht>

<http://www.hamburg.de/gruenesnetz>

<http://www.hamburg.de/contentblob/154158/data/system-freiraumtypen-pdf>

- Hamburg directive „green“ (Globalrichtlinie Grün):
<http://www.hamburg.de/contentblob/86076/data/gruen-pdf>

- brochures:
<http://www.hamburg.de/contentblob/135150/data/hamburgs-gruen>

http://www.hamburg.de/contentblob/135234/data/wandsefal_tblatt

- allotments:
www.kleingarten-hh.de/fileadmin/grafik/Tag_des_Gartens/TDG2007/FlyerTdG2007.pdf

- historic gardens and parks:
<http://www.hamburg.de/contentblob/173388/data/t-d-o-programm-2006>

<http://www.hamburg.de/altona/politik-verwaltung/pressemitteilung/720464/hirschpark.html>

- protected areas:

www.hamburg.de/start-naturschutzgebiete/

www.hamburg.de/start-landschaftsschutzgebiete/

- forestry: www.forst-hamburg.de/wald.htm

- budget plan

<http://www.hamburg.de/contentblob/24072/data/einzelplan6.pdf>

- Igs: www.igs-hamburg.de/133.0.html

- pocket guidebook "Hamburg: Parks and Squares for the Developing City", a guide to landscape architecture, see paper attachment 1