

# Planning instruments in Italy and the UK: private and public spaces for emergency events in urban areas

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## Abstract

The paper describes the main regulatory and planning instruments for urban areas operating in Italy and the UK. The relationships between private and public spaces followed different approaches in the two countries. Italy followed a top-down process by the introduction of standards at national and regional levels. UK followed a bottom-up approach, where the national level provides a framework within which local communities can produce their own local plans.

The preliminary study presented in this paper makes a comparison of Italian and British standards relating to open spaces.

*Keywords: urban planning system, Italy and the United Kingdom, standard, open spaces.*

## 1 Introduction

In Italy, the national regulations define the relationship between private and public spaces in urban areas by means of standards. In the UK, the national regulations do not introduce the obligation inside the urban plans to comply with standards for the definition of the relationships private and public spaces. The local authority (Council) defines, according to the strategy, the standards to be applied on the basis of opportunities, demographic and economic forecasts.

Our opinion is that, in general, urban planning should be supported by quantitative evaluations by means of simulation models. The reference class of models is the *land use* one, which simulates the spatial organisation (e.g. location of residential, retail, services activities) and land use in an urban area [1–3]. Land



use models generally could have three components: *generation* models, which provide an aspatial estimation of level of activities in the whole urban area; *location* models, which provide a spatial distribution of activities among the zones of the urban area; integrated generation–location models, which jointly estimate the levels and spatial distribution of activities. A state-of-the-art concerning land use models is presented in [4].

The paper describes the main regulatory and planning instruments for urban areas operating in Italy and the UK, starting from the comparison of the two planning processes [5]. The definition of standards to regulate the relationships between private and public spaces followed different approaches in the two countries: Italy followed a top-down process by the introduction of standards at national level that are considered as a lower-bound values for the local planning process. The UK followed a bottom-up approach, where the national level provides a framework within which local communities and their councils can produce their own local plans, according to their needs and priorities.

The following part of the paper is articulated into four sections. Section 2, firstly, presents a synopsis of regulatory and planning instruments in Italy. Later, the concept of standard and their values defined at national level are introduced. Section 3, after describing the milestones of the British town and country planning, presents the structure and the components of the current national planning policy framework. The section ends with the description of three cases concerning the calculation of standards for the open spaces in three councils. The choice of open spaces is functional to a subsequent analysis concerning the areas able to accommodate operations related to the management of emergency events (see [6–10]). In Italy the definition of private and public spaces for the management of emergency events (e.g. earthquake) is not considered in the current urban planning system. On the basis of problems emerged after some recent seismic events, some guidelines have been proposed in order to provide support to planners [11]. Section 4 contains a comparison between the systems of the two countries.

## 2 Regulatory and planning instruments in Italy

In Italy the master plan, provided pursuant to the Law n. 1150 of 1942 [12], perimeter zones to be assigned different uses, within which to locate homogeneous activities and to apply the standards defined by D.M. n. 1444 of 1968 [13]. (“For each inhabitant-settled or to be settled – minimum provision of 18 sqm reserved for public spaces or for collective activities, public park or parking lot, with the exception of space for road facilities. Subdivided into: a) 4.50 sqm of areas for education facilities: nursery schools, kindergartens and schools; b) 2.00 sqm of areas for facilities of common interest: religious, cultural, social, welfare, health, administrative, public services (postal offices, civil protection, ....), and others c) 9.00 sqm of areas for public parks, playing and sports areas, with the exception of green belts along the roads; d) 2.50 sqm of parking areas (in addition to parking areas provided in art. 18 of law n. 765): these areas – in special cases – can be distributed on different levels.”) The

standard identifies the minimum provision per resident in the sizing of the areas; expresses the maximum ratios between residential spaces and public spaces reserved for groups of activities, educational buildings, public parks or parking lots.

The standard defines, by means of a ratio, the amenities of a settlement, be it residential, manufacturing, commercial, or otherwise, in terms of equipment; it allows us to compute the building density, the minimum amount of space and public facilities for public use, the minimum heights and distances between buildings. The adoption of the standard is the basic criterion of the analytical method for build a plan as a forecasting tool, based on the calculation of ratios and the successive determination of destinations of use (see Table 1). (Destination of use means the whole functions or activities planned and permitted in built-up areas and not. The main destinations of use are: agricultural, industrial and crafting, tertiary, facilities and equipment for mobility, residence, services and equipment for public use.)

Table 1: Italian standards and standards of Emilia Romagna and Piemonte regions.

	Italy		Emilia-Romagna		Piemonte
	< 10 <sup>4</sup> inh	> 10 <sup>4</sup> inh	< 10 <sup>4</sup> inh	> 10 <sup>4</sup> inh	
Total	12	18	25	30	25
Education	4	4.5	6	6	5
Common interest	2	2	4	4	5
Public parks, playing and sport spaces	4	9	12	16	12.5
Parking lots	2	2.5	3	4	2.5

The definition of standard includes:

- binding limitations on building density, height and distance between buildings;
- maximum ratios between residential (or productive) spaces and spaces for public activities, public parks and parking lots;
- ratios between population and facilities for higher education and health, and public parks.

The Italian planning law, in addition to regulating the building structure and in towns and the urban development (art.1, law n.1150 of 1942) introduces the term *zone*, anticipating the concept of *homogeneous zones* introduced by law n. 765 of 1967 [14], which establishes binding bounds for buildings and minimum standards for public services.

The foundation of law n.1150 of 1942 is the Municipal Master Plan (MMP). The law defines the MDP as a zoning on the entire municipality area, including agricultural areas. The MDP, once approved, becomes national law and as a result, each land changes will be permitted if it complies with its requirements.



Law n.1150 of 1942 explicitly lists the elements that the plan should include: 1) the network of main roads; 2) the zoning of the municipality area with the indication of those devoted to the expansion of urban settlements; 3) areas for public spaces or subjected to special servitude; 4) areas for buildings of public use; 5) constraints for historical, environmental and landscaped areas; 6) the rules for the plan implementation (art. 7).

By transferring the powers from central government to regions [15], a more specific zoning is defined. The plan is no longer a tool to organize the physical growth of the town, but it should also drive this growth in order to be functional to the economic and social development.

By means of law n. 142 of 1990 [16], local authorities have increased their powers and responsibilities for the land government. Urban planning becomes land use planning as it assumes the task of control and direction of the land use changes by means of a set of provisions defined in planning products.

Article n. 117 of the Italian Constitution delegates to the regions the legislative power of government of the territory. In recent years there has been a proliferation of regional laws for the government and the protection of the territory. The standards defined in Emilia-Romagna (Regional laws n. 47 of 1978 and n. 20 of 2000) and Piemonte (Regional laws n. 56 of 1957 and n. 61 of 1984) Regions are reported in table 1.

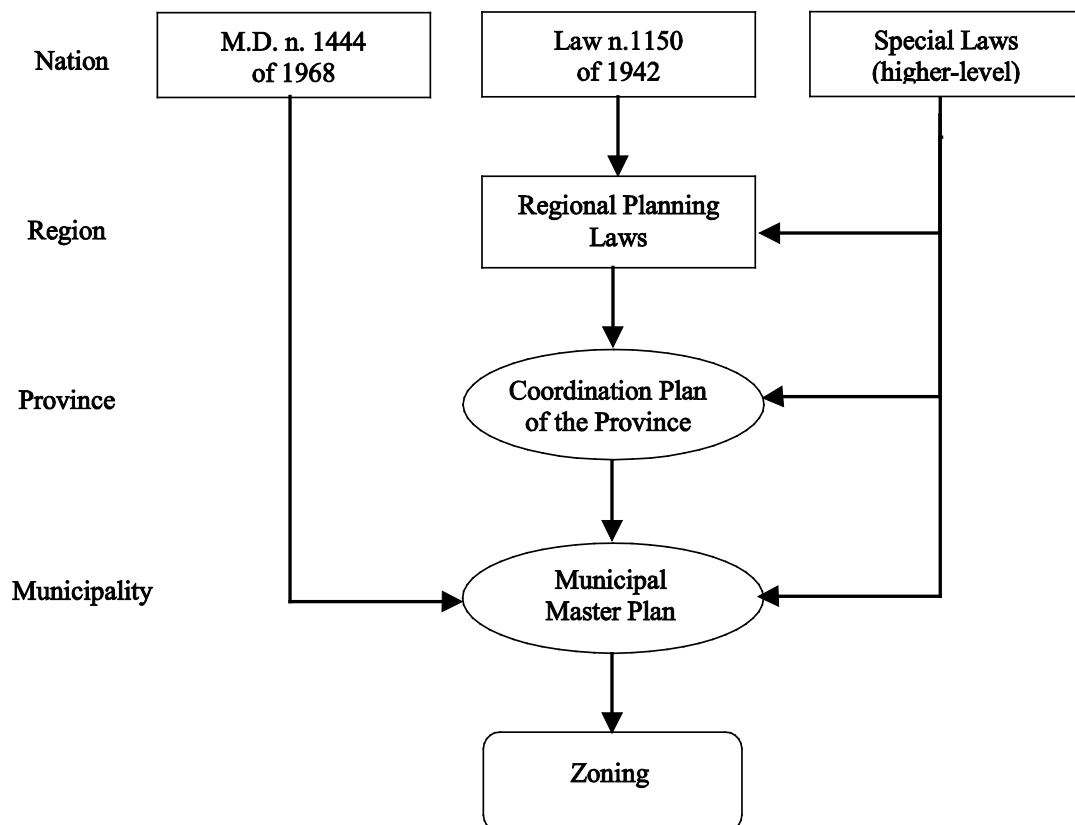


Figure 1: General structure of urban planning in Italy.

The current national legislation [12] introduces a wide and articulated range of plans:

- Coordination Plan of the Province (and region), that provide general planning guidelines for local administrations;
- Municipal Master Plan (MMP) that translates the general guidelines into more precise provisions;
- Implementation of Multi-Annual Programs with the aim of coordinating the plans of new settlements;
- Detailed Plans and Plans of Housing Development.

### 3 Legislation and planning system in the United Kingdom

#### 3.1 Town and country planning system

The British town and country planning was established with the *Town and Country Planning Act* [17], that introduced the requirement of planning permission from the local authority and the development charge to capture the planning gain and the requirement on local authorities to develop Local Plans.

Substantial changes to the development planning system were made in the *Planning and Compulsory Purchase Act* [18] with the replacement of local plans with local development frameworks.

Several measures to shift the powers from central government and towards a local one were introduced in the *Localism Act* [19]. They include reform to make the planning system more democratic and effective and to ensure that decisions about housing are taken locally.

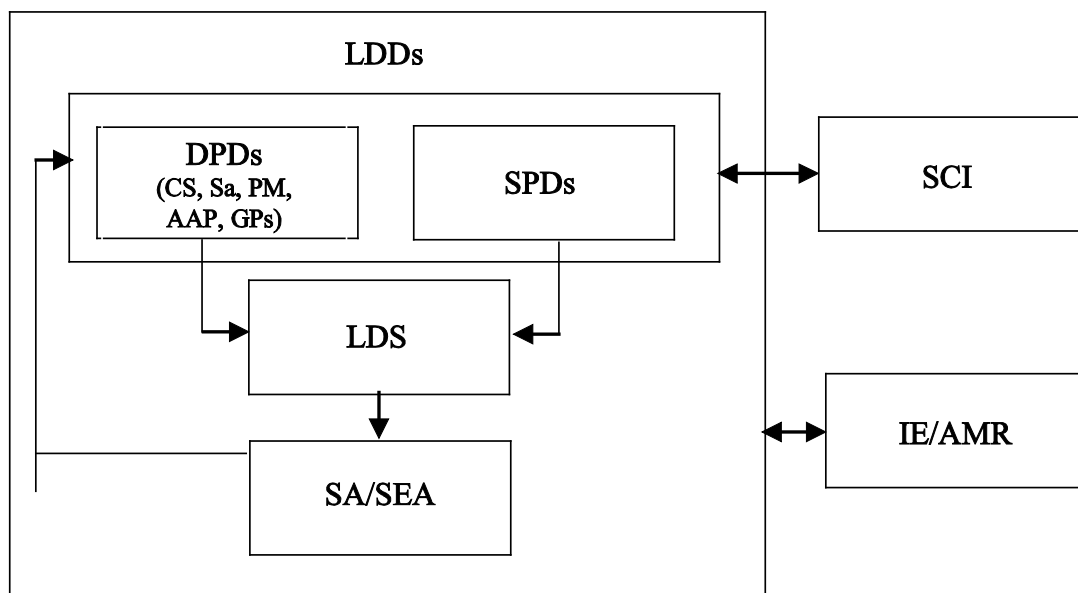


Figure 2: General structure of the Local Development Framework.

Recently the *National Planning Policy Framework* was introduced, which “sets out the Government’s planning policies and how these are expected to be applied. It provides a framework within which local people and their accountable councils can produce their own distinctive local and neighbourhood plans, which reflect the needs and priorities of their communities” [20].

The Local Development Framework (LDF) contains the spatial planning strategy for local development and use of land. The LDF is a portfolio of *Local Development Documents* (LDDs) (see Figure 2), which belong to two categories: *Development Plan Documents* (DPDs) and *Supplementary Planning Documents* (SPDs).

The DPDs must contain the *Core Strategy* (CS), which sets out the vision for the area and the primary policies for meeting that vision together with housing and employment provisions; the *Site allocations* (Sa), where are described the proposed development sites; the *Proposals Map* (PM); which illustrates policy designations and allocations. It may contain the *Area Action Plans* (AAP), which provide a planning framework for areas of change and areas of conservation, and the *General Policies* (GP) *for the control of development*, which cover the protection of the natural, visual and residential environment.

The *Local Development Scheme* (LDS) sets out what DPDs and SPDs propose to prepare over a three year period and the timetable for their production.

The *Statement of Community Involvement* (SCI) sets out how Council intends to achieve continuous community involvement in the preparation of LDDs.

DPDs are subject to *Sustainability Appraisal* (SA) and *Strategic Environmental Assessment* (SEA), which seek to inform decision-making by providing information on the potential implications of policies. The SPDs are subject to SA.

DPDs and SCI are subject to *Independent Examination* (IE), in order to determine the ‘soundness’ of the plan. IE is binding for the local planning authority, which has to produce an *Annual Monitoring Report* (AMR) which will show how the authority is performing against all relevant targets.

The definition of standards to regulate the relationships between private and public spaces follows a bottom-up process (rather than a top-down process as for Italy). This process starts from the identification of land requirements in order:

- to be functional to the demographic and economic development forecasts of the area; and
- to be in accordance to the general goal of economic, environmental and social sustainability.

It continues with the designation and allocation of land for the different activities in the different zones and with the definition of a timetable for their production.

### 3.2 The case of open spaces

Open space is “all open space of public value, including not just land, but also areas of water (such as rivers, canals, lakes and reservoirs) which offer important opportunities for sport and recreation and can act as a visual amenity” [20].

On behalf of the LDF (see Figure 2), the calculation of open spaces is generally described in one of the SDPs. In the following three cases concerning the calculation of standards for open spaces in East Staffordshire, Cambridge and Winchester are reported. It is worth noting that, after the introduction of the *National Planning Policy Framework* in 2012, an updating process of the local plans started and today it is not concluded. In the three examined cases, many SDPs have not yet produced, so the standards reported below are the ones calculated in the local plans drafted before 2012.

### ***East Staffordshire***

On behalf of the East Staffordshire Adopted Local Plan [21], the Open Space SPD [22] reports the provision of different categories of open spaces to be considered (in terms of land) in the applications for new residential development. The categories of open spaces are related to children's play, parks and gardens, semi natural greens spaces, amenity green space, allotments (see table 2). East Staffordshire was subdivided into four areas. Two of them are more urbanized: Burton and Uttoxeter. The average value of provision for all categories of opens spaces is  $3.05 \text{ ha} \cdot 10^3 \text{ inh}$  (30.5 sqm/inh).

Table 2: Provision of land for different categories of open spaces. East Staffordshire ( $\text{ha} \cdot 10^3 \text{ inh}$ ).

Category	Burton	Rural 1	Rural 2	Uttoxeter	Average
Children's play	0.03	0.05	0.03	0.03	0.04
Parks and gardens	1.82	0.13		1.39	0.84
Semi natural green space	1.51	2.95		0.3	1.19
Amenity green space	0.45	1.28	1.22	0.16	0.78
Allotments	0.28	0.34		0.24	0.22
Total	4.09	4.75	1.25	2.12	3.05
Total (sqm/inh)	40.9	47.5	12.5	21.2	30.5

### ***Cambridge***

The Council adopted the [23], which sets out the protection of existing open spaces and the improvement and creation of new facilities on existing open spaces; sets out the standards for open space and sports provision in and through new development.

The adopted standards for the quantity of open space required through new development are set out in the Cambridge Local Plan 2006 [24]. The document reports the provision of four different categories of open spaces: outdoor sports facilities, provision for children and teenagers, informal open spaces, allotments (see table 3). The value of provision for all categories of opens spaces is  $4.1 \text{ ha} \cdot 10^3 \text{ inh}$  (41.0 sqm/inh).

**Winchester**

The Open Space, Sports and Recreation Study [25] considers that a minimum of 2.8 ha of recreational space should be provided for every 1000 residents (28.0 sqm/inh), as table 4 shows. The Study is part of the Winchester District Local Plan [26].

Table 3: Provision of land for different categories of open spaces. Cambridge (ha\*10<sup>3</sup> inh).

Category	Space (ha*10 <sup>3</sup> inh)
Outdoor sports facilities	1.2
Provision for children and teenagers	0.3
Informal open space	2.2
Allotments	0.4
Total	4.1
Total (sqm/inh)	41.0

Table 4: Provision of land for different categories of open spaces. Winchester (ha\*10<sup>3</sup> inh).

Category	Space (ha*10 <sup>3</sup> inh)
Children's play <sup>(*)</sup>	0.8
Sports grounds <sup>(**)</sup>	1.6
General Use	0.4
Total	2.8
Total (sqm/inh)	28

\*to include equipped playgrounds, other opportunities for outdoor play and casual play space.

\*\*of which at least .2ha should be pitch sports.

## 4 Comparison between Italy and the UK

The general goal of this work is the comparison of the Italian and British legislation and planning systems, in order to highlight the main similitudes and divergences. It is worth noting that the two countries are representative of two different legislative approaches: the UK case for Common law, and the Italian case for Roman law.

The preliminary study presented in this paper makes a comparison of Italian and British standards relating to open spaces. The comparisons are between values of standards defined by means of national and regional legislation in Italy

and values determined within local plans of three English councils with a population greater than 10,000 inhabitants.

The Italian legislation sets the standard for public parks, playing and sports spaces to 9.0 sqm/inh (the legislations of Piemonte and Emilia-Romagna increase the threshold respectively to 12.5 and 16.0 sqm/inh). The analysis of local plans of the three English councils showed average values ranging between 28.0 sqm/inh of Winchester and 41.0 sqm/inh of Cambridge. The differences are relevant and are due to the fact that in Italy the national legislation sets a sort of minimum threshold values.

The choice of open spaces is functional to a subsequent analysis concerning the areas able to accommodate operations related to the management of emergency events. According to us, the planning instrument should incorporate in its processes for the selection of destinations of use and for parameters calculation, the logic that can anticipate and capture emergency events. The development of the research will be oriented to the analysis of risk (e.g. seismic) in order to have a quantitative measure of the larger and more complex urban planning system.

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