

Spatial planning in Switzerland : a short introduction

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1. Initial position

The tasks of spatial planning in Switzerland can only be understood if one visualises its most important political, geographical, economic and cultural features. The limited area suitable for settlement of around 13,000 km² together with a highly developed economy and high standard of living leads to strong land use pressure. As a reaction to this, great value is placed on environmental and landscape protection, the more so since tourism, as one of the most important sectors of the economy, is dependent on an unspoilt environment. Even the movement towards ever greener agriculture is based on these particular features. The urbanization of Switzerland is very advanced in spite of the lack of large metropolises. The characteristic feature of the Swiss urban structure is the large number of small and medium-sized towns: by far the largest Swiss town - Zürich - has only 360,000 inhabitants. The population density in the conurbation strip of the Swiss Plateau allows a highly developed infrastructure including that for public transport. The dynamic of the strongly export-orientated economy has long since switched from land-intensive and polluting industry to service industries. A large number of branches of industry in the existing settlement area now provide the conditions for greater "inwards" settlement development on former industrial land.

On the other hand, the spatial planning tasks are different in the regions of the Jura, Swiss Plateau, Alpine foothills, Alps (40% of the area of the country) and on the southern side of the Alps. Furthermore, the political and cultural diversity which exists in a small area makes a national planning policy more difficult. Local, regional and cantonal self-consciousness built on direct democratic rights leads again and again innovative planning solutions. However, it also often prevents the necessary co-operation in economic areas which are defined more by transport axes than by political boundaries. These boundaries are very often the result of political decisions made in the 19th century and don't match today's economic structures.

2. Comprehensive planning and co-ordination obligation for all authorities

The new article on spatial planning, incorporated in the Federal Constitution in 1969, transferred responsibility for framework legislation on spatial planning to the Confederation. However, practical planning implementation was to remain essentially a

matter for the Cantons¹, which in turn often delegate a number of tasks to the communes (local authorities). In addition to this federal framework legislation, the Confederation promotes and co-ordinates the spatial planning of the Cantons and also takes into consideration the "demands" of spatial planning in its own activities. The limited legislative responsibility of the Confederation leads to a variety of spatial planning concepts and instruments.

However, the reality of Swiss spatial planning is not as simple as stated in the article of the Constitution. In fact, Confederation, Cantons and communes are jointly responsible for ensuring economical land use. They do this, inter alia, by harmonizing their activities which have spatial impact and "implementing planning which is orientated towards the desired development of the country". The necessity for close co-operation is founded on the task of spatial planning which is to take responsibility for the whole living space. It must deal with infrastructure structures particularly those for transport, economic policy and environmental protection (all federal responsibilities), as well as land use planning, nature and habitat conservation (for the most part responsibilities of the Cantons) to name but a few. In Switzerland today, spatial planning is understood to be the specific tackling of all political problems which affect the living space. Consequently, spatial planning law not only includes the Federal Law on Spatial Planning, but numerous other laws of so-called functional spatial planning law. These regulate for example technical infrastructure installations (Law on Motorways, Law on Railways, Law on Aviation etc.), protection of nature and the environment (Law on Nature and Habitat Conservation, Law on Water Pollution Control, Law on Environmental Protection, Law on Forests), other important spatially relevant aspects of housing (Law on the promotion of housing construction and property), agriculture and rural land laws, regional policy and tourism².

In detail, the tasks of the Law on Spatial Planning are distributed as follows:

3. The spatial planning tasks of the Confederation

3.1 Framework legislation

In the matter of legislation, the Confederation must limit itself to laying down principles. The principles may indeed touch on the whole range of spatial planning tasks, but should not deal with the subjects in depth. This limitation leaves the Cantons the legislative scope intended in the Constitution. However, the Confederation may regulate in detail particularly important areas which are key for the whole of Switzerland, such as implementation of the principle of the separation of building zones and non-building zones as laid down in the Constitution.

Federal law principles relate in particular to

- the aims and planning principles which must be considered for any spatial planning;

- the planning instruments and related rules of procedure;
- the co-ordination rules for all measures of the authorities having spatial impact;
- those individual questions which are central for the whole functioning of spatial planning, such as the permit obligation for all buildings and installations, the size of building zones, exceptional permission for building outside building zones and ensuring the infrastructure provision of building land.

The Law on Spatial Planning does not contain principles of land law which are important for spatial planning, such as, for example, those on taxation and expropriation. Regulation of these is therefore left to the Cantons - unless provisions of constitutional law apply.

3.2 Promotion and co-ordination of cantonal spatial planning

Co-operation of the Confederation with the Cantons is a central postulate of co-operative federalism. The Confederation promotes and co-ordinates the spatial planning of the Cantons first and foremost through the aforementioned framework legislation and through the approval of cantonal structure plans (cf. section 4 below). However, it also has a duty to co-ordinate its own tasks with the spatial planning of the Cantons. Important instruments for this are the basic studies drawn up by the Confederation and the actual planning instruments of the Confederation, the sectoral strategies and sectoral plans. An example to illustrate the necessity for a sectoral plan is provided by the aviation sector: the aims of spatial planning would not be achieved if the Confederation could simply ignore the spatial planning of the Cantons on the basis of its comprehensive permit and licensing responsibility for aviation installations. The Sectoral Plan for Aviation Infrastructure³ is intended to achieve the necessary co-ordination with the spatial planning of the Cantons. The sectoral plan is not directly binding on private individuals, but lays down how the Confederation should make use of its decision-making scope when issuing permits and licences under aviation law.

3.3 Taking account of spatial planning when fulfilling federal tasks

When fulfilling the tasks conferred on it, the Confederation is also bound by the aims and principles of spatial planning. Therefore, at all levels of action - planning, legislation, administration, case-law - it remains subject to spatial planning law itself. Since federal law does not constitute a comprehensive body of legislation consistent within itself, but a collection which has grown historically, conflicting aims are always possible and even at federal level have to be decided by the process of balancing interests (cf section 4.5 below). Being tied to the "demands" of spatial planning also means that the Confederation is bound by cantonal law and the planning studies based on it unless exempted by special provisions. Finally, approval of cantonal structure plans by the Confederation ensures that cantonal spatial planning does not unlawfully hinder the Confederation from fulfilling its duties. However, the cantonal planning and building regulations do not require approval from the Confederation any more than the land use

planning studies of the Cantons do. If they infringe federal law, then they cannot be applied on the point in question.

4 The spatial planning tasks of the Cantons

According to the text of the Federal Constitution, the Cantons are responsible for the actual "creation" of spatial planning. They carry out the task by means of the following instruments:

4.1 Spatial planning and building regulations

The Cantons enact cantonal implementing legislation for the Federal Law on Spatial Planning. As already mentioned, the federal law lays down only the principles and therefore does not constitute a set of rules which answers all important questions. Cantonal spatial planning and building regulations also contain public building regulations, and often road construction regulations and regulations on building land rationalisation. In simple terms, the cantonal public building regulations are concerned with the requirements for building, the integration and form of buildings and the requirements for construction, operation and maintenance. In addition, there are rules of procedure. When enacting their spatial planning regulations, the Cantons are bound by the aims and principles as well as the instruments of the federal law. This together with the related case-law of the Federal Court allows a certain standardization of planning law. However, there are significant differences in the spatial planning and building regulations of the Cantons. Where no rules have been defined under federal law, there is significant fragmentation of law. Thus the same concept can have a completely different meaning in the neighbouring Canton. There have therefore been calls recently for harmonization at least of concepts and measuring methods. This would primarily be in the interest of the efficient operation of the Swiss internal market, a market of only 7 million people. The autonomy of the Cantons, however, has the advantage that thorough consideration can be given to spatial and cultural characteristics. The spatial planning and building regulations of the Cantons also differ markedly from each other in the extent of regulation: large Cantons characterized by urban development have more extensive and complex legislation than small, rural Cantons⁴. This shows that the spatial planning and building regulations have an important task of resolving conflict.

4.2 Cantonal structure plan

The Cantons draw up a structure plan (Richtplan in German, plan directeur in French) covering the whole area of the Canton (Art. 6 ff. RPG [Law on Spatial Planning]), which is subject to approval by the Federal Council. They determine firstly how they envisage spatial development in their area (Guidelines for spatial development, a comprehensive planning strategy). The structure plan shows how the many activities of the Confederation, the Canton and the communes (local authorities) which have spatial

impact are to be harmonized with each other in the area. The structure plan also deals with the question of when and how the public tasks which have spatial impact are to be carried out. This produces a plan binding on the authorities which, in agreement with the Confederation, shows neighbouring Cantons and bordering countries how cantonal spatial planning is intended to progress towards the desired spatial development. Depending on the state of planning work, the information may be simply orientations, interim results or firm statements. They may concern public transport networks, nature conservation areas of cantonal importance, sites for waste disposal facilities and the like to name but a few examples. The cantonal structure plan also contains instructions on how to proceed: thus, for example, it may be specified how communes should proceed when designating a building zone in accordance with the requirements of federal law, where and when adjustment of the size of building zones is necessary⁵. The cantonal structure plan is therefore not an outline of a "desirable final state" of the cantonal territory, but a process plan for co-ordinating and steering the next stages of spatial development already underway. The map therefore does not constitute the main instrument of the structure plan, but serves to clarify and define the content of the structure plan⁶. The cantonal structure plan is intended to make possible harmonized action by the different authorities involved. At the same time, during the course of the structure plan process, inconsistencies and conflicts become clear, which can be resolved in the prescribed spatial planning procedure. Structure plans are constantly adjusted in line with developments ("updated") and revised at least every 10 years.

4.3 Land use planning

In the land use plans (Nutzungsplan in German, plan d'affectation in French), the Cantons lay down binding provisions on how land may be used in practice. Most Cantons delegate this task to the communes because these have the requisite local knowledge for plot-related land use planning. Many Cantons however also provide cantonal land use plans for projects which are of importance for spatial planning policy. For example, industrial zones or waste disposal sites of regional importance come to mind. Cantonal land use planning then replaces communal (local authority) land use planning in plot-related restricted areas. Land use plans must meet the provisions of the Federal Law on Spatial Planning. The rules are more detailed here than in the case of cantonal structure plans, because land use planning is assigned the important task of laying down the boundary between building zones and non-building zones (Art. 15 RPG). Building zones must respect the planning aims and principles and must not exceed the size laid down in federal law. In addition, there are an increasing number of functional spatial planning law standards, in particular those of environmental law⁷. Designation of a building zone requires, for example, that certain noise pollution values are not exceeded. Inextricably linked with specification of building zones is the task that these should then be serviced for development and made ready for building (Art. 19 RPG). The restriction of building to building zones only makes sense if building zones marked out for the needs of fifteen years ahead are also made ready for building in appropriate stages. Being made ready for building necessarily includes carrying out

building land rationalisation if the existing arrangement of plots is unsuitable for appropriate building (Art. 20 RPG). The federal law authorises the competent authorities to initiate building land rationalisation themselves without the agreement of the landowners. The Cantons often link servicing of building land with building land rationalisation in a uniform procedure. Without reorganisation of the arrangement of plots, there would be no usable building land corresponding to spatial planning aims to meet needs. Another task of the communes is the financing of building land infrastructure provision. It is a matter for the Cantons or communes to regulate this. Landowners are usually involved in the financing of building land infrastructure provision with contributions ("Kausalabgaben" [causal taxes]). Communal land use planning should not simply cover the building zone but should also include the area outside the building zone. Zones with particular purposes can be designated there (e.g. disposal of material, small village zones, ski pistes etc.). Designation of protected zones based on landscape planning is also imperative in most cases.

4.4 Building permits

Another important task of the Cantons is to issue building permits; in order to enforce land use planning, official inspection is necessary before a building is erected. The building permit determines whether a project complies with the provisions of public law, in particular those of material spatial planning law. The project may only be carried out following this procedure. Linked with this permit responsibility of the Cantons is control of building work: building without a building permit and exceeding of the terms of the building permit must be authorised (building inspectorate). The permit responsibility of the Cantons is not applicable in cases where it is assigned to the Confederation under special legislation. This happens for example in the case of many national transport infrastructure projects (motorways, railways, aviation facilities, pipelines etc.).

4.5 Assignment of responsibility within the Canton

4.5.1 Communes (Local authorities)

Most Swiss Cantons have a highly developed municipal federalism. In the spatial planning sector, the following demarcation of responsibility is often undertaken in these Cantons: whilst the Canton is responsible for structure plans binding on authorities and covering its whole territory, it hands over to the communes land use planning binding on landowners, in particular delimitation of the building area from the non-building area and determination of the type and extent of specific building use in the building zones. Since communes have considerable decision-making scope, they draw up overall concepts and structure plans for their area as the basis for land use planning and co-ordination with their other public tasks. The federal law planning instruments, structure plans and land use plans are therefore accessible to all territorial authorities below the Confederation.

The tasks of cantonal structure planning and communal (local authority) land use planning are interlinked in a variety of ways: the transport systems at national and cantonal level (roads, local public passenger transport etc.) for example have a decisive effect on practical land use planning. Cantonal structure plans therefore also have the more or less compulsory requirement that building zones be orientated towards the nodal points of national or regional transport networks. In addition, the Cantons are required to draw up their own land use plans in the case of projects of cantonal importance or at least to be able to give communes detailed provisions for land use planning in the cantonal structure plan. Thus, sites for public buildings, for which the communes then draw up suitable land use plans, are laid down in the structure plan.

In this sense, one can talk about a dual hierarchy in cantonal spatial planning:

- Even though communes are responsible for land use planning, they must respect the plans of the higher state level.
- Swiss planning instruments provide for various levels: the structure plan binding on the authorities sets requirements for land use planning binding on landowners and this in turn usually limits the possibilities of the even more detailed special land use plans which often regulate very specific building projects (also called "Gestaltungsplan", "Überbauungsordnung", "Bebauungsplan" [local plan]).

Most Cantons delegate the tasks of infrastructure provision for building land, building land rationalisation and issuing building permits to the communes. Since the issuing of building permits requires thorough knowledge of the law as well as technical knowledge, smaller communes are occasionally overtaxed by this task. This is usually resolved by the cantonal offices supporting the communes or a cantonal authority retaining a right of approval. So permit responsibility of the communes for buildings outside the building zones (mostly agricultural land) is ruled out by the Federal Law on Spatial Planning: permits require at least the approval of a cantonal authority.

4.5.2 Regional planning associations

Large Cantons often delegate supramunicipal spatial planning tasks to public-law planning associations (regional planning associations). In the Canton Zürich, for example, these draw up regional structure plans, which develop spatial planning on the basis of the structure plan for the whole Canton. In the Cantons of Aargau and Thurgau, the planning associations draw up basic planning studies and provide the communes with spatial planning support. In Geneva, a structure plan for the Swiss-French metropolitan area is available (Charte de l'agglomération Franco-Valdo-Genevoise).

5. Material planning aims and principles of the Federal Law on Spatial Planning

5.1 Economical land use

The Federal Law on Spatial Planning lays down the aims and principles of spatial planning for the whole of Switzerland. Its primary aim is economical use of the limited land area. The importance of this aim can be understood better if one considers that only 30 percent of the comparatively small area of the country of 42,000 km² is suitable for intensive human use. High mountains, forests and water bodies take up a large area. This 30 percent of the land area has to provide adequate space for all needs such as housing, employment, transport, leisure, agriculture, nature conservation etc.. The intensity of land use in Switzerland is thus comparable with that of the Netherlands or the metropolitan areas of the east coast of the US. Legislation has laid down that this is to be carried out by means of careful spatial planning which takes account of the various public and private interests. The aim of economical land use covers two aspects:

- In view of the continuous and rapid spread of settlements after the Second World War, land consumption must be restricted. For additional needs, a check must be carried out whether they can be met in the already built up and serviced area. Agglomeration and change of use in the existing settlement area are central. Even with great efforts being made in this area, settlement growth will hardly come to a halt; the many new infrastructure structures for transport and waste disposal will see to that.
- Economical land use, however, also means optimum spatial organisation of the different land uses. Concentration of buildings in a well serviced settlement area ensures economical land use much better than creating scattered small settlements each with its own infrastructure provision.

5.2 Co-ordination requirement

The second aim of Swiss spatial planning is the co-ordination of all activities with spatial impact carried out by the federal, cantonal and communal authorities. All activities have spatial impact if they change land use or settlement of the country or are intended to maintain these. The "appropriate land use" and "ordered settlement" laid down in the Federal Constitution requires such co-ordination. It goes without saying that successful co-ordination contributes towards economical use of land. For example, a lack of co-ordination between the arrangement of housing areas (communal land use planning) and the building of transport infrastructures (primarily federal planning) can result in neither being used appropriately. A lack of co-ordination therefore leads to plans being impossible to implement and finally to bad investments.

5.3 Orientation towards the desired spatial development

The third aim demands that the activities of the authorities which have spatial impact be orientated towards a desired spatial development. The spatial planning

concept which this requires is laid down at federal level in the "Swiss Planning Policy Guidelines" with the related implementation programme and at cantonal level in the corresponding "Spatial Development Guidelines" and structure plans. An important element of planning policy expressed there is the orientation towards "decentralized concentration", i.e. a network of compact settlement areas of different sizes. At federal level - to put it very simply - one also talks of an "interlinked system of towns and rural areas". This does not mean settlement development simply in the large agglomerations of the Swiss Plateau. The agglomerations and regional centres in the Alpine valleys also have important potential for growth.

In pursuing these aims, the needs of people and the environment must be considered equally. The forward-looking spatial planning required is thus not simply an instrument for promoting economic development, but also one of precautionary nature conservation and environmental protection. Spatial planning also makes an important contribution to housing construction policy, to promoting the country's disadvantaged regions, to agricultural policy and to national defence. It is not possible to lay down in law which needs should prevail in case of conflict. The answer must be provided by the planning proceedings and the subsequent political decisions.

5.4 Planning principles as aids to decision-making

For balancing the different spatial planning aims, Art. 3 of the Law on Spatial Planning lays down a number of "planning principles". These are decision-making criteria which are intended to act as a guide to balancing interests. The planning principles do not in themselves form a definitive consistent system, so that they have to be weighed against each other in each individual case. Specifically the Law on Spatial Planning lists the following principles:

- A. Preservation of the landscape by
 - protecting agricultural cultivable land;
 - integrating settlements into the landscape;
 - maintaining and facilitating public access to lakesides and river banks;
 - conserving natural landscapes and recreational areas;
- B. Arrangement of settlements according to the needs of the inhabitants and limitation of settlements by
 - appropriate location of homes and workplaces and adequate linking by public transport;
 - protection of residential areas from harmful effects and nuisances such as noise and air pollution (now to a large extent put into concrete terms by legislation on environmental protection);
 - creation of cycle tracks and footpaths;
 - creation of favourable conditions for the supply of goods and services;
 - integration of numerous green open spaces and trees in settlements.

- C. Appropriate location of public buildings and installations by
- considering regional needs and reducing inequalities;
 - good accessibility of public and leisure facilities;
 - reduction of adverse effects of these facilities on the environment, the inhabitants and the economy.

5.5 Comprehensive balancing of interests

The balancing of interests based on these principles, required by the Law on Spatial planning and encompassing all essential aspects is divided into the following stages:

- a. identification of the interests involved;
- b. assessment of these interests particularly with regard to their compatibility with the desired spatial development and their possible effects;
- c. decision, taking into consideration as far as possible all these interests;
- d. publication of the balancing of interests in the explanatory statement.

The balancing of interests requires knowledge of the applicable legal norms and availability of comprehensive basic studies. The question of whether the balancing of interests has been conducted correctly is considered to be a legal question which can be examined by the courts. Legal errors can lie in

- the lack of any balancing process;
- inadequate identification of the interests involved;
- incorrect assessment of the effects;
- the wrong weighting of interests.

Such an examination makes clear the limits of the legal examination of spatial planning decisions: technical problems, consideration of special local conditions and the planning judgement of the competent political authorities demand restraint from the judiciary. A balancing of interests which encompasses all major interests and has weighed them with the necessary care is therefore generally upheld by the courts, even if it results in significant interference with the legal positions of third parties.

5.6 Spatial planning law as law on the living space

In Switzerland, the spatial planning law of the Confederation and Cantons (nominal spatial planning law) has restricted scope for historical reasons - it falls a long way short of covering all areas of state duties which have spatial impact. Since spatial planning in Switzerland is rather understood to mean state responsibility for the living space in a wide sense, functional spatial planning includes in particular the spatially relevant areas of environmental law, infrastructure law, agriculture law and nature and habitat law as well as land law and tax law.

For its part, the Federal Law on Spatial Planning regulates only plans "under this law". These are the sectoral strategies and sectoral plans of the Confederation and the

structure plans and land use plans of the Cantons and communes. The aims and principles, rules of procedure and requirements for the means of legal redress apply to these plans.

In addition, there are numerous state plans which have spatial impact directly and indirectly. In particular, the planning of infrastructures such as roads, railways, local public passenger transport, electricity transmission lines, pipelines, aviation and military installations require detailed state planning which must be harmonized with "plans under the Law on Spatial Planning". At federal level, the Federal Office for Spatial Planning and the competent technical offices ensure that the aims and principles of spatial planning are incorporated into these plans and that they are harmonized with the spatial planning of the Cantons. Important instruments in this process are the sectoral strategies and sectoral plans of the Confederation or the Cantons: the increase in their numbers shows that interlinking of specialist and spatial planning interests is becoming more important as time goes on. At communal (local authority) level too, this task of interlinking with urban development concepts and development structure plans is being realised.

Finally, because spatial planning policy and finance policy are both important state overlap policies, there is a close link with financial planning at federal, cantonal and communal level. Communal land use planning, for example, must take account of financial feasibility. An infrastructure development determined by the building zone capacity consequently requires incorporation of the necessary funding in the long-term investment planning of the commune. Even financial compensation granted to improve disadvantaged regions and to compensate particular burdens of central cities constitutes an important instrument of spatial planning policy.

6. Further Information

Further information and documentation on spatial planning in Switzerland can be obtained from the Swiss Planning Association VLP-ASPAN, Seilerstrasse 22, 3011 Bern, Switzerland; Fax +41 31 380 76 77, <http://www.vlp.ch>, e-mail info@vlp-aspan.ch.

On <http://www.vlp.ch> you will find a exhaustive link list on Swiss spatial planning issues.

- 1 *The Cantons are the states which compose the federal state of Switzerland. The political organisation of Switzerland is very similar to the United States of America.*
- 2 *The Swiss federal Law on Spatial Planning is published in French, German and Italian on <http://www.admin.ch/ch/d/sr/70.html>*
- 3 *<http://www.aviation.admin.ch/d/themen/infrastr/index.htm> (in German and French only)*
- 4 *The Swiss cantons are very different in size: Zurich has more than 1 million inhabitants, Appenzell Innerrhoden some 15'000. There are also considerable economic differences.*
- 5 *Federal planning law requires zoning for the whole territory of Switzerland: the territory of the cantons must be separated in land, which can be built on and land, which is reserved for other activities such as agriculture.*

- 6 *Examples on <http://www.ag.ch/raumplanung/> or http://www.fr.ch/ocat/de/richtplan/pdcant_presentation_de.htm*
- 7 *Swiss federal environmental law: <http://www.buwal-recht.ch/index-en.htm> (in English)*
- 8 *For further information see the site of the Federal Office for Spatial Planning <http://www.admin.ch/brp/english/index.html>*

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