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Albula line > The Glacier Express
leaving Celerina.
A. Badrutt / Rhaetian Railway

5.a Ownership

The rail infrastructure of the Albula/Bernina line is owned by the Rhaetian Railway. The remaining ownership structures within the nominated World Heritage perimeter are also clearly defined, and the applicable terms and conditions are set out in the land register.

Real property

The land and buildings which directly serve rail operations are mostly owned by the Rhaetian Railway. Largish expanses of water belong to the municipalities, and in some cases the ground beneath bridges is privately owned. Most of the land overlying the tunnels is owned either by the municipalities or private individuals.

The Railway's real property normally extends over a swathe of 3 to 5 metres from the axis of the rail track. Built-up embankments and cuts up to the top edge of embankments normally belong to the Railway too, as do elements extending beyond the 5-metre zone. These elements are located primarily in places where protective structures have been erected on the side of the track facing the mountain.

The land bordering on the Railway's real property mostly belongs to the municipalities and citizens' councils, especially pastureland and forests, as well as so-called unproductive areas in rocky regions and alpine terrain. Most properties and objects in the localities and on open farmland are privately owned.

Servitudes of real property are based on the existing planning regulations (cf. 5.b). In Switzerland, real property servitudes in the immediate vicinity of the Rhaetian Railway property, pursuant to Art. 18 of the Railway Act (cf. 5.b), require the permission of the Rhaetian Railway.

Company property

All structures which serve rail operations are owned by the Rhaetian Railway. The necessary legal basis, equivalent to the legislation governing real property rights, is extant if these structures are located outside the Railway's real property zone.



Albula line > Rhaetian Railway
train at Bever station.
A. Badrutt / Rhaetian Railway

5.b Protective designation

The “Rhaetian Railway in the Albula/Bernina Cultural Landscape” is protected by several legal provisions: The railway installations (engineering structures, buildings, civil engineering) are subject to Swiss legislation on the protection of nature and the national heritage; beyond this, the Rhaetian Railway is also committed to more extensive measures. The Swiss part of the property as a whole (railway and cultural landscape) will be integrated in the Cantonal Structure Plan which is binding for federal, cantonal and communal authorities. The Cantonal Structure Plan is the central instrument of coordination and management for spatial development in Switzerland. Thus the special protection and sustainable development of the World Heritage Property in Switzerland is guaranteed. There are also provisions to ensure this protection for the part of the property which is located in Italy.

Graubünden (Switzerland)

Protection of the railway

Legal provisions

The railways in Switzerland are regulated at the highest i.e. federal level. Art. 87 of the federal constitution stipulates that railway traffic comes under the jurisdiction of the federal government.

Art. 87 BV: Railways and other means of transport

The federal government is responsible for legislation on railway traffic, cableways, shipping, aviation and space travel.

Pursuant to the railway law of 20 December 1957 (EBG; SR 742.101), based on the above constitutional article, all changes to the rail infrastructure are subject to planning approval under federal law:

Art. 18 EBG

II. Planning approval procedure

1. Principle

¹ Buildings and plant serving entirely or predominantly the construction and operation of a railway (railway installations) may only be erected or modified subject to planning permission.

² The authority issuing permission is:

a. the Federal Office of Transport [BAV];

b. in the case of major projects the department specified in the annex.

³ All authorisations required under federal law are granted with the issue of planning permission.

⁴ Cantonal authorisations and plans are not required. Cantonal law shall be taken into account insofar as it does not unduly restrict the rail company in the performance of its duties.

⁵ Pursuant to the federal law of 22 June 1979 on spatial development planning, submission of a structure plan is a basic prerequisite to planning permission for projects having a significant impact on space and the environment.

⁶ Railway installations include the plant and facilities related to construction and operation as well as locations for the recycling and storage of excavated material that are closely connected, spatially and functionally, with the planned installations.

Under Swiss federal law, the so called “monument assumption” applies to any object whatsoever – whether it figures in an inventory or not; the “monument value” is determined in the event of proceedings. The Albula/Bernina line infrastructure is therefore basically subject to the legislation on protection of the national heritage, which in turn, is based on Art. 78 of the federal constitution. “Protection of the national heritage” is used as a blanket term in Switzerland for issues

such as care of monuments, archaeology and the protection of townscape and landscapes. It is derived from a civil society initiative, institutionalised as the “Association for the Protection of the National Heritage” in 1905 (cf. 2.a.4–2.a.6). Thus use of the term has been conditioned by historical events. In earlier days, the German word “Heimat” meant nature and cultural heritage within an area defined by the national borders; accordingly “protection of the “Heimat” or heritage was synonymous with the conservation of nature and cultural customs and traditions within that territory. The national heritage movement generated significant impulses for enacting legislation on the above issues thereby ensuring that the relevant protection efforts were recognised as an integral part of government policy.

Art. 78 BV Protection of nature and the national heritage

¹ The cantons are responsible for the protection of nature and the national heritage.

² The federal government takes the requirements pertaining to the protection of nature and the national heritage into account in the performance of its duties. It respects landscapes, architectural heritage and historic sites as well as natural and cultural monuments; it ensures their unimpaired conservation when this is in the public interest.

³ It can support efforts for the protection of nature and the national heritage and acquire or safeguard objects of national importance contractually or by compulsory purchase.

⁴ It issues regulations for the protection of flora and fauna and for the conservation of their habitats in their natural diversity. It protects endangered species from extinction.

⁵ Moors and wetlands of outstanding beauty and national importance are protected. Installations may not be built and changes may not be made to the land in these areas. Installations for the protection or for agricultural use of the moors and wetlands shall be excepted.

Together with its implementing ordinance, the federal law of 1 July 1966 (NHG; SR 451) on the

protection of nature and the national heritage based on Art. 78 BV of the constitution, guarantees protection of the railway installations; the federal authorities’ obligation in this respect is implicit in the provisions governing the federal duties.

Art. 2 NHG Performance of federal duties

¹ Performance of a federal duty pursuant to Article 24^{sexies}, paragraph 2 of the federal constitution implies in particular:

- a. the planning, construction and modification of works and installations by the federal government, its agencies and enterprises, including federal administration buildings and installations, national roads, Swiss Federal Railways buildings and installations.
- b. the granting of licences and authorisations, e.g. for the construction and operation of transport facilities and enterprises (including planning permission), works and installations for the transport of energy, liquids or gases or for the transmission of news as well as authorisations for forest clearance;
- c. the grant of contributions to planning, works and installations such as melioration projects, renovation of agricultural buildings, corrective measures to rivers and lakes, water protection plants and traffic installations.

² decisions by cantonal authorities on projects that can probably only be realised with the support of contributions pursuant to paragraph 1, letter c, are equated with the performance of federal duties.

Art. 3 NHG Federal and cantonal obligations

¹ In performing their duties, the federal government, its agencies and enterprises, as well as the cantons, ensure that the country’s landscape and architectural heritage, historic sites and natural and cultural monuments are looked after and preserved unimpaired when the public interest is predominant.

² They fulfil this obligation by

- a. designing and maintaining their own buildings and installations appropriately, or refraining from their construction altogether (Art. 2, letter a);
- b. only granting licences and authorisations subject to conditions or provisos or by refusing to grant them (Art. 2, letter b);
- c. only granting contributions conditionally or refusing to provide them (Art. 2, letter c).

³ This obligation applies regardless of the impor-

tance of the object pursuant to Article 4. A measure may not go beyond what is necessary for the protection of the object and its environment.

⁴ The federal authorities conduct a consultation procedure with the cantons concerned before taking their decision. The Federal Office of the Environment (BAFU), the Federal Office of Culture (BAK), the Federal Office for Roads (ASTRA) and other federal agencies involved assist in enforcing this law pursuant to Articles 62a and 62b of the governmental and administrative organisation law of 21st March 1997.

Paragraph 4 of Art. 3, NHG is particularly important in the context of the nomination. It ensures that the specialised federal agency for the protection of monuments, archaeology and architectural heritage – the *Federal Office of Culture* BAK – will be called upon by the *Federal Office of Transport* BAV, the agency responsible for all railway matters, to give an expert appraisal of any building project. The articles governing this cooperation, in the above-mentioned organisation law, are worded as follows:

Art. 62a and 62 b RVOG

Art. 62a Consultation

¹ If a law provides for the concentration in a single authority (the Primary Authority) of decisions to be taken on plans for buildings and installations, then the latter shall obtain the expert opinions of the specialised agencies concerned before taking its decision.

² If several specialised agencies are involved, the Primary Authority shall hear them together; it may, however, hear them separately if this is justified on special grounds.

³ The Primary Authority shall set the specialised agencies a deadline for submission of an opinion; this term shall normally be two months.

⁴ The Primary Authority and the specialised agencies shall jointly determine cases where, exceptionally, no opinions have to be obtained.

Art. 62b Reassessment

¹ If the opinions submitted by the specialised agencies are contradictory, or if the Primary Authority does not agree with the opinions, it shall conduct a

reassessment with the specialised agencies within 30 days; it may call in other authorities and experts to take part in this procedure.

² If the reassessment is successful, the result shall be binding on the Primary Authority.

³ If the reassessment is not successful, the Primary Authority shall decide; in the event of significant differences between administrative units of the same department, the Primary Authority shall instruct the latter on how to decide. If several departments are involved, they shall reach an understanding. The differing opinions shall be recorded in the document stating the grounds for the decision.

⁴ The specialised agencies shall be entitled to provide information on their opinion independently to a court of appeal even after a reassessment procedure has taken place.

Additional protective obligations of the Rhaetian Railway

The Rhaetian Railway undertakes to apply additional protective provisions for the entire nominated line. For the construction, conversion and renovation of the railway infrastructure it consults experts or uses building methods it has developed in cooperation with specialists (cf. 4.a.1). The consultations with professionals ensure that the specific character and the striking appearance of the Albula and Bernina railway are preserved and that new buildings or installations will blend in well with local architectural styles and the landscape. The additional commitment of the railway is set out in the protection provisions for World Heritage Sites defined in the Cantonal Structure Plan (cf. the following chapter in this contribution).

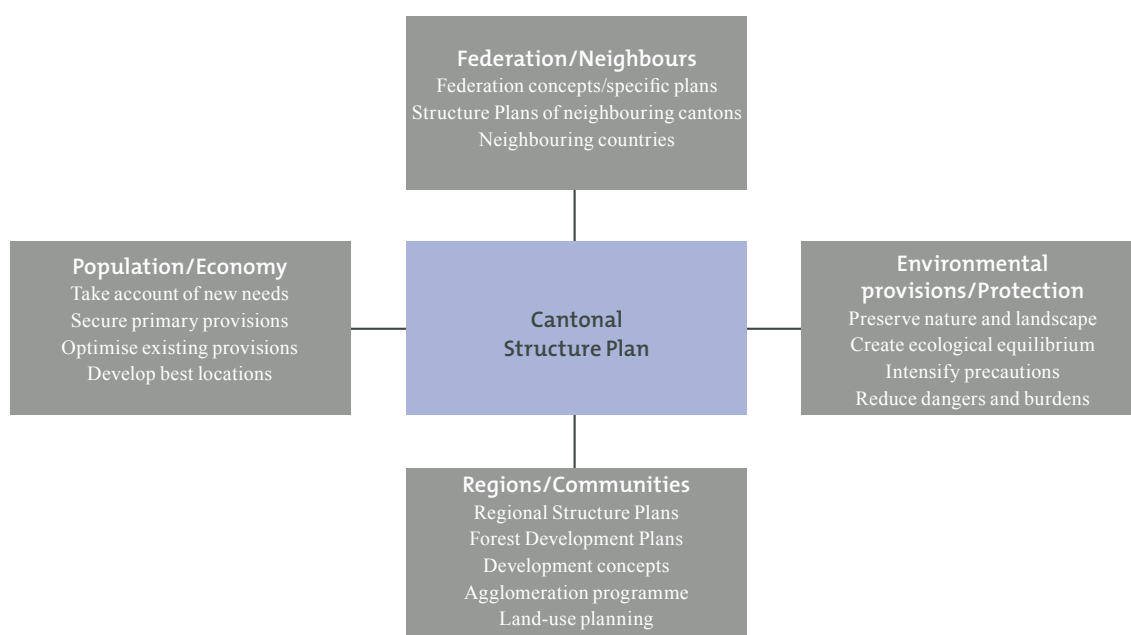
Protection of the Albula/Bernina cultural landscape by the Cantonal Structure Plan

In Switzerland, the Cantonal Structure Plan is the central instrument in controlling spatial development and hence in protecting the landscape; if the “Rhaetian Railway in the Albula/Bernina Cultural Landscape” is designated a

UNESCO World Heritage Site, it will be integrated in the Structure Plan.

In effect, the Cantonal Structure Plan shows how the various federal, cantonal and community activities impinging on the site are harmonised. This is done by integrating the federal government's inventories, concepts and specific plans (cf. the relevant chapters below) taking into account the needs of the inhabitants and economy as well as the planning, concepts and programmes of the regions and communities and also the protection and conservation objectives with regard to

nature, landscape and environment. The concerns of the neighbouring cantons and countries are also addressed. With a view to sustainable development, the aim is to strike a balance between the differing demands on the site, in particular the diversity of interests in terms of protection and use of resources. The Cantonal Structure Plan is binding on the federal, cantonal and community authorities. The plan itself comprises a text and the relevant maps; it is continually adapted to new circumstances and thoroughly reviewed at least every ten years.

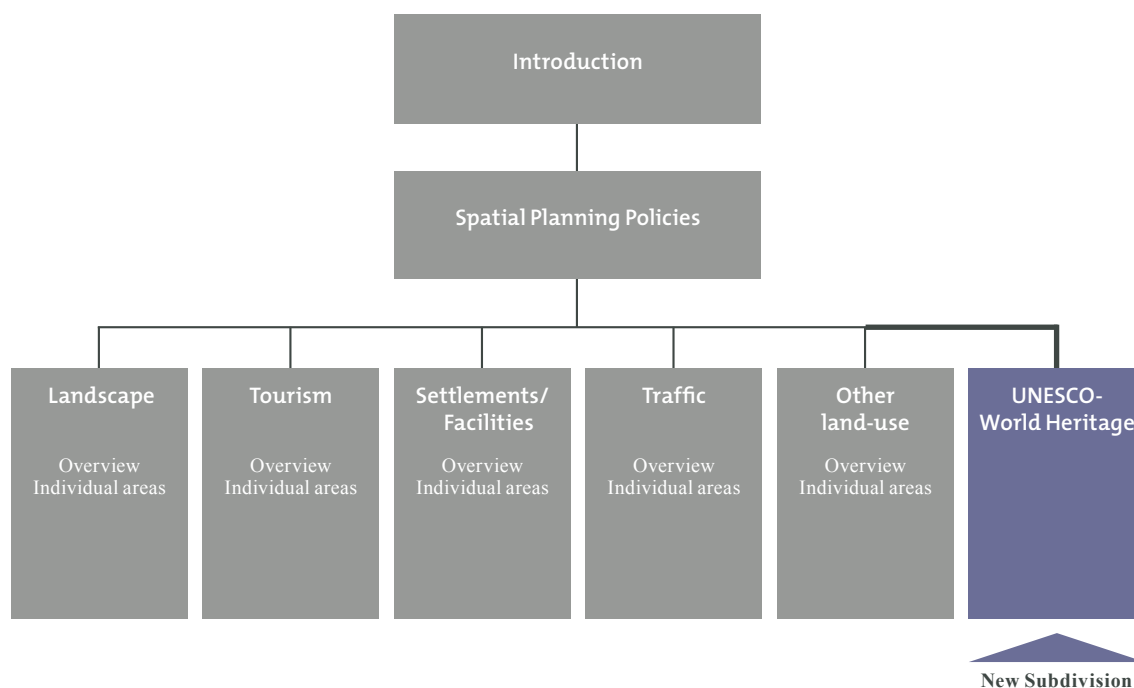


Currently, the Canton Graubünden Structure Plan is divided into five subsectors: landscape – tourism – settlement – traffic – other land-use. Each subsector is introduced by a succinct overview and, in turn, broken down into three to ten

subchapters. Binding objectives are set and primary considerations defined for each subject area, and these must be taken into account by the authorities when embarking on spatial development activities (planning, issuing authorisations, licences etc.).

If the property is accepted for the UNESCO World Heritage List, it is planned to create a new subsector to the Cantonal Structure Plan. This

will establish the provisions to ensure sustainable development of the World Heritage Site.



The primary considerations in the draft for the new subsector “UNESCO World Heritage – Rhaetian Railway in the Albula/Bernina Cultural Landscape” are as follows:

OBJECTIVE

In compliance with the protective provisions of a World Heritage site, the Albula/Bernina line of the Rhaetian Railway and the cultural landscape around it shall be used and further developed, in such a way that the particularities and specific qualities pursuant to the UNESCO Convention shall be preserved in the long-term.

PRINCIPLES

Railway infrastructure in the UNESCO core zone

In the event of new buildings, conversions and renovations of the railway infrastructure (buildings, underground engineering, engineering structures) along the Albula and Bernina line, special attention will be paid to the preservation of character and appearance as well as their integration into the architectural tradition and the landscape. This is guaranteed by professional technical counselling. In the case of renovation of the engineering structures, modular building

procedures will be developed, in cooperation with construction experts, to preserve the character and appearance of the railway while complying with the requirements of running a modern railway system. These principles, are imperative to the extent that they do not have a detrimental effect on the operation of the railway in the long-term.

Settlement areas and open cultural landscape in the UNESCO core zone

In the case of new buildings, conversions and renovations of buildings and installations, heightened awareness and sensitivity is called for in matters of execution and design, to ensure harmonious integration into the architectural heritage and landscape. In terms of their position, type and design, new buildings and installations shall respect the particular landscape and cultural values. They shall be executed to such a high quality standard that the intrinsic value of the region's cultural landscape will be enhanced, or at least not impaired. A strong focus on urban development consultancy or similar measures is key to ensuring compliance with these principles.

The cultural landscape in the UNESCO buffer zone close to the railway

Urban development consultancy is recommended for interventions in the UNESCO buffer zone, in particular for zoning or upgrading zones (higher land use density or an increase in the number of storeys in existing building zones). The decision on whether to follow this recommendation rests with the communities.

Keep the horizon as free of intrusive buildings and installations as possible

The scenic horizon is an important element of the mountain railway character and the perception of the landscape. Basically, the horizon shall be kept

free of new structures and installations. If these are necessary, careful placing of the structural elements is essential in order not to disrupt the continuous line of the horizon.

Forest stewardship along the Rhaetian Railway's Albula/Bernina line

In the area close to the Albula/Bernina line, the forest will be managed in such a way that passengers' appreciation of the landscape and cultural values is impaired as little as possible by afforestation. This means ensuring an obstructed view of parts of the landscape and special structural elements of the cultural landscape. As part of this landscape, the forest, is managed according to the sustainability principle set out in the regional forest development plans. Where the forest has a protective function, this may not be impaired by any measures whatever.

Integrate special features as part of the tourist offer

Particular elements such as the Rhaetian Railway engineering structures, historic routes, particularly valuable architectural monuments, historic settlement nuclei, building complexes, individual buildings and installations and also natural monuments are deemed part of the tourist offer. As far as possible, access to them will be via the existing network of paths and roads. These paths must be kept safe and passable and provide suitable places for rest and refreshment that blend into the landscape unobtrusively.

Utilisation of the cultural landscape and technological change support the objective

Various utilisations (e.g. farming, harnessing water power, tourism etc.) have left their stamp on the cultural landscape in the World Heritage perimeter. The resulting value added contributes

directly and indirectly to the care and conservation of the cultural landscape. The spatially effective activities are judged by weighing up the various interests. The use of modern technology by the railway and in handling the cultural landscape encourage efficient and respectful treatment and therefore long-term conservation of value.

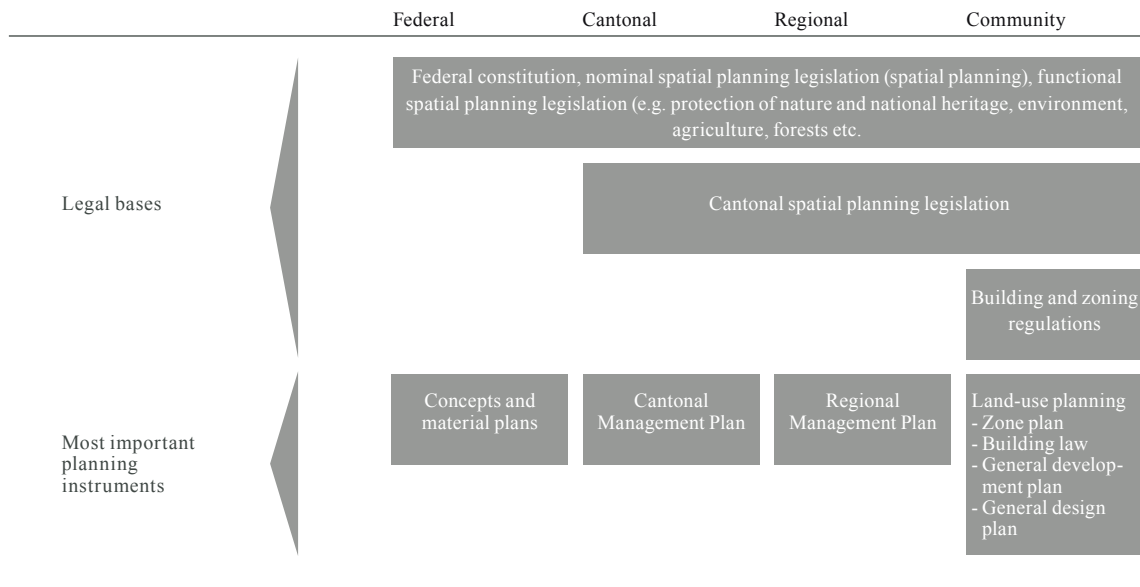
UNESCO World Cultural Heritage sponsoring association and Management Plan

The sponsoring association for the UNESCO World Heritage promotes the preservation and sustainable utilisation of the World Heritage and is responsible for the coordination of monitoring. A UNESCO World Heritage management plan as required by the UNESCO directives is extant. Its

objective is to create a binding framework for the activities of the association.

Legal framework and most important instruments of spatial planning

There are a number of legal provisions regulating the development and with it the protection of the cultural landscape; the Structure Plan, as instrument of coordination, is founded on these. The nominal legislation, which regulates the actual planning, should be differentiated from the functional legislation, which regulates the various sectors that must be coordinated (protection of nature and the national heritage, protection of the environment, infrastructures etc.). The Swiss federal state system delegates distinct



competences, to the various state levels (federal-cantonal-regional-community) each with its own planning instruments.

Nominal spatial planning legislation

Spatial planning is a “cross-section task”. Its objective is to control and guide spatial order and development as a whole and ensure coordination between the various policy-making sectors. Spatial planning has been an integral element of Art. 75 of the federal constitution since 1969.

Art. 75 BV Spatial planning

¹ The federal government establishes the principles of spatial planning. The cantons are responsible for implementing these principles which ensure the expedient and economical stewardship of land and the well ordered settlement of the country.

² The federal government supports and coordinates the efforts of the cantons and works in cooperation with them.

³ The federal government and cantons take the demands of spatial planning into account in the performance of their duties.

The objectives of Swiss spatial planning are stipulated in Art. 1 of the federal law on spatial planning (RPG) of 22nd June 1979 (SR 700); constitutionally, the RPG is a “framework law”.

Art. 1 RPG Objectives

¹ Economical stewardship of the land is assured at federal, cantonal and community level. The authorities coordinate their spatial development activities and implement settlement policies geared to the desired development pattern of the country. Due consideration is given to the natural conditions as well as the needs of the inhabitants and the economy.

² Spatial planning measures are taken at all three levels to support spatial planning, in particular efforts aimed at

- a. protecting the natural elements essential to life such as land, air, water, forest and landscape;
- b. creating and maintaining residential settlements and the spatial prerequisites for the economy;
- c. promoting social, economic and cultural activities in the various parts of the country as well as appropriate decentralisation of settlements and businesses;

- d. ensuring an adequate supply basis for the nation;
- e. guaranteeing national defence.

Art 6 ff RPG stipulates that every canton is obliged to draw up a structure plan.

Art. 6 RPG Fundamental principles

¹ The cantons determine the main features of spatial development in their territory as a basis for the compilation of their structure plans.

² They ascertain which areas are

- a. suitable for agriculture;
- b. of outstanding beauty, valuable and important for recreation or as a natural element;
- c. significantly exposed to natural hazards or harmful influences;

³ They provide information on the current status and desired development of

- a. settlement;
- b. transport and supply as well as public buildings and installations.

⁴ They take into account the concepts and specific plans of the federal government, the structure plans of the neighbouring cantons and the regional development concepts and plans.

The relevant legislation at cantonal level derives from this obligation: the spatial planning law for Canton Graubünden of 6 December 2004 (KRG; 801.100) and the relevant spatial planning ordinance for Canton Graubünden of 24 May 2005 (KRVO; 801.110).

Functional spatial planning legislation

Art. 78 of the federal constitution on the protection of nature and the national heritage, as well as the federal law based on it of 1 July 1966 on the protection of nature and national heritage (NHG; SR 451) have already been discussed in the context of the protection of the Rhaetian Railway as a federal obligation (cf. the relevant passage above). Besides the railway installations, all projects in which the federal government is involved (Art. 2 NHG) are deemed federal obligations. In this context, the federal government details its obligations in the ‘federal inventories’. These are defined by law in the

decree of 9 September 1981 on the federal inventory of Swiss Heritage Sites (VISOS; SR 451.12), the decree of 10 August 1977 on the federal inventory of landscapes and natural monuments (VBLN; SR 451.11) as well as the decree on the federal inventory of historic routes (VIVS; realisation in progress). Further, the law on the protection of nature and the national heritage (Art. 13 ff NHG) also regulates public spending for objects worthy of protection, the possibility of urgent measures (immediate protective measures, compulsory purchases, Arts. 15 and 16 NHG) as also the protection of native flora and fauna (Art. 18 ff NHG) and the protection of moors and wetlands of outstanding beauty (Art. 23 ff NHG). The detailed federal law provisions are set out in the decree of 16th January 1991 on the protection of nature and the national heritage (NHV, SR 451.12).

A particularity of Swiss legislation is the Associative Right of Objection (Verbandsbeschwerderecht), entitling non-governmental organisations to file complaint against administrative decisions, mostly in the context of building permission and planning approval proceedings. This was introduced in 1966 in the federal law on the protection of nature and the national heritage (NHG; SR 451), and was later also incorporated in the law on the protection of the environment (USG; SR 814.01) and in the federal law on foot paths and hiking trails (FWG; SR 704).

Art. 12 NHG Right of appeal for communities and organisations

¹ The communities and Swiss organisations dedicated to the protection of nature, protection of the national heritage, conservation of monuments or similar purely idealistic objectives, which have been established for at least ten years, have right of appeal; insofar as appeal against cantonal decrees or decrees issued by the federal authorities in the last instance to the federal council, or objection to the administrative court, is admissible. [...]

At cantonal level, the cantonal decree on the protection of nature and the national heritage of 27th November 1946 sets out the provisions on the protection of nature and the national heritage and also on the care of public monuments, archaeology and the protection of the architectural heritage.

Art. 1 Decree on the protection of nature and the national heritage: Purpose

The canton and the communities shall safeguard the interests of nature and the national heritage according to the present decree. This shall be realised in particular by:

1. safeguarding the landscape and natural attractions of outstanding beauty against any disfigurement and unnecessary impairment by public or private structures, advertising elements, storage sites, quarries, gravel pits, landfills, lowering ground levels, muddying and pollution of water, overbuilding and blocking of vantage points;
2. the conservation of artistically or historically valuable structures or their ruins, architectural heritage and road systems of value as well as plantations;
3. the protection of locations and monuments of particular interest with respect to the natural sciences (notable geological formations, therapeutic springs, forests, plant habitats, rare or unique trees, animals, erratic blocks, fossils, relicts of historic or prehistoric people, animals and plants);
4. the safeguarding of antiquities (parts of buildings, inscriptions, coats of arms, furniture, implements, tools, weapons, jewellery, textiles, coins, manuscripts, books, paintings, religious objects, prehistoric monuments such as graves, hides, ruins of settlements and defences, cave habitations and sacrifice sites) from destruction, disappearance or removal from the canton;
5. the professional excavation and retrieval of prehistoric and historic finds and the safeguarding of excavated ruins and other structures;
6. buying back natural monuments, antiquities and local art and artefacts which had been sold out of the canton; the canton and the communities support similarly oriented private initiatives as understood under Points 1 to 6 above.

Besides the legislation on the protection of nature and the national heritage there are numerous other legal provisions, concerning activities influencing spatial development and functional spatial planning law (legislation on forestry, agriculture, environment, traffic infrastructure etc.). These are listed in detail in the overview at the end of this chapter.

Most important planning instruments

The importance and function of the Cantonal Structure Plan as instrument of central management and coordination has already been considered. The Cantonal Structure Plan coordinates all legal provisions with a view to their influence on the spatial environment; similarly it also interacts with federal concepts and specific plans and existing regional structure plans and development concepts as well as community land-use planning.

Federal concepts and specific plans

The concepts and specific plans according to Art. 13 of the federal law on spatial planning (RPG) are the most important federal spatial planning instruments. In the concepts and specific plans for the whole of Switzerland, the federal administration shows how it fulfils its spatially-effective obligations in a certain material or subject field, the objectives it pursues and how it proposes to act, and what demands and issues it will take into account. The concepts and specific plans support the spatial planning targets of the authorities at all levels. The directives set out in the concepts and specific plans and those in the cantonal structure plan are mutually complementary, but proposed from a different angle.

A summary of the federal concepts and specific plans is reproduced in the overview at the

end of this chapter. The specific plans on traffic, transmission cables, aviation infrastructure (Samedan regional airfield) and the national sports facilities concept (there are sports facilities of national importance in the Engadin) are particularly significant for the nominated site.

Regional structure planning and forest development plan

In Graubünden the regions, rather than the individual communities, exercise spatial planning responsibilities and compile regional structure plans in their capacity as public law planning units (Art. 18 KRG). These plans cover specific subjects of regional importance, such as land-use (cf. 5.d). The regions are bound by the Cantonal Structure Plan in carrying out their spatial planning activities. Consequently, the specific adaptation of the Structure Plan to protect the UNESCO World Heritage Site also has an impact on these activities. The regional structure plans are subject to approval by the cantonal government and are thus binding on the cantonal authorities. The regional structure plans, like the Cantonal Structure Plan, are updated continuously in line with new developments.

The Forest Development Plan WEP may be seen as a kind of “forestry structure plan”. It contains the general principles for management and care of forests and outlines objectives and development intentions for the entire forested area. A Forest Development Plan is compiled for an entire planning region, overriding individual forest boundaries and ownership boundaries. For the following sectors

- > protection against natural hazards
- > timber production
- > nature and landscape
- > leisure and tourism

- > agriculture
- > game and hunting

special areas are set aside and the specific forestry objectives linked with the particular land use are defined together with the measures needed to achieve them. Besides these special forest areas there are extensive tracts of forest where no particular provisions are called for. The general forestry management principles apply in these cases.

Community land-use planning

In Graubünden the communities are responsible for land-use planning. They control the type and extent of use of their territory by issuing regulations covering every property and plot of land that are binding for the owners. Community land-use planning comprises the building law, zoning plan, the general architectural style plan and the general development plan.

A community building law comprises at least the building regulations, the zoning provisions and other provisions stipulated by cantonal law. According to local requirements, the building provisions regulate the specifications for buildings and installations with respect to execution, operation and upkeep; the design and maintenance of buildings and installations and open air facilities; construction of community installations such as playgrounds, green areas, parking facilities, aeries; the provision of parking spaces for motor vehicles and bicycles; the utilisation of common ground and air-space by private individuals as well as private property for public purposes and other demands on buildings and installations. The zoning provisions determine the purpose of the zones, permitted type of land-use and regulate the style of construction in the building zones.

The zoning plan divides the territory of the

community into various utilisation zones. The 'basic utilisation' zones determine the land use permissible. Additional land-use provisions are issued for zones where types of land use overlap. The communities designate building zones, agricultural zones, protection zones and others according to local needs. The building area is also called the *settlement area*, while the no-building area is referred to as the *agricultural area*. The zoning plan may define areas for a follow-up planning phase (area/district planning). Follow-up planning has the effect of making the area concerned a planning zone. It is initiated either by the authorities or, on application, by the party concerned.

The general organisation plan outlines the fundamental aspects (conservation, renovation, further development) of the settlements and the landscape. The communities may also issue design and style provisions instead of a general organisation plan (cf. Art 22 KRG; 801. 100). The general development plan outlines the fundamental principles governing traffic utilities installations and waste disposal plants for the development of building zones and other utilisation zones. It covers at least the installations for elementary and primary utilities and, where there is no follow-up plan, it also regulates the detailed development for utilities involving several properties.

The community land-use plans are updated as necessary.

Due to space restrictions, it is not possible to include copies of all the land-use plans. However, the plans for one community (Bever) will serve as an example (cf. "Annex" File). A detailed summary of the land-use plans can be found in Chapter 5.d.

Overview

Protection of the Albula / Bernina cultural landscape in management and land-use plans

The protection status of settlements and landscape along the Albula/Bernina line as specified in management and land-use plans is detailed below, broken down according to the sections of the line. Chapter 7.b lists plans from the site area that reflect the regulations of the cantonal structure plan in detail.

Abbreviations

OBSnr	Protection of village architectural heritage (national = n, regional = r)
OBSZ	Protection of architectural heritage zones
KDnr	Cultural monument (national = n, regional = r)
KDS	Protected cultural monuments (land-use planning)
EHZ	Conservation zones (protected zones) (groups of buildings of cultural-historical value)
KL	Cultural landscape with special stewardship
LSG	Protected landscape area according to structure planning
BLN	Federal inventory of landscapes and natural monuments of national importance
ML	Moor landscape of outstanding beauty and national importance
LSZ	Protected landscape area according to community land-use plan
LWZ	Agricultural zone
FFF	Crop rotation area

General	Settlement	Landscape
Domleschg/Thusis		
<ul style="list-style-type: none"> -KL protected in near vicinity (LSG, LWZ, forest) -Orderly settlements -Architectural heritage protected -Art monuments and environs protected 	<ul style="list-style-type: none"> -Thusis: historic nucleus Altdorf and Neudorf (OBSr), OBSZ, development planning consultancy, protected -Sils i. D.: OBSr, OBSZ, KDS, development planning consultancy (Palazzo, Campi ruins, Balenstein castle) 	<ul style="list-style-type: none"> -Domleschg, KL with special stewardship and LSG/LSZ -San Cassian church and environs OBSn, KDS, LSG/LSZ -Hohenrätien and Carschenna LSG/LSZ -Campi ruins and environs OBSn, KDS -Hohenrätien ruins, KDn, KDS -Fort Ehrenfels KDS -Cave drawings Badugnas KDS -Prehistoric rock drawings Carschenna KDn, KDZ
Schin Gorge		
<ul style="list-style-type: none"> -Difficult access area with precipitous rocks and forest Protection from natural hazards necessary as required 	<ul style="list-style-type: none"> -No settlements close to the core or buffer zone -Villages Zorten, Lain, Muldain; sharp delimitation of building zone (buffer zone in far distance) 	<ul style="list-style-type: none"> -Mainly forest (ban on forest clearance and therefore protected) -LWZ -Alvaschein, KL with special stewardship LSG -Mistail church with environs (OBn, LSG)
Tiefencastel – Filisur		
<ul style="list-style-type: none"> -Orderly settlements Architectural heritage and cultural monuments protected -Cultural landscape with special stewardship (hedge landscape) protected -Arable land on valley floor in LWZ -Quarry areas are being re-greened 	<ul style="list-style-type: none"> -Tiefencastel Kirchhügel KDn -Surava: Belfort ruins KDn -Surava/Alvaneu Bad: Surava regional crafts location with historical lime kiln KDS -Filisur OBSn, OBSZ, detailed organisation plan with protected buildings, development planning consultancy, protected 	<ul style="list-style-type: none"> -Prada plain (LSG) with EWZ (electricity works) settlement -KL Albula valley (LSG) -Valley plains LWZ -Forest (ban on forest clearance and therefore protected) -Golf course -KL Albula valley (LSG) -Landwasser viaduct KDn
Filisur – Bergün/Bravuogn		
<ul style="list-style-type: none"> -Deep cut valley with river, rock outcrops and forest -Protection from natural hazards necessary as required 	<ul style="list-style-type: none"> -Greifenstein ruins, KDS 	<ul style="list-style-type: none"> -Largely forest (ban on forest clearance and therefore protected) -Landscape in the buffer zone, also extending to the far distance LSG/LSZ
Bergün/Bravuogn – Preda		
<ul style="list-style-type: none"> -Orderly settlements -Architectural heritage protected -Meadows on valley floor and around Bergün and Preda in LWZ -Extensive areas of forest and rocks/scree -Protection from natural hazards necessary as required 	<ul style="list-style-type: none"> -Bergün/Bravuogn: OBSn and tower KDn protected, detailed heritage plan with protected buildings, development planning consultancy -Latsch: OBSn; environs protected, development planning consultancy -Stugls/Stuls: OBSn; KDn, detailed design plan with protected buildings, development planning consultancy -Naz: Maiensäss settlement in EHZ 	<ul style="list-style-type: none"> -Forest (ban on forest clearance and therefore protected) -Landscape in the buffer zone, also extending to the far distance LSG/LSZ

General	Settlement	Landscape
Val Bever – Pontresina		
<ul style="list-style-type: none"> - Well structured, clear-cut settlements in Samedan – Celerina – St. Moritz – Pontresina area (tourism and focal points in the Engadin) - Meadows, grazing and open larch forests in LWZ, partly BLN and LSG 	<ul style="list-style-type: none"> - Bever: OBSn, OBSZ, detailed organisation plan with protected buildings, development planning consultancy, protected - Bever: Church KDn - Samedan: OBSn, OBSZ, development planning consultancy - Celerina: OBSr, special community heritage directives - St. Moritz: OBSr - St. Moritz: Engadin Museum and Segantini Museum KDn - Pontresina: OBSn, detailed organisation plan with protected buildings - Pontresina: S. Maria chapel with tower and Grand Hotel Kronenhof KDn 	<ul style="list-style-type: none"> - Val Bever in LSG - Bever-Samedan-Pontresina plain in LWZ and forest, BLN, LSG/LSZ - Samedan-Celerina golf course - S. Gian (KDn) with environs: BLN, LSG and LSZ - ML, BLN
Val Bernina – Bernina Pass		
<ul style="list-style-type: none"> - Alpine meadow and water-glacier landscape with imposing views of Bernina Group; virtually unpopulated 	<ul style="list-style-type: none"> - no cohesive settlements 	<ul style="list-style-type: none"> - Val Bernina extensively covered in BLN and LSG - Glacier apron, Morteratsch glacier - Albris-Morteratsch federal no-hunting reserve
Bernina Pass – Cavaglia		
<ul style="list-style-type: none"> - Alpine grazing and glacier landscape with imposing views of Palù glacier and into Val Poschiavo; virtually uninhabited 	<ul style="list-style-type: none"> - no cohesive settlements 	<ul style="list-style-type: none"> - Largely in LSG, subsectors in BLN - Palù glacier apron and Lake Palù LSG - Cavaglia plains with moulins LSG
Cavaglia – Poschiavo valley floor		
<ul style="list-style-type: none"> - Well tended cultural landscape (Maiensäss areas) from Cadera to valley floor - Valley floor, orderly but changed settlements and intensively farmed areas; hedge landscapes on the alluvial fans (KL with special land stewardship) - Lake Poschiavo with largely natural shores (except Le Prese-Li Geri and Miralago) 	<ul style="list-style-type: none"> - San Carlo: OBSn, detailed organisation plan with protected buildings, east flank LSG/LSZ - San Carlo: S. Carlo Borromeo church with Casa Volt, KDn - Poschiavo Borgo: OBSn, detailed organisation plan with protected buildings - Poschiavo Borgo: historic nucleus and “Spagnoli” district KDn - Poschiavo Borgo: S. Vittore church KDn - Poschiavo Borgo: S. Maria Assunta church, KDn - Poschiavo Borgo: Old Augustinian convent - Poschiavo Borgo: Council building with tower KDn - Poschiavo Borgo: De Bassus-Mengotti house KDn - Prada: OBSn, detailed organisation plan with protected buildings, - Canton: OBSn, detailed organisation plan with protected buildings - Le Prese OBSr 	<ul style="list-style-type: none"> - Alluvial fans with hedge landscape (LSG) - Valley plain FFF, LWZ - Lake Poschiavo surroundings LSG, forest (clearance ban, thus protected), LWZ
Lake Poschiavo – Campocologno		
<ul style="list-style-type: none"> - Narrow valley and valley floor that is relatively densely populated and intensively farmed 	<ul style="list-style-type: none"> - Brusio – Campascio: orderly settlement pattern - Brusio OBSr, nucleus with development planning consultancy - Crafts locations (traditional) - San Romerio chapel KDn - “Cröt” cool house KDn 	<ul style="list-style-type: none"> - Motta, massive rockfall area in LSG - Terrace landscape, LSG/LSZ - Chestnut forests with terraces, LSG/LSZ - Brusio reverse curve viaduct, LSG/LSZ

Legal bases according to subject

The following table shows the legal bases and instruments for protection and stewardship of the cultural landscape according to subject, with a breakdown of the cultural landscape into *settlement area* and *landscape area* (forest and other areas).

Landscape element	Classification	Type of classification
Settlement area		
Settlement area general	<ul style="list-style-type: none"> - Art. 15 RPG, building zone - Art. 22 KRG, community regulative system (building law and plans) - Cantonal structure planning (Chapter 5.2) - Differentiated building zones in land-use planning 	<ul style="list-style-type: none"> - Federal legislation - Cantonal legislation, Structure planning - Cantonal legislation, Structure planning - Land-use planning
Building zone - protected areas (protection of architectural heritage)	<ul style="list-style-type: none"> - Art. 5 NHG, architectural heritage of national, regional and local importance - Art. 43 KRG development planning consultancy Art. 73 KRG development planning - Cantonal structure planning (Chapter 5.5.1) - Land-use plan protected zones, development planning consultancy, development directives, building law provisions (BauG, zoning plan, general organisation plan) 	<ul style="list-style-type: none"> - Federal legislation - Cantonal legislation - Structure planning - Land-use planning
Building project adjacent to rail operation area	<ul style="list-style-type: none"> - Art. 18m EBG, Art. 18m EBG, building projects adjacent to or on railway property, Rhaetian Railway approval required 	<ul style="list-style-type: none"> - Federal legislation
Landscape area		
Landscape area (forest)	<ul style="list-style-type: none"> - Art. 5 forest law, ban on clearance law 	<ul style="list-style-type: none"> - Federal legislation
Landscape area (other)	<ul style="list-style-type: none"> - Art. 24 RPG, special licence, zone conformity, site-bound 	<ul style="list-style-type: none"> - Federal legislation
Moor landscapes and wetlands	<ul style="list-style-type: none"> - Art. 78 BV, moors and wetlands of national importance 	<ul style="list-style-type: none"> - Federal constitution
Biotop protection	<ul style="list-style-type: none"> - Art. 18 NHG, raised and flat bogs, wetlands, amphibian spawning grounds, glacier aprons, dry meadows - Structure planning (Chapter 3.7) - Land-use plan protected zones 	<ul style="list-style-type: none"> - Federal legislation - Structure planning - Land-use planning
Landscape	<ul style="list-style-type: none"> - Art. 5 NHG, landscapes and natural monuments of national importance - Structure planning (Chapter 3.5 and 3.6) - Land-use plan protected zones 	<ul style="list-style-type: none"> - Federal legislation - Structure planning - Land-use planning
Fauna and habitats	<ul style="list-style-type: none"> - Art. 11 JSG, no-hunting zones - Structure planning (Chapter 3.8) - Land-use plan protected zones 	<ul style="list-style-type: none"> - Federal legislation - Structure planning - Land-use planning

Legal bases according to legislative level
The following table sets out the most important legal bases, arranged according to legislative level (appended to the candidature documentation [“Annex” File] in electronic form). All

federal laws can be found in the systematic collection at www.admin.ch/ch/d/sr/sr.html available in the national languages German, French and Italian. The cantonal laws can be consulted at www.gr.ch.

Level	Most important legal provisions	Bases, inventories	Specific plans and concepts (Federation) structure planning (canton and region), land-use plans (communities)
Federation	<ul style="list-style-type: none"> - Agreement of 23 November 1972 on the protection of the world cultural and natural heritage (SR 0.451.41) - Haag Convention of 14 May 1954 for the protection of cultural assets in the event of armed conflict (SR 0.520.3) - Federal law of 1 July 1966 on the protection of nature and the environment (NHG; SR 451). - Decree of 16 January 1991 on the protection of nature and the national heritage (NHV; SR 451.1) - Decree of 10 August 1977 on the federal inventory of landscapes and natural monuments (VBLN; SR 451.11) - Decree of 9 September 1981 on the federal inventory of Swiss Heritage Sites (VISOS; SR 451.12) - Decree of 28 October 1982 on the protection of riverside wetlands of national importance (Wetlands decree; SR 451.31) - Decree of 21 January 1991 on the protection of raised and transition bog lands of national importance (Raised bogs decree; SR 451.32) - Decree of 7 September 1994 on the protection of flat bogs of national importance (Flat bogs decree; SR 451.33) - Decree of 15 June 2001 on the protection of amphibian spawning grounds of national importance (Amphibian spawning grounds decree; AlgV; SR 451.34) - Decree of 1 May 1996 on the protection of moor landscapes of outstanding beauty and national importance (Moor and wetland landscapes decree; SR 451.35) - Federal law of 22 June 1979 on spatial planning (RPG; SR 700) - Spatial planning decree of 28 June 2000 (RPV; SR 700.1) 	<ul style="list-style-type: none"> - Federal inventory of landscapes and natural monuments of national importance (BLN) - Federal inventory of cultural assets of national and regional importance - Federal inventory of Swiss Heritage Sites (ISOS) - Federal inventory of historic routes (IVS) - Federal inventory of the riverside wetlands of national importance - Federal inventory of raised and transitional bog lands of national importance - Federal inventory of the flat bogs of national importance - Federal inventory of the amphibian spawning grounds of national importance - Federal inventory of the moor landscapes of outstanding beauty and national importance - Federal inventory of glacier aprons and alluvial plains - Inventory of the federal no-hunting zones - National forestry inventory - Production cadastre for agriculture (extended transition zone, pre-alpine hill zone, mountain zones I-IV, summer grazing area) 	<ul style="list-style-type: none"> - Swiss agricultural concept; (LKS), issued by the federal council by decision of 19 December 1997 - Specific crop rotation area plan; (FFF), issued by the federal council by decision of 8 April 1992 - Specific plan for transmission cables (SüL), issued by the federal council by decision of 27 June 2001 and updated continuously - Specific traffic plan, part programme, issued by the federal council by decision of 26 April 2006 - Specific military plan, issued by the federal council by decision of 28 February 2001 - Specific traffic plan, part programme, issued by the federal council by decision of 26 April 2006 - Specific aviation infrastructure plan (SIL), part i - IIIB, issued by the federal council by decision of 18 October 2000 with continuous updating of part IIIC, 1. – 6. Series - National sports grounds concept (NASAK), issued by the federal council by decision of 23rd October 1996 - Specific plan – AlpTransit, New Alpine Rail Axis (NEAT) issued by the federal council by decision of 15th March 1999

Level	Most important legal provisions	Bases, inventories	Specific plans and concepts (Federation) structure planning (canton and region), land-use plans (communities)
	<ul style="list-style-type: none"> -Federal law of 21 June 1991 on the melioration of water courses (SR 721.100) -Railway law of 20 December 1957 (EBG; SR 742.101) -Federal law of 24 June 1902 on electrical light and heavy power installations (EleG; SR 734.0) -Decree of 8 November 1978 on licensing of cableways (Cableway licence decree, LKV; SR 743.11) -Federal law of 7 October 1983 on the protection of the environment (USG; SR 814.01) -Decree of 19 October 1988 on the environment compatibility test (UVPV; SR 814.011) -Federal law of 24 January 1991 on protection of waters (Waters protection law, GSchG; SR 814.20) -Federal law of 29 April 1998 on agriculture (LWG; 910.1) -Decree of 29 March 2000 on summer alp grazing contributions (SöBV; SR 910.13) -Decree of 4 April 2001 on the regional promotion of quality and the network of ecological compensation surfaces in agriculture (Eco-quality promotion, ÖQV; SR 910.14) -Decree of 7 December 1998 on structural improvement in agriculture (Structural improvement decree, SVV; SR 913.1) -Federal law of 4 October 1991 on forestry (WaG; SR 921.0) -Federal law on hunting and the protection of mammals and birds in the wild (Hunting law, JSG; SR 922.0) 		

Level	Most important legal provisions	Bases, inventories	Specific plans and concepts (Federation) structure planning (canton and region), land-use plans (communities)
Canton	<ul style="list-style-type: none"> - Law of 24 October 1965 on the promotion of the protection of nature and national heritage in Canton Graubünden (BR 496.00) - Decree of 27 November 1946 on the protection of nature and the national heritage (BR 496.100) - Decree of 2 June 1972 on the protection of the Upper Engadin lake landscape (BR 496.150) - Spatial planning law of 6 December 2004 for Canton Graubünden (KRG, BR 801.100) - Spatial planning law of 24 May 2005 for Canton Graubünden (KRVO, BR 801.110) - Decree of 21 November 2000 on the repurposing of farmsteads and buildings and installations worthy of protection outside building zones (repurposing decree, UVO, BR 801.150) - Directives of 6 May 1997 on risk zone planning (BR 801.500) - Introductory law of 2 December 2001 in relation to the protection of the environment law (BR 820.100) - Cantonal protection of the environment decree of 13 August 2002 (BR 820.110) - Cantonal decree of 30 April 1991 on the environment compatibility test (KVUVP, BR 820.150) - Law of 25 September 1994 on the conservation and promotion of agriculture (BR 910.000) - Agricultural decree of 28 March 2000 (BR 910.050) - Canton Graubünden melioration law of 5 April 1981 (BR 915.100) - Cantonal forestry law of 25 June 1995 (KWaG, BR 920.100) - Cantonal forestry decree of 2 December 1994 (KWaV, BR 920.110) - Export provisions of 19 December 1995 pursuant to the cantonal forestry law (AbzKWaG, BR 920.120) 	<ul style="list-style-type: none"> - Cantonal nature and landscape inventory - Cantonal inventory of monuments 	<ul style="list-style-type: none"> - Canton Graubünden Structure Plan, issued by the government 19 November 2002, approved by the federal council 19 September 2003 (www.richtplan.gr.ch) - Forest development plans (cf. 5.d)

Level	Most important legal provisions	Bases, inventories	Specific plans and concepts (Federation) structure planning (canton and region), land-use plans (communities)
Region			- Regional structure plans (see list in Chapter 5.d)
Communities		- Detailed settlement inventories - Complementary inventories on biotopes and landscapes	Land-use planning comprising - Building law - Zoning plan - General urban organisation plan (or organisation directives) - General development plan (see list in Chapter 5.d)

Tirano (Italy)

Protection of the Railway

The railway installations (including the station) on the Italian side also belong to the Rhaetian Railway. As the owners and the company are formally identical the same rights and obligations apply for the Italian and Swiss sections of the nominated line.

Protection of the Cultural Landscape

In Tirano – the only Italian municipality concerned by the World Heritage nomination - careful handling of the cultural landscape in the core and buffer zones is assured by the *Piano regolatore generale del Comune di Tirano PRG* (the equivalent of the communal land-use plan in Switzerland). Plans issued by the province and provincial legislation, take precedence over the PRG. Under Italian law no new structures may be closer than 150 m from the banks of the rivers; this means no new builds are permitted over a 300 m wide area (150 m to the left and right of the river). The core zone is located in this “300 m strip” along the Poschiavino river.

The buildings and installations already in the core zone and buffer zone are subject to community legislation under the PRG. For buildings and installations in the “centro storico” (historic nucleus) zones – analogous to building legislation in Switzerland – there are restrictive provisions governing utilisation, typology, characterisation, appearance and design (forms, colours, materials etc.). For the other PRG zones, utilisation forms and dimensions are also detailed according to plot.

The core and buffer zones on the municipal territory of Tirano is broken down into the following land-use zones:

Core zone

The main land-property categories in this area are as follows:

- > N zones (barren, uncultivated): 40%.
- > E zones (productive, agricultural): 30%.
These are the areas destined for farming/productive agriculture; restricted building is permitted i.e. building for agricultural needs. Productive agriculture is instrumental in the conservation of the hydro-geological system, forest and land resources. In particular there are E1 zones (ordinary), E3v zones (specific, vineyards) and E3f zones (specific, orchards).
- > A zones (residential historical nucleus): 5%.
- > B1 zones (more sparsely inhabited): 5%. B zones are essentially residential. These areas already exist or are virtually complete. Settlement is recent and definition of the urban organisation is virtually complete with the exception of some adjustments to needs.
- > Railway zones: 5%. These are the areas planned for railway installations, infrastructure and operating equipment.
- > Areas of River Poschiavino: 15%.

Buffer zone

The main land-property categories in this area are as follows:

- > A zones (residential historical nucleus): 20%.
 - > N zones (barren, uncultivated): 15%.
 - > Railway zones: 5%.
 - > E1 zones (general, agriculture): 5%.
 - > E3v zones (special, agricultural, vineyards): 15%.
 - > E3f zones (special, orchards): 5%.
 - > B1 zones (sparsely residential): 15%.
 - > B2 zones (residential, services): 5%.
 - > C2 zones (expanding residential areas): 5%.
- C areas have not yet been developed or they

only have a few buildings for new residential development.

- > Zones for public installations, public utilities and of communal interest: 10%.

Die PRG protection provisions relevant for the property are appended to the candidature documentation (“Annex” File) in electronic form (Italian).

The building regulations for areas with historic settlement nuclei and historic parts (“centro storico”) in the province as a whole are also set out in the *Piano territoriale di Coordinamento della Provincia di Sondrio* PTCP. This plan was adopted by the mayors of the communities in the province of Sondrio 9th September 2006 and referred to the Region of Lombardy for ratification. Further, this plan is based on numerous legal provisions that contribute to the protection and sustainable development of the cultural landscape (cf. 7.b). Die PTCP protection provisions relevant for the property are appended to the candidature documentation (“Annex” File) in electronic form (Italian).



Albula line > The Glacier Express
at Bever.
A. Badrutt / Rhaetian Railway

5.c Means of implementing protective measures

Graubünden (Switzerland)

Basic procedural principles

In Switzerland the three strata of government – federation, canton and community – have graduated levels of competence for the implementation of the protective provisions. Three fundamental principles play a central role in the process of drawing up and approving protective and development measures: deposition for viewing by the public, consultation and appraisal of differing interests.

Deposition for public viewing

The spatial plans described in Chapter 5.b (Federal concepts and specific plans, structure plans, land-use plans) involve a public hearing and participation in accordance with article 4 RPG. This means that these plans are open to the public and that anyone may comment on them (see articles 7, 11, 13 KRVO). The basic principle of public presentation and giving members of the public the opportunity to lodge objection also applies to building projects, with the exception of construction work which either will take only a brief period of time or which does not affect public or private interests (see article 86 KRG and article 40 KRVO).

Consultation

The consultation process is based on the principle of involvement and is the same for all procedures (spatial planning, railway law). One of the first steps in this procedure involves the lead authority (as determined by law) investigating the areas that will be or might be affect-

ed by the spatial plan or building project. Here ‘areas’ refers to aspects such as nature protection, heritage protection, environmental protection, agriculture, forestry, and so forth. The responsible technical bodies are given the opportunity to comment on the submission and to forward an opinion to the lead authority. As a rule, the lead authority prepares the decision on behalf of the legally established decision-making body. During this procedure, the various interests are weighed against each other. The same principle applies in terms of the involvement from a territorial point of view (directly affected regions or local authorities). In the case of the UNESCO World Heritage Site, for example, the *Federal Office of Transport* BAV invites the *Federal Office of Culture* BAK to submit an opinion.

Harmonising interests

The harmonisation of interests is a core method used in spatial planning, protection of nature and the national heritage protection. The method involves assessing the interests affected and weighting them in terms of clearly understandable criteria. The planning principles defined in article 3 of Federal law on spatial planning provide a guideline for this. These principles do not of course offer a definitive system, free of contradictions, as their application and weighting is always related to the particular problem being considered. The weighting takes into consideration the importance of objects, and when considering nature protection and national heritage protection a distinction is made between national, regional and local importance. The convention on

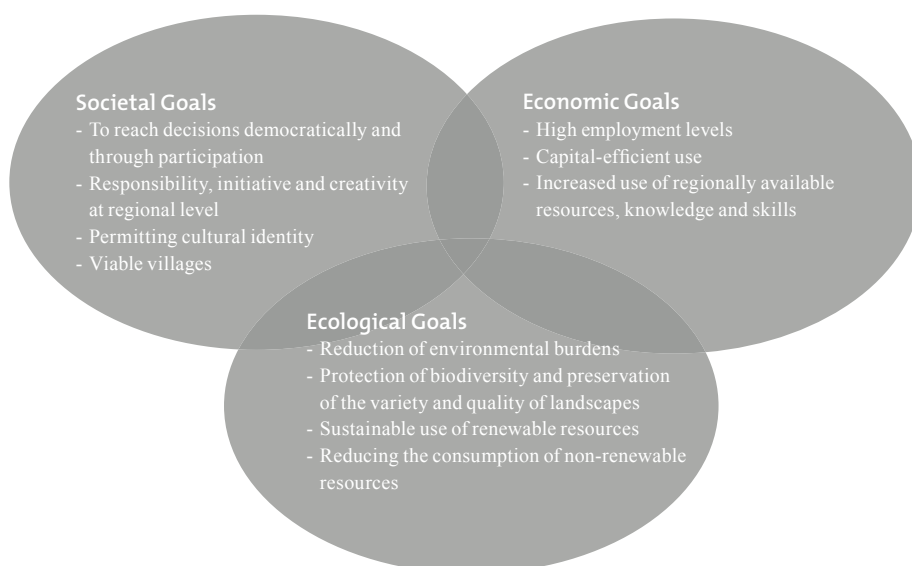
the protection of the world's natural and cultural assets (SR. 0.451.41) is implemented by means of domestic laws (non self-executing). Switzerland has no special law relating to World Heritage sites, so in practice any such site within the country is taken to be of national importance and is therefore assigned the highest level of importance.

The harmonisation of interests is an open process that can respond to any new interests that may arise. It is also based on the concept of sustainable development, now established as part of the new Federal constitution, and is a higher-ranking guideline applicable to all policy areas. Sustainable development means satisfying the needs of the present day without putting at risk the ability of future generations to fulfil their own needs. Sustainable development aims to achieve societal, economic and ecological compatibility – three interdependent areas that must be given due consideration when harmonising the various interests.

Planning implementation and the railway

Planning approval procedures in accordance with Railway law which take account of the legislation on protection of nature and the national heritage protection

The plan-approval procedure derived from railway legislation is regulated by the Railway Law, the Railway Directive and the Plan Presentation Order. When the BAV (*Federal Office of Transport*) as lead authority distributes a project to other federal bodies as part of a normal planning-approval procedure, the consultation process applied is based on the principle of involvement. These federal bodies may include the BAFU (*Federal Office of the Environment* – the federation's technical body responsible for the environment, forests, nature protection and landscape protection) and the BAK (*Federal Office of Culture* – the federation's technical body for the preservation



of monuments, archaeology and the protection of townscape images). BAK and BAFU check aspects such as the extent to which a project touches on the interests of the protection of nature and the national heritage. This work takes into account the special circumstances presented by the UNESCO World Heritage Report on the “Rhaetian Railway in the Albula/Bernina Cultural Landscape”, as set out in the Cantonal Structure Plan. These authorities base their decisions in part on the various inventories binding on the federation (see Chapter “Protection of nature and the national heritage” below). The authorities may also ask (and in some cases are required to ask) the EKD and ENHK – the advisory commissions of the federation – to submit technical reports. The EKD is the *Federal Commission for the Preservation of Monuments*, and the ENHK the *Federal Commission for the Protection of Nature and Cultural Heritage*. As part of the assessment of a project, the technical departments can submit requests for changes to the lead authority or even reject the project completely. The BAV makes its decision based on a balance of interests and is required to reach an agreement with the technical departments by means of a legally defined procedure.

The planning approval project is also sent to the canton, which accepts responses from the local authorities and any third parties affected. Laws passed by the canton and the local authorities cannot oppose the planning approval. In practice, however, due consideration is given to the laws passed by the canton and local authorities, as well as to the railway law and to other public interests. The local authorities keep the project on public display in the form normally used locally for a period of 30 days. During this period, anyone whose rights and duties are affected

by the building project and whose interest in the project is worthy of protection may express an opinion or request changes to the plan. The law on group complaints (cf. 5.b) allows all issues to be raised, including questions on alignment, environmental protection and noise protection, spatial planning aspects, and so forth.

The planning approval procedure as a rule concludes with the BAV issuing a decision; this decision may be challenged.

The planning approval is important in two ways. On the one hand it is in effect a building approval and on the other it implies that the project correctly applies the normal rules of railway know-how and is designed using state-of-the-art technology; in other words, the planning approval also confirms that the project has passed a safety review by the BAV.

Technical advice and the Rhaetian Railway

The Cantonal Structure Plan contains provisions concerning protection of the World Heritage Site (see draft for the new Structure Plan subsection “UNESCO World Heritage” in 5.b). The provisions require the Rhaetian Railway to involve qualified specialists (specialists in the cantonal tasks of preservation of monuments or other experts) during the planning, design or implementation of new railway facilities and during the conversion and rehabilitation of existing railway facilities. The task of these experts is to ensure that the specific character and dominant image of the Albula and the Bernina lines remain preserved and that new structures and facilities are properly integrated into the townscape and the landscape images.

The example of the development of modular construction methods for the rehabilitation of railway bridges shows how this type of technical advice works in practice (cf. 4.a.1).

Implementation of the protective provisions of the cantonal structure plan in the cultural landscape of the Albula / Bernina region

As described in Chapter 5.b, the presentation of the desired spatial development and its implementation through the use of plans is mainly the task of the cantons, although these delegate part of the work involved to the local authorities. The Cantonal Structure Plan is a central instrument in the spatial development of an area that is developed by the canton's *Office of Spatial Development*, working together with other technical departments of the canton and with the regions and the local authorities (article 14 KRG). The Office of Spatial Development prepares a draft Structure Plan, makes it available for public viewing for a period of at least 30 days and distributes it to the cantonal technical departments concerned for review. The Office of Spatial Development then reviews any suggestions and objections that publication of the plan may give rise to. The results are made available to the participants and the general public in an appropriate form. As a rule, the opportunity is also taken to have the ARE (*Federal Office of Spatial Development*) make a preliminary review of the plan. The ARE circulates the draft structure plan to various technical departments of the federation (selected on the basis of the principle of involvement) for comment and then prepares a 'Preliminary Review Report'. These technical departments include the BAK (Federal Office of Culture), which reviews the draft plan in terms of national heritage protection and the preservation of monuments. As a result of this requirement to lay out the plan for public inspection, the general public makes suggestions and raises objections, the cantonal technical departments, regions and local authorities affected submit opinions, and where invited the federation returns a Prelimi-

nary Review Report. Where necessary, the draft structure plan is then revised and updated. The efficient and transparent harmonising of interests is of great importance at this point. In Graubünden, the Structure Plan is approved by the government (article 14 KRG) whereupon it becomes binding on the cantonal authorities. Upon final approval by the Federal government, the structure plan then also becomes binding on the federal authorities. As explained in Chapter 5.b, the relevant amendments will be made to the Structure Plan in the event of the site being inscribed on the UNESCO World Heritage List. This will be initiated as soon as the success of the candidature has been confirmed. Core and buffer zones together with the key considerations in the Cantonal Structure Plan have been elaborated in conjunction with the communities, regions, canton and federation. This specific amendment shall be binding on the authorities at all levels; all authorities committed to the higher interests defined in the Structure Plan with respect to the protection and sensitivity in dealing with the World Heritage.

Details of the structure plan procedure may be found under www.are.gr.ch > Richtplanung > Verfahrenabläufe (in German).

Obligation to consult on design

The cantonal structure plan makes higher demands for the World Heritage Site in terms of the design of buildings and facilities and the quality of their integration into the townscape and landscape images (see draft for the new Structure Plan subsection "UNESCO World Heritage" in 5.b). The approach used to implement this principle is that of 'consultation on design'; this applies to the railway infrastructure as well as to buildings and facilities. In concrete terms, the consultation on design occurs through the involvement of qualified technical advisers in the approval procedure

(see the relevant chapter below). Where this consultation is not possible, measures of similar value are pursued, for example establishing appropriate design guidelines or articles in the building law. During the period when the present candidacy was being drafted, the opportunity was taken to develop a number of implementation and support tools related to the area of village-level advice with respect to design. These tools are intended for use by the authorities involved in spatial development. They have been published on the Internet (www.siedlungsgestaltung.gr.ch) and provide a valuable basis for the day-to-day work and implementation.

In the *core zone* (for derivation and definition of the term cf. 1.e), consultation on design is an obligatory requirement. Where new agricultural structures within the UNESCO core zone are concerned, financial contributions from the public sector are only granted if the buildings concerned fit correctly into the townscape and landscape images.

In the *buffer zone* in the adjoining area (for derivation and definition cf. 1.e) the various existing building regulations and zone plans of the local authority will ensure an orderly development. Consultation on design is recommended for the buffer zone in the adjoining area and is a way of emphasising the requirement for increased sensitivity of the design. Where proposals involve intensification of use or extensions to settlements, special attention must be paid to the design and the integration into the images of townscape and landscape. Measures for directing growth in extensions of settlement areas have already been set out by the existing structure planning.

For the *buffer zone in the distant area* (views which include the horizon line, cf. 1.e), the significance of the horizon line moves into the foreground. This line is to be kept free of any new

structures and facilities affecting the landscape and which can be seen from the core zones.

Should such buildings and facilities be unavoidable due to higher-level public interest (e.g. to ensure national supplies), then a design and layout must be selected which will minimise any adverse affect on the horizon line.

Protection of nature and the national heritage

Aspects of special interest include the preservation of monuments, archaeology, protection of the townscape image, protection of the landscape and the protection of nature. The relevant technical departments of the BAK (*Federal Office of Culture*), the BAFU (*Federal Office of the Environment*), the cantonal section for the Care of Historic Monuments (*Denkmalpflege Graubünden*), the cantonal Archaeological Service (*Archäologischer Dienst Graubünden*), and the departments for nature protection and the protection of the landscape within the cantonal *Office for Nature and the Environment* (Amt für Natur und Umwelt ANU) are responsible for the implementation of these aspects, both at federal and cantonal levels. The inclusion of the World Heritage Site in the Cantonal Structure Plan is a clear statement of the increased interest in its protection. During the harmonisation of interests, which is a normal part of the protection process (see above in this section), special consideration will be given to this feature.

It has already been described in the protection of the railway facilities (see the chapter on planning approval procedure earlier in this section) how the federal task of implementing protection of nature and the national heritage is carried out in individual cases. In a similar process, the BAK also checks all other federal tasks affecting the cultural landscape of the Albula/Bernina region,

reviewing them in terms of their influence on the cultural heritage; the BAFU carries out a similar review in terms of the influence on the natural heritage. The federation is responsible for reviewing all activities with a strong spatial impact. Such activities include the construction or alteration of infrastructure facilities (a federal task commensurate with the federation's duty of approving them), transport facilities (concession under federal law), the development of waterways, the construction or conversion of structures for agricultural use or for protection against natural hazards (federal subsidies).

In making its assessment, the federation bases its work on the inventories of objects of national significance and on the preservation aims formulated with respect to them. These inventories are only legally binding on the federation, but are also taken into consideration in the canton's planning activities. A basic requirement is that the objects included must be preserved unimpaired. Deviations from this are only permitted when other, higher-level interests of national importance imply that they cannot be avoided. Three federal inventories currently comply with the NHG – the ISOS, the BLN and the IVS.

The BLN, the *federal inventory of landscapes and natural monuments of national significance* includes objects, typical landscapes and natural monuments (for the entries in the inventory which concern the cultural landscape of the Albula/Bernina region see 5.b, Overview tables). Typical landscapes are mostly cultural landscapes strongly influenced by nature that contain surface forms especially characteristic of a region, or features of cultural history and habitats important to local flora and fauna. Natural monuments are individual animate and inanimate natural features such as erratic blocks, rock outcrops or typical forms of landscape. These are elements of landscape

protection for which the overall appearance of the landscape is in the foreground.

The *ISOS*, the *federal inventory of Swiss Heritage Sites* includes permanent settlements worthy of protection (for the entries in the inventory related to the cultural landscape of the Albula/Bernina region see 5.b, Overview tables; they are also appended to the candidature documentation [“Annex” File] in electronic form). A “townscape image” is more than a settlement and something more than the sum of individual buildings. It is not only buildings which make up a townscape image, spaces are also involved – the spaces between houses, the squares and streets, the gardens and parks. A locality is characterised by the relation between the buildings themselves and between the buildings and their surroundings, such as woods and meadows, and the landscape. The *ISOS* seeks to illustrate this interrelationship as seen by an overall view of the ensemble; it also establishes specific preservation goals for each townscape image. The Cantonal Structure Plan lists the townscape images of national and regional importance; the associated regulations on protection are binding on the authorities. Protection measures relate to individual plots of land and are binding on the property owners; these are implemented within the framework of land-use planning (see below in this section).

The *IVS*, the *inventory of historic transport routes in Switzerland*, the principles of which are presently only available in draft form, contains comprehensive information on the course of historic routes, their history, their condition and their significance. It is not only meant to serve as a means for the protection, maintenance and care of historic transport routes, it is also intended to provide a means for promoting the sustainable use of historic routes for tourism. The inventory will therefore also make an important contribution towards

the creation of an attractive network of footpaths, trails and cycle routes. A network of this type for slow-moving traffic is part of the strategy set out in the Federal law of 4th October 1985 concerning footpaths and trails (FWG; SR 704).

Further to the three federal inventories which are regulated in a specific ordinance based on Art. 5 of the NHG (VISOS, VBLN und VIVS; cf. 5.b), there are other inventories on the federal side which are relevant in dealing with World Heritage issues: the *Biotope inventories*. They cover raised and flat bogs, spawning areas for amphibians, meadowland, glacier aprons and alluvial plains; an extension to cover other protected nature surfaces is in preparation. The Cantonal Structure Plan lists the biotopes of national and regional importance; the relevant regulations on protection are binding on the authorities. The protection that relates to individual plots of land and which is binding on the property owners is applied in the context of land-use planning (see below in this section). Besides planning-based protection, where exploitation of the biotopes is essential and possible, specific utilisation of these areas can be contractually agreed with the users and the specific utilisation paid for.

A project control that is essentially independent of political influence is guaranteed by the *Verbandsbeschwerderecht*, the NGO right to file objection (cf. 5.b). This right enables organisations active across Switzerland to lodge complaints against certain cantonal orders or against orders issued by federal authorities. To be eligible for this right, an organisation must be dedicated to the protection of nature and the national heritage, the preservation of monuments, or related but purely conceptual goals and must have been in existence for at least 10 years. This right to file objection also ensures that the implementation of the legal provisions for the protection of the cultural landscape

of the Albula/Bernina region is effectively monitored. It can be exercised only in clearly defined circumstances, for example in planning approval procedures involving the railway and in proposals subject to an obligatory environmental impact assessment; other examples include requests for land clearance work, applications for structures outside the building zone (see chapter on building permission below) and other federal tasks. The right to object is not a veto right; it simply helps to ensure that building proposals comply with the current laws. At the moment, 30 Swiss NGOs have a right to object.

The cantons are primarily responsible for the actual implementation of nature and national heritage protection, as explained in the federal constitution (article 78 BV). In Graubünden, the responsibility falls on the cantonal technical bodies already referred to, and to which the NHK (*Cantonal Commission for the Protection of Nature and Cultural Heritage*) is assigned.

The commission provides advice to the cantonal government, the local authorities and to private individuals. The cantonal technical departments may also request that experts from the federation be consulted. EKD (*Federal Commission for the Preservation of Monuments*) and ENHK (*Federal Commission for the Protection of Nature and Cultural Heritage*), the federation's advisory bodies, can also be commissioned to prepare special technical reports. The *Denkmalpflege* (Care of Historic Monuments) and the *Archäologische Dienst* (Archaeological Service) are responsible for monitoring the cultural heritage of structures within the cantonal territory; these maintain close contact with the related cantonal technical bodies, the municipal authorities and with owners. Project support and monitoring takes the form of continuing support and advice from the canton's technical experts throughout the entire course of

the project. ANU (*Cantonal Office for Nature and the Environment*) is the department responsible for biotope and landscape protection; it exercises a similar function to that of the department for the preservation of monuments and the cantonal department for archaeology.

Another source of support for the preservation of natural and cultural objects is provided by financial contributions from the public sector for objects in the fields of protection of nature and national heritage which are worthy of protection (cf. 5.b); for example, the federation and canton provide joint subsidies for restoration work. Where building work involves structures entitled to subsidies, what are known as ‘costs entitled to a contribution’ are deducted from the total cost; 25–35 % of these are then assumed by the federation and/or canton, the size of the contribution being based on the importance of the object. Owners can submit a request for a financial contribution of this type to the cantonal department for the preservation of monuments. This department reviews all the applications submitted and then arranges them in a time-based sequence as part of the joint financial planning between federation and canton. One direct consequence of a subsidy is that the object is placed under protection. In this case, the entry of an easement in the property register in favour of the confederation and the canton means that any constructional measure planned for the object must first be approved by the BAK and by the cantonal department for the preservation of monuments. A financial contribution confirms the public interest in the monument. This support allows building work appropriate to the monument to be carried out by qualified craftsmen. Financial resources are also available for the protection of biotopes within the area of the cultural landscape. The corresponding legal basis is provided for under article 13 NHG. The contributions

granted within the framework of the laws on agriculture are of much greater importance for the cultural landscape (see the chapter on other control mechanisms below).

The federation may acquire natural or cultural objects by amicable means; where this is not possible, it can acquire or safeguard them by compulsory purchase. If a natural object or cultural monument of national significance is in imminent danger, the federation can place such an object under its protection, using time-limited measures, and can then organise the safeguards needed to ensure its preservation.

Federal concepts and implementation plans

The federation’s concepts and specific plans (cf. 5.b) are developed in close partnership between the federal bodies and the cantons. This is a requirement for the interplay between concepts and specific plans on the one hand and the cantonal structure plan on the other. The approving authority in this case is the Federal Council.

The authorities at all the various levels of government are required:

- > to ensure compatibility of their spatial activities with current concepts and specific plans
- > when harmonising interests, to give due consideration to the issues arising from the concepts and specific plans
- > where necessary, to work together with the appropriate federal agencies
- > to justify any wish they have to modify valid concepts and specific plans and in so doing to fully consider the various interests involved.

If the area is accepted into the UNESCO list of World Cultural Heritage sites, the Cantonal Structure plan will be modified accordingly (cf. 5.b), which will affect the federation’s specific plans and concepts.

Regional Structure Plans and Forest Development Plan

The *regional structure plans* prepared by the regions (cf. 5.b) become binding upon the authorities in the canton (including the local authorities) once they have been approved by the cantonal government. The local authorities affected take the details of the regional structure plan into consideration in their land-use planning, which is how the structure plans are implemented. The various responsibilities are defined in article 18 KRG and the process regulated by article 18 KRVO. The various steps in the procedure are similar to those of the Cantonal Structure Plan, except that here the region has the role of the canton and the canton takes over the function of the federation. For further information, see www.are.gr.ch > Richtplanung > Verfahrenabläufe (in German).

The *Forest Development Plan* (cf. 5.b) is approved by the government and by the local authorities affected. The procedure here is similar to that followed by the regional structure plan. The cantonal and local authority departments are bound to comply with and implement the outcome of the planning process. The provisions under article 5 of the Federal law of 5th October 1991 concerning the forests (WaG; SR 921.0) is of fundamental importance to the forest development plans as it provides fundamental protection to the existing forest coverage. Approvals for land clearance may be given in exceptional circumstances and subject to specific conditions. The Cantonal Structure Plan stipulates that the forest development plans must take the requirements of the UNESCO World Heritage Site into consideration. The structure plan defines the special views which are to be kept free of obstruction by the forest as well as the special views visible from the railway, due allowance being made for the functions of the forest ('protective forest').

In practice, the forest development plans find their implementation through the forestry stewardship plans. These are developed by the forest owner in collaboration with and through the support and assistance given by the cantonal forestry service.

Local authority land-use planning

Land-use planning (building law, zone plan, general design plan, general structure plan, cf. 5.b) is approved by the cantonal government and takes into consideration higher-level controls, particularly with respect to the cantonal structure plan. A detailed explanation of this procedure may be downloaded from www.are.gr.ch or www.bvr.ch (in German).

Building permission

In practice, the land-use plan is largely implemented through the building permission procedure as based on the spatial planning law. This permission procedure applies to new buildings and facilities and the conversion or rehabilitation of existing buildings and facilities; it involves checking to see whether the proposals comply with the legal provisions as well as with the framework established by the planning instruments. This procedure also involves checking for compliance with various requirements, such as the design and integration into the landscape and the environmental provisions for the core and buffer zones as set down in the Cantonal Structure Plan (cf. 5.b).

Buildings and structures with a significant impact on the environment are as a rule subject to an *environmental compatibility test* (Umweltverträglichkeitsprüfung UVP) – legislation specifies where such an assessment is required. Examples include proposals for new wider roads, parking structures with more than

300 parking spaces, railway facilities, power stations, high-voltage lines, large and special landfill sites, quarries for the extraction of large quantities of gravel, sand and stone. Also access to new regions by transport facilities for tourists, linking of ski areas, larger snow-making installations, golf courses, large sports stadia, land consolidation/land improvement measures, shopping centres, and the like. The type of approval procedure to be used depends on the type of facility proposed. For example, land-use planning includes assessing the environmental impact of proposed large scale sand and gravel quarries; for Federal tasks (cf. 5.b) such as buildings and facilities of the Rhaetian Railway (railway law), the UVP forms part of the planning permission procedure. The spacial planning authorisation procedure fundamentally distinguishes between *settlement area* and *landscape area*.

Settlement area

The settlement area comprises the actual building zone – those areas defined in the land-use plan as building zones, for which the local authority defines the type and extent of use through the zone plan and the building law. As a rule, a distinction is made between village core zones (historic village nuclei which have evolved over a long time), residential zones with different intensities of use, mixed-use zones (residential and commercial), commercial/industrial zones and zones for public structures and facilities. Special protective zones are defined for local centres worthy of protection and/or similar protective measures taken. For townscape images that are worthy of protection and which are of national and regional importance, the Cantonal Structure Plan defines the principles for the protection and high-quality further development of the area involved.

As a rule, the land-use plan specifies a duty to

prepare a district plan for larger new building areas, the goal being to promote high-quality development in terms of both architecture and settlement structure.

Structures and facilities within building zones may be built, altered, demolished or subjected to a change of use exclusively subject to written building permission granted by the building departments of the local authority. The local authority also requires the cantonal department for the preservation of monuments or its own design advisors to be consulted where a proposal relates to a monument that has been listed in one or other of the inventories.

For building projects, the application submitted directly by the owner is first subjected to a formal review by the local authority department, which checks to ensure the application is complete and clarifies whether any additional authorisations are needed, in which case the building department initiates the appropriate applications for permission from the authorities concerned. At the same time as the building application is submitted, the applicant has profile markers staked out at the proposed building site showing the dimensions of the planned buildings or facilities. When the documents are complete (and additional documents are requested if this is not the case), the building application is published in the official cantonal gazette and can be viewed by the public for a period of 20 days. Should an environmental impact assessment or other special approval be necessary, the corresponding documents will also be made available to the public.

Those organisations entitled to file objection are informed of the building application by the building department. These can either express their interest in participating in the procedure or file objection. At the end of the objection period, the building department reviews all objections

lodged and informs the applicant of them. The applicant then considers the objections and must state their response to them within a period of 20 days. On the basis of this statement of position and of the conditions defined by planning and building law, the building authority assesses the building submission and publishes the decision on the building approval together with the decisions on any other additional approvals that may additionally be required. As mentioned earlier, there is a provision that any building proposal in the core zone of the World Heritage Site must involve a neutral expert; it is recommended that an expert of this type be involved for any proposals within the buffer zone (adjoining area), although this is not a requirement. At this stage in the procedure, the local authority either calls on an advisor qualified in the field of design and style planning (as a rule an architect or an expert from the cantonal department for the preservation of monuments) or itself reviews the building application in terms of compliance with the special design regulations which apply to the UNESCO core zone. If the design qualities of a project are considered to be insufficient, the owner will be advised of this and given details of any specific deficiencies; the building application is returned for revision, in some cases together with specific suggestions for improvement. A revised building application is again subjected to the entire review process.

As a rule, to avoid any risk of conflict with his work as an advisor, the technical expert called in to advise may not accept any commissions within the local authority area which appointed him. Generally, the costs for this advisory service are passed on to the applicant on the basis of the expenses incurred. If the design of the proposed work for which the building application is submitted is of a high quality, then the services of the advisor will be less extensive; conversely, if the quality of the

design is poor then his services (and the financial expenditure) will be correspondingly higher. This creates an incentive to prepare a design that is of a high quality.

A detailed explanation of the procedure may be downloaded from www.are.gr.ch or www.bvr.ch (in German).

Landscape area

The landscape area comprises all the territory outside the area of the settlement, and primarily concerns forest, agricultural areas, recreational areas (such as ski areas and golf courses), protected zones (such as nature, landscape and rivers and lakes protection zones, cultural objects, archaeological sites), mining and quarrying sites and landfill areas and zones exposed to natural hazards.

These zones are also defined in the zone plan, and the building law contains the relevant provisions for them. In the landscape area, the local authorities also consider the binding content and area-specific considerations of the Cantonal Structure Plan and in particular the regulations concerning the buffer zones of the outlying area. Cultural objects in the landscape are identified and protected; these include ruins of forts, unique religious buildings, rock drawings, and so forth.

Buildings and facilities outside the building zone require not only building permission from the local authority but also an approval from the canton (BAB approval). Essentially, only those buildings and facilities are approved that are located outside the building zone. A distinction is made between buildings and structures that conform to the zone (such as a new agricultural building in an agricultural-use zone), location-related buildings and facilities (such as power stations and overhead lines) and 'exceptions' such as the partial conversion of buildings no longer used for agricultural purposes. The main legal basis is provided under

the Federal law on spatial planning (articles 24 – 24d RPG). The building approval procedure for structures outside the building zones is similar to that for structures within these zones. However, the local authority's building department is required to forward the building application together with a preliminary assessment to the cantonal *Office of Spatial Development*. This leads to additional consultation based on the principle of involvement with other cantonal technical departments. The results of this additional consultation provide the basis for the Office of Spatial Development to inform the local authority's building department with respect to the canton's decision. If the canton and local authorities cannot come to the same conclusion as to whether a building application should be approved or not, then the law requires a relevant settlement to be made.

A detailed explanation of the procedure may be downloaded from www.are.gr.ch or www.bvr.ch (in German).

Where applications concern buildings or facilities to be constructed in a forest area, the site-specific requirement must be demonstrated just as for similar developments in a landscape area. Furthermore, the spatial planning requirements must be met and the site clearance must not lead to any serious risk to the environment. If more than 5,000 m² of forest are affected, the approval procedure for land clearance applications must also take the views of the federation into consideration. If the area to be cleared is less than 5,000 m² then the canton can issue permission autonomously. However, every case must provide for replacement of the cleared area of forest (reforestation or nature protection measures). Should clearance work or similar additional approvals be required, then as a rule these are coordinated in terms of land-use planning by the Office of Spatial Development and collected from the responsible technical body.

Other control mechanisms

The agricultural zones defined in the land-use plan ensure that the cultural landscape is preserved to its full extent. However, this requires that it should continue to be used and cultivated, as cultural landscapes not put to agricultural or forest use tend to run wild. Mountain areas are especially at risk of decline, due to their unfavourable location and population drift. A system of financial incentives has been set up to avoid this risk: area-based financial contributions to farmers and livestock owners ('direct payments') support their preservation of the cultural landscape. Additional, ecology-based compensation payments – founded on the concept of ecological networks – offer farmers financial support and compensation for their services in the protection of nature.

The provision of supporting information and advice is yet another way of implementing the protection of the World Heritage Site. Here, a large variety of guidelines and advisory documents on the design of buildings and facilities are available (such as on the planning and design of power supply lines, land improvement measures, the design of quarry areas, landfill areas, roads and ski slopes).

Another starting point for implementing the protection of an area is to exert influence on a project during the early stage of its development. One example would be during the construction of new agricultural businesses ('relocation' cf. 4.a,2); a cantonal procedure used during the early design stages of such a scheme reviews possible locations for the project and its impact on the townscape and landscape images. This ensures that the planned building is integrated into the landscape; the subsequent design work then concentrates on the form of the proposed building.

The various guidelines, leaflets, and so forth are drawn up by the appropriate technical de-

partments. Many of these are available on the Internet (www.are.gr.ch, www.anu.gr.ch, or www.alstv.gr.ch [in German]).

Tirano (Italy)

Both the *Piano regolatore generale del Comune di Tirano* PRG and the *Piano territoriale di Coordinamento della Provincia di Sondrio* PTCP (cf. 5.b) are approved, in the last instance, by the Region of Lombardy. Structures have been created at regional level which are responsible for handling all World Heritage issues: these are the *Ministry of Cultural Heritage* and the *Ministry of the Environment*. Environmental and cultural heritage conservation matters are not dependent on municipal jurisdiction. The Ministry of Cultural Heritage is responsible for the cultural and monumental heritage and is located in the Regione Lombardia or Lombardy. On the other hand, the Ministry of the Environment is responsible for natural heritage and is also located in the Regione Lombardia. Any structural interventions on the site, require environmental planning permission from the municipal authorities with a view to conservation of the land. The authorisation process is conducted by two environmental experts, nominated by the municipal authorities, who appraise the project and issue a binding opinion. Planning permission is granted by the municipality. The superior authority has the power to revoke the measure within 60 days. In the Municipality of Tirano, the person delegated by the mayor to grant environmental planning permission is the engineer Paolo Clementi, who is responsible for technical issues in the Municipality of Tirano. The environmental experts are the architect Simone Cola from Sondrio and the engineer Virgilio Scalco from Villa di Tirano. They both attended a specific environ-

mental further training course to prepare them for the position as environmental experts for the municipality.

The *Directorate general for Lombardia's cultural and land heritage* is a regional expression of general managerial level of the Ministry of Cultural Heritage and Activities, attached to the cultural and natural heritage department and is located in Milan, the capital of the region. The regional director coordinates and controls the activities of the outlying offices ('Superintendencies') of the territory, whose priority task is to protect the (architectural, landscape, historical-artistic, anthropological-ethnic and archaeological) cultural heritage and to handle relations with the Ministry of Cultural Heritage and Activities with Regione Lombardia, the local governments and other institutions on the territory. Moreover, the regional director proposes to the head of the department, the measures to be introduced in the one-year and multi-year programmes and the budget plans, defining priorities on the basis of the indications submitted by the 'superintendencies' of each sector. One activity which has been developed by the directorate general of Lombardia over the past two years represents enforcement of an initial value added Code to "exercise functions and activities with a view to promoting awareness of the cultural heritage and guaranteeing the best conditions for public utilisation and sustainable conservation of this heritage". The directorate general ensures the conservation of cultural assets in museums, archaeological sites and parks, monument-character objects in public ownership; it is convinced that the effectiveness of the measures implemented by the Ministry of Cultural Heritage and Activities on the site today, is to be measured in terms of (adequate and consistent) accessibility and usability of the cultural assets. Beyond the adhesion to and

signing of many other important Programme Agreements, the Frame Programme Agreement between the Ministry of Cultural Heritage and Activities and the Regione Lombardia (signed in 1999 and renewed in 2003) concerns the cultural heritage and promotes the cooperation with other qualified institutions and individuals. The directorate general has implemented specific agreements and conventions governing individual sites and monument-character estates, in order to assess various modes of associate management of public services, respecting the particular characteristics of each reality. Within the directorate general there are many technical and scientific specialists. Among them, for example, architects, art historians and archaeologists, backed up by administrative and information personnel (some 30 people). Within the directorate general there is also an UNESCO work group, both for the sites that already figure on the World Heritage List, and for those which are nominated or candidates. These groups each comprise an architect, an art historian, two archaeologists and an administrative officer.

Charter of the support group

A supporting group founded in the legal form of an association has been established to realise the objectives defined in the Management Plan in the context of the UNESCO World Heritage: the “UNESCO World Heritage Rhaetian Railway in the Albula/Bernina Cultural Landscape Association” (cf. 5.e). Members of the Association are the Federal Office of Culture BAK, the Canton Graubünden, the Rhaetian Railway, the communities within the World Heritage perimeter as well as persons or organisations linked to the World Heritage. The Association is responsible for promoting the preservation and sustainable use of the

World Heritage Site in general, for the coordination of monitoring and controlling activities concerning the railway and the cultural landscape, and in particular for information on and use of the UNESCO label.

To anchor increased sensitivity in dealing with the World Heritage more firmly, the Association members are also bound by a charter, that is incorporated in the Articles of Association in the form of an introduction. By signing the charter, all participants undertake to implement the principle considerations formulated in the Management Plan.



Albula line > The Glacier Express
in Val Bever.
A. Badrutt / Rhaetian Railway

5.d Existing plans related to municipality and region in which the proposed property is located

Graubünden (Switzerland)

Regional level

Regional structure planning

At present, the following regional structure plans are in force (cf. 5.b and 5.c), position 1st October 2006.

Heinzenberg-Domleschg

- > the Feldis, Sarn, Tschappina and Mutten ski areas, landscape protection and wildlife protection areas, regional public transport, hiking trails, cycle tracks, mountain bike routes, bridle-paths, and private motorised traffic routes were approved by the government 13th June 1995 by decision N°. 1469 and duly noted.
- > the Viamala motorway service area, approved by the government 30th March 2004 by decision N°. 444.
- > Change in the extraction and exploitation of material, Campi quarry; approved by the government 6th October 2005 by decision N°. 1209.

Mittelbünden

- > Ski areas, snow-making, concept for a golf course, landscape protection areas, landfills/deposits of material 1st part: Lenzerheide, regional public transport, concept for shooting range for civilian use, regional priorities extending the road network; approved by the government 16th March 1993 by decision N°. 557 and duly noted.

- > Lenzerheide snow-making facility, change approved by the government on the 13th June 1995 by decision N°. 1472.
- > Savognin and Sur Carungas ski areas, change approved by the government 4th October 1999 by decision N°. 1782.
- > Extraction of gravel, sand and stone, approved by the government 2nd October 1995 by decision N°. 2531.
- > “Kessi” material extraction in Filisur, minor change approved by the department of economics and the interior, approved 14th May 1996.
- > Marmorera quarry, minor change approved by the department of economics and the interior, approved 30th August 1996.
- > Landfills/material deposits 2nd part: Albula valley/Surses, approved by the government 2nd October 1995 by decision N°. 2531.
- > “Schinterbödeli” in Schmitten, minor change approved by the department of economics and the interior 27th November 2000.
- > Gneida/Dartgaz, minor change approved by the department of economics and the interior 16th June 1997.
- > Proposal for landfills and material deposit, change approved by the government 23rd April 2002 by decision N°. 563.
- > Proposal for the extraction of gravel, sand and stone, change approved by the government approved 23rd April 2002 by decision N°. 563.
- > Recreation areas, approved by the government 17th June 2002 by decision N°. 843.

Upper Engadin

- > Snow-making facilities, approved by the government 11th July 1988 by decision N°. 2025.
- > Snow-making facilities in the St. Moritz area, approved by the government 12th August 1997 by decision N°. 1702.
- > Loipen (cross country skiing tracks), approved by the government 13th May 1997 by decision N°. 1052.
- > Ski areas and transport facilities for tourists, extraction of material, landfills for inert materials, paths (cycle ways and others), approved by the government 13th May 1997 by decision N°. 1052.
- > Golf facilities, approved by the government 29th August 2000 by decision N°. 1367.
- > Landscape protection, approved by the government 19th December 2000 by decision N°. 2094.
- > Snow-making facilities, approved by the government 1st October 2002 by decision N°. 1418.
- > Transport, approved by the government 19th August 2003 by decision N°. 1180.

Val Poschiavo

- > Winter tourism: ski areas, cross-country skiing, sledging, mountain huts/accommodation; summer tourism: walking trails, cycle ways, mountain huts/accommodation and mountain-bike routes; camping; landscape protection; quarrying for stone, gravel and sand; landfills; raw materials deposits; collection and sorting points, regional public transport, and private motorised traffic; approved by the government 2nd November 1999 by decision N°. 1936 and duly noted.
- > Regional snow-making facilities, approved by the government 27th October 1992 by decision N°. 2650.

- > Quarrying for stone, gravel and sand; landfills; deposits of material; modification of 2005, approved by the government 6th June 2006 by decision N°. 642.

Forest Development Plans

The current Forest Development Plans (cf. 5.b and 5.c) are:

- > Heinzenberg-Domleschg: in preparation, position summer 2006; the structure and details of demands have been prepared
- > Mittelbünden: approved by the government 5th March 2002 by decision N°. 294.
- > Upper Engadin: work is expected to start during 2006
- > Val Poschiavo approved by the government 11th March 2003 by decision N°. 317.

Local authority level**Local authority land-use plans (district plans)**

The following table shows the current status of the local authority plans (cf. 5.b. and 5.c). The following district plans are updated continuously.

Thusis: District plan approved by the government 15th January 1990 by decision N°. 82; with numerous subsequent partial revisions (the last approved by the government 20th September 2005 by decision N°. 1153).

Sils i.D.: District plan approved by the government 20th February 1989 by decision N°. 437; with numerous subsequent partial revisions (the last approved by the government 23rd December 1997 by decision N°. 2552).

Zillis-Reischen: District plan approved by the government 13th July 1993 by decision N°. 1760; with numerous subsequent partial revisions (the last approved by the government 7th March 2006 by decision N°. 248).

Scharans: District plan approved by the government 11th April 1983 by decision N°. 863; with numerous subsequent partial revisions (the last approved by the government 14th September 2004 by decision N°. 1305).

Mutten: District plan approved by the government 28th April 1975 by decision N°. 843; with numerous subsequent partial revisions (the last approved by the government 31st August 1999 by decision N°. 1548).

Vaz / Obervaz: District plan approved by the government 17th July 2001 by decision N°. 1179; with numerous subsequent partial revisions (the last approved by the government 28th February 2006 by decision N°. 219).

Alvaschein: District plan approved by the government 3rd September 1991 by decision N°. 1578; with numerous subsequent partial revisions (the last approved by the government 7th September 1999 by decision N°. 1578).

Stierva: District plan approved by the government 14th November 1988 by decision N°. 2844; with numerous subsequent partial revisions (the last approved by the government 19th September 2000 by decision N°. 1526).

Tiefencastel: District plan approved by the government 12th October 1997 by decision N°. 2578; with numerous subsequent partial revisions (the last approved by the government 17th August 1999 by decision N°. 1465).

Brien / Brinzauls: District plan approved by the government 15th July 1985 by decision N°. 1948 and 15th December 1985 by N°. 3342; with numerous subsequent partial revisions (the last approved by the government 23rd August 2004 by decision N°. 1191).

Surava: District plan approved by the government 12th July 1982 by decision N°. 1801.

Alvaneu: District plan approved by the government 16th July 1991 by decision N°. 2196; with

numerous subsequent partial revisions (the last approved by the government 3rd June 2003 by decision N°. 829).

Schmitten: District plan approved by the government 19th March 1984 by decision N°. 674; with numerous subsequent partial revisions (the last approved by the government 26th October 1999 by decision N°. 1875).

Filisur: District plan approved by the government 6th April 1993 by decision N°. 817; with numerous subsequent partial revisions (the last approved by the government 4th July 2000 by decision N°. 1104).

Bergün / Bravogn: District plan approved by the government 16th December 1985 by decision N°. 3030, 1st December 1986 by decision N°. 3183 and 4th October 1994 by decision N°. 2511; with numerous subsequent partial revisions (approved by the government 20th September 2005 by decision N°. 1154).

Bever: District plan approved by the government 28th February 2006 by decision N°. 220.

Samedan: District plan approved by the government 21st October 1997 by decision N°. 2157; with numerous subsequent partial revisions (the last approved by the government 23rd May 2006 by decision N°. 569).

Celerina: District plan approved by the government 13th April 1987 by decision N°. 889 and 7th December 1999 by decision N°. 2136; with numerous subsequent partial revisions (the last approved by the government 7th February 2006 by decision N°. 140).

St. Moritz: District plan approved by the government 29th February 2000 by decision N°. 326, 17th October 2000 by decision N°. 1638 and 15th January 2002 by decision N°. 37; with numerous subsequent partial revisions (approved by the government 26th September 2006 by decision N°. 1083).

Pontresina: District plan approved by the government 5th December 1988 by decision N°. 3017 and 19th June 2004 by decision N°. 943; with numerous subsequent partial revisions (the last approved by the government 27th Juni 2006 by decision N°. 790).

Poschiavo: District plan approved by the government 19th March 1984 by decision N°. 627; comprehensive revision of the settlement section 29th April 2004 by decision N°. 625.

Brusio: District plan approved by the government 13th April 1999 by decision N°. 657; with one subsequent partial revision (approved by the government 24th February 2004 by decision N°. 242).

Tirano (Italy)

Municipality of Tirano and the Province of Sondrio

- > *Piano regolatore generale del Comune di Tirano* PRG; approved by the Region of Lombardy 13th March 1990.
- > *Piano territoriale di Coordinamento della Provincia di Sondrio* PTCP, adopted by the mayors of the Province of Sondrio 9th September 2006 with a view to approval at regional level.



Albula line > Larch forests line the railtrack in Val Bever.
A. Badrutt / Rhaetian Railway

5.e Property management plan or other management system

The Management Plan establishes a binding framework for the efficient protection and long-term management of the “Rhaetian Railway in the Albula / Bernina Cultural Landscape” World Heritage site.

The Management Plan (annexed to the candidature material as a separate document) outlines the objectives for the World Heritage site and additional measures required to achieve these objectives. It also sets out the institutional framework needed to implement measures, as well as the means for monitoring, maintaining and further developing the World Heritage site in the spirit of the UNESCO Directives.

Fundamental for all phases of the Management Plan is the definition of a guiding principle expressing the understanding for and appreciation of the World Heritage concept.

Management guiding principle

The award of UNESCO World Heritage status will ensure that this stretch of the unique Rhaetian Railway will be durably preserved and enhanced in the Albula/Bernina cultural landscape. This will be achieved by qualitative development taking into account the various influential factors in order to achieve an optimum balance between traditional and modern. Appropriate landscape stewardship and continuity in spatial development policy, will ensure that the historical character of the Albula/Bernina cultural landscape, that has been formed by traditional use, can be maintained in the long-term.

Awareness of the cultural heritage of the region and the need to maintain it must be raised. This contributes to the generation of regional offers,

promoting the regional added value and ensuring continuity of settlement; it keeps jobs. Specific communications measures will be used with a view to raising cultural awareness beyond the region and, above all, to enhancing its appeal for tourism.

Sponsors

The “UNESCO World Heritage Rhaetian Railway in the Albula/Bernina Cultural Landscape Association” is in the process of formation (cf. Articles of Association in Management Plan). The purpose of the Association is to ensure the conservation and promotion of the World Heritage Rhaetian Railway in the Albula/Bernina cultural landscape according to the Management Plan. Accordingly, it is incumbent on the Association to coordinate the monitoring of the World Heritage site and to oversee the measures foreseen under the Management Plan. The Association relies on the existing structures, both for monitoring protection of the site and also in marketing and developing the offer. Its task is to establish and promote coordination between the existing institutions and administrative offices which are concerned with the protection and promotion of the World Heritage sites, within the legislative framework.

The Association’s strategy is based on the concept of sustainable development. The Association sets binding objectives for its work which

consist in compiling standards for general organisational work, determining means for protecting the cultural asset and cultural landscape and ensuring sustainable development. An appropriate system will be set up to assess the efficacy of the defined objectives and resulting measures as well as guidance of these measures; here the Association can have recourse to existing instruments both within the Rhaetian Railway company and in the national and cantonal spatial development observation system. The Association complies with all legal requirements in the implementation of its objectives which allows the communities, the regions, the cantons and the Rhaetian Railway company relative autonomy in their operations.

Fields of Action

Five fields of action are defined on the basis of the guiding principle:

1. Railway, technology and architectural heritage
2. Cultural landscape
3. Economy and tourism
4. Organisation and communication
5. National and International cooperation

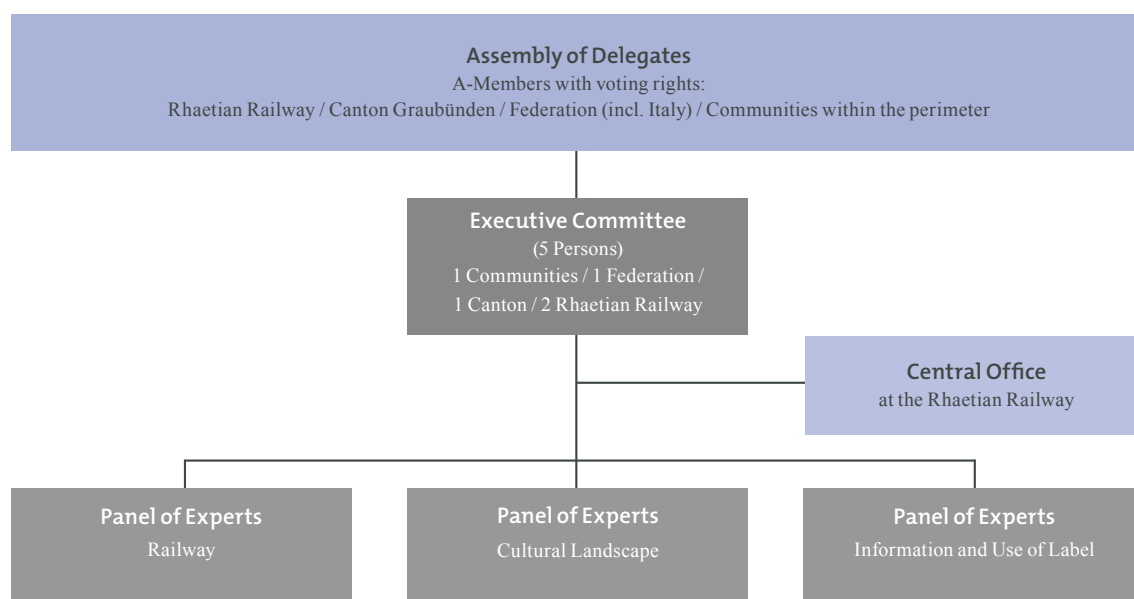
Objectives, fields of intervention and measures

The objectives, the relevant fields of intervention and the measures are based on the five fields of action. This operational process is set out, including concrete measures, in detail in the Management Plan. The Management Plan is designed so that new experience is incorporated and measures on the basis of the new findings can be further developed.

Transnational management

In addition to the 22 communities on Swiss territory, the perimeter of the property also takes in the municipality of Tirano, in Italy. This calls for transnational management of the World Heritage site. Like all the Swiss communities involved, Tirano is a full member of the Association, where it can promote its interests. At national level, the Swiss Federal Office of Culture will represent the concerns of Italy in the Association. The basis is the “Memorandum of Understanding” drawn up and signed by both states (the relevant document is an integral element of the Management Plan). The exchange of interests will be realised on the basis of interstate cooperation. Individual activities, calling for interstate cooperation will be dealt with on a case by case basis.

Sponsoring



Fields of action, objectives, fields of intervention and measures

Sustainable development (activity maxims)					
Activity domains					
	1	2	3	4	5
	Railway	Cultural landscape	Economy/Tourism	Organisation	Cooperation
Objectives O	Railway O ₁	Cultural landscape O ₂	Economy/Tourism O ₃	Organisation O ₄	Cooperation O ₅
Sectors S	Railway S ₁	Cultural landscape S ₂	Economy/Tourism S ₃	Organisation S ₄	Cooperation S ₅
	S 1.1 Protection, maintenance and further development S 1.2 Documentation S 1.3 Safety S 1.4 Public transport S 1.5 Railway museum/information center	S 2.1 Protection and care, biodiversity, landscape aesthetics S 2.2 Forestry S 2.3 Agriculture S 2.4 Settlement and building consulting	S 3.1 Railway programmes S 3.2 Natural and cultural landscape programmes S 3.3 Agricultural and forestry programmes S 3.4 Tourist programmes S 3.5 Regional development S 3.6 Networking S 3.7 Logo use and brands	S 4.1 Quality management association S 4.2 Coordination with administrations S 4.3 Monitoring and controlling S 4.4 Finances S 4.5 Communications	S 5.1 Cooperation with Italy S 5.2 National and international cooperation projects
Measures M	Railway M ₁	Cultural landscape M ₂	Economy/Tourism M ₃	Organisation M ₄	Cooperation M ₅



Albula line > The Glacier Express in Val Bever. The Beverin stream flows alongside the embankment.
A. Badrutt / Rhaetian Railway

5.f Sources and levels of finance

The owners of the objects which make up the nominated world heritage are basically responsible for financing the measures necessary for the preservation and sustainable development of the railway and the cultural landscape; their efforts are supported by government grants. Accordingly, the Rhaetian Railway receives a substantial amount of public funds to help offset the cost of transport services and the maintenance and repair of the rail infrastructure. “UNESCO World Heritage Rhaetian Railway in the Albula / Bernina Cultural Landscape” is an association financed by members’ contributions.

The association was created to promote the preservation and sustainable development of the World Heritage (cf. 5.e). It coordinates the activities of all the institutions involved in this work, and its two panels of experts – the Railway Committee and the Cultural Landscape Committee – ensure proper monitoring and controlling in the different areas of operation. The association is financed primarily by contributions from its members, the Swiss Federal Office of Culture, Canton Graubünden, the Rhaetian Railway, the municipalities in the World Heritage perimeter and organisations or people connected with the World Heritage. It is planned to attach the association’s office to the Rhaetian Railway.

Financing of the Albula and Bernina lines, including all fixed rail installations and the entire rolling stock, is handled by the Rhaetian Railway. Together with receipts from passenger traffic and freight transport, the most important sources of financing are contributions from the public purse, as provided for in the Railway Law (cf. 5.b): under “Compensation Payments for Regional Transport”, the federal and cantonal authorities reimburse transport companies for the cost of services ordered in the traffic and infrastructure sectors which are not covered by the budget. By means of spe-

cial “infrastructure payments”, the authorities meet the cost of infrastructure investments which are not financed by the above compensation payments. These contributions take the form of interest-free, conditionally repayable loans. Compensation payments for traffic and infrastructure totalled CHF 116.2 million in 2005, with CHF 103.5 million provided by the Confederation and CHF 12.7 million by Canton Graubünden). In the same year, total public sector investment contributions for Rhaetian Railway replacement and extension projects amounted to CHF 78.4 million (Confederation CHF 66.4 million, Canton Graubünden CHF 12.0 million). Furthermore, uninsured damage caused by natural disasters which exceeds the Company’s financial capacity may be taken over by the federal authorities. The Confederation also provides subsidies to promote combined rail/road carriage of goods, and transport of accompanied motor vehicles by train. Apart from the Railway Act, there are other legal bases for public sector financing. Investment contributions, for example, can be granted under the Equal Opportunities for the Disabled Act or noise control regulations. The various financial flows in the public transport sector are basically an integral part of financial planning at

the federal and cantonal levels of government – which means that they are subject to political influence. A reorganisation of railway infrastructure financing is currently under way.

The framework conditions necessary to secure the authenticity and integrity of the cultural landscape on a long-term basis are provided by regional planning. In the final analysis, the owners themselves are responsible for the maintenance and sustainable development of the objects making up the cultural landscape. Existing funding and support schemes are available to ensure the requisite finance. For instance in Switzerland, farms receive direct payments according to surface area farmed and tied to ecological conditions. Direct payments to farms in the Albula/Bernina region currently amount to approximately CHF 16 million a year. In addition, other annual contributions totalling CHF 4 million are made to the agricultural sector (investments and summer pasturing). Financial assistance is also provided for forestry. Regional policy instruments are available to encourage sustainable development projects in mountainous areas, the countryside and border regions. Planning consultancy fees for buildings and installations (cf. 5.b and 5.c) are normally passed on by the municipalities (the building authority) to the builder. Financial aid for projects to preserve monuments is granted in accordance with the relevant legal provisions.

Information is disseminated via the sponsoring institutions, the Rhaetian Railway and interested organisations, and paid for separately by those concerned. The costs of other specific projects, such as visitor management or the development of tourist services, are borne by the parties involved.



Albula line > Before the south portal of
the Albula tunnel at Spinas (Val Bever).
A. Badrutt / Rhaetian Railway

5.9 Sources of expertise and training in conservation and management techniques

The technical expertise essential to ensure professional conservation and development of heritage sites is assured for all disciplines. The authorities responsible have access to accredited specialists who are already engaged in the management of the sites or can be called on to do so. The institutionalised cooperation between the individual departments, as well as with other institutions, guarantees the transfer of knowledge when specific problems arise; where academic questions and research projects are involved, the personnel also have access to numerous public and private institutions. Government legal and logistics services and sponsoring bodies assist the specialists in their work. Further education and training services are assumed by a number of public and private institutions. They offer qualified study and further training opportunities at all levels and for all specialised fields.

Graubünden (Switzerland)

Knowledge base of the authorities involved

At national level (www.admin.ch, www.ch.ch) the *Federal Office of Culture* (BAK, the authority responsible for the conservation of monuments, archaeology and protection of local heritage) and the *Federal Office of the Environment* (BAFU, the federal authority responsible for the conservation of nature and landscapes) and the *Federal Office of Spatial Development* (ARE, federal authority responsible for spatial planning, overall transport and sustainable development) have qualified personnel in all the specialised fields concerned (architecture, history of art and architecture, spatial planning, agronomy, geography, geology, biology, environmental sciences, forestry and cultural engineering sciences). The *Federal Office of Transport* (BAV, federal authority for land-based public transport) has the specialists for all technical questions (engineering sciences).

The *Federal Commission for the Preservation of Monuments* (EKD) as well as the *Federal Commission for the Protection of Nature and Cultural Heritage* (ENKH) are the technical commissions providing advice in the sectors conservation of monuments, archaeology and protection of local heritage and the protection of nature and landscapes. The commissions comprise reputed, highly qualified specialists in the fields of teaching, research and practice (architecture, art and the history of architecture, archaeology, natural sciences). BAK and BAFU and the cantons, can entrust the compiling of expert opinions in the context of cultural and national heritage to the commissions. On application by the cantons, the federal government may appoint additional specialists from the private sector as federal experts and entrust them with specific mandates as the need arises. The BAK assigns some 150 expert mandates a year throughout Switzerland; currently some 300 are ongoing. In this way the sites always have experts to hand for highly specialised questions.

The *Federal Archive for the Conservation of Monuments* (EAD) is a documentary office run by the Federal Office of Culture. The EAD collects, archives, looks after and provides access to documents on archaeology, care of monuments, visual aspects of urban patterns and the landscape, history of architecture and art as well as folk culture. The extensive archives include restoration reports, plans, photographs and negatives, administrative files and publications; they provide information on archaeological excavations, restoration measures carried out on listed objects and on the development of the visual impact of local areas; it also answers questions on changes to the landscape, culture and society over the past 110 years.

At cantonal level (www.gr.ch) the *Denkmalpflege* (Care of Historic Monuments) and the *Archäologische Dienst* (Archaeological Service) are departments of the *Office of Culture*; they have their own qualified specialists in architecture, history of art and architecture, archaeology and conservation. The *Office for Nature and the Environment* covers a large number of technical services including the Nature and Landscape service (geography, geology, environmental sciences, spatial planning, forestry and cultural engineering etc.). The staff of the Canton Graubünden *Office of Spatial Development* (architecture, geography, spatial planning, cultural and forestry engineering) are engaged in the fields of cantonal structure planning, regional master planning, outline planning, municipal land-use planning, building permission procedures, geographic information systems, electronic data processing, administration and archiving. The Cantonal *Office for Agriculture and Geo-information* (agronomy, geography, biology, other natural sciences) deals with questions involving geo-informa-

tion and surveying, sustainable development and structural improvements in agriculture. The Graubünden *Forestry Office* is the cantonal centre of competence for woodlands and forests and implementing the relevant legal prescriptions; it also has specialists in forestry engineering and associated fields. The *Office for Hunting, Game and Fishing* is responsible for the maintenance of healthy game and fish populations appropriate to their habitats; the game and fish wardens and the other personnel are qualified experts. The Office for Economy and Tourism has qualified personnel for questions dealing with the economy, living space and tourism sectors.

The Cantonal *Commission for the Protection of Nature and Cultural Heritage* advises the Canton Graubünden authorities on issues involving care of historic monuments, archaeology and landscape preservation. The members are also highly qualified specialists in the history of art, architecture and natural sciences.

All historic documents and documents produced by the cantonal administration are in the safekeeping of the *State Archives* of Canton Graubünden. The archives preserve and classify the relevant archives and make them available to research in their registers, inventories and publications. The State Archives have a central function for research on the history of Graubünden and the regional cultures and also has its qualified staff.

Knowledge base of the private and public institutions involved

The *Rhaetian Railway* (www.rhb.ch) has its own qualified personnel in the technical fields of engineering and transport sciences. The material accessible in its archives, which go back to the earliest days, and the knowledge transfer

(oral history) of employees – a large proportion employed by the Rhaetian Railway for many years – is used in the management of the sites. The planned *Railway Museum* in Bergün/Brauvogn (cf. 5.h) will be able to serve, on the one hand as information point for the UNESCO World Heritage, and on the other as competence centre for the history of railway construction. The Protection of Monuments *Expert-Center* (www.expert-center.ch) is an interdisciplinary counselling and research unit for natural science and technological questions in connection with the conservation of construction monuments and their furnishings. It makes its services available to public and private owners of architectural and art monuments, construction specialists, persons responsible for the care of monuments at federal, cantonal community level, university and polytechnic research and specialists in Switzerland and abroad. The Expert-Center with its two laboratories in Zürich and Lausanne is integrated in both Federal Institutes of Technology: The laboratory in Zurich collaborates with the Forschungsstelle für Technologie und Konservierung des Instituts für Denkmalpflege of the Federal Institute of Technology in Zurich and the Lausanne laboratory continues the work of the former Laboratoire de Conservation de la Pierre of the Federal Institute of Technology in Lausanne.

The *Federal Materials Testing Institute* (EMPA, www.empa.ch) is a research institute engaged in the field of material sciences and technology. It is part of the Federal Institute of Technology area and thus the Swiss science and technology and educational complex. The primary tasks of the institute focus on applications-oriented research and development and provides highest standard services in the field of sustainable material sciences and technolo-

gies. Innovative cooperation with industry and public institutions assuring the safety of the individual and the environment, dissemination of knowledge and teaching at university level are all central elements.

The *Swiss Institute for Art Research* (SIK, www2.unil.ch/isea/) founded 1951 is an art history and art technology research and documentation centre focussing on art in Switzerland. The institute enjoys federal recognition and is largely supported by public funds. The Swiss Institute for Art Research realises art science and art technology research projects, namely studies and material analyses. Works of art are conserved and restored in its own workrooms. These works may be paintings by old masters, classic wooden sculptures or contemporary works of art. The institute compiles technological expertises on cases of damages and offers counselling on and support in the care and preparation of collections and exhibitions.

The *Swiss national group* of the *International Council on Monuments and Sites* (ICOMOS, www.icomos.ch) is an association of specialists involved in the care of historic monuments. The group works in the fields of architecture, landscaping, conservation of monuments, archaeology, inventorisation, restoration, accessibility, natural sciences and in specialised crafts. The front line activities of ICOMOS Switzerland are the promotion of the national and international exchange of ideas on tasks and problems related to the maintenance of historic structures. To this purpose the Swiss group participates in the planning and realisation of congresses and seminars that are mostly jointly funded by professional associations, federal commissions or cultural institutions.

The *Society for the History of Art in Switzerland* (GSK; www.gsk.ch) is an influential participant

in the research of location-specific art in Switzerland and issues publications on its findings. It facilitates involvement in teaching and research and promotes young scientific talent in the field of Swiss art history research. To fulfil these tasks, the GSK collaborates regularly with institutions pursuing similar objectives.

The *National Information Centre for the Conservation of Cultural Assets* (NIKE, www.nike-kultur.ch) is the centre of information in Switzerland on the conservation of cultural assets. The centre is supported by 30 specialised associations and public organisations. Its objective is the interdisciplinary exchange of specialist knowledge and to provide information for the general public.

The objective of the *Plantahof Agricultural Training and Advisory Centre* (www.plantahof.ch) is to strengthen the economic and social situation of farming families and the rural communities in Graubünden. Thanks to its traditional roots in the rural region and specialist support by experts the information service can provide comprehensive counselling in all sectors of agriculture and rural economy (economics, production technology and ecological farming taking into account the cultural and social structures; it also provides appraisals, expert opinions and further training).

Training and further education of the persons responsible for heritage sites

Most of the specialists involved in the authorities and institutions working in the field of the cultural and natural heritage have a relevant university or college degree. In Switzerland this implies the two *Federal Institutes of Technology* in Zurich (www.ethz.ch) and Lausanne (www.epfl.ch), the *Universities* of Zurich (www.unizh.ch), Basel (www.unibas.ch), Bern ([\[unibe.ch\]\(http://www.unibe.ch\)\), Fribourg \(\[www.unifr.ch\]\(http://www.unifr.ch\)\), Neuchâtel \(\[www.unine.ch\]\(http://www.unine.ch\)\), Lausanne \(\[www.unil.ch\]\(http://www.unil.ch\)\), Geneva \(\[www.unige.ch\]\(http://www.unige.ch\)\) and Mendrisio \(\[www.arch.unisi.ch\]\(http://www.arch.unisi.ch\)\). All Swiss federal institutes and universities offer university degree and post-graduate courses \(Bachelors and Masters degrees, doctorates, post-doctorate and lecturing qualifications, post graduate courses\) in the scientific fields concerning the conservation of nature and protection of the national heritage. The *Institute for the Conservation of Monuments and Building Research* of the Zurich Federal Institute of Technology \(\[www.idb.arch.ethz.ch\]\(http://www.idb.arch.ethz.ch\)\) is devoted to the specific issues of the care and protection of monuments.](http://www.</p>
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Numerous *Universities of Applied Sciences* (the Eastern Switzerland, North West Switzerland, Zurich and Bern Universities of Applied Science, the Hautes écoles spécialisées de Suisse occidentale in western Switzerland, the Italian-speaking Scuola universitaria professionale della Svizzera italiana, www.bbt.admin.ch/fachhoch/e/index.htm) also offer courses, post graduate and further education courses in most of the fields concerning cultural and natural heritage.

The *Abegg-Stiftung Riggisberg* (www.abeggstiftung.ch), the *Hochschule der Künste Bern* HKB (www.hkb.bfh.ch), the *Haute école d'arts appliqués* HEAA-Arc in La Chaux-de-Fonds and the *Scuola universitaria professionale della Svizzera italiana* SUPSI in Lugano provide training as restorers and conservers (Master/Bachelor of Arts AUS in Conservation-Restoration) in the various specialist fields (textiles, architecture and interior design, painting and sculpture, graphic design, written material and photography, modern materials and media, archaeology, ethnography, scientific objects, architectonic surfaces). Further, the Federal Of-

Office of Culture grants annual scholarships for further training at the *Centro Europeo di Venezia per i mestieri della conservazione del patrimonio architettonico* in San Servolo.

The dual system for on-the-job occupational training customary in Switzerland offers numerous opportunities for learning the crafts and craftsmanship demanded in the conservation of cultural heritage.

Thanks to the recognised high standard of education and training, Swiss professionals have access to many further training opportunities abroad (for example the ICCROM courses) www.iccrom.org.

to the existing protection mechanisms of both states, also guarantees the appropriate preservation of the cultural property.

As in Switzerland, training and continuous training in the field of natural and cultural heritage is assured by numerous university and other institution courses at the highest level.

Tirano (Italy)

Several authorities, at various political levels are responsible for the Italian part of the property:

The administration of the *Provincia di Sondrio* (www.provincia.so.it), the *Municipality of Tirano* (www.comune.tirano.so.it) and, specifically for the architectural and cultural heritage, the *Direzione regionale per i beni culturali e paesaggistici della lombardia* (www.lombardia.beniculturali.it). All these authorities have the necessary experts available, in various scientific fields, for the conservation of the site. The *Ufficio Lista patrimonio mondiale UNESCO* in the *Ministero per i beni e le attività culturali* (www.beniculturali.it) deals with all questions concerning the Italian World Heritage Sites at national level, and oversees the management of the sites.

The association founded for the management of the sites, the “UNESCO World Heritage Rhaetian Railway in the Albula/Bernina Cultural Landscape Association” (cf. 5.e), in which all the parties involved will be represented, assures the transnational transfer of know-how and, further



Albula line > Rhaetian Railway train on
the Albula Viaduct I.
A. Badrutt / Rhaetian Railway

5.h Visitor facilities and statistics

The Rhaetian Railway's Albula and Bernina lines carry almost 2 million passengers per year. The cultural landscape these lines pass through has facilities offering the equivalent of 2.5 million overnight stays per year, provided by 150 hotels with around 11,850 beds and about the same number in the self-catering sector. Several documentation outlets in the area provide visitors to the heritage site with information on the Rhaetian Railway and the surrounding cultural landscape, and additional information centres are currently being planned. One example is the railway museum in Bergün / Bravuogn, that is still at the planning stage.

Railway infrastructure and statistics

The railway infrastructure immediately related to the World Heritage site focuses on the Albula/Bernina line peak seating capacity. According to the current timetable some 13,000 seats per day are available on the Albula section, whilst the Bernina section offers some 5,000 seats per day in winter and 8,000 in summer. The figures quoted apply to services operating at full capacity, although in practice the actual levels of utilisation vary with the time of day and are also subject to strong seasonal fluctuations. The passenger-carrying capacity is also dependent on the amount of freight transported by the trains providing the passenger services. In 2005, the Rhaetian Railway carried the following numbers of passengers on the Albula and Bernina sections:

Chur – St. Moritz section

Departing from Chur	680,000 passengers
Arriving at St. Moritz	430,000 passengers
Departing from St. Moritz	355,000 passengers
Arriving at Chur	640,000 passengers

St. Moritz – Tirano section

Departing from St. Moritz	320,000 passengers
Arriving at Tirano	190,000 passengers
Departing from Tirano	205,000 passengers
Arriving at St. Moritz	320,000 passengers

In the same year, some 17,000 passenger trains ran on the Albula section and some 11,000 on the Bernina section. All new wagons purchased under the Rhaetian Railway's current rolling stock acquisition programme will comply with the requirements of the Equal Opportunities for the Disabled law and will be equipped with modern passenger information systems. At present the railway stations within the nominated property at Thusis, Tiefencastel, Filisur, Bergün/Bravuogn, Samedan, St. Moritz, Pontresina, Poschiavo, Campocologno and Tirano are fully staffed, either by the Rhaetian Railway or by subcontractors. The personnel at these stations are able to provide visitors with information on the Albula and Bernina railway lines and on the cultural landscape. The stations also have a range of informative material on the lines. Should the Albula/Bernina Lines be accepted for inclusion in the list of World Heritage Sites, the

Rhaetian Railway plans, in cooperation with the local authorities, to make additional information available to the general public at a number of the stations; this material would cover the Albula/Bernina lines, the cultural landscape surrounding them and the UNESCO World Heritage Site. There are also plans to set up a UNESCO information centre in the planned railway museum in Bergün/Bravuogn, directly next to the Rhaetian Railway's main station building.

The Rhaetian Railway runs through the cultural landscape of the Albula/Bernina area, a popular destination for day trips. Should the property be included in the list of World Heritage Sites the popularity of the area will probably be accentuated, with starting points at the medium and larger-sized centres such as Davos, Scuol, Lenzerheide, Savognin, Chur, Flims, Laax and Tirano. Public transport services and the extensive networks of hiking and biking trails have opened up the area, providing ideal conditions for encouraging visitors to dispense with the use of cars. Combined tickets offered by the Swiss Federal Railways the Rhaetian Railway and the Italian Railways could also meet with interest. Even if there is a wider range of opportunities and attractions for discovering the cultural landscape in summer, should the nomination for listing as a World Heritage Site be successful, the demand for railway trips through the area during the winter season is also likely to grow.

Tourist infrastructure and key figures

The Canton Graubünden is one of the major holiday regions in Switzerland. The region has a total of 830 hotels with 48,000 beds plus a further 125,000 offered by the self-catering sector. Together these generate a total of 11 million potential overnight stays, of which 4.5 million are during the summer season. With the exception of

the Upper Engadin, the main tourist activity in the canton takes place largely outside the perimeter of the World Heritage Site. While tourism in the Albula valley and in the Val Poschiavo does indeed play an important part for both areas, in terms of numbers, it does not make a major contribution at cantonal level. The largest localities in these valleys – Bergün/Bravuogn and Poschiavo – typically record annual visitor figures of a mere 30,000 and 52,000 hotel overnight stays respectively (by comparison, the number of overnight stays per year in hotels in Davos is greater than 800,000). Altogether the number of overnight stays in hotels in the potential heritage site is around 1.5 million per year with a similar number of overnight stays recorded for the self-catering sector.

The hotel capacity in the Albula and the Poschiavo Valleys amounts to 1,547 beds, provided by 55 different businesses. In addition, about the same number of beds are available in self-catering apartments. There are almost 60 restaurants in the same area, with seating for some 4,900 guests. The localities in the Upper Engadin affected by the nomination as a World Heritage Site contain 100 hotels with some 10,000 beds together with 145 restaurants with seating for around 14,000 guests. Five camping sites are also located within the core zone.

Tourism in the province of Sondrio focuses on Livignio, Bromio, Aprica, Val Malenco, Madesimo and Teglio, but plays only a minor role in Tirano. The town has 292 hotel beds and recorded 29,000 overnight stays in 2005. Its 27 restaurants can accommodate 2,400 guests.

Museums and other sources of information

A number of informative and educational attractions and services are located within the perimeter of the proposed World Heritage Site.

Extensive parts of the Mittelbünden (central Graubünden) region, including the Albula valley, are situated within a regional nature park (the Parc Ela). The park offers interconnected tourist services and features, each related to specific themes. The various themes include the Railway History Education Trail between Preda and Bergün/Bravuogn, which passes very close to the engineering structures of the Rhaetian Railway. The trail is almost 8 km long and involves a change in altitude of 400 m. Illustrated info boards erected at special points of interest provide details of the construction and alignment of the railway line, whilst timetables tell visitors the time when the next train will be passing. As part of the 'Albula Railway Experience' project – the heart of which is the planned Railway Museum in Bergün/Bravuogn – there are plans to extend the railway education trail as a railway adventure trail as far as Tiefencastel; the new trail section will cover the historic railway corridor between Stugl/Stuls and Bergün/Bravuogn, the former Bellaluna mining centre (today a cultural centre), and Filisur. The Filisur Nature Education Trail – a high altitude trail between Filisur and Wiesen – has illustrated info boards which provide information on the local flora, fauna and geology. Another resource within the perimeter of the World Heritage site which is connected with the Parc Ela is the "ansaina" waterway.

The international prize-winning 'On the track of climatic change' educational adventure trail runs between Muottas Muragl and Alp Languard (in the Upper Engadin). The trail aims to accentuate awareness of the global-warming induced natural phenomena in the Alps. Besides addressing the question of the rapid warming of the climate, the adventure trail also provides information on the causes and global consequences of the greenhouse effect. The info boards show examples of

different approaches to solving the problems and possible ways of dealing with them. The climate trail project was developed by WWF Switzerland in cooperation with the Engadin Nature Research Society. The valley station of the Lagalb cableway is the starting point for a mining history education trail whose eight stopping points lead the visitor over the Bernina Pass to the Camino mine tunnels, the only tunnels which are still accessible. The trail also leads over the Fuorcla Minor, crossing the two mining areas and passing the Fuorn d'Plattas ore smelting plant, which dates back to 1458. The trail provides information on the history of mining activities in the area from the 13th to the 16th centuries, on the history of the mine tunnels and on the type of rock in this area (pyrite – arsenopyrite). The 'Protecting People and the Forest' education trail runs between Alp Grüm and Poschiavo. The trail illustrates the links between the protective engineering measures and the important protective function that mountain forests provide with respect to settlements, railways and people. The 'Environmentally-friendly Electricity' education trail from Lago Bianco (Ospizio Bernina) to Cavaglia illustrates the history of the electrification of the Rhaetian Railway and Val Poschiavo, the requirements needed for the ecologically-friendly generation of electricity and also the geology and biology of the high Alpine valley. Seven moulins can be viewed in the Cavaglia area, at a height of 1700 m above sea level.

The AlpenAcademie (alpine academy) in the Engadin was established quite recently; it is supported by the Academia Engiadina in Samedan. As part of its GeoParc and Cultur Engadin educational courses, in lectures and guided tours the Academy introduces visitors to the attractions that the Engadin has to offer in the fields of culture and natural sciences.

The nominated heritage site contains many museums. Thus, the starting point of the Albula line, is also the starting point of the Viamala EcoMuseum, run by the Association for the Cultural Area of the Viamala; the purpose of this museum is to preserve the valuable cultural area around the impressive natural monument of the Viamala Gorge and to use it for tourism at a sustainable level. The district museum (Fundaziun Museum) in Bergün/Bravuogn offers an insight into daily life in an Engadin house – a type of farmhouse which is unique in the Alps (cf. 2.a.6); the former working part of the house contains a 1:87-scale model railway showing the line between Bergün/Bravuogn and Preda on the Albula line. In Bergün/Bravuogn, work is presently in hand on the development and construction of the Albula railway museum. Here, the former arsenal next to the Rhaetian Railway main station building is being converted for this purpose. The new rolling stock shed will be located between the main tracks and the arsenal building, and a new section of track running across the railway station square will link the shed to the existing railway line. The new shed and track will enable trains composed of historic locomotives and carriages to run along the Albula section. The railway museum is due to open in the spring of 2008. In Samedan, the Chesa Planta museum of daily life offers the opportunity to visit one of the most important stately homes in the region. The museum provides an insight into the way of life of nobility in Graubünden during the 17th and 18th centuries (cf. 2.a.6). The Chesa Planta houses the offices of the cultural archives of the Upper Engadin and also what is probably the most important library of Rhaeto Romansh literature in the world. The Bob Museum in Celerina illustrates the history of the sport of bobsledding since 1900 and provides an understanding of an

important aspect of the history of tourism in the Upper Engadin. There are several museums in St. Moritz including the Museum Engiadinais that dates from 1906. This museum provides an important record of the national heritage protection movement which grew up across Europe around 1900 (cf. 2.a.4) and is also a forerunner of the many local customs and crafts museums which were set up after the Second World War. The Museum Engiadinais has exquisite interiors, high quality furniture spanning six centuries and a large number of other exhibits; it is one of the most representative museums in terms of local customs and traditions. The building itself, designed by the architect Niklaus Hartmann the Younger, was one of the first in the canton to be built in the 'Heimat' style (cf. 2.a.5). The Segantini Museum, which was designed by the same architect, was opened in 1909. The museum building, constructed in the form of a rotunda, was based on a preliminary draft by the renowned artist Giovanni Segantini (1858–1899) for an Engadin Panorama planned for the Paris World Fair of 1900 (cf. 2.b.9). Amongst other exhibits, the museum houses the artist's famous Alpine Triptych. Segantini spent the last five years of his life in the Engadin. The hundred year old Villa Arona in the centre of St. Moritz houses the Berry Museum, dedicated to the spa physician and painter Peter Robert Berry (1864–1942), who based his artistic work strongly on Segantini's style of painting. The Mili Weber House is the home of the Mili Weber Foundation. The house was built in 1917 for the artist of the same name (1891–1978), who also designed and decorated interior. The location of the house, on the wooded mountainside, above the eastern end of the lake is idyllic. The Museum Alpin in Pontresina, located in an Engadin house dating from 1716, hosts a permanent exhibition which covers many

themes; these include the traditional Engadin house, the development of summer and winter tourism, mining in the Upper Engadin, minerals to be found in the region, hunting, game and the environment. The Palazzo de Bassus-Mengotti in Poschiavo, the most significant stately home in the Poschiavo Valley, contains a regional museum (Museo Poschiavino) which focuses on the lifestyle and way of life in the Val Poschiavo over the past 300 years. There are plans to move the museum's collection of 'farming tradition' items in the near future to the Casa Tomé, one of the last, largely unchanged farmhouses in the village. The Casa Console Museum of Romantic Art in Poschiavo displays the paintings collected by the former publisher Ernesto Conrad. The collection includes works from the 19th century (mainly of the Munich school), with works by Wilhlem Kaulbach, Franz von Lenbach, Carl Spitzweg, Franz von Stuck and also by renowned Swiss painters such as Ferdinand Hodler, Louis-Auguste Veillon and Heinrich Füssli. The Museo Casa Besta in Brusio is located in an aristocratic house dating from the 17th century. The museum provides information on tobacco-growing, smuggling, milk production and shoe-making in the valley. In Tirano, the Museo Ethnographico Tiranese, on the Piazza della Basilica documents the history of the town. The museum houses a wealth of artefacts from the region.

Besides the education trails and museums the nominated heritage site also includes a large number of valuable sacred and secular buildings. These and several other places of interest which are open to the public can be reached by the Rhaetian Railway. Guided tours are frequently available.



Albula line > The Glacier Express on the
Landwasser Viaduct.
A. Badrutt / Rhaetian Railway

5.i Policies and programmes related to the presentation and promotion of the property

A variety of informative documents on the nominated cultural asset are already available, and further material will be compiled for the presentation and promotion of the Albula / Bernina line. A comprehensive documentation system is at the planning stage.

Various informative pamphlets on the Rhaetian Railway and the surrounding cultural landscape are already being issued to visitors to the nominated site, and further presentations and promotions are at the planning stage (cf. 5.h). For example, the “Rhaetian Railway in the Albula/Bernina Cultural Landscape” will be integrated as a central theme at the permanent exhibition of the future Railway Museum in Bergün/Brauvuogn, if it is accepted for the UNESCO World Heritage List. Moreover, existing documentation on the various topics will be coordinated and streamlined to ensure high-impact presentation. Public awareness of the quality and cultural and landscape value of the nominated property will be reinforced through maintenance and promotion. In general, cooperation between representatives of the tourist industry, cultural and spatial planning, and the Rhaetian Railway will be intensified by the site’s inclusion on the UNESCO World Heritage List.

The “UNESCO World Heritage Rhaetian Railway in the Albula/Bernina Cultural Landscape Association” (cf. 5.e) will set up a comprehensive documentation system in conjunction with the Rhaetian Railway and communities in the nominated area, with the objective of identifying and, where possible, providing access to the material available. Existing databases will be linked so that information on the World Heritage site can be disseminated as efficiently as possible.



Albula line > On the Solis Viaduct.
A. Badrutt / Rhaetian Railway

5.j Staffing levels

Various organisations, with a large number of highly qualified specialists, ensure that the Albula/Bernina line and its cultural landscape maintains its World Heritage quality standard long-term.

The Rhaetian Railway alone, which as owner is responsible for the infrastructure and operation of the Albula/Bernina stretch, has a staff of some 1,500 including, among other professions: agricultural machinery mechanic, architect, automation technician, car mechanic, carpenter, carriage cleaner, catenary wire fitter, civil engineer, civil engineering draughtsman/woman, clerical workers, construction engineering draughtsman/woman, computer specialist, construction engineer, depot assistant, development engineer, economist, electrician, electrical assistant, electrical draughtsman/woman, electrical engineer, electronics technician, electromechanical engineer, engine driver, engine fitter, engineering draughtsman/woman, engine shed foreman, general mechanic, lawyer, locksmith, logistics assistant, machine fitter, machine mechanic, machinery fitter, mechanic, operating assistant, painter, plumber, precision mechanic, railway traffic controller, saddler, smith, secretary, track engineer, technical draughtsman/woman, ticket collector, turner, upholsterer, warehouseman/woman, workshop assistant.

In the cultural landscape sector as well, the project can draw on the expertise of Canton Graubünden and the Province Sondrio departments and administrative offices engaged in the sustainable management of the cultural landscape (cf. 5.g). The staff of these offices include the following specialists: architect, agronomist,

biologist, chemist, forestry engineer, geographer, geologist, lawyer, cultural engineer, art historian, economist and physicist.

Besides the Rhaetian Railway and the public administration, the personnel of the 23 communities involved will contribute to ensuring that the authenticity and integrity of the nominated property is sustained. There are several local and regional tourist offices in the nominated area, all run by qualified professionals, to provide information to tourists and to raise awareness.