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DETAILED SPATIAL PLANNING CONCEPTION OF THE COASTAL AREA

Final Report

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Faculty of Architecture
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December 2005



Občina
Divača



Občina
Hrpelje-Kozina



Občina
Ilirska Bistrica



Občina
Izola



Občina
Komen



Mestna občina
Koper



Občina
Piran



Občina
Sežana

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Summary

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CONTENT LIST:

<u>1. RESULTS</u>	3
<u>1.1. METHODOLOGY OF SPATIAL IMPLEMENTATION OF STRATEGIC STARTING POINTS (PLANNING AND IMPLEMENTATION LEVELS)</u>	4
<u>1.2. STRATEGIC STARTING POINTS AND SPATIAL DEVELOPMENT GOALS</u>	4
<u>1.3. DIRECTIONS CONCERNING THE INTENSITY OF DEVELOPMENT IN INDIVIDUAL PARTS OF THE COASTAL BELT – CHARACTERISTIC TYPES OF SPATIAL SEQUENCES (PERCEPTION MODEL)</u>	4
<u>1.4. DIRECTIONS FOR A DISTRIBUTION OF SUITABLE ACTIVITIES OR FORMS OF SPACE USE IN THE COASTAL BELT – FUNCTIONAL MODEL</u>	7
<u>1.5. A DETAILED CONCEPTION – DEVELOPMENT MODELS</u>	16
<u>1.6. DETAILED RULES FOR SPATIAL PLANNING OF THE COASTAL BELT PROMOTING THE PRESERVATION OF PARTICULARITIES AND VALUES OF THE COASTAL BELT</u>	23
<u>1.6.1. Substantiation</u>	23
<u>1.6.2. Guidelines for spatial planning with an emphasis on the preservation of landscape features</u>	25
<u>1.6.3. Establishment of Distinctive Features in Spatial Management along Coastal strip</u>	31
<u>1.6.4. Specific Rules on Spatial Management in Coastal Strip</u>	31
<u>1.6.5. Priorities in Spatial Management by Individual Characteristic Sequences</u>	33
<u>1.7. INSTRUMENTARIUM</u>	39
<u>1.7.1. Criteria for Evaluation of Interventions in Coastal Strip and Evaluation of Models</u>	39
<u>1.7.2. Criteria for Evaluation of Development Models</u>	40
<u>1.7.3. Criteria for Evaluation of Interventions in Coastal Strip – Micro-ambience Criteria</u>	42
<u>1.7.4. Conclusions and Guidelines regarding Criteria for Evaluation of Spatial Interventions in Coastal strip and Evaluation of Models</u>	49
<u>1.8. DRAWING UP PROGRAMME FOR IMPLEMENTATION OF REGIONAL CONCEPTION – DETERMINATION OF KEY PROJECTS</u>	50
<u>1.9. INDICATORS FOR MONITORING SUSTAINABLE DEVELOPMENT OF COASTAL STRIP</u>	51
<u>2. CONCLUSION</u>	52

1. RESULTS

The coastal belt is of strategic importance to the national, regional and local levels, as it represents an exceptionally sensitive area in terms of both environment and milieu. In each activity affecting the physical environment of the coastal belt it is necessary to coordinate the development potentials with the possibilities of maximum preservation of natural resources and of ensuring the public interest in terms of access, use and permanent preservation of the typical features of a specific coastal area.

The project introduces the basic trends as well as detailed rules, instructions and methodology concerning the coordination of development possibilities of individual spatial potentials with the principles of sustainable development. A special chapter is dedicated to the observance of environmental peculiarities of the coast, defined within the set of detailed rules on spatial planning as a supplement to the basic rules of the Spatial Order of Slovenia. The concrete results are presented in the following content groups:

a. methodology

- the methodology of spatial implementation of strategic starting points (planning and implementation levels)

b. strategic starting points and spatial development goals

- the strategic starting points and spatial planning goals are defined in detail in Chapter 4

c. space: perception model

- the subdivision of the coastal belt into 5 typical spatial units characterises the existing appearance of the coastal belt area, which needs to be qualitatively enhanced by means of individual detailed rules concerning its potential physical or spatial revitalisation

d. programme: functional model

- directions concerning the distribution of suitable activities in the space: subdivision of the coastal belt into 4 types of spatial units defined according to the existing legal regimes, the natural conservation of the environment, the existing and planned types of use, with the consideration of mutually exclusive legal regimes.

e. detailed conception – development models

- alternative conceptions of coast planning in three selected areas under spatial management

f. detailed rules

- detailed rules on the spatial planning of the coastal belt take into account the particularities of this area and function as a supplement to the basic rules of the Spatial Order of Slovenia.

g. criteria

- criteria for the spatial planning of the coastal belt or evaluation of alternative spatial solutions

h. instrumentation

- setup of a programme for the implementation of a regional conception – definition of key projects
- indicators of monitoring the coastal belt sustainable development

1.1. METHODOLOGY OF SPATIAL IMPLEMENTATION OF STRATEGIC STARTING POINTS (PLANNING AND IMPLEMENTATION LEVELS)

The methodology of strategic starting point implementation has been tested throughout the structure of the project:

1. survey of all strategic starting points and definition of suitable starting points with respect to the status and trend analysis
2. definition of the vision and goals of spatial development with integrated strategic starting points
3. preparation of space development scenarios and assessment or evaluation of their merits; which scenario ensures the realisation of the strategic starting points
4. processing of the adequate scenario through various spatial models
5. evaluation and selection of the most suitable model
6. preparation of a detailed spatial conception which observes the detailed rules on spatial planning in the coastal belt
7. definition of indicators of monitoring the status of developments in the coastal area
8. revision of planned starting points with respect to the observations derived through monitoring the situation and developments in the area.

1.2. STRATEGIC STARTING POINTS AND SPATIAL DEVELOPMENT GOALS

The strategic starting points and spatial planning goals are elaborated in Chapter 4.

1.3. DIRECTIONS CONCERNING THE INTENSITY OF DEVELOPMENT IN INDIVIDUAL PARTS OF THE COASTAL BELT – CHARACTERISTIC TYPES OF SPATIAL SEQUENCES (PERCEPTION MODEL)

Among the most important results of the research are detailed rules for spatial planning, prepared on the basis of an elaborate spatial analysis of two models (the perception and functional models). An analysis of evaluation of recognisability of the coastal belt from a perceptual point of view enables a comprehensive view of the space and its appearance. The coastal belt is divided into 27 units pertaining to one of the five defined categories.

In terms of space perception we have established five different types - categories of spatial sequences:

- 1. → landscape sequence**
- 2. → landscape sequence with minimal elements of built structure**
- 3. → sequence of landscape and built structures interlacing**

- 4. → **built sequence with minimal elements of natural structure**
- 5. → **built sequence**

CHARACTERISTIC TYPES OF SPATIAL SEQUENCES IN THE COASTAL BELT

type 1	LANDSCAPE SEQUENCE	<p>- typically natural appearance of the space, a natural sea-land point of contact, no built structure inside the wider perception area, the sequence represents a completed natural whole.</p> <p>- built exclusively from the “primary” elements of natural and cultural landscapes (green verticals of trees, a horizontal contact between sea level and land etc.)</p>
%		
areas no.: 3, 6, 23, 27		
type 2	LANDSCAPE SEQUENCE WITH MINIMAL ELEMENTS OF BUILT STRUCTURE	<p>- a recognisable and preserved natural appearance of the space, a natural sea-land point of contact with individual elements of built structure, in a wider environment the built elements do not preclude the perception of the space as natural, the sequence still represents a completed natural whole.</p> <p>- built from the “primary” elements of natural and cultural landscapes (green verticals of trees, a horizontal contact between sea level and land etc.) With individual built elements.</p>
%		
areas no.: 1, 4, 11, 12 16, 17, 18, 20, 21, 22, 26		
type 3	SEQUENCE OF LANDSCAPE AND BUILT STRUCTURE INTERLACING	<p>- the area features neither a completely natural nor a completely built up appearance. It is perceived as an even alternation of natural and built up zones, belts, separate wholes.</p> <p>Oriented:</p> <p>- towards type 2 or 4</p>
%		
areas no.: 2, 5, 7, 10, 13, 15, 19		
type 4	BUILT SEQUENCE WITH MINIMAL ELEMENTS OF NATURAL STRUCTURE	<p>- the area displays a typically built up appearance, with the intermediate green open spaces and verticals of trees creating the feeling of “soft” urban architecture.</p>
%		
areas no.: 9, 14, 25		
type 5	BUILT SEQUENCE	<p>- typically built up or urban appearance of the area, architectural heritage or a recognisable new typology.</p> <p>subgroups:</p> <p>- (protected old town nuclei; technological structure – industry, marina, port, shipyard: residential structure; public areas...)</p>
%		
areas no.: 8, 24		

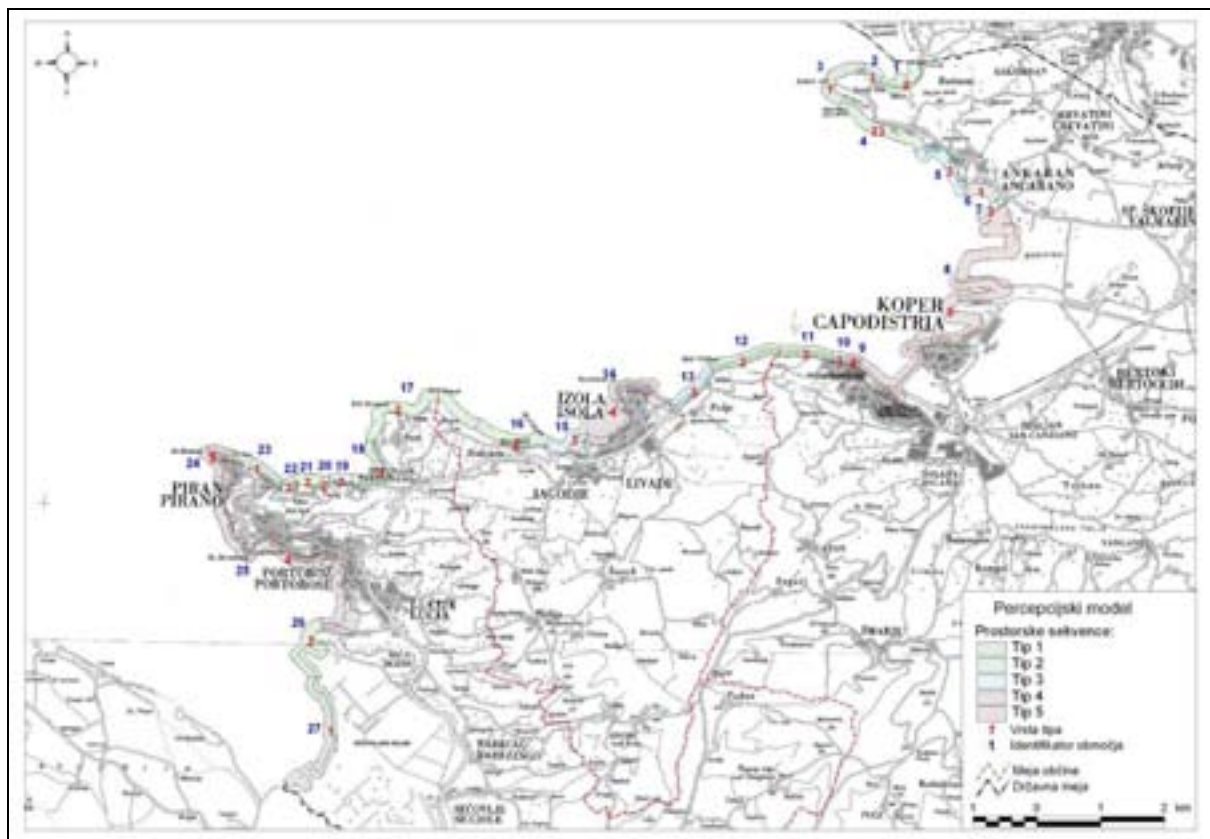


Fig. 3: Classification of areas according to the perception model.

1.4. DIRECTIONS FOR A DISTRIBUTION OF SUITABLE ACTIVITIES OR FORMS OF SPACE USE IN THE COASTAL BELT – FUNCTIONAL MODEL

The directions for a distribution of suitable activities or forms of space use in the coastal belt have been prepared for four different types of spatial areas and 27 areas making up the coastal belt.

The four different types of spatial area are defined according to the existing legal regimes, according to the natural conservation of the environment, the existing and planned types of use, with the consideration of mutually exclusive legal regimes:

1. **The existing and planned developments, activities and forms of use involve least number of restrictions. The essential condition is the elimination of the present causes for the degradation of the environment as well as of conflicts among the various existing forms of sea use.** Possible uses:
 - commercial port,
 - passenger port,
 - shipyard, watercrafts servicing, workshop for small boat repair,
 - gradual exclusion of industry from the area directly affecting the coast,
 - all forms of traffic are allowed, with an emphasis on the development of public, alternative and pedestrian traffic,

- gradual withdrawal of open space stationary traffic from the 200 m belt of the coastline influence area,
 - all possible forms of use pertaining to the spatial areas under categories 2, 3 and 4.
- 2. Some parts of the coast are intended for a more intensive tourist activity as well as various compatible uses associated directly with the coastal belt.** Possible uses:
- mariculture,
 - tourist port,
 - boat berths,
 - recreation and relaxation infrastructure of a permanent character, transforming the appearance of the space
 - all forms of traffic are allowed, with an emphasis on the development of public, alternative and pedestrian traffic, but with a gradual restriction of the private vehicle traffic in the 200 m belt of the coastline influence area,
 - within the belt of inshore terrains the private vehicle traffic is completely restricted,
 - all possible forms of use pertaining to the spatial areas under categories 3 and 4.
- 3. Areas intended primarily for a quite intensive general use: tourist activity, short sea shipping, anchoring as well as individual forms of suitably regulated fisheries.** Possible use:
- production of salt as an already existing activity,
 - mariculture with exclusively positive effects on the environment,
 - managed bathing facilities,
 - recreation and relaxation infrastructure of a temporary character, which does not alter the appearance of the space,
 - within the belt of inshore terrains the private and motor vehicle traffic is completely restricted,
 - all possible forms of use pertaining to the spatial areas under category 4.
- 4. Areas intended for general use.** Possible uses:
- bathing beach,
 - development of natural-science- and cultural heritage tourism,
 - recreation and relaxation infrastructure of a temporary character, which does not interfere with protective measures,
 - building public footpaths with an urban equipment that does not interfere with protective measures,
 - within the belt of inshore terrains the private and motor vehicle traffic is completely restricted,
 - building the most essential infrastructure.

Communal uses in all areas:

- free access to the sea (wherever the established legal regimes allow it),
- shoreline footpath,
- cycle track.

Possible / allowed uses by area:

Area 1:

- kept up bathing beach,
- service platforms for fishermen and mariculture,
- rowing centre,
- sailing centre,
- maritime hubs,
- diving centre.

Area 2:

- swimming pool complex for tourists,
- managed bathing facilities,
- outdoor cinema,
- area of health and climate tourism,
- culinary tourism.

Area 3:

- bathing beach (part of the coast traditionally frequented by a large number of bathers),
- nature trails and educational areas,
- vantage points,
- mariculture.

Area 4:

- esplanade,
- kept up bathing beach,
- area of health and climate tourism,
- youth/student tourism areas,
- youth convalescent homes,
- tourist and recreation areas for people with special needs,
- viewing platforms,
- vantage points,
- culinary tourism,
- maritime hubs,
- temporary anchorage for watercrafts.

Area 5:

- swimming pool complex for tourists,
- esplanade,
- managed bathing facility,
- kept up bathing beach,
- outdoor cinema,
- area of health and climate tourism,
- youth/student tourism areas,
- tourist and recreation areas for people with special needs,
- areas intended for leisure time activities (children's playgrounds, parks, theme parks, adrenaline park, people with special needs, etc.),
- local ports (boat berths),

- culinary tourism,
- maritime hubs,
- temporary anchorage for watercrafts.

Area 6:

- nature trails and educational areas,
- vantage points,
- potential substitute biotope for the flora and fauna of the Škocjanski zatok nature reserve.

Area 7:

- bathing beach (part of the coast traditionally frequented by a large number of bathers),
- areas intended for leisure time activities (children's playgrounds, parks, theme parks, adrenaline park, people with special needs, etc.),
- vantage points,
- local ports (boat berths),
- culinary tourism,
- areas devoted to the purposes of defense and protection,
- maritime hubs.

Area 8:

- service platforms for watercrafts (in the area of the third pier of the Port of Koper),
- service platforms for fishermen and mariculture (workshop for small boat repair at the outlet of the Badaševica),
- small boat repair workshop for boat berths (at the outlet of the Badaševica),
- rowing centre,
- sailing centre,
- esplanade,
- managed bathing facilities (Public Bathing Facility),
- kept up bathing beach (the jetty of the new Koper marina),
- outdoor cinema (northern coast),
- areas of youth/student tourism (town nucleus),
- areas intended for leisure time activities (children's playgrounds, parks, theme parks, adrenaline park, people with special needs, etc.), (northern shore, Bonifika, etc.),
- vantage points (belvedere, church belfry),
- local ports (boat berths),
- sea ports (the existing marina, the new Koper marina),
- passenger port,
- expansion of the trade port (the third pier of the Port of Koper),
- economic zone (within the Port of Koper),
- culinary tourism,
- transport and logistics terminal (within the Port of Koper),
- maritime hubs (northern shore, the old pier, end of the new marina jetty).

Area 9:

- swimming pool complex for tourists,
- esplanade,
- managed bathing facility,

- area of health and climate tourism,
- tourist and recreation areas for people with special needs,
- areas intended for leisure time activities (children’s playgrounds, parks, theme parks, adrenaline park, people with special needs, etc.),
- further development of the existing areas of congress tourism,
- maritime hubs,
- culinary tourism.

Area 10:

- esplanade,
- kept up bathing beach.

Area 11:

- esplanade,
- kept up bathing beach,
- nature trails and educational areas,
- cultural-heritage trails and educational areas,
- vantage points,
- viewing platforms,
- local ports (boat berths),
- temporary anchorage for watercrafts.

Area 12:

- diving centre,
- esplanade,
- bathing beach (part of the coast traditionally frequented by a large number of bathers),
- nature trails and educational areas,
- area of health and climate tourism,
- viewing platforms,
- vantage points,
- temporary anchorage for watercrafts.

Area 13:

- swimming pool complex for tourists,
- managed bathing facilities,
- kept up bathing beach,
- area of health and climate tourism,
- cultural-heritage trails and educational areas,
- tourist and recreation areas for people with special needs,
- areas intended for leisure time activities (children’s playgrounds, parks, theme parks, adrenaline park, people with special needs, etc.),
- local ports (boat berths),
- maritime hubs.

Area 14:

- service platforms for watercrafts,
- service platforms for fishermen and mariculture,
- small boat repair workshop for boat berths,
- rowing centre,
- sailing centre,
- managed bathing facilities,
- kept up bathing beach,
- outdoor cinema,
- area of health and climate tourism,
- areas intended for leisure time activities (children’s playgrounds, parks, theme parks, adrenaline park, people with special needs, etc.),
- viewing platforms,
- vantage points,
- local ports (boat berths),
- sea ports,
- passenger port,
- culinary tourism,
- maritime hubs.

Area 15:

- swimming pool complex for tourists,
- esplanade,
- managed bathing facilities,
- cultural-heritage trails and educational areas,
- areas of youth/student tourism,
- tourist and recreation areas for people with special needs,
- areas intended for leisure time activities (children’s playgrounds, parks, theme parks, adrenaline park, people with special needs, etc.),
- temporary anchorage for watercrafts,
- maritime hubs.

Area 16:

- esplanade,
- kept up bathing beach,
- picnic grounds,
- viewing platforms,
- vantage points,
- culinary tourism.

Area 17:

- bathing beach (part of the coast traditionally frequented by a large number of bathers),
- nature trails and educational areas,
- viewing platforms,
- vantage points.

Area 18:

- service platforms for fishermen and mariculture,
- small boat repair workshop for boat berths,
- swimming pool complex for tourists,
- esplanade,
- managed bathing facilities,
- kept up bathing beach,
- nature trails and educational areas,
- cultural-heritage trails and educational areas,
- area of health and climate tourism,
- tourist and recreation areas for people with special needs,
- areas intended for leisure time activities (children’s playgrounds, parks, theme parks, adrenaline park, people with special needs, etc.),
- local ports (boat berths),
- mariculture,
- salt-making,
- derivation of therapeutic mud and brine,
- culinary tourism,
- maritime hubs.

Area 19:

- bathing beach (part of the coast traditionally frequented by a large number of bathers),
- nature trails and educational areas,
- viewing platforms,
- vantage points.

Area 20:

- swimming pool complex for tourists,
- managed bathing facilities,
- esplanade,
- outdoor cinema,
- area of health and climate tourism,
- youth convalescent homes,
- picnic grounds,
- tourist and recreation areas for people with special needs,
- areas intended for leisure time activities (children’s playgrounds, parks, theme parks, adrenaline park, people with special needs, etc.),
- maritime hubs.

Area 21:

- bathing beach (part of the coast traditionally frequented by a large number of bathers),
- nature trails and educational areas,
- viewing platforms,
- vantage points.

Area 22:

- swimming pool complex for tourists,
- managed bathing facilities,
- esplanade,
- nature trails and educational areas,
- area of health and climate tourism,
- picnic grounds,
- diving centre,
- tourist and recreation areas for people with special needs,
- areas intended for leisure time activities (children’s playgrounds, parks, theme parks, adrenaline park, people with special needs, etc.),
- maritime hubs,
- apartment village.

Area 23:

- bathing beach (part of the coast traditionally frequented by a large number of bathers),
- nature trails and educational areas,
- viewing platforms,
- vantage points.

Area 24:

- esplanade,
- bathing beach (part of the coast traditionally frequented by a large number of bathers),
- nature trails and educational areas,
- vantage points,
- viewing platforms,
- culinary tourism.

Area 25:

- service platforms for watercrafts,
- rowing centre,
- sailing centre,
- diving centre,
- swimming pool complex for tourists,
- esplanade,
- kept up bathing beach,
- managed bathing facilities,
- outdoor cinema,
- area of health and climate tourism,
- areas of youth/student tourism,
- tourist and recreation areas for people with special needs,
- youth convalescent homes,
- areas intended for leisure time activities (children’s playgrounds, parks, theme parks, adrenaline park, people with special needs, etc.),
- further development of areas of congress tourism,
- viewing platforms,

- vantage points,
- temporary anchorage for watercrafts,
- local ports (boat berths),
- sea ports,
- passenger port,
- culinary tourism,
- maritime hubs,
- apartment village.

Area 26:

- bathing beach (part of the coast traditionally frequented by a large number of bathers),
- nature trails and educational areas,
- cultural-heritage trails and educational areas,
- area of health and climate tourism,
- areas intended for leisure time activities (children’s playgrounds, parks, theme parks, adrenaline park, people with special needs, etc.),
- viewing platforms,
- vantage points,
- culinary tourism.

Area 27:

- service platforms for fishermen and mariculture,
- bathing beach (part of the coast traditionally frequented by a large number of bathers),
- nature trails and educational areas,
- cultural-heritage trails and educational areas,
- viewing platforms,
- vantage points,
- local ports (boat berths),
- mariculture,
- salt-making,
- derivation of therapeutic mud and brine,
- maritime hubs.

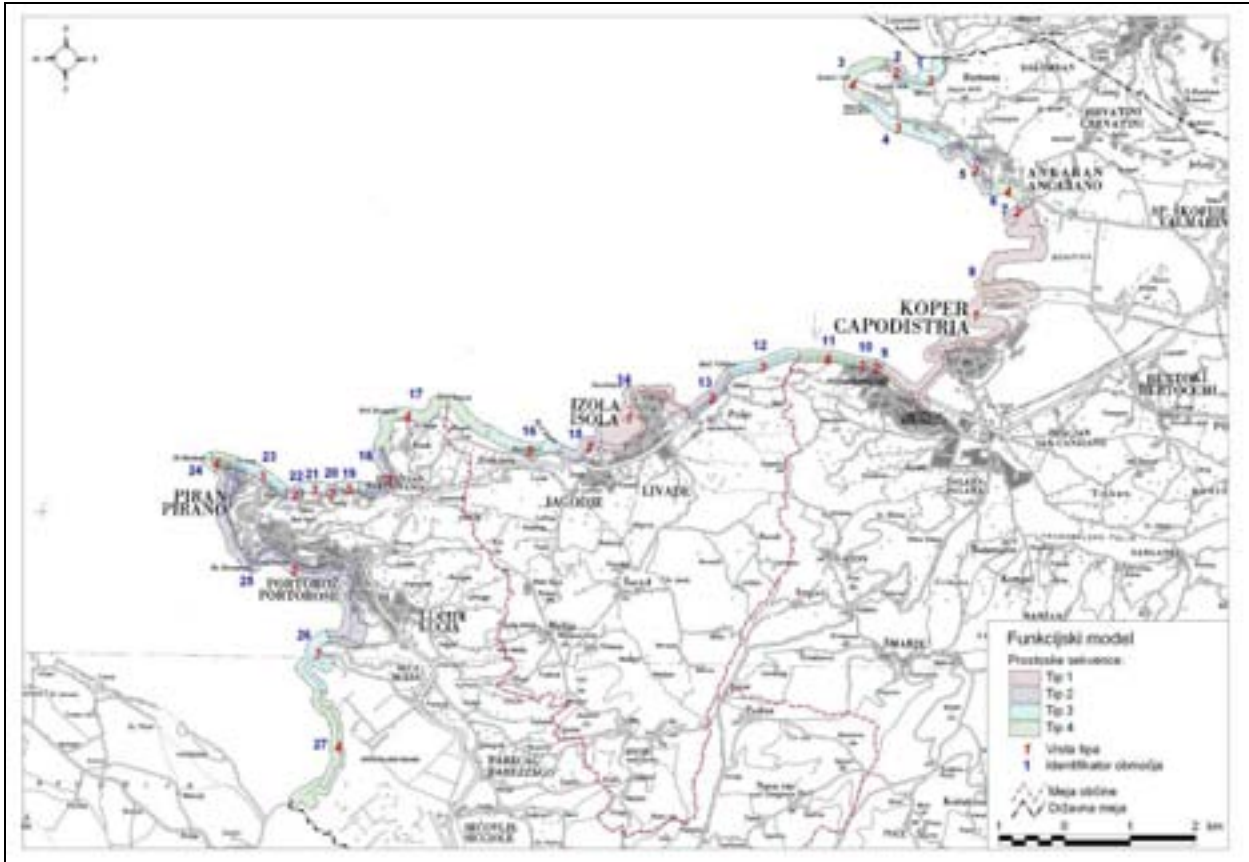


Fig. 4: Categorization of areas according to the functional model.

1.5. A DETAILED CONCEPTION – DEVELOPMENT MODELS

In accordance with the project task, in the third phase of the project we prepared detailed alternative conceptions of the coastline planning and management in three selected areas, but we have realised that due to the present planning level of consideration the proposed results are not useful for the actual planning in these areas. The proposed methodology is helpful, but the spatial developments should be planned by the individual municipalities, them being the carriers of activities of spatial planning on the local level and as such the only bodies able to adequately harmonize the existing interests within the area. Nonetheless, the designed models are useful in the preparation of detailed rules and indicators for the monitoring of sustainable development in the selected areas.

Presentation of development models in the selected areas

For each of the priority areas under consideration we have prepared three development models (alternative programme conceptions): the protection model (emphasising the aspects of vulnerability), the development oriented model (stressing the aspects of attractiveness) and the balanced model (a search for synergistic solutions). We have added the description of a fourth model – the model of the existing trend (trend extrapolation).

All development models are evaluated according to the same set of criteria, described in the chapter *Criteria for the Evaluation of Developments in the Coastal Belt*.

In the evaluation of the protection model according to the comprehensive criteria a special attention is called to the estimation of the potential negative effect on the economic and social development as well as on the spatial arrangement itself. An objective and unequivocal estimation is especially helpful on the level of dialogue between the local community and individual segments of the general public.

It is anticipated that the development-oriented model will not be evaluated very favourably in the fields of effects on areas of protected natural and cultural heritage and due to its unsuitable social consequences.

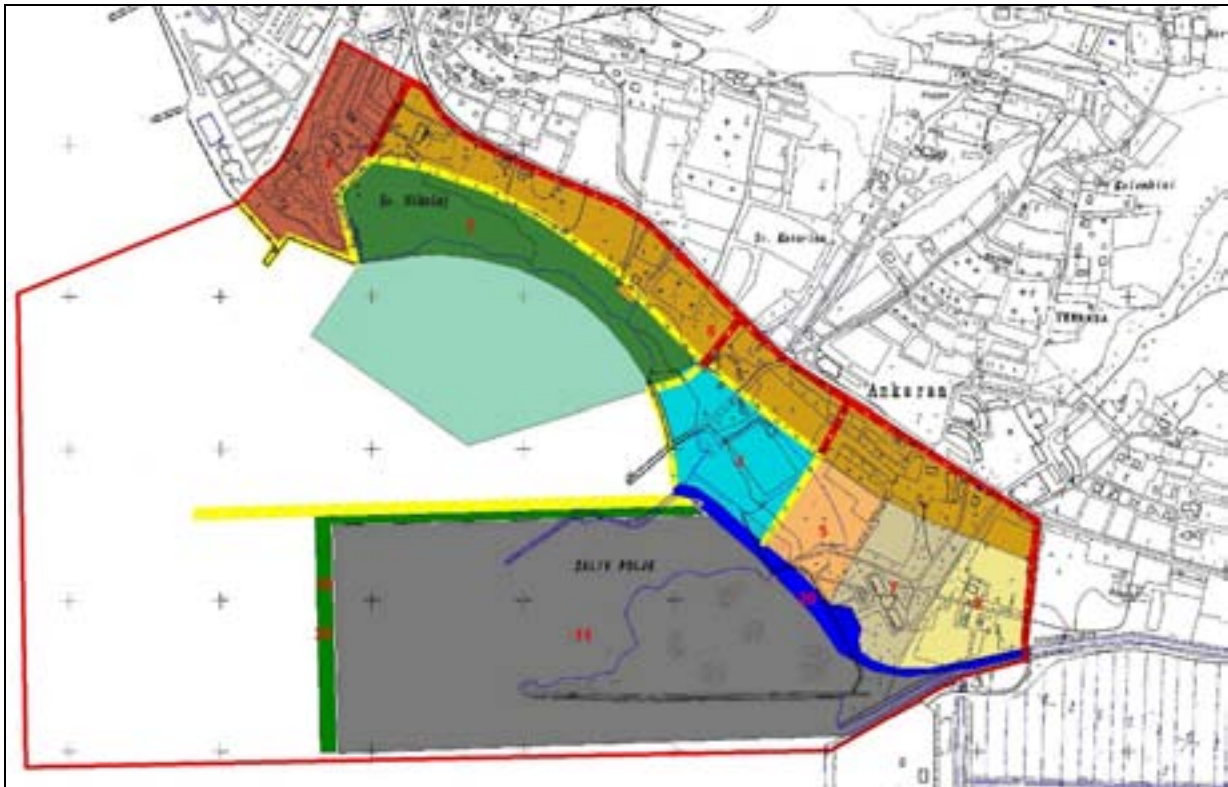
Further, it also has to be verified whether the model of the existing trend is also unsuitable. We anticipate it is, as any hesitation in searching for suitable solutions represents serious damage on all levels – the environmental, spatial, social and economic.

The model of search for synergistic solutions points out the most adequate spatial solutions in the spirit of rational spatial development, positive effects on a wider and local areas as well as achievement of a comprehensive sustainable development with regard to the environmental, spatial, economic, social and cultural levels and aspects. The uniform criteria help us ascertain whether a proposed model is indeed the most adequate and suitable in all aspects or whether on a certain level it is perhaps weaker than on others and needs to be suitably balanced in its segments, meaning it is necessary to look for a more harmonious solution. (The more the estimates by individual criteria and weightings are uniform, the more the proposed model is balanced; of course, it is desirable that the values be as high as possible.)

In the next pages, we shall present one solution in a selected area per each littoral municipality, the remaining material is in the Enclosure.

Koper: Balanced model - a search for synergistic solutions

The model assumes the construction of the third pier in its planned extent. A part of the third pier, facing the Port, is dedicated to the activities of the port and the service platform for watercrafts (for the Port of Koper). A part of the pier is intended for sports programmes, rowing and sailing activities and bathing beach. The peripheral Ankaran channel is shifted to the point of intersection of the third pier and the Bay of St. Catherine. A part of the channel is then used as a military port, another as area for boat berths. Boat berths are also built in the Bay of St. Catherine. The Bay of St. Nicholas is converted into a nature reserve with a circular nature trail. The intended use for the remaining areas is green open spaces, sports and recreation areas and nodal tourist infrastructure. A walkway is built along the shore, in conformity with all protection measures.



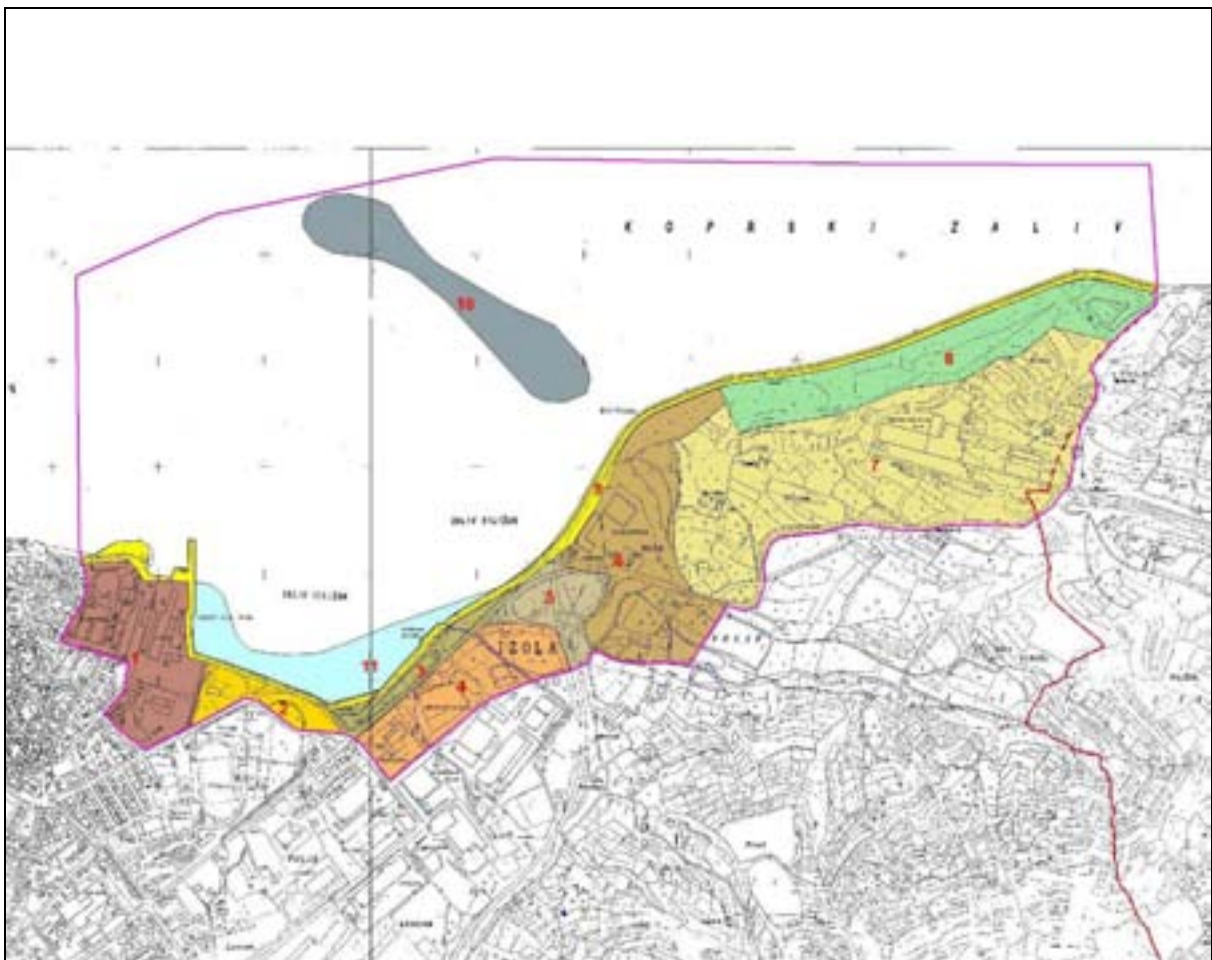
Proposed uses / programmes in spatial areas:

area	possible uses
yellow line	stabilised coast, esplanade
1	further development of the existing tourist infrastructure, green open spaces as well as sports and recreation areas: tourist area (campground), culinary tourism, leisure time activities (children's playgrounds, parks, theme parks, people with special needs, etc.), areas intended for sports and recreation coast: kept up and managed bathing facility, hub of public sea links, vantage point
2	protected area of nature preservation, circular nature trail
4	boat berths, towards the sea a bathing beach (part of the coast traditionally frequented by a large number of bathers)
5	service platforms for fishermen, small boat repair workshop for boat berths
7	area devoted to the purposes of defense and protection
8	leisure time activities (children's playgrounds, parks, theme parks, adrenaline park, people with special needs, etc.), green open spaces and sports and recreation areas, development of tourist infrastructure on a limited scale
9	area of public utility infrastructure (Central Wastewater Treatment Plant), green open spaces and sports and recreation areas
10	green open spaces – a buffer zone between the trade port and other uses, possible development of sports and recreation activities (rowing centre, sailing centre) pier: vantage point, viewing platform, maritime hub, bathing beach (part of the coast traditionally frequented by a large number of bathers)

11	expansion of the trade port (the third pier of the Port of Koper)
20	shift of the Ankaran peripheral channel

Izola: Balanced model - a search for synergistic solutions

The coastal area between Koper and Izola is set up as a walkway with additional adaptations of the beach. After the coast road is redirected through the tunnel, the whole coastal area is changed into an esplanade with urban elements connecting the towns of Koper and Izola. A sparse network of links set perpendicularly to the coast connects the esplanade with the inland areas. Modifications of the non aggressive type (i.e., not interfering with the sea floor more than it is necessary) enabling bathing are attached to the coast (for the purposes of constructing a bathing beach). In Cape Viližan a jetty is constructed in the sea, bearing green open spaces as well as sports and recreation areas, while in its interior part a kept up bathing facility (with a concessionaire) is set up. The jetty is connected to the land by an arm of the esplanade consisting of a footpath, cycle track, roller track and emergency driveway.



After the coast road has been redirected through the tunnel and the traffic area has been reorganised, a large part of the area can be used for other types of activities. The area near the Jadranka campground, to the south as far as the area of the new city radial road, is turned into a series of green open spaces and sports and recreation areas. The Bay of Jadranka is cleaned up, the spropel-covered and littered bottom of the bay is cleansed, a new beach is structured (perhaps by sanding). A tourist village is set up at Rude. The area is enriched by urban elements,

a network of differentiated public spaces, a green system (including green open spaces as well as sports and recreation areas). A parking garage is built. The area around the Izola Hospital is dedicated to the development of the green system and at a smaller scale to the development of specialised tourist/health programmes, which can be subtly connected to the beach through the cliff footpath. The developments observe all protection arrangements (geomorphological heritage, cultural landscape, archaeological site). After the withdrawal of the shipbuilding activities from the shipyard, the area is transformed into a new, lively part of the town with a varied urban use and an interlacing of urban functions. The coast is converted into a bathing beach.

Proposed uses / programmes in spatial areas:

area	possible use
yellow line - 9	stabilised coast, esplanade
1	varied urban use: a new part of the town, central activities, housing coast: bathing beach (part of the coast traditionally frequented by a large number of bathers) transport terminal
2	green open spaces, city park, coast: bathing beach (part of the coast traditionally frequented by a large number of bathers)
3	tourist area (campground), sports and recreation areas coast: managed bathing facility
4	leisure time activities (children's playgrounds, parks, theme parks, adrenaline park, people with special needs, etc.), green open spaces, sports and recreation areas
5	green open spaces, sports and recreation areas
6	development of tourist infrastructure, leisure time activities (children's playgrounds, parks, theme parks, adrenaline park, people with special needs, etc.), green open spaces, sports and recreation areas, parking garage
7	green open spaces, sports and recreation areas, development of a specialised tourist infrastructure in conformity with the cultural landscape regime, leisure time activities (children's playgrounds, parks, theme parks, adrenaline park, people with special needs, etc.)
8	green open spaces
10	object in the sea – the Viližan jetty: , leisure time activities (children's playgrounds, parks, theme parks, adrenaline park, people with special needs, etc.), green open spaces, sports and recreation areas, vantage points, viewing platforms, maritime hub aquatorium: sea bottom archaeological park coast: bathing beach (part of the coast traditionally frequented by a large number of bathers)
11	expansion of the beach by sanding: managed bathing facility

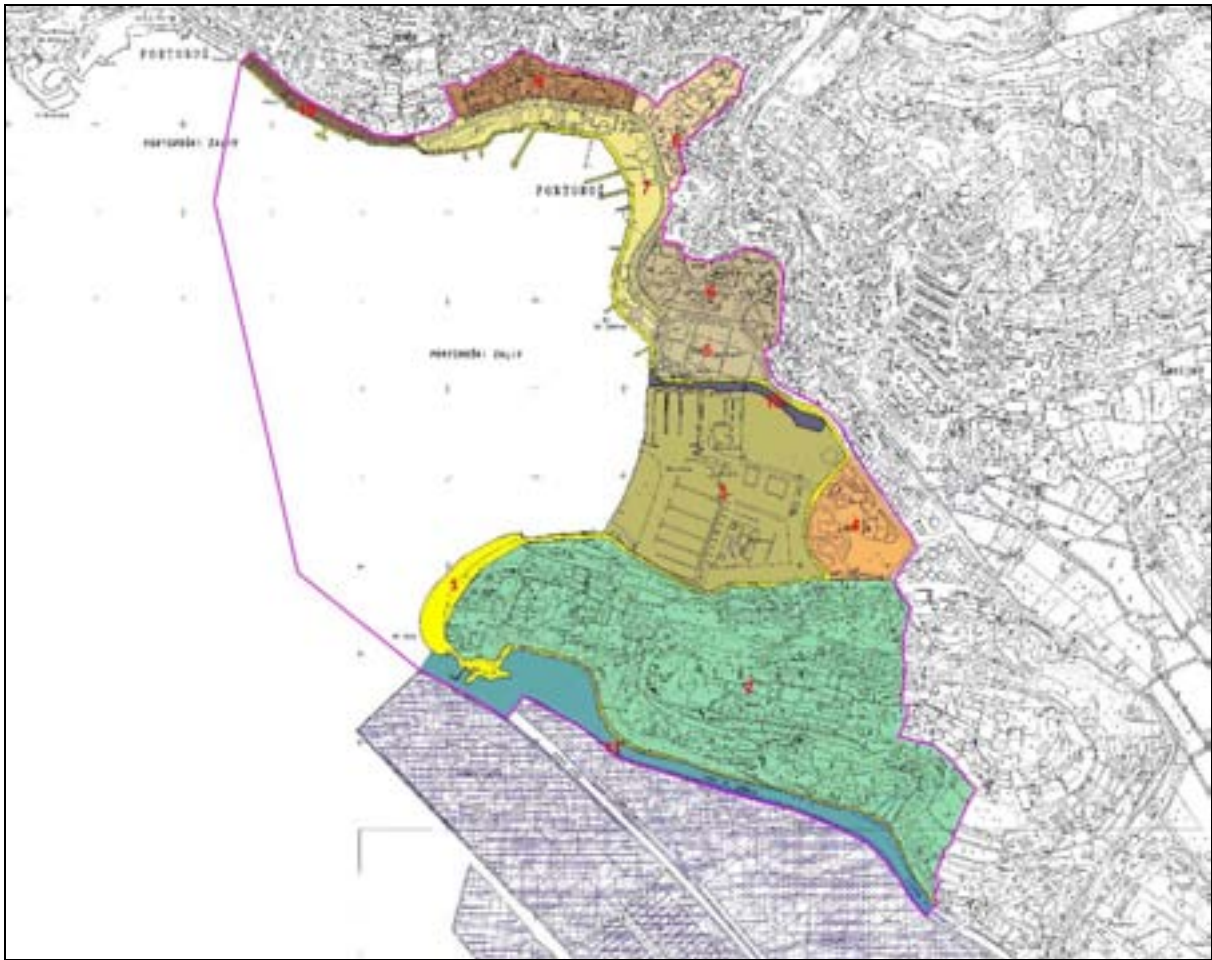
Piran: Balanced model - a search for synergistic solutions

An esplanade is set up in the coastal zone between Piran and the Sečovlje salt pans, but without any aggressive interventions into the coastline belt and the sea, and at the same time observing all protection measures. Though the expansion of the beach by sanding is not possible anywhere in the area, the coastline can be widened in several alternative ways (with nodal piers, pile structures, consoles, etc.). Individual parts of the shore can be offered up under concession as a

bathing beach for hotel guests, provided that the free passage along the coast remains unobstructed.

The centre of Portorož develops into a tourist village, the tourist infrastructure itself gets improved and perfected. The majority of the traffic is redirected to inland links, while the use of alternative means of transport increases. A series of buildings between the road and the sea is removed, subsequently the area is made over with green open spaces, especially parks and theme areas intended for various user groups. In the green open spaces it is possible to set up light nodal structures of the pavilion-type so that the view of the sea is at least in part still preserved.

In the surroundings of the Auditorium a new urban centre of Portorož is set up; it would be even possible to erect several buildings (public offices, mixed use) to reach the level of urban density. The structures erected are again of the pavilion type, some of them set up amidst the green open spaces, between which town squares and different types of public spaces would hopefully form. A similar arrangement as for the centre of Portorož is also planned between the Auditorium and Lucija. The Lucija marina is not supposed to expand. The Seča area is converted into a landscape park, with all pertinent infrastructure as well as a bathing beach. The landscape is managed but without any built structures. Accesses and areas along the St. Jernej channel are turned into green open spaces or sports and recreation areas. The boat berths in the St. Jernej channel are provided with adequate accesses. Development activities in the lagoon are not possible. Access is provided by a one-way road with areas for a safe avoidance of vehicles, a footpath, a cycle track with an appropriate urban equipment (lighting). The already expanded areas are used as parking spaces. The number of boat berths is determined according to the loading capacity of the area (in particular the number of parking spaces).



Proposed uses / programmes in spatial areas:

area	possible use
yellow line - 1	esplanade, mostly on the shoreline
2	landscape park, present use (residential, tourist – campground) coast: bathing beach (part of the coast traditionally frequented by a large number of bathers),
3	sea port, service platforms for watercrafts, tourist infrastructure, coast: maritime hub
4	further development of mixed area: central activities, commercial-business activities, public spaces, intermediate green open spaces
5	sports and recreation areas, green open spaces
6	tourist infrastructure, green open spaces set up
7	development of tourist infrastructure maximum to the present templates, green open spaces, sports and recreation areas coast: managed bathing facility, maritime hub
8	concentration of urban functions, open and public space set up
9	tourist infrastructure, open and public space set up
10	varied urban use: renovation of salt storehouses, development of tourist infrastructure

	coast: maritime hub
11	landscape modification of the St. Jernej Channel, boat berths, accesses
13	landscape modification of the Liminjan Channel, boat berths, accesses

1.6. DETAILED RULES FOR SPATIAL PLANNING OF THE COASTAL BELT PROMOTING THE PRESERVATION OF PARTICULARITIES AND VALUES OF THE COASTAL BELT

1.6.1. Substantiation

The *Rules on Spatial planning in the Coastal Zone* are based on the general rules of the Spatial Order of Slovenia and determinate environmental particularities of the area, defined by intermediate results within the framework of perception analysis. To enable a full understanding of the methodology presented as well as the final results it is necessary to set out a determinate terminological substantiation that will help understand the analytical process in the formation of the detailed rules.

Substantiation and definition of “planning and management of individual types of coastal belt”

The project task defines and presents the following types:

- urban coast,
- naturally preserved coast,
- coast with prevalently infrastructural activities.

On the basis of a detailed analysis of the area and field work we have determined that although the proposed classification defines (by form and contents) three different characteristic types, it is quite general in its definition and as such does not comprise all *structural elements of spatial planning*, which need to be defined in the *rules on spatial planning* within the framework of the Spatial Order of Municipality (SOM).

We have thus established that the term *urban coast* refers mostly to grounds inside the town area (and therefore denotes the status and function of an urbanised area), the term *naturally preserved coast* denotes its appearance in terms of landscape and degree of preservation with regard to the elements of natural and cultural landscape, while the term *coast with prevalently infrastructural activities* defines in particular the inshore terrains with a determinate (majority) share of infrastructural activities, i.e., defines the extent and nature of activities in the inshore terrains.

The Spatial Order of Slovenia (SOS) as an umbrella document for spatial planning and management (with regard to the coastal area as well) defines the general rules within the Spatial Orders of individual municipalities. In order to form *an adequate set of detailed rules of planning and management of coastal area* we have conducted a perception analysis of the entire coastal belt area, defining in it individual elements that need to be regulated by law-governed spatial planning documents.

Analytical procedure – Subdivision of the studied area into twenty-seven units classified by five categories

By subdividing the coastal belt into individual landscape, architectural and urbanistic elements we established five typical spatial sequences in which either prevalently urban or prevalently landscape architectural physiognomy was present in different majority shares. This refers to the present state of the area for which we wish that in case of spatial development detailed rules (c.f. the following pages), adjusted to each determined category, be adhered to.

For the purposes of the analysis we divided the area of the coastal belt into 27 “sequences” classified by one of the following five categories (types):

Type 1. Landscape sequence

Type 2. Landscape sequence with minimal elements of built structure

Type 3. Sequence of landscape and built structures interlacing

Type 4. Built sequence with minimal elements of natural structure

Type 5. Built sequence.

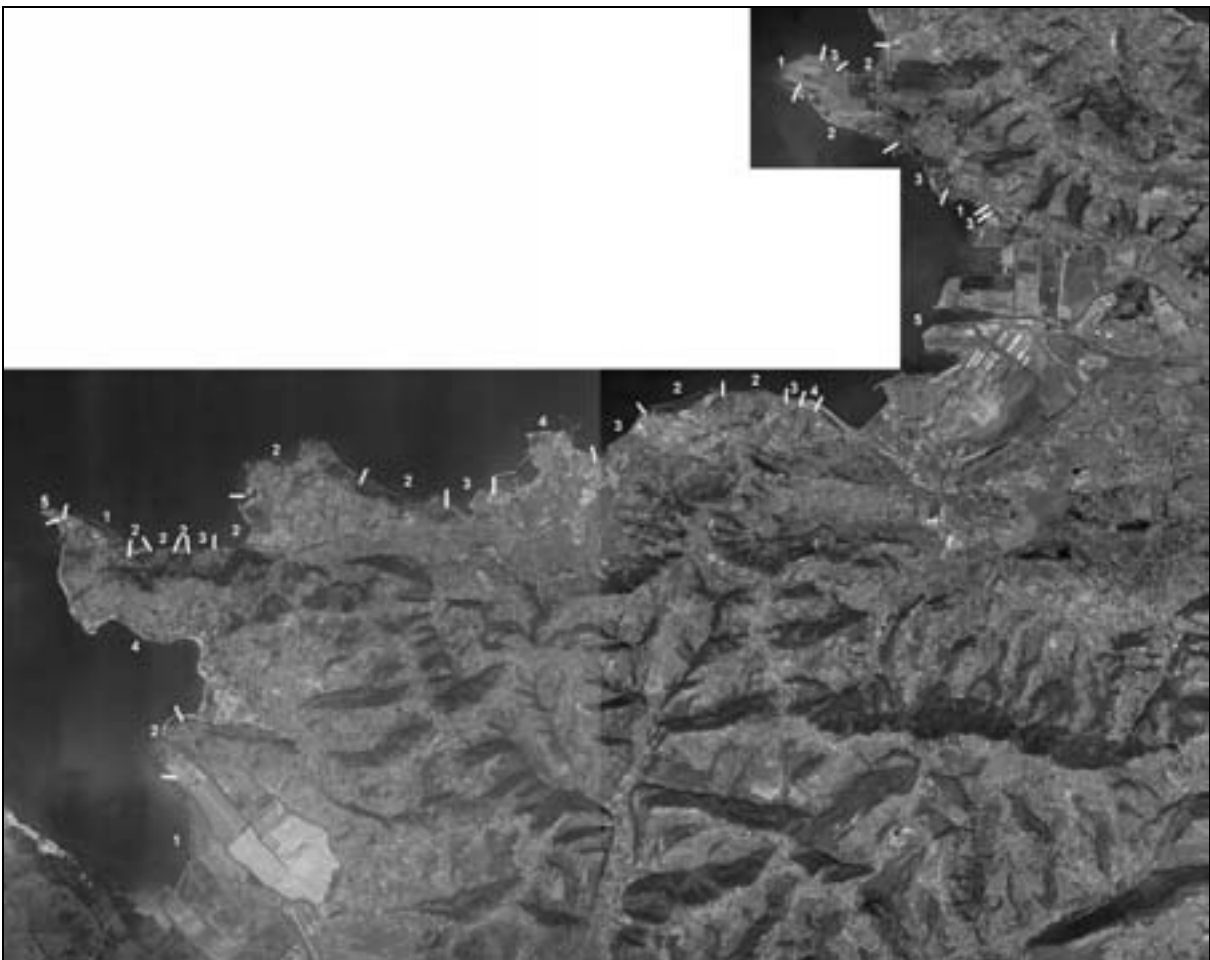


Fig. 5: Classification of the coastal belt into five categories (types).

Definition of the coastal belt by five categories

Despite the proposed subdivision of the coastal belt into five characteristic sequences it is possible to use the latter to define the coast also as *an urban coast* (prevalently type 5, partly type 4), *a naturally preserved coast* (prevalently type 1, partly type 2) and *a coast with prevalently infrastructural activities* (in particular types 3, 4 and 5).

Problems and tolerance in determining the characteristic types of spatial sequences

The proposed subdivision has been prepared for the coastal belt with a transverse and a depth dimension. It takes into account the minimum depth of a characteristic sequence (app. 25 m transversally according to the definition by the Waters Act), while the longitudinal dimension is not numerically defined, but it rather depends on the share of elements of built and/or landscape structure. Despite its relatively general character such method has enabled a relevant spatial analysis and determination of reliable results.

We would also like to point out that the boundary between individual sequences in space is not clearly definable, but represents a sharper or softer passage both in the transverse as well as longitudinal directions. For a realisation of concrete spatial acts it will be necessary to conduct more detailed spatial analyses that will take into account also all minor tolerances and practical structural situations.

1.6.2. Guidelines for spatial planning with an emphasis on the preservation of landscape features

The guidelines for spatial planning with a special emphasis on the preservation of landscape features (as prescribed by the aforementioned Decree) refer to landscape and infrastructure planning. Since the project task has already defined the individual sequences, different rules of spatial planning are prescribed for individual sequences. These are:

1. A landscape sequence represents a characteristic natural appearance of the space, a natural landscape. This mostly comprises the cliff and salt pan areas. These areas are part of landscape parks and other protected landscapes that are subject to protection ordinances and elaborate expert groundwork, guidelines and conditions for the protection.

2. Landscape sequence with minimal elements of built structure represents a recognisable and preserved natural appearance of the area, with the built elements not precluding a natural perception of the area and the sequence still representing a complete natural whole. This type of coast areas are in most cases protected, either as cultural landscapes or other protection areas, subject to protection ordinances and elaborate expert groundwork, guidelines and conditions for the protection.

Spatial planning in types 1 and 2 should adhere to the Decree on Spatial Order of Slovenia (planning in landscape; art. 54-63) and expert groundwork, guidelines and conditions of the

Institute of the RS for Nature Conservation and Public Institute for the Protection of Cultural Heritage of Slovenia.

In the landscape sequence and the landscape sequence with minimal elements of built structure the landscape-architectural spatial design should be top priority and should dictate the planning of built elements in the space.

Natural areas should be included in the system of public open areas very prudently and in accordance with the guidelines on nature preservation. It is vital that the remaining parts of the natural as well as the newly restored sea shore be preserved and that the diversity of ecosystems be protected. In the area of transition between priority nature protection areas and urbanised areas it is important to ensure a gradual passage of intensity of activities and planning, from the less intensive and sustainability-oriented in the outer boundaries of the protected areas to the more intensive in the zones closer to the urbanised areas.

The natural areas can be made part of the system of open spaces also via footpaths (the lake in Fiesa, the Strunjan Štjuža Lagoon, the salt pans), which have to be carefully planned in accordance with the principles of nature preservation.

The grounds laid with greenery and the equipment of open spaces in these areas should adhere to the nature protection guidelines. In the naturally preserved areas the greenery grounds should not stand out, instead, the natural structure of the landscape should be preserved. In natural areas protected by law it is of particular importance that the status is not changed in any way. With an introduction of new plants not indigenous to a determinate area the natural balance could be destroyed.

3. Sequence of landscape and built structures interlacing – this is a sequence in which planning and development of open space is of particular significance. In the areas of natural and built up zones alternating, as well as in the areas with a prevalently built up appearance and the intermediate green open spaces it is most important to try to connect (wherever possible) the green and other open spaces into a system and ensure a high quality of individual operations of spatial planning.

4. Built sequence with minimal elements of natural structure and 5. Built sequence

Typical of these two types is a built up or urban appearance of the space.

Some of these areas are part of architectural heritage, such as clustered mediaeval town nuclei of Piran, Izola and Koper, which are part of law-governed closed areas. The planning of green and other open spaces in these areas should be carried out with much prudence so that the grounds laid with greenery do not alter the character of the space completely (e.g., for a mediaeval town that has never had any particular zones of urban greenery it would be wrong to plan a tree-lined esplanade) – the guidelines of the Public Institute for the Protection of Cultural Heritage should be strictly adhered to.

Detailed guidelines for the planning of green and other types of open spaces

Almost the entire coastal belt of Slovenia is protected to some extent and covered by regulations, expert groundwork and guidelines.

In the planning of green and other types of open spaces in areas that are not formally protected (for which, therefore, no spatial planning guidelines have been prepared yet) the rules on the spatial planning from the Decree on the Spatial Order of Slovenia should be followed (relevant chapters: I/2.1.2.6 Green open space areas, I/2.3 PLANNING IN LANDSCAPE, I/2.3.2.3 Areas of water terrains, I/2.3.2.6 Tourism and recreation areas, I/3.2 PLANNING GREEN AREAS AND OTHER PUBLIC OPEN SPACES I/3.3 PLANNING STATIONARY TRAFFIC AREAS), **upgraded by more detailed planning guidelines:**

The public open spaces are few and fragmented. For this reason they should be connected into a system and transformed in accordance with an integrated concept of open space planning. The latter should include the local spatial characteristics, the characteristics of the coast as a tourist destination, and the Mediterranean character of the area. The transformation of unsuitable areas and an integrated concept of planning urban and green areas of the coastal belt would improve the quality of the living environment and the recreation programme.

The public green open spaces are few and poorly maintained. The lack of recreation areas is critical, whereas the access to the sea is unsatisfactory or limited. Green open spaces, parks and arboreta (a local feature) are preserved in the areas of clustered settlement or next to prominent buildings. An interesting feature is also individual exotic species and their importance to the microclimate. In planning green open spaces the existing quality greenery should be preserved (historical parks, pine trees lining the coastal road, etc.), while any planning of new ones should take into account the characteristics of the space and the existing situation (e.g., the use of autochthonous plants and other traditionally used plant species). Historical parks should be reconstructed in order to represent again a completed whole as well as a representative and identification element of a space.

Privately-owned green areas are mostly well-designed gardens and parks, not accessible to the public. If possible, they should be made accessible to the general public and included into the system of open spaces.

In the procedure of open space planning it would be first of all necessary to decide on a design approach. The first and foremost guidance in this is the awareness of local features, which can change substantially the basic planning starting points and should therefore be taken into account in the design phase.

Another important principle is “less is more.” The design should thus be simple, as simplicity is most of the time the most effective. The materials should be exclusively of local origin and high quality, as they significantly contribute to the local identity of the space, to a Mediterranean character of the space.

In addition to these basic guidances the key common design guidelines are the following:

- comfort and safety for pedestrians and the disabled;
- visually clear planning that is friendly to and suitable for the users;
- functionality and diversity of use;
- a planning in conformity with the local character of the space, with individual details of the locality;
- emphasis on the local character (and expression of the historical character of the area);
- adherence to the historical development of the urban form;

- emphasis on important entry points, distinguishing elements, views, focal points;
- establishment of clear and perceivable design features;
- uniform identity-building design;
- high quality design: simple and clear design that strengthens the local character of the space;
- use of high quality materials;
- efficient management and maintenance.

Guidelines for the planning of built open spaces (hard surface)

Paving footpaths, platforms, built urban open spaces (such as squares, street areas) and stationary traffic areas is an important part of the open space design in the coastal belt. The quality and type of materials can contribute substantially to the establishment of local typicality and the impression the space is able to give to the people.

Advantageous in terms of price, asphalt and concrete slabs are still two of the frequently used materials, replacing the local materials and thereby diminishing the local character of space. Unfortunately, it has also been known to happen that despite the recent use of new, more expensive materials the new paving is even worse, as the materials used are not of local origin and cause an even bigger confusion and fragmentation of the space.

Natural stone is still the material that can create the best and most luxurious appearance of all modern materials. In fact, the paving material contributes essentially towards emphasising the local typicality of the space.

The basic guidelines for paved areas are:

- use of local materials and paving methods
- simplicity: feeling of visual harmony (the paving should be the background, the basis to which other elements, such as facilities, grounds laid with greenery etc., are subsequently attached). For this reason, complicated patterns are not recommendable and are only suitable in exceptional circumstances, for example when we wish to connect two different materials (e.g., two paths)
- selection of high quality and durable materials
- if possible, take into account the existing quality paving and natural stone patterns (e.g., in old town nuclei)
- observance of the proportional relations between the size of an individual paving unit, the size of the area to be paved, other elements and buildings
- use of safe, stain and slip resistant materials
- the texture of the paving has to meet the requirements of all users of the space (for example, disabled people on wheelchairs etc., if the plan for a determinate section includes access for the disabled)
- paying attention to details and a good execution (one-direction paving, manhole covers)
- in the areas where the coast is planned to be stabilised by skalmet local material (sandstone) should be used, and the distribution of the rocks should follow the natural arrangement to the greatest extent possible.

A design without architectural barriers

The architectural barriers in a space preclude access to people in wheelchair and hinder the movement of other disabled people, not only the motoric impaired but also the blind and the visually impaired people. The design of the paths should take into consideration the limitations of the disabled as much as possible and allow all users of the space a safe and comfortable use of the paths.

- wherever access for people in wheelchair is planned it is necessary to build ramps with an appropriate inclination
- the very conception of open spaces should to the benefit of the blind and the visually impaired plan the placement of touchable materials in key points and a sufficiently strong contrast between paving materials and urban equipment.

Urban equipment

Urban equipment comprises benches and other types of seats, posts, dustbins, lighting, signs and other equipment (cycle facilities, railings, boards...). It contributes to a comfortable use of space and its noticeability.

The equipment can include a quality sculpture or other work of art to variegate the paths, to lay emphasis on and contribute towards the identity and typical local character of the space. It can also help to the understanding of the space in a substantial way (as a visual reference point).

Avoiding standardised urban equipment used throughout Slovenia would be most desirable and appropriate, instead one should approach a design of urban equipment special to the coastal area. Such design should observe the following guidelines:

- the urban equipment should be attractive, durable and efficient
- it should fit the space and reflect the local particularities and character. This is of the utmost importance in historical and closed areas.
- a coordination of different elements of equipment creates a feeling of harmony. The best option would be to have the equipment made specifically for a determinate space and use no standard equipment. The design should be chosen carefully and should fit the purposes of an individual space, but most of all it should be simple, of simple lines and shapes.
- the urban equipment should not stand out, but rather blend with the rest of the space. Exceptionally, it can form a prominent feature when we want to emphasise a certain element reflecting the character of the space (e.g., bollards for boat mooring in the harbour...).
- historical areas should reflect the historical character of the space. If there exist examples of historical equipment or they can be reproduced from paintings or photographs, they could represent a possibility for the use of the same design, if they prove suitable for bringing out the local character. A historical piece of equipment can also be used as a basis for designing a new set of equipment.
- whenever possible, it is sensible to include artists in the process of designing equipment and other decorative elements of the path.
- use durable, long-lasting materials
- the positioning of the urban equipment is most significant: it should not compromise the visual composition of the whole setting, the views etc., nor should it preclude free movement. If possible, the number of elements should be kept low: signs can be fixed to lamp posts, lights and signs can be fixed on buildings.

Guidelines for Management of Designed Green Surfaces and Individual Planting Areas

Planting material, trees in particular, have an important role especially in coastal urban areas. The remnants of forests, smaller and larger clusters of trees, constitute a crucial separation element in otherwise characteristically condensed building patterns. Planting may decisively denote the local character of the physical space and is as such of key importance for the establishment of identity. Owing to the Mediterranean climate, the Slovenian littoral region allows luxuriant vegetation that cannot grow in other regions across Slovenia. Therefore it is above all necessary to use region- and climate-specific plants. In combination with other designing approaches, such a starting point should contribute to enhanced recognizability of the area, respect for local tradition and would at the same time be in compliance with ecological requirements of selected plant species. Most appropriate for the purposes of the project are plant species with high heat and drought tolerance that are thus most adapted to the local growing conditions.

With the predominant percentage of conifers growing in this area, the ratio between coniferous and deciduous tree species differs from that elsewhere in Slovenia. Owing to their excellent adaptation to the climate conditions, stone pines, Alpine pines, cedars, and cypresses have an especially crucial role. This is also made clear by their traditional use in the Slovenian littoral region. As the most important plants in landscaping public open spaces, trees should also be the most represented element for these purposes. Most recommended among bushes are thickly flowering varieties as well as varieties with attractive and often diversely coloured foliage. Majority of bushes are ever-green. Also useful are shrubbery plants or perennials with scented aromatic foliage or fragrant flowers. Since tourism is essential for the coastal region, it is also appropriate to use highly flowering tree varieties, such as bigleaf magnolias, crape myrtles and albizias. The traditional use of palm trees may in part be replaced by other plants, as palms, not sufficiently adapted to the climate conditions, do not grow very well.

Some plants are (or were) considered particularly characteristic for this part of the coast and are therefore used in an accordingly greater extent. Here, above all, belong oleanders and stone pines. The use of exotic plant varieties should thus be more an exception as the rule.

Planting the coastal area with vegetation should be distinctive, so that it can also be visible from the sea. At the same time, the planting should be planned in such a manner so as not to obstruct the view from the land within the narrow coastal strip. The planting must be based on the use of evergreen and autochthonous, including flowering plants. And most importantly, the planting should also provide shade, especially in tourist resorts, which during summer are crowded throughout the day.

Characteristic, important **trees** grow along the entire coastal strip. Especially roadsides are dominated by umbrella-shaped stone pines. The seashore is also often covered with other pine varieties, and some locations offer specimens of evergreen oaks and cedar. All these trees require protection, in particular fully grown-up ones. Furthermore, in view of their important role, the removal of these tree varieties should be allowed only in exceptional cases, in so far such a measure would prove indispensable within the frame of a broader, integrated landscaping concept or protection reasons. When planting stone pines we should also take into account the risk of pavement rippling due to tree roots.

Trees can define a space or its function, as well as help build and establish identity. Planting high-trunked trees is considered appropriate, since they allow unobstructed view of the sea and at the same time provide shade. The vegetation spanning between hotels and the shore should allow clear view of the sea.

Trees have a valuable impact on the climate, providing shade and cooling the air through evaporation. With their texture, movement and expression of seasons, they stand in contrast to the urban, built-up space.

Shrubbery has an important role of providing screenings, contrastive background against other elements, etc.

It should be borne in mind that the maintenance of shrubbery is much more demanding than that of trees. In so far adequate maintenance cannot be guaranteed, it is recommended that the use of shrubbery should be limited if not even completely avoided.

1.6.3. Establishment of Distinctive Features in Spatial Management along Coastal strip

On the basis of the analysis of the situation, set of management elements (1st and 2nd phase of the study) and determined starting points in developing spatial interventions in the coastal strip (3rd phase of the study), we have defined characteristic architectural, urbanistic and landscape elements, as well as distinctive features (chapter 3.2 - 3rd phase) which are not sufficiently covered under the general rules of the Spatial Order of Slovenia.

Specific elements underlying spatial management in the coastal strip are integrated in the following thematic clusters:

- I. Visual restraint, perception of characteristic spatial sequences of the coast
- II. Panoramic silhouette of the coast
- III. Panorama sea – coast and vice-versa
- IV. Typology of building structure in the coastal strip
- V. Accessibility and transitivity of the coast

Their management requires certain amendments to and upgrading of the Spatial Order of Slovenia based on intermediate study results in determined characteristic types of spatial sequences of the coast (chapter 3.2 – 3rd phase).

1.6.4. Specific Rules on Spatial Management in Coastal Strip

Specific rules governing spatial management arise from determined *distinctive features of spatial management in the coastal strip* (visual restraint, silhouette, panoramas, typology of building structure, accessibility and transitivity of the coast).

RULE No 1:

Add I. – visual restraint

- in implementing spatial management it is necessary to not only maintain but also upgrade the existing image of the coast, i.e. architectural and landscape qualities, especially in characteristic spatial sequences of Types 1, 2 and 3;

- in developing new spatial conceptions, spatial interventions should be performed on the basis of public architectural and urbanistic calls for proposals ensuring participation and application of competent expertise and consequently the development of quality spatial planning and management solutions.

RULE No 2:

Add II. – silhouette

- spatial interventions should yield a characteristic silhouette of the coast, including both building structure and landscape;
- special significance is attributed to silhouettes of historical town centres, natural cliffs and characteristic elements of the terraced cultural landscape, which are already protected under relevant regulations;
- new spatial interventions complement the existing situation or upgrading the characteristic spatial image;
- spatial management requires detailed determination of regulation lines, orientation of constructions and roof ridges, spacing between constructions and parcellation;
- conspicuous and distinctly voluminous buildings should be fit into suitable background so as not to obstruct visual perception of the characteristic silhouette.

RULE No 3:

Add III. – panoramas

- panoramas of the sea from the coast and panoramas of the coast from the sea are ensured by transverse visual distances in the space, therefore any spatial interventions should ensure suitable visual transparency;
- spatial interventions should be planned in such a manner so as to avoid the unwanted obstruction of view by building structure and excessively high vertical vegetation, as well as provide views of the sea from public areas, paths, parks and markets;
- in planning spatial interventions it is necessary to perform an in-depth analysis of the space and retain or upgrade the existing visual distances and/or create new visual distances;
- the depth of visual distances varies from one concrete spatial situation to another.

RULE No 4:

Add IV. – building structure

- in the sequence of Type 1, there are, as a rule, no building structures;
- in the sequence of Type 2, building structures appear on an exceptional basis, as fortifications of the shore, building of water sites, installations and constructions of mobile pavilion-like designs for the purposes of bathing and tourism activities or sport and other recreational activities, as well as fishery, mariculture, etc.;
- building structure appears to a greater extent in characteristic sequences of Types 3, 4 and 5;

- in areas outside building heritage preservation zones, the typology of objects in new spatial plans may also follow modern architectural plans,
- due to the special significance of the coastal space, spatial planning and management solutions should, as a rule, be obtained on the basis of architectural and urbanistic calls for proposals;
- building structure management requires detailed determination of: the formulation of construction volume, facades, openings and roofs, the use of construction materials, the design of details and landscaping the surroundings of the constructions;
- in conceptualising construction volumes, larger construction volumes should, as a rule, be fit well enough into the hinterland.

RULE No 5:

ADD V. – accessibility and transitivity

- spatial interventions should ensure accessibility and transitivity of the coast;
- accessibility of the coast shall mean unlimited and unobstructed access from the hinterland to public areas on/at the coast;
- transitivity of the coast shall mean unlimited and unobstructed transit through public areas in the longitudinal direction of the coast;
- transitivity and accessibility of the coast are limited for motor traffic;
- new spatial conceptions should ensure adequate accessibility for personal and/or public transport and at the same time guarantee that public footpaths are relieved from traffic;
- accessibility and transitivity of the coast shall be ensured by appropriate arrangement of lands used for intended purpose, stipulated parcellation and regulation lines;
- accessibility and transitivity of the coast should be ensured without any architectural obstacles;
- parking areas shall be constructed outside the coastal strip;
- transitivity of the coast shall be temporally and spatially unlimited for intervention vehicles (wherever possible);
- transitivity of the coast shall be exceptionally ensured for delivery vehicles (wherever possible and for limited periods of time).

1.6.5. Priorities in Spatial Management by Individual Characteristic Sequences

Spatial management must be based on the existing situation classified by one of five categories. Spatial interventions must be in line with the existing qualities (natural and building structures) or upgrade the space in a visual and functional qualitative manner.

1	LANDSCAPE SEQUENCE	Distinctive landscape area without or with minimum added buildings and constructions. This sequence primarily includes natural landscape or remnants thereof and cultural landscape. The structure of the area is dominated by landscape elements, i.e. natural elements (trees, forests, bushes and shrubs, afforestation areas, visible relief features, cliffs, gravel and rocky seashore, etc.) or cultural landscape elements (fields, vineyards).
I.	Visual restraint	<ul style="list-style-type: none"> - no intervention is allowed in the landscape sequence that would degrade the existing or integral landscape image of the area - visual restraint represents harmonious natural wholes and implies the preservation of the natural image of the coast
II.	Silhouette	<ul style="list-style-type: none"> - it is necessary to preserve the characteristic natural silhouette of the coast, especially vertical and linear vegetation, green surfaces and other structural elements of the landscape - natural cliffs, terraces and the ruggedness of the coastal line represent landscape phenomena of the coastal strip
III.	Panoramas	<ul style="list-style-type: none"> - spatial visual distances are ensured by appropriate vegetation cover design (individual elements, smaller groups and entire areas) - visual distances must be provided in both directions: from the coast seawards and vice versa, as well as in both transversal and longitudinal directions
IV.	Building structure	<ul style="list-style-type: none"> - building structure does not appear in the sequence of Type 1, exceptionally, however, it is only present in the form of water constructions and installations for the protection against harmful impacts of waters, harbour infrastructure, as well as constructions and installations ensuring safe navigation
V.	Accessibility and Transitivity	<ul style="list-style-type: none"> - subject to protection-related requirements; within protection zones, transitivity and accessibility are defined by protection regimes - the coast must be accessible to all users

2	LANDSCAPE SEQUENCE WITH MINIMUM ELEMENTS OF BUILDING STRUCTURE Distinguishable and preserved natural or cultural landscape, a natural interface between land and sea, containing individual elements of building structure; within the wider ambient, building elements do not interfere with the natural spatial perception; the sequence still presents landscape as a whole.	
I.	Visual restraint	<ul style="list-style-type: none"> - preserves the natural image of the coast and surrounding areas - building elements interlace with nature, remaining invisible in the environment
II.	Silhouette	<ul style="list-style-type: none"> - the natural silhouette and entire landscape remain preserved - building structure complements the natural silhouette to a minimum extent
III.	Panoramas	<ul style="list-style-type: none"> - visual distances are accomplished with vegetation elements and only exceptionally with elements of building structure
IV.	Building structure	<ul style="list-style-type: none"> - appears to a minimum extent in the transition zone between land and sea, - appears as an element of protected zones (cultural and natural monuments, landscape parks) - appears in the form of provisional constructions
V.	Accessibility and Transitivity	<ul style="list-style-type: none"> - subject to protection-related requirements; within protection zones, transitivity and accessibility are defined by protection regimes - the coast must be accessible to all users

3	SEQUENCE OF INTERLACING LANDSCAPE AND BUILDING STRUCTURES Equal exchange of natural and urban zones, strips, harmonious wholes; possible reclassification into Type 2 or 4	
I.	Visual restraint	<ul style="list-style-type: none"> - preservation of vegetation maintaining the balance between built and non-built areas - building elements have a limited visual affect on the coastal strip - construction of larger complexes is implemented in the hinterland
II.	Silhouette	<ul style="list-style-type: none"> - preservation of the landscape silhouette with characteristic building structure - building structure has a direct affect on the coastal strip
III.	Panoramas	<ul style="list-style-type: none"> - appropriate visual distances in the area are created by interlacing building structure and vegetation
IV.	Building structure	<ul style="list-style-type: none"> - principally dispersed building structure
V.	Accessibility and Transitivity	<ul style="list-style-type: none"> - paved or sand footpaths running transversally to or along the coast

4	BUILDING SEQUENCE WITH MINIMUM NATURAL STRUCTURAL ELEMENTS Urbanised space containing intermediate green surfaces (developed city landscapes; parks, playgrounds, etc.), inducing a “soft” urban feel.	
I.	Visual restraint	<ul style="list-style-type: none"> - presents harmonious building wholes, lines - landscape structural elements appear as individual elements within concentrated building structures
II.	Silhouette	<ul style="list-style-type: none"> - in planning new building structures the existing building structure image should be maintained or upgraded - building structure must follow natural coastal lines, terraces or slopes
III.	Panoramas	<ul style="list-style-type: none"> - visual distances are created with building structures, partly with vegetation
IV.	Building structure	<ul style="list-style-type: none"> - new building structures follow contemporary architectural trends and include necessary green interventions - green interventions appear as soft transitions from one urban cluster to another
V.	Accessibility and Transitivity	<ul style="list-style-type: none"> - promenading areas are integrated in green surfaces and other public open spaces (markets, plateaus, recreational areas, etc.) - the formulation of public surfaces on the coastal promenade contains urban elements

5	BUILDING SEQUENCE Characteristic urban image of the space, architectural heritage or distinctive contemporary typology. Subcategories: (protected historical town centres; technological structure - industry, marina, port, shipyard; residential structure; public areas, etc.)
I.	Visual restraint - the condensation of building structure must ensure the characteristic visual recognizability
II.	Silhouette - in designing new building structures the existing urban silhouette should be upgraded - it is necessary to ensure vertical consistency of constructions and conformity with the existing height of building
III.	Panoramas - visual distances are created with building structures, wherever possible and/or necessary
IV.	Building structure - historical core of distinctive architectural nature should function as a whole; new building appears in the form of in-fill building or is moving into the hinterland - typology: individual building, housing complexes, multipurpose buildings and public buildings - they all may expand in the hinterland
V.	Accessibility and Transitivity - promenading areas are integrated in green surfaces and other public open spaces (markets, plateaus, recreational areas, etc.) - the formulation of public surfaces on the coastal promenade contains predominantly urban elements

1.7. INSTRUMENTARIUM

1.7.1. Criteria for Evaluation of Interventions in Coastal Strip and Evaluation of Models

The methodology of evaluating spatial interventions in the coastal strip is conceptualised as a comprehensive synthesis of individual aspects of treatment that are based on statutory contents and other specificities of the coastal space. *The criteria for the evaluation of interventions in the coastal strip* are intended for the purpose of selecting an optimum solution within the framework of alternative opportunities, for which reason they cover all necessary aspects of treatment. The evaluation of models applies the *ponder-appraisal* method, which allows the use of values and appraisals for individual contents.

Due to a considerable number of ambience and qualitative specific features of the treated area, the major part of the criterion-based analytics is intended for the purposes of visual assessment of spatial arrangements.

Determination of Criteria for Evaluation of Interventions in Coastal Strip

In principle, the methodology aims at evaluating individual programming conceptions and related constructions and images of the space. In the selection procedure, the following individual impacts of spatial interventions shall be subject to evaluation:

- impacts on the development of natural spatial elements,
- impacts on the development of created spatial elements,
- impacts on protected and preserved areas,
- impacts on the protection and development of cultural heritage,
- impacts on the development of social environment,
- impacts on the development of economic environment,
- impacts on the development cultural and symbolically recognisable environment.

According to applicable legislation (Article 15 of the Spatial Order of Slovenia), the selection procedure should evaluate alternative solutions by taking into account the aspect of rational use of space, functional aspect, protection aspect, economic aspect, as well as the aspect of acceptability within the local social environment. With the impacts on *social and economic development* being to a large extent comparable to other (non-coastal) spaces and the specificity of the coastal strip being of predominantly visual nature, specific analytics shall aim at treating *spatial perception*, including natural elements and building structure.

What is Subject to Evaluation?

On the basis of assumed impacts, statutory treatment contents (Article 15 of the Spatial Order of Slovenia) and intermediate results, we have developed two groups of criteria that facilitate a two-phase implementation of the procedure. The first phase comprises the evaluation of development models, for which reason the criteria are brought in line with the programming and strategic macro-location assessment, respectively. The second phase covers the evaluation of individual spatial arrangements on the basis of a selected model and in accordance with a greater number of micro-ambience criteria:

A: Criteria for Evaluation of Development Models – Programming Conception Criteria

B: Criteria for Evaluation of Interventions in Coastal strip – Micro-ambience Criteria

1.7.2. Criteria for Evaluation of Development Models

The criteria for the evaluation of development models are intended for the strategic assessment of individual programming and macro-location conceptions and determination of an optimum solution within the framework of available opportunities.

A: Criteria for Evaluation of Development Models		MODEL 1 Protection model		MODEL 2 Development-oriented model		MODEL 3 Balanced model	
		Appr.	Sum				
CRITERION	ponder						
1. ASPECT OF RATIONAL USE OF SPACE							
2. FUNCTIONAL ASPECT							
3. PROTECTION ASPECT							
4. ECONOMIC ASPECT							
5. ASPECT OF ACCEPTABILITY WITHIN LOCAL SOCIAL ENVIRONMENT							
Total							

Detailed classification of the criteria:

A: Criteria for Evaluation of Development Models		MODEL 1 Protection model		MODEL 2 Development-oriented model		MODEL 3 Balanced model	
		Appr.	Sum				
CRITERION	ponder						
1. ASPECT OF RATIONAL USE OF SPACE							
Impacts on the development of created spatial elements:							
- aspect of rational use of space, including the assessment of spatial arrangement suitability for spatial development within a broader area (determination of most influential area with regard to the significance of the programmes),							
- settlement aspect,							
- infrastructure aspect: traffic, municipal utilities,							
- landscape development and protection aspect,							
- potential conflicts with the existing uses							
2. FUNCTIONAL ASPECT							

- functional aspect, including the assessment of spatial suitability with regard to all relevant technical or technological characteristics of and opportunities for the construction and technical implementation of spatial arrangement,							
3. PROTECTION ASPECT							
Impacts on the development of natural spatial elements:							
- relief,							
- soils,							
- sea,							
- waters,							
- air,							
- forest,							
- agricultural lands							
Impacts on protected and preserved areas under nature preservation regulations:							
- by areas and regimes (for each individual area within the influential area)							
Impacts on the protection and development of cultural heritage:							
- by areas and regimes (for each individual area within the influential area)							
4. ECONOMIC ASPECT							
Impacts on the development of economic environment:							
- appraisal of potential impact on economic growth / of the municipality, region, state,							
- appraisal of general impact on the structure of the municipality population incomes,							
- appraisal of general impact on the municipality labour market,							
- appraisal of impacts by principal economic development stakeholders – definition by each individual area within the influential area (e.g. for the Ankaran area: the Port of Koper, Instalacije d.o.o., LTO etc.),							
- economic aspect, including the assessment of spatial suitability with regard to the costs of the spatial arrangement implementation, together with the costs of lands, indemnities, compensations, operation and maintenance, mitigation measures, benefits to users, maintenance and rehabilitation							
5. ASPECT OF ACCEPTABILITY WITHIN LOCAL SOCIAL ENVIRONMENT							
Impacts on the development of social environment:							
- appraisal of impact on demographic trends (trend in the number of the population) within the influential area,							
- impact on the characteristics of the spatial distribution of the population (number, density, structure, distribution, mobility, migrations) within the influential area,							
- aspect of acceptability within the local social environment – appraisal of estimated satisfaction level in the population / local community / within the influential area,							
- appraisal of estimated impacts on marginal groups within the influential area							
Impacts on the development of cultural and symbolically recognisable environment:							
- identity,							
- recognizability,							
- ambientality,							

- panoramas from entrance roads, from the sea, from the proximity, from the distance, from specific observation points									
Harmonisation of economic, social, spatial, environmental and cultural development and protection aspects									
Total									

1.7.3. Criteria for Evaluation of Interventions in Coastal Strip – Micro-ambience Criteria

The criteria for the evaluation of spatial interventions and micro-ambience criteria, respectively, are intended for the assessment of individual spatial arrangements (programming, architectural and urbanistic conceptions). Due to specific ambience features of the area, a special part of the analytics is dedicated to comprehensive visual assessment. Below we shall present the establishment of micro-location criteria evaluating spatial interventions in the coastal strip with regard to the perception of characteristic spatial sequences and building structure.

1.7.3.1. Characteristic Types of Spatial Sequences

In the preliminary phases, we have analysed the recognizability of the coastal strip from the perception aspect. For the purposes of the analysis, the area was segmented into 27 spatial sequences classified into one of five categories. Presented below is the summary of basic characteristics underlying individual sequences, on the basis of which micro-ambience criteria are determined for the evaluation of spatial interventions in the coastal strip.

1. LANDSCAPE SEQUENCE

- A distinctly landscape space without or containing minimum added buildings and constructions. This sequence primarily includes natural landscape or the remnants thereof, as well as cultural landscape. In the sense of its structure, the sequence is dominated by landscape elements, i.e. natural elements (trees, forests, bushes and shrubs, afforestation areas, visible relief features, cliffs, gravel and rocky seashore, etc.) or cultural landscape elements (fields, vineyards).

Subject to evaluation: → **the level of preservation and upgrading of the existing image of the space**

2. LANDSCAPE SEQUENCE WITH MINIMUM ELEMENTS OF BUILDING STRUCTURE

- Distinguishable and preserved natural or cultural landscape, a natural interface between land and sea, containing individual elements of building structure; within a wider ambient, building elements do not interfere with the natural spatial perception; the sequence still presents landscape as a harmonious whole.

Subject to evaluation: → **the level of preservation of the existing situation, including the scope and quality of its upgrading**

→ **the level of preservation and upgrading of the existing spatial image**

3. SEQUENCE OF INTERLACING LANDSCAPE AND BUILDING STRUCTURES

- Equal exchange of natural and urban zones, sections, harmonious wholes.
- Orientations: into Type 2 or 4

Subject to evaluation: → **design and function quality of interlacing elements of natural and building structures**

→ **the level of preservation and upgrading of the existing image of the space**

→ **the possibility to remodel the sequence into Type 2 or 4**

4. BUILDING SEQUENCE WITH MINIMUM NATURAL STRUCTURAL ELEMENTS

- Urbanised space containing intermediate green areas (developed city landscapes; parks, playgrounds, etc.), inducing a “soft” urban feel.

Subject to evaluation: → **the level of preservation and upgrading of the existing spatial image**

→ **the scope and form of architectural interventions introducing new quality in the space**

5. BUILDING SEQUENCE

- Characteristic urban image of the space, architectural heritage or distinctive contemporary typology.
- Subcategories: (protected historical town centres; technological structure - industry, marina, port, shipyard; residential structure; public areas, etc.).

Subject to evaluation: → **the level of preservation and upgrading of the existing spatial image**

→ **the scope and form of integrating elements of landscape structure (green system)**

→ **the scope and form of architectural interventions introducing new quality in the space**

By means of the perception model, we wish to draw attention to the necessity of considering the *broader scenery* in designing individual architectural and urbanistic arrangements. The proposed classification of spatial sequences facilitates the establishment of the identity of the coastal strip, balance between requirements and wishes, introduction of necessary new soft interfaces between individual contentual and spatial areas, provision of ambience impacts and at the same time preservation of natural and cultural diversity in the coastal strip.

Starting points in developing spatial interventions

→ **the basic starting point of the spatial analysis is the tendency to preserve the existing scope of the natural image of the coast, particularly in the sequences of Types 1 and 2**

→ **degraded areas still containing elements of natural and cultural landscapes require adequate rehabilitation (possible revitalisation and renaturation or even introduction of a new programme) to the greatest extent possible; the elements of building structure should be properly fit in the space in order to co-create the characteristic spatial diversity**

- **building sequences should contain as many elements as possible of a designed city landscape**
- **in large-scale spatial arrangements (long-term arrangements), as well as planning and managing the network of public spaces, consideration should primarily be given to the characteristic coastal image, for which reason new interventions are to be developed as measures fostering qualitative upgrading of spatial ambience**

Criteria for evaluation of interventions in relation to characteristic spatial sequences:


- **the level of preservation and upgrading of the existing “holistic” spatial image**
- **the level of preservation of individual elements of natural and cultural landscapes, including the scope and quality of their upgrading**
- **design and function quality of interlacing elements of landscape and building structures**
- **scope and form of architectural interventions introducing new quality in the space**

1.7.3.2. Building structure - Elements of Visual Perception

On the basis of field records made on the current situation, we have determined individual typological characteristics of the building structure in the coastal strip. In dealing with the area we have primarily focused on the following:

- individual elements of urbanistic design,
- individual elements of architectural design,
- general spatial characteristics and problems of building in the coastal area.

On the basis of the records and analysis, we have selected management elements in analogy to the statutory elements as laid down in the Spatial Order of Slovenia. In addition to general elements, our spatial analysis also identified numerous specificities of the treated area that are not given sufficient attention in the Spatial Order of Slovenia (or their specific definition makes them difficult to determine in the form of statutory rules). For this reason we shall provide an additional list of certain orientations that will enable the complementation of the existing rules with appropriate *detailed rules for spatial management* in the coastal strip.

<p>WHAT DO WE MANAGE?</p>  <p>ELEMENTS OF BUILDING STRUCTURE MANAGEMENT IN THE COASTAL STRIP</p>	<p>SPATIAL ORDER OF SLOVENIA SPATIAL MANAGEMENT</p> <p>BUILDING STRUCTURE MANAGEMENT</p>
<p>01 Regulation lines and building structure boundary</p>	<p>I/3 CONSTRUCTION PLANNING AND BUILDING Article 86 (laying down standards and conditions for</p>

02	Purpose, functional design and position of constructions	construction planning and building)
03	Orientation of roof ridges	I/3.1 BUILDING STRUCTURE PLANNING Article 87 (building structure planning)
04	Parcellation: size and forms of construction parcels	Article 88 (building typology)
05	Building rate or density	Article 89 (regulation lines)
06	Green surfaces	Article 90 (construction height – height criteria)
07	Public spaces, open spaces	Article 91 (utilisation rate in building plots)
08	Building volume	Article 92 (size and design of constructions)
09	Replacement construction	Article 93 (sizes and dimensions of building plots)
10	Extensions and elevations	Article 94 (purpose, functional design and position of constructions)
11	Auxiliary or elementary constructions	I/3.2 PLANNING OF GREEN SURFACES AND OTHER PUBLIC OPEN SPACES
12	Typology of building and architectural elements	Article 95 (planning of green surfaces)
13	Facades and openings	Article 96 (planning of other public open spaces)
14	Roofs	I/3.3 PLANNING OF PARKING AREAS
15	Construction material	Article 97 (planning of parking areas)
16	Details and ornaments	I/3.4 PLANNING AND BUILDING OF ELEMENTARY CONSTRUCTIONS
17	Colour, fences, surroundings	Article 98 (planning and building of elementary constructions)

<p>SPECIFICITIES OF BUILDING STRUCTURE IN COASTAL STRIP</p> <p>↓</p> <ol style="list-style-type: none"> 1. visual restraint, perception of sequences 2. panoramic silhouettes 3. panorama sea/coast 4. typology of building structure, landscape 5. accessibility and transitivity 	<p>GUIDELINES AND RECOMMENDATIONS FOR NECESSARY AMENDMENTS OF PROVISIONS IN SPATIAL ORDER OF SLOVENIA</p> <p>MANAGEMENT ELEMENTS</p> <p>SPATIAL MANAGEMENT STANDARDS, CRITERIA AND CONDITIONS</p> <p>THAT ARE NOT TREATED IN SPATIAL ORDER OF SLOVENIA</p>
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<p>MICRO-AMBIENCE CRITERIA <i>for spatial interventions in the coastal strip</i></p> <p>↓</p> <p>DETAILED RULES FOR SPATIAL MANAGEMENT IN COASTAL STRIP</p>	<p>DETAILED RULES FOR SPATIAL MANAGEMENT IN COASTAL STRIP</p> <p>I/3 PLANNING AND BUILDING OF CONSTRUCTIONS</p> <p>I/3.1 PLANNING OF BUILDING STRUCTURE</p> <p>I/3.2 PLANNING OF GREEN SURFACES AND OTHER PUBLIC OPEN SPACES</p> <p>I/3.3 PLANNING OF PARKING AREAS</p> <p>I/3.4 PLANNING AND BUILDING OF ELEMENTARY CONSTRUCTIONS</p>
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Starting points in developing spatial interventions

Spatial arrangements in the coastal strip should:

- *preserve protected zones of natural and cultural landscapes*
- *preserve and upgrade the existing panoramic silhouette of the coast*
- *preserve and upgrade the characteristic ambience of individual locations*
- *preserve and upgrade the Mediterranean typology of building structure or, by means of suitable interventions, introduce new quality and architectural screen in the space*
- *avoid building in excessive volumes (exceptionally in explicitly urbanised sequences)*
- *involve minimum interventions with building structure in the coastal strip (in compliance with the general trend of spatial arrangements in the coastal strip)*
- *guarantee, with spatial interventions, smoothest possible access to and transitivity of the coast*
- *ensure, by means of building structure, modification as well as upgrading of the existing situation in the coastal strip*
- *facilitate the realisation of multifunctional use of space*

Characteristic elements of building structure management in the coastal strip:

1. visual restraint, perception of sequences

Subject to evaluation: → - regulation lines and building structure boundary

- purpose, functional design and position/orientation of constructions
- auxiliary or elementary constructions, replacement construction
- green surfaces, public spaces, open spaces

2. panoramic silhouettes

Subject to evaluation: → - building volume
- extensions and elevations

3. panorama: sea/coast

Subject to evaluation: → - panoramas
- position, orientation of constructions

4. typology of building structure

Subject to evaluation: → - typology of building and architectural elements
- facades and opening
- roofs
- construction material
- details and ornaments
- colour, fences, surroundings

5. accessibility and transitivity

Subject to evaluation: → - parcellation: size and dimensions of building plots
- building rate or density

B: Criteria for Evaluation of Interventions in Coastal strip – Micro-ambience Criteria		MODEL 1		MODEL 2		MODEL 3	
		Protection model		Development-oriented model		Balanced model	
CRITERION	ponder	Appr.	Sum				
1. ASPECT OF RATIONAL USE OF SPACE							
2. FUNCTIONAL ASPECT							
3. PROTECTION ASPECT							
4. ECONOMIC ASPECT							
5. ASPECT OF ACCEPTABILITY WITHIN LOCAL SOCIAL ENVIRONMENT							
6. SPATIAL - PERCEPTIONAL ASPECT							
6.1 aspect of perception of characteristic spatial sequences							
6.2 building structure aspect							

Total							

Detailed classification of the criteria:

B: Criteria for Evaluation of Interventions in Coastal strip – Micro-ambience Criteria		MODEL 1 Protection model		MODEL 2 Development-oriented model		MODEL 3 Balanced model	
		Appr.	Sum				
CRITERION	ponder						
1. ASPECT OF RATIONAL USE OF SPACE							
2. FUNCTIONAL ASPECT							
3. PROTECTION ASPECT							
4. ECONOMIC ASPECT							
5. ASPECT OF ACCEPTABILITY WITHIN LOCAL SOCIAL ENVIRONMENT							
6. SPATIAL - PERCEPTIONAL ASPECT evaluated on the basis of pre-determined sequence(s)							
6.1 Aspect of perception of characteristic spatial sequences							
Type 1: landscape sequence							
<i>- the level of preservation and upgrading of the existing spatial image</i>							
Type 2: landscape sequence with minimum elements of building structure							
<i>- the level of preservation of the existing situation; the scope and quality of upgrading</i>							
<i>- the level of preservation and upgrading of the existing spatial image</i>							
Type 3: sequence of interlacing landscape and building structures							
<i>- design and function quality of interlacing elements of natural and building structures</i>							
<i>- level of preservation and upgrading of the existing spatial image</i>							
<i>- possibility to remodel the sequence into Type 2 or 4</i>							
Type 4: building sequence with minimum natural structural elements							
<i>- the level of preservation and upgrading of the existing spatial image</i>							
<i>- the scope and design of architectural interventions introducing new quality into the space</i>							
Type 5: building sequence							
<i>- the level of preservation and upgrading of the existing spatial</i>							

<i>image</i>									
- the scope and design of integrating elements of landscape structure (green system)									
- the scope and design of architectural interventions introducing new quality into the space									
6.2 Aspect of model, scope and design of building structure									
1. visual restraint, perception of sequences									
- regulation lines and building structure boundary									
- purpose, functional conception and position or orientation of constructions									
- auxiliary or elementary constructions, replacement construction									
- green surfaces, public spaces, open spaces									
2. panoramic silhouettes									
- building volume									
- extensions and elevations									
3. panorama sea/coast									
- panoramas									
- position, orientation of constructions									
4. typology of building structure									
- typology of building and architectural elements									
- facades and openings									
- roofs									
- construction material									
- details and ornaments									
- colour, fences, surroundings									
5. accessibility and transitivity									
- parcellation: size and dimensions of building plots									
- building rate or density									
Total									

1.7.4. Conclusions and Guidelines regarding Criteria for Evaluation of Spatial Interventions in Coastal strip and Evaluation of Models

The determined criteria principally present the methodology, which must be complied with in conducting assessments of spatial interventions, whereby the values of ponderers are defined with regard to concrete situations. The implementation of detailed evaluations for individual spatial conceptions requires appropriate studies that reach beyond the scope of the project at hand (for example: the functional aspect - technical feasibility study, protection aspect - studies regarding integrated assessment of environmental impact and studies regarding assessment of environmental impact for protected zones, economic aspect - economic study and study of spatial economics, acceptability aspect - public opinion research, opinion polls, etc.).

The essential contentual contribution is presented by micro-ambience criteria relating to the evaluation of each individual spatial intervention in the light of the impact on characteristic

spatial sequences and building structure. The criteria are based on the preliminary analysis of the coastal space (2nd phase) and defined starting points for its planning and management.

1.8. DRAWING UP PROGRAMME FOR IMPLEMENTATION OF REGIONAL CONCEPTION – DETERMINATION OF KEY PROJECTS

Key projects are those that have simultaneous impact on development focal points, development axes and solutions to problem focal points in at least two coastal municipalities. Thus they exceed their local importance stressing the regional as well as national significance of spatial intervention. In view of the results yielded so far and the assessment made by the project team, the following have been identified as key projects:

1. Planning and management of the coastal promenade spanning along the entire coast of the Republic of Slovenia.
2. Common service facilities for all tourist ports (marinas).
3. Construction of an international port intended for public transport (main passenger terminal for passenger transport by sea) with a possible connection with local ports intended for local public passenger transport.
4. Management, development and promotion of protected nature preservation zones.

Ad.4 The project Management, development and promotion of protected nature preservation zones is included in the project CAMP Slovenia (Coastal Area Management Programme), for which reason it shall not be dealt with in detail here. The project team believes that the management, development and promotion of nature preservation zones are of key importance for the development of the identity of the Slovenian coast.

We propose that the contents of key projects bearing regional significance are determined within the framework of the project Detailed Conception of Spatial Plan Related to Coastal Strip as part of the Regional Conception of Spatial Development (RCSD). In their RCSD validation procedures, municipalities should reach a consensus with regard to the proposed contents. Once the consensus has been reached, each individual municipality should specify what detailed contents, documents and financial funds are to be included in individual projects. The special status of the coastal strip requires that primary stakeholders in key projects should be the State and municipalities. Due to the estimated large scope of necessary investments, the implementation of key projects should also include investments from the private sector. The State and municipalities should jointly determine the conditions and standards for managing private sector investments, which are to guarantee the preservation of public interest.

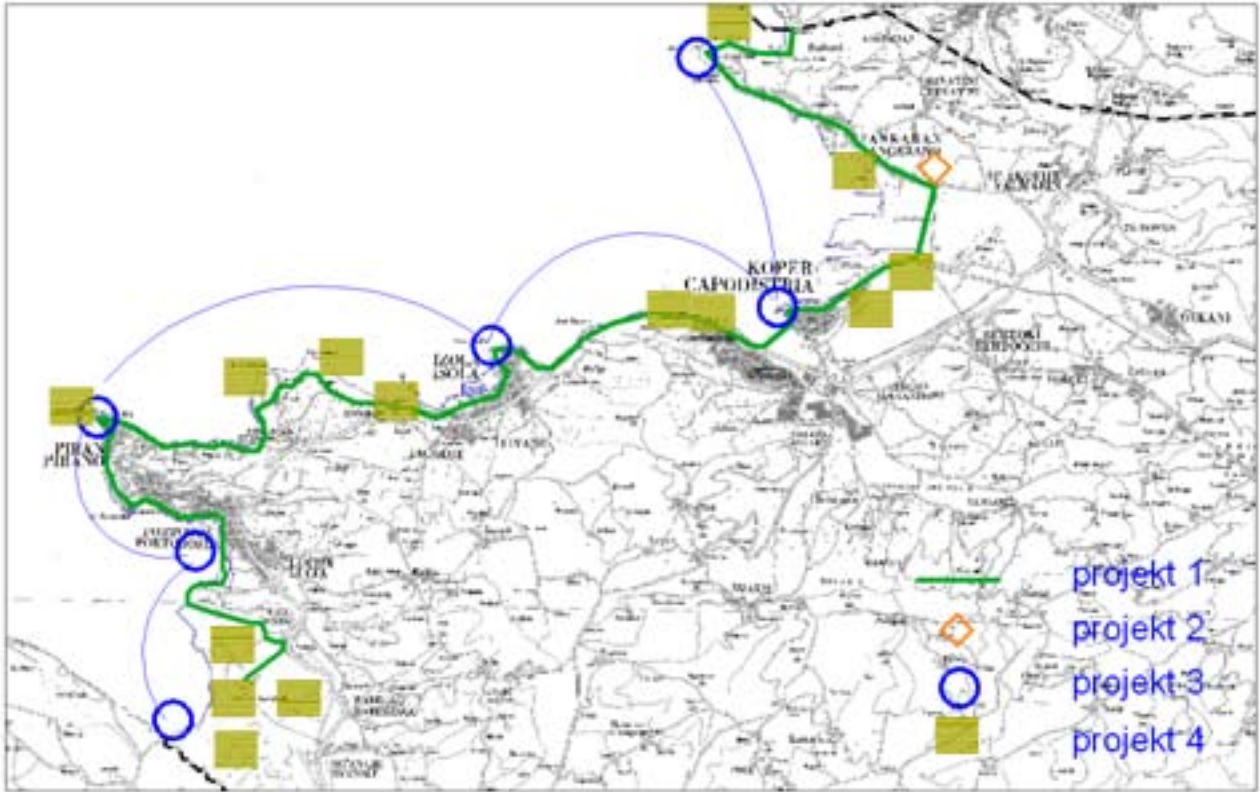


Figure 6: Chart of key regional projects.

1.9. INDICATORS FOR MONITORING SUSTAINABLE DEVELOPMENT OF COASTAL STRIP

The entire selection of indicators for monitoring spatial arrangements in the coastal strip comprises:

1. Urbanisation level within the 200 m strip of inshore land (increase in the number of permanent inhabitants, conversion of agricultural land into settlement areas);
2. Deagrarisation level within the 200 m strip of inshore land or the conversion of agricultural land into forest;
3. Quality of sea water in public bathing sites; the percentage of suitable samples with regard to microbiological criteria;
4. Share of coast with regulated access to the shore (sea goods);
5. Investments in nature preservation zone management;
6. Level of tourist pressure within the 200 m strip of inshore land (the number of tourist beds per 100 inhabitants and the number of tourist overnight stays per 100 inhabitants).
7. Length of paths leading to the shore within 200 m strip of inshore land (footpaths, cycle paths, roads);
8. Parking area surface within the 200 m strip of inshore land;
9. Initiatives for amendments in spatial planning and detailed plans within the 200 m strip of inshore land;
10. Invested capital (public/private) within the 200 m strip of inshore land.

Note: Indicators under Nos. 1, 2, 6, 7, 8, and 9 are spatially restricted to the 200 m strip of inshore land. In accordance with the preparation of the Protocol on Integral Coastal Management in the Mediterranean, we propose that the strip of inshore land is brought in line with the adopted provisions in the Protocol.

2. CONCLUSION

The preparation of the project “Detailed Conception of Spatial Plan Related to Coastal Strip” posed a major professional challenge and practical experience also for the group consisting of the representatives of three faculties and the Studio Mediterana. Every step taken has shed light on ever new expert views and yielded an exhaustive list of new tasks that are yet to be accomplished. However, due to time and financial limitations of the project, we had to content ourselves with the scope as it was determined by the concrete project assignment.

In accordance with the project assignment, we provide appropriate methodology for coastal strip spatial management, detailed rules, criteria and the proposal of key regional projects. We are well aware of the fact that concrete decisions made in view of detailed spatial conceptions will be the result of indispensable harmonisation and decision-making in the process of spatial planning and management within the framework of individual local communities.

The proposal for the spatial “conception” has been drawn up on the basis of three input data:

1. Maps demonstrating spatial vulnerability or spatial potentials for the development of individual activities,
2. maps demonstrating the thus-far planning decisions or project, as well as proposals in the course of preparation, and
3. maps demonstrating expert proposals resulting from analytical work performed by the study team.

On the basis of cross-referencing all the above three maps, we have established the conformity or non-conformity of different interests and values in the space. The cross-referencing led to the proposal for optimum programming and spatial planning and management solutions in the coastal strip ensuring synergy of individual spatial planning and management solutions as well as orientation towards sustainable spatial development. The project is the outcome of a limited number of data generated within a concrete time cross-section, for we were, as has been mentioned, faced with numerous new incentives throughout the duration of this project. The latter, especially, points to the fact that spatial planning and management are not and must not be considered as merely a rigid academic exercise - they constitute a living process that necessitates participation and cooperation of all stakeholders as well as broader public.

The project more concretely defines the notion of the coastal strip, which is in several contexts also starting to cover areas reaching deeper in the coastal hinterland and inshore strip, respectively. The project, furthermore, determines the impact of broader coastal hinterland and provides arguments supporting the need for inter-municipal cooperation in all spatial planning solutions that serve common interests. The project proposes several joint tasks that may be, due to their strategic significance, financed from European structural funds. The project extends the list of general rules governing spatial management contained in the Spatial Order of Slovenia with

specific rules applicable to the narrower coastal strip and tests them on three sample coastal areas. Developed methodological and criterial apparatus may prove a valuable asset for individual coastal municipalities in drawing up their spatial planning and management documents or in preparing new development projects.

On the termination of this project we conclude that it will yield successful results only if we have provided well-argued and convincing evidence that the narrower coastal strip is a finite natural good which requires prudent management, that it is for this purpose necessary to enhance inter-municipal cooperation in managing the coastal strip and at the same time follow long-term and short-term interests of all municipalities in a concerted manner, and finally, that it is necessary to develop joint spatial management projects that will contribute to the sustainable development of the Slovenian coast.