

Draft Environmental Report for

**Strategic Environmental Assessment of the**

**Interreg V-A Slovenia-Austria**

**Cross-Border Co-operation Programme 2014-2020**

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# Executive Summary

The scope of the Strategic Environmental Assessment (SEA) is to ensure integration of environmental concerns into plans, programmes and policies and minimise potential environmental impacts of their implementation. SEA is required also for the cooperation programme Interreg V-A Slovenia-Austria 2014-2020 (henceforth CP SI-AT). The legal basis is constituted of different legislative acts valid in Slovenia and the three federal states in Austria, but they are all based on EU SEA Directive therefore it is possible to use a common approach. The process will include relevant authorities in the Cooperation Programme area, namely:

* Ministry of Agriculture and Environment – Sector for SEA (Slovenia),
* Government of Styria (Austria),
* Government of Carinthia (Austria),
* Government of Burgenland (Austria).

The Environmental Report is based on the draft Cooperation Programme Slovenia – Austria 2014 - 2020, version 6 received in November 2014 and published for public consultation in December 2014. The Methodology is based on Slovene Decree on Environmental Report that is the most detailed in prescribing the approach to impact assessment. An internal scoping was conducted initially to determine the key evaluation issues the results of ex-ante evaluation that was performed at the same time were also taken into account.

The cooperation programme Interreg V-A Slovenia-Austria, Cross-Border Co-operation Programme 2014-2020 (CP SI-AT in further text) was assessed. The conceptual orientation of the CP SI-AT programme 2014-2020 follows the ambition of European cohesion and the Europe 2020 strategy, with its aims at "smart, sustainable, inclusive growth". The programme further takes into account macro-regional, national and regional strategies. The programme area covers 38,353 km2, with a population of about 3,467,000 people. The programme area covers the following NUTS 3 regions:

* Gorenjska, Koroška, Savinjska, Podravska, Pomurska, Osrednjeslovenska, Goriška and Zasavska in Slovenia and
* Oststeiermark, West- and Südsteiermark, Graz, Obersteiermark Ost, Obersteiermark West, Unterkärnten, Klagenfurt-Villach, Oberkärnten and Südburgenland in Austria.

The timeframe of the programme implementation is 7 years, from 2014 to 2020, and additional 3 years for the finalisation of funded projects. Thus, the total period of the programme implementation is 2014 till 2023.

The programme lists types and examples of actions to be supported under each investment priority. The actions are broadly defined in order to allow for diversity of projects. Because the fraction of funding that can be spent on physical investment is very small, the projects are unlikely to comprise investment that would require and Environmental Impact Assessment (EIA). Some of the projects, particularly in the field of support to SMEs, R&D and flood management might lead in the long term to so called “EIA-type” of projects.

The structure of CP SI-AT is presented in the following table. The financial plan amounts to 57.213.191 EUR in total, with ERDF contributing 47.988.355 EUR (85% of total funding).

| **Priority** | **Thematic objective (TO)** | **Investment priority** | **specific objective** |
| --- | --- | --- | --- |
| **Priority 1**  **Strengthening cross border competitiveness, research and innovation**  **Total financing: 17.675.069 €**  **Union support: 15.023.809 €** | Thematic Objective 1 Research and Innovation | 1b) Business investment in innovation and research | *Strengthening R&I in technological and economic fields of strength through cross border cooperation of relevant stakeholders.* |
| 1b) Business investment in innovation and research | *Broaden the basis of innovating enterprises in the programme area.* |
| Thematic Objective 3 SME | 3d) Supporting the capacity of SMEs to engage in growth and innovation processes | *Growth of internationalization of SMEs in the programme area* |
| **Priority 2**  **Protecting the Environment and Promoting Resource Efficiency**  **Total financing: 20.663.838 €**  **Union support: 17.564.263 €** | Thematic Objective 6 Environmental protection & resource efficiency | 6(c) Protecting, promoting and developing cultural and natural heritage | *Sustainable development of natural and cultural heritage* |
| 6(f) Promoting innovative technologies to improve environmental protection and resource efficiency | *Sustainable management and utilization of water resources* |
| **Priority3**  **Governance**  **Total financing: 14.588.569 €**  **Union support: 12.400.284 €** | Thematic Objective 11 Institutional capacity building & efficient public administrations |  |  |
| **Priority 4**  **Technical Assistance**  **Total financing: 4.285.714 €**  **Union support: 3.000.000 €** |  |  |  |

In the scoping phase the key environmental issues to be assessed in SEA were determined on the basis of draft CP SI-AT and environmental objectives were determined. Selection of environmental objectives vas based on various EU programme documents, national level documents and programme documents of Austrian federal states. Environmental objectives and their indicators are shown in the following table.

| **Issue** | **Environmental Objective** | **Environmental Indicators** |
| --- | --- | --- |
| **Biodiversity, flora and fauna** | Maintained diversity of species and natural habitats | The state of target protected species and priority habitat types, as well as qualifying species and habitat types of Natura 2000 sites, on which projects supported within the framework of intervention priority 6c of the CP SI-AT programme will potentially focus. |
| The state of habitat types with which construction or non-construction flood protection measures, supported within the framework of intervention priority 6f of the CP SI-AT programme, will intervene |
| favourable condition of Natura 2000 network | The state of qualifying species and habitat types of Natura 2000 sites where projects, supported with the funds of the CP SI-AT, will be implemented  The state of qualifying species and habitat types of Natura 2000 sites on which projects, supported within the framework of intervention priority 6c of the CP SI-AT programme, will potentially focus. |
| **Water** | pursuit of good chemical and ecological conditions of waters till 2020 | * The quality of groundwater in aquifers in areas where projects, supported within the framework of the CP SI-AT, will take place * The chemical and ecological state of surface waters in areas where projects, supported within the framework of the CP SI-AT, will take place |
| Improved flood risk management | The number of inhabitants living in flood areas for which flood protection will improve with projects supported within the framework of intervention priority 6f of the CP SI-AT |
| **Natural Heritage** | favourable condition of natural heritage (Protected Areas, Natural Values etc.) | The state of natural heritage in the areas of implementation of individual projects, supported with the funds of the CP SI-AT programme. |
| **Cultural Heritage** | favourable condition of cultural heritage (both objects and areas) | The number and the state of objects and areas in which projects, supported with the funds of the CP SI-AT, will be implemented. |

The state of the environment in the CP SI-AT area is quite good. je dokaj dobro. The following key issues were pointed out in the context of cross-border issues:

The following key aspects with cross-border impact have been identintified in the program area CP SI-AT:

* Water management, including flood safety: 41% water flows into Slovenia from Austria, therefore good quality management of waters is necessary to prevent pollution and reduce the risk of flooding downstream.
* management of Natura 2000 sites and protected areas: the areas of preserved nature (in the case of protected areas also of natural heritage) often extends beyond the boundaries and form the so-called green corridors. These areas are important for the conservation of species and habitat types, such as migration corridors of animals and as an area for recreation.
* Joint preservation of cultural heritage: the programme area shares historic ties and preservation of cultural heritage can contribute to the conservation of the cultural richness of the area. This in turn also contributes to the development of tourism in the area.
* Ensuring the availability of public transport: this aspect is important in terms of providing access and achieving reduction of air emissions from transport. Particularly important is the exchange of experience, and possibly also establishment of cross-border public transport in areas with high rate of daily commuters. The programme is not dealing with transport, however it is an important factor of quality of life in the programme area because of the air pollution with particulate matter (PM10), NOx and ozone.

The likely significant effects on the environment were assessed by reviewing potential significant impacts of CP SI-AT on several levels: on strategic level, by priority axis/specific objectives and by potential projects (types of supported activities). The impacts were assessed on the basis of several factors (whether they are positive or negative, direct or indirect, how large are they, are they reversible and the potential for cumulative and synergistic effects). We have also considered that the potential for negative impacts will be reduced in the process of different permmitting procedures, e.g. , the prior procedure for the assessment of effects on the environment („pre-EIA“ in Slovenia) and the assessment of acceptability of effects of the plan on the Natura 2000 areas (Appropriate Assessment; in Slovenia also for protected areas), in accordance with the Habitats Directive. The results are presented in the following table.

| **Topic** | **Environmental Objective** | **Description of the Effects** | **Skupna ocena** |
| --- | --- | --- | --- |
|  |
| **Biodiversity, flora and fauna** | Maintained diversity of species and natural habitats | The predominant effect on biodiversity will have projects and activities implemented within the framework of intervention priorities 6c and 6f. Within the framework of intervention priority 6c, the CP SI-AT supports joint planning and management of areas with high biodiversity (e.g. Natura 2000 sites, protected areas), sustainable tourism within the context of preservation and presentation of natural heritage, outdoor recreation and similar, which can have a positive effect on the preservation of biodiversity. A negative effect of such activities can occur in the case of an excessive number of visitors or poor visitors’ management, however, this is highly unlikely.  Activities for improving the management of waters and flood protection within the framework of the intervention priority 6f will, in general, have a positive impact on the biodiversity of water and shore habitats, but a locally negative impact on habitat types and species is possible at implementation of projects.  The potential for negative impact on biodiversity within the priority axis 1 is negligible, since the projects will be mostly focused on urban areas and built environment. In the event that any of the selected projects develops services for conservation and management of biodiversity, monitoring of biodiversity, etc. this could have a positive impact, but probably only visible in the long term. | B |
| favourable condition of Natura 2000 network | Similar conclusions apply as for the biodiversity. In general, the intervention priority 6c will predominantly have an positive effect on the preservation of a favourable state of Natura 2000 sites, however, a negative effect can occur in the case of an excessive number of visitors or poor management of visits. To mitigate such effect, a mitigation measure is required to ensure the management of visits in projects targeted at the development of tourism on Natura 2000 sites.  Activities for improving the management of waters and flood protection within the framework of the intervention priority 6f will, in general, have a positive impact on the preservation of a favourable state of qualifying species and habitat types of the network of Natura 2000 sites. Although it is possible that certain activities will have a locally negative impact on habitat types and species, e.g. on the location of investment flood protection measures, this possibility will be reduced by the prior procedure for the assessment. | C |
| **Water** | pursuit of good chemical and ecological conditions of waters till 2020 | Sustainable tourism will contribute to an increased care for waters. Activities supported within the framework of the intervention priority 6f will contribute to improving the state of waters. On the long term the “soft” activities for improved monitoring, forecasting, joint tools and services (investment priorities 6f and 11) will contribute to the improved water quality.  Projects supported within the priority axis 1, may affect the waters with increased emissions, however this is highly unlikely. Priority axis 1 will have positive effect if some projects may be specifically aimed at seeking joint innovative solutions for reducing the impact on waters or to improve the state of waters. | A |
| Improved flood risk management | The intervention priority 6f will contribute to the improvement of flood protection. In the long term, “soft” activities for improved monitoring, forecasting, joint tools and services (investment priority 6f and 11) could contribute to the environmental objective.  Projects supported within priority axis 1 can have positive impact if any of them will be specifically geared towards seeking innovative solutions for improved flood safety (e.g. monitoring and forecasting technologies). | A |
| **Natural Heritage** | favourable condition of natural heritage (Protected Areas, Natural Values etc.) | For the effects of all intervention priorities the same applies as for the environmental objective "Favourable state of the network of Natura 2000 sites." The development of sustainable forms of tourism which are related to natural heritage may contribute to the preservation of natural heritage and raising awareness on its existence.  An increased number of visits is possible, which can in the case of excessive number of visitors or poor management of visits lead to negative effects, although this is unlikely. | C |
| **Cultural Heritage** | favourable condition of cultural heritage (both objects and areas) | The intervention priority 6c comprises activities which will lead to an improved preservation, presentation and promotion of cultural heritage.  An increased number of visits is possible, but it is supposed to have insignificant impact on cultural heritage. | B |

During the implementation of CP SI-AT cumulative and synergistic impacts will arise both within the programme itslf (e.g. among the sustainable tourism projects) and with other programmes, for example operational programmes for ESI funds.

A mitigation measure is necessary for projects aimed at promotion and development of tourism in areas with high biodiversity, such as Natura 2000 sites and protected areas. Projects could lead to an increase in visitors in these areas, which is why it is necessary for such type of projects to request a description in the application documentation regarding the type of management of visits an individual project will aim to facilitate. The mitigation measure to ensure management of visitors needs to be implemented with all tenders of the CP SI-AT which will support the intervention priority 6c. The Managing Authority and the Joint Technical Secretariat are competent for the implementation of the mitigation measure within the framework of tender preparation. The Managing Authority and the Joint Technical Secretariat will also monitor the performance of the implementation within the framework of monitoring the effects and results of the supported projects.

The results of the analysis of the effects were compared with two alternatives, the so-called zero alternative and the alternative without thematic objective 6/Priority Axis 2, which was one of the options discussed by the Task Force in the early stages of programme preparation. It turns out that both alternatives are less suitable than the selected program.

Monitoring the achievement of environmental objectives CP SI-AT will be ensured through the monitoring of selected indicators alongside of monitoring and evaluation of CP SI-AT implementation; it will be done for the first time between 2017 and 2019 and the second time at the end of the programme.

Overall, the implementation of CP SI-AT is likely to have very little negative impact on the environment and quite significant positive impact. Among the positive effects worth mentioning is the reduction of flood risk and care for heritage. In most cases, the negative effects are so small that they are not significant. Moreover, most of the co-financed projects will have environmental impacts that will be visible only on mid- to long term. The following recommendations were proposed in order to further reduce the negative impacts and strengthen the positive impact we present the following recommendations:

* Evaluation criteria for project applying for co-financing under Priority Axis 1 should include the possibility of additional points to projects that target sustainable use of natural resources and reducing the environmental impact as well as development of new monitoring methods,
* Results of monitoring of environmental indicators and achievement of objectives should be publicly available on the website of CP SI-AT,
* It should be ensured that the projects supported under the investment priority 6f is aligned with the relevant River Basin Management Plan.
* Projects that involve natural and cultural heritage should ensure sustainability of results; this should be checked at the end of the project.

**Table of content:**

[Executive Summary i](#_Toc409049840)

[1. Introduction 1](#_Toc409049841)

[a) Scope and legal framework of the assessment 1](#_Toc409049842)

[b) The SEA process and the programme context 1](#_Toc409049843)

[c) Structure of the report 2](#_Toc409049844)

[d) Methodology 2](#_Toc409049845)

[e) Consultation with relevant institutions and public participation 3](#_Toc409049846)

[2. Short presentation of the Cooperation Programme 4](#_Toc409049847)

[f) Overview of Priorities, Thematic Objectives and Investment Priorities 6](#_Toc409049848)

[g) Types of projects to be supported 11](#_Toc409049849)

[h) Use of natural resources, potential emissions, waste and waste management 15](#_Toc409049850)

[i) Financial plan for the programme 16](#_Toc409049851)

[3. Scoping and methods of assessment 17](#_Toc409049852)

[j) Links between the planning process and SEA 17](#_Toc409049853)

[k) Scoping 17](#_Toc409049854)

[l) Environmental objectives 19](#_Toc409049855)

[m) Relationship with other relevant plans and programmes 19](#_Toc409049856)

[n) Important environmental stragegies, programmes and policies 20](#_Toc409049857)

[o) Assessment Methodology 20](#_Toc409049858)

[p) Uncertainties, Data Gaps and Technical Deficiencies 21](#_Toc409049859)

[4. Current environmental baseline and trends 22](#_Toc409049860)

[q) Environmental baseline 22](#_Toc409049861)

[r) Areas under various types of protection 32](#_Toc409049862)

[s) Trends and likely evolution of the environmental baseline 32](#_Toc409049863)

[5. Assessment of potential impacts of the programme 33](#_Toc409049864)

[t) Overview on the impacts of the programme on the environment 33](#_Toc409049865)

[u) Overview of impacts on environmental objectives 41](#_Toc409049866)

[v) Assessment of reasonable alternatives 45](#_Toc409049867)

[6. Mitigation measures and timeline for their implementation 48](#_Toc409049868)

[7. Monitoring of the implementation of the programme 49](#_Toc409049869)

[w) Environmental indicators 49](#_Toc409049870)

[x) Provisions for an environmental monitoring system 50](#_Toc409049871)

[8. Conclusions and Recommendations 51](#_Toc409049872)

[9. The SEA team 52](#_Toc409049873)

[10. References 52](#_Toc409049874)

**List of figures, tables and pictures**

[Table 1: Steps of the SEA process 1](#_Toc409050054)

[Table 2: Types and examples of actions to be supported under each investment priority and their potential for EIA 11](#_Toc409050055)

[Table 3: types of activities supported by codes of intervention under each investment priority and their potential for EIA 14](#_Toc409050056)

[Table 4: Proposed Environmental Objectives of CP SI-AT 19](#_Toc409050057)

[**Table 5: The relevance matrix for assessment of impacts on environmental objectives** 21](#_Toc409050058)

[Table 6: Overview of nature protected areas in Austrian side of the programme area )2009) 30](#_Toc409050059)

[Table 7: Overview of potential impacts of implementation of CP SI-AT on the environment 35](#_Toc409050060)

[Table 8: Overviw of potential impacts of implementation of CP SI-AT on the environment 41](#_Toc409050061)

[Table 9: Comparison of impact of selected alternatives 46](#_Toc409050062)

[Table 10: Environmental indicators for assessment of impacts of CP SI-AT implementation on the environment 49](#_Toc409050063)

[Figure 1: The Cooperation Programme Area 4](file:///C:\Users\User\Documents\AAAAMalezija\SI-AT\SEA_CBC_SI-AT_2014-2020_draft_verANG.docx#_Toc409050138)

[Figure 2: Contribution of the CP SI-AT programme to the EU 2020 strategy 5](#_Toc409050139)

[Table 3: Overview of Priorities, Thematic Objectives, Investment Priorities and types of projects to be supported 6](#_Toc409050140)

[Table 4: Financial table of the CBC programme 16](#_Toc409050141)

[Figure 5: Air pollution with PM10 *(Source: Slovenian Environment Agency)* 22](#_Toc409050142)

[Figure 6: Year based GHG emissions from sectors in Slovenia 1986-2011 24](#_Toc409050143)

[Figure 7: Estimation of chemical condition of underground waters 2996-2008 and trends (Source: Slovenian Environmental Agency) 25](#_Toc409050144)

[Figure 8: Alert map of floods, 2012 (Source: Slovenian Environmental Agency) 26](#_Toc409050145)

[Figure 9: Area of Alpine convention (MOP) 27](#_Toc409050146)

[Figure 10: schematic presentation of important landscape areas in the programme region (source: Spatial Development Strategy of Slovenia) 28](#_Toc409050147)

[Figure 11: Natura 2000 areas 29](#_Toc409050148)

[Figure 12: Natura 2000 in Styria 31](#_Toc409050149)

**List of Acronyms:**

|  |  |
| --- | --- |
| ARSO | Environment Agency of Slovenia |
| CBC | Cross border cooperation |
| SEA | Strategic Environmental Assessment |
| EC | European Commission |
| ESI | European Structural and Investment Funds |
| EU | European Union |
| JMC | Joint monitoring committee |
| JTS | Joint Technical Secretariat |
| MA | Managing Authority |
| NGO | Non-governmental organization |
| CfP | Call for proposals |
| CPR | Common provision regulation; Regulation (EU) No 1303/2013 of the European Parliament and of the Council of 17 December 2013 laying down common provisions on the European Regional Development Fund, the European Social Fund, the Cohesion Fund, the European Agricultural Fund for Rural Development and the European Maritime and Fisheries Fund and laying down general provisions on the European Regional Development Fund, the European Social Fund, the Cohesion Fund and the European Maritime and Fisheries Fund and repealing Council Regulation (EC) No 1083/2006 |
| OP EKP 2014–2020 | Operational Programme for implementation of European Cohesion Policy in 2014–2020 |
| RDP 2014–2020 | Rural Development Programme for 2014-2020 |
| SME | Small and medium-size enterprises |
| TO | Thematic objective |

# Introduction

## Scope and legal framework of the assessment

The scope of the Strategic Environmental Assessment (SEA) is to ensure integration of environmental concerns into plans, programmes and policies and minimise potential environmental impacts of their implementation. SEA is required by the so-called SEA Directive[[1]](#footnote-1) and was applied to the EU Cohesion Policy for the first time in the 2007-2013 programming period.

SEA is required in the 2014-2020 programming period, too. The Common Provision Regulation requires an ex ante evaluation for each programme in order to improve the quality of its design. Where appropriate, the ex-ante evaluation must incorporate the requirements for strategic environmental assessment set out in Directive 2001/42/EC of the European Parliament and of the Council, taking into account also climate change mitigation needs. Both Ex-ante Evaluation Report and Environmental Report for the Interreg V-A Slovenia-Austria (CP SI-AT Programme in further text) will be sent together with the draft Cooperation Programme to the Commission services which will consider them when assessing the Cooperation Programme prior to their adoption.

The legal basis for the SEA differs across the programme area. In Austria, the SEA Directive has been transposed by amending or passing specific regulations on the level of the individual federal states, thus Burgenland, Carinthia and Styria have integrated SEA requirements into different federal state acts. In Slovenia, on the other hand, SEA process is regulated by a distinct decree on national level, namely the Decree laying down the content of Environmental Report and on detailed procedure for the assessment of the impacts on certain plans and programmes on the environment (Official Gazette of the RS, no. 73/05).

The Environmental Report will serve as a basis for the Strategic Environmental Assessment process that will include relevant authorities in the Cooperation Programme area, namely:

* Ministry of Agriculture and Environment – Sector for SEA (Slovenia),
* Government of Styria (Austria),
* Government of Carinthia (Austria),
* Government of Burgenland (Austria).

## The SEA process and the programme context

The SEA process entails the assessment of the likely significant effects on the environment as well as consultations of relevant authorities and the general public. The Environmental Report is the output of the process which presents findings and recommendations for improving the integration of environmental concerns in the programme in question. Both the environmental report and the consultations on findings of SEA should be considered in the finalisation and approval of the programme, although the decision on that lies with the authority in charge of the programme – the Managing Authority in case of the CP SI-AT Programme. The SEA process is structured in the steps shown in the following table.

Table 1: Steps of the SEA process

| Activity | Comment | Implementation |
| --- | --- | --- |
| Scoping | The content and the scope of the environmental report are defined. The results of the scoping were presented at one of the Task Force meetings. | August, September 2014 |
| Assessment of impacts | The likely significant environmental effects and reasonable alternatives are assessed and presented in the environmental report | September, October 2014 |
| Public consultation | Not only the authorities with environmental responsibilities, but also the general public must be consulted. The environmental report must be therefore publicly accessible for the prescribed period. | December 2014, January 2015 |
| Integration in the programme | The environmental report and the results of consultations shall be considered before the programme is adopted. | January 2015 |
| Adoption of the Environmental Report and the programme | Information on this should be available to the public. | January 2015? |

The following documents have been used as the basis for Strategic Environmental Assessment of the Cooperation Programme and the preparation of the environmental report:

* Directive 2001/42 on the assessment of the effects of certain plans and programmes on the environment
* Guidance document on ex-ante evaluation for the Programming Period 2014-2020 (2013): Monitoring and evaluation of European Cohesion Policy: European Regional Development Fund, European Social Fund, Cohesion Fund - Annex 1: Ex-ante evaluation and the Strategic Environmental Assessment; January 2013
* Greening Regional Development Programmes Network (2006): Handbook on SEA for Cohesion Policy 2007-2013, February 2006

The Environmental Report is based on the draft Cooperation Programme Slovenia – Austria 2014 - 2020, version 6 received in November 2014 and published for public consultation in December 2014.

## Structure of the report

The Environmental Report is structured in the following way:

1. Introductory part, presenting:
   1. the scope and legal framework, the structure of the SEA process,
   2. methodology and consultation with the stakeholders and environmental authorities
   3. Short presentation of the Cooperation Programme
2. Scoping and method of assessment, presenting:
   1. Linkages of programming process and SEA and Lessons learned from the past programming period
   2. Scoping, SEA Objectives and indicators
   3. Relationship with other relevant plans and programmes, Relevant Environmental Strategies, Programmes and Policies
   4. Assessment Methodology and Uncertainties, Data Gaps and Technical Deficiencies
3. Current environmental baseline and trends
   1. Environmental baseline (description, indicators)
   2. Areas under various types of protection
   3. Trends and likely evolution of the environmental baseline
4. Assessment of potential impacts of the programme
   1. Overview on the impacts of the programme on the environment and on the environmental objectives
   2. Assessment of reasonable alternatives
   3. Mitigation measures and timeline for their implementation
   4. Monitoring of the implementation of the programme
5. Conclusions and Recommendations

## Methodology

The environmental report was prepared during the strategic environmental assessment process conducted from July 2014 till December 2014 through the following activities:

* Review of the Cross-Border Cooperation Programme Slovenia – Austria 2014-2020 (versions 3.0 to 6.0), Palemid, Palemid – Consulting, Research, Education LLC, JOANNEUM RESEARCH Forschungsgesellschaft mbH, Draft, Maribor, Graz, June 2014 – November 2014,
* Monthly meetings of the Task Force between June and November 2014,
* Findings of ex-ante evaluation,
* Conclusions of the meetings with some stakeholders.

The analysis of the environmental baseline was done on the basis of publicly available data on the situation in the programme area. Scoping, environmental objectives and indicators were defined in-house and will be consulted with all environmental authorities responsible for SEA in the programme area.

The approach to assessment of impacts is based on the Slovenian legislation, namely the Decree laying down the content of Environmental Report and on detailed procedure for the assessment of the impacts on certain plans and programmes on the environment (Official Gazette of the RS, no. 73/05). Of all relevant SEA legislation in the programme area, the Decree has the most detailed definition of the approach to assessment of the impacts of plans and programmes.

Assessment of impacts in the context of the strategic environmental assessment should beguided by the precautionary principle. As a result, the overall assessment of an impact should be given on the basis of the maximum negative impact. The result is a slightly blurred picture of the overall impact of CP SI-AT, as the negative impacts play more prominent role and obscure the fact that a program often has positive effects on an issue, parameter, or environmental objective. The SEA of CP SI-AT was carried out in a similar manner, as it was based on the Rules on the assessment of the acceptability of the implementation of plans and projects on Natura 2000 areas and protected areas (Official Gazette of RS, no. 130/04, 53/06, 38/10 and 3/11) which specifies the implementation of the third and fourth paragraphs of Article 6 of the so-called Habitats Directive - Council Directive 92/43 / EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora (OJ L no. 206 dated 22nd 7 1992, p. 7).

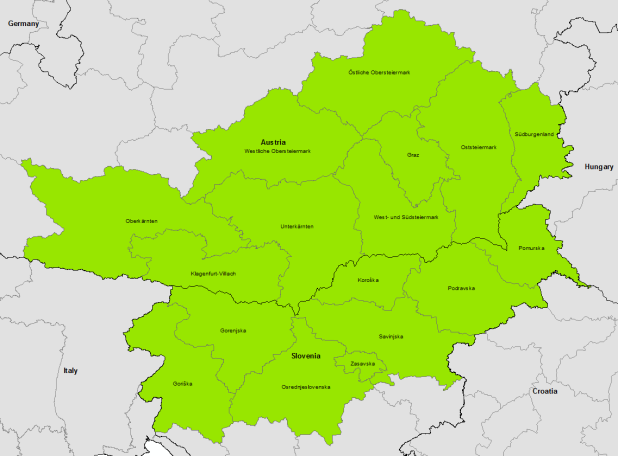
## Consultation with relevant institutions and public participation

To be completed following the completion of consultation with the public.

# Short presentation of the Cooperation Programme

The name of the cooperation programme is Interreg V-A Slovenia-Austria, Cross-Border Co-operation Programme 2014-2020 (CP SI-AT programme 2014-2020 in further text).

The conceptual orientation of the CP SI-AT programme 2014-2020 follows the ambition of European cohesion and the Europe 2020 strategy, with its aims at "smart, sustainable, inclusive growth". The programme further takes into account macro-regional, national and regional strategies. As a specific instrument – in the portfolio of European and national instruments available for territorial development – the CBC programme SI-AT aims at strengthening cooperation structures in selected policy fields linked to Community priorities.



Source: JOANNEUM RESEARCH, 2014

The programme area covers the Slovenian NUTS 3 regions Gorenjska, Koroška, Savinjska, Podravska, Pomurska, Osrednjeslovenska, Goriška and Zasavska and the Austrian NUTS 3 regions Oststeiermark, West- and Südsteiermark, Graz, Obersteiermark Ost, Obersteiermark West, Unterkärnten, Klagenfurt-Villach, Oberkärnten and Südburgenland. The programme area covers 38,353 km2, with a population of about 3,467,000 people.

The timeframe of the programme implementation is 7 years, from 2014 to 2020, and additional 3 years for the finalisation of funded projects. Thus, the total period of the programme implementation is 2014 till 2023.

Figure 1: The Cooperation Programme Area

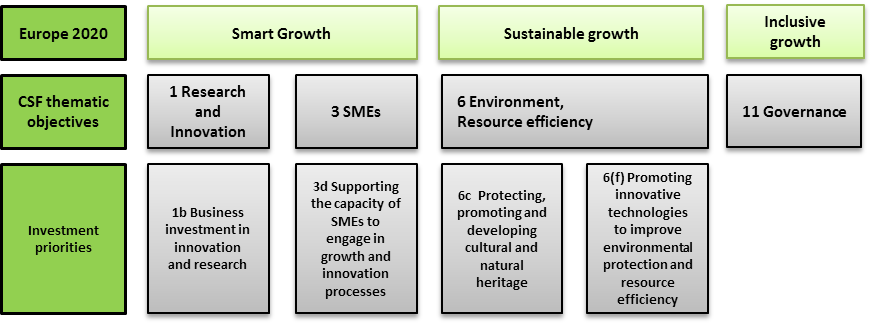
The cross-border programme area is characterised by second tier cities with their agglomerations – i.e. Graz (265,778) and Ljubljana (277,554), small and medium sized cities such as e.g. Maribor (112,088), Kranj (55,623) and Celje (48,868) in Slovenia, Kapfenberg (21,586) and Leoben (24,345) in Upper Styria and Klagenfurt (95.450) and Villach (59.646) in Carinthia. These core areas do account for the majority of population, centres of education as well as of research and knowledge. In addition the programme area consists of rural areas, which are predominantly characterised by agriculture, forestry or tourism. Demographic change in the programme area reflects the EU level trends: while regional centres do grow – i.e. especially Graz (6.1 %) and Osrednjeslovenska (7.5 %) as well as Klagenfurt-Villach (1.7 %); most rural areas are characterised by decreasing population and emigration (2007-2013: Obersteiermark Ost -4.0 %, Obersteiermark West -3.6 %, Unterkärnten -3.0 %, Oberkärnten -2.9 %, Zasavska -3.8 %, Pomurska -3.3 %, Koroška -2.06 %); in others the number of population varied to a small amount or stagnated, while Gorenjska (2.04 %) could increase their population.

The programme area is characterised by mountainous landscape with forests to the West and hilly areas and flatland to the East. Mountainous areas are less populated, mostly with small villages and individual mountain farms in some regions; the predominant land use is forests, grassland (including mountain pastures) and fields with quite extensive agriculture. Some of the hilly areas, especially in the East, are well-known winegrowing regions. The lowlands in the Eastern part of the Programme area are characterised by mostly intensive agriculture. Carinthia has extensive lakes and several large rivers flow through the programme area, such as Drava/Drau, Mura/Mur, Raab/Raba, Sava and Soča. Larger cities and towns are located mainly in larger valleys and plains. Land use planning both in Slovenia and Austria uses zoning to locate industry and certain type of services in separate industrial and/or business zones. Detailed analysis of zoning is technically too demanding for the purpose of this SEA, therefore it was not made. In general it could be noted that a fair share of the population is living in rural areas, with housing areas in the centre and small business areas on the periphery. The expansion of the industrial zones experienced in the last two decades, especially in the Slovene part of the area, has slowed down due to recession and restructuring. Similar can be said for shopping and business areas, although there is no quantitative evidence.

Based on the regulatory framework which foresees thematic concentration of expenditure on a limited number of objectives and investment priorities, the ST-AT CBC programme 2014-2020 selected four thematic priorities (TO 1, 3, 6 and 11) with four investment priorities and the priority for the technical assistance:

* Strengthening research, technological development and innovation (TO 1)
* Enhancing the competitiveness of SMEs (TO 3)
* Preserving and protecting the environment and promoting resource efficiency (TO 6)
* Enhancing institutional capacity of public authorities and stakeholders and efficient public administration (TO11).

Figure 2: Contribution of the CP SI-AT programme to the EU 2020 strategy



**Source:** JOANNEUM RESEARCH, 2014

## Overview of Priorities, Thematic Objectives and Investment Priorities

Table 3: Overview of Priorities, Thematic Objectives, Investment Priorities and types of projects to be supported

|  |  |  |  |
| --- | --- | --- | --- |
| **Priority** | **Thematic objective (TO)** | **Investment priority /**  **specific objective** | **Type and examples of actions to be supported under the investment priority** |
| **Priority 1**  **Strengthening cross border competitiveness, research and innovation** | Thematic Objective 1 Research and Innovation | 1b) Business investment in innovation and research  *Spec. objective 1: Strengthening R&I in technological and economic fields of strength through cross border cooperation of relevant stakeholders.* | * Improvement of cross border competitiveness and excellence in research and innovation (e.g. by creation of joint cross border platforms for know-how and technology transfer as basis for research and innovation, applied science projects, etc.) * Better use of research infrastructure for crossborder research institutions and relevant stakeholders (e.g. institutional cooperation between R&D-infrastructures). * Use of research potential of researchers and their international mobility (with the purpose to increase the competitiveness of CB area). * Implementation of research, innovation, technology transfer projects to support the building up of competences in the programme area. * Promotion of cross border cooperation between research institutions and public administrations. |
| 1b) Business investment in innovation and research  *Spec. objective 2: Broaden the basis of innovating enterprises in the programme area.* | * Strengthening of innovation processes and investments for enterprises cooperating across border and other institutions to develop new or improved products, services and pilot investments. * Support to enterprises in the phase of testing innovation (including the process of certification). * Commercialization of the solution developed and promotion of entrepreneurship. * Incentives to strengthen the innovation ability of enterprises (offering innovation support services to support innovation) or the use of new technologies in common fields of strength such as mechanical engineering and process engineering, materials (i.e. polymers), design, food, production, wood processing industry. * Support services for innovative (innovation in services, creative industries, product innovation, etc.) entrepreneurs/companies and potential entrepreneurs to enable the start-up of business. * Support of cross border SME/networks to develop new or improved products, services or to enter new markets and improve their export potential. * Encouragement and support of creation or further development of the cross-border clusters. * Encouragement and support of technology and know-how transfer (of best practices) between research, technology, educational institutions and/or institutions of the cultural and creative sector with enterprises for the development, adaptation and marketing of new technologies, products or services. * Support of exchange of experiences in the field of business and innovation development. |
| Thematic Objective 3 SME | 3d) Supporting the capacity of SMEs to engage in growth and innovation processes  *Spec. objective: Growth of internationalization of SMEs in the programme area* | * Promotion of new entrepreneurship models (innovative companies with potential of global growth, companies in CB areas facing the development challenges (problem areas). * Strengthening growth and development of SMEs (and their creativity and innovativeness, investment in processes and development and development of the capabilities of the SME’s to cooperate, especially by design and implementation of support programmes). * Complementarity with the national actions of upgrading of existing CB business environment. * Development of new CB business models and integrated models of business processes. * Promotion and strengthening business and development CB networks (transfer of best practices, combination of existing services, enable networking between companies, platforms, clusters, institutions (financial, support) etc.). * Increasing cross border cooperation of companies for competitiveness, internationalization and export e.g. by supporting networking/clusters of enterprises, joint investments, joint participation on the market, etc. * Creation of awareness towards internationalisation for enterprises (SMEs), especially high growth enterprises and enterprises with the potential to grow in the programme area by promotion. * Development of the capabilities of the SME’s to cooperate, especially by design and implementation of support programmes (mentoring, coaching, trainings, etc.) focused on gaining and improving of specialised qualifications, skills and competences (e.g. process innovation, new business models, language knowledge, intercultural competence, technical know-how, IPR, “greening” of SMEs, creative industry, social responsible entrepreneurship, etc.). * Development of cross-border SME networks and clusters along specific value chains. |
| **Priority 2**  **Protecting the Environment and Promoting Resource Efficiency** | Thematic Objective 6 Environmental protection & resource efficiency | 6(c) Protecting, promoting and developing cultural and natural heritage  *Spec. objective: Sustainable development of natural and cultural heritage* | * Development and practical implementation of necessary joint strategies and action plans for management and active conservation of natural and cultural heritage sites (e.g. Natura 2000 sites, cultural monuments etc.). * Sustainable utilization and management of natural and cultural heritage, including nature protection measures. * Conservation, restoration, development and valorisation of cultural and natural heritage sites as well as public visitor infrastructure for their utilization in the field of sustainable tourism. * Support of know-how transfer, training and capacity building as well as awareness-raising for relevant stakeholders in developing corresponding skills. * Joint development of new/improved products and services in the field of sustainable tourism in order to preserve/valorize the natural/cultural heritage in an appropriate way and/or to increase the attractiveness of the programme area (e.g. accommodations, tours, transportation, recreational activities, development of joint quality standards in touristic services). |
| 6(f) Promoting innovative technologies to improve environmental protection and resource efficiency  *Spec. objective: Sustainable management and utilization of water resources* | * Development and practical implementation of joint sustainable water strategies to set out long-term plans to secure the water future of the programme area (e.g. identifying threats to water availability and quality, elaboration of policies and actions to help water users, water corporations and catchment management authorities to manage and respond to those threats, * exchange of know-how and technologies, exchange and improvement of innovative methods like the usage of storm water for process water purposes, small scale investments etc.). * Development and practical implementation of joint modeling, monitoring and forecasting studies and research works (e.g. determination of ecological minimum flow needs for surface water bodies, elaboration/ further improvement of hydrological prognostic system models, elaboration of research studies regarding ground water resources availability, etc.) with the inclusion of climate change implications as well as action plans to reduce the overall water and wastewater footprint (e.g. awareness raising actions among the wider public and local   communities).   * Development and practical implementation of integrated flood determination, protection and control measures (e.g. infrastructure investments, further elaboration of the existing floods information platform) as well as river restoration measurements (e.g. biosystemrenaturation and preservation). * Practical implementation of joint monitoring activities (qualitative and quantitative) to assess the status and impacts of the measures incorporated. * Preparation and implementation of construction and non-construction anti flood measures in line with the flood risk management plan |
| **Priority3**  **Governance** | Thematic Objective 11 Institutional capacity building & efficient public administrations |  | * Strengthening public institutional cooperation between regions, municipalities and cities as well as key institutions involved in regional development activities (e.g. exchanging practices, knowledge, know-how, services, development strategies, etc.) * Strengthening cooperation within cross-border networks on local/regional level, as well as the cooperation of institutions providing public services, training and educational institutions, cultural associations, etc. (e.g. capacity building, knowledge exchange and networking activities). * Developing and implementing training programmes and schemes (in order to intensify future cross-border cooperation as well as to build up capacities and skills needed for the CB labor market (e.g. intercultural communication and qualification trainings, language courses, joint schemes to support transfers of best practices and know-how, study visits, vocational training) * Developing new services and products regarding important regional topics in order to ensure closeness to citizens and the visibility of the programme (e.g. trainings, consultancies). * Active awareness-raising among key stakeholders as well as the wider public (e.g.   information sheets, public information events, etc.)   * Developing and implementing CB tools and services (e.g. analytical tools, management tools, technical tools, software tools, etc.) for the purpose of risk management prevention (e.g. joint monitoring surveys etc.) and emergency interventions (e.g. information about hospital beds, availability of ambulances and medical workers, etc.). * Establishing cross border partnership to support research and innovative policies for the circular economy |
| **Priority 4**  **Technical Assistance** |  |  | * Adequate personnel in all the management bodies, including Managing Authority/ Joint Technical Secretary, National Authority in Slovenia / Regional Bodies in Austria. * Direct and indirect cost related to the bodies, such as office supply and maintenance cost, informational technology cost including electricity bills, etc. * Operational necessities by the Audit and Certifying Authorities. * Formation, implementation and upkeep of the monitoring system. * Informational and communicational undertakings. * Services related with the operations needed for the preparation for the upcoming   programming period (evaluations, analysis, indicator development, etc.). |

**Source:** Cross-Border Cooperation Programme Slovenia – Austria 2014-2020, Palemid – Consulting, Research, Education LLC, JOANNEUM RESEARCH Forschungsgesellschaft mbH, Version 6.0

## Types of projects to be supported

The programme lists types and examples of actions to be supported under each investment priority. The actions are broadly defined in order to allow for diversity of projects. Because the fraction of funding that can be spent on physical investment is very small, the projects are unlikely to comprise investment that would require and Environmental Impact Assessment (EIA). Some of the projects, particularly in the field of support to SMEs, R&D and flood management might lead in the long term to so called “EIA-type” of projects. These usually have larger impact on the environment, therefore it needs to be assessed whether the investment is acceptable at all, and develop mitigation measures if necessary.

In Slovenia, a new Decree on projects for which Environmental Impact Assessment in necessary (Official Gazette no. 51/14) has just been passed that introduced a pre-assessment of all the investment projects co-financed by EU funding; as a result, also all the projects approved for funding from the CP SI-AT programme that will include physical investments in the Slovene part of the programme area will be screened for their environmental impacts, regardless of the size and type of investments.

The types and examples of actions defined in the programme are shown in the table below; an assessment of project’s potential to lead to potential EIA-type of investments is also shown. As only a small fraction of funds can be used for investments in infrastructure, it is highly unlikely that projects will directly lead to EIA-type of investments. The impact of the projects cofinanced from the Interreg V SI-AT is more likely going to be indirect: it is more likely that the projects will help to set up the context and prepare the documentation for EIA-type of investments, so these might follow after the Interreg V SI-AT-supported projects are already finished. In the table below only those examples of actions were classified as having the potential for EIA that can lead to EIA-type of projects right on the basis of the co-financed project. An example would be a new production or research facility, or a flood risk infrastructure built, or certain type of habitat restoration measures implemented on the basis of the findings of a co-financed project. Activities such as networking, establishment of clusters, capacity-building and awareness-raising activities etc. are going to lead to development of EIA-type of projects only on the medium to long run. Because of that and because of fast pace of changing of trends, it was impossible to assess their potential for EIA-type projects.

Table 2: Types and examples of actions to be supported under each investment priority and their potential for EIA

| **Investment Priority** | **Types and examples of actions** | **Potential for EIA** |
| --- | --- | --- |
| **1b) Business investment in innovation and research** | Improvement of cross border competitiveness and excellence in research and innovation (e.g. by creation of joint cross border platforms for know-how and technology transfer as basis for research and innovation, applied science projects, etc.) | / |
| Better use of research infrastructure for crossborder research institutions and relevant stakeholders (e.g. institutional cooperation between R&D-infrastructures) | / |
| Use of research potential of researchers and their international mobility (with the purpose to increase the competitiveness of CB area) | / |
| Implementation of research, innovation, technology transfer projects to support the building up of competences in the programme area | **+?** |
| Promotion of cooperation between research institutions and public administrations | / |
| Strengthening of innovation processes and investments for enterprises cooperating across border and other institutions to develop new or improved products, services and pilot investments. | **+?** |
| Support to enterprises in the phase of testing innovation (including the process of certification). | / |
| Commercialization of the solution developed and promotion of entrepreneurship. | **+?** |
| Incentives to strengthen the innovation ability of enterprises (offering innovation support services to support innovation) or the use of new technologies in common fields of strength such as mechanical engineering and process engineering, materials (i.e. polymers), design, food, production, wood processing industry. | / |
| Support services for innovative (innovation in services, creative industries, product innovation, etc.) entrepreneurs/companies and potential entrepreneurs to enable the start-up of business. | / |
| Support of cross border SME/networks to develop new or improved products, services or to enter new markets and improve their export potential. | / |
| Encouragement and support of creation or further development of the cross-border clusters. | / |
| Encouragement and support of technology and know-how transfer (of best practices) between research, technology, educational institutions and/or institutions of the cultural and creative sector with enterprises for the development, adaptation and marketing of new technologies, products or services. | / |
| Support of exchange of experiences in the field of business and innovation development. | / |
| **3d) Supporting the capacity of SMEs to engage in growth and innovation processes** | Promotion of new entrepreneurship models (innovative companies with potential of global growth, companies in CB areas facing the development challenges (problem areas). | / |
| Strengthening growth and development of SMEs (and their creativity and innovativeness, investment in processes and development and development of the capabilities of the SME’s to cooperate, especially by design and implementation of support programmes). | / |
| Complementarity with the national actions of upgrading of existing CB business environment. | / |
| Development of new CB business models and integrated models of business processes. | / |
| Promotion and strengthening business and development CB networks (transfer of best practices, combination of existing services, enable networking between companies, platforms, clusters, institutions (financial, support) etc.). | / |
| Increasing cross border cooperation of companies for competitiveness, internationalization and export e.g. by supporting networking/clusters of enterprises, joint investments, joint participation on the market, etc. | / |
| Creation of awareness towards internationalisation for enterprises (SMEs), especially high growth enterprises and enterprises with the potential to grow in the programme area by promotion. | / |
| Development of the capabilities of the SME’s to cooperate, especially by design and implementation of support programmes (mentoring, coaching, trainings, etc.) focused on gaining and improving of specialised qualifications, skills and competences (e.g. process innovation, new business models, language knowledge, intercultural competence, technical know-how, IPR, “greening” of SMEs, creative industry, social responsible entrepreneurship, etc.). | / |
| Development of cross-border SME networks and clusters along specific value chains. | / |
| **6(c) Protecting, promoting and developing cultural and natural heritage** | Development and practical implementation of necessary joint strategies and action plans for management and active conservation of natural and cultural heritage sites (e.g. Natura 2000 sites, cultural monuments etc.). | **+?** |
| Sustainable utilization and management of natural and cultural heritage, including nature protection measures. | **+?** |
| Conservation, restoration, development and valorisation of cultural and natural heritage sites as well as public visitor infrastructure for their utilization in the field of sustainable tourism. | **+?** |
| Support of know-how transfer, training and capacity building as well as awareness-raising for relevant stakeholders in developing corresponding skills. | / |
| Joint development of new/improved products and services in the field of sustainable tourism in order to preserve/valorize the natural/cultural heritage in an appropriate way and/or to increase the attractiveness of the programme area (e.g. accommodations, tours, transportation, recreational activities, development of joint quality standards in touristic services). | / |
| **6(f) Promoting innovative technologies to improve environmental protection and resource efficiency** | Development and practical implementation of joint sustainable water strategies to set out long-term plans to secure the water future of the programme area (e.g. identifying threats to water availability and quality, elaboration of policies and actions to help water users, water corporations and catchment management authorities to manage and respond to those threats | / |
| Exchange of know-how and technologies, exchange and improvement of innovative methods like the usage of storm water for process water purposes, small scale investments etc.) | / |
| Development and practical implementation of joint modeling, monitoring and forecasting studies and research works (e.g. determination of ecological minimum flow needs for surface water bodies, elaboration/ further improvement of hydrological prognostic system models, elaboration of research studies regarding ground water resources availability, etc.) with the inclusion of climate change implications as well as action plans to reduce the overall water and wastewater footprint (e.g. awareness raising actions among the wider public and local communities) | / |
| Development and practical implementation of integrated flood determination, protection and control measures (e.g. infrastructure investments, further elaboration of the existing floods information platform) as well as river restoration measurements (e.g. biosystemrenaturation and preservation) | **+?** |
| Practical implementation of joint monitoring activities (qualitative and quantitative) to assess the status and impacts of the measures incorporated | / |
| Preparation and implementation of construction and non-construction anti flood measures in line with the flood risk management plan | **+?** |
| **11: Promoting legal and administrative cooperation and cooperation between citizens and institutions** | Strengthening public institutional cooperation between regions, municipalities and cities as well as key institutions involved in regional development activities (e.g. exchanging practices, knowledge, know-how, services, development strategies, etc.) | / |
| Strengthening cooperation within cross-border networks on local/regional level, as well as the cooperation of institutions providing public services, training and educational institutions, cultural associations, etc. (e.g. capacity building, knowledge exchange and networking activities). | / |
| Developing and implementing training programmes and schemes (in order to intensify future cross-border cooperation as well as to build up capacities and skills needed for the CB labor market (e.g. intercultural communication and qualification trainings, language courses, joint schemes to support transfers of best practices and know-how, study visits, vocational training) | / |
| Developing new services and products regarding important regional topics in order to ensure closeness to citizens and the visibility of the programme (e.g. trainings, consultancies). | / |
| Active awareness-raising among key stakeholders as well as the wider public (e.g. information sheets, public information events, etc.) | / |
| Developing and implementing CB tools and services (e.g. analytical tools, management tools, technical tools, software tools, etc.) for the purpose of risk management prevention (e.g. joint monitoring surveys etc.) and emergency interventions (e.g. information about hospital beds, availability of ambulances and medical workers, etc.). | / |
| Establishing cross border partnership to support research and innovative policies for the circular economy | / |

Table 3: types of activities supported by codes of intervention under each investment priority and their potential for EIA

| **Code** | **Intervention field** | **Investment priority** | | | | | **Potential for EIA** |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **1(b)** | **3(c)** | **6(c)** | **6(f)** | **11** |
| 013 | Energy efficiency renovation of public infrastructure, demonstration projects and supporting measures *(Infrastructure providing basic services and related investment)* |  |  |  |  | ✓ | **+?** |
| 021 | Water management and drinking water conservation (including river basin management, water supply, specific climate change adaptation measures, district and consumer metering, charging systems and leak reduction)*(Infrastructure providing basic services and related investment)* |  |  |  | ✓ |  | **+?** |
| 056 | Investment in infrastructure, capacities and equipment in SMEs directly linked to research and innovation activities | ✓ |  |  |  |  | **+?** |
| 057 | Investment in infrastructure, capacities and equipment in large companies directly linked to research and innovation activities | ✓ |  |  |  |  | **+?** |
| 058 | Research and innovation infrastructure (public) | ✓ |  |  |  |  | **+?** |
| 059 | Research and innovation infrastructure (private, including science parks) | ✓ |  |  |  |  | **+?** |
| 060 | Research and innovation activities in public research centres and centres of competence including networking | ✓ |  |  |  |  | / |
| 061 | Research and innovation activities in private research centres including networking | ✓ |  |  |  |  | / |
| 062 | Technology transfer and university-enterprise cooperation primarily benefiting SMEs | ✓ |  |  |  |  | / |
| 063 | Cluster support and business networks primarily benefiting SMEs | ✓ |  |  |  |  | / |
| 064 | Research and innovation processes in SMEs (including voucher schemes, process, design, service and social innovation) | ✓ |  |  |  |  | / |
| 066 | Advanced support services for SMEs and groups of SMEs (including management, marketing and design services) |  | ✓ |  |  |  | / |
| 067 | SME business development, support to entrepreneurship and incubation (including support to spin offs and spin outs) |  | ✓ |  |  |  | / |
| 068 | Energy efficiency and demonstration projects in SMEs and supporting measures |  | ✓ |  |  |  | / |
| 072 | Business infrastructure for SMEs (including industrial parks and sites) |  | ✓ |  |  |  | **+?** |
| 075 | Development and promotion of tourism services in or for SMEs |  | ✓ |  |  |  | / |
| 077 | Development and promotion of cultural and creative services in or for SMEs |  | ✓ |  |  |  | / |
| 083 | Air quality measures |  |  |  |  | ✓ | / |
| 085 | Protection and enhancement of biodiversity, nature protection and green infrastructure |  |  |  | ✓ |  | / |
| 086 | Protection, restoration and sustainable use of Natura 2000 sites |  |  |  | ✓ |  | **+?** |
| 087 | Adaptation to climate change measures and prevention and management of climate related risks e.g. erosion, fires, flooding, storms and drought, including awareness raising, civil protection and disaster management systems and infrastructures |  |  |  |  | ✓ | **+?** |
| 088 | Risk prevention and management of non-climate related natural risks (i.e. earthquakes) and risks linked to human activities (e.g. technological accidents), including awareness raising, civil protection and disaster management systems and infrastructures |  |  |  | ✓ |  | / |
| 090 | Cycle tracks and footpaths |  |  | ✓ |  |  | / |
| 091 | Development and promotion of the tourism potential of natural areas |  |  | ✓ |  |  | **+?** |
| 092 | Protection, development and promotion of public tourism assets |  |  | ✓ |  |  | / |
| 093 | Development and promotion of public tourism services |  |  | ✓ |  |  | / |
| 094 | Protection, development and promotion of public cultural and heritage assets |  |  | ✓ |  |  | / |
| 095 | Development and promotion of public cultural and heritage services |  |  | ✓ |  |  | / |
| 096 | Institutional capacity of public administrations and public services related to implementation of the ERDF or actions supporting ESF institutional capacity initiatives |  |  |  |  | ✓ |  |
| 104 | Self-employment, entrepreneurship and business creation including innovative micro, small and medium sized enterprises *(Promoting sustainable and quality employment and supporting labour mobility)* |  | ✓ |  |  |  | / |
| 107 | Active and healthy ageing *(Promoting sustainable and quality employment and supporting labour mobility)* |  |  |  |  | ✓ | / |
| 108 | Modernisation of labour market institutions, such as public and private employment services, and improving the matching of labour market needs, including throughactions that enhance transnational labour mobility as well as through mobility schemes and better cooperation between institutions and relevant stakeholders (*Promoting sustainable and quality employment and supporting labour mobility*) |  |  |  |  | ✓ | / |
| 112 | Enhancing access to affordable, sustainable and high-quality services, including health care and social services of general interest *(Promoting social inclusion, combating poverty and any discrimination)* |  |  |  |  | ✓ | / |
| 118 | Improving the labour market relevance of education and training systems, facilitating the transition from education to work, and strengthening vocational education and training systems and their quality, including through mechanisms for skills anticipation, adaptation of curricula and the establishment and development of work-based learning systems, including dual learning systems and apprenticeship schemes (*Investing in education, training and vocational training for skills and lifelong learning)* |  |  |  |  | ✓ | / |
| 119 | Investment in institutional capacity and in the efficiency of public administrations and public services at the national, regional and local levels with a view to reforms, better regulation and good governance |  |  |  |  | ✓ | / |
| 120 | Capacity building for all stakeholders delivering education, lifelong learning, training and employment and social policies, including through sectoral and territorial pacts to mobilise for reform at the national, regional and local levels |  |  |  |  | ✓ | / |

## Use of natural resources, potential emissions, waste and waste management

The programme strategy for Slovenia and Austria (hereinafter referred to as "the CP SI-AT") does not define in detail the requirements for natural resources. Based on the draft document of the CP SI-AT, we can assess that the following natural resources will be essential for its implementation:

* Land as the natural resource and space for building new objects;
* Water:
  + Drinking water: water supply for co-financed projects;
  + Technological water: important for the development of activities financed within the framework of the first priority axis (Strengthening research, technological development and innovation and enhancing the competitiveness of SMEs); the necessary quality of water depends on the purpose of investment;
  + Surface water: for development of different forms of sustainable tourism e.g. recreation and water sports (kayaking, canoeing, fishing, etc.), supported within the framework of the second priority axis "Protecting the environment and promoting resource efficiency";
* Biomass: wood is an important natural resource which can be processed into different products and also presents a renewable source of energy. Within the framework of the first priority axis (Strengthening research, technological development and innovation and enhancing the competitiveness of SMEs), we can also expect projects in the wood processing industry and projects promoting the use of wood biomass to produce energy.
* Biodiversity: an important natural resource which is likely to present the basis for certain projects within the framework of the second priority axis "Protecting the environment and promoting resource efficiency" (e.g. environmental protection tourism, environmental protection education).

It is impossible to assess what will be the requirements for natural resources with projects implemented within the framework of the CP SI-AT. In view of the fact that the CP SI-AT predominantly supports soft contents, such as common product development, common marketing or common planning of the management of protected areas, direct requirements for natural resources will be very small. On the one hand, some activities, e.g. common innovation activities of companies and the design of tourist products related to natural heritage, can lead to a certain exploitation of natural resources, especially water, biomass and biodiversity; nevertheless, due to the size of the programme this is going to be small in scope and very likely connected with the existing activities (e.g. the existing wood processing facilities, the existing water consumption for tourism purposes, the existing protected areas). On the other hand, projects in the field of flood protection contribute to the improvement of protection of water and soil (i.e. reduction in soil erosion).

Furthermore, it is impossible to asses to what extent additional emissions into the environment or even arrangements of new sources of emissions will occur as a result of implementation of the CP SI-AT and projects co-financed by this programme. Especially the content of the first priority axis allows for the possibility of investment into the implementation of individual arrangements in companies, within which we can expect emissions into the environment, especially emissions into the air, noise emissions and emissions into water. The aspect of climate change mitigation and adaptation has been included in the intervention priority 6f, which is directed at ensuring flood protection and appropriate water management.

The implementation of the CP SI-AT will not contribute to an increased quantity of waste in the programme area, nor is any of the priorities targeted to support projects in the field of waste management. It is possible that, within the framework of the first priority axis, support will be provided to projects aimed at seeking innovative solutions for improved waste management and reducing the quantity of waste in companies, e.g. by implementing the zero waste concept.

## Financial plan for the programme

Altogether the programme budget consists of 57.213.191 EUR, with an ERDF contribution of 47.988.355 EUR, which corresponds to 85% of the total financing.

Table 4: Financial table of the CBC programme

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Priority axis** | **Union support (a)** | **National counterpart**  **(b) = (c) + (d))** | **Indicative breakdown of the national counterpart** | | **Total funding**  **(e) = (a) + (b)** | **Co-financing rate**  **(f)  = (a)/(e)** |
| **National Public funding (c)** | **National private funding  (d)** |
| **Priority axis 1** | 15.023.809 | 2.651.260 | 1.237.255 | 1.414.006 | 17.675.069 | 85% |
| **Priority axis 2** | 17.564.263 | 3.099.576 | 2.066.384 | 1.033.192 | 20.663.838 | 85% |
| **Priority axis 3** | 12.400.284 | 2.188.285 | 1.458.857 | 729.428 | 14.588.569 | 85% |
| **Priority axis 4** | 3.000.000 | 1.285.714 | 1.285.714 | / | 4.285.714 | 70% |
| **Total** | 47.988.355 | 9.224.836 | 6.048.210 | 3.176.626 | 57.213.191 | **84%** |

**Source:** Cross-Border Cooperation Programme Slovenia – Austria 2014-2020, Palemid – Consulting, Research, Education LLC, JOANNEUM RESEARCH Forschungsgesellschaft mbH, Version 6.0

# Scoping and methods of assessment

## Links between the planning process and SEA

The preparation of the environmental support began in June 2014, when the first draft of the programme was drawn up; later it was taking place parallel to the preparation of the CP SI-AT. Simultaneously, the ex-ante evaluation began. It was carried out parallelly and employed a larger group of selected professionals. At the beginning of the preparation of environmental report – in the scoping phase – thematic objectives and intervention priorities had, roughly speaking, already been selected and agreed upon at working group meetings (the so-called Task Force), consisting of representatives of competent institutions from Slovenia and the Austrian federal provinces of Carinthia, Styria and the Province of Burgenland, the Managing Authority and the Joint Technical Secretariat.

Representatives of the programming team and the working group were informed of the findings of potential effects, together with the findings of ex-ante evaluation, since these contents are related. The results of scoping, priority environmental themes and the proposed environmental objectives were presented at the working group meetings which took place on 30 July and 8 September 2014.

Initially, the CP SI-AT placed a significant emphasis on energy efficiency and using renewable energy sources, but later the scope of the supported contents or activities was narrowed down at coordination meetings. The priority axis 2 – aimed at intervention priorities 6(c) Preservation, protection, promotion and development of natural and cultural heritage, and 6(f) Promotion of innovative technologies to improve environmental protection and efficient energy use – was more clearly defined. This is appropriate also with regard to the findings of the ex-ante evaluation and the preparation of the environmental report.

We also discussed environmental contents of the CP SI-AT and potential effects on the environment with certain stakeholders in the programme area at a series of meetings between July and November 2014.

In what follows, coordination of findings from the public consultation within the framework of both processes will take place, i.e. the preparation of the CP SI-AT and the drawing up of the environmental report. Following the submission of the CP SI-AT to the European Commission, coordination of the environmental report with the comments of the European Commission will take place.

## Scoping

Scoping and preparation of environmental objectives and indicators were carried out internally, in the team which had prepared the environmental report. If necessary, they will be further coordinated with the competent authorities for the protection of the environment in the programme area. In the scoping phase, we examined the state of the environment in the programme area, the content of the CP SI-AT and its potential effects on the environment. We also determined on which environmental factors, as defined in the Directive 2001/42/EC of the European Parliament and of the Council of 27 June 2001 on the assessment of the effects of certain plans and programmes on the environment, could affect the programme and would, therefore, require further detailed coverage. The findings are presented in the table below.

Table 1: Environmental factors important for the CP SI-AT

| **Environmental Factors** | **Detailed assessment** | **Justification** |
| --- | --- | --- |
| Biodiversity, flora and fauna | Yes | Within the priority axis 2, the CP SI-AT comprises activities for the preservation of natural heritage which could contribute to the preservation of biodiversity, animal life and plant life. Activities aimed at improving flood protection can also contribute to this. Arrangements based on the financed projects can also negatively affect them. This factor is covered in two chapters, i.e. the chapter on biodiversity and the chapter on natural heritage. |
| Soil | No | Potential effects of activities supported by the CP SI-AT on the protection and quality of soil are negligible; therefore, this factor was not covered separately. |
| Water | Yes | Within the priority axis 2, the CP SI-AT comprises activities related to the quality and quantity of waters. The quality and quantity of waters and flood protection are one of the factors of quality of life in the programme area. |
| Air | No | Within the priority axis 1, the CP SI-AT comprises activities which could affect the quality of air, since the target group also includes companies and, consequently, production. However, the supported activities can only indirectly affect the quality of air over a medium or long-term period; since the scope of emissions is small, this factor was not covered separately. |
| Climate factors | Yes, but not in a separate chapter | Adjustment to climate change, and specifically for the possibility of floods, will be included in the evaluation of effects on flood protection within the framework of the analysis of effects on water. The potential for increased greenhouse gas emissions as a consequence of programme implementation is negligibly small. It is possible that some of the projects financed within the framework of the priority axis 1 will comprise innovations and modernisations in order to reduce the effects on climate factors, but within the framework of programme implementation this effect will be negligible. |
| Material assets | No | Material assets were not covered separately, as they had been already covered within the framework of other chapters. |
| Cultural Heritage | Yes | The CP SI-AT also comprises those activities which will contribute to the protection of cultural heritage, which is why it is important to include this aspect, as well. |
| Landscape | No | The CP SI-AT comprises those activities wherein the potential for affecting the landscape is negligible. Potential effects on the landscape are indirectly covered within the framework of the chapter on biodiversity and within the framework of effects on cultural heritage. |
| Population and human health | No | The CP SI-AT is indirectly aimed at the protection and improvement of quality of life in the programme area, since it facilitates economic growth and preservation of natural and cultural heritage. The programme will positively affect the population. Individual issues which are important for the quality of life will be covered within the segment of chapters on waters, biodiversity and cultural heritage. The effects on economic growth have been appropriately covered in the segment on the ex-ante evaluation. |
| Interrelationship between the above factors | Yes, but not in a separate chapter | The interrelationship between factors has been covered in the segment on the consideration of individual factors. |
| Creation or increase in risk for natural or man-made disasters | Yes, but not in a separate chapter | The CP SI-AT also includes activities aimed at improving flood protection and joint flood monitoring and information systems (for providing information in case of floods), which will be covered within the framework of the analysis of effects on water. |

The analysis of the state and trends and the assumptions regarding the state in case the plan is not implemented, have been based on publicly accessible data on the state of the environment in the programme area. In the scoping phase the experience from the past programming period was confirmed, i.e. that the data varies greatly not only between the two countries, but also between the Austrian federal provinces which are participating in the programme. The data differs in terms of both depth and accuracy (e.g. on geographical level – some data are available only on the national level, some only on the level of municipalities). Consequently, it will be difficult to coordinate the common indicators and ensure their monitoring. As an alternative, we have also covered the possibility to choose other thematic objectives and intervention priorities.

## Environmental objectives

Environmental objectives are based on strategies, plans and programmes in the field of environment on EU and national level. They were prepared on the basis of the content of CP SI-AT and documents listed in the next chapter. Environmental objectives are shown in the table below together with a short explanation.

Table 4: Proposed Environmental Objectives of CP SI-AT

| **Issue** | **Environmental Objective** | **Justification of the Environmental Objective** |
| --- | --- | --- |
| **Biodiversity, fauna and flora** | Maintained diversity of species and natural habitats | CP SI-AT supports the joint planning and management of areas of high biodiversity (e.g. Natura 2000 areas, protected areas) as well as conservation and sustainable use of natural heritage, including measures for the nature protection. This can have a positive impact on biodiversity conservation. In addition, the program supports sustainable tourism in the context of preservation and presentation of natural heritage.  Activities supported by the programme under Axis 1 could have only smaller impact on biodiversity, because CP SI-AT does not support major investments which could have significant impacts. It is also possible that some of the supported projects will be focused on biodiversity conservation and its sustainable use. |
| favourable condition of Natura 2000 network | Similar justification as for the environmental objective in the field of biodiversity. The programme area contains a rich network of Natura 2000 sites, which in some locations form continuous cross-border areas and allows for "conservation" of green corridors. |
| **Water** | pursuit of good chemical and ecological conditions of waters till 2020 | The programme area is rich in water resources and in the Priority Axis 2 the CP SI-AT includes activities that are related to the good water quality and quantity (in particular various forms of sustainable tourism). Quality of water can be affected also by the projects that will be funded under Priority Axis 1; it is possible that some of the projects will be specifically focused on finding joint innovative solutions to reduce impacts on water or to improve its status. |
| Improved flood risk management | Priority investment 6f under Priority Axis 2 CP SI-AT is aimed at improving flood protection. This will contribute, amongst other, to improved implementation of the so-called flood directive. |
| **Natural Heritage** | favourable condition of natural heritage (Protected Areas, Natural Values etc.) | Similar justification as for the environmental objective in the field of biodiversity. The program area is very rich in natural heritage and includes a number of protected areas, as well as smaller natural values important for the preservation of local identities. |
| **Cultural Heritage** | favourable condition of cultural heritage (both objects and areas) | CP SI-AT will finance different types of projects, some of the projects in the framework of priority axis 2 will be especially dedicated to cultural heritage. |

## Relationship with other relevant plans and programmes

The Programme is related to numerous EU policies and programme documents, the key one being the Strategy EU 2020.

CP SI-AT has considered numerous macro-regional programmes, specific for individual country and federal state or region as well as strategies and recommendations that are important in the ontext of cross-border cooperation. These are:

* EU Strategy for Danube region (EUSDR),
* EU Strategy for Alpine region (EUSALP),
* EU Strategy for Adriatic-Ionian region (EUSAIR),
* Strategies and programmes on national level:
  + Development Strategy of Slovenia 2014-2020,
  + National Reform Programme for Slovenia 2013-2014,
  + National Reform Programme for Slovenia 2014-2015,
  + Smart Specialisation Strategy for Slovenia 2014-2020,
  + National Reform Programme for Austria and its strategies:
    - Research, Technology and Innovation Strategy of the Austrian Government - The Road to become Innovation Leader
    - Strategy 2020 - Research, Technology and Innovation for Austria
    - Austrian Energy Strategy 2020,
    - Austrian concept of spatial development (ÖREK 2011).
* Regional strategies and programmes:
  + Business Strategy Styria 2020,
  + Strategy Carinthia 2020,
  + Strategy of Styria for promotion of airborne science,
  + Tourisem 2015 for Burgenland area..

## Important environmental stragegies, programmes and policies

The following strategies, plans and programmes in the field of enviroment were considered at the preparation of the programme:

* + EU Strategy on Adaptation to Climate Change (COM(2013) 216)
  + Green Infrastructure (GI) - Enhancing Europe’s Natural Capital (COM(2013) 249)
  + Our life insurance, our natural capital: an EU biodiversity strategy to 2020 (COM(2011) 244)
  + Territorial Agenda of the European Union 2020 - Towards an Inclusive, Smart and Sustainable Europe of Diverse Regions (May 2011)
  + Roadmap for Moving to a Competitive Low Carbon Economy in 2050 (COM(2011)112)
  + Roadmap to a Resource Efficient Europe (COM(2011) 572)
  + Eco-innovation Action Plan (Eco-AP) (COM(2011) 899)
* On national level:
  + National Environmental Action Plan for Slovenia (2005 – 2012, ReNPVO),
  + Austrian national strategy for climate change adaptation,
  + River Basin Management Plan for Danube and Adriatic river cachments 2009-2015 and Programmes of measures water management in Slovenia
  + Operational programme for management of Natura 2000 sites in Slovenia 2014–2020,
  + Slovene national programme for culture 2014–2017.

## Assessment Methodology

The assessment of impacts will be carried out in 3 phases:

* Possible alternatives will be discussed as the first step to highlight the strategic approach of the CP SI-AT Programme in terms of the strategy, selected thematic objectives, the defined priorities and specific objectives, the interrelations between the priorities, the consideration of the horizontal principle of sustainable development and the programme indicators.
* Second, the effects of individual specific objectives and selected types of actions will be assessed. The assessment will be qualitative and focused on general assumptions about causes and effects because only types of projects are defined and no detailed characteristics of the individual projects (location, size, activities etc.) cannot be known at this stage. We have also considered which of the supported activities could lead to an “EIA type” of project.
* In the last phase, the overall potential effects of the programme on the environmental issues and its contribution to the environmental objectives will be assessed.

The approach to the assessment is based on Slovene legislation, i.e. Decree laying down the content of environmental report and on detailed procedure for the assessment of the effects on certain plans and programmes on the environment (Official Gazette no. 73/05) which defines that different aspects need to be assessed (depending on volume, duration, cumulative and synergistic effects) and defines grading scale of impacts on achieving environmental objectives. Grading categories are labelled A to E with grade X in case the impacts cannot be assessed. The list of grading categories is presented below.

**Table 5: The relevance matrix for assessment of impacts on environmental objectives**

|  |  |
| --- | --- |
| **Grade** | **Explanation of grade** |
| A | No impact /impact can be positive |
| B | Insignificant impact |
| C | Insignificant impact (in respect to mitigation measures) |
| D | Significant impact |
| E | Devastating impact |
| X | Determination of impact is not possible |

Assessment of impacts in the context of the strategic environmental assessment should beguided by the precautionary principle. As a result, the overall assessment of an impact should be given on the basis of the maximum negative impact. The result is a slightly blurred picture of the overall impact of CP SI-AT, as any time there is any negative impact that is large, but could be mitigated by mitigation measures, the grade C should be given although the program often has positive effects on an issue, parameter, or environmental objective.

## Uncertainties, Data Gaps and Technical Deficiencies

The data on data on different environmental issues in the programme area are available at different levels, in different forms and from different time periods and they are not directly comparable. In such cases, we use expert knowledge and a comparative evaluation of the status of individual factors. For the Slovene part of the programme area the analysis was to some extent facilitated by the single environmental database run by the Environment Agency and the Statistical Office of the Republic of Slovenia, while the environmental monitoring systems in the Austrian federal states are quite diverse.

Data is sometimes not directly comparable due to technical differences, for example different formats of collecting and storing data in databases. The biggest problem was the availability and comparability of GIS data, since the approaches to the presentation and level of detail are very diverse.

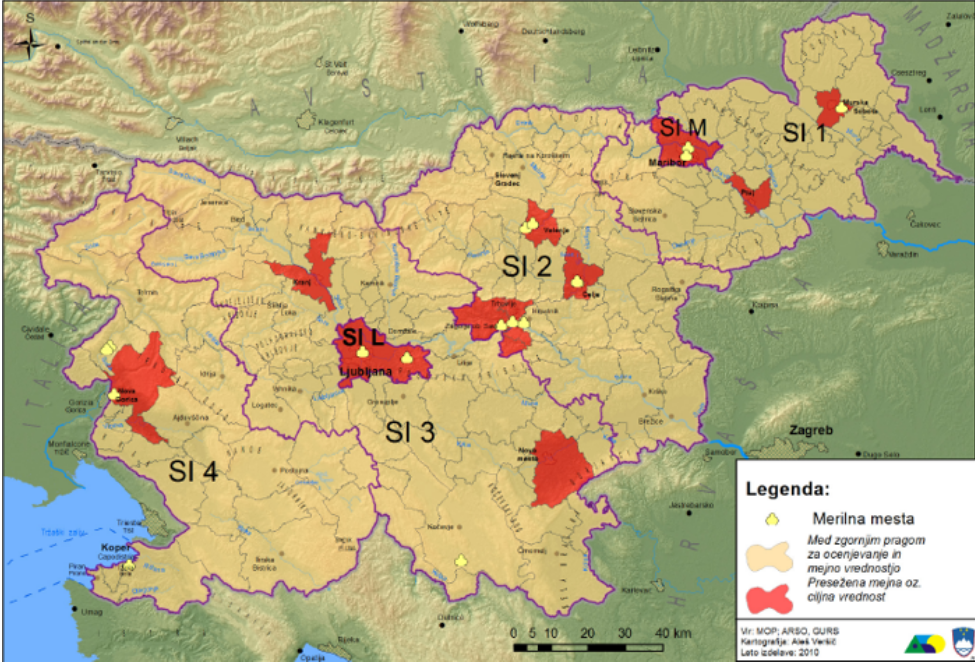
# Current environmental baseline and trends

## Environmental baseline

### Air quality

Atmospherical particles (PM10) are, beside air pollution with ozone, one of the pressing problems of air quality in Slovenia as there is a high number of days, when concentration of particles (PM10) is above allowed level, especially in urban areas (Ljubljana basin) and around densed traffic locations, especially in winter. Zasavje region has the highest number of days over the limit value (in 2008 more then 100 days). Nevertheless, pollution with particles is in decline.

Areas of exceedance of limiting values in the Slovenian part of the programme area is limited to the largest cities (Ljubljana, Maribor, Kranj, Murska Sobota, Celje, Ptuj) and Zasavje. Most of these cities, as well as Zasavska region have adopted ordinances on air quality plan on the basis of which action plans will be prepared to reduce air pollution with particulate matter, mitigation measures, a monitoring plan and to determine the responsible persons.



Measurement locations below limit value  exceeded limit value

Figure 5: Air pollution with PM10 *(Source: Slovenian Environment Agency[[2]](#footnote-2))*

Ground level ozone (O3) is exceeded accross the country with transportation as the main cause. Primorska region (a part is in the programme area) is the most polluted area in Slovenia with ozone, due to the transfer of ozone from Po valley (transboundary pollution) and higher number of days with sun radiation. In general higher concentrations appear in urban centres, in countryside and in higher altitudes. Precursor emissions have been reduced for 41% from 1990 to 2011 due to stricter emissions standards for motor vehicles. Emissions of NOx and VOCs have been in 2011 lower then the target values.

Emissions from point sources such as thermal power plants, district heating plants and industry, have also decreased considerably. The thermal power plants and district heating plants (TPP Šoštanj increased production, TPP Trbovlje decreased it; Ljubljana district heating system) still have the highest share of emissions (60 %).

The most important sources of air pollution are energy and transport; agriculture is prominent only at ammonium pollution. In the last decades Slovenian economy has slowly restructured in the direction of services development, but it still has high proportion of processing industry (22%) compared to other EU countries, with emphasis on energy intensive industry. Most of the industrial air pollution sources (metal and chemical industry, energy production) are in the programme area. Increased energy use in transport (40% share in 2008) is a result of increase of motorization rate of population, growth of kilometres driven per car, and growth of transit transportation. Despite increased use of energy emissions from transport and energy sector are decreasing, mostly due to new technologies. No detailed information for the programme area were available, but we can assume that similar trends apply, with larger impact of energy sector because most of the activities of this sector are carried out in the programme area.

**Austria**

Air pollution is decreasing, but the concentration of particulate matter (PM10) and nitrogen oxides still exceeds the limits set at EU level. There are large differences between locations, as similarly to Slovenia, transport is one of the main sources of air pollution. PM10 limiting values of the European Directive on air quality were exceeded in 2011 in seven of the nine Austrian federal states, therefore guidelines were prepared on how to take action to reduce emissions by 20%. The area of Graz was one of the most polluted with PM10. Styria has adopted a management plan for air quality in 2011. At the moment there are no detailed data to what extent its implementation is contributing to improving the situation.

Other emissions in Austria are relatively low, with the exception of ozone, which occasionally exceed the limits in urban areas. SO2 emissions have been significantly reduced due to the restructuring of the economy. In general, like Slovenia, pollution from point emission sources such as industrial plants has been reduced, with transport becoming the main source of air pollution.

**Climate change**

**Slovenia**

Greenhouse gas (GHG) emissions in total in Slovenia in 2011 have been 19.509 kt of CO2 equivalent, which is higher then allowed Kyoto baseline year[[3]](#footnote-3) value, but they are still acceptable if carbon sinks are considered: accounting for forests as sinks the average GHG emissions in Slovenia in 2008-2012 can be 20.045 kt of CO2 equiv. The programme area contains vast forests except in the flatlands of Pomurje and Podravje, alluvial plains of central Slovenia, Gorenjska and Savinjska valley and highlands.

GHG emissions have been reduced in 2011 (regarding the year 2010) in the majority of European countries, for 3,3% in EU-27 and for 4,2% in EU-15; while in Slovenia have been higher for 0,1%. Main reason for hat has been transportation and to a smaller extent emissions from thermal power plants, technological processes and waste. Road transportation has had the biggest share in growth of GHG emissions in Slovenia; emissions have been higher for 190% compared to the Kyoto baseline year (1986). Noticeable decrease in emissions has been traced in use of energy in industry and construction (from 22% in 1986 to 9% in 2011), and emissions from agriculture are slightly lower because of decrease in livestock breeding and improved management of pig farms. The data are estimates for entire Slovenia and detailed data on the programme area were not available, but the trends are likely to be very similar.

The biggest share in GHG emissions in Slovenia in 2010 has had energy supply (33,7%), followed by transportation (27%), energy use (21,2%) and agriculture (10,1%); the largest share has CO2 (82,6 % in 2010), mainly from energy use, followed by CH4 (10,1 %), from waste management and agriculture, and N2O (5,8 %), from agriculture and (road) transportation.

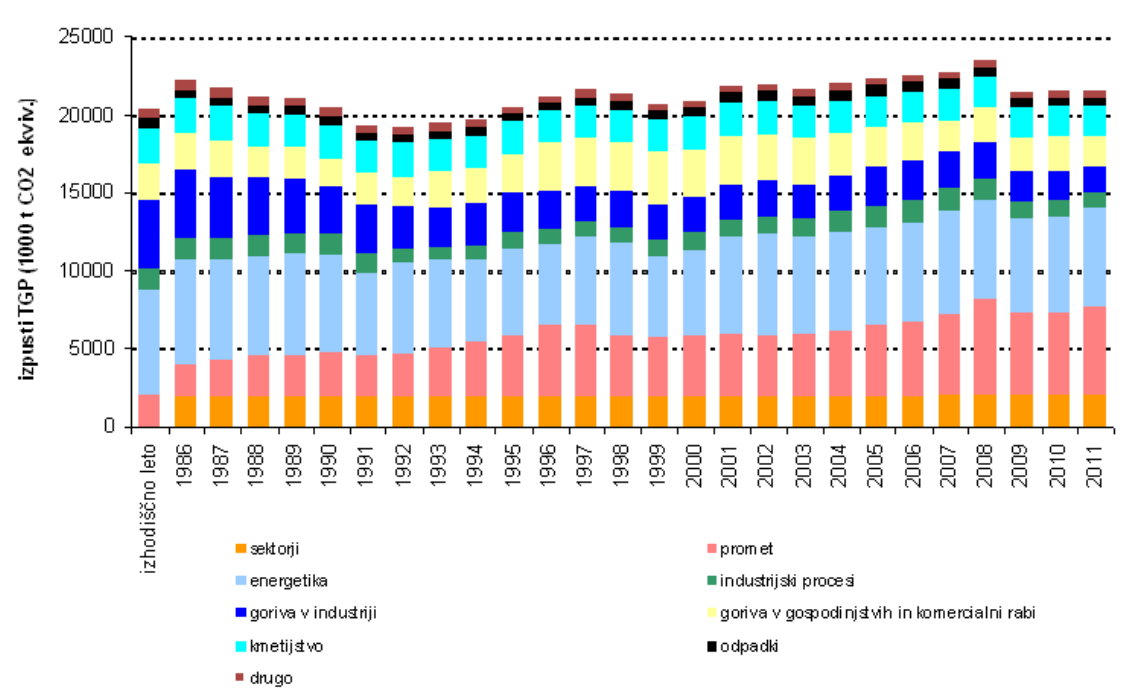
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Figure 6: Year based GHG emissions from sectors in Slovenia 1986-2011

*Key: top-down first column, then second: sectors, energy, fuels in industry, agriculture, other, transport, industrial processes, fuels in households and commercial use), waste (Source: Slovenian Environment Agency)*

In Slovenia achieving goals from Kyoto protocol and to reduce its GHG emissions is based on Operational Programme for Reducing GHG emissions in the period 2008-2012 (revised version of the Operational Programme 2013-2020 is in the preparation). Other documents important for climate change policy are National Action Plan for Energy Efficiency 2008-2016 and National Action Plan for Renewable Energy Resources 2010-2020.

**Austria**

A key strategy for reducing GHG emissions in Austria was the "Klimastrategie 2007", the objectives of which have not been achieved up to now. Greenhouse gas emissions in Austria in 2011 totaled 82.8 million tonnes of CO2 equivalent, which is about 6.0% more than in 1990. With the exception of 2010, GHG emissions continue to decrease; in 2010 the increase was primarily due to higher recovery after the economic crisis. Austria is committed under the Kyoto Protocol to reduce emissions by 13% in the period 2008-2012 compared to the base year 1990. Much of the reduction has been achieved with so-called flexible instruments (actions abroad, funded by Austria). Following the trend of the objectives of the Kyoto Protocol would not be difficult to achieve, but data for recent years are not available.

An interesting fact is that in 2010 the concentration of NOx was approximately 40% higher than the threshold set with the Emission Limit Values Act. These emissions are to a large extent the result of heavy traffic. This is also corroborated by the data of Carinthian Institute for Climate Protection, which show that the largest source of air pollution is transport which increased by 64% since 1990, the second largest source is industry and the third is heat generation.

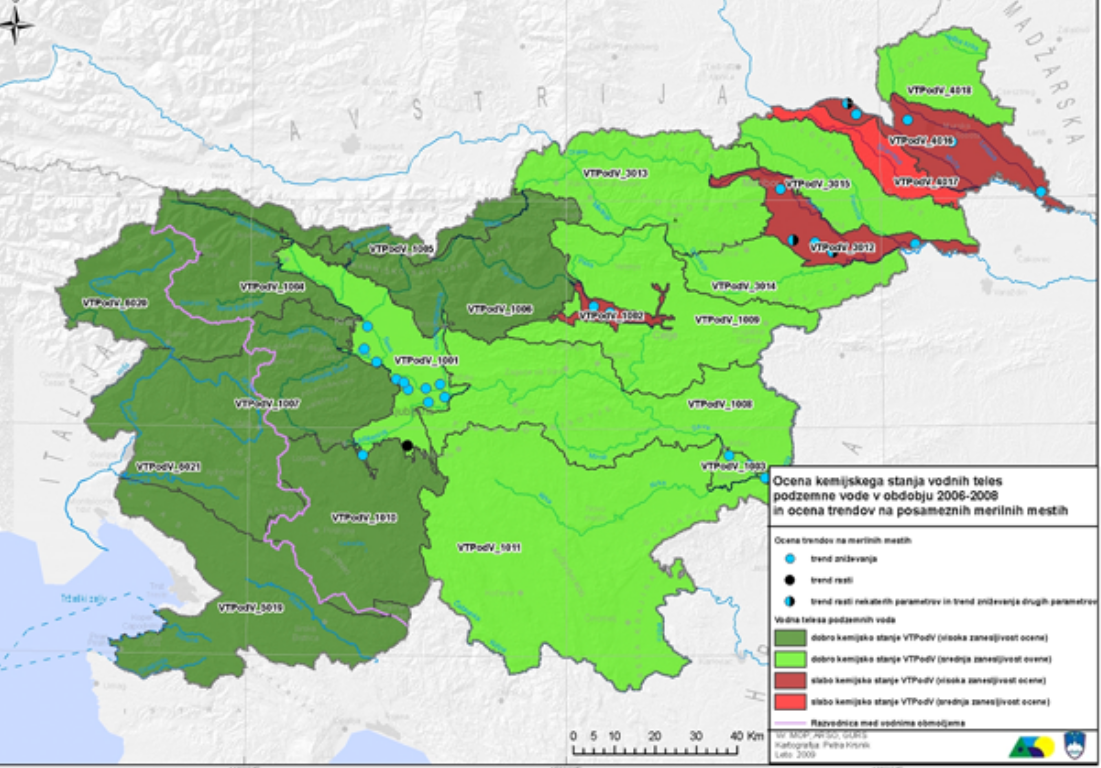
### Water quality and water management, including flood risk

**Slovenia**

Environmental goals for surface waters are: pursuit of good chemical and ecological conditions of waters till 2015; prevention of further degradation of waters, reduction of emissions into waters. More than half - 51,6 % (80) of all surface waters are achieving the environmental objectives and of these 7,1 % are in very good condition. Good chemical condition was determined for almost 95% (147) of all surface waters as mostly they do not contain any contaminants.

In general Slovenian surface waters are not overloaded with dangerous substances. More than a third - 38,1 % (59 ) of surface waters do not reach good ecological condition; Kamniška Bistrica at the section Študa – Dol is a well-known example of river in very bad condition.

95% of Slovenian population use underground water for drinking. The aquifers in the northeast of Slovenia, which is part of the CP SI-AT area, are the most polluted ones, containing pesticides and nitrates. On several measurement points the trend of decrease of atrazine and desetil-atrazine concentrations has been noticed, which is a positive consequence of prohibition of their use. Efficient decrease of nitrate concentrations is not noticeable yet. Underground water in karst is of better quality, but requires more efficient protection due to its high vulnerability. Water resources are protected with water protection areas on state level; at smaller aquifers there is a delay in transfer of legislation to state level, therefore the municipal decrees still aplly in such cases.



* Good chemical condition (high probability)  Poor chemical condition (medium probability)

 Bad chemical condition (high probability)  Bad chemical condition (medium probability) trend of reduction  trend of growth

Figure 7: Estimation of chemical condition of underground waters 2996-2008 and trends (Source: Slovenian Environmental Agency)

Water consumption is increasing in households (1.7% between 2011 and 2012) and decreasing in industry and businesses (by 4.6% between 2011 and 2012); disaggregated data for program area is not available, but it is likely that the trends are similar. The number of households connected to the sewerage treatment is increasing, among other things, due to the obligations of Slovenia for the implementation of the Water Framework Directive.

Majority of Slovenian rivers have torrent character and have high waters in the spring and autumn, and this applies also to the rivers in the programme area. Years from 2008 to 2010 rivers have above average runoff; while the runoff in 2011 has been very close to year 2003 when it was the lowest (in the period 1961-2011).

The largest rivers in the Slovenian part of the programme area are Sava, Drava and Mura. Sava originates in the programme area and is an increasingly important source of energy. Drava and Mura run through greater part of the Austrian part of programme area and are also an important source of energy; while the chain of hydropower plants on the Drava is established both in Austria and Slovenia, Mura is exploited for energy only in Austria at the moment. Among other major rivers there are Savinja, Dravinja, Ljubljanica, Sora, Kamniška Bistrica and Ledava.

In Slovenia 7% of population live on flood areas. The most extensive flood areas are northeast plains of Sub Panonic Slovenia, Pre-Alps basins and valleys and plains by rivers Ledava, Mura and Ščavnica. The programme areacontains the areas with biggest share of Slovenian population on flood areas - in Savnjska region (13%), Zasavje region (12%) and Central Slovenian region (9%). In the last decade, the frequency and damage from floods have increased significantly.

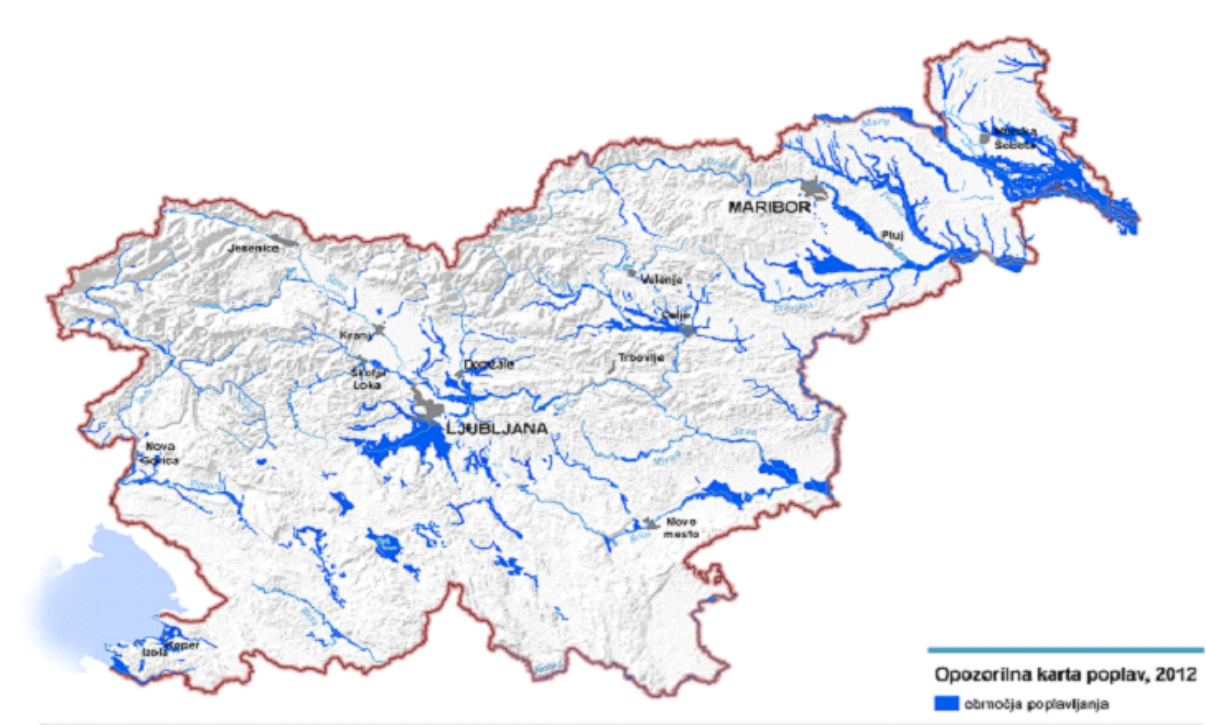
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Figure 8: Alert map of floods, 2012 (Source: Slovenian Environmental Agency)

Most of the programme area is part of the Danube River Basin Districts that is shared between Slovenia, Austria, Hungary, Croatia and Italy. In addition, western part of the programme area (Soča Valley) is part of the Adriatic river basin, Slovenia sharing it with Croatia and Italy. Slovenia prepared River Basin Management Plans for both River Basin Districts as one document titled 'The RBMP for Danube RBD and North Adriatic RBD 2009-2015'.[[4]](#footnote-4)

**Austria**

The Austrian part of the program area is characterized by numerous lakes which form the core of the tourist offer. In general, water quality in lakes and streams is good. The main rivers are the Drava, Mura and Raba: all three are important in terms of cross-border impact, since the first two flow to Slovenia and the last one to Hungary. It is interesting that approx. 41% of the water flowing through Slovenia comes from Austria.

Most of the surface water in Austria is of good quality, only 10% of rivers and streams are in poor state according to the parameters of the Water Framework Directive. Groundwaters, too are generally of good quality and are crucial for the water supply. Utilization of nitrate and plant protection products continues to decline due to the effective implementation of the Water Framework Diretive and changes in the field of agriculture, brought about by the Common Agricultural Policy. Among the more polluted areas is still the area of Leibnitz and the area along the Mura.

According to data from 2008, 95% of the Austrian population were connected to the public water supply; in the main cities of the states participating in the programme that share was the same or even higher in 2011 (Klagenfurt / Carinthia - 98%, Graz / Styria - 97%, Eisenstadt / Burgenland - 95%). A water supply pipeline is planned from Koralm to Villach that will improve the drinking water supply in Carinthia, where occasionally a lack of quality drinking water occurs. According to Eurostat data from 2010, 91.5% of people living in Carinthia were connected to the sewerage system, while in Styria this share was 91.0% and even 98.7% in Burgenland; this is very high level. Drinking water resources are protected by a system of protected areas at the individual state level.

Accurate data on the number of residents in flood-prone areas for the program area is not available, but in any case the most flood-risk areas of the Drava, Mura and Kučnica. Just as in Slovenia, the frequency of fllods is increasing.

### Landscape

Most of the programme area is part of the area of Alpine convention. The Alpine Convention[[5]](#footnote-5) is an international treaty between the Alpine countries (Austria, France, Germany, Italy, Liechtenstein, Monaco, Slovenia and Switzerland) as well as the EU, aimed at promoting sustainable development in the Alpine area and at protecting the interests of the people living within it. It embraces the environmental, social, economic and cultural dimensions. Unlike other mountain regions, the Alps are strongly characterized by cultural landscapes which are present also at high altitudes. These areas being traditionally marked by a great biodiversity, the preservation of nature and landscape protection in the Alps must deal especially with cultural landscapes, in which the transition to “wild nature” is often blurred.

The objectives indicated in the Protocol on the [Conservation of Nature and Landscape Protection](http://www.alpconv.org/en/convention/protocols/Documents/protokoll_naturschutzGB.pdf) include measures to protect, care for, and restore ecosystems as well as preserve the natural living environments of wild animal and plant species and are the most demanding ones. Among other things, territorial and urban planning, soil protection, water, energy, industry and handicraft, tourism, agriculture and forestry, but also training, education and research are mentioned in the Protocol.

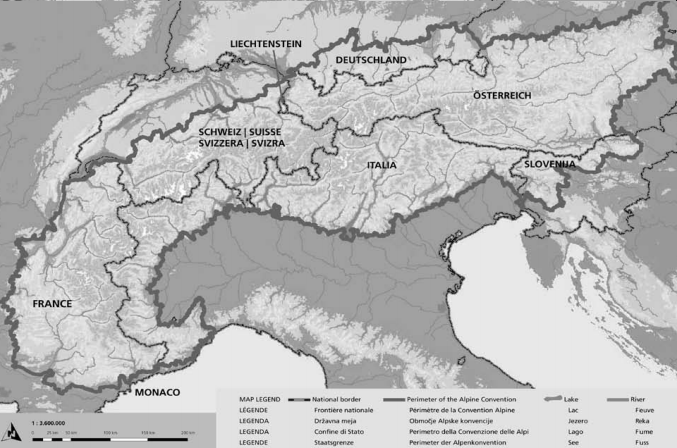


Figure 9: Area of Alpine convention (MOP[[6]](#footnote-6))

**Slovenia**

In Slovenia, the programme area is categorised in the following landscape macro regions of Slovenia –Alpine landscape, Subalpine landscape and Pannonian landscape. These macro regions include landscape with recognisable characteristics on national level. These are the areas which include the recognisable and representative parts of Slovenian landscape with well preserved landscape elements, areas of outstanding landscape with unique or rare patterns of landscape structure, areas of cultural heritage with high symbolic value in combination with outstanding elements of natural value. The core areas of national importance are Triglav National Park and Goričko Landscape Park. Other areas with nationally recognised characteristics are Pohorje and central part of Slovenske Gorice, Drava River and entire Goričko area.

The areas with recognisable characteristics on national level are: Bohinj, Fužinarsko-Studorske planine, Lipnica valley, valley of Zg. Selce, Trenta, Brdo, central part of Slovenske gorice, Bitnje, Srednji vrh pri Gozdu Martuljku, Strojna, grad Borl, Jezersko, Fala area, part of Goričko, Jeruzalemske gorice, Ribniško Pohorje, area of Rogatec and Donačka gora, southern part of Pohorje etc.

Some outstanding landscapes in the programme areas are: Drežnica, Trenta, Bled, Uskovnica, Voje, Bitnje, Bohinj, Sorica-Danje-Torka, Logarska dolina, Jezersko, Koprivna, Strojna in alpine region, Bukovnica, Kobilje, Lendavske gorice, Dolinsko pri Polani, Dolnja Bistrica-Hotiza, Jeruzalemske Gorice, Gradišče, Kalvarija-Piramida in Haloze in pannonian region. A map of the outstanding landscape areas is below.

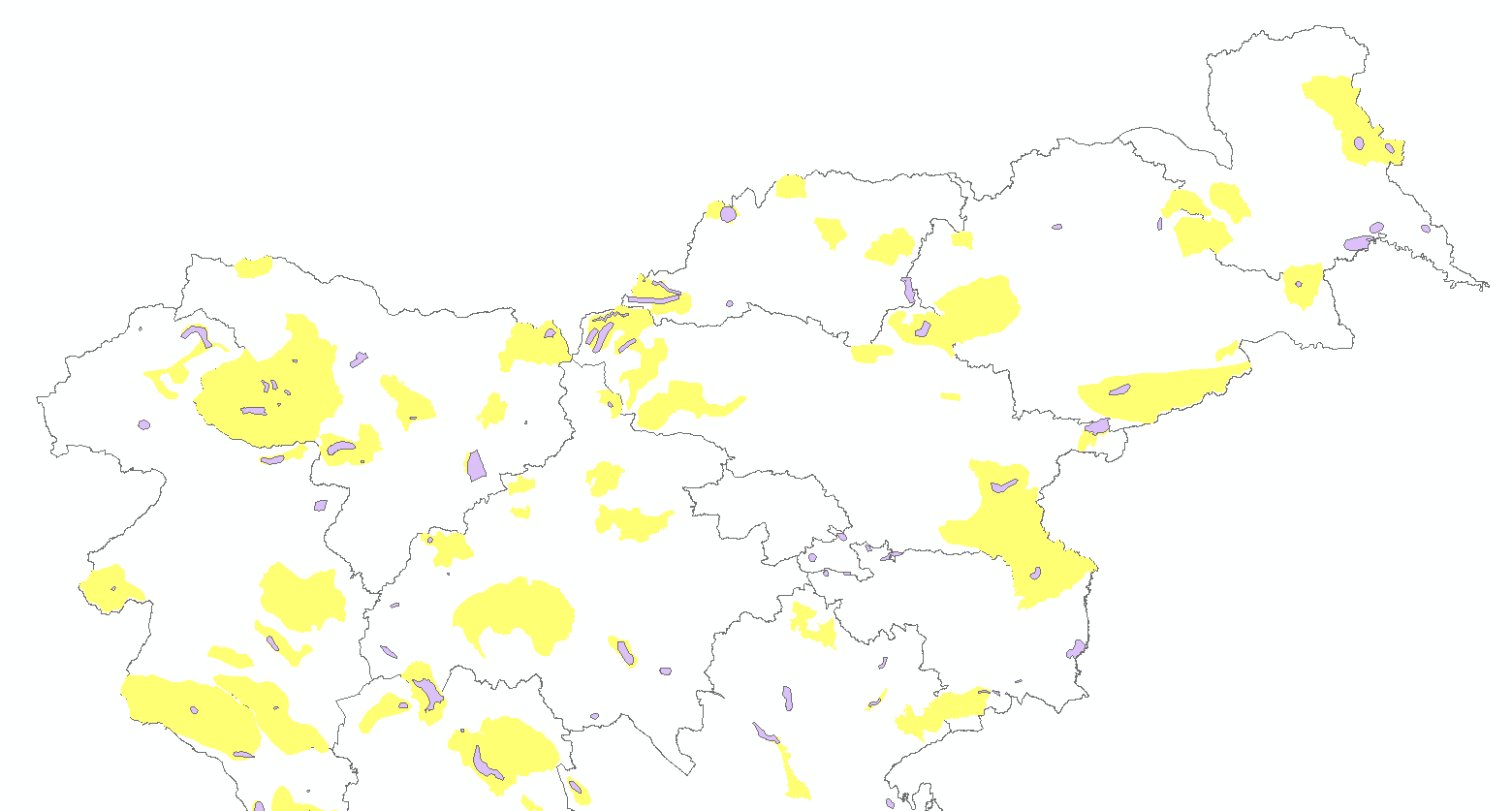


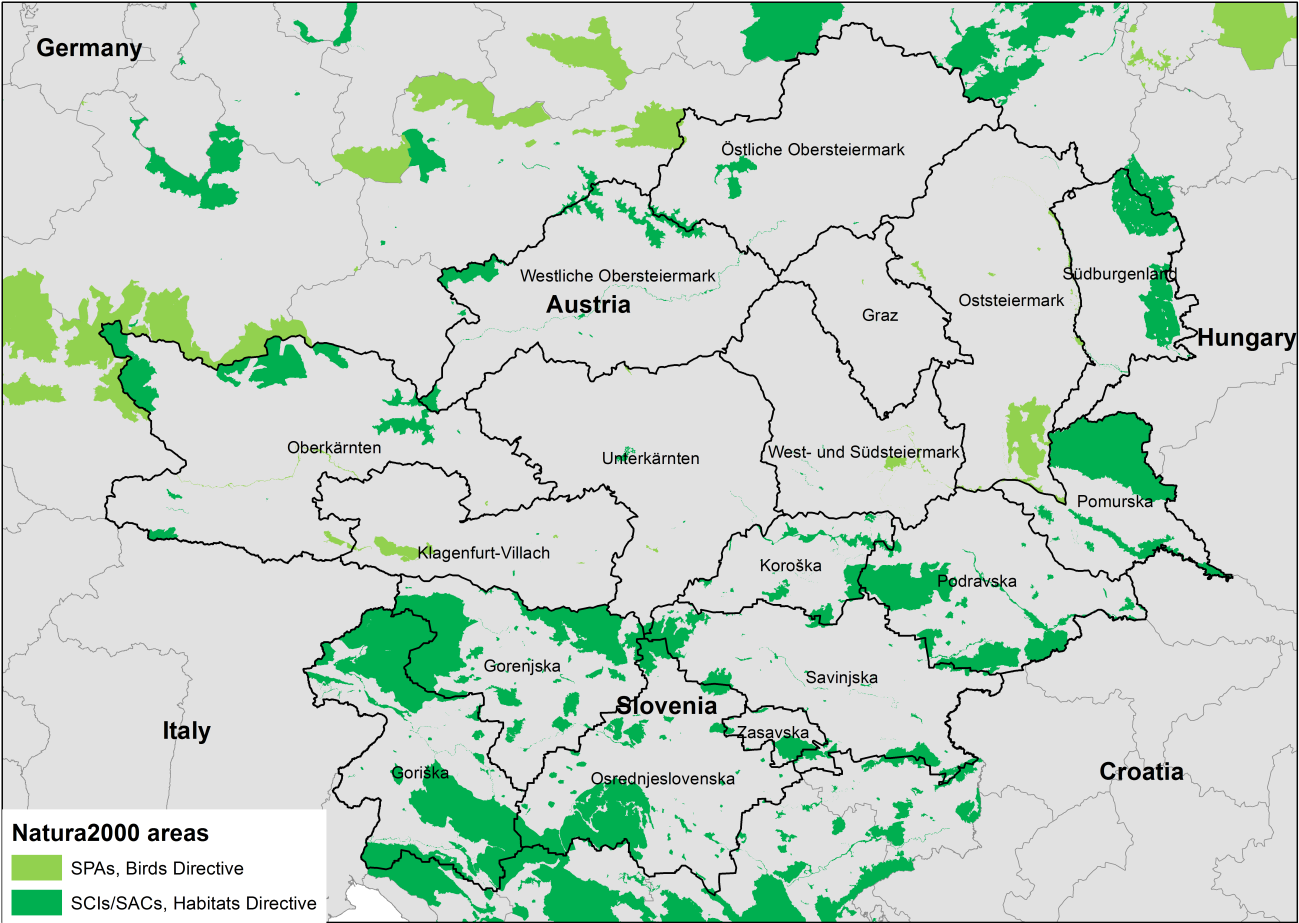
Figure 10: schematic presentation of important landscape areas in the programme region (source: Spatial Development Strategy of Slovenia)

**Austria**

Austria also has extensive exceptional landscapes, which are usually part of the Protected Areas and Natura 2000 sites. In the Alpine part of the programme area they are considered practically the same as in Slovenia. The landscapes are maintained by using the instruments of nature protection and implementation of the Rural Development Programme, which helps to maintain extensive farming in less-favored areas. In some areas the situation has worsened due to the increased construction and urban development, but in times of economic crisis has stalled a bit.

### Biodiversity and Natural Heritage

The entire programme area is characterized by a very high biodiversity, which is also reflected in the large number of protected areas and Natura 2000. The Natura 2000 network is particularly dense in the Slovenian part of the program area, and is expected to increase it on the Austrian side of the program area. The Austrian part of the programme area, on the other hand, has more smaller protected areas.



Vir: EEA, JOANNEUM RESEARCH – POLICIES; 2014

Figure 11: Natura 2000 areas

**Slovenija**

Slovenia is one of the countries with the greatest biodiversity in Europe. This is the result of special natural circumstances, such as the diversity of geographical, climatic and other specific factors, and of different historical circumstances in the last two hundred years. Slovenia represents one of the most important crossroads on the migration routes for several floristic elements and animal species. Important habitat types include natural forest, caves, peat lands, major river basins, lakes and fish ponds, wetlands, and several types of meadows and grasslands.

Total Natura 2000 area in Slovenia is 720287.82 ha, which represents 35.53 % Slovene territory. 26.31 % of area is situated in protected areas. Slovenia has 260 sites registered as SCI according to Habitats directive and 26 SPA sites registered as SCI. The majority of these sites are in the programming area. About 70% of the Slovenian Natura 2000 network is covered by forests, which shows their overall good condition. Among the larger areas of Natura 2000 are highlands and hilly areas (Karavanke, Pohorje, Julijske Alpe, Jelovica, Kamniško-Savinjske Alpe Peca, Goričko, etc.) wetland areas (Ljubljansko barje) and bigger rivers (Drava, Mura, Savinja – Letuš, Sava – Medvode – Kresnice, Dravinjska dolina, Planinsko polje, etc.)

Protected areas cover about 12.5 % of Slovenia’s surface area. [[7]](#footnote-7) Currently there is one national park, three regional parks, 44 nature parks, one strict nature reserve, 54 nature reserves and 1276 natural monuments in Slovenia. The only national park (Triglav national park) in Slovenia is partly situated in Gorenjska statistical region, on the other hand, there are no regional parks in the 6 regions that are part of the programme. Landscape park Goričko covers big surface in Pomurska region, so does nature park Logarska valley in Savinjska region. Goričko is also playing an important role in cross-border development and is part of 3-lateral park with similar parks in Austria and Hungary.

In 2013, first Geopark was formed in Slovenia (crossborder Geopark Karavanke). It covers a surface area of 977 km2 with population over 50.000. Geopark is situated in Koroška statistical region. **From march 2013 on** Karavanke/Karawanken Geopark is a part of the European (EGN) and Global (GGN) Geoparks Network under Unesco.

**Austria**

The three federal states involved in the programme preparation are implementing nature and landscape protection by specific protection programmes for species, habitats or landscapes and by nominating sites under different categories of area protection (see table). Landscape protection areas and protected parts of landscape primarily aim at landscape protection whereas national parks and nature reserves are natural or semi-natural ecologically important areas with habitats worth protecting and/or rare or endangered fauna and flora species.

Austria has impressive species diversity: there are around 45,000 animal species and 2,950 ferns and flowering plants. Of these, 581 animal species and 167 plant species are found only in Austria.[[8]](#footnote-8) 27 % of Austrian territory is protected under nature conservation legislation: 16 % is strictly protected as Natura 2000 sites, national parks or nature conservation areas, while 11 % comprises less strictly protected sites, such as landscape conservation areas.[[9]](#footnote-9) Data on this are presented in the table below, but only on national level.

Table 6: Overview of nature protected areas in Austrian side of the programme area )2009)

|  |  |  |  |
| --- | --- | --- | --- |
| Site category | Number | Km2 | % of national territory |
| National parks | 6 | 2353 | 2.8 % |
| Natura 2000 sites | 159 | 11,557 | 13.8 % |
| Nature conservation areas | 442 | 2,992 | 3.6 % |
| Landscape conservation areas | 247 | 12,696 | 15.1 % |
| Nature and landscape conservation areas | 4 | 506 | 0.6 % |
| Protected parts of landscapes | 347 | 86 | 0.1 % |
| Nature parks | 48 | 4,143 | 4.9 % |
| Ramsar sites | 19 | 1,380 | 1.6 % |
| Biosphere parks | 6 | 1,525 | 1.8 % |
| Other conservation areas (excl. nature reserves) | 40 | 1,507 | 1.8 % |

In the Europe-wide ecological network Natura 2000 Styria has already 41 sites, which can be seen in lower map.[[10]](#footnote-10) 16 Natura 2000 sites can be found in Burgenland and 33 in Carinthia.

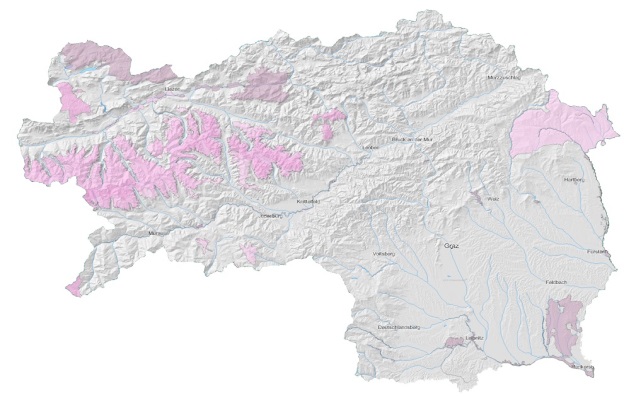


Figure 12: Natura 2000 in Styria

There are 39 nature reserves, 76 protected landscape areas, 33 areas of conservation / Natura 2000 sites, 263 natural monuments, two national parks as well as one national park and biosphere reserve in Carinthia.

In Burgenland, 34% of the land area is dedicated to natural reserves and landscape conservation areas

such as, for example, the Neusiedler See National Park. In Styria, there are 7 nature parks and one national park (Gesaeuse).

### Cultural heritage

In the CBC programme area there are many **cultural heritage sites**, including the cultural landscape. Cultural heritage has different regimes of protection and the categorisation differs between Slovenia and Austria.

Cultural heritage is an important factor in the development of tourism in the area and increases visibility of the different areas and localities. The whole programme area is very rich in non-material cultural heritage, such as local customs, musical and linguistic traditions. The latter stems from the large number of minorities in the programming area, the Slovenian and Croatian to Hungarian minority and extensive Roma population in the eastern part of the programme area.

**Slovenia**

In the Slovene part of the programme area there are more than 22,000 cultural heritage sites and 416 cultural heritage areas. The units of cultural heritage are of very different types, from different religious buildings to secular architectural heritage such as castles (Ljubljana castle, Bogenšperk, Rakičan Castle, Grad...), urban architecture and old rural homesteads.

In the last decade numerous cultural heritage sites were rennovated, often with the help of funding from ERDF, cross-border cooperation projects and the Rural Development Programme, and the awareness of the general public has increasaed. During the investment and construction boom (the period between 2000 and 2010), a significant number of cultural heritage buildings were damaged or even destroyed.

**Austria**

A similar situation is in Austria, where a number of cultural heritage sites are protected on the federal state level. The city of Graz - the historic core and Eggenberg Castle is the only UNESCO heritage site in the programme area.

### Cross-border issues

The following key aspects with cross-border impact have been identintified in the program area CP SI-AT:

* Water management, including flood safety: 41% water flows into Slovenia from Austria, therefore good quality management of waters is necessary to prevent pollution and reduce the risk of flooding downstream.
* management of Natura 2000 sites and protected areas: the areas of preserved nature (in the case of protected areas also of natural heritage) often extends beyond the boundaries and form the so-called green corridors. These areas are important for the conservation of species and habitat types, such as migration corridors of animals and as an area for recreation.
* Joint preservation of cultural heritage: the programme area shares historic ties and preservation of cultural heritage can contribute to the conservation of the cultural richness of the area. This in turn also contributes to the development of tourism in the area.
* Ensuring the availability of public transport: this aspect is important in terms of providing access and achieving reduction of air emissions from transport. Particularly important is the exchange of experience, and possibly also establishment of cross-border public transport in areas with high rate of daily commuters.

## Areas under various types of protection

There are numerous areas with special protection regimes, however, we have not shown them on one map due to the large amounts of data. In the program area are some types of such sites:

* Water protection zones (for protection of the quality of water),
* Flood areas,
* Natura 2000 sites,
* Protected Areas,
* Natural values (in Slovenia)
* Environmentally Sensitive Areas (in Slovenia)
* Protective forests and forest reserves (in Slovenia)
* buildings and areas of cultural heritage.

## Trends and likely evolution of the environmental baseline

Baseline trends without implementation of the programme are presented as the “zero alternative” in the chapter on alternatives.

# Assessment of potential impacts of the programme

## Overview on the impacts of the programme on the environment

The likely significant effects on the environment were assessed on different levels:

* on strategic level (consideration of environmental objectives in the development of the Programme)
* by priority axis/specific objectives,
* by potential projects (types of supported activities).

We have reviewed the proposed activities to be supported by the CP SI-AT and have prepared recommendations. The impacts were assessed on the following basis:

* Whether they are positive or negative,
* Whether they are direct or indirect
* Magnitude,
* spatial extent,
* reversibility,
* potential cumulative and synergistic effects.

On the strategic level, the CP SI-AT is largely intended to support activities aimed at improving the state of the environment, i.e. directly or indirectly by supporting activities which depend on quality environment (tourism). The entire priority axis 2 focuses on this and the largest percentage of funds have been allocated for it – more than two thirds (i.e. a good 36 percent of the entire programme budget). The high concentration of projects aimed at the development of sustainable tourism related to natural and cultural heritage can lead to an increase in visitors which, in the case of inadequate management of visits, can lead to negative effects on the natural heritage (e.g. disappearance of certain habitats, withdrawal of certain animal species into more quiet areas, etc.)

Priority axis 1, which supports the development of small and medium-sized enterprises, innovations, cooperation of research institutions and companies, can by supporting development and a long-term increase in the volume of production contribute to an increase of emissions in the long term. With regard to the structure of the economy, the existing cooperation and research activities in the programme area (wood processing chain, energy efficiency, new technologies of perception and monitoring of the state, etc.) may facilitate the development of green technologies and technologies and products with lesser impact on the environment, as well as contribute to improved monitoring of the state of the environment and forecasting of environmental trends. In all of the cases, the effects will be small, because the priority axis is aimed at mostly small and medium-sized enterprises, as well as at research activities before or during the phase of commercialisation of products (i.e. a small scope of activities).

Priority axis 3 with its projects for the strengthening of cooperation and enhancing institutional capacity can improve the understanding of environmental contents, environmental processes and legal requirements, as well as procedures in the field of the state of the environment. Moreover, it can improve cooperation and exchange of experience and data in the field of environmental protection. Negative effects on the environment are unlikely, since the envisaged activities do not comprise cooperation in the fields with significant negative effects on the environment.

Priority axis 4 involves technical assistance, which will play an important role in determining to what extent activities within the framework of the first three priority axes will contribute to achieving the programme and environmental objectives. The Managing Authority can predominantly contribute to the environmental performance of the programme on two levels: with suitably designed criteria for the selection of projects and timely monitoring of the effects and results of programme implementation. The latter can depend on the annual reporting on progress and ongoing evaluations; however, timely adaptation of the programme to support those aspects of implementation which successfully support the preservation or improve the state of the environment (especially priority axis 2) will be important, also in order to reduce potential negative effects on the environment.

According to the legislation, services for heritage protection (protection of cultural heritage, nature conservation) should be included in heritage restoration and investment projects, so all investments in heritage should be aligned with the protection requirements. Services for heritage protection (Institute for Nature Protection and Institute for Cultural Heritage Protection in Slovenia, competent federal state offices in Austria) and inspection services therefore play an important role in licensing procedures and controls.

Table 7: Overview of potential impacts of implementation of CP SI-AT on the environment

| **Type of action** | **Environmental effects description** | **Environmental effects characteristics** | **Time horizon** |
| --- | --- | --- | --- |
| **TO 1b** |  |  |  |
| Improvement of cross border competitiveness and excellence in research and innovation (e.g. by creation of joint cross border platforms for know-how and technology transfer as basis for research and innovation, applied science projects, etc.) | No impact except positive impact in case of research in the field of environment | * Indirect effects * Cumulative and synergistic effects | * mid- and long term |
| Better use of research infrastructure for crossborder research institutions and relevant stakeholders (e.g. institutional cooperation between R&D-infrastructures). | No impact. |  |  |
| Use of research potential of researchers and their international mobility (with the purpose to increase the competitiveness of CB area). | No impact. |  |  |
| Implementation of research, innovation, technology transfer projects to support the building up of competences in the programme area. | No impact except positive impact in case of research in the field of environment | * Indirect effects * Cumulative and synergistic effects | * mid- and long term |
| Promotion of cross border cooperation between research institutions and public administrations. | No impact. |  |  |
| Strengthening of innovation processes and investments for enterprises cooperating across border and other institutions to develop new or improved products, services and pilot investments. | * potential positive impact in case of research and product/services development in the field of environment * potential negative impacts on environment and natural resources depending on technology | * Indirect and direct effects * Possible positive effects on environment * Possible negative effects in case of using polluting technologies * Cumulative and synergistic effects | * mid- and long term |
| Support to enterprises in the phase of testing innovation (including the process of certification). | * potential positive impact in case of research and product/services development in the field of environment * potential negative impacts on environment and natural resources depending on technology | * Indirect and direct effects * Possible positive effects on environment * Possible negative effects in case of using polluting technologies * Cumulative and synergistic effects | * mid- and long term |
| Commercialization of the solution developed and promotion of entrepreneurship. | * potential positive impact in case of commercialisation and promotion of environmentally friendly product/services | * Indirect and direct effects * Possible positive effects on environment * Cumulative and synergistic effects | * mid- and long term |
| Incentives to strengthen the innovation ability of enterprises (offering innovation support services to support innovation) or the use of new technologies in common fields of strength such as mechanical engineering and process engineering, materials (i.e. polymers), design, food, production, wood processing industry. | * potential positive impact in case of research and product/services development in the field of environment * potential negative impacts on environment and natural resources depending on technology | * Indirect and direct effects * Possible positive effects on environment * Possible negative effects in case of using polluting technologies * Cumulative and synergistic effects | * mid- and long term |
| Support services for innovative (innovation in services, creative industries, product innovation, etc.) entrepreneurs/companies and potential entrepreneurs to enable the start-up of business. | * potential positive impact in case of research and product/services development in the field of environment * potential negative impacts on environment and natural resources depending on technology | * Indirect and direct effects * Possible positive effects on environment * Possible negative effects in case of using polluting technologies * Cumulative and synergistic effects | * mid- and long term |
| Support of cross border SME/networks to develop new or improved products, services or to enter new markets and improve their export potential. | No impact. |  |  |
| Encouragement and support of creation or further development of the cross-border clusters. | No impact. |  |  |
| Encouragement and support of technology and know-how transfer (of best practices) between research, technology, educational institutions and/or institutions of the cultural and creative sector with enterprises for the development, adaptation and marketing of new technologies, products or services. | * potential positive impact in case of research and product/services development in the field of environment * potential negative impacts on environment and natural resources depending on technology | * Indirect and direct effects * Possible positive effects on environment * Possible negative effects in case of using polluting technologies * Cumulative and synergistic effects | * mid- and long term |
| Support of exchange of experiences in the field of business and innovation development. | No impact. |  |  |
| **TO 3d** |  |  |  |
| Promotion of new entrepreneurship models (innovative companies with potential of global growth, companies in CB areas facing the development challenges (problem areas). | No impact. |  |  |
| Strengthening growth and development of SMEs (and their creativity and innovativeness, investment in processes and development and development of the capabilities of the SME’s to cooperate, especially by design and implementation of support programmes). | * potential positive impact in case of development and promotion of environmentally friendly product/services | * Indirect and direct effects * Possible positive effects on environment * Cumulative and synergistic effects | * mid- and long term |
| Complementarity with the national actions of upgrading of existing CB business environment. | No impact. |  |  |
| Development of new CB business models and integrated models of business processes. | No impact. |  |  |
| Promotion and strengthening business and development CB networks (transfer of best practices, combination of existing services, enable networking between companies, platforms, clusters, institutions (financial, support) etc.). | * potential positive impact in case of research and product/services development in the field of environment * potential negative impacts on environment and natural resources depending on technology | * Indirect and direct effects * Possible positive effects on environment * Possible negative effects in case of using polluting technologies * Cumulative and synergistic effects | * mid- and long term |
| Increasing cross border cooperation of companies for competitiveness, internationalization and export e.g. by supporting networking/clusters of enterprises, joint investments, joint participation on the market, etc. | No impact. |  |  |
| Creation of awareness towards internationalisation for enterprises (SMEs), especially high growth enterprises and enterprises with the potential to grow in the programme area by promotion. | No impact. |  |  |
| Development of the capabilities of the SME’s to cooperate, especially by design and implementation of support programmes (mentoring, coaching, trainings, etc.) focused on gaining and improving of specialised qualifications, skills and competences (e.g. process innovation, new business models, language knowledge, intercultural competence, technical know-how, IPR, “greening” of SMEs, creative industry, social responsible entrepreneurship, etc.). | No impact. |  |  |
| Development of cross-border SME networks and clusters along specific value chains. | No impact. |  |  |
| **TO 6c** |  |  |  |
| Development and practical implementation of joint strategies and action plans for management and active conservation of natural and cultural heritage sites (e.g. Natura 2000 sites, cultural monuments etc.). | * Use of heritage aligned with its conservation objectives * Improved conservation, presentation and promotion of heritage | * direct and indirect effects * Possible positive effects * Cumulative and synergistic effects | * mid- and long term |
| Sustainable utilization and management of natural and cultural heritage, including nature protection measures. | * Use of heritage aligned with its conservation objectives * Improved conservation, presentation and promotion of heritage | * direct and indirect effects * Possible positive effects * Cumulative and synergistic effects | * mid- and long term |
| Conservation, restoration, development and valorisation of cultural and natural heritage sites as well as public visitor infrastructure for their utilization in the field of sustainable tourism. | * Use of heritage aligned with its conservation objectives * Improved presentation and promotion of heritage * more sustainable investments | * direct and indirect effects * Possible positive effects * Risk of negative effects in case of exceeding no. of visitors * Risk of negative environmental effects of infrastructure * Cumulative and synergistic effects | * Short-, mid- and long term |
| Support of know-how transfer, training and capacity building as well as awareness-raising for relevant stakeholders in developing corresponding skills. | * awareness raising - more sustainable action due to improved knowledge | * Indirect effects * Possible positive effects * Cumulative and synergistic effects | * Short-, mid- and long term |
| **TO 6f** |  |  |  |
| Development and practical implementation of joint sustainable water strategies to set out long-term plans to secure the water future of the programme area (e.g. identifying threats to water availability and quality, elaboration of policies and actions to help water users, water corporations and catchment management authorities to manage and respond to those threats, exchange of know-how and technologies, exchange and improvement of innovative methods like the usage of storm water for process water purposes, small scale investments etc.). | * potential positive impact on water quality and availability | * Indirect and direct effects * positive effects on water * Cumulative and synergistic effects | * mid- and long term |
| Development and practical implementation of joint modeling, monitoring and forecasting studies and research works (e.g. determination of ecological minimum flow needs for surface water bodies, elaboration/ further improvement of hydrological prognostic system models, elaboration of research studies regarding ground water resources availability, etc.) with the inclusion of climate change implications as well as action plans to reduce the overall water and wastewater footprint (e.g. awareness raising actions among the wider public and local communities). | * potential positive impact on water quality and availability | * Indirect effects * positive effects on water * Cumulative and synergistic effects | * mid- and long term |
| Development and practical implementation of integrated flood determination, protection and control measures (e.g. infrastructure investments, further elaboration of the existing floods information platform) as well as river restoration measurements (e.g. biosystem renaturation and preservation). | * potential positive impact on water quality and availability * potential negative impacts on habitats and species (especially downstream) | * Indirect and direct effects * positive effects on water * possible negative effects on biodiversity * Cumulative and synergistic effects | * mid- and long term |
| Practical implementation of joint monitoring activities (qualitative and quantitative) to assess the status and impacts of the measures incorporated. | No impact. |  |  |
| **TO 11** |  |  |  |
| Strengthening public institutional cooperation between regions, municipalities and cities as well as key institutions involved in regional development activities (e.g. exchanging practices, knowledge, know-how, services, development strategies, etc.) | No impact except positive impact in case of exchange of experience on efficient use of natural resources and heritage conservation | * Indirect effects * Cumulative and synergistic effects | * mid- and long term |
| Strengthening cooperation within cross-border networks on local/regional level, as well as the cooperation of institutions providing public services, training and educational institutions, cultural associations, etc. (e.g. capacity building, knowledge exchange and networking activities). | No impact except positive impact in case of exchange of experience on efficient use of natural resources and heritage conservation | * Indirect effects * Cumulative and synergistic effects | * mid- and long term |
| Developing and implementing training programmes and schemes (in order to intensify future cross-border cooperation as well as to build up capacities and skills needed for the CB labor market (e.g. intercultural communication and qualification trainings, language courses, joint schemes to support transfers of best practices and know-how, study visits, vocational training) | No impact. |  |  |
| Developing new services and products regarding important regional topics in order to ensure closeness to citizens and the visibility of the programme (e.g. trainings, consultancies). | No impact. |  |  |
| Active awareness-raising among key stakeholders as well as the wider public (e.g. information sheets, public information events, etc.) | No impact except positive impact in case of promotion of sustainable development, efficient use of natural resources and heritage conservation | * Indirect effects * Cumulative and synergistic effects | * Short-, mid- and long term |
| Developing and implementing CB tools and services (e.g. analytical tools, management tools, technical tools, software tools, etc.) for the purpose of risk management prevention (e.g. joint monitoring surveys etc.) and emergency interventions (e.g. information about hospital beds, availability of ambulances and medical workers, etc.). | Positive impact on human health and population | * Indirect effects * Cumulative and synergistic effects | * Short-, mid- and long term |

## Overview of impacts on environmental objectives

The impacts of the priority axes were assessed on the basis of their potential impact on the achievement of environmental objectives. The results are shown in the table below.

Table 8: Overviw of potential impacts of implementation of CP SI-AT on the environment

| **Topic** | **Environmental Objective** | **Description of the Effects** | **Overall grade** | **Grade of impacts of investment priority** | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **1b** | **3d** | **6c** | **6f** | **11** |
| **Biodiversity, flora and fauna** | Maintained diversity of species and natural habitats | Projects and activities implemented within the framework of intervention priorities 6c and 6f will predominantly have an effect on biodiversity. Within the framework of intervention priority 6c, the CP SI-AT supports joint planning and management of areas with high biodiversity (e.g. Natura 2000 sites, protected areas). Support for activities leading to an improved preservation, presentation and promotion of natural heritage is also planned. Biodiversity is often the key characteristic of natural heritage. In addition, the programme supports sustainable tourism within the context of preservation and presentation of natural heritage, outdoor recreation and similar, which can have a positive effect on the preservation of biodiversity. A negative effect of activities aimed at the development of sustainable tourism can occur in the case of an excessive number of visitors or poor management of visits, leading to, for example, damage to the vegetation, degradation of habitats and withdrawal or disappearance of animal species due to environmental disturbances (e.g. noise, interfering with animal resting places, nesting sites, maternity roosts, etc.). However, we have assessed that due to focusing on sustainable tourism this should, as a rule, not occur. Deterioration of biodiversity can threaten the attraction of the tourist activity itself, conceived and marketed as a form of sustainable tourism.  Activities for improving the management of waters and flood protection within the framework of the intervention priority 6f will, in general, have a positive impact on the biodiversity of water and shore habitats, as they will improve the quality of waters and management of waters. However, it is possible that certain activities will have a locally negative impact on habitat types and species, e.g. on the location of investment flood protection measures. This possibility will be reduced by the prior procedure for the assessment of effects on the environment (in Slovenia), on Natura 2000 sites (in Slovenia, but also in protected areas), but also with the assessment of acceptability of effects of the plan on the protected areas (Appropriate Assessment), in accordance with the Habitats Directive.  There is a possibility that projects financed within the framework of other intervention priorities will negatively impact biodiversity, since the projects (at least within the framework of priority axis 1 – intervention priorities 1b and 3d) will mostly be aimed at urban areas or, as the case may be, settlements. Furthermore, all of the supported projects comprising investments, as well as projects within the framework of priority axes 1 and 3 (intervention priorities 1b, 3d and 11), will have to carry out a prior procedure for the assessment of effects on the environment, in accordance with the applicable legislation. In the event the projects will take place on the Nature 2000 sites, they will have to carry out an assessment of acceptability of effects of the plan on the protected areas (Appropriate Assessment), in accordance with the Habitats Directive (in the entire programme area). This will help examine and prevent the possibility of negative effects not only on Natura 2000 sites and natural heritage, but also on biodiversity within those areas.  The implementation or priority axes 1 and 3 may also contribute to achieving the environmental objective if any of the selected projects is focused on this field - for example, by developing services for preservation and management of biodiversity, monitoring of the state of biodiversity (e.g. development of sensors for the monitoring of animals and their activities), with projects for coordinated monitoring of biodiversity, migrations, common activities for raising awareness on the importance of biodiversity and similar. | B | A | A | B | B | A |
| favourable condition of Natura 2000 network | Projects and activities implemented within the framework of intervention priorities 6c and 6f will predominantly have an effect on Natura 2000 sites. There are planned activities which will lead to an improved preservation, presentation and promotion of Natura 2000 sites. The intervention priority 6c comprises activities directly aimed at preserving Natura 2000 sites, i.e. with joint and improved management of these areas and activities for increased promotion and use of these areas for different forms of sustainable tourism. This will have a positive effect on the preservation of a favourable state of Natura 2000 sites. A negative effect can occur in the case of an excessive number of visitors or poor management of visits, leading to, for example, damage to the vegetation, degradation of habitats and withdrawal or disappearance of animal species due to environmental disturbances (e.g. noise, interfering with animal resting places, nesting sites, maternity roosts, etc.). To make the effect acceptable, a mitigation measure is required to ensure the management of visits in projects targeted at the development of tourism on Natura 2000 sites.  Activities for improving the management of waters and flood protection within the framework of the intervention priority 6f will, in general, have a positive impact on the preservation of a favourable state of qualifying species and habitat types of the network of Natura 2000 sites. Although it is possible that certain activities will have a locally negative impact on habitat types and species, e.g. on the location of investment flood protection measures, this possibility will be reduced by the prior procedure for the assessment of effects on the environment (in Slovenia), but also with the assessment of acceptability of effects of the plan on the protected areas (Appropriate Assessment), in accordance with the Habitats Directive.  Furthermore, all of the supported projects comprising investments, as well as projects within the framework of priority axes 1 and 3 (intervention priorities 1b, 3d and 11), will have to carry out a prior procedure for the assessment of effects on the environment (in Slovenia), in accordance with the applicable legislation. In the event the projects will take place on Nature 2000 sites, they will have to carry out an assessment of acceptability of effects of the plan on the protected areas (Appropriate Assessment), in accordance with the Habitats Directive (in the entire programme area). This will help examine and prevent the possibility of negative effects. However, we practically do not expect such projects, since the majority of investments within the framework of these two priority axes will be implemented in urban areas or, as the case may be, urban settlements. | C | A | A | C | B | A |
| **Water** | pursuit of good chemical and ecological conditions of waters till 2020 | Different forms of sustainable tourism within the framework of intervention priority 6c, e.g. water sports recreation, depend on quality water environment. Sustainable tourism will contribute to an increased care for waters. It is not expected that the expansion of tourist activities could negatively affect the state of waters. Activities supported within the framework of the intervention priority 6f, but especially activities for improving flood protection and implementation of joint strategies in the field of waters, will contribute to improving the state of waters and, consequently, achieving the environmental objective. In the long term, activities for improved monitoring and forecasting (e.g. development of models) within the framework of the intervention priority 6f, as well as activities for the development of cross-border tools and services within the framework of the intervention priority 11, will also contribute to the improvement of the state of waters.  Projects supported within the priority axis 1, but especially activities for SMEs within the framework of the intervention priority 1b, may affect the state of waters if emissions into waters will increase within the framework of supported projects. This is unlikely to happen directly due to project implementation – since the projects cannot contain major investments – but based on the results of these projects, e.g. with commercialisation and production of innovative solutions, developed within the framework of the project. Based on the scope of possibilities offered by the CP SI-AT (support is not thematically limited to a particular field of innovations or activities) and the small quantity of available funds, we have assessed that there will be very few projects on whose basis the impact on waters would increase to such an extent that they could impact the environmental objective. In addition to the possibility of the effect being small, it also exceeds the programme period. Therefore, we have assessed that this influence is negligible.  It is possible that a project may be specifically aimed at seeking joint innovative solutions for reducing the impact on waters or to improve the state of waters. By applying them in the programme area, this could contribute to a good chemical and ecological state of waters. | A | A | A | A | A | A |
| Improved flood risk management | The intervention priority 6f within the framework of the priority axis 2 will contribute to the improvement of flood protection in two ways: directly with the implementation of smaller non-investment and investment flood protection measures in target areas (e.g. the Kutschenitza River) and indirectly with joint planning, studies, modelling and determining appropriate measures.  Activities within the framework of other intervention priorities will not negatively affect the flood protection, but they may contribute to achieving the environmental objective if the selected projects are focused on this field – e.g. with innovations for more efficient monitoring of the state of waters, by designing services and products for efficient flood protection, with projects of coordinated operation in the event of floods and similar. | A | A | A | A | A | A |
| **Natural Heritage** | favourable condition of natural heritage (Protected Areas, Natural Values etc.) | For the effects of all intervention priorities the same applies as for the environmental objective "Favourable state of the network of Natura 2000 sites." All of the supported projects implemented in relation to natural heritage will have to take into consideration environmental protection guidelines, which will have to be ensured in project documentation. In Slovenia, the assessment of acceptability (Appropriate Assessment) also has to be carried out for protected areas.  The development of sustainable forms of tourism which are related to natural heritage (learning pathways, recreational pathways along the protected areas, past the natural monuments and different forms of natural heritage and similar) may contribute to the preservation of natural heritage and raising awareness on its existence.  An increased number of visits is possible, which can in the case of excessive number of visitors or poor management of visits lead to negative effects, e.g. damage of natural heritage, theft of its constituents (e.g. with geological and geomorphological heritage) and similar, although this is unlikely. | C | A | A | C | B | A |
| **Cultural Heritage** | favourable condition of cultural heritage (both objects and areas) | The intervention priority 6c comprises activities which will lead to an improved preservation, presentation and promotion of cultural heritage. The latter is supposed to be significantly connected with the development of sustainable forms of tourism, which will contribute to the more sustainably oriented investments in tourism (paths between the objects and areas of cultural heritage, cultural heritage tourism, etc.)  All of the supported projects implemented on objects or areas of cultural heritage, as well as their use, will have to take into consideration cultural heritage protection guidelines, which will have to be ensured in project documentation.  An increased number of visits is possible, which could lead to the changes of characteristics of cultural heritage (damage, wear and tear, etc.), although this is unlikely. | B | A | A | B | A | A |

### Cumulative and synergistic effects

Support for networking, research and innovations within the framework of priority axis 1 can over a medium- or long-term period lead to cumulative effects, especially emissions into the air and water. It is also possible that the space needs of supported beneficiaries and their project partners will increase. Cumulative effects can be positive in the case of implementation of technology and products with lesser impact on the environment, or negative in the case of increasing emissions due to an increase in production volume or implementation of new technologies with higher emissions or emissions which present a greater environmental burden.

Cumulative effects may also occur within the framework of implementing priority axis 2, i.e. when a larger number of projects is implemented in a certain protected area (Natura 2000 sites, protected areas) or on a natural heritage site. On the one hand, effects can be negative if the projects together lead to a substantial increase of visitors and the use of this area, which could cause a worsening of the state of habitats and populations of qualifying or protected plant and animal species. On the other hand, effects can also be positive if, by using financed projects, the management of visitors is improved and infrastructure for visitors is arranged in a manner which decreases the pressure on protected areas and natural heritage.

We have assessed that synergistic effects will occur during the implementation of the CP SI-AT and other ESI Funds programmes due to certain connections between their contents. We can expect that beneficiaries within the framework of the CP SI-AT will, for the most part, create joint strategies, approaches, tools and products which they will be able to implement in certain cases by using the available funds within the framework of other ESI Funds programmes, e.g. funds from the ERDF for supporting investments into SMEs, funds of the Cohesion Fund for arranging flood protection and water management, funds of the ESF for the training of certain target groups and similar.

Correspondingly, synergistic effects will occur during the implementation of the CP SI-AT and other strategies and programmes on the national level, e.g. with the Strategy for Research and Technological Innovation "Become a Leading Innovator" of the Federal Austrian Government, River Basin Management Plans in Slovenia and Austria (i.e. its federal provinces), Natura 2000 Management Programme for Slovenia 2014-2020 and similar.

In all of the cases, the possibility for significant cumulative effects is very small, since the number of financed programmes will also be small. In addition, potential cumulative effects, as well as synergistic effects, will occur over a longer period of time which exceeds the period of programme implementation.

## Assessment of reasonable alternatives

CP SI-AT was prepared on a very strategic level, as it forms a framework to support projects with a very wide range of fields. It is therefore possible to create alternatives particularly at the level of decision on investment priorities and the allocation of resources among them. We discussed two alternatives:

* the so-called zero alternative, ie the situation in the program area, if the CP SI-AT is not performed,
* CP SI-AT focused on the thematic objectives 1 and 11, ie strengthening research, technological development and innovation and institutional capacity building. That kind of program is one option, which weighed Working Group at its meetings.

The results of the analysis of alternatives are shown in the next table.

Table 9: Comparison of impact of selected alternatives

| **Issue** | **Environmental Objective** | **Alternative** |  |
| --- | --- | --- | --- |
| **Zero Alternative** | **CP SI-AT Focused on Thematic Objectives 1 and 11** |
| **Biodiversity, flora and fauna** | Maintained diversity of species and natural habitats | Biodiversity and a favourable state of the network of Natura 2000 sites has been preserved within the framework of the prescribed procedures and with the help of national programmes and resources available within the framework of operational programmes for the ESI Funds and centralised programmes, such as LIFE+. In comparison with the implementation of the CP SI-AT, in the event of Zero Alternative there will be slightly fewer activities for the preservation, promotion and raising awareness on biodiversity, protected and endangered plant species and animal species, as well as the role of Natura 2000 sites and protected areas. | The situation is very similar as with the Zero Alternative, since the programme would not specifically support activities connected with the preservation of nature. Projects supported within the framework of priority axis 11 which will, in terms of content, be based on enhancing cooperation and raising awareness in the field of environmental protection, will contribute to the environmental objectives. However, their direct contribution will be very small and visible in the long term. |
| favourable condition of Natura 2000 network |
| **Water** | pursuit of good chemical and ecological conditions of waters till 2020 | The chemical and ecological state of waters will be improved due to the implementation of the Plan for Management of Waters, rural development programmes (agricultural environmental climate measures) and trends of reducing emissions arising from industrial activities. | The situation is similar as with the CP SI-AT, except that the effects will be smaller. With this alternative, there are no positive effects of the management of waters, monitoring of the state and development of sustainable tourism on the environmental objective.  Activities for SMEs within the framework of the intervention priority 1b may affect the state of waters if emissions into waters will increase within the framework of supported projects. However, this is unlikely to occur directly due to the implementation of projects. With this alternative, the programme would be more focused and more funds would be available for the implementation of the priority axis 1. Consequently, more projects would be implemented. Nevertheless, due to the long-term effects of the supported projects and the scope of possibilities which such a programme would offer, the effect of programme implementation on waters would be so small that it would not significantly negatively affect the environmental objective.  Moreover, projects supported within the framework of priority axis 1 contribute to the improvement of the chemical and ecological state of waters. It is possible that a project will be specifically aimed at seeking joint innovative solutions for reducing the impact on waters or to improve the state of waters. |
| Improved flood risk management | Flood protection will be improved due to the implementation of the Plan for Management of Waters, implementation of the provisions of the Directive 2007/60/EC on the assessment and management of flood risks (Floods' Directive) and the necessity to act due to the ever more frequent number of floods. | The situation is very similar as with the Zero Alternative, since the programme would not specifically support activities for the improvement of flood protection which are included in the intervention priority 6f.  Activities within the framework of other intervention priorities will not negatively affect the flood protection; they can, however, contribute to achieving the environmental objective if the selected projects are focused on this field, e.g. by innovations for a more efficient monitoring of the state of waters, designing services and products for efficient protection against floods (intervention priorities 1b and 3d), with projects of coordinated operation in the event of floods (intervention priority 11) and similar. |
| **Natural Heritage** | favourable condition of natural heritage (Protected Areas, Natural Values etc.) | Natural heritage is preserved within the framework of the prescribed procedures and with the help of national programmes and resources available within the framework of operational programmes for the ESI Funds and international financial resources and donations. In comparison with the implementation of the CP SI-AT, in the event of Zero Alternative there will be slightly fewer activities for the preservation of different forms of natural heritage. | The situation is very similar as with the Zero Alternative, since the programme would not specifically support activities connected with the preservation of natural heritage. Projects supported within the framework of the priority axis 11 which will, in terms of content, be based on enhancing cooperation and raising awareness in the field of protection of natural heritage (e.g. the importance of preservation, joint approaches to the management and promotion of protected areas), will contribute to the environmental objective. However, their direct contribution will be very small and visible in the long term. |
| **Cultural Heritage** | favourable condition of cultural heritage (both objects and areas) | Cultural heritage is preserved within the framework of the prescribed procedures and with the help of national programmes and resources which are available within the framework of operational programmes for the ESI Funds and international financial resources (e.g. the Norwegian Financial Mechanism in Slovenia). In comparison with the implementation of the CP SI-AT, in the event of Zero Alternative there will be slightly fewer activities for the preservation of different forms of cultural heritage. | The situation is very similar as with the Zero Alternative, since the programme would not specifically support activities connected with preservation of cultural heritage. Projects supported within the framework of the priority axis 11 which will, in terms of content, be based on enhancing cooperation and raising awareness in the field of protection of cultural heritage (e.g. the importance of cultural heritage, joint approaches to the management and promotion of cultural heritage, transfer of best practices and professional knowledge), will contribute to the environmental objective. However, their direct contribution will be very small and visible in the long term. |

Selected CP SI-AT is from an environmental point of view more suitable than the alternatives analysed as it includes thematic objective 6 Maintaining and protecting the environment and promoting resource efficiency, which supports the co-financing of projects intended to protect heritage (investment priority 6c) and improving flood protection (investment priority 6f ). Positive impact would be even greater if the CP SI-AT was more focused - with investment priorities 6c and 6f, but with a smaller number of other investment priorities, which would make more resources available for "environmental" priority investments and enable a greater number of projects. However, the Task Force for the preparation of CP SI-AT has decided early on in the preparation of the programme that the promotion of economic development (investment in research and innovation, enhancing the competitiveness of SMEs) is crucial for the development of the programme area, and therefore must be included in the program.

# **Mitigation measures and timeline for their implementation**

We have assessed that nearly all of the potential negative effects on the environment due to implementation of the CP SI-AT will be so small that mitigation measures will not be necessary. On the project level, numerous effects on the environment will be reduced within the framework of acquiring all of the required environmental and nature protection permits and approvals which beneficiaries have to obtain for the co-financed investments.

A mitigation measure is necessary for projects aimed at promotion and development of tourism in areas with high biodiversity, such as Natura 2000 sites and protected areas. Projects could lead to an increase in visitors in these areas, which is why it is necessary for such type of projects to request a description in the application documentation regarding the type of management of visits an individual project will aim to facilitate.

A significant effect of the projects supported with the funds of the CP SI-AT is unlikely, since the projects will be relatively small. Therefore, it is unlikely that an individual project could have a significant influence on the number of visitors. As regards the indicator of performance for this intervention priority, 16 projects will be co-financed for new and/or improved joint cross-border tourist products. Since we expect that only part of these projects will comprise facilitation of tourist activities and visits to Natura 2000 sites and protected areas, the possibility of a negative effect of this intervention priority is small. However, it is possible that an increased number of visitors may occur due to cumulative effects of other projects or activities for visitors of Natura 2000 sites and protected areas, which is also the reason for the assessment and proposal to implement a mitigation measure.

The mitigation measure to ensure management of visitors needs to be implemented with all tenders of the CP SI-AT which will support the intervention priority 6c. The Managing Authority and the Joint Technical Secretariat are competent for the implementation of the mitigation measure within the framework of tender preparation. The Managing Authority and the Joint Technical Secretariat will also monitor the performance of the implementation within the framework of monitoring the effects and results of the supported projects.

# Monitoring of the implementation of the programme

## Environmental indicators

Environmental indicators for following the state of the environment and impacts of CP SI-AT on the environment are shown in the table below. They were selected from the existing systems for environmental monitoring.

Table 10: Environmental indicators for assessment of impacts of CP SI-AT implementation on the environment

| **Issue** | **Environmental Objective** | **Environmental Indicators** | **Justification** |
| --- | --- | --- | --- |
| **Biodiversity, flora and fauna** | Maintained diversity of species and natural habitats | The state of target protected species and priority habitat types, as well as qualifying species and habitat types of Natura 2000 sites, on which projects supported within the framework of intervention priority 6c of the CP SI-AT programme will potentially focus. | We have assumed that the majority of protected species and priority habitat types are protected within the framework of the network of Natura 2000 sites and protected areas.  The indicator can be monitored by using the assessment of the state of qualifying species and habitat types (see explanation for the below indicator). In addition, it has been envisaged that, within projects focusing on certain characteristics of Natura 2000 sites or protected sites, monitoring of selected protected species and/or certain habitat types will take place.  The indicator is aimed at the implementation of intervention priority 6c, since within this investment we expect the biggest (presumably positive) effects. The effects of intervention priority 6f have been included in the next indicator. The impact of projects within the framework of priority axes 1 and 3 will be negligibly small; therefore, it would not be sensible to monitor the indicator for them.  It will be difficult to separate the influence of the CP SI-AT projects from the influence of other programmes, especially from rural development programmes (agricultural environmental climate measures) and possible larger national or regional projects. Therefore, it will be important to put the indicator into the context within the framework of evaluation. |
| The state of habitat types with which construction or non-construction flood protection measures, supported within the framework of intervention priority 6f of the CP SI-AT programme, will intervene | The indicator is aimed at monitoring the effects of implementation of intervention priority 6f. Its monitoring will be possible within the framework of reporting on project implementation.  It will be difficult to separate the influence of projects, financed within the framework of the CP SI-AT, for improving flood protection from the more extensive projects and programmes for improving flood protection (e.g. Plans for the Management of Waters within the framework of the Cohesion Fund, etc.). Therefore, it will be important to put the indicator into the context within the framework of evaluation. |
| favourable condition of Natura 2000 network | The state of qualifying species and habitat types of Natura 2000 sites where projects, supported with the funds of the CP SI-AT, will be implemented  The state of qualifying species and habitat types of Natura 2000 sites on which projects, supported within the framework of intervention priority 6c of the CP SI-AT programme, will potentially focus. | The indicator can be monitored by using the assessment of the state of qualifying species and habitat types within the framework of monitoring the implementation of the Birds Conservation Directive and Habitats Directive. The indicator can be monitored every 6 years, when the analysis is performed and a report is prepared for the implementation of both Directives. The last reporting took place in 2013 and the next will take place in 2019. Therefore, it will be possible to use the data within the framework of monitoring and evaluating the implementation of the CP SI-AT. The data for the Natura 2000 sites, on which projects are taking place, is analysed.  It will be difficult to separate the influence of the CP SI-AT projects from the influence of other programmes, especially from rural development programmes (agricultural environmental climate measures) and possible larger national or regional projects. Therefore, it will be important to put the indicator into the context within the framework of evaluation. |
| **Water** | pursuit of good chemical and ecological conditions of waters till 2020 | * The quality of groundwater in aquifers in areas where projects, supported within the framework of the CP SI-AT, will take place * The chemical and ecological state of surface waters in areas where projects, supported within the framework of the CP SI-AT, will take place | The indicator can be monitored within the framework of monitoring the state of waters for reporting on the implementation of the Water Framework Directive. In Slovenia, both indicators are monitored by the Slovenian Environmental Agency within the framework of the system of indicators of the state of the environment (indicators VD11 and VD12).  The indicator focuses on aquifers and surface waters in areas where individual projects are implemented in order to cover their effects more easily. Nevertheless, it will be difficult to separate the effects of the CP SI-AT projects on the state of waters from the effects of implementation of other projects and programmes (e.g. The Plan for Management of Waters, Investment into Cleaning Waste Water within the framework of the Cohesion Fund, etc.). Therefore, it will be important to put the indicator into the context within the framework of evaluation. |
| Improved flood risk management | The number of inhabitants living in flood areas for which flood protection will improve with projects supported within the framework of intervention priority 6f of the CP SI-AT | The indicator is aimed at monitoring the effects of implementation of intervention priority 6f. Its monitoring will be possible within the framework of reporting on project implementation. The manner of monitoring projects will have to be adapted to this (i.e. request data for the indicator within the framework of application and reporting).  It will be difficult to separate the influence of projects, financed within the framework of the CP SI-AT, for improving flood protection from the more extensive projects and programmes for improving flood protection (e.g. Plans for the Management of Waters within the framework of the Cohesion Fund, etc.). Therefore, it will be important to put the indicator into the context within the framework of evaluation. |
| **Natural Heritage** | favourable condition of natural heritage (Protected Areas, Natural Values etc.) | The state of natural heritage in the areas of implementation of individual projects, supported with the funds of the CP SI-AT programme. | The indicator can be monitored within the framework of reporting on the implementation of individual projects, i.e. those projects which intervene with the natural heritage or are implemented in areas thereof. |
| **Cultural Heritage** | favourable condition of cultural heritage (both objects and areas) | The number and the state of objects and areas in which projects, supported with the funds of the CP SI-AT, will be implemented. | The indicator can be monitored within the framework of reporting on the implementation of individual projects, i.e. those projects which intervene with the cultural heritage or are implemented in areas thereof. |

## Provisions for an environmental monitoring system

The impact of implementation of CP CP SI-AT on the environment should be monitored using the proposed indicators in the framework of evaluation: it is suggested that it is implemented for the first time in 2017 or at latest in 2019, and then again at the wrap-up of the implementation of the programme .

# Conclusions and Recommendations

Overall, the implementation of CP SI-AT is likely to have very little negative impact on the environment and quite significant positive impact. Among the positive effects worth mentioning is the reduction of flood risk and care for heritage. In most cases, the negative effects are so small that they are not significant. Moreover, most of the the cofinanced projects will have environmental impacts that will be visible only on mid- to long term.

The only exception in terms of significant impacts are the effects on the Natura 2000 species and habitat types in the event of inappropriately implemented projects supporting tourism based on natural resources - namely if the project causes excessive visit which damages the habitat types and habitats of qualifying species. Applying the precautionary principle the impact was assessed as significant where implementation of mitigation measures is necessary (grade C) and a mitigation measure was proposed – a project selection criteria whereby projects that aim at increasing tourist visits in Natura 2000 sites or protected areas should include visitors’ management. As a result, the overall assessment of the impacts of CP SI-AT on the environment was assessed as insignificant if mitigation measures are implemented (grade C).

The following recommendations were proposed in order to further reduce the negative impacts and strengthen the positive impact we present the following recommendations:

* Evaluation criteria for project applying for co-financing under Priority Axis 1 should include the possibility of additional points to projects that target sustainable use of natural resources and reducing the environmental impact as well as development of new monitoring methods (e.g. non-invasive monitoring of animal species populations, monitoring of flood effects),
* Results of monitoring of environmental indicators and achievement of objectives should be publicly available on the website of CP SI-AT,
* It should be ensured that the projects supported under the investment priority 6f is aligned with the relevant River Basin Management Plan.
* Projects that involve natural and cultural heritage should ensure sustainability of results; this should be checked at the end of the project.

It should be noted that there are only a few possibilities for negative impacts because the program is financially limited and only a small number of projects will be implemented within each priority axis. It will be interesting to monitor the actual implementation of the CP SI-AT and its effects because of the possibility of indirect and cumulative impacts that will only become apparent in the long term. For this reason, and in order to facilitate the planning of the next programming period, monitoring of achievement of environmental objectives should be carried out in parallel to regular monitoring and evaluation of program implementation.

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