





Work Package 4 Alpine Spatial Development

Action 4.4 Mapping of both active and missing stakeholders relevant to spatial development in the two selected thematic fields.

Working paper

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Impressum

All WIKIAlps project partner contributed to the stakeholder analysis by commenting the methods and analysing the institutions as follows:

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Method

Background

The term "stakeholder" is a very general one and depending on the context it is more or less well defined. For instance the economic sciences give clear information about what relevant stakeholders for enterprises are. In other fields such as policies, programs or projects the answer to this question is often not as obvious. Generally, the term "stakeholder" refers to people/groups of people and/or organisations which hold a legitimated interest (a stake) in the respective policy, program etc. and are influencing it or influenced by it.

A stakeholder analysis is not connected to a set of fixed methods, it has different meanings for different people and branches. There exists a broad variety of approaches which have been developed and used in very different fields from research, private economy to governmental foreign aid. However, all of them have finally in common that they describe the influence, power, interests and relations between stakeholders. Stakeholder analysis thus leaves us with a certain liberty concerning the methods to apply. That is why it is first of all necessary to narrow down the aim, focus and purpose of our analysis.

The general procedure of a stakeholder analysis is presented in Figure 1.









Each step can be underlain with a variety of technics. While it is possible to leave out some points of step 3 and step 4, the steps 1 and 2 are always crucial. Almost all methods emphasize the necessity to devote a special attention to step 1, because if the issue/the stake is not as precise as possible it will be difficult to identify stakeholders and to explore - in step 3 - the attitude, interest, influence, power etc. of them.

A stakeholder analysis is always a snapshot of a specific moment in time along a process: changes with regard to stakeholders' positions, attitudes, interests, power and relations - also to a certain extent of institutions - are more or less neglected in basic methods.

The role of stakeholder analysis in WIKIAlps

Dealing with sustainable spatial development, WIKIAIps is interested in the underlying structure of actors and networks involved in spatial development across the Alps. In particular, it focuses on the diffusion of Alpine Space project results via stakeholders and their networks.

The projects of the Alpine Space programme have the aim to contribute to sustainable spatial development of the whole Alpine arc. Over the last programming periods, they have mobilized a large number of stakeholders from different countries and territorial levels. Project results such as new knowledge and best practices become thus first and foremost accessible for participating stakeholders and their networks. It is, however, very likely that a significant number of stakeholders in Alpine spatial development have neither yet participated in Alpine Space projects nor sufficient information and access to Alpine Space project results that could be interesting for them.

It is the aim of this analysis to explore the Alpine Space stakeholder landscape, by 1) identifying key stakeholders, clusters, patterns and target groups for Alpine Space programme action, and 2) detecting lacks and missing links within the scope of the WIKIAlps-project. Spatial development stakes exist at European, national, regional and local level. The decisions regarding spatial development as well as spatial planning practice mostly take place on the local level. Nevertheless, inter-municipal and regional levels play a coordinating role. The stakeholder analysis will therefore deal with all levels.

WIKIAIps aims at delivering valuable information and insights into the stakeholder landscape of the Alpine Space Programme to the programme authorities; Information on which it is possible to capitalize for the future programming period. The WIKIAIps project foresees the analysis of stakeholders for the rather general issue "Sustainable spatial development" in the thematic fields of "inclusive growth" and "resource efficiency and ecosystem management". It is obvious that it is not possible to perform a stakeholder analysis within the project by using the common methods for three main reasons:

- The issue is not clearly enough defined;
- The spatial dimension is too large;
- The number of potential relevant stakeholders is very high;

Consequently a different approach of stakeholder analysis will be applied.







Analysis of institutions and organisations

The stakeholder analysis within the Wikialps project is meant to describe stakeholders with certain influence on sustainable spatial development (SSD) in the Alpine Space in a more general way. It will therefore be carried out by analyzing institutions¹ instead of persons. This has the side effect to probably enlarge the validity period of the analysis as persons tend to change positions (mentally as well as physically) more often than institutions.

We performed a stakeholder analysis on an institutional level using the Alpine Space project partner data base as a starting point, which was provided by the Joint Technical Secretariat of the Alpine Space programme². The general roll-out of the analysis is sketched in Figure 2.



Figure 2: Stakeholder analysis in WIKIAlps - working steps

Step 1: List the stakeholders and gather further information

The first step is to take the list of institutions which participated at Alpine Space projects in the two selected thematic fields. For each stakeholder, the Wikialps partners add further information to the list for further qualification. This information is descriptive like type, sector, spatial level, thematic

¹ Institution in this case comprises particular formal organizations of government and public services like Municipalities, Ministries and administrations on different spatial levels, but also organisations and bodies like private businesses, chambers, scientific institutes etc.. Institution in this case is not meant in the sense of social sciences comprising customs and behaviors important to a society (like marriage, legal system etc.)

² This database provided information like name, contact, project in which the institution participated and partner type (project partner or lead partner) of participating institutions. Names were harmonized for stakeholders participating in several projects, and unique identity keys were attributed. We chose to separate subunits of one and the same institution (e.g. departments of an administrative region, faculties of an university, research units of a research centre) in order to account for differences in field of work.







focus/branch and an estimation of influence like resources, fields of influence, degree of influence and area of influence. The descriptive part contains objective information while the information about the influence is to a certain amount subjective. This provides a table in which the different competences of stakeholders ("matrix of competences") are structured and presented. As there are in science always concerns about subjectivity the estimation of the attributes "degree of influence" and "area of influence" is to be made by different persons (at least two), independently from one other. This means practically: repeat the columns n-fold, hide filled columns until all persons involved made their estimation, compare the estimations and find an agreement about it. This will not provide objectivity, but at least to a certain extent "inter-subjectivity".

Step 2: Stakeholder analysis and Interpretation

The first analysis step will be consist in providing descriptive statistics like frequency of types, branches/thematic focus, spatial levels etc. Based on the descriptive attributes and on the estimation of influence, different analysis methods and presentations via diagrams or matrices are possible. These should help to identify key stakeholders, clusters, patterns and target groups for Alpine Space program action.

An interpretation of the analysis' results is possible on national and international level. It should give answers to the following questions:

- Which sectors, branches, spatial levels etc. are good or poorly represented?
- Which are clusters, networks and less involved institutions within the AS stakeholder landscape?
- Which are the key stakeholders?
- Are there obvious disparities between the countries?
- Which resources have the institutions?
- How can they influence SSD and is their influence strong or weak?

Finally, we can derive targeted actions that are needed to keep and improve stakeholders' inclusion and involvement in SSD projects in the Alpine Space programme. For this, we will class stakeholders according to their interest and previous involvement (based on the stakeholder analysis results) in the following categories:

Stakeholders, that

- need to be kept involved,
- need to be motivated/reached by publicity right from the start,
- should be engaged closely,
- offer a high potential (what are barriers?)







Results

Stakeholder analysis – Descriptive statistics

The following analysis and interpretation comprises the project partner institutions of the Alpine Space program period 2007-2013 in the thematic fields "inclusive growth" and "resource efficiency and ecosystem management". In total there were 28 projects (14 in each thematic field).

The starting point of the analysis was the list of institutions which participated as Project Partners in Alpine Space projects in the two selected thematic fields. For each stakeholder, the Wikialps partners added information to the list for further analysis. This information is in the first part descriptive (like type of institution, sector, spatial level or thematic focus/branch a stakeholder represents). In the second part the WIKIAlps team made an estimation of influence, based on data and estimations on resources, fields of influence, degree of influence and area of influence. Influence in WikiAlps means the direct influence and quantitative information while the information about the influence is more qualitative, and to a certain amount subjective³. The result is a table in which the different competences of stakeholders (cf. "matrix of competences") are structured and presented.

Column 2 of Table 1 shows the number of different projects the stakeholders in each country participated. Stakeholders from Austria participated in all 28 projects, France and Italy in almost every project, while institutions from Switzerland, Germany and Slovenia participated in about two thirds of the projects.

Country	Participation in AS projects	Stakeholders
AT	28	42
СН	19	28
DE	22	30
FR	27	44
IT	27	64
SI	23	23
Total	28	231

Table 1: Participation of stakeholders in the AS Programm

³ As there are concerns about subjectivity the estimation of the attributes "degree of influence" and "area of influence" was made by different persons (at least two) independent from each other. If they don't match they have to discuss the difference and find an agreement. This procedure does not provide objectivity, but at least to a certain extent "inter-subjectivity" - if conducted by competent persons.







Table 2.	Stakeholders ⁴	nroject	narticination

Projects	AT	Γ	CH		DE		FR		IT		SI	
Count	Count	%										
1	22	52,4	26	92,9	26	86,7	34	77,3	46	71,9	11	47,8
2	9	21,4	1	3,6	4	8,7	8	18,2	10	15,6	8	34,8
3	9	21,4	1	3,6			1	2,3	6	9,4	4	17,4
4	1	2,4					1	2,3				
5	1	2,4							2	3,1		
Total	42		28		30		44		64		23	



Figure 3: Stakeholders' project participation across countries

A considerable percentage of stakeholders participated in several projects, in Slovenia more than 50%, in Austria almost 50% and in Italy about 30%. Some stakeholders participated even in 4 or 5 projects, while in Switzerland and Germany about 90% of the institutions participated only in one project (of the two thematic fields).









Figure 4: Types of stakeholders (< 10 are classed as 'other')

About one third of stakeholders are authorities (+ spatial planning authorities) and another third are Universities or research centers. Furthermore, there is a considerable portion of NGOs, development agencies and protected areas. The vast number of additional types of stakeholders highlights heterogeneity, i.e. potentially, stakeholders from very different horizons can participate in AS projects.

Except for 4 per cent, almost all of the AS stakeholders came from the area of the Alpine Space programme. Within this group, 40 per cent of partners came from the territory of the Alpine Convention, and 60 per cent from outside this perimeter.









Figure 5: Stakeholder location in relation to Alpine Space perimeters

The thematic focuses of stakeholders reflect their fields of work (cp. Figure 6). They correspond to the orientations behind the two selected thematic fields and confirm the relation to territorial development, inclusive growth and resource efficiency. A focus on planning (regional, urban, spatial, and environmental) is recognizable among stakeholders, as well as on the environment (forestry, ecology, water management, protected areas, environment, risks), and on dimensions of development (regional development, economic development, sustainable development, health care, tourism).



Figure 6: Thematic focuses (number of occurrences, more than 1 possible, > 10) across stakeholders







The "inter-subjective" estimation of influence

One of the most interesting outcomes and generally the most important intention of a stakeholder analysis is to find out which influence the stakeholders have. As this is rather difficult for such a broad issue as sustainable spatial development in such a wide perimeter as the Alps or the Alpine Space, we decided to add at least some "influence information" about each stakeholder. These information are added in for columns and try to describe the following four issues:

- The resources on which the stakeholder can build, as examples some keywords⁴ were given, but the partners were free to extend the list and it was possible to give multiple answers.
- The most important means through which the stakeholder may act: project action, expertise, lobbying, education, research-policy interface etc. The partners could extend the list, multiple answers were possible.
- The degree of influence (with regard to sustainable spatial development): estimation based on resources and main influence.
- The area of influence: local, regional, national, international. For universities the area of influence is difficult to estimate, as is stretches often wide, for such cases it was allowed to choose "all.



⁴ cluster / network, decision-making/policy-making, economic / financial, employees, intermunicipal coordination, knowledge / expertise, membership (number of members), publicity / multiplier



Figure 7: Resources of stakeholders to influence SSD

Figure 7 shows the resources the stakeholders have to influence sustainable spatial development in the Alps. The main resource the project partner in the AS programme have is knowledge and expertise (almost 60% of the stakeholders). This again is due to the high share of universities and research institutions. But also decision-making and policy-making competences were named at least for about one quarter of the stakeholders. For 17 stakeholders intermunicipal coordination was named. Intermunicipal coordination and cooperation are very important factors for sustainable spatial development, as the local level is often not powerful enough and the regional level is too large for certain issues, such like restricting the development of new building areas. So stakeholders who have this resource are very important, but are underrepresented.



Figure 8: The most important means of stakeholders

Figure 8 shows the most important means of the stakeholders as the WIKIAlps project partners estimated. Not surprising the sharing of expertise is the most often named one - this underlines that universities and research institutions (including authorities with research structures) had a high share as project partners in the two selected thematic fields of the last AS programme period. But also for more than one third policies and planning policies are named as important means of influence and for about one quarter the partner estimated that they are research-policy interfaces. Looking at these stakeholders shows that they are mainly authorities and authorities doing research. As multiple answers were possible there is a respectable overlap between stakeholders with the means "(planning) policies" and "research-policy interface".







A respective amount of stakeholders (69 out of 231) has "project action" as an important mean to influence sustainable spatial development. This could be a hint for the importance of singular projects for sustainable spatial development. Projects as additional activities with extra means in terms of stuff and money can trigger development.

Regarding the degree of influence on sustainable spatial development (cp. Table 3), most partners (39%) who participated in the analysed projects were estimated to have a low influence, but only 26% having a high influence. This is due to the fact that universities and research institutes participate to a great share in the programme, but generally have a low direct influence on sustainable spatial development. Their influence may be more indirect, in the case of AS projects in the first part it is likely that they have at least influence on cooperating pilot regions.

Table 3: Degree of influence on sustainable spatial development

Influence	Count	%
high	60	26
medium	78	34
low	91	39
unknown	2	1



Figure 9: Area of influence



Figure 9 shows the area of influence the stakeholders have on SSD. The French and Italian partners gave multiple answers for the same stakeholders, therefore a multitude of answers developed. Leaving the institutions (Universities and research institutions) with influence on all levels- from local to international influence – aside, it shows that more than 130 stakeholders have influence at regional level, 38 have influence on national and 57 on local areas. For 15 stakeholders the WIKIAIps partners estimated they have international influence on SSD.

Considering only stakeholders with distinct influence it shows a similar picture: almost two thirds have influence in their region (cp. Figure 10).



Figure 10: Area of influence (without "all" and multiple entries)







Stakeholder network analysis (Irstea)

Data on project participation of the stakeholders has also been used to analyse the stakeholder network behind the AS projects. For this, we have used social network graphs. These graphs are visual tools that enable us to explore proximity, relationships and their strengths between stakeholders, here the Alpine Space project partners. They have their foundation in social network analysis (see Hanneman and Riddle (2005) for an introduction) which is based on mathematical tools and graph theory. By definition, a social network is simply a set of actors (nodes), that may have relationships (edges) with one another. In our case, the network nodes are all identified stake holding institutions in the 30 AS projects along the 2007-2013 programming period. The list of stakeholders was created using the excel sheet from the JTS. However, this list might be subject to bias as different practices exist in declaring project partners, especially for large institutions such as regions, provinces, universities or research centres (head institution, sub-units). Therefore, and contrary to the main stakeholder analysis, we derived a second dataset by aggregating stakeholders according to their head institutions. In the aggregated dataset, the number of stakeholders dropped from 231 to 189, i.e. 40 institutions are in fact sub-units of head institutions. This generalization gives us insights on the real importance of these head institutions; information that is not available in the disaggregated data. We will see that this consideration has consequences for the graphs. The edges are based on the collaborations with other stakeholders that took place during the projects. We do not consider variations in collaboration intensity (e.g. different intensities of collaboration in general, timely variation) as we did not have available such qualitative data. Although data might not appear rich on first sight (lack of intensity), the resulting graphs provide us with valuable insights on the (partial, only 30 projects) network established in the framework of the AS programme.

We used freely available software tools: First, the R statistical software (R Development Core Team, 2008) is used to prepare data on edges and nodes. In a second step, we used gephi network analysis software (Bastian, Heymann, & Jacomy, 2009) to develop the graphs. Network graphs are typically drawn using layout algorithms, which calculate and draw the network based on the data on nodes and edges provided. Here, we used the Fruchterman and Reingold layout algorithm (Fruchterman & Reingold, 1991) that puts emphasis on complementarities between nodes. Once the network is drawn, it reflects centrality of stakeholders in the whole network (position), proximity between stakeholders (more distant stakeholders are less linked) and strength of relationships (number of collaborations, several possible, via thickness of edges). Furthermore, statistical tools and clustering algorithms can be used to explore the stakeholder landscape, e.g. regarding

- local connectivity of stakeholders (termed degree or weighted degree centrality),
- geographic centrality of stakeholders (termed closeness centrality),
- transit centrality of stakeholders (nodes where a lot of transit can happen, termed betweeness centrality),
- authority (termed eigenvector centrality, nodes connected to central nodes are central themselves),
- and clusters of stakeholders, i.e. detection of underlying sub-groups/communities of stakeholders (Levallois, 2014).

For the analysis, we used the following graphs: First, we compare two graphs based on the disaggregated (sub-units as institutions) and aggregated (head institutions) data. In these two graphs,







we also highlight local connectivity of stakeholders. We then continue exploring in more detail the graph of head institutions, highlighting the distribution of projects, stakeholder role (lead partner, project partner) and countries across the network, and presenting a clustering approach.



Figure 11: Social network graph of aggregated institutions (sub-units aggregated by WIKIAlps project (Irstea))





Figure 12: Social network graph of disaggregated data (sub-units of institutions, as reported to the JTS)

Both graphs show the social network as established between project partners due to the collaboration in 30 projects across two thematic fields. Figure 3 is based on the aggregated data on institutions, resulting in 189 stakeholders and 1678 edges (links established by project participations). Figure 4 is based on the pure disaggregated data, i.e. 228 stakeholders and 1747 edges. Both graphs show the







links between stakeholders (thicker edges for more links), their positions in the overall network (proximity to other stakeholders) and their centrality, or function as a hub, expressed here by node and label size and a colour gradation (darker for more central). The centrality measure here is weighted degree, a measure for local connectivity. It is calculated as the sum of edges for a node, weighted by the weight of each edge.

Figure 3 shows that almost all stakeholders of the two thematic fields are interlinked via their collaboration in one or more projects. Different central actors function as hubs, having participated in several projects and tying the network together, especially the Province of Aosta, Region Lombardia and EURAC leap the eye. One project (ALPS-Bio-Cluster) and its stakeholders, however, are not linked to the rest of the network (top-right). Globally, stakeholders situated on the periphery of the resulting circle have less relationships within this network than stakeholders that are situated closer to the centre. We observe a major central network around the Province of Aosta valley, with several central actors in its surrounding like Piemont Region, Veneto Region, ERSAF Lombardia, Land Kärnten and other authorities and research institutions. The research centres EURAC and Irstea are also important hubs but are farer away from the central network, thereby linking further stakeholders to it. Besides the Province of Aosta, a second major player is Region Lombardia, that has many links to stakeholders on the periphery, but it is less connected to the central network. Overall, the central network with its hubs is able to link all project partners (via links of second, third and fourth degree), and is mainly composed by regional or provincial authorities, universities and research centres. This reflects also the fact discovered above that these institutions account for the majority of stakeholders in AS projects.

Figure 4, based on sub-units of institutions, shows a completely different graph, but again almost all stakeholders remain linked. A second project is not connected to the global network in this graph (bottom of the graph). Relationships are less intense between stakeholders in general, and a major central network cannot be distinguished. Major hubs of the network are Land Kärnten, ERSAF Lombardia, EURAC and the University of Innsbruck, and several smaller nodes around them. The four former named stakeholders chose to declare their head institutions to the JTS as project partners, whereas others, such as the Region Lombardia, chose to declare their sub-units (departments, for instance). This blurs real centrality of stakeholders and biases the graph layout. We thus think that Figure 3 better reflects the reality of the AS partner network in the two thematic fields.



Figure 13: Distribution of lead partners and countries within the network



Further explorations (see Figure 5) of the aggregated stakeholder network highlight that major hubs, such as Province of Aosta valley, ERSAF Lombardia, Land Kärnten and EURAC, do not necessarily to be lead partners (in dark blue on the left graph) in order to become central players in the network. However, some central players such as Region Lombardia and Irstea were lead partners in the projects. Plotting the country of stakeholders as labels (right graph), we see that Italian (yellow), but also Austrian (red) and French stakeholders (light blue) are the most central ones in the network. For Germany (green), Switzerland (pink) and Slovenia (dark blue), only one (LFU Bayern), two (WSL, BAFU) and one (Gozdarski institut) stakeholders are close to the central nodes, respectively. The stakeholders with the most participations and thus multiple links, therefore the most central, are Italian.

Finally, figure 6 shows the same network graph, but with node labels showing project affiliation for stakeholders with only one project and number of projects for stakeholders that participated in more than one project. In addition, node colours reflect the affiliation to clusters. These clusters have been calculated using the Chinese Whispers algorithm, a very basic algorithm that aims at "finding groups of nodes that broadcast the same message to their neighbours" (Biemann, 2006). With regard to the projects, we see that the social network graph positions stakeholders based on the links established by the thematically-related projects. For instance, partners in the project groups ACCESS, MORECO, demochange (territorial and demographic development), RURBANCE, CAPACITIES, COMUNIS (territorial and economic development), INNOCITE, SPHERA, ACCESS, NATHCARE (economic development) and MANFRED, ECONNECT, rechargegreen (environment) are situated close to each other.

The partition of nodes using the clustering approach pushes this idea of grouping even further. It identifies nine clusters in our network, which correspond to the project affiliation of stakeholders and also to the degree of implication. There is a large central cluster (light blue) that collects all stakeholders that make up the "core" of the stakeholder network. It includes the partners that







participated often in AS projects, and their competences might touch various subjects (links to the peripheral actors and their projects.

Figure 14: Social network graph showing distribution of projects among stakeholders (labels, number of projects for stakeholders with more than 1 project) and clusters (node colours)









Other clusters confirm the grouping according to project themes in this graph. The red cluster highlights stakeholders working on environmental topics, the light green cluster those working on economic and territorial development topics; dark green is on construction, dark red is on geology, and dark blue also refers to territorial development.

In a nutshell, the stakeholder network analysis has provided some additional information on the relationships between stakeholders, which have been established throughout the 30 analysed AS projects. A central network of stakeholders has emerged whose members frequently participate in projects, thereby drawing other, more peripheral stakeholders into the network. Their collaboration (proximity) seems not be constrained by specific thematic focuses, but is probably based on a general interest in the Alpine Space programme (and funding) and in topics related to the Alps. These are the "hot hubs" of the programme. This group is completed by the lead partners, which can but may not be that central. We saw also that a distinction between stakeholders on sub-unit and main unit level does not result in the same network. In this regard, it seems essential to know how strong sub-units of institutions, participating in different projects, exchange information (administrative, project management, or thematic) and can be seen as stakeholders on their own. Information flow between sub-units might vary according to stakeholder types (authority, research centre, university). Finally, the cluster approach has pointed at the presence of some thematic sub-networks, for instance environmental or territorial development issues. Partners, once involved in a project, might explore new pathways and prepare follow-up projects on similar topics, thereby strengthening their links over time and overcoming limits of project duration. In this regard, the Alpine Space programme creates added value through networking.







Main findings of national results

Austria

- The most frequent themes are environmental planning (23%) and regional development (15%);
- 13% of all partners have been lead partner;
- Many stakeholders participated in two or more projects;
- 45% of all stakeholders are either research institutes or universities;
- These institutions, however, are considered less influential for SSD in the Alpine Space;
- The vast majority belongs to the public sector, mainly at national or regional level;
- Current networks are mainly built of research institutions and governmental departments;
- Private stakeholders from the local level must be engaged to participate in AS projects

France

- Both thematic fields have been equally distributed across projects and institutions;
- 77 % of the partners only contributed to one project, but 8 projects involved 3 or even 4 French institutions;
- 14 % of all institutions have been lead partner;
- More than 80 % of the institutions belong to the public sector, mainly at regional and local level, but diversity of fields of work and institutional types;
- 25 % of all stakeholders are either research institutes or universities;
- Main fields of work are spatial development and spatial planning, development of mountain territories, environmental science, forestry and health and bio-technologies;
- 95 % of institutions come from the AS programme area, there are only a few from outside the AS area;
- 75 % of participating institutions situated in the Rhône-Alpes administrative region;
- More than half of the institutions are considered to have a low impact on spatial development;
- Stronger impacts on spatial development come from the regional and local level; one quarter of all institutions has at least medium impact on the local level;
- There are several networks of institutions through AS, but only one large network with strong influence on spatial development;

The analysis reveals notable imbalances in the group of French institutions that participated in AS projects of the two thematic fields:

- Participation is not equally distributed across the French alpine territory: southern territories lagging behind lsere and Rhône department;
- Although spatial development and spatial policies appear frequently as main fields of work of the considered stakeholders, the majority of them have low influence on alpine spatial development, especially on transnational scale. Research institutes and universities appear frequently in the projects, but their influence may be seen as rather low, or at least more indirect;
- largely dominated by the public sphere







- few institutions participated from areas outside the AS. In the perspective of an enlarged and permeable AS network, it could be desirable to include human capital and knowledge from areas outside the programme area;
- Project participants are generally larger institutions and structures, who are able to fulfil the project management requirements. Participation of smaller institutions, both from the public and private sphere, should be facilitated in order to diversify the AS network;

Overall, the analysis of French stakeholders has shown a sensitive lack of operational partners on the ground across the AS projects, capable of implementing change towards sustainable spatial development.

Germany

- Most stakeholders participated only in one project of the two thematic fields, only 4 stakeholders in two projects;
- Most stakeholders come from the public sector, only two from the private sector and only one NGO participated. In case of Universities they act generally on all spatial levels, participating research institutes of the federal states concentrate on the regional level. Most authorities act mainly on regional level;
- Major part of stakeholders are authorities or universities / research centres;
- The thematic focus of the institutions lies as expected in the two thematic fields considered on resources and on spatial planning and regional development;
- Most project partners are located outside the Alpine Convention area, but inside the AS;
- There are only a few stakeholder with high influence on sustainable spatial development;
- The participation of local stakeholders is very low, especially institutions concerned with regional development on a supra-local level (Leader groups, integrated rural development regions) did not participate (in this program period and the two selected fields). They are an important target group for the AS programme;

Italy

- Many stakeholder participated in more than one project;
- More than half of the stakeholders are authorities; mainly acting on the regional level;
- Most project partners are located outside the Alpine Convention area, but inside the AS;
- Most stakeholders are from the public sector, only 4 (out of 64) are representing the private sector;
- Most active regions are Lombardia and Piemonte;
- No stakeholder with just local level (no municipalities), the smallest administrative units participating as a PP are "provinces";
- Half of the stakeholders are regional directorates with wide competences;
- Almost all authorities are representing the regional level, they have mainly a high influence;
- Half of the stakeholders have high influence mainly on local and regional level, but some also on national and even international level;

Slovenia

- Research institutes/centres (7), Development agencies (5) and Universities/Institutes of applied science (4) are very well represented (total stakeholders: 23);
- Only two are authorities;







- most are from the public sector;
- no stakeholders representing the local level, most represent the national level;
- only 4 stakeholders are located within the perimeter of the Alpine Convention, while 19 stakeholders are located within the area of Alpine Space;
- 6 stakeholders have high influence all of them on national level, 13 have medium influence on all spatial levels or on regional level;

Switzerland

- The major part of stakeholders are research institutes (26%) followed by authorities (16%) and NPO (16%);
- Stakeholders are mainly public (84%), 13% are a mixture of private and public and only a very small percentage (3%) can be considered as private. => The project partners are dominated heavily by public organisations, private stakeholders were kind of an exception.
- Therefore the local level can be considered as heavily under-represented;
- Less than one fourth of the stakeholders are located in the perimeter of the Alpine Convention.
- Although research institutions represent one fourth of the stakeholders they do not leave much behind other organisations such as authorities and NPOs. It would be wishful that more projects would be composed out of these three types of organisations, a combination that delivers scientific results, implemented in reality and considered in policies.
- With regard to the spatial level of actions, it can be said that the regional one is the most widespread. It would be too complicated to address single actors on a local level. Via regional entities local actors can be best reached. Furthermore local activities run the risk that they are only transferable with difficulties to a higher level or being integrated in strategies and policies. For these reasons the increase of local actors has not to be actively supported.
- Concerning the degree of importance it can be said that the stakeholders ranked with high importance are mainly authorities and are equipped with economic and publicity/multiplier resources. They are the most influential for SSD and influence activities via funding and policies. Therefore it is important to assure a good integration of authorities in future projects, only that way a sustainable embedding of project results into policy papers and strategies can be guaranteed.







Transnational similarities and differences

There can be found both, similarities and differences across these national AS stakeholder landscapes.

Sector: Most project participants came from the public sector, followed by the public-private sector, only 15 from the private sector and only 4 from the civil society. The picture is more or less the same for all countries.

Type: In Austria and Germany about 40 % of the stakeholders are Universities and research institutes, in Slovenia about one third and in France and Switzerland about 25 %. Italy has the lowest share of these types of institutions with only about 15 %, but one of them (EURAC) is participating in 5 projects of the considered thematic fields in the last program period. While Austria and Slovenia have a very low share of authorities (less than 10 %) more than half of the stakeholders are authorities in Italy. The other countries are in between, Germany about one third, Switzerland 16 % and France nearly 20 %.

Spatial level: Stakeholders representing only the local level are rare, but the supra-local and regional level is well represented (more regional level than supra-local). Local stakeholders are sometimes indirectly involved as pilot regions without being project partner.

Influence:

The main <u>resource of influence</u> the project partner in the AS programme have is knowledge and expertise (almost 60% of the stakeholders). This again is due to the high share of universities and research institutions. But also decision-making and policy-making competences were named at least for about one quarter of the stakeholders.

Concerning the most important <u>means of influence</u> sharing of expertise is the most often named- this underlines that universities and research institutions (including authorities with research structures) had a high share as project partners in the two selected thematic fields of the last AS programme period. But also for more than one third of stakeholders policies and planning policies are named as important means of influence and for about one quarter the partner estimated that they are research-policy interfaces.

Regarding the intersubjective estimation of the <u>degree of influence</u> on sustainable spatial development, the analysis shows that about 40 % of the stakeholders have a low influence, about 34 % have medium influence and only about 26 % seem to have a high influence. One possible explanation is that universities and research institutes have a low (direct) influence, but represent a significant share of stakeholders, while the local stakeholders who have a high influence on (sustainable) spatial development are not as often project partners.

Concerning the area of influence most of the stakeholders hold it in their region, some on a national and a few on local or international scale.







Conclusion and recommendations

The AS programme seems to be most interesting for the public sector and less interesting for the private sector or the civil society. In most of the countries universities and research institutions are over-represented; a fact that might point at a lack of direct influence on sustainable spatial development. The identified key players of regional authorities and universities/research institutions should be kept closely engaged in the AS programme, in order to build on existing knowledge and networks in the next programming period. However, there might be lacks and missing links of transferring and communicating insights and knowledge to those who generally have a high influence on this issue, i.e. local stakeholders that dispose of spatial planning competences (municipalities as well as protected areas). Those stakeholders were rather under-represented in the analysed projects. In order to involve more local and supra-local institutions, it would be necessary to raise awareness on the AS programme and make application and project management easier, thus rendering the programme more attractive. The local level might be lacking resources (financial as well as personal, human capital). In addition, stakeholders from the private sector are poorly represented. Raising awareness among them for spatial development issues and the links to their activities seems essential. Joint regional planning and location strategies could be elaborated if public and private sectors would work more closely together. With regard to geographic context, we found that some regions were of the Alpine Space better represented than others, e.g. in France Isère and Rhône department and in Italy Lombardia and Piemonte. This provides evidence for higher motivation and more fruitful grounds in these areas, but leads to the polarization of project knowledge and experiences as well as funding, thereby challenging territorial cohesion in the Alpine Space. It would be necessary to explore the reasons why some regions lack behind in terms of AS programme participation. These regions should be motivated. To conclude, it seems crucial to build upon the strong existing network of "hot hubs" (see network analysis) in order to create a sustainable network of stakeholders that exceeds project durations, and which might then have an increasing impact on spatial development. These actors, if kept engaged closely, will continue to draw other actors into the projects, enlarging both scope and impact. Nonetheless, awareness raising and motivating measures are necessary to mobilise both actors on the ground and from different spheres, that relate rather indirectly to spatial development issues.







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Appendix: National Results

Austria

With respect to the thematic fields, it can be stated that the number of stakeholders within "resource efficiency" is 50% higher than within the field "inclusive growth". Almost 45% of all stakeholders (both fields) are either research institutes or universities. Since these institutions are predominantly public, it is not surprising that only 8% of the total number of stakeholders can be classified as private. Research institutes and universities are mostly located at the national—to a lower degree—regional level, thus, this fact leads to a very low number of stakeholders at the local level, which only represents 6% of the total cases. Regarding the thematic interest of the stakeholders, environmental planning (23%) and regional development (15%) are the most frequent classes, which are mainly ascribed to their larger thematic field ("resource efficiency" and "inclusive growth," respectively). While only 4% of the partners are located outside the Alpine Convention's limits, about 13% of all partners have been lead partner—at least in one project. Interestingly, only 35% of the stakeholders have participated in just one project, while the vast majority participated in two or more projects (up to five).

While the absolute number of research institutes of universities should be maintained (or even be extended), these national institutions' relative share should decrease, that is, the number of other regional and local-stakeholder types should increase. This is particularly necessary, for none of the universities and research centers are highly influential for sustainable development. In turn, the number of governmental partners (authority, spatial planning authority or water agency, environmental agency, for instance) is desired to be higher, for these stakeholders are rated as highly influential. Moreover, the need to increase local and private stakeholders is evident: only one stakeholder out of 68 is both "local" and "private"! Yet, this combination of characteristics is crucial for sustainable development, as the actors in bottom-up participation process are mainly "local" and "private"! Thus an increase of stakeholders belonging to this group would be necessary for reaching participatory spatial development. Finally, in the Austrian case, a greater diversity of stakeholders would not be bad, since only a third participated just one time, while the majority contributed to much more projects in the fields. The latter conveys the impression that, to a certain degree, the Austrian stakeholder network is somewhat static, and could profit from ideas of new groups of interest, particularly locally and privately working ones. For example stakeholders belonging to the Government of Carinthia participated five times and stakeholders from the University of Innsbruck took part in four projects. Participants that contributed to three projects include other Austrian university institutes (from the agricultural or veterinary universities) and other regional governmental departments, for example from Tyrol and Salzburg. This means that there is a good cooperation between governmental and research stakeholders in Austria, but at the same time there is a lack of AS-experienced local and private stakeholders such as small and medium enterprises or networks.

In sum, these interpretations support the results of a project in-depth analysis within the "resource efficiency" field: they led to the conclusion that only a few tools and methods developed for the broad public are available, and that the majority of findings is directed to a scientific readership;







without a doubt, this weakness is related to the stakeholder network structure as shown by the case of Austria, where research and university stakeholders predominate.

Most important facts on Austrian AS stakeholders

- environmental planning (23%) and regional development (15%) are most frequent themes
- 13% of all partners have been lead partner
- the vast majority (65%) of stakeholders participated in two or more projects
- 45% of all stakeholders are either research institutes or universities
- these institutions, however, are considered less influential for SSD in the Alpine Space
- the vast majority belongs to the public sector, mainly at the national or regional level
- current networks are mainly built of research institutions and governmental departments
- private stakeholders from the local level must be engaged to participate in AS projects







France

Descriptive analysis and mapping

Over the period from 2007 to 2013, 44 French institutions have participated in 28 Alpine Space (hereafter AS) projects from the fields "inclusive growth" (hereafter IG) and "resource efficiency and ecosystem management" (hereafter RE). Six of these (14 %) have been lead partner of a project. Across the two thematic fields, both projects and institutions were equally distributed (14 projects from each field, 28 and 29 project participations for IG and RE respectively). There was only one institution that worked on projects of both thematic fields (Institute of Alpine Research in Grenoble). Yet, remarkably, the majority of institutions only contributed to one project (77 per cent, see table 1), and only two institutions participated in 3 or 4 projects (IRSTEA Mountain Ecosystems research unit in Grenoble and the LIRIS Laboratory in Lyon). Overall, French institutions participated 57 times over the period.

The distribution of French partners across projects is heterogeneous (see Figure 15 below). Most of the projects involved one or two institutions. Eight projects, however, involved 3 or even 4 institutions from the French stakeholder landscape; a fact that points at high interest for the specific issues of these projects and rather strong networks at regional and local level.

Table 4: Project participations

AS participations	Institutions	%	Total AS participations
1 project	34	77	34
2 projects	8	18	16
3 projects	1	2.5	3
4 projects	1	2.5	4
Total	44	100	57



Figure 15: Number of French partners in projects



Given the variety of topics among projects, the variety of French stakeholders in institution types and areas of work across the two thematic fields is not surprising. Although we can identify 14 types of institutions, Figure 16 shows that more than 80 per cent of the project partners belong to the public sector. The AS programme seems to have principally importance for the public sphere. NGOs together with public authorities account for 36 per cent of partners alone. Research institutes or universities make up another 25 per cent. Actors from the economic sphere play a minor role. Accordingly, the main areas of work concern wider public policy, spatial planning and development of mountain territories (see Figure 13). Environmental sciences, forestry and natural hazards also appear frequently. Rhône-Alpes has a large sector of bio- and health technologies, and three projects (NATHCARE, ALIAS, ALPS Bio-Cluster) involved both local networks and clusters that explain the areas of work of health care and related technologies. Both diagrams show larger categories of other types (for instance municipality, cluster or protected area) and other work areas (for instance transport, energy or tourism), confirming a generally diverse landscape of stakeholders.



Figure 16: Types of institutions

Figure 17: Main field of work

Some spatial disparities become apparent when we look at the spatial distribution of project participation for the two thematic fields (see Figure 18). The majority of projects involved



participants from the Isere (11) and Rhone (12) departments, the French NUTS 3 level. The institutions in these two NUTS3 territories account for almost 50 per cent of project participations. Institutions from other departments, particularly in the Southern French Alps, on the Mediterranean coast and in the Ain department, did contribute to the projects to a much lesser extent. At a higher level, Rhône-Alpes administrative region, accounting for almost three quarters of project participations, outperforms the two other AS regions Provence-Alpes-Côte-d'Azur (4 participations) and Franche-Comté (6 participations). Unsurprisingly, the majority of institutions was situated in the area of the AS programme (93 %), 44 per cent of which even within the area of the alpine convention. Only one institution (2.2 %) joined an AS project from other areas in France, outside the alpine perimeters (ONF International, situated in Paris but ONF has also regional delegations).



Sources: JTS Alpine Space programme, © EuroGeographics for the administrative boundaries

Figure 18: Distribution of project participations

We estimated influences on spatial development at the main scale of intervention for every institution (see Figure 19 below). Most of the French partners in AS projects operate at regional (22) or local level (15), which is in line with the objectives of the AS programme to operate specifically at regional and local level in order to foster territorial cohesion. Nevertheless, more than half of the total of institutions is considered to have lower influences on spatial development. Only two institutions on international level have medium or strong impacts respectively (European Association of elected representatives from Mountain regions and the Committee for the European Transalpine Link). On the national level, no institution with higher impact participated in the projects. Influences on spatial development are considered highest for regional and local level: 17 institutions from these scales are considered to have at least a medium influence on spatial development. One quarter of all institutions has at least medium impact on the local level. Globally, strong impact institutions appear to be lacking at all spatial scales.



Figure 19: Institutions, scales and influences

Finally, the network graph in figure 16 (see below) sketches the links between French stakeholders that became apparent in the AS projects. The graph was developed using gephi network analysis software (Bastian, Heymann, & Jacomy, 2009), and based on the Fruchterman and Reingold layout algorithm (Fruchterman & Reingold, 1991). Links are based on two types of relationships, namely 1) collaborations (at least one) within an AS project 2007-2013 in the two thematic fields and 2) affiliations to larger structures (e.g. department of a regional council). The graph also considers frequency of participation in AS projects and influence on alpine spatial development: varying node size indicates the number of project participations and graduated reds are used to show different influences on spatial development. This partial analysis of French stakeholders has some limits since we leave out links to other partners in the AS, i.e. some institutions appear isolated or only linked to smaller networks. We can, however, derive some information on 1) who worked with whom in different projects and 2) where centres of gravity are.

The graph shows that 7 institutions have had no collaboration links to other French partners during their AS projects. They only had links with transalpine partners. The other stakeholders had collaborations with other French partners in at least one project. Two bigger groups, the one around the Rhône-Alpes regional council and two departments of it (territorial policy and tourism, parks and mountain departments) and the one around IRSTEA EM (mountain ecosystem research unit), indicate larger networks of project partners that were established during several projects. Particularly the Rhône-Alpes regional council network has some far reaching connections in the graph. In addition, the red graduation illustrates a bigger influence on spatial development of this network, as more influential regional and local stakeholders build up the network (e.g. intermunicipal syndicates, municipalities, regional councils and the Grenoble planning agency). Partners from research add up to this network. The Irstea network is more dominated by research and technology oriented partners.


Besides these two, two smaller networks are present with institutions linked mostly through one project.



Figure 20: Network graph (check annex for full stakeholder names)







Most important facts

- both thematic fields have been equally distributed across projects and institutions
- 77 per cent of the partners only contributed to one project, but 8 projects involved 3 or even 4 French institutions
- 14 per cent of all institutions have been lead partner
- more than 80 per cent of the institutions belong to the public sector, mainly at regional and local level, but diversity of work areas and institution types
- 25 per cent of all stakeholders are either research institutes or universities
- main fields of work are spatial development and spatial planning, development of mountain territories, environmental science, forestry and health and bio-technologies
- 95 per cent of institutions comes from the AS programme area
- three quarters of participating institutions situated in the Rhône-Alpes administrative region
- more than half of the institutions are considered to have a low impact on spatial development
- stronger impacts on spatial development come from the regional and local level; one quarter
 of all institutions has at least medium impact on the local level
- several networks of institutions through AS, but only one large network with strong influence on spatial development

Interpretation

The analysis revealed notable imbalances in the group of French institutions that participated in AS projects of the two thematic fields. First, participation is not equally distributed across the French alpine territory. Notable concentrations are situated in the Isere and Rhône departments, other especially southern territories lagging behind. This might have different reasons. Politically, the northern French Alps are more oriented towards the Alps (also in a transnational perspective) and also to the centres of gravity of the European economy (concept of the blue banana), whereas the Southern Alps are more oriented towards the Mediterranean Sea and the coast. Mountainous zones in the South are less populated, economically less prosperous and more marginal. In addition, economic activity and population create higher perceived pressures in the Northern French Alps, and might contribute to an advanced political and societal understanding of spatial development and natural resource management as contemporary challenges. Second, although spatial development and spatial policies appear frequently as main fields of work of the considered stakeholders, the majority of them has low influence on alpine spatial development, especially on transnational scale. On regional and local scales, various stakeholders, e.g. the regional authorities and large intermunicipal syndicates, have a rather determining influence on spatial development in the Alps. Research institutes and universities appear frequently in the projects, but their influence may be seen as rather low, or indirect. Although the state and the regions create incentives and create the framework for regional and local development, the major operational level of spatial planning and development initiatives is situated on the local level (municipalities, intermunicipal syndicates, city regions, parks). Hence, if the AS wants to promote sustainable spatial development on the operational level, it would necessarily have to increase the share of local authorities without compromising the participation of higher decision-making levels.







Third, the group of French institutions is largely dominated by the public sphere. An increase in private enterprises might enlarge the scope, facilitate exchanges and increase performance of alpine (spatial) development. For instance, AS projects might reinforce the territorial anchorage of enterprises and inversely raise their awareness for alpine issues. Fourth, and according to the requirements of the operational programme, relatively few institutions participated from areas outside the AS. In the perspective of an enlarged and permeable AS network, it could be desirable to include human capital and knowledge from areas outside the programme area. Last, and in more general terms, a major problem that became apparent throughout the analysis is related to constraints of stakeholders to participate in AS projects, notably in terms of human capital, expertise and financial resources. Project participants are generally larger institutions and structures, who are able to fulfil the project management requirements. Participation of smaller institutions, both from the public and private sphere, should be facilitated in order to diversify the AS network. In a nutshell, the analysis of French stakeholders has shown a sensitive lack operational partners on the ground across the AS projects, capable of implementing change towards sustainable spatial development. Table 2 summarizes these results in an action matrix, defining appropriate actions for different groups of stakeholders based on their participation and interest in alpine spatial development.

Table 5: Action matrix for French stakeholders

Keep involved:	Engage closely:
strong participation, weak interest	strong participation, strong interest
all stakeholders that already participated and	Research institutes, universities
have lower interest, e.g. SMEs, research	NGOs
institutes not directly working on Alpine topics	Public authorities, policy-makers
Raise awareness:	Motivate:
weak participation, weak interest	weak participation, strong interest
private sector enterprises	municipalities, intermunicipal syndicates
outer alpine stakeholders	protected areas
	city regions
	small and medium-sized public and private actors

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List o	f French	partners
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ID	Partner Institution	Acronym
FR001	Urban Planning Agency of the Grenoble Urban Region	AURG
FR002	ALPARC - Alpine Network of Protected Areas	ALPARC
FR003	European Association of elected representatives from Mountain regions	AEM







ID	Partner Institution	Acronym
FR004	BRGM (Bureau of Geological and Mining Research), Regional Geological Survey Rhone-Alps	BRGM
FR005	Drôme Chamber of Commerce and Industry - Neopolis	CCI DROME
FR006	Chamber of Commerce and Industry of Lyon	CCI LYON
FR007	Local authority for Bourget lake purification	Cisalp
FR008	Council of the Department of Savoy	CG SAVOIE
FR009	Council of the Department of Isere	CG ISERE
FR010	Provence-Alpes-Côte d'Azur regional Council	CR PACA
FR011	Adviser in Architecture, Regional Planning and Environment of Vaucluse	CAUE VAUCLUSE
FR012	Entente for the Mediterranean Forest / CEREN (Test and Research Center of the Entente)	CEREN
FR013	GERES - Group for the Environment, Renewable Energy and Solidarity	GERES
FR014	Grenoble Alpes Metropole, Department of Prospective & Territorial Strategy	LA METRO
FR015	Grenoble Institute of Technology, GIPSA-lab UMR 5216 UJF-INPG-CNRS	GIPSA
FR016	Healthcare Cooperating Group - EMOSIST - FC	EMOSIST-FC
FR017	Cooperation Healthcare Group - Rhône Alpes Healthcare Information System	SISRA
FR018	Urban Planning Institute of Grenoble	IUG
FR019	National research institut of science and technology for environment and agriculture, Grenoble	IRSTEA EM
	center, Mountain Ecosystems Research Unit	
FR020	National research institut of science and technology for environment and agriculture, Grenoble	IRSTEA ETNA
	center, Torrent erosion, snow and avalanches Research Unit	
FR021	Technological institute for Forestry, Cellulose, Construction Timber and Furniture (FCBA),	FCBA
	South-Western Delegation	
FR022	The Mountain Institute, University of Savoie	Inst. Montagne
FR022 FR023	The Mountain Institute, University of Savoie LIRIS Laboratory, Computer Science Department, National Institute of Applied Sciences of Lyon	Inst. Montagne LIRIS
FR022 FR023	The Mountain Institute, University of Savoie LIRIS Laboratory, Computer Science Department, National Institute of Applied Sciences of Lyon (INSA de Lyon), Lyon University	Inst. Montagne LIRIS
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FR022 FR023 FR024 FR025 FR026 FR027	The Mountain Institute, University of SavoieLIRIS Laboratory, Computer Science Department, National Institute of Applied Sciences of Lyon (INSA de Lyon), Lyon UniversityMountain environments, dynamics and territories laboratory, CNRS research unit UMR5204, Savoie UniversityEnvironment-City-Society laboratory, CNRS research unit UMR5600, Lyon UniversityPACTE laboratory - Territories Research Unit UMR 5194 CNRS, Grenoble UniversityCommittee for the European Transalpine Link	Inst. Montagne LIRIS EDYTEM EVS PACTE transalpine
FR022 FR023 FR024 FR025 FR025 FR026 FR027 FR028	The Mountain Institute, University of Savoie LIRIS Laboratory, Computer Science Department, National Institute of Applied Sciences of Lyon (INSA de Lyon), Lyon University Mountain environments, dynamics and territories laboratory, CNRS research unit UMR5204, Savoie University Environment-City-Society laboratory, CNRS research unit UMR5600, Lyon University PACTE laboratory - Territories Research Unit UMR 5194 CNRS, Grenoble University Committee for the European Transalpine Link Lyonbiopôle	Inst. Montagne LIRIS EDYTEM EVS PACTE transalpine Lyon BIOPOLE
FR022 FR023 FR024 FR025 FR026 FR027 FR028 FR029	The Mountain Institute, University of Savoie LIRIS Laboratory, Computer Science Department, National Institute of Applied Sciences of Lyon (INSA de Lyon), Lyon University Mountain environments, dynamics and territories laboratory, CNRS research unit UMR5204, Savoie University Environment-City-Society laboratory, CNRS research unit UMR5600, Lyon University PACTE laboratory - Territories Research Unit UMR 5194 CNRS, Grenoble University Committee for the European Transalpine Link Lyonbiopôle MEDICALPS, Rhone Alpes Health Cluster	Inst. Montagne LIRIS EDYTEM EVS PACTE transalpine Lyon BIOPOLE MEDICALPS
FR022 FR023 FR024 FR025 FR026 FR027 FR028 FR029 FR030	The Mountain Institute, University of SavoieLIRIS Laboratory, Computer Science Department, National Institute of Applied Sciences of Lyon (INSA de Lyon), Lyon UniversityMountain environments, dynamics and territories laboratory, CNRS research unit UMR5204, Savoie UniversityEnvironment-City-Society laboratory, CNRS research unit UMR5600, Lyon UniversityPACTE laboratory - Territories Research Unit UMR 5194 CNRS, Grenoble UniversityCommittee for the European Transalpine LinkLyonbiopôleMEDICALPS, Rhone Alpes Health ClusterFrench National Forest Service (Regional Agency Drôme-Ardèche)	Inst. Montagne LIRIS EDYTEM EVS PACTE transalpine Lyon BIOPOLE MEDICALPS ONF DROME
FR022 FR023 FR024 FR025 FR026 FR027 FR028 FR029 FR030 FR030	The Mountain Institute, University of Savoie LIRIS Laboratory, Computer Science Department, National Institute of Applied Sciences of Lyon (INSA de Lyon), Lyon University Mountain environments, dynamics and territories laboratory, CNRS research unit UMR5204, Savoie University Environment-City-Society laboratory, CNRS research unit UMR5600, Lyon University PACTE laboratory - Territories Research Unit UMR 5194 CNRS, Grenoble University Committee for the European Transalpine Link Lyonbiopôle MEDICALPS, Rhone Alpes Health Cluster French National Forest Service (Regional Agency Drôme-Ardèche) ONF International	Inst. Montagne LIRIS EDYTEM EVS PACTE transalpine Lyon BIOPOLE MEDICALPS ONF DROME ONF INT
FR022 FR023 FR024 FR025 FR026 FR027 FR028 FR029 FR030 FR031 FR032	The Mountain Institute, University of SavoieLIRIS Laboratory, Computer Science Department, National Institute of Applied Sciences of Lyon (INSA de Lyon), Lyon UniversityMountain environments, dynamics and territories laboratory, CNRS research unit UMR5204, Savoie UniversityEnvironment-City-Society laboratory, CNRS research unit UMR5600, Lyon UniversityPACTE laboratory - Territories Research Unit UMR 5194 CNRS, Grenoble UniversityCommittee for the European Transalpine LinkLyonbiopôleMEDICALPS, Rhone Alpes Health ClusterFrench National Forest Service (Regional Agency Drôme-Ardèche)ONF InternationalFranche-Comté Regional Council	Inst. Montagne LIRIS EDYTEM EVS PACTE transalpine Lyon BIOPOLE MEDICALPS ONF DROME ONF INT CR FC
FR022 FR023 FR024 FR025 FR026 FR027 FR028 FR029 FR030 FR031 FR031 FR032 FR033	The Mountain Institute, University of SavoieLIRIS Laboratory, Computer Science Department, National Institute of Applied Sciences of Lyon (INSA de Lyon), Lyon UniversityMountain environments, dynamics and territories laboratory, CNRS research unit UMR5204, Savoie UniversityEnvironment-City-Society laboratory, CNRS research unit UMR5600, Lyon UniversityPACTE laboratory - Territories Research Unit UMR 5194 CNRS, Grenoble UniversityCommittee for the European Transalpine LinkLyonbiopôleMEDICALPS, Rhone Alpes Health ClusterFrench National Forest Service (Regional Agency Drôme-Ardèche)ONF InternationalFranche-Comté Regional CouncilRegional Council of Franche-Comté/spatial planning and energy efficiency department	Inst. Montagne LIRIS EDYTEM EVS PACTE transalpine Lyon BIOPOLE MEDICALPS ONF DROME ONF INT CR FC CR FC DAEE
FR022 FR023 FR024 FR025 FR026 FR027 FR028 FR029 FR030 FR031 FR031 FR032 FR033 FR034	The Mountain Institute, University of SavoieLIRIS Laboratory, Computer Science Department, National Institute of Applied Sciences of Lyon (INSA de Lyon), Lyon UniversityMountain environments, dynamics and territories laboratory, CNRS research unit UMR5204, Savoie UniversityEnvironment-City-Society laboratory, CNRS research unit UMR5600, Lyon UniversityPACTE laboratory - Territories Research Unit UMR 5194 CNRS, Grenoble UniversityCommittee for the European Transalpine LinkLyonbiopôleMEDICALPS, Rhone Alpes Health ClusterFrench National Forest Service (Regional Agency Drôme-Ardèche)ONF InternationalFranche-Comté Regional CouncilRegional Council of Franche-Comté/spatial planning and energy efficiency departmentRhône-Alpes regional authority	Inst. Montagne LIRIS EDYTEM EVS PACTE transalpine Lyon BIOPOLE MEDICALPS ONF DROME ONF INT CR FC CR FC CR FC DAEE CR RA
FR022 FR023 FR024 FR025 FR026 FR027 FR028 FR029 FR030 FR031 FR031 FR032 FR034 FR034	The Mountain Institute, University of SavoieLIRIS Laboratory, Computer Science Department, National Institute of Applied Sciences of Lyon (INSA de Lyon), Lyon UniversityMountain environments, dynamics and territories laboratory, CNRS research unit UMR5204, Savoie UniversityEnvironment-City-Society laboratory, CNRS research unit UMR5600, Lyon UniversityPACTE laboratory - Territories Research Unit UMR 5194 CNRS, Grenoble UniversityCommittee for the European Transalpine LinkLyonbiopôleMEDICALPS, Rhone Alpes Health ClusterFrench National Forest Service (Regional Agency Drôme-Ardèche)ONF InternationalFranche-Comté Regional CouncilRegional Council of Franche-Comté/spatial planning and energy efficiency departmentRhône-Alpes - Planning department	Inst. Montagne LIRIS EDYTEM EVS PACTE transalpine Lyon BIOPOLE MEDICALPS ONF DROME ONF DROME ONF INT CR FC CR FC DAEE CR RA CR RA PT
FR022 FR023 FR024 FR025 FR026 FR027 FR028 FR029 FR030 FR031 FR031 FR031 FR032 FR034 FR035 FR036	The Mountain Institute, University of SavoieLIRIS Laboratory, Computer Science Department, National Institute of Applied Sciences of Lyon (INSA de Lyon), Lyon UniversityMountain environments, dynamics and territories laboratory, CNRS research unit UMR5204, Savoie UniversityEnvironment-City-Society laboratory, CNRS research unit UMR5600, Lyon UniversityPACTE laboratory - Territories Research Unit UMR 5194 CNRS, Grenoble UniversityCommittee for the European Transalpine LinkLyonbiopôleMEDICALPS, Rhone Alpes Health ClusterFrench National Forest Service (Regional Agency Drôme-Ardèche)ONF InternationalFranche-Comté Regional CouncilRegional Council of Franche-Comté/spatial planning and energy efficiency departmentRhône-Alpes regional authorityRégion Rhône-Alpes - Planning departmentRegional Council of Rhône Alpes - Mountain, Tourism and Natural Regional Park Direction	Inst. Montagne LIRIS EDYTEM EVS PACTE transalpine Lyon BIOPOLE MEDICALPS ONF DROME ONF INT CR FC CR FC CR FC DAEE CR RA CR RA PT CR RA TMP
FR022 FR023 FR024 FR025 FR026 FR027 FR028 FR029 FR030 FR031 FR031 FR032 FR033 FR034 FR035 FR036 FR036	 The Mountain Institute, University of Savoie LIRIS Laboratory, Computer Science Department, National Institute of Applied Sciences of Lyon (INSA de Lyon), Lyon University Mountain environments, dynamics and territories laboratory, CNRS research unit UMR5204, Savoie University Environment-City-Society laboratory, CNRS research unit UMR5600, Lyon University PACTE laboratory - Territories Research Unit UMR 5194 CNRS, Grenoble University Committee for the European Transalpine Link Lyonbiopôle MEDICALPS, Rhone Alpes Health Cluster French National Forest Service (Regional Agency Drôme-Ardèche) ONF International Franche-Comté Regional Council Regional Council of Franche-Comté/spatial planning and energy efficiency department Rhône-Alpes regional authority Région Rhône-Alpes - Planning department Regional Council of Rhône Alpes - Mountain, Tourism and Natural Regional Park Direction Regional Oncology Network of Rhone Alps 	Inst. Montagne LIRIS EDYTEM EVS PACTE transalpine Lyon BIOPOLE MEDICALPS ONF DROME ONF INT CR FC CR FC DAEE CR RA CR RA PT CR RA TMP RRC-RA
FR022 FR023 FR024 FR025 FR026 FR027 FR028 FR029 FR030 FR031 FR031 FR033 FR034 FR035 FR036 FR037 FR038	The Mountain Institute, University of SavoieLIRIS Laboratory, Computer Science Department, National Institute of Applied Sciences of Lyon (INSA de Lyon), Lyon UniversityMountain environments, dynamics and territories laboratory, CNRS research unit UMR5204, Savoie UniversityEnvironment-City-Society laboratory, CNRS research unit UMR5600, Lyon UniversityPACTE laboratory - Territories Research Unit UMR 5194 CNRS, Grenoble UniversityCommittee for the European Transalpine LinkLyonbiopôleMEDICALPS, Rhone Alpes Health ClusterFrench National Forest Service (Regional Agency Drôme-Ardèche)ONF InternationalFranche-Comté Regional CouncilRegional Council of Franche-Comté/spatial planning and energy efficiency departmentRhône-Alpes - Planning departmentRegional Council of Rhône Alpes - Mountain, Tourism and Natural Regional Park DirectionRegional Oncology Network of Rhone AlpsRhônalpénergie-Environnement	Inst. Montagne LIRIS EDYTEM EVS PACTE transalpine Lyon BIOPOLE MEDICALPS ONF DROME ONF INT CR FC CR FC CR FC DAEE CR RA CR RA PT CR RA TMP RRC-RA RAEE
FR022 FR023 FR024 FR025 FR026 FR027 FR028 FR029 FR030 FR031 FR031 FR031 FR033 FR034 FR035 FR036 FR037 FR038 FR039	The Mountain Institute, University of SavoieLIRIS Laboratory, Computer Science Department, National Institute of Applied Sciences of Lyon (INSA de Lyon), Lyon UniversityMountain environments, dynamics and territories laboratory, CNRS research unit UMR5204, Savoie UniversityEnvironment-City-Society laboratory, CNRS research unit UMR5600, Lyon UniversityPACTE laboratory - Territories Research Unit UMR 5194 CNRS, Grenoble UniversityCommittee for the European Transalpine LinkLyonbiopôleMEDICALPS, Rhone Alpes Health ClusterFrench National Forest Service (Regional Agency Drôme-Ardèche)ONF InternationalFranche-Comté Regional CouncilRegional Council of Franche-Comté/spatial planning and energy efficiency departmentRhône-Alpes regional authorityRégion Rhône-Alpes - Planning departmentRegional Council of Rhône Alpes - Mountain, Tourism and Natural Regional Park DirectionRegional Oncology Network of Rhone AlpsRhônalpénergie-EnvironnementSociety of Alpine Economics of Upper Savoy	Inst. Montagne LIRIS EDYTEM EVS PACTE transalpine Lyon BIOPOLE MEDICALPS ONF DROME ONF DROME ONF INT CR FC CR FC DAEE CR RA CR RA PT CR RA TMP RRC-RA RAEE SEA
FR022 FR023 FR024 FR025 FR026 FR027 FR028 FR029 FR030 FR031 FR032 FR033 FR034 FR035 FR036 FR037 FR038 FR039 FR039 FR039	The Mountain Institute, University of SavoieLIRIS Laboratory, Computer Science Department, National Institute of Applied Sciences of Lyon (INSA de Lyon), Lyon UniversityMountain environments, dynamics and territories laboratory, CNRS research unit UMR5204, Savoie UniversityEnvironment-City-Society laboratory, CNRS research unit UMR5600, Lyon UniversityPACTE laboratory - Territories Research Unit UMR 5194 CNRS, Grenoble UniversityCommittee for the European Transalpine LinkLyonbiopôleMEDICALPS, Rhone Alpes Health ClusterFrench National Forest Service (Regional Agency Drôme-Ardèche)ONF InternationalFranche-Comté Regional CouncilRegional Council of Franche-Comté/spatial planning and energy efficiency departmentRhône-Alpes regional authorityRégion Rhône-Alpes - Planning departmentRegional Council of Rhône Alpes - Mountain, Tourism and Natural Regional Park DirectionRegional Oncology Network of Rhone AlpsRhônalpénergie-EnvironnementSociety of Alpine Economics of Upper SavoyLocal authority for Annecy lake purification	Inst. Montagne LIRIS EDYTEM EVS PACTE transalpine Lyon BIOPOLE MEDICALPS ONF DROME ONF DROME ONF INT CR FC CR FC DAEE CR RA CR RA PT CR RA TMP RRC-RA RAEE SEA SILA







ID	Partner Institution	Acronym
FR042	Pays horloger development syndicate	Pays Horloger
FR043	Joseph Fourier Grenoble University, Laboratory of study of the Transfers in Hydrology and	OSUG
	Environment OSUG	
FR044	Town of Lure - General Services Departement	Lure

Germany

Table 6: Participation of stakeholders in the AS Programm

Thematic field	Count	AS participation	Stakeholders	Total AS participation
Inclusive growth	11	1 project	26	26
Resource	11	2 projects	4	8
efficiency and		Total	30	34
ecosystem				
management				
Total projects	22			

In Germany 30 institutions participated in 22 different projects (out of 30 projects), four institutions were partners in two projects of the two selected thematic fields of the Program period 2007-2013. In several projects more than one German institution participated.

Branches and types of stakeholders

Table 7: Types of stakeholders in Germany (only PP list of the two thematic fields)

Branch (NACE-Code)	Туре	Sector	Count
D	Energy agency and similar institutions	private	1
М	Other	private	1
	Technological and scientific research center	public	1
Ν	development ageny	public-private	1
0	Authority	public	10
	Protected areas management body	public	1
	Technological and scientific research center	public	3
Р	University/Institute of applied science	public	8
Q	Provider of public services	public-private	1
S	Chamber of trade and crafts	public-private	2
	NGO/NPO in the fields of environment, water	civil society	1
	management, natural resources management and hazards		
	control		
Total			30







As Table 7 shows most (almost one half) Project Partners (PP) are NACE-code "O" (14 in total, 10 of them authorities). NACE-code "P: Universities or Institutes of applied science" are also frequently project partners in the Alpine Space Programme. The public sector is therefore clearly dominating, while the private sector is underrepresented as well as institutions representing the civil society. Looking closer at authorities (Table 8) it shows that most of them have their thematic focus on regional development, spatial or regional planning. Two of them are representing the local, but eight the regional level. Their main resources are decision-making/policy-making. These stakeholders have often high influence on sustainable spatial development. They are one very important target group for the Alpine Space program.

Spatial Level Thematic focus / interest F		Resources	ID	Degree of influence on sustainable regional development
local	spatial planning	decision-maker / policy-maker	DE022	high
	regional development	decision-maker / policy-maker	DE010	high
regional	economic development, tourism	decision-maker / policy-maker inter-municipal coordination	DE013	high
	geology	knowledge / expertise; employees	DE015	medium
	geology	knowledge / expertise; employees	DE017	low
	regional planning; regional development	knowledge / expertise; intermunicipal cooperation	DE016	medium
	regional planning; regional development	knowledge / expertise; policy action	DE001	medium
	spatial planning	decision maker / policy maker, knowledge / expertise	DE019	medium
	water management	knowledge / expertise	DE028	low
	regional development	decision-maker / policy-maker inter-municipal coordination	DE012	high
Total			10	institutions

Table 8: Authorities

Another type of well represented institutions within the scope of the analysis is "Universities and Institutes of applied sciences" and "Technological and scientific research center" with their main resources knowledge / expertise (see Table 9). Their influence is generally not very high but their area of influence is wider than for participating authorities. Universities and research institutes work generally on all spatial levels, but have low (direct) influence on sustainable spatial development.







Table 9: Universities and research centers

Spatial Level	Thematic focus / interest	Resources	ID	Degree of influence on sustainable regional development		
Technological and scientific research center						
all	bioscience	knowledge / expertise	DE007	low		
regional	forestry	knowledge / expertise	DE021	low		
	forestry	knowledge / expertise; employees	DE020	low		
	water management, ecology	knowledge / expertise	DE030	low		
University/Institut	e of applied science					
all	architecture	knowledge / expertise	DE008	low		
	ecology	knowledge / expertise	DE003	low		
	geophysics	knowledge / expertise	DE018	low		
	informatics, bio- technology	knowledge / expertise	DE006	low		
	spatial planning	knowledge / expertise	DE027	low		
	tourism	knowledge / expertise	DE011	low		
	transport and mobility	knowledge / expertise	DE023	low		
	water management	knowledge / expertise	DE029	low		
Total			12	institutions		

Table 10: Thematic focus of institutions

Thematic focus / interest	Count
architecture	2
crafts, housing / building sector	1
bioscience	1
ecology	2
ecology, natural resources	1
water management, ecology	1
water management	2
forestry	2
geology	2
geophysics	1
economic development, tourism	2
tourism	1
regional development	2
regional planning; regional development	2
spatial planning	3
environmental planning, consulting	1







Thematic focus / interest	Count
health care	1
informatics, bio-technology	1
transport and mobility	1
energy supply	1

Looking closer at the thematic focus of the institutions and grouping them, it shows that many (13) of them have their focus at resources (marked in light green) and the other main group (8) is in context with spatial planning and regional development. Close to these institutions are the 3 institutions concerned with economic development and tourism. The issue of building and architecture is represented by three institutions, the other institutions don't form a "cluster", but are more singular in this analysis. The thematic focus of institutions corresponds to the two selected thematic fields, the picture would change, if the other thematic fields (Climate change, competitiveness and innovation of SMEs, low carbon energy and energy efficiency, sustainable transport and mobility) would be included into the analysis.

Influence of stakeholders on sustainable spatial development

Figure 21 shows the degree influence the stakeholders have on the different spatial levels. The highest influence on local and regional level have the authorities who are directly involved in or responsible for spatial planning in their area. But in the two thematic fields of the last program period of the Alpine Space program only 5 of such authorities participated as project partners, although they represent an important target group of the program. If this is representative for all thematic fields and also the other program periods, strategies have to be found to motivate more of them to participate.

The stakeholders with a low degree of influence are mainly universities and research institutions, which contribute to sustainable spatial development by giving their knowledge and expertise on all spatial levels from the local and regional level (mostly by support for pilot activities) to the national and even international level by exchanging the expertise via networking and activities in their common channels (conferences, scientific journals etc.). The play an important role in the Alpine Space program as Partners (at least in the scope of this analysis), but are maybe compared to local stakeholders somehow overrepresented.

The most important stakeholders - the key stakeholders for sustainable spatial development - are the 5 institutions with high influence at the local and regional spatial level.







			DE005			
al	high	DE010	DE012			
ati	nign	DE022	DE013			
spa						
e			DE001			
ld			DE015			
ina			DE016			
tai	medium	DE014	DE019			
sn			DE025			
u s			DE026			
0						
DC						DE003
ne			DE002			DE006
lf			DE004			DE007
fii			DE009			DE008
0	low		DE017	DE024		DE011
le E			DE020			DE018
egl			DEU21			DE023
Õ			DE028			DE027
			DE030			DE028
		local	regional	national	international	all
		spa	tial level of influer	nce on sustainable	spatial developm	ent

Figure 21: Influence grid

Spatial level of stakeholders

National and local stakeholders are poorly represented, while most stakeholders represent the regional level - a level which includes state authorities from Bavaria. Most research institutes and universities as well as the few private enterprises included as partners in the program work at all spatial levels from the local level - often involved as pilot site - to international level, subject to the respective needs.







Location of stakeholders

Table 11: Relation to Alps

Relation to Alps	NUTS3	Partner town / location	Role in the AS project	Participation in AS projects	Sector
Alpine	DE273	Kempten	PP	1	public-private
Convention	DE215	Berchtesgaden	PP	2	public
	DE21D	Garmisch-Partenkirchen	PP	1	public
			PP	2	public-private
	DE21K	Rosenheim	PP	1	public
	DE27E	Sonthofen	PP	1	public
Alpine Space	DE131	Freiburg im Breisgau	LP	1	public
			PP	1	public
	DE147	Langenargen	PP	1	public
	DE148	Ravensburg	PP	1	public
	DE212	München	LP	1	public
			LP	1	public-private
			PP	1	private
			PP	1	public
			PP	1	public-private
	DE21B	Freising	PP	1	public
			PP	2	public
	DE21E	Eching a. Ammersee	PP	1	civil society
	DE21H	Neuherberg	PP	1	public
	DE271	Augsburg	LP	2	public
				4	n vis co to
				4	private
		Objectives and		1	public
outside	DE111	Stuttgart		1	public
	DE92			1	public
	DEB32	Kaiserslautern	PP	1	public
	DED43	Freiberg	44	1	public

At the first glance stakeholders within the perimeter of the Alpine Convention - supposed to have a stronger relation to the Alps as stakeholders outside - seem to participate not as often as expected in the Alpine Space program, it is only the sixth part of partner institutions. None of them was leadpartner, but two of them were partners in two projects. All of them are public or public-private institutions.

Most of the German project participants are located in the Alpine Space outside the perimeter of the Alpine Convention, some of them were leadpartners and two of them participated in two projects. One reason is that most authorities for the Laender as well as many universities and research are located in bigger cities. There are only very few of them within the German Alpine Convention area due to the relatively small part the Alps have in Germany and Bavaria.







Four stakeholders are located apart from the Alpine Space, they are all universities whose special knowledge / expertise was assumedly needed for some projects.

Interpretation

Among the participating institutions in Germany the public sector, represented mainly by authorities and universities / research institutes, is very good represented, while the private sector is almost not represented as project partner. Presumably some SMEs are participating indirectly as contracting partners of authorities. It is noticeable that most project partners have low or medium influence on sustainable spatial development. One reason is the lack of local authorities as project partners, because they hold many planning competences and have therefore a high influence on spatial development on the local level. Some of them participate indirectly in the program as "pilot regions" without being project partner, but via university or research center.

There is no obvious "network of stakeholders" visible in the two thematic fields of the program, there are not many stakeholders participating in more than one project in this period.

The fact that only 5 stakeholders are located in the perimeter of the Alpine Convention is due to the relatively small part the Alps take compared to the rest of Germany or even Bavaria. The Alpine Convention area in Germany has only medium sized towns with less than 70.000 inhabitants and therefore less institutions like e.g. universities / research centers to participate in the program. Local actors are rarely participating.

Extension of stakeholder list

The following Table 12 illustrates additional potential partners for the respective thematic fields. It is merely a subjective selection which does not claim to be exhaustive. The total number of 89 institutions has been analysed in terms of what thematic fields they cover, what type of institutions they represent and on what spatial level they are working.

Thematic field(s)	Institution	Institution	Туре	Spatial level
Architecture	Lehrstuhl Sustainable Urbanism TU München	Technical University Munich, Chair for Sustainable Urbanism	University/Institute of applied science	All levels
Architecture	Bund Deutscher Landschaftsarchitekten BDLA	Federation of German Landscape Architects	Public/private organisation representing enterprises and especially SMEs	National
Crafts, housing / building sector	Bayerischer Bauindustrieverband	Bavarian Construction Industry Association	Public/private organisation representing enterprises and especially SMEs	Regional
Crafts, housing/ building sector	Bayerische BauAkademie	Bavarian Building Academy	Chamber of trade and crafts	Regional
Crafts, housing / building sector	Cluster-Initiative Forst und Holz in Bayern gGmbH	Cluster-initiative Forestry and Wood in Bavaria Ltd.	Public/private organisation representing enterprises and especially SMEs	Regional
Ecology	Akademie für Naturschutz und Landschaftspflege ANL	Bavarian Academy for Nature Conservation and	Education and training center	

Table 12 Additional stakeholders for thematic fields (selection)







		Landscape Management		
Ecology	Bund Naturschutz in Bayern e.V.	Bavarian Branch of Friends of the Earth Germany	NGO/NPO	Regional
Ecology	Landesbund für Vogelschutz	Bavarian Association for Bird Protection	NGO/NPO	Regional
Ecology	Bayerischer Naturschutzfonds	Bavarian Fund for Nature Protection	Other	Regional
Ecology	Bayerisches Umweltministerium	Bavarian State Ministry of the Environment and Consumer Protection	Authority	Regional
Ecology, natural resources	Landesamt für Umwelt (noch nicht beteiligte Fachabteilungen)	Bavarian Federal Agency for the Environment	Environmental agency	Regional
Ecology, natural resources	Studienfakultät Forstwissenschaft und Resourcenmanagement, TU München - Weihenstephan	School of Forest Science and Resource Management	University/Institute of applied science	All levels
Ecology, natural resources	Ämter für Ernährung, Landwirtschaft und Forsten (counties)	County Agencies for Nutrition, Agriculture and Forestry	Authority	Supra- local
Ecology, natural resources	Bayerischer Bauernverband BBV	Bavarian Farmers Organisation	Public/private organisation representing enterprises and especially SMEs	Regional
Ecology, natural resources	Arbeitsgemeinschaft bäuerliche Landwirtschaft ABL	Association of smallholder farmers	Public/private organisation representing enterprises and especially SMEs	National
Ecology, natural resources	Almwirtschaftlicher Verein	Association of mountain farmers	Public/private organisation representing enterprises and especially SMEs	Supra- local
Economic development, tourism	BAYERN TOURISMUS Marketing GmbH	Bavarian Tourism Marketing Ltd.	Public/private organisation representing enterprises and especially SMEs	Regional
Economic development, tourism	Tourismus Oberbayern München e.V.	Tourism Association Oberbayern Munich	Public/private organisation representing enterprises and especially SMEs	Supra- local
Economic development, tourism	Tourismusverband Allgäu/Bayerisch-Schwaben e.V.	Tourism Association Allgäu/Bayerisch-Schwaben	Public/private organisation representing enterprises and especially SMEs	Supra- local
Economic development, tourism	Deutscher Hotel- und Gaststättenverband, Landesverband Bayern	Bavarian Branch of the German Hotel and Restaurant Association	Public/private organisation representing enterprises and especially SMEs	Regional
Economic development, tourism	Tourismusgesellschaften auf lokaler bzw. Landkreiebene (Tegernseer Tal, Chiemgau, Oberallgäu etc.)	County Tourism Associations	Development agency	Supra- local
Energy supply	E.ON Energie Deutschland GmbH	E.ON SE	Other	Internatio nal







E 1		NA 1 1 1		
Energy supply	Stadtwerke (Munchen, Rosenheim, Kempten, Kaufbeuren etc.?)	Municipal energy suppliers	Provider of public services	Local
Energy supply	Regionale Energiedienstleister (Green City Energy)	Regional energy service providers	Energy agency and similar institutions	
Energy supply	Energie innovativ	Bavarian Energy Agency	Energy agency and similar institutions	Regional
Energy supply	Vereinigung Wasserkraftwerke in Bayern e.V.	Association of Hydro-Power- Plants in Bavaria	Public/private organisation representing enterprises and especially SMEs	Regional
Energy supply	Landesverband Bayerischer Wasserkraftwerke e.V.	Association of Hydro-Power- Plants in Bavaria	Public/private organisation representing enterprises and especially SMEs	Regional
Environmental planning, consulting	Wissenschaftszentrum Weihenstephan für Ernährung, Landnutzung und Umwelt (u.a. Departments: Ökologie und Ökosystemforschung)	TUM School of Life Sciences Weihenstephan (e.g. Departments: Ecology and Ecosystem Research)	University/Institute of applied science	All levels
Forestry	Bayerische Staatsforsten	Bavarian State Forests	Other	Regional
Forestry	Bayerischer Waldbesitzer- Verband e.V.	Bavarian Association of Private Forest Owners	Public/private organisation representing enterprises and especially SMEs	Regional
Forestry	Bayerischer Jagdverband e.V.	Bavarian Hunters Association	Other	Regional
Forestry	Ökologischer Jagdverband e.V.	Ecological Hunters Association	Other	Regional
Geology	Bayerischer Industrieverband Steine und Erden e.V.	Bavarian Assocation Industrial Rocks and Minerals	Public/private organisation representing enterprises and especially SMEs	Regional
Health care	Malteser Landesverband Bayern/Thüringen	Malteser Social Services, Bavarian branch	Provider of public services	Regional
Health care	Bayerisches Rotes Kreuz	Bavarian Red Cross	Provider of public services	Regional
Health care	Johanniter Landesverband Bayern	Johanniter, Bavarian branch	Provider of public services	Regional
Health care	Bayerisches Staatsministerium für Gesundheit und Pflege	Bavarian State Ministry for Health and Care	Authority	Regional
Health care	Bayerisches Staatsministerium für Arbeit und Soziales, Familie und Integration	Bavarian State Ministry of of Labour, Social Affairs, Family and Integration	Authority	Regional
Health care	Diakonie Bayern	Diakonie, Bavarian branch	Provider of public services	Regional
Health care	Kreiskrankenhäuser	County hospitals	Provider of public services	Supra- local
Health care	Bayerische Ärztekammer	Bavarian Medical Association	Public/private organisation representing medics	Regional







Deviewel	Other dentation and a the same set like in		Development energy	C
Regional development	Standortmarketinggesellscha ften (MB, TS etc.)	County regional development agencies (MB, TS etc.)	Development agency	Supra- local
Regional development	Bayerischer Sparkassenverband	Bavarian mutual savings bank (+ county branches)	Other	Supra- local
Regional development	Bayerischer Raiffeisenverband	Local rural credit cooperatives (+ county branches)	Other	Supra- local
Regional development	Genossenschaftsverband Bayern	Bavarian Cooperatives Association	Other	Regional
Regional development	Bundesverband mittelständische Wirtschaft, Landesverband Bayern	Federal Association of SME	Public/private organisation representing enterprises and especially SMEs	National
Regional development	Landesarbeitsgemeinschaft der Freiwilligen- Agenturen/Freiwilligen- Zentren/Koordinierungsstell en in Bayern e.V.	Association of Volunteer Agencies/Coordination Centers in Bavaria	Development agency	Regional
Regional development	Bayerische Verwaltung für Ländliche Entwicklung (BZA und ALEs)	Bavarian Agencies for Rural Development	Authority	Regional
Regional development	ILE-Regionen in der Gebietskulisse des Alpenraumprogramms (Achental, Kulturraum Ampertal, Sempt- /Schwillachtal, Erdinger Holzlandgemeinden, Altöttinger Holzlandgemeinden, Lech- Wertach, Holzwinkel- Altenmünster etc.)	Integrated Rural Development regions in the Alpine Space area	Intermunicipal association	Supra- local
Regional development	Leader-Regionen in der Gebietskulisse des Alpenraumprogramms (e.g. Ammersee, Auerbergland, Berchtesgadener Land, Chiemgauer Alpen, Chiemgauer Seenplatte, Dachau AGIL)	LEADER-Regions in the German Alpine Space Area	Development agency	Supra- local
Regional planning; regional development	Regionale Planungsverbände (Regionen 14, 15, 16, 17, 18)	Regional Planning Authorities	Spatial planning authority	Supra- local
Regional planning; regional development	Vereinigung für Stadt-, Regional- und Landesplanung SRL	Association for Urban, Regional and Spatial Planning	Network	National
Regional planning; regional development	Kreisplanungsämter und kommunale Bauämter	County and municipal planning departments	Spatial planning authority	Local
Regional planning;	TU München, Lehrstuhl für Raumentwicklung	TU Munich, Chair for Urban Development	University/Institute of applied science	National







regional development				
Regional planning; regional development	Deutsche Akademie für Städtebau und Landesplanung	German Academy for Urban Development and Regional Planning	Network	National
Regional planning; regional development	Europäische Metropolregion München	European Metropolitan Region Munich	Intermunicipal association	Supra- local
Spatial planning	TU München, Lehrstuhl für Raumentwicklung	TU Munich, Chair for Urban Development	University/Institute of applied science	All levels
Spatial planning	Lehrstuhl für Städtebau und Regionalplanung	Chair of Urban Development and Regional Planning	University/Institute of applied science	All levels
Tourismus	Tourismusverbände (s.o.)	Tourism associations (see above)	Public/private organisation representing enterprises and especially SMEs (e.g. SME networks, cluster organisations)	Regional
Tourismus	Hotellerie und Gaststätten (s.o.)	Hotels and restaurants (see above)	Public/private organisation representing enterprises and especially SMEs (e.g. SME networks, cluster organisations)	Regional
Tourismus	Verband Deutscher Seilbahnen und Schlepplifte e.V.	Association of German Cable Cars and Lifts	Public/private organisation representing enterprises and especially SMEs (e.g. SME networks, cluster organisations)	National
Tourismus	Deutscher Alpenverein (+ relevante Sektionen vor Ort)	German Alpine Club (+ relevant local branches)	NGO/NPO	National
Tourismus	NaturFreunde Deutschlands e.V., Landesverband Bayern	NatureFriends Germany, Bavarian branch	NGO/NPO	Regional
Transport and mobility	Bayerische Eisenbahngesellschaft BEG	Bavarian Railway Association	Public and non profit oriented transport provider	Regional
Transport and mobility	Oberbayernbus (RVO/RVA)	Oberbayern bus (RVO/RVA, subsidiary of German Railway DB)	Public and non profit oriented transport provider	Supra- local
Transport and mobility	DB Regio Bayern	DB Regio, Bavarian branch	Public and non profit oriented transport provider	Regional
Transport and mobility	Vogtlandbahn (ALEX, BLB)	Vogtlandbahn railway operator	Public and non profit oriented transport provider	Supra- local
Transport and mobility	Veolia (BOB, Meridian)	Veolia railway operator	Public and non profit oriented transport provider	Supra- local
Transport and mobility	Verkehrsclub Deutschland, Regionalverband Bayern	Mobility Club Germany, Bavarian branch	NGO/NPO	Regional
Transport and mobility	ADAC, Regionalverband Bayern	German Automotive Club, Bavarian branch	Other	Regional
Transport and mobility	Allgemeiner Deutscher Fahrrad Club ADFC,	German Cyclist Association, Bavarian branch	NGO/NPO	Regional







	Regionalverband Bayern			
Transport and mobility	TU München, Ingenieurfakultät Bau Geo Umwelt, Fachgebiet für Siedlungsstruktur und Verkehrsplanung	Chair of Urban Structure and Transport Planning	University/Institute of applied science	All levels
Transport and mobility	Bayerisches Staatsministerium des Innern, für Verkehr und Bau	Bavarian Ministry of the Interior, Building and Transport	Authority	Regional
Transport and mobility	Staatliche Bauämter (Straßenbauabteilungen)	Bavarian Public Construction Authorities	Authority	Regional
Transport and mobility	Bundesverband eMobilität e.V.	Federal E-Mobility Association	Public/private organisation representing enterprises and especially SMEs (e.g. SME networks, cluster organisations)	National
Transport and mobility	Regierung von Oberbayern / Regierung von Schwaben (Abteilungen Wirtschaft, Landesentwicklung, Verkehr sowie Planen und Bauen)	Distric Governments of Oberbayern and Schwaben (Departements Spatial Development and Transport and Planning and Construction)	Authority	Regional
Transport and mobility	Autobahndirektion Südbayern	South-Bavarian Federal Highway Authority	Authority	Regional
Water management	Stadtwerke (SWM, Rosenheim etc.)	Municipal energy suppliers	Provider of public services	Local
Water management	Wasserwirtschaftsämter (KE, WM, RO, TS, M)	Water Management Offices	Authority	Supra- local
Water management	TU München, Lehrstuhl für Wasserbau und Wasserwirtschaft	TU Munich, Chair for Hydraulic Construction and Water Management	University/Institute of applied science	All levels
Water management, ecology	Landesfischereiverband Bayern e.V.	Bavarian Fishery Association	NGO/NPO	Regional
Additional categories	Bayerischer Gemeindetag	Council of Bavarian Municipalities	Intermunicipal association	Regional
Additional categories	Bayerischer Landkreistag	Council of Bavarian Counties	Intermunicipal association	Regional
Additional categories	Bayerischer Städtetag	Council of Bavarian Cities	Intermunicipal association	Regional
Additional categories	Bayerischer Rundfunk / Bayerisches Fornschen	Bavarian public-service	Other	Regional
		Dioudoustina		

A quantitative analysis reveals that most institutions are public/private organisations representing enterprises. These are usually lobbying organisations for certain interest groups such as accommodation, e-mobility or small and medium-sized enterprises.







Public/private organisation representing enterprises														19
Other	-								11					
Authority								10						
University/Institute of applied science							8							
Provider of public services						7								
NGO/NPO						7								
Public and non profit oriented transport provider				5	5									
Intermunicipal association				5	5									
Development agency				4										
Energy agency and similar institutions		2												
Spatial planning authority		2												
Network		2												
Education and training center]= :	1												
Environmental agency) = :	1												
Chamber of trade and crafts		1												
	0	2	4		6	8	1	0	12	14	1	.6	18	20

Figure 22 Type of institutions

Thematically, a number of additional stakeholders can be assigned to the thematic fields "transport and mobility", "regional development" and "health care" (cf. Figure 23).









Figure 23 Thematic fields of potential additional stakeholders

By far, the most institutions can be allocated on regional level, with significant additional institutions on supra-local (i.e. between local and regional) and national level (cf. Figure 20).











Italy

For the Italian part of the Alpine Space (Aosta Valley, Trentino-Alto Adige, Piemonte, Lombardia, Liguria, Veneto, Friuli-Venezia Giulia) 64 institutions participated in different projects: 14 in the "inclusive growth" thematic field and 13 in the "resource efficiency and ecosystem management" thematic field (cf. Table 13).

Table 13: Thematic field of the projects

Thematic field	Count		
	West	East	Total
Inclusive growth	14	10	14
Resource efficiency and ecosystem management	13	13	13
	27	23	27

Table 14: AS participation

AS parti- cipation	Stake- holders	Total AS parti- cipation	Stake- holders	Total AS participat ion	Stake- holders	Total AS parti- cipation
	West			East	Total	Total
1 project	24	24	22	22	46	46
2 projects	7	14	3	6	10	20
3 projects	4	12	2	6	6	18
4 projects						
5 projects	1	5	1	5	2	10
	36	55	28	39	64	94

Table 15: AS participation

	Number of projects
1 IT partner	3
2 IT partners	6
3 IT partners	7
4 IT partners	5
5 IT partners	4
6 IT partners	2

Table 15 shows that nearly one third of the stakeholders (18) participated in more than one project: 10 stakeholders were partners in 2 different projects, 6 stakeholders were partners in 3 different







projects, 2 stakeholders were partners in 5 different projects (ERSAF - Regional Agency for services to agriculture and forestry and European Academy of Bozen/Bolzano). Globally, project partners from Italy were present 94 times in 27 different projects, suggesting, in general, a high level of involvement in the Alpine Space Programme 2007/2013.

The relatively small number of projects compared to the number of institutions, suggests the participation of different stakeholders from Italy in the same projects.

Types of stakeholders

Table 16 shows that more than half (35/64) of the project partners are "authorities", followed by the rest of the types represented one time (Chamber of commerce) to four times ("spatial planning authorities" and "university/institutes of applied science"). Except for the large group of public authorities, the photography is quite heterogeneous.

These following typologies of institutions are not represented:, education and training center, energy agency and similar institutions, inter-municipal association, international organization, labor market service, network, public and nonprofit oriented transport provider, public/private organization representing enterprises and especially SMEs, water agency.

8 different stakeholders have been Lead Partners and, among these, one has been Lead Partner in three projects (Lombardy Region - General Directorate for health). Globally, PPs from Italy have been LP 10 times: 9 times a LP came from Western Italy (Aosta Valley, Piemonte, Lombardia, Liguria) and only 1 time a LP came from Eastern Italy (Trentino-Alto Adige, Veneto, Friuli-Venezia Giulia).

Туре	Count	LP	Count	LP	Count	LP
	West		East			
Authority	17	3	18	1	35	4
Chamber of Commerce and Industry	1	-			1	
Development agency	2	-			2	
Environmental agency	2	2	1		3	2
NGO/NPO	1	-			1	
NPO	1	1	1		2	1
Protected areas management body	1		1		2	
Provider of public services	1	-	1		2	
Spatial planning authority	4	-			4	
Research institute/centre			3		3	
Technological and scientific research center	2	1	1		3	1
University/Institute of applied science	2	-	2		4	
Other	2				2	
	37	7	28	1	64	8

Table 16: Types of stakeholders in Italy







Table 17: Location of stakeholders

Relation to Alps	NUTS3	Partner town / location	Region	Role in the AS project	Participation in AS projects	Sector
Alpine Convention	ITC20	Aosta	Valle dÁosta	PP	1	public
				PP	1	public
				PP	2	public
				PP	1	public
				PP	2	public
				LP	1	public
				PP	1	public
	ITC16	Valdieri	Piemonte	PP	2	public
	ITC14	Stresa	Piemonte	PP	1	public-private
	ITH10	Bolzano	Bolzano	PP	2	public
				PP	5	Private
				LP	1	public
				PP	1	public
	ITH20	Trento	Trento	PP	1	Private
				PP	1	public
				PP	1	public
				PP	1	public
				PP	1	public
				PP	1	public
	ITH33	Belluno	Veneto	PP	1	public
				PP	3	public
Alpine	ITC33	Genova	Liguria	PP	2	public-private
Space	ITC45	Milano	Lombardia	PP	1	public
				LP	2	public-private
				LP	3	public
				PP	5	public-private
				PP	1	public-private
				LP	1	public
				PP	1	civil society
				PP	1	public
				PP	1	public
				LP	1	public
				PP	1	public
	ITC11	Torino	Piemonte	PP	1	public
				PP	1	public-private
					•	
				PP	3	public







Relation to Alps	NUTS3	Partner town / location	Region	Role in the AS project	Participation in AS projects	Sector
				PP	1	public
				PP	1	public
				LP	3	public
				PP	1	public
				LP	1	public-private
				PP	1	public
	ITC18	Alessandria	Piemonte	PP	2	public
	ITC17	Asti	Piemonte	PP	2	public-private
	ITC47	Brescia	Lombardia	PP	1	public
	ITC4B	Mantova	Lombardia	PP	1	public
	ITH35	Venezia	Veneto	PP	1	public
				PP	1	public
				PP	1	public
				PP	1	public
				PP	3	public
	ITH36	Padova	Veneto	PP	1	public
				PP	2	public
				PP	2	public
	ITH42	Udine	Friuli- Venezia Giulia	PP	1	Public
				PP	1	public
	ITH44	Trieste	Friuli- Venezia Giulia	PP	1	Private
				PP	1	Public
outside	ITD55	Bologna	Emilia Romagna	PP	1	public
	ITI4	Rome	Lazio	PP	1	public
				PP	1	public
				PP	2	public
				Total	94 Projects	64 Institutions

Table 18: Stakeholder 's relation to the Alps

Relation to the Alps	Count Stk
Alpine Convention	21
Alpine Space	39
Outside	4





One-third of the stakeholders are within the perimeter of the Alpine Convention (21/64). Partners from the Alpine Convention perimeter are mainly from Aosta, Trentino-Alto Adige and only one of them was lead partner in one project, but five of them were partners in more than one project (two in 5 different project at the same time). (cf. Table 17 and Table 18).

Most of the project participants from Italy (39) are located in the Alpine Space outside the perimeter of the Alpine Convention. In total 60/64 are located within the AS perimeter. 18 of them participated in more than one project. In particular, 6 partners participated in 3 different projects and 2 partners in 5 different projects. Only four stakeholders are located outside the Alpine space. Three are Italian ministries located in Rome and the other one was probably involved for its special knowledge / expertise and maybe because already part of an established network with other project participants.

Table 19: Stakeholders' Sectors

Sector	Count Stakeholders
Public	46
Private	4
Public-Private	8
Civil Society	1

It is very remarkable that the majority of the stakeholders come from the public sector (cf. Table 19). Private sector is poorly represent by four stakeholders (all in the Eastern part of the Alpine space), and eight that are public-private (all from the Western part). Civil society only appears one (an NGO).

Table 20: Location of stakeholders

Region	E/W	Count Stk
Emilia Romagna		1
Friuli-Venezia Giulia	E	4
Lazio		3
Liguria	W	1
Lombardia	W	14
Piemonte	W	14
Trentino- Alto Adige	Е	10
Val d'Aosta	W	7
Veneto	Е	10

The most active Alpine regions from AC or AS in Italy are Lombardia and Piemonte, with 14 stakeholders each, and Veneto and Trentino-Alto Adige with 10. Liguria is the less represented with just one stakeholder. Among the totality of partners, 36/60 come from the Western part of Italy while only 24 come from the East, this shows a greater involvement in the Alpine Space Programme from the Western part of Italy.







Even if Italy covers a big area of the Alpine Convention (second state after Austria), the Western part is smaller and not so wide as the Eastern one and regional authorities as well as environmental agencies and research centers are located in bigger cities in the plain outside the Alpine Convention perimeter. This explains why stakeholders from the perimeter of the Alpine Convention in Piemonte, Lombardia, Liguria seem to participate not as often as expected in the Alpine Space program. This consideration can be extended also to Veneto and Friuli-Venezia Gliulia.

Table 21: Spatial level of stakeholders

Relation to Alps	Spatial level	Count	Count	
		West	East	Total
Alpine	regional	7	10	17
Convention	local / supra local	1		1
	local / supra local / regional / national / international	1	1	2
	regional / national/ international		2	2
Alpine Space	regional	12	8	20
	local / supra local	6		6
	local / regional / national / international	1	1	2
	local / supra local / regional / national / international	3		3
	local / supra local / regional	2		2
	local / supra local / regional / national	1		1
	local / supra local / international	1		1
	national		2	2
outside	regional	1	1	2
	National		3	3
	Total	36	28	64

Concerning the spatial level of stakeholders it is quite interesting to notice that there is no stakeholder with just local level (for example there are no municipalities among stakeholders from Italy. The smallest administrative units participating as a PP are "provinces"). The vast majority of the stakeholders have a regional level (39 out of 64). In Italy, regions are the first-level administrative divisions of the state and between them it is important to notice that Aosta Valley (7 regional directorates participating as PPs) and the "provinces" of Bolzano and Trento have a broader amount of autonomy granted by a special statute. However, for all the regions except Aosta Valley and the exceptional cases of the "provinces" of Bolzano and Trento where all the regional/provincial







perimeter is within the Alpine Convention, it might be difficult for local stakes to be effectively represented in documents elaborated by regional authorities that see the Alps as territories distributed at the edge of the cities' areas.

Table 22: Thematic focus / interest of stakeholders

Thematic focus	Count		
	West	East	Total
agriculture	4	1	5
agro-tourism			
all municipal duties			
architecture			0
bioscience	1	1	2
bio-technologies	1		1
consulting	1	1	2
crafts	1		1
ecology	2	2	4
economic development		2	2
energy supply		1	1
environment	6	6	12
environmental protection		1	1
environmental quality	5	1	6
forest fires	5		5
forestry	5	2	7
geology	4	7	11
geophysics			
health	2	1	3
health care	1	2	3
health technologies	1	1	2
housing/building sector	2		2
informatics		1	1
information systems	1	1	2
Landscape		1	1
landscape ecology			
landscape planning	5	1	6
mobility/regional logistics centres		1	1
lobbying/sector representation	2		2







mountain agriculture			
mountain ecosystems			
mountain forests			
mountain policies	2		2
mountain population	1		1
mountain specificity	2	1	3
mountain territories	3	2	5
natural hazards	5	1	6
natural resources	2	1	3
nature conservation	5	2	7
pastoralism	1		1
physics	1		1
protected areas	7	3	10
public service		2	2
regional development		3	3
regional planning	8		8
renewable energies	5	2	7
resource pooling			
risks	5	5	10
sector development	1		1
soil	5	2	7
solidarity development			
spatial planning	8		8
sustainable development	6	1	7
technology development		2	2
tourism	4	1	5
transport/mobility	1		1
unspecific	2		2
urban design			
urban planning	2	3	5
urbanism	2		2
waste management	4	1	5
waste water management			
water management	5	4	9
water quality monitoring		1	1







It was not possible to attribute a single thematic focus to most of the stakeholders because half of them are regional directorates with wide competences. This explains in part why thematic focuses are very different and dispersed (cf. Table 22).

"Environment" (12 times), "geology" (11 times) and "protected areas" & "risks" (10 times) are the themes that appear the most, followed by "regional planning" and "spatial planning" (8 times), "sustainable development", "soil", "renewable energies", "forestry" and "nature conservation" (7 times). Thematic fields regarding "resource efficiency and ecosystem management" appear more often than those regarding "inclusive growth", although the number of projects from each thematic field is almost the same (cf. Table 13).

In depth-analysis of most frequent types of stakeholders Table 23: *Authorities and spatial planning authorities*

Spatial Level	Thematic focus / interest	Resources	ID	Degree of influence on SSD
Local / supra-local	unspecific	decision-maker/policy maker knowledge/expertise	IT049	high
	unspecific	decision-maker/policy maker knowledge/expertise	IT066	high
regional	craft; housing/building sector	decision-maker/policy maker knowledge/expertise	IT040	unknown
	health; health care	decision-maker/policy maker knowledge/expertise	IT042	medium
	forestry	decision-maker/policy maker knowledge/expertise	IT043	high
	geology, natural hazards, risks, regional planning, spatial planning, soil	decision-maker/policy maker knowledge/expertise	IT044	medium
	renewable energies	decision-maker/policy maker knowledge/expertise	IT046	medium
	landscape planning, spatial planning, regional planning, urban planning, urbanism, housing/building sector	decision-maker/policy maker knowledge/expertise	IT051	high
	environment, environmental quality, regional planning, spatial planning, sustainable development, waste management, water management	decision-maker/policy maker knowledge/expertise	IT053	high
	forestry, protected areas, natural resources, nature conservation, landscape planning	decision-maker/policy maker knowledge/expertise	IT054	high
	information systems	decision-maker/policy maker knowledge/expertise	IT055	medium
	protected areas, nature conservation, forestry, agriculture	decision-maker/policy maker knowledge/expertise	IT057	high
	spatial planning, regional planning, urban planning, urbanism	decision-maker/policy maker knowledge/expertise	IT059	high
	geology, natural hazards, risks, soil	decision-maker/policy maker knowledge/expertise	IT060	high
	tourism	decision-maker/policy maker knowledge/expertise	IT061	medium
	spatial planning, regional planning	decision-maker/policy maker knowledge/expertise	IT063	high



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Spatial Level	Thematic focus / interest	Resources	ID	Degree of influence on SSD
	environment, landscape planning, protected areas, sustainable development, waste management, water management, renewable energies	decision-maker/policy maker knowledge/expertise	IT068	high
	geology, natural hazards, regional planning, risks, soil, spatial planning, water managemen	decision-maker/policy maker knowledge/expertise	IT069	high
	environment, environmental quality, landscape planning, ecology, protected areas, sustainable development, waste management, water management	decision-maker/policy maker knowledge/expertise	IT070	high
	environment, landscape planning, ecology, protected areas, sustainable development, waste management, water management, renewable energies	decision-maker/policy maker knowledge/expertise	IT073	unknown
	geology, mountain territories, natural hazards, regional planning, risks, soil, spatial planning	decision-maker/policy maker knowledge/expertise	IT074	high
	geology; risks	knowledge / expertise;	IT001	high
	Consulting; environment; environmental quality; nature conservation; soil; sustainable development; water management; water quality monitoring	knowledge / expertise; publicity / multiplier	IT011	high
	risks; water management;	knowledge / expertise;	IT002	high
	urban planning; nature conservation;	knowledge / expertise; policy action	IT004	high
	forestry	knowledge / expertise;	IT005	high
	health care	knowledge / expertise; intermunicipal coordination	IT006	high
	geology; risks	knowledge / expertise;	IT003	medium
	ecology, urban planning, geology, natural resources, energy supply, waste management	knowledge /expertise	IT020	high
	public service;	knowledge / expertise; employees	IT007	medium
	health, health care, health technologies	Decision-maker/policy-maker	IT021	high
	public service	Decision-maker/policy-maker	IT024	high
	geology	Decision-maker/policy-maker	IT022	high
	mobility/regional logistics centres	Decision-maker/policy-maker	IT027	high
	Geology; risks	knowledge / expertise;	IT010	high
	urban planning; landscape planning	Decision-maker/policy-maker	IT025	high
	economic development, mountain territories, regional development	Decision-maker/policy-maker	IT026	high
National	environment	decision-maker / policy-maker	IT018	high
	environment, mountain territories, protected areas, reneweable energies, water management	decision-maker / policy-maker	IT016	high
Total			39	institutions







Looking closer at authorities, including spatial planning authorities, Table 23 shows that almost all are representing the regional level (in two cases the local/supra-local). Again, as in the general analysis, the thematic focus of these institutions is very general and embrace a wide spectrum. Their resources are decision-making/policy-making and knowledge and expertise. These stakeholders have mainly a high influence, also medium appears often, on sustainable spatial development (planning competences on the geographical area of the administrative region or influence over policies and action in other sectors - such as health - that might affect regional development). In some cases, it was impossible to establish the degree of influence (marked as unknown) because directorates change name and competencies with regional elections and some of them no longer exist. One potential reason for this evidence: careful selection of the most competitive project consortia representing a value added for investment in specific territories.

Another analysis can be made for the group assembling the institutions that were present as PPs twice (see Table 16 and Table 24): "environmental agencies", "development agencies", "technological and scientific research centers", "university/institutes of applied science" and "others".

Spatial Level	Thematic focus / interest	Resources	ID	Degree of influence on sustainable regional development
Development agency				
local / supra local	sustainable development, agriculture, tourism	cluster/network membership knowledge/expertise	IT039	medium
	consulting, renewable energies, tourism	intermunicipal coordination membership knowledge/expertise	IT052	low
Environmental Agency				
regional	environment, environmental quality, natural hazards, risks	knowledge/expertise	IT065	medium
	environment, environmental quality	knowledge/expertise	IT071	medium
Other institutions				
all	tourism	cluster/network economic/financial membership intermunicipal coordination publicity/multiplier	IT072	low
local / supra local / regional	agriculture, forestry, mountain policies, mountain specificity, mountain territories, pastoralism, protected areas, soil, spatial planning, natural resources, nature conservation	cluster/network intermunicipal coordination membership knowledge/expertise	IT050	low
Technological and scientific research center				

Table 24: Environmental agencies, development agencies, technological and scientific research centers, university/institutes of applied science and others







Spatial Level	Thematic focus / interest	Resources	ID	Degree of influence on sustainable regional development
regional, national, internationa	technology development	knowledge / expertise;	IT008	medium
local / supra local / regional / national	bioscience, bio- technologies, health, health technologies	knowledge/expertise cluster/network	IT047	low
local / regional / national / international	renewable energies	cluster/network economic/financial employees knowledge/expertise	IT041	medium
Research institute/centre				
local, supra-local, regional, national, international	bioscience; environment; mountain specificity; regional development; renewable energies;	knowledge / expertise;	IT012	medium
National	risks, natural hazards, water management, geology	knowledge / expertise;	IT019	high
National	soil, geology, landscape	knowledge / expertise	IT015	medium
University/Institute of applied science				
regional, national, international	economic development, regional development, tourism	knowledge / expertise	IT013	low
Local, regional, national, international	Agriculture; ecology; environment; forestry	knowledge / expertise	IT019	medium
all	physics	knowledge/expertise	IT062	low
	agriculture, forestry	knowledge/expertise	IT064	low
Total			16	institutions

The stakeholders in this group are very different. In general their degree of influence on sustainable development is lower. The institutions that registered a medium level of influence often act as a research-policy interface and they can hence have some influence on regional development. Their main resource is knowledge/expertise followed by the fact of being part of a cluster/network and then the ability to embrace inter-municipal cooperation. The spatial level is very different and varies from the local level to all levels.

The thematic focus shows greater variance compared to the authorities group. Environment is always important but other clusters of the same importance can be found: tourism and agriculture.

Influence of stakeholders

According to Figure 25 33 stakeholders out of 64 are in the red case, having thus a high degree of influence on local and regional sustainable spatial development. In most cases they are authorities who have direct influence over policies and action in other sectors that directly affect sustainable spatial development in their area. It is important to notice that some of them also have an influence at the international level because they are part of transnational networks.







The stakeholders with a medium degree of influence are mainly environmental agencies, research institutes which contribute to sustainable spatial development by giving their knowledge and expertise from the local to the regional spatial regional level and might be science advisors for policy makers. The stakeholders with a low of influence are mainly universities, NPOs, protected areas management bodies and other associations. In most cases they are part of wider networks.











Figure 25: Degree of influence on sustainable spatial development of Italian stakeholders







Slovenia

Table 25: Types of stakeholders in Slovenia (only PP list of the two thematic fields)

Туре	Count	Lead
Authority	2	
Development agency	5	
Other	2	
Protected areas management body	1	
Provider of public services	2	
Research institute/centre	7	
University/Institute of applied	4	
science		
Total	23	0

Table 26: Thematic focuses of stakeholders

Thematic field	Thematic focus	Count
Inclusive growth	health, health care	2
	housing / building sector	1
	ecology, geology, landscape ecology, natural hazards,	1
	pastoralism, protected areas, regional development, regional	
	planning, transport / mobility,	
	tourism	1
	spatial planning, urban design, urban planning, urbanism	1
	regional development	4
Inclusive growth total		10
Resource efficiency	water management	1
	forestry	2
	geology	1
	ecology	1
	agriculture, lobbying/sector representation	1
	protected areas, mountain territories	1
	agriculture	1
	unspecific	1
	urban design	1
	consulting, renewable energies, solidary development, sustainable development	1
	environment, sustainable development, environmental	1







Thematic field	Thematic focus	Count
	planning, environmental quality	
	regional development	1
Resource efficiency total		13
Both thematic fields (total)		23

There were 23 different stakeholders from Slovenia. None of them was the lead partner, all of them were project partners. 3 stakeholders were partners in 3 different projects (Urban Planning Institute of the Republic of Slovenia, Geological Survey of Slovenia and Slovenian Forestry Institute). 4 stakeholders were partners in 2 different projects. Other stakeholders were partners in just 1 project.

According to the type of the institution (Table 25) there is a very good representation of Research institutes/centres (7), Development agencies (5) and Universities/Institutes of applied science (4). Other types of the institutions which are represented are: Providers of public services (2), Authorities (2), Protected areas management bodies (1), Other (2).

The stakeholders which are not represented are: Chambers of Commerce and Industry, Chambers of trade and crafts, Education and training centers, Energy agencies and similar institutions, Environmental agencies, Inter-municipal associations, International organisations, Labour market services, Networks, NGO's/NPO's, NPO's, Public and non profit oriented transport providers, Public/private organisations representing enterprises and especially SMEs (e.g. SME networks, cluster organisations), Spatial planning authorities, Technological and scientific research centers, Water agencies.

Thematic focuses of stakeholders are very different and dispersed (

Table 26). The best represented is regional development (4 stakeholders) which is followed by health and health care (2 stakeholders). All other represented thematic focuses which are represented just by one stakeholder.

The thematic focuses which are not represented by any stakeholders are: agro-tourism, all municipal duties, architecture, bioscience, bio-technologies, crafts, economic development, energy supply, forest fires, geophysics, health technologies, informatics, information systems, landscape planning, mountain agriculture, mountain ecosystems, mountain forests, mountain policies, mountain population, mountain specificity, natural resources, nature conservation, public service, resource pooling, risks, sector development, soil, technology development, waste management, waste, water treatment and water quality monitoring.

Regarding the sector, there are 18 stakeholders from public sector, 2 stakeholders from public-private sector, 2 stakeholders from private sector and 1 stakeholder from civil society.

Regarding the »objective« spatial level/scale of stakeholders there are 14 stakeholders with national level, 7 stakeholders with regional level and 3 stakeholders with supra local level. Among those one stakeholder has both, regional and supra local level. None of the stakeholders was listed in international ot local level.







Regarding the branches of stakeholders according to NACE 2 classification, 10 stakeholders belong to category M (professional, scientific and technical activities), 8 stakeholders belong to category N (administrative and support service activities), 2 stakeholders belong to category Q (human health and social work activities) and 1 stakeholder belongs to category E (water supply; sewerage, waste management and remediation activities).

Regarding the relation to Alps just 4 stakeholders are located within the perimeter of the Alpine Convention, while 19 stakeholders are located within the area of Alpine Space.

Regarding the »intersubjective« degree of influence on sustainable regional development there are 13 stakeholders with medium degree of influence on sustainable regional development, 6 stakeholders with high degree of influence on sustainable regional development and 4 stakeholders with low degree of influence on sustainable regional development.

Regarding the »intersubjective« area of influence there are 9 stakeholders who have influence on national level, 7 stakeholders who have influence on regional level, and 7 stakeholders who have influence on all levels (national, regional and local). None of the stakeholders covers just the local level.






Switzerland

Descriptive part

The number of stakeholders in the thematic field of "resource efficiency" (15) is almost the same than in the field of "inclusive growth" (16). The major part of stakeholders are research institutes (26%) followed by authorities (16%), the same number is defined as NPO (16%) followed by environmental agencies. The stakeholders are mainly public (84%), 13% are a mixture of private and public and only a very small percentage (3%) can be considered as private.

In Switzerland we have a very low number of Lead Partners (2 out of 31) and only two stakeholders are involved in several projects of the AS programme 2007-2013 (incl. growth, resource efficiency). These were namely the Geneva University Hospitals (in 3 projects) and the Swiss Federal Institute for Forest, Snow and Landscape Research WSL Research Programme Forestry and Climate Change (in 2 projects). Only two out of the stakeholders act on all spatial levels (local, regional, national), the major part (58%) are active on a regional level and 35% on a national level. Therefore the local level can be considered as heavily underrepresented. Thematically the stakeholders are located in the fields of environment (32%), health (13%) and regional development (10%), the rest of the stakeholders has shares below 10%. Less than one fourth of the stakeholders are located in the perimeter of the alpine convention.

Interpretation

As a 1st conclusion it can be said that during the AS programme period 2007-13, the themes "resource efficiency" and "inclusive growth" were dominated heavily by public organisations, private stakeholders were kind of an exception. In Switzerland this is an important gap since the Interreg programme belongs to the New regional policy instrument (NRP) which targets the fostering of entrepreneurs and added value. Although research institutions represent one fourth of the stakeholders they do not leave much behind other organisations such as authorities and NPOs. It would be wishful that more projects would be composed out of these three types of organisations, a combination that delivers scientific results, implemented in reality and considered in policies.

The low number of Lead partners in Switzerland has different reasons 1) Switzerland is a small country, thus there is a smaller pool of potential LPs available 2) the co-financing in Switzerland the co-financing of project partners is higher than in the European Union, which is not an incentive to overtake a time consuming role as a lead partner 3) Swiss institutions can only do a technical leadership, the financial lead must be in the responsibility of a European partner institution, this might appear to many partnerships as not convenient. With regard to the spatial level of actions, it can be said that the regional one is the most widespread. This is due to the fact that in Switzerland the regions represent a perfect mixture of bundling local needs/synergies and a good linkage to the levels beyond (eg. Cantons). It would be too complicated to address single actors on a local level. Via regional entities local actors can be best reached. Furthermore local activities run the risk that they are only with difficulties transferable to a higher level or being integrated in strategies and policies. For these reasons the increase of local actors has not to be actively supported.

With regard to the thematic focus of the projects it is no wonder that in the field of "resource efficiency" and "inclusive growth" environmental issues take a predominant role. Concerning the degree of importance it can be said that the stakeholders ranked with high importance are mainly authorities and are equipped with economic and publicity/multiplier resources. They are the most influential for SSD and influence activities via funding and policies. Therefore it is important to assure







a good integration of authorities in future projects, only that way a sustainable embedding of project results into policy papers and strategies can be guaranteed.