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**MINISTRY OF CULTURE  
STATE INSTITUTE FOR NATURE PROTECTION**

**Karst Ecosystem Conservation – KEC (GEF TF 050539 HR)  
CARDS Project EuropAid/119879/C/SV/HR - Institutional  
Strengthening of the State Institute for Nature Protection**

**ANNUAL MANAGEMENT PLANNING WORKSHOP  
REPORT**

(Zagreb, Hotel International, December 4-5, 2006)

Zagreb, January 2007

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## Summary

The Management Planning Workshop was a joint obligation of the Karst Ecosystem Conservation (KEC) Project, and the CARDS Institutional Strengthening of the State Institute for Nature Protection (SINP). Second draft management plans of five KEC parks (NP Risnjak, NP Plitvička jezera, NP Sjeverni Velebit, NP Paklenica and Nature Park Velebit) and four management plans developed under the guidance of other international organizations (Nature Park Učka, Nature Park Žumberak-samoborsko gorje, Đurđevački pijesci Reserve, Cret Dubrava Reserve) were presented and compared.

Management planning objective of the KEC project was to introduce and demonstrate a contemporary management planning system, including establishment of park MP teams, training, stakeholder consultation process and the management plan drafting itself (special focus was given to biodiversity monitoring in parks, which should be based on management planning needs and clear targets, and then entrusted to scientists who should tailor the methods accordingly). One of the main goals of the CARDS project was to set and demonstrate the management planning evaluation system with SINP as a central responsible institution. The time span and dynamics of these projects were different, and first drafts of KEC management plans were evaluated before being revised according to the findings along the development process. Due to the fact that the approach of both projects was based on an early and proactive involvement of stakeholders (especially local communities and main sectors) and coherency of activities and conservation measures, the harmonization to be done will consist mainly of minor procedural adjustments.

Beside harmonization of the two methodologies, forest protection program which is mandatory according to the Law on Nature Protection, and the Law on Forests, was another issue to be harmonized. Proposal of the Forest Ecosystem Protection Program was presented by the Ministry of Culture, while the Ministry of Agriculture, Forestry and Water management presented the legal status of forest protection in Croatia. The issue to be further elaborated and agreed upon was to which extent forest inventory methods should be applied for protected area zones where there is no forest harvesting.

The third question to be solved was relationship between PA management plans and physical plans. Ministry of Environmental Protection, Physical Planning and Construction presented the legislative framework for protected area physical plans, indicating that the content was not defined, and the common practice was to follow the structure of county physical plans. However, physical plan zoning system should be respected as a higher hierarchical level.

## 1. Introduction

Ministry of Culture and the State Institute for Nature Protection organized a joint workshop on protected area management planning, held on December 04 and 05, 2006, in Zagreb, Hotel International (Miramarska 24).

The workshop is an obligation of the Karst Ecosystem Conservation Project (KEC), as well as of the CARDS Project Institutional Strengthening of the State Institute for Nature Protection. The goal was to harmonize the approaches and methods of protected area management planning.

The KEC Project has been implemented for four years, with the support from the GEF/World Bank grant and the budget of the Republic of Croatia. The project area encompasses 6 priority areas: four national parks (NP Risnjak, NP Plitvička jezera, NP Paklenica, NP Sjeverni Velebit), Nature Park Velebit, and Ogulin and Kupa areas. The main project outcomes are formed and have been fine-tuned for integration into the existing nature protection system. These include flora, fauna and habitats inventory data that are integrated together with the literature data in an advanced database, five park management plans developed in continuous cooperation with local communities, and trained praks staff who gained new knowledge on protected area interpretation, biodiversity monitoring, and GIS tools. The project completion is planned for December 2007.

CARDS Project Institutional Strengthening of the State Institute for Nature Protection is focused on adjusting the functions and capacities of this institution to those required for the EU membership, which includes also evaluation of the protected area management plans and formats of biodiversity data collection. The project is supported from the CARDS Program by European Union, including the contribution from the budget of the Republic of Croatia. The final results were presented at the visibility event held on November 29, 2006, Vukovarska 78 in Zagreb.

Other issues concerning protected area management planning were presented and discussed too, including relationship between management plans and physical plans, harmonization with forestry legislation, and potential improvement of environment and landscape, through implementation of agrienvironment measures.

## 2. Objectives

Workshop objectives included:

- Review the projects progress towards meeting the development objective
- Review the draft management plans and the action plans
- Introduce the CARDS management planning evaluation system
- Harmonize KEC and CARDS management planning methods/techniques
- Learn about financing in PA management planning
- Introduce the draft forest ecosystem protection program
- Collect the participants' feedback
- Inform the general public about the project progress

## 3. Work and presentations

**Moderator:** Mr. **Jernej Stritih**, Team Leader, CARDS project (Gopa/Cowi/Oikos)

*Opening*

Mr. **Zoran Šikić**, Assistant Minister, Nature Protection Directorate, Ministry of Culture, welcomed the participants, and emphasized that another step of protected area management planning was made towards internationally accepted standards, since the last workshop, when the methodology and cooperation with the local communities were still being defined.

Now, there are five final proposals of the management plans of NP Risnjak, NP Sjeverni Velebit, NP Plitvička jezera, NP Paklenica, and Nature Park Velebit, and the CARDS evaluation system. Both methodologies should be harmonized. Support of the World Bank and European Commission to building the institutions capacities has been very important in the process. This support has helped in improving the county and local institutional levels too. The KEC Project provided biodiversity inventory and the database needed for the development of the management plans that defined strategic development of the park public institutions and were developed in cooperation with the local communities who were thus trained in undertaking eco tourism and sustainable agriculture activities. Mr. Šikić also spoke about the works in the parks, which would improve the parks management and tourist facilities, such as the road from Babić Sića to Zavižan, the info center at the entrance to the Mala Paklenica, and the new Nature Park Velebit premises in Gospić where the final workshop is planned to be held next year. The KEC Project has implemented its work plan successfully. Success of the KEC Project implementation is a result of many efforts, and among them, of the consulting company Agriconsulting too, who harmonized the know-how of Croatian and international experts. Apart from this, there was another important event to be noted, that is proclamation of the eleventh Nature Park Lastovo. The efforts of the CARDS and KEC projects contribute to achieving the imperative goal – development and implementation of Natura 2000 network. There are two main objectives: to build a coherent nature protection system and to implement it.

Mr. **Davorin Marković**, Director of State Institute for Nature Protection welcomed all and focused on protected area management plan as the main document needed for fulfilling two basic objectives. These are: to protect natural values to a maximum and at same time raise the awareness of the local community and enable them to enjoy the nature. Although one can get the impression that there are many protected areas in Croatia, still there is need for further improvement. Protected area management planning should reconcile the basic social and economic needs of local people and conservation of the main protected area features. With respect to the CARDS project management planning methodology, two local protected area management plans were developed: Dubravica and Đuređevački pijesci, which provide the local people with perspectives for a living. They are based on environment protection principles and scientific work. Further improvement is needed, and there is hope that both KEC and CARDS projects will succeed to achieve it.

Ms. **Karin Shepardson**, TTL WB greeted the participants, and welcomed the joint efforts of KEC and CARDS projects. The KEC project and the CARDS project provided the building block for creating management plans of protected areas. The approach has relied on public participation of local communities, which is very similar to the approach of the European Union. Ms. Shepardson was looking forward to the resolve in a common agreement. There were some challenges identified in the process. These are: appropriate integration of forest protection within management plans and protected areas, good collaboration between physical planning process and management planning process of protected areas and sharpening the borders between the two, strengthening enforcement mechanisms to decrease illegal activities within a park, such as poaching. The last but not least challenge is how to ensure adequate financing of the parks, primarily those activities which parks identified as priority issues. Capacity building in financial issues to access EU funds in future will also be very critical in relations to the management plans. The World Bank is committed to help the KEC project till its completion and thus contribute to the EU accession process and establishment of the future Natura 2000. The joint agenda points to the need to proactively push to find the information and the common approach. Ms. Shepardson was happy to see that the experts from the neighboring countries participate the workshop as well.

Ms. **Mojca Starc**, Sector Manager - Environment, Delegation of the European Commission to the Republic of Croatia, greeted the participants and thanked the organizers for the

workshop preparation. Ms Starc presented the EU approach to protected area management planning under the CARDS project, in its basic aspects. In EU, there are legal instruments for nature conservation, primarily the Habitat Directive and the Birds Directive, essential for establishment and implementation of Natura 2000 network (one fifth of EU territory is currently covered with Natura 2000 network). Croatia encompasses the territory of four European regions included in Natura 2000 network, and protects its nature on the basis of Nature Protection Act that defines various categories of protected areas. Ms. Starc then explained the terminology used in the EU Directives, in order to help the understanding of the management plan development process based on active participation of local communities, and adoption of the plans (subsidiarity principle), presenting the examples of EU member countries. Each member country decides on the adoption of its protected area management plans. European Commission takes into account all criteria defined in the Directives, particularly the consultation and monitoring processes. By this time, Croatia has shown success in management planning of its protected areas.

#### *KEC Project progress on five management plans*

Mr. **Paolo Viskanić**, Team Leader (Agriconsulting) presented the **general issues and results** during four years of the **KEC Project**. The overall project goal is to conserve biological diversity and ecological integrity of the Karst ecosystems in Croatia. The KEC Project area includes four national parks (NP Risnjak, NP Plitvička jezera, NP Sjeverni Velebit, and NP Paklenica), Nature Park Velebit, and two areas to be assessed for protection status, Ogulin region and the Kupa River valley. Mr. Viskanić gave a brief overview of project activities and teams, and how these activities are merged to lead towards the main project objectives. These include general policy, natural resources inventory and mapping, and social and economic issues, the results of which are mainstreamed into the protected area management planning process. The final proposals of the five management plans will be completed in January 2007. Management planning guidelines were developed too. Mr. Viskanić also presented the summaries of the tasks that were completed by the time of the workshop and those that have been under completion. The results of the study on local cattle breeds, sheep and horses and local tourism workshops were also incorporated into the management plans, as well as data on caves. Among those that were still to be done, inventory data entering and processing, biodiversity monitoring program and monitoring migration corridors and population dynamics of large carnivores (collared bears, problems, data collection, green bridges use confirmed through infrared monitoring system, recently third collared lynx), fine-tuning of the five management plans, assessment of Ogulin and Kupa areas, and designation of the network of highly significant biodiversity hotspots should be completed. All project data are organized in a GIS and database system. It is based on the central server in the Ministry of Culture and can be extended to additional protected areas without new expenses, because it can be accessed through access databases, the web browser, free editing client, and commercial software. Installation of the service in the Ministry is under completion, and shortly it will be available to the parks. Production of the first cave management plan was another important activity, and Cave Manita peć was selected as an example of the process (the guidelines were produced too). The cave management plan is based on the description of the cave, its history, geological and biological aspects. The same structure was followed as for the park management plans (infrastructure and current use, zoning and management, monitoring system, etc).

Mr. **Željko Kramarić**, local management planning expert (Agriconsulting) continued the presentation with an overview of the **management planning activities during last six months**, starting with the management planning principles according to which the process was guided. The planning process begins at the national level; it is projected to the protected area and is finalized at the zone level. All the five draft management plans were completed. Mr. Kramarić was glad to hear from Mr. Šikić that Croatia would make its efforts to become the regional center of nature protection. The management planning methodology, data

processing and definitions need to be clarified and agreed at the very beginning of the process that must be participatory and involve all stakeholders and local communities in order to ensure their support. Additionally, other participatory actors need to be involved with an aim to ensure their participation at an early stage, not waiting the legal procedure alert. All stakeholders were consulted along the process, and all information was reviewed. All the pressures were identified as well as the changes that might occur in near future. Also, the management plans must be prepared by the parks themselves. The first year of the KEC project included production of the work plan and the methodology, review and comparison of international protected area management planning systems, survey of current physical plans, and field visits to the parks stakeholders. Selection of international examples of park management plans was done too, and they were presented to Croatian parks at the first management planning workshop in November 2003, at which standard content, format and zoning system were agreed among all Croatian parks and main institutions. The planning steps included the development of the zoning methodology, and establishment of parks management planning teams, who defined vision and mission of each park. The process was announced at press conferences, and a number of meetings and interviews with stakeholders were carried out. The results were analyzed and discussed at public meetings. Biodiversity inventory data were analyzed too, and the first pilot management plan of NP Risnjak was drafted and presented at the second management planning workshop in NP Risnjak in March 2005. The methodology was used for drafting other four park management plans. The analysis done by the experts of the CARDS project was based on these first drafts. However, revision of all the draft plans included analyses of the conservation goals in respect of the parks visions and missions. Along the process, conservation objectives and measures were redefined, the action plans were outlined, and the zones were further elaborated. Park infrastructure and financing systems were analyzed too. Monitoring of the efficiency of management plan implementation was also defined. Currently, the basis of the management plans is sufficient for evaluation. During the development of the second drafts all comments of the stakeholders were incorporated, including forestry issues concerning implementation of the Forest Inventory Ordinance, and forest ecosystem protection programs defined in the Nature Protection Act, both to be discussed during this workshop. Altogether, by October 2006, about 350 work days were spent on meetings on park management planning. The process was complex and required a lot of compiling of a huge amount of data.

### *Evaluation of PA management plans*

Mr. **Matjaž Harmel**, protected area management planning expert, CARDS project (Gopa/Cowi/Oikos) presented the **Guidelines for management plan evaluation**. The methodology was defined and training of the State Institute for Nature Protection (SINP) staff on how to evaluate the management plans was carried out. Activities of this component included analysis of current management plans in Croatia, workshops, drafting the guidelines for evaluation of management plans (February 2006), and evaluation itself. The purpose of the guidelines was that any protected area has to be evaluated according to certain criteria. Five management plans were included in the process, based on three approaches to management plan drafting, and two categories of parks, national parks and nature parks. The other intention was that SINP has to be included in the process at a very early stage. The management plan preparatory process is rather complex, and SINP must be involved at the beginning, to communicate the plan with the parks. The content of evaluation included the basic data on a management plan (category; status; area; management staff info; and preparatory team info), legal compliance (formal compliance; structure as defined in the law; chapters: forest ecosystem protection program; management objectives and policy; protection guidelines; plan implementation), preparatory process (public participation; identification and involvement of stakeholders; workshops; public hearing and public discussion; evaluation of the comments), protected area status (key data on a protected area; main protected area features; proposed additional activities), management plan

relevance (log-frame) was used for evaluating to which extent the vision and objectives are relevant for a protected area; performance indicators; timeframe of implementation, assumptions and risks; proposals), level of harmonization with other plans (physical plan – zoning; other sectors plans – particularly in nature parks: forests, water, tourism, game hunting, fishing), monitoring (of key processes, including data collection for the central database, management plan implementation, and costs) organization and financing (necessary park staff positions; required organization scheme and financing for implementation of management plans; projections of future needs, 10-year financial framework), and conclusions and recommendation. According to these guidelines, the management plans of three national parks (Risnjak, Sjeverni Velebit and Paklenica) and two nature parks (Kopački rit and Učka) were evaluated in the period from February to October 2006, against the adoption criteria. All these plans were in different developmental stages. The evaluation process included the review of the draft management plan, field visit to the protected area, first evaluation, second field visit and final evaluation with guidelines. Eleven people were engaged in the procedure. Generally, the evaluations can be summarized as following: The three KEC management plans were well elaborated and had clear objectives relevant to conservation issues of subject areas, while the Kopački rit and Učka plans were at stages before setting their logical frameworks. Because the second revision of the KEC management plans was not completed at the time, the indicators were not yet defined; the activities, organization, financing, monitoring, and forestry programs were not sufficiently elaborated; visitor plans were missing; social and economic issues were not sufficiently emphasized and integrated, reflecting insufficient involvement of the local communities in park management planning; guidelines for other sectors plans were too general. None of the evaluated management plan drafts fully complied with the legal provisions at that time. Recommendations were made and the missing elements were included in the subsequent drafts. As a conclusion, this was the first generation of park management plans in Croatia, for which various development models and approaches were used. The management planning process is well structured and lot of systematic effort was put in the development process. These guidelines provide good basis for quality assurance that does not require a uniform management plan format and should leads to positive evaluation of the final draft management plans.

#### *Second draft Management Plans - vision, objectives and policies, goals, measures*

Mr. **Miljenko Gašparac**, Conservation Manager **NP Risnjak** reported on the management plan changes that occurred during second revision. The first draft was completed in January 2005, after a year of intensive data collection and processing. Intensive discussions and consultations took place, and the second draft was completed four months later, in May 2005. The second draft was further discussed and revised according to the results of biodiversity inventory and the consultation process. Some chapters and/or items were regrouped, the basic conservation objectives were reconsidered, and the differences between the management plan and physical plan were addressed, based on joint meetings with physical planning institutions. Physical plans often restrict biodiversity management. The basic conservation objectives include biodiversity conservation, water quality protection, social and economic development, local community participation, research, education and interpretation, visitor system, and cultural heritage conservation. These objectives are accompanied with conservation measures that are needed to complete the park's mission. In the second draft, the zone maps were better linked to the description of each zone. Four action plans were completed (Mountain hut Risnjak, Mountain meadows management, Reception Center Leska, and Reintroduction and monitoring of capercaillie, among 18 action plans defined altogether. The projected cost of the action plans implementation would be 1,390,000 EUR. Very important aspect in the planning process was to set reachable objectives and feasible conservation measures. Another important aspect was including certain important issues such as forest protection, as well as having also the legal basis for their implementation.

Ms. **Svjetlana Lupret-Obradović**, Conservation Manager **NP Sjeverni Velebit** reminded the participants on the park vision that was built on experiencing its pristine wilderness. Since NP Svjevneri Velebit is the youngest national park, the general objectives include: to properly register all the assets (land, buildings) within the park boundaries, legally define the ownership, and get authorization of the park to manage some of the assets (1 action plan); research and monitoring (2 action plans), biodiversity conservation (meadows – 4 action plans; forests – 2 action plans, water ecosystems – 3 action plans, subterranean ecosystems – 2 action plans, species and habitats – 4 action plans), cultural heritage conservation (2 action plans), public participation (1 action plan), promotion and marketing (5 action plans), visitor system (5 action plans), adequate road infrastructure (2 action plans), and institutional capacity building (3 action plans), are the main management planning objectives. Unlike NP Risnjak, there were 50 action plans defined in order to ensure financing of their implementation. One of the major problems has been lack of personnel. The ranger service should be established and adequate equipment procured. The total 10-year cost of the action plans implementation is 34,1905,000 HRK, and the ratio in the total expenditure would be 46 % compared to 54% of overhead costs. The problem is that NP Sjeverni Velebit as a young park needs a lot of investing in infrastructure and equipment.

Ms. **Natalija Pavlus**, Conservation Manager **Plitvička jezera National Park** gave a short introduction about the park's geographical position and history. The park was extended to surrounding 29,482 ha in 1997. The vision was hard to be defined. The first one defined in April was rather complex, centered on uniqueness of the lake tufa barriers, and the aspect of regional development, in order to integrate the conservation and economic objectives. Along with the revision of the first draft management plan, the vision was changed into a simple one stemming from park's natural and cultural heritage. The main conservation objectives and measures were improved for forests (forest ecosystem protection program/action plan), grasslands (action plan), water ecosystems (protect water quality), and research including the database (in future, to be based on monitoring). Revitalization and reconstruction of cultural heritage was planned too. Preservation of traditional agriculture, animal husbandry and crafts was also envisaged. The main management objectives include tourism, marketing and visitor system (visitor system and entrance fees, accommodation and services – to be extended to local entrepreneurs, marketing and promotion – improve the image of the park); interpretation and training of the park staff, visitors, and local people; road infrastructure (exclude the road D1 from the park area), water supply infrastructure; waste water treatment; reduction of mobile telephony transmitters; cooperation with the local community (include settlements in the visitor system, support traditional agriculture); defining rights and obligations of land owners and co-owners, and increase area owned by the park. There were no changes in the zoning system, but the number of action plans was reduced to 18 including forests, forest plantations, monitoring of relic forests, flora, fauna and fungi, reintroduction of autochthonous trout, grassland management, visitor system, adjustment of park infrastructure to disabled persons, introduction of clean technologies, education programs and facilities, visitor centers, information and interpretation plan, biking trail network, cultural heritage inventory, encourage traditional crafts and souvenirs, define land ownership, strategy of public participation and cooperation with local communities. The action plans contain the main objective, activity plan with deadlines, implementation, control, costs, sources of financing, and monitoring. Monitoring of management plan implementation and of biodiversity status was planned.

Mr. **Gordan Lukač**, Conservation Manager **Paklenica National Park** introduced the management planning team and other experts who provided the data for the management plan: about 5 to 12 park staff, 20 consultants from Agriconsulting, 37 experts engaged in fieldwork, and about 12 IT/GIS experts. The park vision is based on typical Velebit natural characteristics and sustainable tourism and recreation. The main management objectives include: long-term conservation of biodiversity, including forest succession, grasslands

maintenance, water courses quality, subterranean ecosystems. Cultural heritage protection is focused on preservation of traditional buildings (Shepard stone shelters, field stone walls, etc) and the related database. Social aspect puts the emphasis on promotion of education and recreation, cooperation with the local community in sustainable use of natural resources, employment and regional economic development. Visitor system should improve marketing and promotion of park natural features, traditional souvenirs, and park tours (park guide is under preparation). Research of biodiversity and the database upgrade was envisaged, as well as monitoring of indicator bird species in the recreation zones. Concerning park organization, involvement of volunteers, university students, military service in civil activities, and primary and secondary school students was planned too. There were 11 action plans, which include forest protection, grasslands maintenance, management of chamois population, reintroduction of griffon vulture, evaluation and protection of Mala Paklenica Canyon, management of Manita Peć Cave, revitalization of cultural heritage, introduction of 'clean' technologies, regulation and control of cliff climbers, development of interpretation system, and adjustment of infrastructure to disabled persons.

Ms. **Ana Brkljačić**, Park Manager of **Velebit Nature Park**, emphasized very good cooperation with Agriconsulting, and briefly described the general park features: large area of 200,000 ha, two national parks within the park boundaries (NP Paklenica – 9,600 ha and NP Sjeverni Velebit – 10,500 ha), administrative responsibility of 3 counties, 4 towns and 7 municipalities. Since it is a nature park, ongoing economic activities include 3 forest management areas of Croatian Forests, 11 hunting grounds, agriculture, cattle breeding, more than 1000 km of road and railway networks, and hydropower facilities. In the international context, the park is a part of UNESCO Man and Biosphere network since 1978; it is assessed as potential Natura 2000 site; WWF listed it as one of the Mediterranean Forest 'hot-spots'. The vision merges conservation of natural and cultural values with sustainable utilization of natural resources on 92% of the park area, and the management objectives are set accordingly. Therefore, high priority was given to stakeholder involvement and public participation in order to develop mutually agreed park management solutions, particularly with forestry, agriculture and game hunting sectors. Ms. Brkljačić emphasized that the physical plan was still missing. The lack of the physical plan generates problems in proper park management according to the standard zoning system. Four action plans were completed: Cerovačke Caves Management Plan, Reintroduction of Capercaillie, Establishment of the Information Center, and Reconstruction of the Premužić's Trail. Other action plans to be developed include: reintroduction and conservation of chamois, monitoring of forests and forest management, cultural heritage inventory, network of mountain huts, grassland management, information and interpretation plan, public participation strategy, plan of sport tourism development, and management of caves. Ms Brkljačić also presented the rough financial structure of the plan, in which the annual cost of action plans implementation was calculated separately from the overhead costs (including the salaries) for the next ten-year period.

### **Discussion**

Mr. **Matjaž Harmel** noted that there is significant improvement in the second drafts, and asked about the forest protection programs. Mr. Viskanić replied that the development process is important and has taken four years. Forest protection program is on the agenda the second day of the workshop.

Mr. **Igor Cvitanović** said that fire prevention and control should be dealt with in the management plans as well.

Ms. **Marija Brajković** commented that geological heritage is not sufficiently represented, while utilization of mineral resources and abandoned quarries were not addressed. Mr. Šikić replied that management plans are not the only documents to deal with these issues; CBD Strategy is under revision and will address these issues.

Ms. **Selma Rojnica**, member of the Nature protection Commission of the Croatian Mountaineering Association, asked about use of ('clean') energies and cleaning technologies, but these were not within the scope of park management plans.

#### *PA Monitoring program*

Prof. **Luigi Boitani**, Senior Management Planning Advisor (Agriconsulting) focused his presentation on **distinction between monitoring for scientific purposes and monitoring for PA management needs**. The first one tracks the values of the observed variable while the latter detects changes of a variable through time. First step is to define monitoring goals. The main monitoring goals of PA management include: to define trends, evaluate effectiveness of a conservation activity, define response to detected changes, and to define the causes of a change. A monitored variable should always be an attribute of the feature, depending on the management need, such as knowing population size, distribution, genetic variability, number of packs, or survival rates of a species. The other step in setting a monitoring program is to define the level of change and the precision of the estimate. Based on clear PA management needs defined by the park staff, scientists should define and calibrate the monitoring protocol (method, sampling strategy, organization of the field work, statistics, funding, personnel, and equipment) according to these needs. Precise targets must be defined because both steps vary in costs dramatically. Taking into account detected changes is called adaptive management. Comparison of the park with surrounding areas where no actions were undertaken provides the information about how successful the park management was. Prof. Boitani then presented some examples of monitoring of wolves in Italy.

#### *Annual work plans*

Ms. **Irina Župan**, Head of Department, State Institute for Nature Protection, presented the **legal requirements concerning annual programs** of park protection, maintenance, conservation, promotion and use, and analysis of current annual programs which were assessed as unevenly structured, while some types of park activities were missing in some cases. SINP has developed the guidelines for the development method and delivery procedure of the annual program, according to which the program had three parts: (1) the state of the park; (2) the program itself; and (3) investments: protection programs, fire prevention and control, investment programs. This format is temporary. The paragraph dealing with the state of the park would not be obligatory once all the parks have developed the management plans.

Mr. **Željko Kramarić** assessed the **annual program as the only instrument for state control** over conservation objectives in the parks, which can be used for monitoring of activities implementation, financial results, and general performance. It contains additional explanations of the management plans and action plans, and more details on planned annual resources. Still, the annual program can not reflect the long-term management processes, but should be a tracking tool for the management methods applied in a park. It should contain general indicators and parameters, and its structure should enable reaction to extrinsic ecosystem changes. Currently, the program encompasses only those activities that are financed from the state budget and park income, while funding from other sources was not envisaged. As a conclusion; the program should clearly indicate obligations of PA public institutions to the Ministry and public. Its format should be standardized, the procedure more simple, and flexibility ensured.

*Group work, exercise in preparing the monitoring program and creating relations between monitoring and annual planning*

**Facilitator:** Mr. **Matjaž Harmel**, protected area management planning expert, CARDS project (Gopa/Cowi/Oikos)

#### *Presentations of the groups, discussion*

Participants were divided into three groups and the following topics covered:

- Monitoring of the Management Plans
- Annual Work Plans
- Organizational Structure of Protected Areas Institutions

#### **Monitoring of the Management Plans**

It was discussed within the group how to prepare monitoring plans for the protected areas. There was a concrete example from the nature park Kopački rit from which it was possible to see how monitoring enables to track and monitor processes in the nature.

It was agreed by the group that monitoring is defined by the goals set in management plans. Monitoring should show how the goals are met and let know if something went wrong. This would be the basis for proposing the corrective measures.

Monitoring indicators should be defined and agreed. Monitoring priorities usually are based on money available.

To conclude, it has to be defined:

- what is to be monitored
- when (time period, every year, every ten years)
- who will do monitoring (it is suggested that protected area personnel conduct monitoring because they know the area better than anyone else)
- monitoring methodology should be developed in order to have comparable results.

#### **Annual Work Plans**

The group analyzed the guidelines provided by the State Institute for Nature Protection. The group identified that the following points need to be improved:

- international cooperation (not properly defined, because other chapters should be dealing with it too)
- short-term and long-term objectives stated in the initial phase (they should be considered long-term objectives)
- surveillance system (certain actions of monitoring should be included)
- GIS and data-base
- tourism issues (not clear whether it is about the visiting management system or tourism comprised of catering and other activities. They should be separated from one another)
- annual program is a public document and should be made more public (it should be communicated to the public)
- strategic objectives should be really strategic (should be realized through management and annual plans)
- budgeting constraints (sometimes get only a half of what is needed. The group was of the opinion that county institutions are in a better position. Financial agreement with the Ministry is signed in April. Funds for realization of annual plans are not feasible. Therefore management of protected areas should decide on implementation priorities based on priority criteria).

In conclusion, the group concluded that our planning process is rather complex.

#### **Organizational Structure of Protected Areas Institutions**

The group presented their conclusions:

- internal organization does not respond to implementation goals
- parks should be organized in a way that enables them to implement management plans
- there should be supervision of what is going on in the field

- exchange of experience with other parks is needed and thematic interests established
- education of staff in order to be able to conduct their work properly.

**Facilitator:** personal impression is that the situation on protection / conservation of nature is changing rapidly. Management plans no longer are in the concept phase, but the implementation phase has started. This is the right way to go and success will come.

Mr. **Mate Kosović** from the protected area Marijan Park Forest stated that local governments pay more attention to protected areas.

**Facilitator** concluded that healthy competition between local and national government could take place when it comes to financing of protected areas.

### 3.2 Tuesday, December 05

**Facilitator:** Mr. **Željko Kramarić**, local management planning expert (Agriconsulting)

#### **Management plans in different stage of preparation**

Mr. **Paul Hotham**, Director of Eurasia Programme, Fauna and Flora International and parks management representatives, presented **management planning process in practice**, based on the experience from the **Nature Parks Žumberak-Samoborsko gorje** and **Učka**. Management planning process is a tool for providing practical assistance to protected area staff, who prepares a management plan based on combination of best practice and experience. The process is carried out in line with the following basic principles: fully participatory process engaging stakeholders and all members of staff; focus on facilitating park teams to draft own plans; provision of training and mentoring where required; guided process delivered in 15 stages; staff use a series of forms, guidance notes and structured activities to complete each stage; ongoing feedback and advice provided. Mr. Hotham then presented all stages of the process, from preparations to annual work plans. Once the core team is established and has an understanding of purpose, context, technical terms and concepts relevant to planning, they should identify the legal policy framework for the plan, review/adapt management zones, and engage with stakeholders. After completing stakeholder analysis and participation plan, communication is carried out through workshops, semi-structured interviews, and village meetings. The data are analyzed and published in the bi-annual newsletter. It is essential to get the stakeholders views on values of and threats to a protected area, consequence of leaving Park unmanaged, and options using values and mitigating threats. Developed mini-management plans provide opportunity for lots of discussion on the issues, and a positive outcome for park and local people. Management plan structure includes introduction and site description, the goal (vision), identification of main themes, evaluation of main themes, objectives and indicators, actions and indicators, monitoring, timetable, resource and budgeting. When consultation, reviews and approval are completed, annual work plans are developed. Mr. Hotham gave the examples of guidance for structuring objectives, developing the goal, developing objectives and indicators, and developing actions and indicators.

Mr. **Matija Franković**, *conservation expert*, presented the approach to development of a **grassland action plan for the Žumberak-Samoborsko gorje Nature Park**. The project started in 2002 by building public institution. The basic idea was to develop an action plan for the nature value the Park has that is grassland. Grasslands are endangered in Croatia but in Europe too, because woods are devastated. It became clear that the grassland action plan had to be developed within a broader concept of management plan. Grassland action plan has to correspond to the management plan. In searching for our partners we were looking for people with experience in protected area management. The project is being implemented in partnership with UK's Flora and Fauna International and jointly financed by UK and the public

institution. The idea was to transfer know-how to Croatian protected areas. Compared to other efforts (projects) this project was developed in different manner. It was started by a broad stakeholders meeting. When it started in 2002, 3-4 people were engaged and in 2004, 15 people were engaged. One important aspect of this project is ownership. It was important to create the ownership by local people for the project; therefore they were engaged by investing their time and money (e.g. local people provided free accommodation). Also unofficial communication has been developed and maintained by local opinion makers (e.g. priests). Part of the process was to understand the problems local people faced because of the protected area, to understand their needs and to work together. It was a successful exercise and memorable experience. Also nine structured meetings were held and semi-structured questionnaire prepared and filled out when visiting villages in the protected area. Also SWOT analysis based on the stakeholders' inputs was conducted. International partners brought know-how on management plans, including contribution to democracy – how to appreciate people, how to respect their opinion.

Mr. **Marin Grgurev** presented the management plan of **Nature Park Učka**, and focused on the experiences throughout the development process, stressing the importance of the team building. Five workshops and meetings with the stakeholders and the local community were held. Numerous intensive meetings were organized in the process, and people spent many whole days together. The superiors did not push the process, they were more as observers, and guided the process when it was needed. Two basic activities should be noted; scientific work and the management planning. High degree of local community contribution is included. The process started in 2005. Different stakeholders were involved, the Institute, Ministry, and people dealing with grasslands, forestry, etc and we concentrated on activities that were implemented in the park during last 5 years. This was a good system, to motivate people who do not express themselves easily. There are 250 inhabitants in the park, at least 60-70 interviews were carried out with these families. Park staff was previously prepared how to conduct the interviews, and include these opinions into the park management planning. Eight basic topics were set and evaluated: preserving biodiversity, habitats, cultural heritage, manage the landscapes, use the natural resources in a sustainable manner, provide education, promote and support the local community, etc. The activities and performance indicators were defined. Activity plan was revised and sorted out in order to be homogenous. The main goal was to preserve all natural values and improve the attitude of the local community. International partners in the process provided them with the recommendations. Observing the KEC project was also helpful. Lack of human resources and assistance from responsible institutions should be stressed too. The Park staff needed time to accommodate to new work responsibilities.

Ms. **Biserka Vištica**, Park Manager of the **Kopački Rit Nature Park**, introduced the main park features and the history. In 350 years, the flooded area has been reduced to 30%. The development of the management plan started in 2001 and was financed with 2,5 million HRK from the World Bank grant. Twelve background studies on geology, geography, hydrology, meteorology, biodiversity, water management, infrastructure, agriculture, forestry, game hunting, fishing, tourism, social and economic issues, and legislation were made. These studies were presented to public and the final draft was produced in September 2003. Requirements of the Ramsar Convention were taken into account, and the structure of the plan included the following sections and chapters: (1) Guidelines and Content (Introduction, Park Description, Park Status and Management Objectives, and Action Plans including the costs); (2) Management Objectives (Biodiversity Protection, Wetland Management, Sustainable Use of Resources including tourism, fishing, agriculture, forestry and game hunting); (3) Sectors Objectives and Tasks (Current State and History, Optimal Solutions, Proposed Management Measures, Time and Financial Indicators). Ms. Vištica then indicated problems and solutions the park management plan should have focused on: how to preserve natural processes of flood, sedimentation and relief creation; how to conserve exceptional biodiversity; how to manage the water regime, forests, hunting game populations, and

tourism, in a sustainable manner. The plan was revised in 2003 and contained the following chapters: status assessment and the management objectives by zones; zoning system (8 zones), MP implementation with spatial distribution of activities, park organization, relationship with the local community (including co-financing joint projects with stakeholders), monitoring of sustainable development. The revised management plan from 2003 was assessed against the management objectives. The assessment showed several shortcomings, e.g. some recommendations concerning management of natural resources were not in line with the biodiversity conservation objectives (forestry, game hunting, water management); the plan was not harmonized with new legislation and the physical plan; the planned budget was inadequate. On the other hand, the following was accomplished: communication with stakeholders was improved; some planned activities were carried out; funding sources from local authorities were ensured. CARDS evaluation done in 2006 revealed the following: clear park vision and mission were missing, biodiversity and performance monitoring programs were missing; there were no management guidelines for sectors; coherent action plans were missing. A new management plan revision was planned in 2007, including data collection, SWOT analysis, defined vision, introduction of the consultation process, and realistic budgeting. Completion and adoption of the new management plan were planned in 2008.

Mr. **Goran Gugić**, Park Manager, presented the management plan of the **Lonjsko polje Nature Park**. Its structure includes preamble, description of park natural, social and cultural features, evaluation, strategic and operational objectives, and the action plan. Within the chapter on park evaluation, there is a paragraph on confronted values and interests, analyzing internal natural factors, human induced factors, factors arising from legislation or tradition, physical considerations, and available resources. Management planning objectives were grouped into long-term management objectives and factors influencing their achievement, and operational objectives with management measures. The management planning was carried out through field work and workshops on common issues, e.g. revitalization of grasslands including grazing, visitor system, and flood prevention and control. The strategic documents include: management plans of other park users, the physical plan, management rule book, habitat map, land use comparison, regional tourism master plan, tourism marketing plan, marketing of agricultural products, Environmental Impact Assessment of the flood control system (World Bank). The following action plans were under construction: tourism marketing plan for Sisačko-moslavačka County and Nature Park Lonjsko polje, traditional local products, summer school 2006 (UNESCO/Bologna), visitor management system, and the Management Plan of Krapje dol.

Mr. **Jernej Stritih**, Team Leader, CARDS project (*Gopa/Cowi/Oikos*) presented the management plan of **Cret Dubravica Reserve**. There were two pilot projects, Cret Dubravica and **Đurđevački pijesci**. One of the objectives of the project was the development and preparation of management plans of small Natura 2000 sites, based on participatory approach, including all procedures, data collection, interpretation, and monitoring. The overall goals of the CARDS Project were: development of the national biodiversity information system, development of the stakeholder network for nature conservation, and development and application of procedures of PA management plans evaluation. Under the stakeholder cooperation goal, the objectives of the pilot projects included starting the process of preparation of the management plans, establish adequate visitor systems, develop promotional materials, prepare the interpretation guide, establish a group of trained interpreters, establish a network of stakeholders, and present and promote Natura 2000 to public. Mr. Stritih presented the project activities by month, as well as the work days spent, for both pilot projects. The process included identification of stakeholders, a workshop at which reserve status, the vision, mission, and the objectives were evaluated; and preparation of the draft version (SINP). The adoption of the draft management plans would depend on the institutional framework. The proposed MP structure was as following:

introduction (purpose, preparatory process); PA management objectives and policies (vision, mission, PA objectives, policy); PA conservation guidelines (PA status evaluation, conservation concept, monitoring, management of natural and cultural values and resources, economic development, visitor system, connections with neighboring areas, impact on environment and social-economic complex), MP implementation (guidelines for linking sectors plans, implementation activities and responsible persons, control, costs, funding, and institutional structure. PA status evaluation includes: values (natural values, cultural values, and local community); use (land use, infrastructure, water management and facilities, economic activities, threats); management (nature protection, forests, water, infrastructure, tourism). For each zone, protection objectives, visitor objectives, developmental objectives, measures, performance indicators, assumptions and risks, were defined. Eight measures were presented: active habitat maintenance, species reintroduction, forest monitoring, construction of access roads to the peat-land, info-centers and web pages, interpretation training, promotion, souvenirs. For each measure, responsible institution, specific objectives, description of the activities, sources and costs, were defined.

Ms. **Željka Kolar**, Director of the Public Institution for the Management of Protected Areas, Koprivničko Križevačka County, presented the general features of the “**Đurđevački pijesci**” **Special Reserve**. The reserve was established in 1963, and the protection measures were defined in 1999 and published in the County Official Gazette. The reserve is part of the forest land and according to the Forest Management Plan (valid by 2006) only sanitary cuts are allowed. In terms of nature conservation, the Reserve is managed by the County Public Institution. The specific features of the reserve are sand dunes that are stabilized. There are few spots of bare sand left. Typical sand vegetation contains also some Panonian endemic species, and provides habitat to various fauna species. The main purpose of the reserve is conservation of these species, as well as other natural and cultural features of this unique habitat. The drafting process of the management plan included development of the management guidelines according to the Law on Nature Protection, stakeholder identification and the consultation process. The vision was to conserve the remaining non-forested sand areas in order to preserve its specific biodiversity. The mission was to maintain the sand areas and promote the protection, especially to the local community. The same management plan structure and the drafting process as for the Cret Dubravica were used. The chapter on the plan implementation contains guidelines for connecting the sectors plans (physical planning, forestry, game hunting, and water management). The activities include: regular and active protection, and habitat maintenance; removal of non-sand vegetation and humus layer, relief reconstruction; biodiversity and soil monitoring; pilot species reintroduction; visitor infrastructure; information points and promotional material; organized visiting, linking with tourism plans of visiting; souvenirs; local schools visits; cooperation with schools and NGOs. Implementation costs were estimated to about 150,000.00 HRK. Funding sources: state budget, local authorities, tourist associations, various national and international funds, legal entities, and other. The management plan is valid for 10 years and revised each 5 years.

Mr. **Szilágyi Gábor**, Hortobagy National Park, presented the experience of **PA management planning in Hungary**, and the lessons learned. The legal background is the Law on Nature Protection (1996) and the Ministerial Order on the content and preparation of management plans (2001). There are several provisions on the procedure and 5 pages of appendices based on EUROSUTE guidelines. Complete documentation should have preparatory documents, a detailed plan, and the management plan. New protected areas can be proclaimed only if having a management plan. First draft is prepared by PA managers and then checked by the Ministry. The second draft is subject to local/regional public hearings. The third draft enters the inter-ministerial conciliation, so the fourth (final) draft is approved through a Ministerial Order. Hungary is a member of EU for 5 years, and the current status of protected area is the following: There are 26 approved protected areas (14,500 ha), 88 of them are under the approval process (140,000 ha) and for 101 of proposed protected areas

the approval process has not started yet (750,000 ha). Mr. Gábor assessed the management plans as of a monographic character, and insufficiently focused. The approval process is too bureaucratic and can be easily blocked. The management objectives are not clear to stakeholders so they see only restrictions. The legislation should be more flexible in order to take into account natural processes. The annual budget planning is not properly linked to the management plan, and the plan is rather contractual than an administrative conservation measure. In Lithuania, the management plans for 96 Natura 2000 sites were developed in 2005 and 2006. There is a Ministerial Order about management plan content but the approval procedure is not regulated. The plans are developed by the parks, while independent project teams serve as facilitators, and stakeholders are involved from an early stage. The planned activities should be financed by planned EU projects. Since economists are not involved, the financial part is weak. Mr. Gábor gave several recommendations; the first one was to keep bureaucracy on the minimum. Content of the management plan of a given protected area should have only relevant chapters. These should be focused on clearly identified and easily understandable management goals. MP drafting and negotiating should be given to outsiders. Stakeholders should be identified at the beginning and involved in the drafting as early as possible – consensual approach should be applied. Other goals beside conservation ones should be a part of the plan too. Funding of each management action should be planned in detail on a project basis.

Physical Plans for the parks and Management Plans for the parks, “Where is the border between the two?”

Ms. **Mirjana Turnšek**, Head of Department, Ministry of Environmental Protection, Physical Planning and Construction presented nature protection as a spatial component. An assessment in the physical planning strategy and the program, which are approved by the Parliament, is that current protected area should be two times larger, while each protected area should have its physical plan. County physical plans define areas of national parks and nature parks in different manners. The content is not defined in the law, therefore the same approach as the one used for county physical plans is used. By this time, there were no clear zoning of the park areas, according to nature protection, cultural heritage protection and use purposes. This is why physical plans are hard to compare. Recent generation of physical plans respected the legal provisions on inter-sectoral cooperation and these documents were improved in terms of zoning and precision of borders. Most problems arise from conflicts among sectors or among local interests. Land ownership is not clear, commercial pressure is increasing, settlements tend to expand, exploiting of mineral resources is continued, large infrastructure and roads cross protected areas. Tourism sector would like to increase its capacities. The Government has not started systematical buying of the most fragile and endangered parts of nature as is prescribed in the Law, and has not considered alternative solutions such as contracting or foundations. Ms. Turnšek emphasized that PA management plans must be harmonized with the physical plans that are higher in the hierarchy. It does not exclude parks policies and actions plans implementation. Regardless of their character, both types of plans must be coordinated and harmonized. Ms. Turnšek then described the relationships and cooperation types concerning the five KEC management plans. Two of them were completed, one is under revision, and the one of NP Sjevneri Velebit is under preparation. The presentation was continued with description of the building permit process, and of broader EU practices. By this time, five physical plans of national parks (NP Mljet, NP Risnjak, NP Paklenica, NP Brijuni, and NP Kornati) and two of nature parks (NP Učka, NP Kopački rit) were completed. For three national parks (NP Krka, NP Sjevneri Velebit, NP Plitvička jezera) physical plans are under construction, as well as for nine nature parks (NP Medvednica, NP Lonjsko polje, NP Vransko jezero, NP Žumberak-samoborsko gorje, NP Papuk, NP Biokovo, NP Telašćica, NP Velebit, NP Lastovsko otočje). Ms. Turnšek also presented the Regulation on planning and protection of the coastal zone, and its main goals. These include conservation of traditional spatial and landscape values, through limiting or

excluding use of natural resources and building activities. Also, tourism development should be based on high quality and efficient building of tourist capacities.

Ms. **Stella Šatalić**, Biodiversity Task Manager in KEC Project Implementation Unit, presented the draft content of the Forest Ecosystem Protection Program of Protected Areas, which is mandatory according to the Nature Protection Act. It includes guidelines in line with the vision and objectives of the PA management plan, forest survey, survey of important habitats, survey of areas and objects with important social functions, and forestry operation manual. Forests are managed by the zones as defined in the PA management plan. No activity is allowed in the strict protection zone 1a. Minimum intervention (for visitors safety), e.g. cutting trees that could fall on the trail, is allowed. Active protection zone 2a allows reconstruction and improvement of forest ecosystem, which include reintroduction of non-commercial species, maintenance of forest canopy in order to prevent soil exposure, and treatment only with biological substances in case of diseases. Forest survey for 1a, 1b, and 2a contains those elements of forest inventory which are needed to monitor achievement of conservation objectives, and GIS forest and other habitat maps 1:25,000. Active protection zone 2b includes sustainable forest management according to Natura 2000 management principles. In national parks, it applies to private forest owners who are allowed to supply with wood their family holdings (traditional ways of forest utilization), but are not allowed to use their forests for commercial purposes. In nature parks commercial forestry is allowed and should be defined in line with biodiversity conservation objectives contained in Natura 2000 principles. Therefore, for the zones 2b, 3 (use zone) and 4 (buffer zone), forest survey contains forest inventory according to the Forest Inventory Ordinance (Law on Forests) and related maps, as well as GIS forest and other habitats maps 1:25,000.

Mr. **Robert Ojurović**, Head, Forestry Department, Ministry of Agriculture, Forestry and Water Management, presented the level of harmonization of the Forest Ecosystem Protection Program with the Forest Inventory Ordinance, starting with the comparison of the articles of both nature protection and forestry laws defining the program: in the first one by protected area categories, and for special purpose forests in the latter one. Based on the Law on Forests, the Forest Inventory Ordinance also sets the obligation to develop the Program, as well as the methodology used for all forests in Croatia. Mr. Ojurović then listed the elements of the forest management plan that should be used for development of the forest program, and the standard items of the forest inventory minutes. Forest management program must have at least 14 maps, and these are: basic forest administration units, topography, forest inventory classes, forest age classes, forest roads, annual forest harvest plan, silvicultural works, fire risk, forest communities, soils, ecological-managerial forest types, forest amenity values, habitats, and protected areas. Mr. Ojurović also presented the procedure of approving forest management plans - a copy is kept in the nature park too.

Ms. **Jagoda Munić**, president of NGO Green Action, gave a view on forestry in Croatia, especially concerning FSC implementation and protected areas. There is long forestry tradition in Croatia, forest species composition is close to natural, the share of forest area within total is comparatively high, forests are spreading on some areas, and FSC process was introduced. From the other hand, a forest is not only a group of trees and should be approached as an ecosystem. Local communities/public are insufficiently involved in forest management. Nature parks are areas where too much, or almost all, is allowed. Ms. Munić then presented the issues indicated in the FSC Evaluation. General Forest management plan envisages 20 km of forest roads per 1,000 ha Is it based on scientific indicators? It is generally proven that consequences of forest roads construction include habitat fragmentation, lower habitat quality, soil degradation including erosion, etc. Construction of forest roads should be viewed at the level of a broader protected area, not only within forest unit boundaries. Ms. Munić noted there is a FSC request concerning improvement of the forest roads network. An EIA that takes into account cumulative impact effects should be carried out for each new forest road. In case of priority areas, such as Velebit, areas

surrounding towns, vulnerable areas, stakeholder consultation process should be carried out at national level. The measures recommended by FSC include development and implementation of a forest planning and construction manual, which contains also EIA methodology, by next annual inspection checking. Disposal of used forest machines oil should be regulated. Consultation procedure during development of forest management plans should be improved and regulated. Consultation forum should be established. Cooperation with parks management on identification of rare and endangered species should be established. High conservation value forest must be excluded from harvesting (to be identified in cooperation with the parks) and considered as a potential part of the ecological network. Ms. Munić then presented some bad examples of forest roads. Generally, forest legislation is more and more liberal, entrepreneur zones are established within forests, previously defined land use is easily changed, and the question is 'is profit a future priority?'

Ms. **Tatjana Borbaš**, Ministry of Agriculture, Forestry and Water Management presented the IPA RD program, and agrienvironment measures, which are under the responsibility of the Directorate for Sustainable Rural Development (Ministry of Agriculture, Forestry and Water Management). Section for EU programs management and planning deals with pre-accession programs and promotional activities, as well as with the SAPARD program. IPA is a new pre-accession aid instrument for candidate and potential candidate countries, for the period 2007-2013. It supersedes previous PHARE, ISPA, SAPARD, and CARDS programs. IPA supports capacity building needed for meeting political and economic criteria of the legislative approximation process. The basic legal instrument for IPA implementation in Croatia is a Decree on authorization of government bodies responsible for coordination and management of aid instrument in the pre-accession period (2006). Central Office for Development Strategy and Coordination of EU Funds coordinates IPA, while the Ministry of Finance carries out the financial management. The scope of IPA includes institutional strengthening, regional and transboundary cooperation, regional development of transport, environment protection, and competitiveness, and development of human resources. The SAPARD Directorate prepares Agricultural and rural development plan 2007-2013, which will be implemented by the IPA RD Directorate and the SAPARD Agency. Ministries, economic, social and environmental partners, and farmers are involved in IPA RD programming as partners. EC Monitoring Committee supervises the process and the work of both implementing agencies (managing authority of the Ministry of Agriculture, Forestry and Water Management, and SAPARD/IPA RD Agency). IPA RD priorities include (1) improvement of marketing efficiency and implementation of EU standards, (2) preparatory activities for implementation of agrienvironment measures and the Leader, and (3) rural economy development. Environment and landscape improvement, and preparation and implementation of local rural development strategies are proposed measures and sub-measures of the priority 2. There are three pilot projects within the measure 'Environment and landscape improvement': grassland maintenance in Nature Park Velebit, grassland maintenance in Nature Park Lonjsko polje and improvement of soil structure and fertility of arable land in Zagrebačka County. The beneficiaries are selected on voluntary basis and include farmers, farming cooperatives, companies, NGOs and public institutions dealing with land tenure or owning the land. Assistance includes direct payments per hectare and covering capacity building, knowledge transfer and promotion costs. Implementation starts in 2008. Available compensations, and adequate administration structure and control are the prerequisites for receiving the assistance. Awareness raising, public campaigns, and education are necessary for setting the stage for good projects.

### **Discussion**

**Mr. Petar Jurjević**, Croatian Forests, appreciated the effort of Ms. Munić in building her view concerning Croatian forestry, but also wanted to emphasize that special knowledge is needed for developing forest fire prevention and control plans. In the last 3 years in Croatia, the average of fire trails is 4,000 ha and only 9% are a part of huge forests. In 2003, Croatia had less forest fires than the rest of Europe, e.g. France, 1.1% of fires in Croatia (or Russia

3%). The development of forest trails is a prerequisite for good fire prevention and control, on Velebit as well. It must be a part of forest management plans. He agreed with Ms. Munić that forests are endangered.

Ms. **Munić** was not assured that the forest trails network was scientifically based, and would have been happy if such literature existed.

Mr. **Edo Hadžiselimović**, Croatian Mountaineering Association, noted that no permit was needed for constructing forest roads, and emphasized some recommendations, e.g. Croatian Forests should stop their works, and take all the equipment back, to protect the forest area as soon as possible, due to its rich biodiversity, and should include NGOs in the forest management planning process.

Mr. **Ante Cvitanović**, manager of the Nature Park Biokovo, commented that relationship between management plans and physical plans was not clear, especially responsibilities. The synergy should be used, both plans have jointly adopted protection measures, and it would be bad if those plans would have different measures defined. This regards particularly the zoning systems. Both ministries should reach final agreement on this, and produce the guidelines. Concerning forests, the park encountered a problem with agricultural areas. It is not clear who is responsible for them.

Mr. **Ivica Milković**, Croatian Forests, commented forest management plans and their relation to nature conservation. Meetings are organized on this issue and it is harmonized in last 50 years. Mapping of the forest area which is hard to access would be difficult, and was not sure whether it is necessary. He compared Croatian and Austrian methods, emphasizing traditional techniques. Velebit terrain is difficult to approach.

Mr. **Dalibor Hatić**, Director of OIKON, introduced himself as an authorized FSC reviewer for Croatia. He complemented the presentation of Ms. Munić with a few remarks. FSC standards evaluate forestry performance, e.g. compliance with forestry legislation. Also, huge forest areas do not allow proper intervention in case of a fire, and the Forestry Act must be applied accordingly. The environmental legislation does not prescribe an EIA for forest road construction, but it should be carried out anyway.

Mr. **Tibor Mikuška**, conservation manager from Nature Park Kopački rit, had few remarks concerning physical planning. He noted that in the Ordinance on Physical Planning the symbols used for biodiversity categories do not correspond to those used for management plans. Development processes of both plans have different dynamics and methods. The development of a physical plan is a long process, and often when it is completed the document is outdated and needs amending. Also, the foresters should adjust their activities according to park management planning requirements. It was not quite clear whether the Forest Protection Program defined in the Nature Protection Act should be an action plan.

Ms. **Vlatka Dujmović**, Nature Park Papuk, asked when the nature protection conditions will be respected by agencies that perform commercial activities in protected areas. She gave an example from the Nature Park Papuk. The Park is very important area for birds and area excluded from management activities should be enlarged and dead trees left in forest. Guidelines to manage the Park area respecting these two factors have been prepared and submitted to the Ministry of Agriculture, Forestry and Water Management, State Institute and Croatian Forests. These institutions did not oppose the guidelines, but there is a belief that there was no clear understanding of the guidelines. This is grounded in the fact that less timber volume should be cut in protected areas and nature protection conditions should be incorporated in management plans. The practice has shown that at this stage it is mentioned in different papers but not properly performed. She also suggested that both Croatian Forests and Nature Park should aim to improve their communication.

It was also pointed out that inconsistencies and contradictions between Forest Act and Nature Protection Act should be resolved through a working group, having a legal person in its membership that should analyze both acts and propose their harmonization.

### **3.3 Closure of the Workshop**

Mr. **Zoran Šikić**, Assistant Minister for Nature Protection, Directorate for Nature Protection, Ministry of Culture was pleased to see a broad audience working together and towards the same objective. Besides the efforts done nationally at all levels (e.g. central government, regional and local governments), the Ministry is also active in the area of international cooperation and fund raising. Today we are here because of two internationally funded projects: WB Karst Ecosystem Conservation and CARDS Project Institutional Strengthening of the State Institute for Nature protection.

Mr. Šikić emphasised that many times it is a challenge to get consensus between people who are engaged in nature protection and people who are engaged in natural resources management. Therefore events such this one are very important as they offer an opportunity to seat together and identify things that we have in common (e.g. sustainable management), but also things where some inconsistencies and problems exist (e.g. harmonization of management plans and physical plans, forest roads, etc.). They also offer us an opportunity to listen to local communities and the public. He stated his belief that all the participants were willing to reduce human impacts to a minimum, but someone should not forget that local people have to make their living using natural resources.

The State Institute for Nature Protection will have an important role to play in resolving these issues.

In addition to the two ongoing projects (KEC and CARDS) there some projects in pipeline such as Inventory Project. The projects could help us improve the protected area management system and lessons from these two projects will be learnt. One of the biggest challenges ahead is how to engage local authorities. Mr. Šikić emphasised that nature protection in Croatia has been decentralized and now local authorities have to establish management teams and secure funds for nature protection. The Ministry is willing to help but it is now for local authorities to take responsibility.

Once again, this workshop has proved that we are going in right direction, that many things have been achieved (e.g. five management plans) that there is a room for improvement (e.g. data quality, inspection) and therefore he was hoping that the KEC final workshop to be held in new premises of the Nature Park Velebit (construction supported by KEC) in Gospić, in 2007, will be another occasion to meet and continue to work towards the same objective – an efficient protected area management system and to become the regional leader.