ASSESSMENT OF CAPACITY DEVELOPMENT NEEDS OF PROTECTED AREA STAFF IN EASTERN EUROPE

ESTONIA

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2015

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Acknowledgements

The preparation and publication of this report was supported by the German Federal Agency for Nature Conservation (Bundesamt für Naturschutz: BfN) as a component of the project 'Capacity Building Plans for Efficient Protected Area Management in Eastern Europe' **(**Number: Z1.3-544 11-63/12 (FKZ: 3512 82 1800)).

The following national consultants supervised the completion of the questionnaires in Estonia and collated the results for processing: Nele Sober (The Environmental Board), Kaja Lotman (EUROPARC Baltic Section).

The following contributed to planning and steering committee meetings and provided invaluable advice and comments in support of the regional surveys.
Rolands Auzins, Regional Director, Nature Conservation Agency, Latvia.
Grazia Borrini-Feyerabend, Global Coordinator of the ICCA Consortium, Switzerland.
Boris Erg, Director of IUCN Programme Office for Southeastern Europe, Serbia.
Naik Faucon, Atelier Technique des Espaces Naturels (ATEN), France.
Ralf Grunewald, German Federal Agency for Nature Conservation (BfN), Germany.
Michael Jungmeier, Klagenfurt University, Austria.
Jan Kadlečik, State Nature Conservancy of the Slovak Republic.
Hanns Kirchmeir,E.C.O Institut fur Okologie/University of Klagenfurt, Austria.
Maria Munnoz, Fundacion Interuniversitaria Ferndando Gonzales Bernaldez, Spain.
Tamara Pataridze, Agency of Protected Areas, Georgia.
Carol Ritchie, Director, EUROPARC Federation, Germany/Scotland.
Sebastian Schmidt, Michael Succow Foundation/Greifswald University, Germany.
Andrej Sovinc, WCPA Regional Vice Chair for Europe/ Head of Secovlje Salina Nature Park, Slovenia.
Gisela Stolpe, German Federal Agency for Nature Conservation (BfN), Germany.
Irina Zupan, State Institute for Nature Protection, Croatia.

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SUGGESTED CITATION

Appleton, M.R., Ionita, A., Lotman, K., Nitu, R., Sober, N. & Stanciu, E. (2014). *Assessment of capacity development needs of protected area staff in Eastern Europe; Estonia.* ProPark Foundation, Brasov.

ABBREVIATIONS USED IN THE TEXT

BfN	Bundesamt für Naturschutz (German Federal Agency for Nature Conservation).
CBD	Convention on Biological Diversity.
EST	Estonia
ha	Hectare(s)
GPPPAM	Global Partnership for Professionalising Protected Area Management.
IUCN	International Union for the Conservation of Nature and Natural Resources (IUCN).
IUCN Cat I	IUCN Category I Protected Area (Strict Protected Area).
IUCN Cat II	IUCN Category II Protected Area (National Park).
IUCN Cat III	IUCN Category III Protected Area (Natural Monument).
IUCN Cat IV	IUCN Category IV Protected Area (Nature Reserve).
IUCN Cat V	IUCN Category V Protected Area (Protected Landscape).
IUCN Cat VI	IUCN Category VI Protected Area (Managed resource use area).
mgmt	Management.
PA	Protected Area.
Person/training day	The equivalent of one individual attending a training course for one day.
PMT	Project management team.
PoWPA	Programme of Work on Protected Areas.
TNA	Training needs assessment.
WCPA	World Commission on Protected Areas

1 SUMMARY

This report is one of the outputs from surveys of capacity development needs in 23 countries in Eastern Europe.[1], probably the most comprehensive assessment of competence and capacity development needs for protected areas conducted in the region. A separate General Report describes the entire regional methodology and process, and should be consulted alongside this report.

The component for Estonia included the following elements.

A **General Questionnaire** (Annex 1) was completed by six respondents from Keskkonnaamet (the Estonian Environmental Board), representing six protected areas, and managing agencies covering at least 87,000 ha, and with 77 staff.

A detailed **Self-Assessment Questionnaire** (Annexes 2 and 3) was completed by 52 employees of Keskkonnaamet from 12 protected areas and managing entities.

The use of three different ways of assessing capacity needs (assessment by managers, self-assessment by individuals and identification by individuals of personal preferences) offers quite different perspectives on needs and priorities. Results presented in this report have been aggregated across the whole region; results for the individual participating countries are published in supplementary reports.

The results of the surveys provide information on staffing profiles (numbers, job levels, gender, age, education and experience), training provided in the past three years and structured assessments of competence in 125 specific protected area skills across 10 categories of protected area work.

1.1 MAIN CONCLUSIONS

OVERALL

- This survey is not as comprehensive or as representative as it could have been. From Keskkonnaamet, just over 10% of staff completed self-assessments, and Laheema and Karula National Parks declined the opportunity to participate. RMK (The State Forest Management Centre), which is in charge of the management of tourism inside PAs declined to participate in the surveys.
- Based on the results from the questionnaires that were completed, personnel in Estonia's protected area system have quite good individual capacity, are well educated and have a good range of experience. The need for training is formally recognised by the existence of central budgets for staff development and the provision of a range of opportunities for training. There is a need to build on this foundation by institutionalising capacity development for PA personnel in order to improve performance and to establish a clearer professional standard and profile for the sector.

STAFFING OF PROTECTED AREAS IN ESTONIA

- Estonia (36% male/64% female) has an unusual gender balance compared to the rest of the region (average: 66% male/34% female). It would be useful to find out the reasons for this.
- The personnel surveyed are very well educated; almost all have a university education. This indicates good potential for improvement in capacity, and for development of internal training programs, making use of the high educational level of many staff.
- The workforce has quite a good balance of ages and experience. This is encouraging from the perspective of developing capacity and passing on skills, and suggests that many staff stay in protected area work for a long time.

TRAINING

- Availability of training is quite good, but appears to be very patchy. Whereas some staff have benefited from more than 10 days' training per year, others have had little or none. The overall average of around 1 person day per year is much less than the 5-10 days considered as required in the general assessment.

[1]Albania, Armenia, Azerbaijan, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Estonia, Georgia, Hungary, Kosovo, Latvia, Lithuania, Macedonia, Moldova, Montenegro, Poland, Romania, Serbia, Slovakia, Slovenia, Turkey and Ukraine.

- Keskkonnaamet has an annual budget for training. The focus of training delivered to date has been quite broad, covering all the listed skills categories. The largest amount of training has been in conservation skills (CMP).
- Training in Estonia is delivered by a range of providers, with an encouraging amount of internal training.
- The preferred modes of capacity development are learning visits, workplace learning and short courses.

SPECIFIC SKILLS CATEGORIES

Management of finance and physical resources

- Based on the results of the survey, this category is not a major priority for capacity development.

Management of human resources

- Based on the results of the survey, this category is not a major priority for capacity development.

Communication, technology and information

- Investment should only be made in GIS and IT training where there is a high likelihood of sustainability and where the protected area institution has adopted an IT culture.
- Many staff would like to have English language training.

Field craft

- All protected areas staff should have at least basic training in first aid, safety and security.

Conservation planning, assessment and management

- The fact that this category is a priority need, even when it has been the subject of a lot of training, requires further investigation. It may be necessary to determine more precisely what skills are required.
- Training for PA staff in biodiversity conservation should focus on management oriented skills rather than academic studies. The focus should be on developing, applying and monitoring the impact of specific measures designed to achieve the defined conservation goals of protected areas.
- Many senior PA staff would like training in the specific skills related to valuation of ecosystem services.

Sustainable development & communities

- There is a national need for training in working with communities and local stakeholders, and this should be a priority topic in future initiatives.

Protected Area policy, planning and projects

- This category should be a priority for training of senior and possibly middle managers.
- To be effective, individual capacity building in this topic must take place in parallel with institutional capacity building for improved management and governance of protected area systems and individual sites.

Law Enforcement

- **Error! Reference source not found.**Middle managers and all site/field based staff require capacity development in skills related to law enforcement and compliance. This training should include a strong focus on 'soft' law enforcement approaches such as working with communities to reduce wildlife crime.

Recreation and tourism

- Senior managers require training in identifying tourism and recreation opportunities and developing suitable programmes, along with viable business plans.
- Training for middle managers and technical staff should focus on the day-to-day management of tourism, and in particular on impact monitoring and reduction and on visitor management.

Awareness, education and public relations

- Training in awareness is probably not required as a separate category, but should be integrated into training in tourism and recreation and in working with local stakeholders.

1.2 RECOMMENDATIONS

Based on these conclusions, the following main recommendations are made. Each recommendation is accompanied by a set of specific recommended measures.

OVERALL RECOMMENDATIONS

1. Establish a formal staff development policy and programme in Keskkonnaamet

    1.1 Keskkonnaamet should develop an overall policy strategy and plan for capacity developments of its personnel.

    1.2 Keskkonnaamet should establish basic norms for how much capacity development should be made available to staff.

    1.3 Records should be kept of all capacity development events, of training attended by all personnel and of the quality and impact of the training.

1.4 RMK (The State Forest Management Centre), which manages all the tourism activities in PAs, should be integrated into capacity assessment and development activities of Keskkonnaamet.

2. Engage with regional initiatives to improve the professionalization and profile of PA management.

2.1 Estonia should continue to be an active partner in regional initiatives through Europarc, Eurosite, IUCN etc.

3. Build internal capacity for capacity development

3.1 Appoint a capacity development/training officer (or small team) in Keskkonnaamet

3.2 Establish and train a national capacity development team comprising expert practitioners from within protected area institutions.

3.3 Provide supervisors in protected areas with training in basic instructional techniques for working with teams and workgroups.

SPECIFIC CAPACITY DEVELOPMENT RECOMMENDATIONS

4. Develop a common foundation programme for all protected areas staff

4.1 All new or recently appointed protected area staff should complete a two-day induction course
4.2 National curricula and programmes for the course should be developed, and a set of training materials provided.
4.3 The course should be delivered by a national or regional training team from Keskkonnaamet.
4.4 Completion of the course should be certificated and documented in the personnel records of staff.

5. Build capacity for tourism and recreation

5.1 Develop and deliver a training programme for Keskkonnaamet staff and for RMK in tourism and recreation

5.2 Engage in regional initiatives to share experience improve standards for tourism and recreation in protected areas.

5.3 Ensure full engagement of Keskkonnaamet personnel in the 7th International Conference on Monitoring and Management of Visitors in Recreational and Protected Areas (MMV) in Tallinn in August 2014.

6. Build capacity for working with communities

6.1 Develop and a training programme for staff working in protected areas where collaborative management with communities and local stakeholders is an important component.

7. Organise a series of facilitated seminars/learning events for senior staff of Keskkonnaamet (and partners)

7.1 Hold a facilitated seminar/learning event for senior staff on ecosystem valuation.

7.2 Hold a facilitated seminar/learning event for senior staff on communication, awareness and public relations.

7.3 Hold facilitated seminars/learning events for senior staff on protected area planning, management and monitoring.

7.4 Hold facilitated seminars/learning events for senior staff on project and proposal identification and preparation.

8. Build capacity for applied conservation biology and conservation management

8.1 Design and deliver an updated course on applied, management-oriented conservation management.

9. Maintain and update skills and knowledge of personnel involved in law enforcement and protection

9.1 Develop and deliver a training course/seminar on prevention, compliance and law enforcement for field staff.

9.2 Provide regular updates for field staff on legislation, threats and approaches for reducing illegal activities.

2 BACKGROUND AND PURPOSE OF THE SURVEY

This report is a component of the project '*Capacity Building Plans for Efficient Protected Area Management in Eastern Europe*', implemented by the ProPark Foundation[2], based in Brașov (Romania) and funded by the German Federal Agency for Nature Protection, the Bundesamt für Naturschutz (BfN). The project's overall objective is to support and coordinate the development of national and regional plans for capacity building for implementation of the Convention on Biological Diversity (CBD) Programme of Work on Protected Areas (PoWPA) in Eastern Europe. The expected project outputs are:

1. Two or three national and one subregional capacity building plans, accepted by the relevant national institutions, committed to take the lead in implementing and further developing them.
2. Protected area capacity development curricula proposal developed, and discussions initiated with countries on possibilities to have it standardized across the region.
3. Steps and resources identified for certification of the protected area training/capacity development programmes initiated through the project.
4. At least two training of trainers workshops (with a focus on didactic skills, resources available and objectives of the entire programme).
5. Active network of protected area specialists involved in the capacity development programmes as trainers/mentors.
6. Centres of good practice for protected area capacity development identified and promoted (if existing).
7. Funding possibilities identified in the region and recommendations developed for national authorities on possibilities to develop sustainable financing for the capacity development programmes.

As a foundation for these outputs, a detailed analysis of capacity development needs was required from all participating countries. A general report has been prepared with information gathered from surveys conducted in 23 countries in Eastern Europe by local consultants employed by the project. This report focuses in detail on the results from Estonia.

3 METHOD

3.1 SELECTION OF PARTICIPATING COUNTRIES

Of the 23 participating countries[3], Estonia was selected as one of nine 'first level countries' where two questionnaires would be used

i. A General Questionnaire to be completed by senior staff members representing protected areas and managing agencies across the country.

ii. A detailed Self-Assessment Questionnaire to be completed by individuals within a selected sample of protected areas.

The other countries in this 'first level' group were Estonia, Latvia, Georgia, Romania, Serbia, Slovakia, Slovenia and Ukraine. See General Report for details.

3.2 DESIGN OF THE QUESTIONNAIRES

Two questionnaires were used in Estonia.

[2] ProPark Foundation for Protected Areas is designed as a social business. Its commercial arm is established with the purpose to generate money to support capacity building programmes and protected area management activities.

[3] Albania, Armenia, Azerbaijan, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Estonia, Georgia, Hungary, Kosovo, Latvia, Lithuania, Macedonia, Moldova, Montenegro, Poland, Romania, Serbia, Slovakia, Slovenia, Turkey and Ukraine.

3.2.1 GENERAL QUESTIONNAIRE

The General Questionnaire was designed to be completed by senior staff members representing protected areas or managing agencies and to provide a national overview of protected areas and capacity development. The questionnaire has three main sections, as shown in Table 1. See Annexe 1 for the full questionnaire.

Table 1 Sections of the General Questionnaire

Main Section	Subsection
A. General information	A1. Country. A2. Full name of protected area or institution. A3. IUCN category of the protected area (if known). A4. Area of the protected area (hectares). A5. Name and position of person completing the questionnaire. A6. Date of completion of questionnaire. A7. Staff numbers.
B. Current situation for training and capacity development	B1. Previous training. Time and resources allocated to formal training and capacity development for staff or local stakeholders in the past 3 years. B2. Resources and budget for training. If the institution has its own special budget for training, total allocations for the past 3 years are indicated. B3. Skills and experience. Competence assessments for each level of staff. B4. Future needs and priorities. Three most important capacity development need(s) of each category of staff. (personal preferences).
C. Modes of training and learning	C1. Modes of learning. C2. Allocation of time for training and development.

In the questionnaire, respondents were asked to distinguish between five levels of personnel in their organisations.

- Directors/Deputy Directors/Senior Managers.
- Mid-level Managers/Professional Technical Staff.
- Field Staff/Rangers.
- Support staff (labourers, cleaners, drivers etc.).
- Administrative Staff.

In Section B3 of the questionnaire, respondents were asked to assess the competence of five levels of staff in the protected area(s) he/she represented against each of 11 skills categories shown in Table 2.

Table 2 Skills categories used in the questionnaire

Code	Category	Description
GEN	**GENERAL SKILLS**	General skills require for any job in a protected area. Commitment, motivation, positive attitude, honesty, teamwork etc.
FRM	**FINANCIAL & RESOURCES MANAGEMENT**	Management and organisation of finances, assets and equipment for the protected area.
HUM	**HUMAN RESOURCES MANAGEMENT & DEVELOPMENT**	Directing, managing, organising and capacity building for staff and others working in the PA.
CTI	**COMMUNICATION TECHNOLOGY AND INFORMATION**	Communication skills. Presentations, reports, negotiations, conflict resolutions. Use of computers and technology.
FCR	**FIELD CRAFT AND PRACTICAL SKILLS**	Skills for field work: navigation, health and safety, basic construction and maintenance and good environmental practice in the field.
CMP	**CONSERVATION ASSESSMENT PLANNING & MANAGEMENT**	Identifying, surveying and monitoring species and ecosystems. Identifying the need for and carrying out specific actions for the protection and conservation of species, habitats and ecosystems.

SDC	**SUSTAINABLE DEVELOPMENT & COMMUNITIES**	Conducting social and economic assessments in local communities. Working with communities in the Protected Area and Buffer Zone to promote sustainable resource use and development.
PAM	**PROTECTED AREA POLICY, PLANNING AND PROJECTS**	Preparing strategies, master plans and management plans for managing protected areas. Designing and applying for special projects to support the work of Protected Areas.
LAW	**LAW ENFORCEMENT**	Law enforcement: understanding the law and conducting activities to enforce the law in protected areas.
RTO	**RECREATION AND TOURISM**	Planning and managing environmentally sensitive recreation and tourism for visitors to protected areas.
AWA	**AWARENESS, EDUCATION AND PUBLIC RELATIONS**	Planning, designing and carrying out awareness, education and public relations work with visitors and local people. Promoting and publicising the Protected Area through the media.

Competence assessments were carried out using a standard numerical scale, as shown in Table 3.

Table 3 Assessment scale for competence

Scale	Definition
0	Staff at this level do not need these skills
1	Staff at this level need these skills, but have little or no competence in them: extensive training and development are needed.
2	Staff at this level need these skills and have some competence in them: Further training and development are needed.
3	Staff at this level need these skills and have good competence in them: Periodic updating only is needed.
4	Staff at this level need these skills and are highly competent in them. They could train and instruct others in these skills.

The uses, advantages and limitations of this type of questionnaire are discussed in the General Report.

3.2.2 DETAILED SELF-ASSESSMENT QUESTIONNAIRE

This questionnaire was designed to be completed by individuals working for a selected sample of protected areas. This assessment involved the use of 125 standard skills in 10 categories (the same categories as those used for the General Questionnaire except that the Category 'General Skills' was not included; see Table 2). These skills are derived from a set of widely used competence standards developed by the author originally for protected areas in Southeast Asia[4]. A full list of the skills is included in Annexe 2. This assessment distinguished four staff levels as shown in Table 4, although for analysis, Levels 4 and 5 were combined because: a) It was very difficult for respondents to distinguish between Levels 4 and 5; and b) Combining the two levels made the personnel categories analogous to those used in the General Questionnaire.

Table 4 Occupational levels for protected areas staff

Level	General responsibilities	Typical Protected Area Job at this Level
5	**Directorial.** Strategic and programmatic responsibilities	Head of a complex/high profile park, park complex or national/provincial protected areas agency.
4	**Senior Management, Higher Technician.** Project, departmental management and/or high level technical responsibilities	Head of a protected area. Deputy head or section head of a large, complex and/or high profile protected area. Leader of technical section.
3	**Middle Management Supervisor/Technician.** Supervisory/mid-level technical responsibilities	Head of a protected area subunit or section. Head of nature reserve/sanctuary. Senior/supervising member of sections or work teams.
2	**Skilled worker.** Technical practical responsibilities with some team leadership	Ranger. Established and experienced worker/team leader. Experienced local community member.

[4]Appleton, M.R., Texon, G.I. and Uriarte, M. (2003) *Competence standards for protected area jobs in SE Asia*. ARCBC, Los Banos, Philippines.

Each questionnaire included the following.

1 A cover page, requesting general details about the respondent and including information about the time and location of the assessments (See Annexe 2).
2 A list of competences identified as being relevant to the work of the respondent group (see Annexe 3).

Respondents were asked to complete the relevant information on the cover sheet and then to provide a numerical self-assessment for each skill listed as follows:

0 I do not need this skill in my work
1 I need this skill in my work, but I have little or no competence in it. I require extensive training and development.
2 I need this skill in my work, and I have some competence in it. I require advanced training and development.
3 I need this skill in my work, and I have good competence in it. I only require periodic updating.
4 I have high competence in this skill and could train others to do it.

Respondents were then asked to select up to 5 of the competences in which they, as individuals, would particularly like to improve their skills.

The uses, advantages and limitations of this type of questionnaire are discussed in the General Report.

3.3 CONDUCT OF THE SURVEYS IN ESTONIA

The surveys were supervised and facilitated by national consultants engaged by the project management team. The main tasks of the consultants were:

- To prepare background information and a plan for the implementation of the task in their countries (including a list of protected area by types, a list of their administrations and administrators/custodians, the number of staff and their contact details, the management system, etc.). Based on this a sample of PAs would be identified (where it was not possible or practical to approach all PAs) for completion of the questionnaires.
- To participate in a brief online training session concerning the questionnaires and how they should be applied.
- To translate the questionnaires and the project description in the national language.
- To conduct field visits and/or phone interviews and collect information for the training needs assessment.
- To collect and compile information concerning the previous and existing capacity building initiatives, the actors playing a key role in this field, the overall context and main issues for capacity building for PA staff, etc.
- To collate and submit the collected information to the project management team.

Before starting the fieldwork, consultants were asked to prepare an overview of their national PA system. Based on this, the PAs to be included in the study were selected to constitute a relevant sample, and plans for fieldwork developed. The templates of the questionnaires, result sheets and reports, as well as written instructions on how to conduct and supervise the field phase of the TNA were then provided by the project management team. Training for consultants was conducted via Skype and was designed to clarify how to organize the field activity and how to fill in the questionnaires. The final details of the plan and the costs were discussed and agreed with each expert separately. To support the consultants, official Letters of Introduction were supplied by ProPark, introducing the project and certifying the role of the consultant in the project. During the fieldwork period, the activities of the consultants were monitored through continuous communication and periodic status reviews. Assistance and advice were provided where required. To ensure a common format and a similar content of the reports, a template was provided to the experts, to guide them in structuring the information.

3.4 SELECTION OF SAMPLE PROTECTED AREAS AND PERSONNEL

The protected areas where the survey would be conducted were selected using the background information provided by national consultants concerning the types of PAs, their management and, where available, the number of staff working in each PA management body. The selection aimed to form a sample that included the most complex types of PAs (those having their own management body), a diversity of PA managing authorities (where relevant), as well as a relevant and representative sample of PA staff.

3.5 COMPLETION AND PROCESSING OF THE QUESTIONNAIRES

The national consultants, with support from the project management team, supervised the completion of the questionnaires. This happened in a number of ways:

- The consultant visited the protected area, directly explained the questionnaires, and supervised their completion.
- Questionnaires were conducted as interviews over the telephone or by Skype (for the General Questionnaire only).
- Personnel in protected areas were trained and supported remotely (by phone, email or Skype) to supervise completion for the questionnaires, which they then returned to the national consultant.
- All questionnaires were collected and the results entered into a pre-prepared Microsoft Excel spreadsheet and forwarded to the ProPark for analysis.

The method used depended on the resources and time available for visiting the protected areas. Throughout the process, the project management team was available to provide support and answer questions.

Once the questionnaires had been completed, they were collected and checked by the national consultants, who then collated and entered the results into pre-prepared Excel spreadsheets provided by the PMT. The overall numbers of questionnaires completed in Estonia are shown in Table 5.

Table 5 Completion of questionnaires in Estonia

Survey	Number of question-naires completed	Number of PAs/institutions covered by questionnaires	Number of individuals covered by questionnaire.	Dates of survey
General Questionnaire	6	6	77 full time equivalent personnel	April-June 2013
Self-Assessment Questionnaire	52	12	52 individual self - assessments	April/May 2013

4 RESULTS

4.1 OVERVIEW OF PROTECTED AREAS AND CAPACITY DEVELOPMENT IN ESTONIA

Information from the report of national consultants Nele Sober and Kaja Lotman.

One national environmental agency, Keskkonnaamet, the Estonian Environmental Board (EEB), manages all the 932 PAs through the specialized departments in its structure (the Nature Conservation and Nature Education Departments). Specialists in the fields of nature protection, nature education, nature usage, nature management, cultural heritage, nature conservation biology, nature conservation, land use, etc are employed in these departments. Keskkonnaamet has over 400 employees. RMK (The State Forest Management Centre) manages all the tourism activities in PAs, including tourism infrastructure.

Keskkonnaamet has conducted a wide range of training events in the past 3 years. Some of the training is provided the whole year around (or systematically), but it mostly lasts 1 day. The purpose of the training is to develop new skills and to update existing skills, for example when a new law is validated or new databases have been launched.

The training budget of Keskkonnaamet is centralized; protected areas themselves do not have their own training budgets. Depending on the topic, workers from different fields are offered opportunities for training; not all the training events are for a fee. If a worker has an interest in a certain training event, s/he can address his/her superior, who can obtain approval from the head of the personnel, provided a budget is available.

Capacity building is not a special component of the management plans of protected areas. Usually the training needs are identified from the yearly personal interviews between the supervisor and the worker. Approval of the trainings is done by the direct supervisor and the directorate. The latter also decides on the budget.

4.2 COVERAGE OF THE SURVEYS

4.2.1 COVERAGE OF THE GENERAL QUESTIONNAIRE

The national consultants collected information from respondents representing six protected areas and managing agencies responsible for at least 87,000 hectares of protected areas in Estonia. See Figure 1 and Table 6. This was a relatively small sample of the protected areas and covers the managers of around 15% of the personnel of Keskkonnaamet. The reason given for this was that many staff was too busy at the time to complete the questionnaire.

Figure 1 IUCN Categories of PA included in the survey

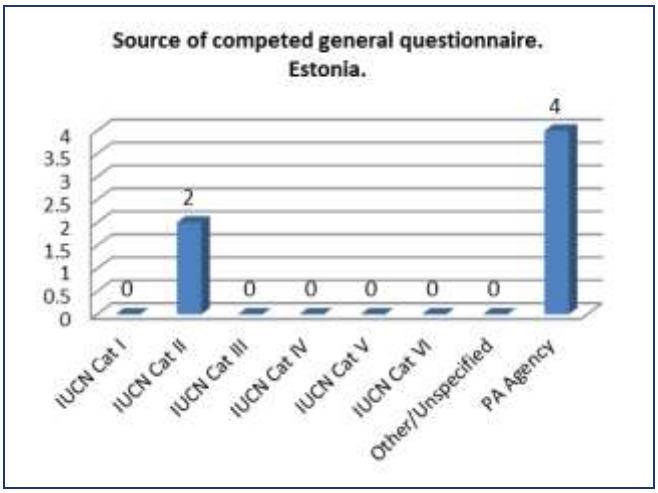


Table 6 Sources of responses to the General Questionnaire in Estonia

	Institution
1	Environment Agency / Matsalu National Park
2	Environment Agency / Soomaa National Park
3	Environment Agency / Jõgeva-Tartu region
4	Environment Agency / law department
5	Environment Agency / personnel department
6	Environment Agency / nature conservation department

RMK (The State Forest Management Centre), which is in charge of the management of tourism inside PAs declined to participate in the surveys, as did Laheema and Karula National Parks.

4.2.2 COVERAGE OF THE SELF-ASSESSMENT QUESTIONNAIRE

Self-assessments were completed by 52 individuals from 12 protected areas and managing entities as shown in Table 7.

Table 7. Source of the self-assessment questionnaires

	Institution		Institution
1	Environment Agency / Matsalu National Park	**7**	Environment Agency. Law department
2	Environment Agency / Soomaa National Park	**8**	Environment Agency. Personnel department
3	Environment Agency / Vilsandi National Park	**9**	Environment Agency. Nature conservation department
4	Environment Agency / Lahemaa National Park	**10**	Environment Agency. Nature education department
5	Environment Agency / Karula National Park	**11**	Environment Agency / Harju-Järva-Rapla region
6	Environment Agency / Jõgeva-Tartu region	**12**	Environment Agency / environmental department

RMK (The State Forest Management Centre), which is in charge of the management of tourism inside PAs declined to participate in the surveys, as did Laheema and Karula National Parks.

4.2.3 STAFF DENSITY

These numbers represent a staffing density of 0.88 personnel per thousand hectares of protected area. However, given the structure of Keskkonnaamet and the small number of respondents, this figure cannot be considered reliable.

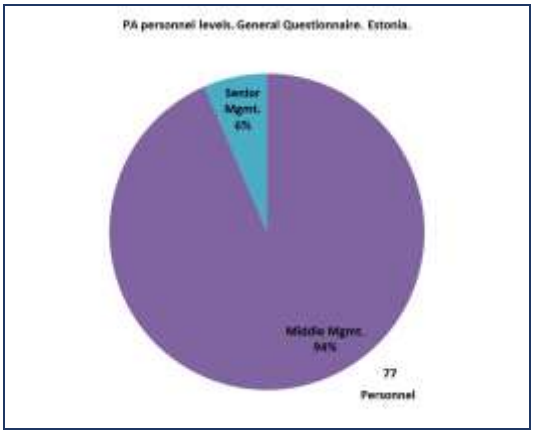
4.2.4 SUMMARY OBSERVATIONS ON COVERAGE

The surveys covered around 15% of the personnel of responsible for Estonia's major protected area and none of the personnel directly responsible for tourism in the protected areas. The calculated staffing density is slightly below the regional average of 1.16 staff per 1,000 hectares and fairly close to global averages, but as previously mentioned, cannot be considered as reliable.

4.3 PERSONNEL PROFILES

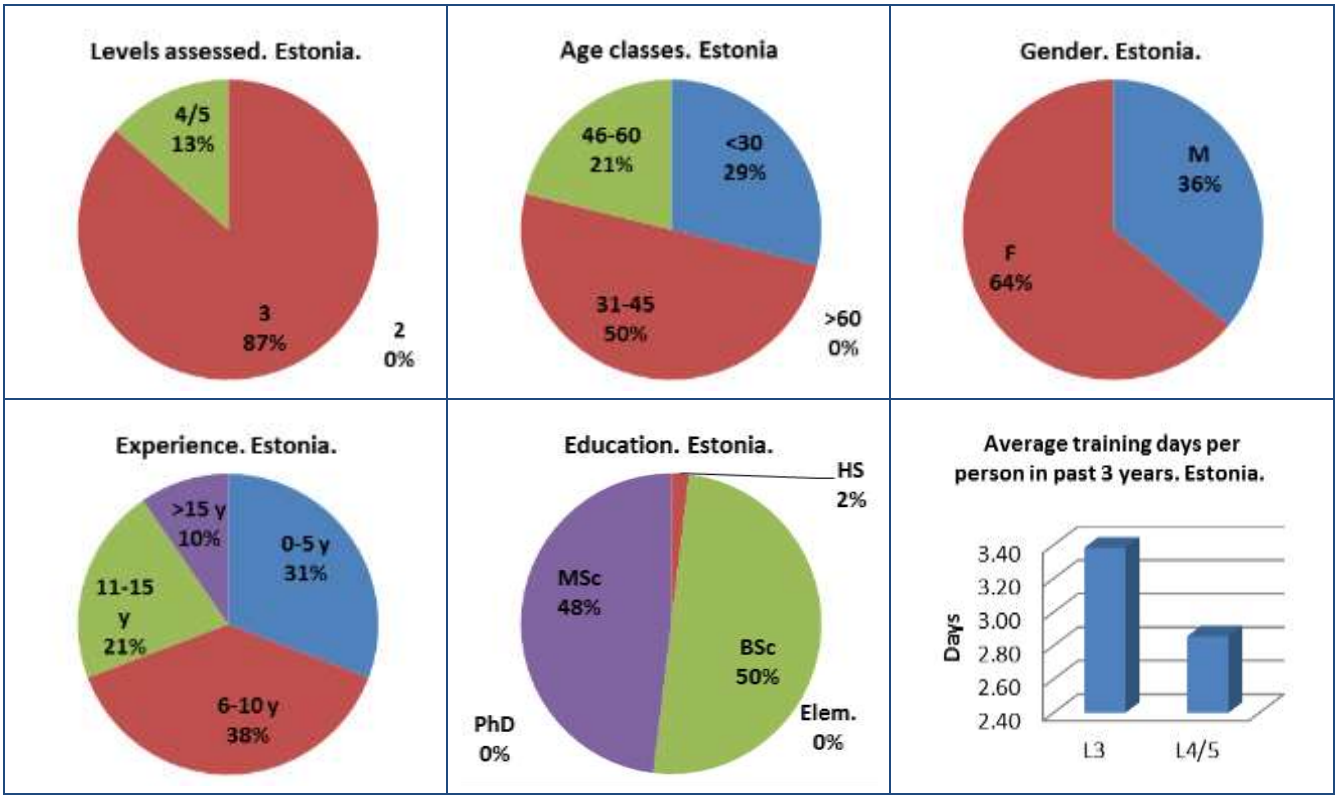
The six protected areas and agencies covered by the General Questionnaire reported that they employ 77 personnel. The distribution of personnel between job categories is shown in Figure 2. In Estonia, no personnel were reported in the categories of 'Ranger'. 'Administrative Staff' or 'Support Staff'.

Figure 2. Personnel covered by the General Questionnaire according to job level



The Self-Assessment Questionnaire provided much more details about the 52 respondents in the six protected areas and administrations covered. Figure 3 shows the aggregated results from the personal information section of the questionnaire.

Figure 3 Summary of personal information from self-assessments in 18 PAs (52 responses)



4.3.1 GENERAL OBSERVATIONS ON PERSONNEL PROFILES

Estonia (36% male/64% female) has an unusual gender balance compared to the rest of the region (average: 66% male/34% female). It would be useful to find out the reasons for this.

None of the personnel assessed or listed are categorised as 'Rangers' or at Level 2. This appears to be because most of the field-based personnel of Keskkonnaamet have a wide range of technical and supervisory responsibilities, and therefore qualify as Level 3.

Protected area personnel in Estonia are generally well educated, with 98% having a university education. The survey did not record the subject of the degrees awarded to the respondents, so it was not possible to assess the relevance of the education.

The workforce has quite a good balance of ages and experience. This is encouraging from the perspective of developing capacity and passing on skills, and suggests that many staff stay in protected area work for a long time (in some countries high staff turnover is a major limiting factor for staff development).

4.4 TRAINING

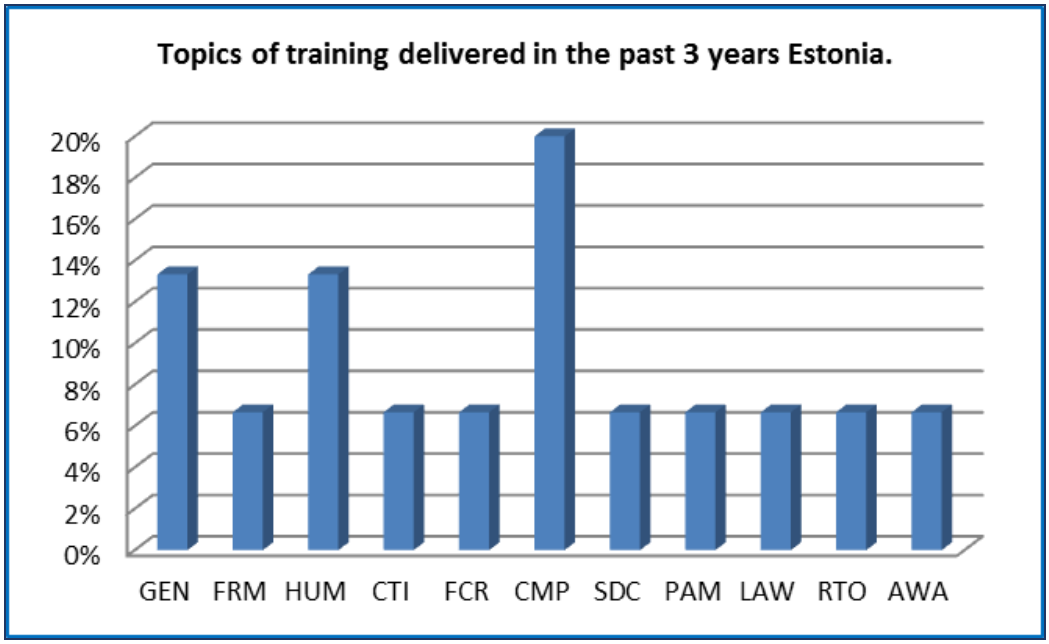
4.4.1 RECENT TRAINING PROVISION

In the General Questionnaire, respondents were asked to provide details of training provided for personnel in their organisation in the past three years. From this, it could be calculated that PA personnel in Estonia received 16.9 training days per person per year. However, in the Self-Assessment Questionnaire, respondents reported far less training (around 1 day per person per year). The reasons for this are not entirely clear.

4.4.2 TOPICS OF TRAINING

Figure 4 shows the proportions of different training topics reported, classified according to the standard skills categories used in the survey. This shows a good balance of training provision across all the categories, with an emphasis on conservation management skills (CMP).

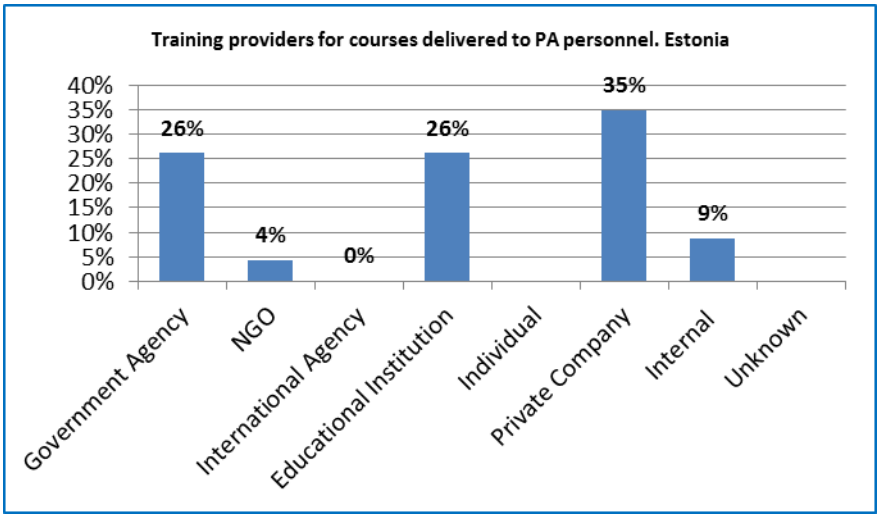
Figure 4 Training topics



4.4.3 TRAINING PROVIDERS

Figure 5 shows the relative proportions of the different training providers reported. These results show quite a balanced range of provision, including 9% of training delivered internally.

Figure 5 Training providers



4.4.4 IDEAL TRAINING PROVISION

Respondents to the General Questionnaire were asked to suggest an ideal number range of annual training days for personnel at different levels. The results are shown according to ranked preferences in Figure 6.

Figure 6 Numbers of training days recommended by respondents to the General Questionnaire

Recommended Annual Number of Training Days. Ranked preferences. Estonia. 1 = Most preferred 6= Least preferred					
Training Days	**Senior Management**	**Middle Managers**	**Rangers/ Field Staff**	**Admin Staff**	**Support Staff**
0 days	**2**	**2**		**4**	
1-5 days	**2**	**3**		**2**	
6-10 days	**1**	**1**		**1**	
11-15 days	**4**	**4**		**2**	
16-20 days	**4**	**4**		**4**	
>20 days	**4**	**4**		**4**	

The results suggest that, in the opinion of respondents, staff require up to 10 days' training per year.

4.4.5 FUTURE TRAINING PRIORITIES

Respondents to the General Questionnaire were asked to identify what they personally considered priorities for future training for staff in their organisations. Figure 7 shows the result for Estonia, compared with the aggregated result for the entire region. It is noteworthy that the top ranking category is also the category in which most training has been delivered to date.

Figure 7 Ranked preferences of senior managers for priority future training topics.

	CATEGORY	**ESTONIA**	**OVERALL FOR THE REGION**
GEN	General skills	**2**	**3**
FRM	Financial & resources management	**4**	**10**
HUM	Human resources management & development	**2**	**11**
CTI	Communication technology and information	**4**	**6**
FCR	Field craft and practical skills	**4**	**4**
CMP	Conservation assessment planning & management	**1**	**2**
SDC	Sustainable development & communities	**4**	**8**
PAM	Protected area policy, planning and projects	**4**	**1**
LAW	Law enforcement	**4**	**7**
RTO	Recreation and tourism	**4**	**5**
AWA	Awareness, education and public relations	**4**	**9**

4.4.6 MODES OF LEARNING AND TRAINING

Respondents were asked to rank in order of importance eight modes of learning and training for personnel at different levels. The results are shown in Figure 8 and show a clear preference for workplace learning, for exchanges and study visits and for short courses.

Figure 8 Preferred modes of training

Ranked preferences for modes of capacity development. Estonia					
1 = Highest Ranked. 8 = Lowest Ranked	Senior Mgmt.	Middle Managers	Rangers/ Field Staff	Admin Staff	Support Staff
Informal learning in the work place with more experienced colleagues	2	1		1	
Short training sessions provided by supervisors/managers in the work place	4	3		3	
Short Formal Training Courses (<1 week)	3	3		4	
Longer training courses (1-4 weeks)	6	6		5	
Long Term Study for Formal Qualifications (e.g. University Courses)	7	5		6	
Informal individual learning using training manuals and study materials	7	8		8	
Formal individual study through distance learning, internet etc.	5	6		6	
Exchanges and study visits with other Protected Areas	1	1		2	

4.4.7 FUNDING FOR TRAINING

Estonia was one of the few countries in the region that was able to provide detailed figures on expenditure on training. The results are summarised in Table 8, and indicate a modest allocation per employee.

Table 8 Reported expenditure on training by Keskkonnaamet in Estonia

Year	Budget	Indicative expenditure per person (based on total number of 441 employees of Keskkonnaamet.
2011	€58,400	€132
2012	€48,470	€110
2013	€69,260	€157

4.4.8 GENERAL OBSERVATIONS ON TRAINING

1. There are some discrepancies about the amount of training delivered. Based on the figures from the General Questionnaire, the average of training is around 16 training days per person per year, which is very high in comparison with the rest of the region (average ca. 3 days per year). However, from the self-assessment individuals the average training reported was around one day per person per year. Looking in more detail, it appears that while some respondents had received a lot of training (>10 days), many had attended none or very little.
2. Overall, managers considered that all staff require 5-10 days training per year.
3. Training topics in Estonia have been well balanced across categories, with an emphasis on conservation skills.
4. Training in Estonia is delivered by a wide range of providers, including a significant amount of internal training.
5. The preferences of managers for capacity development modes suggest a strong interest in internal training and staff development, as well as in study tours and short courses.
6. Estonia was one of the few countries to report expenditure on training. On average it appears that around EUR150 per person per year is spent on training.

4.5 RESULTS FROM THE COMPETENCE ASSESSMENTS

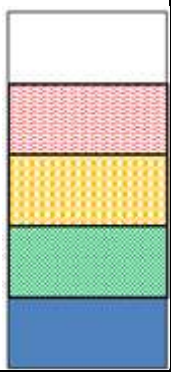
4.5.1 GENERAL ASSESSMENTS OF COMPETENCE BY MANAGERS OF PERSONNEL IN THEIR ORGANISATIONS (GENERAL QUESTIONNAIRE)

These assessments were conducted by one person for each protected area/institution and are therefore based on the opinion and judgment of that person of the average, overall levels of competence in their organisation.

Each set of assessments is summarised in three graphics.

Graphic A shows the proportions of self-assessments for each skills category, according to the numerical scale described in the previous section (see Table 3). Colour coding is used to aid understanding of the results (see Table 9). These graphics exclude assessments of '0' (not relevant), and therefore only represent proportion of responses which considered the skills category to be relevant. The author has found that a rapid assessment of competence can be made by considering the boundary between the two weakest categories (indicated in red and yellow) and the two strongest categories (green and blue). The yellow-green boundary therefore, provides a quick indication of comparative competence of the different categories.

Table 9 Colour coding used for competences

Rating	Definition	Colour code
0	Personnel in my organisation do not need this skill.	
1	Personnel in my organisation need this skill, but overall have little or no competence in it. Extensive training and development are required.	
2	Personnel in my organisation need this skill and overall have some competence in it. Advanced training and development are required.	
3	Personnel in my organisation need this skill and overall have good competence in it. Periodic updating only is required.	
4	I Personnel in my organisation need this skill and overall have high competence in it. They could train others to do it.	

Graphic B shows the average assessment score (1, 2, 3 or 4) of all responses where the skills category is considered relevant. The higher the average therefore, the higher the level of existing competence.

Graphic C shows Capacity Needs Index (CNI), which is intended to provide a standardised indication of the need for capacity development in the different categories. The formula for the CNI is shown in the box below.

Capacity Needs index (CNI) =

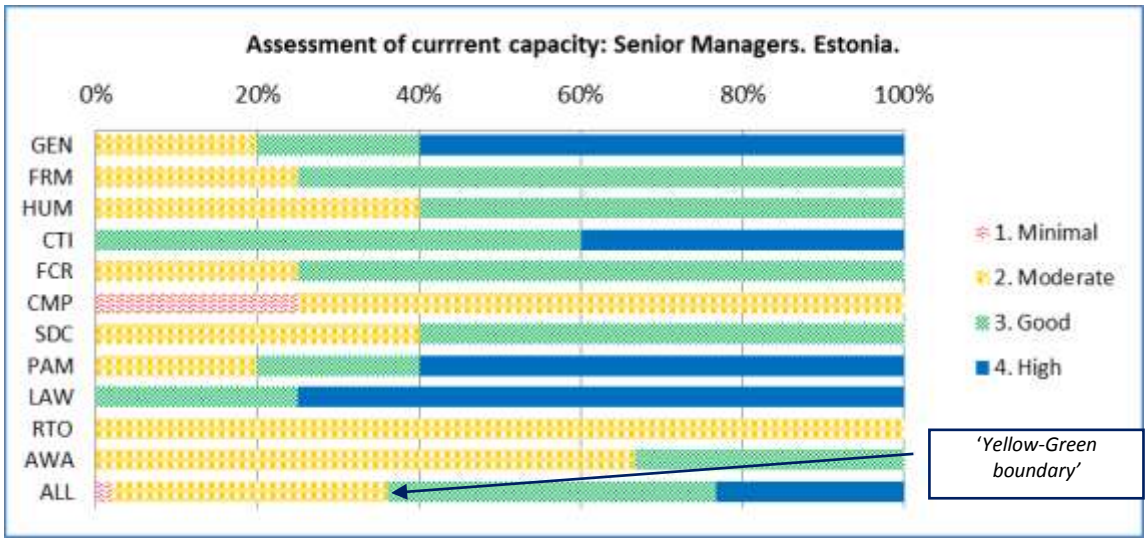
Proportion of responses that assess the skills category as relevant) * Proportion of responses that assess competence in the skills category as either 1(Little or no competence) or 2 (some competence).

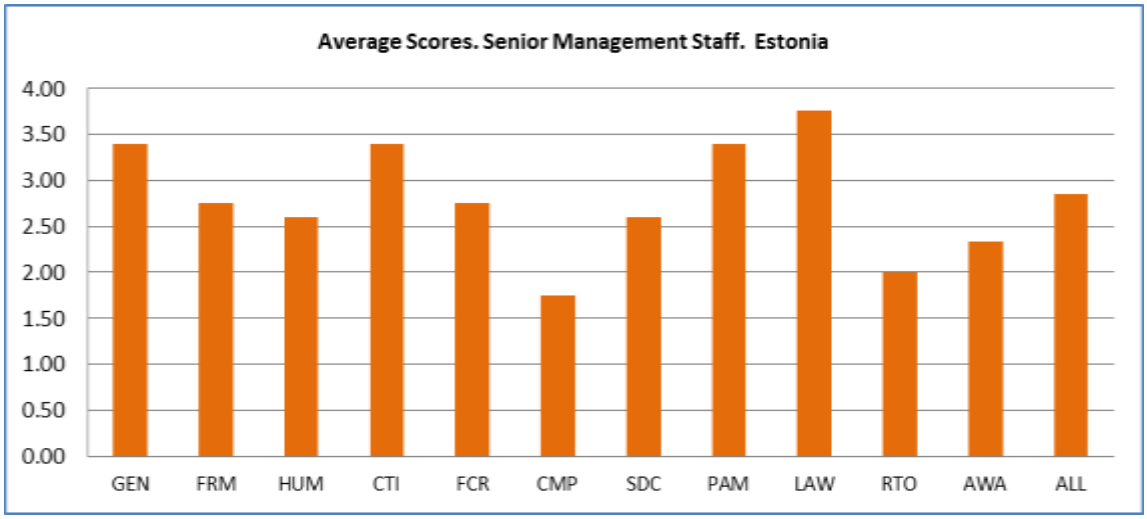
The higher the CNI, the greater the need for capacity development in that category. This formula is intended to take into account how relevant the category is, as well as how weak the overall competence is.

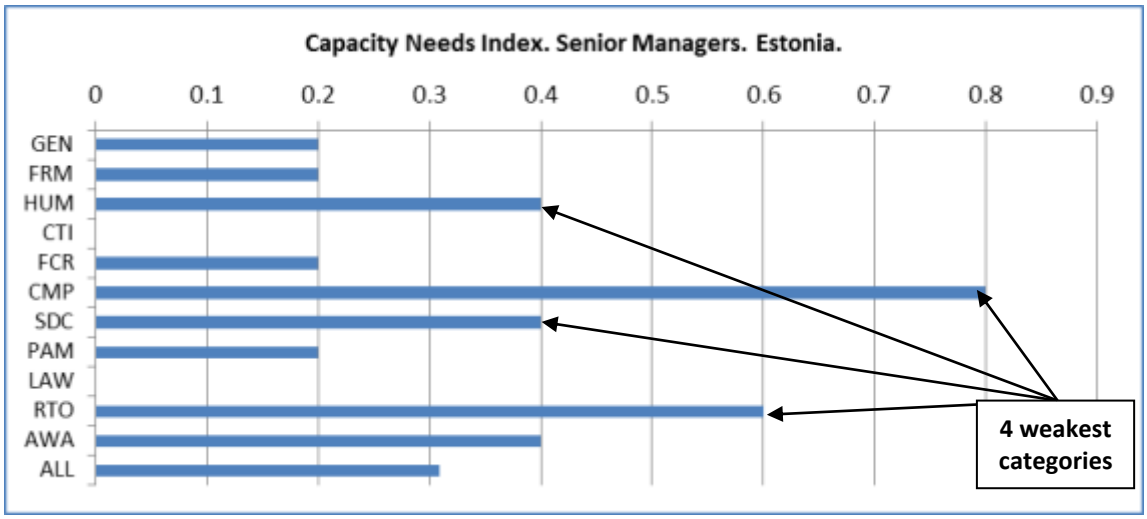
The results are shown for Senior Managers, Middle Managers and Technical Staff, and Field Staff (Rangers) only. The results for administrative and support staff are available separately, but inclusion of the results tends to distort the needs of the 'front line' PA staff. Each set of results is accompanied by brief observations. See Section 5 for more detailed assessment and discussion and Section 6 for recommendations.

When evaluating these results, it should be borne in mind that these are the results of just six assessments by senior managers.

GENERAL ASSESSMENTS OF COMPETENCE IN PROTECTED AREAS: SENIOR MANAGERS



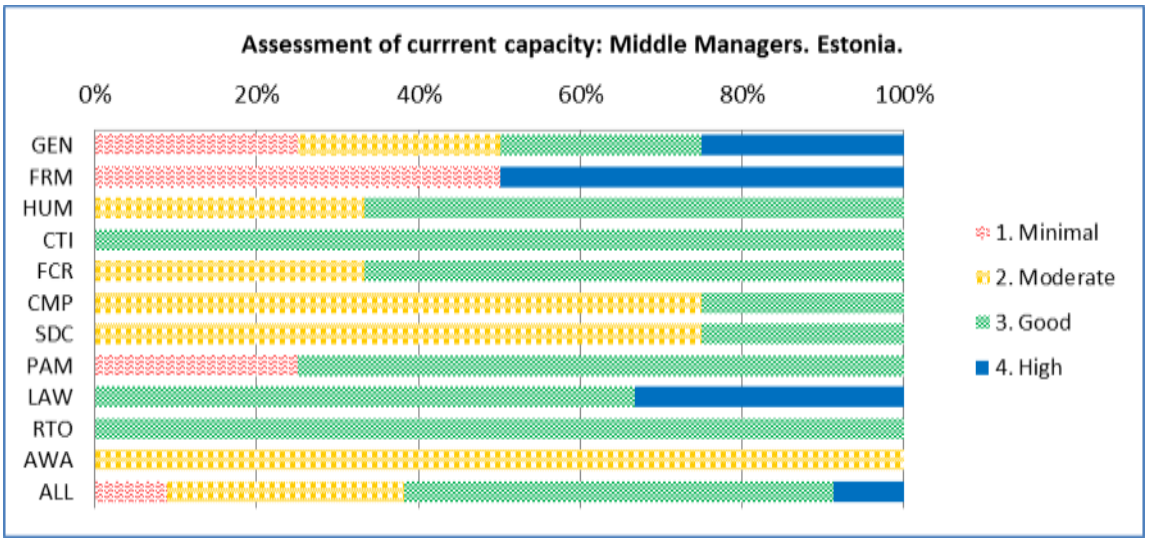


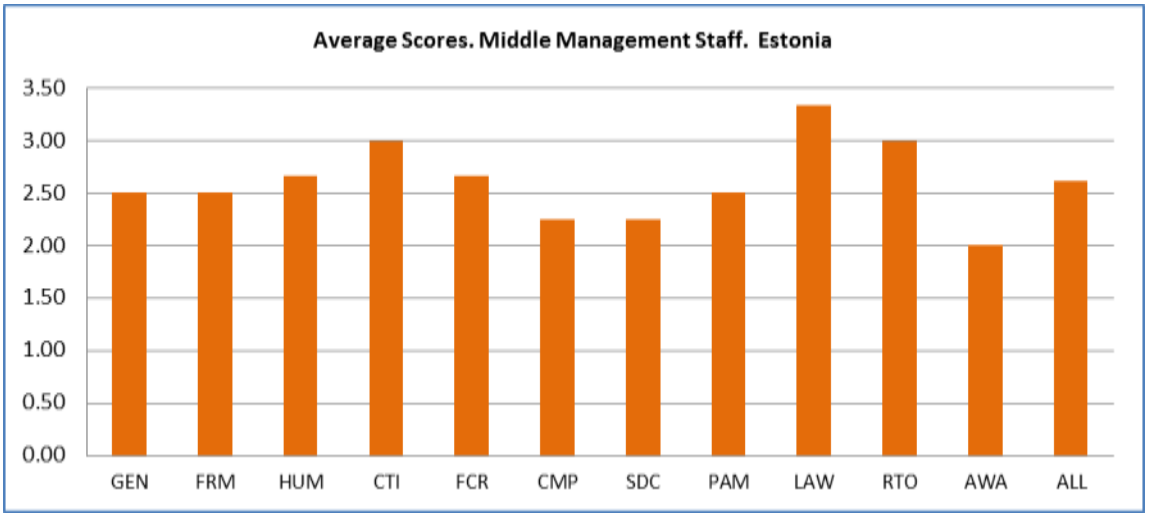


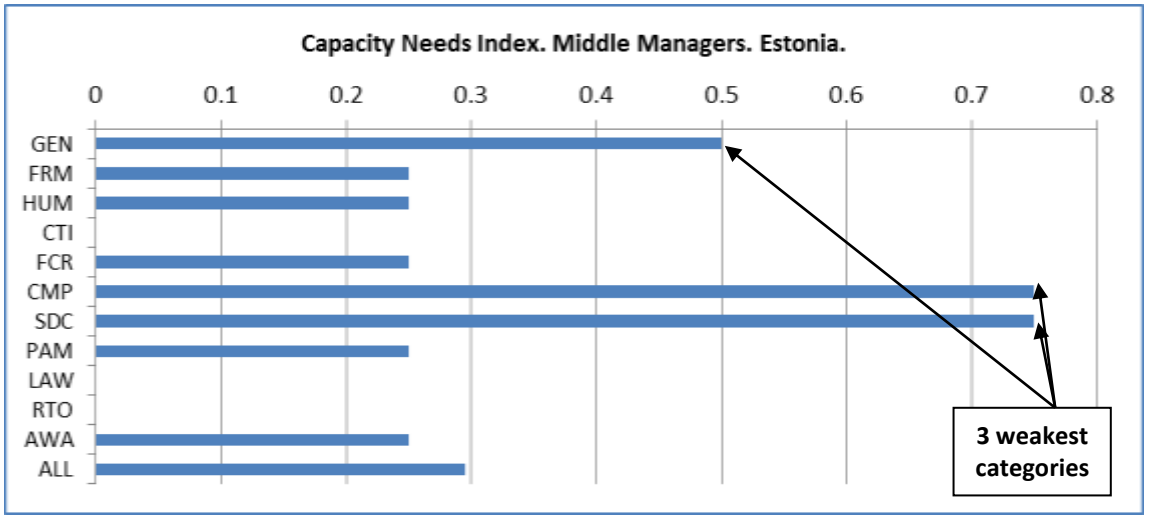
OBSERVATIONS

Overall, confidence in the competence of senior managers is quite high; 63% of the responses were in the strongest two assessment bands. However, the results for the individual categories vary widely and four categories rate as particular needs, HUM, SDC, RTO and, primarily CMP. The weakness in CMP is noteworthy as this has been the category is which most training has been provided.

GENERAL ASSESSMENTS OF COMPETENCE: MIDDLE MANAGERS







OBSERVATIONS

The overall assessment shows good levels of confidence by the assessors in the capacity of middle management and technical staff, but there are three clear priority needs: General Skills, CMP and SDC. The weakness in CMP is noteworthy as this has been the category is which most training has been provided.

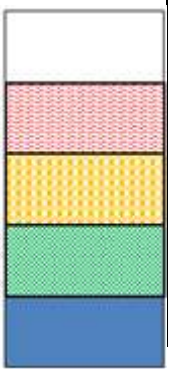
4.5.2 SELF ASSESSMENTS OF COMPETENCE BY INDIVIDUALS

Where the General Questionnaire focused on the judgement and opinion of a representative person from each protected area institution, the Self-Assessment Questionnaire records the opinions of individuals about their own competence.

Each set of assessments is summarised in three graphics.

Graphic A shows the proportions of self-assessments for each skills category, according to the numerical scale described in the previous section. Colour coding is used to aid understanding of the results. These graphics exclude assessments of '0' (not relevant), and therefore only represent proportion of responses which considered the skills category to be relevant. The author has found that a rapid assessment of competence can be made by considering the boundary between the two weakest categories (indicated in red and yellow) and the two strongest categories (green and blue). The yellow-green boundary therefore, provides a quick indication of comparative competence of the different categories.

Table 10 Colour coding used for competences

Rating	Definition	Colour code
0	I do not need this skill in my work	
1	I need this skill in my work, but I have little or no competence in it. I require extensive training and development.	
2	I need this skill in my work, and I have some competence in it. I require advanced training and development.	
3	I need this skill in my work, and I have good competence in it. I only require periodic updating.	
4	I have high competence in this skill and could train others to do it.	

Graphic B shows the average assessment score (1,2,3 or 4) of all responses where the skills category is considered relevant. The higher the average, therefore, the higher the level of existing competence.

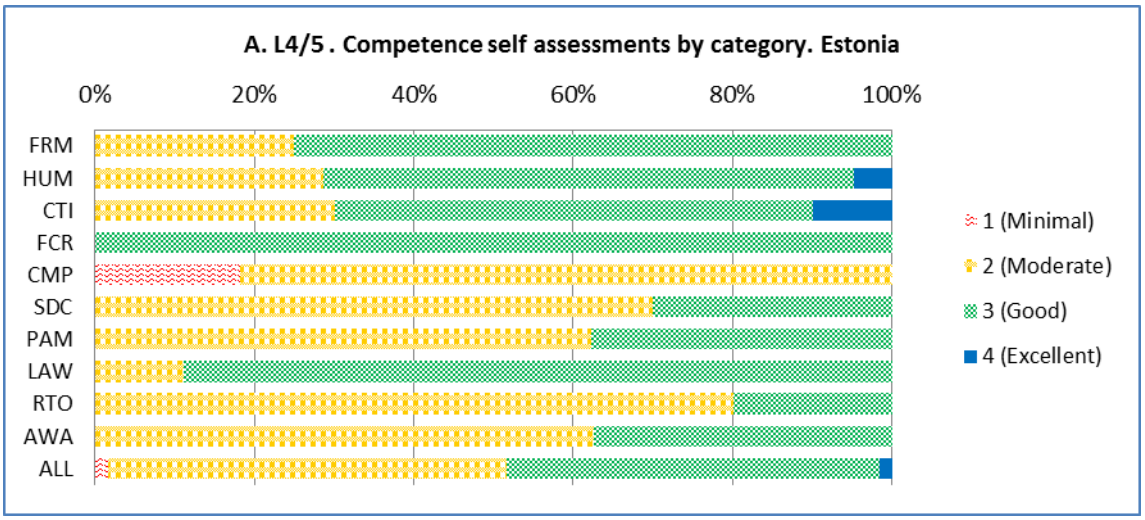
Graphic C shows Capacity Needs Index (CNI), which is intended to provide a standardised indication of the need for capacity development in the different categories. The CNI is calculated as follows:

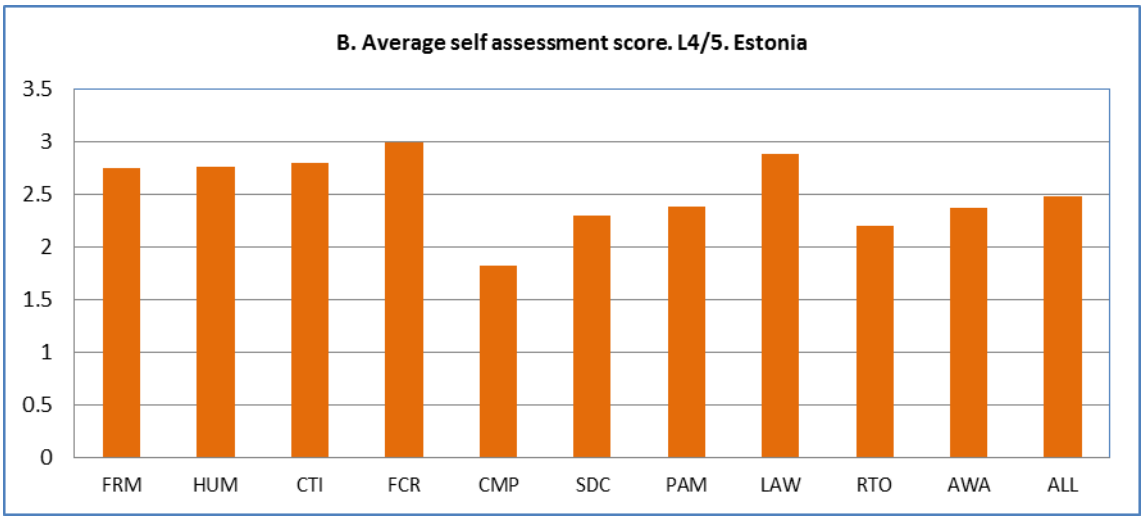
Capacity Needs index (CNI) =
(Proportion of responses that assess the skills category as relevant) * Proportion of responses that assess competence in the skills category as either 1(Little or no competence) or 2 (some competence).

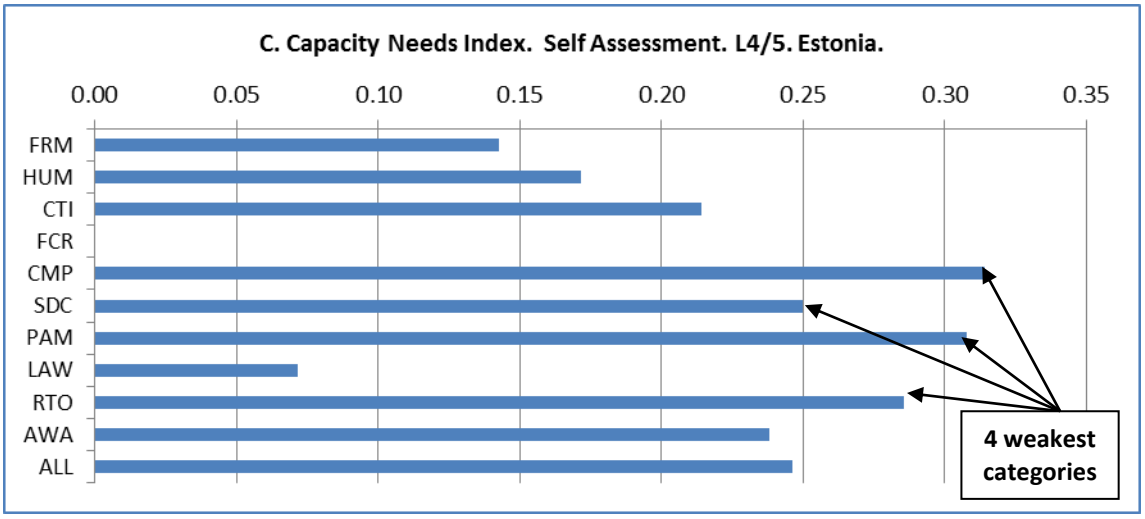
This formula is intended therefore to take into account how relevant the category is as well as how weak the overall competence is. The higher CNI therefore, the greater the need for capacity development in that category.

Each set of results is accompanied by brief observations. See Section 5 for more detailed assessment and discussion and Section 6 for recommendations.

SELF ASSESSMENTS OF COMPETENCE: LEVEL 4/5 SKILLS





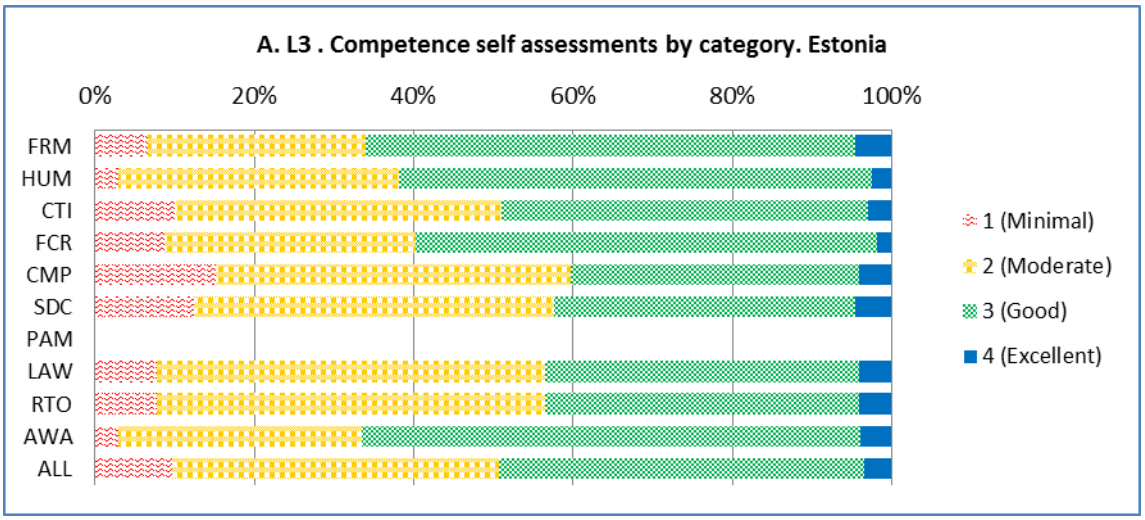


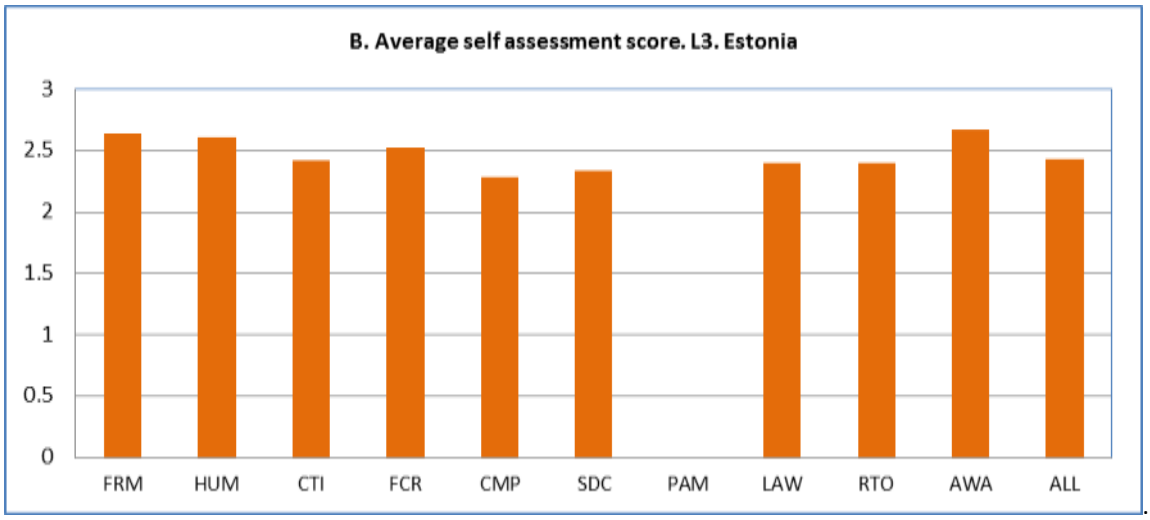
OBSERVATIONS

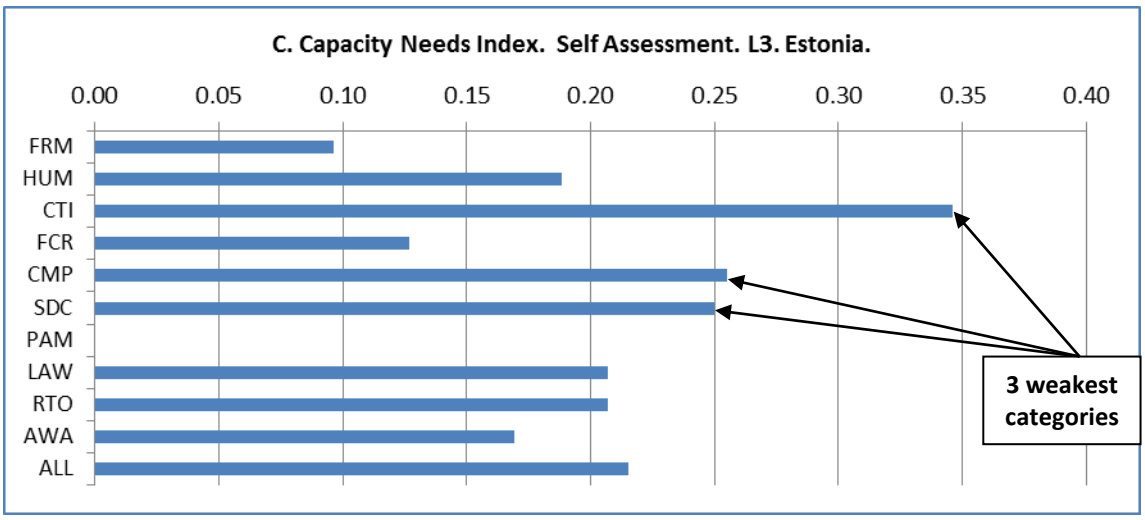
Around 50% of the self- assessments are in the two strongest score bands (3 and 4), indicating a moderate level of capacity and confidence in skills at this level. The weakest categories are PAM, RTO and CMP. The result for PAM is noteworthy, as this category is assessed as one of the strongest in the General Assessment.

It should be noted however that the relevance scores for most categories were very low compared with other countries, almost all less than 50%.

SELF ASSESSMENTS OF COMPETENCE: LEVEL 3 SKILLS





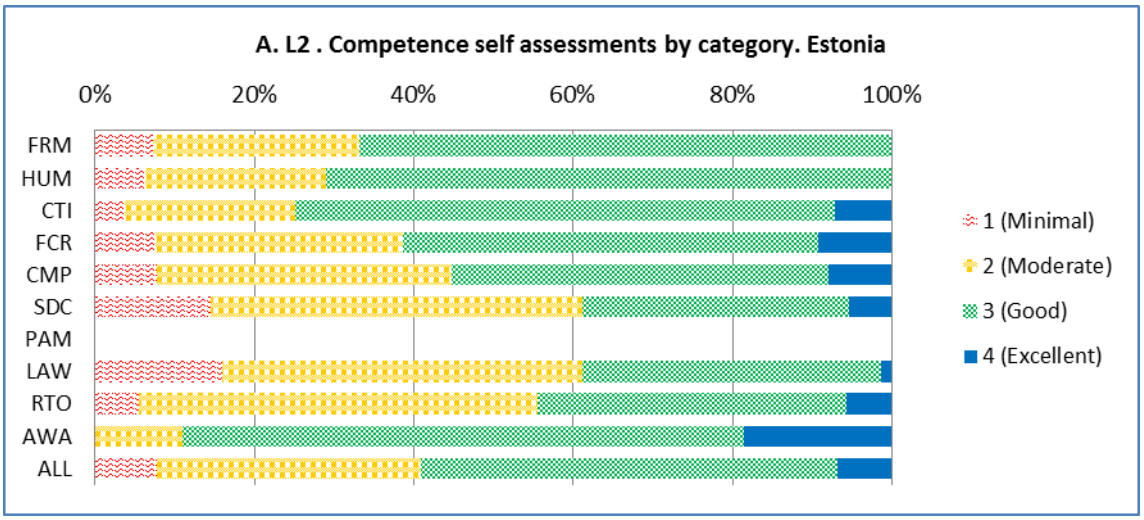


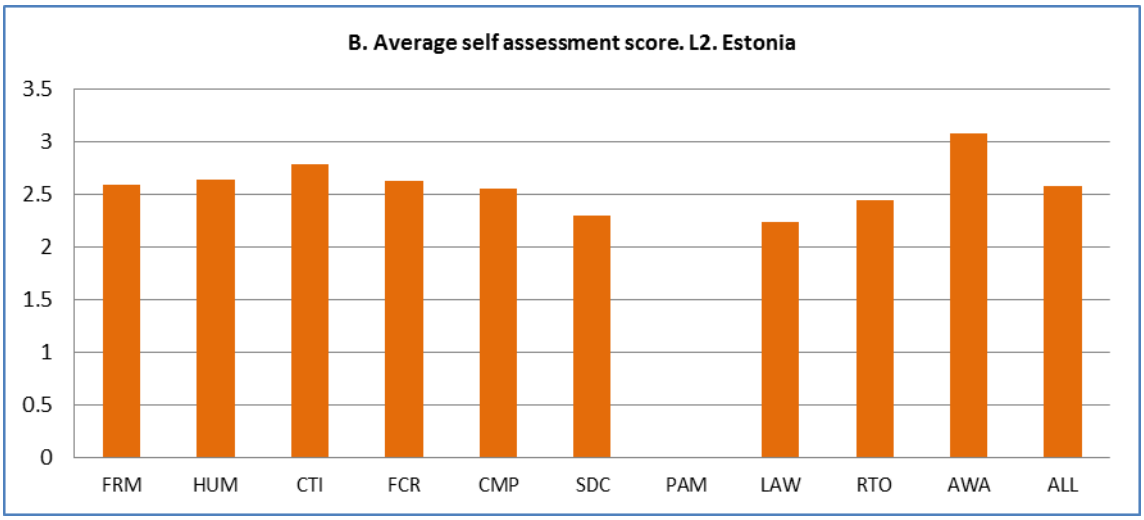
OBSERVATIONS

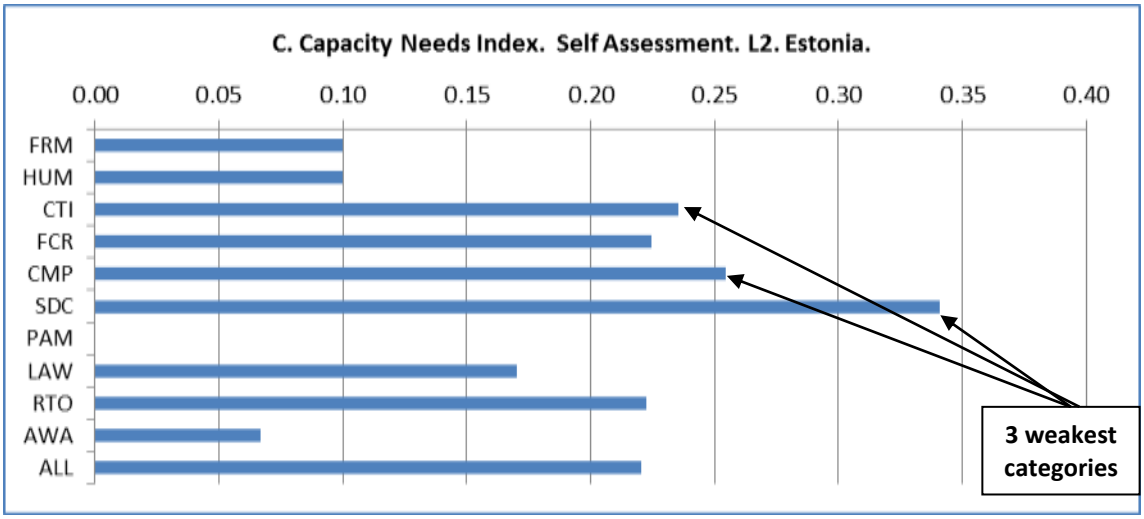
As with the senior managers, around 50% of the assessments are in the two weakest score bands (1 and 2), indicating an overall lack of capacity at this level. The weakest categories are CTI, CMP and SDC.

It should be noted however that the relevance scores for most categories were very low compared with other countries, almost all less than 50%.

SELF ASSESSMENTS OF COMPETENCE: LEVEL 2 SKILLS







OBSERVATIONS

Overall capacity is better than for Level 3 and Level 4/5. Respondents identify that their greatest needs are for capacity development in working with communities (SDC) and basic conservation (CMP).

4.5.3 RANKING OF INDIVIDUAL COMPETENCES AND PERSONAL PREFERENCES FROM THE SELF ASSESSMENT

The previous section aggregated the results according to the ten general skills categories. However, it was also possible to analyse self-assessed competence in the specific skills within each category, providing a more detailed picture of specific capacity development requirements. This information can be used to help identify the specific components of training courses and to contrast the results of self-assessments with personal preferences. The results are presented below.

RANKING OF INDIVIDUAL COMPETENCES AND PERSONAL PREFERENCES: LEVEL 4/5 SKILLS

Figure 9 Comparison of ranked capacity development priorities of senior managers according to the self-assessment (left) and ranked personal preferences for capacity development (right)

PRIORITIES BASED ON SELF-ASSESSMENTS OF COMPETENCE. GREATEST CAPACITY DEVELOPMENT NEED FIRST.			PRIORITIES BASED ON PERSONAL SELECTION OF SKILLS. MOST PREFERRED FIRST.		
CODE	**SKILL**	**CNI SCORE**	**CODE**	**SKILL**	**Prefer-ences**
CMP 4.5	Determine the value of ecological/environmental services.	0.57	CMP 4.2	Plan, manage and evaluate, scientifically based programmes for species research, conservation and monitoring (survey, monitoring, control, reintroduction, special protection measures etc.))	7
PAM 4.5	Develop protected area project plans, proposals and budgets using nationally or internationally recognised formats and processes.	0.57	CTI 4.1	Negotiate agreements and resolve disputes and conflicts.	6
PAM 5.3	Plan and negotiate trans boundary protected area and conservation initiatives.	0.57	CMP 4.1	Plan, manage and evaluate, scientifically based programmes for ecosystem and habitat research, conservation and monitoring ecosystems)	5
CMP 4.1	Plan, manage and evaluate, scientifically based programmes for ecosystem and habitat research, conservation and monitoring ecosystems)	0.43	SDC 4.2	Resolve conflicts concerning protected areas, communities and other stakeholders	5
PAM 4.3	Lead development of contingency plans for potential disasters.	0.43	PAM 4.1	Understand and interpret relevant legislation for the planning and management of protected areas	5
PAM 4.4	Plan and negotiate trans boundary protected area and conservation initiatives.	0.43	CTI 4.2	Institute mechanisms for public consultations, communication and participation over decisions, policies & plans.	3
HUM 4.3	Plan for and ensure the welfare, health and safety of staff, visitors and other users	0.29	CMP 4.5	Determine the value of ecological/environmental services.	3
HUM 4.4	Lead training and development needs analysis.	0.29	PAM 4.2	Lead the development of protected area conservation zoning systems and management plans using an appropriate national or international format and process	3
CTI 4.2	Institute mechanisms for public consultations, communication and participation over decisions, policies & plans.	0.29	AWA 4.3	Plan and manage marketing, media and public relations activities.	3
CMP 4.2	Plan, manage and evaluate, scientifically based programmes for species research, conservation and monitoring.	0.29	FRM 4.1	Develop and monitor annual financial plans and prepare financial reports	2
SDC 4.1	Develop agreements with communities for resource access and use.	0.29	FRM 4.2	Develop detailed business plans, fund raising and revenue generating schemes.	2
SDC 4.3	Identify and mobilise external sources of assistance, support and finance for local communities.	0.29	HUM 4.1	Identify staffing needs and structures, assign roles and responsibilities and set performance standards	2
SDC 4.4	Design and implement long socio economic and cultural research and monitoring programmes.	0.29	FCR 4.1	Contribute to specification and design of major infrastructure projects.	2
PAM 4.2	Lead the development of protected area conservation zoning systems and management plans using an appropriate national or international format and process	0.29	PAM 4.4	Plan and negotiate trans boundary protected area and conservation initiatives.	2
PAM 4.8	Monitor management effectiveness of the protected area using standard tools and	0.29	RTO4.1	Lead development of detailed recreation and tourism strategies and plans for the protected	2

	methods (e.g. IUCN Management Effectiveness Tracking Tool (METT))			area and local communities	
RTO 4.1	Lead development of detailed recreation and tourism strategies and plans for the protected area and local communities	0.29	AWA 4.2	Research and plan interpretive/tourist/visitor centres and other major infrastructure	2
RTO 4.2	Develop business and financial plans and forecasts for tourism and recreation in the protected area	0.29	HUM 4.4	Lead training and development needs analysis.	1
RTO 4.3	Establish safety standards and codes of conduct for protected area users.	0.29	CMP 4.3	Plan, manage and evaluate ex-situ animal conservation and breeding projects (rescue centres, captive breeding etc.)	1
AWA 4.2	Research and plan interpretive/tourist/visitor centres and other major infrastructure	0.29	CMP 4.4	Plan, manage and evaluate ex-situ plant conservation and breeding projects (botanic gardens, plant breeding for reintroduction etc.)	1
AWA 4.3	Plan and manage marketing, media and public relations activities.	0.29	SDC 4.3	Identify and mobilise external sources of assistance, support and finance for local communities.	1
PAM 5.1	Direct and evaluate policy and strategy development for biodiversity conservation and protected area management.	0.29	SDC 4.4	Design and implement long socio economic and cultural research and monitoring programmes.	1
PAM 5.4	Direct the process of protected area boundary formalisation, rationalisation, gazettement.	0.29	PAM 4.5	Develop protected area project plans, proposals and budgets using nationally or internationally recognised formats and processes.	1
PAM 5.5	Contribute to updating of policies and legislation related to protected areas and biodiversity conservation	0.29	PAM 4.6	Develop and negotiate collaborative partnerships, plans and programmes	1
FRM 4.1	Develop and monitor annual financial plans and prepare financial reports	0.14	PAM 4.7	Direct, review and evaluate implementation of special projects (with national or international funding)	1
FRM 4.2	Develop detailed business plans, fund raising and revenue generating schemes.	0.14	RTO 4.2	Develop business and financial plans and forecasts for tourism and recreation in the protected area	1
HUM 4.1	Identify staffing needs and structures, assign roles and responsibilities and set performance standards	0.14	AWA 4.1	Lead the development of interpretation, awareness and education strategies and action plans and evaluate their impacts	1
HUM 4.5	Plan, design, supervise and evaluate staff training and capacity development programmes	0.14		ALL OTHER SKILLS	0
CTI 4.1	Negotiate agreements and resolve disputes and conflicts.	0.14			
CMP 4.3	Plan, manage and evaluate ex-situ animal conservation and breeding projects (rescue centres, captive breeding etc.)	0.14			
CMP 4.4	Plan, manage and evaluate ex-situ plant conservation and breeding projects (botanic gardens, plant breeding for reintroduction etc.)	0.14			
SDC 4.2	Resolve conflicts concerning protected areas, communities and other stakeholders (Disputes, complaints over settlements, resource use, land claims, decisions. Disputes between different stakeholder groups)	0.14			
PAM 4.1	Understand and interpret relevant legislation for the planning and management of protected areas	0.14			
PAM 4.6	Develop and negotiate collaborative partnerships, plans and programmes	0.14			
PAM 4.7	Direct, review and evaluate implementation of special projects (with national or international funding)	0.14			
LAW 4.1	Identify legal requirements and instruments for improving or extending protection and contribute to the development of protected area regulations.	0.14			
AWA	Lead the development of interpretation,	0.14			

4.1	awareness and education strategies and action plans and evaluate their impacts				
PAM 5.2	Direct the design of protected areas, networks, systems and strategies.	0.14			
HUM 4.2	Manage staff recruitment and contracting.	0.00			
FCR 4.1	Contribute to specification and design of major infrastructure projects.	0.00			
LAW 4.2	Coordinate protected area law enforcement activities with law enforcement and regulating agencies	0.00			

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RANKING OF INDIVIDUAL COMPETENCES AND PERSONAL PREFERENCES: LEVEL 3 (100 MIDDLE MANAGERS AND TECHNICAL SPECIALISTS)

Figure 10 Comparison of ranked capacity development priorities of middle managers according to the self-assessment (left) and ranked personal preferences for capacity development (right)

PRIORITIES BASED ON SELF-ASSESSMENTS OF COMPETENCE. GREATEST CAPACITY DEVELOPMENT NEED FIRST.			**PRIORITIES BASED ON PERSONAL SELECTION OF SKILLS. MOST PREFERRED FIRST.**		
CODE	**SKILL**	**CNI SCORE**	**CODE**	**SKILL**	**Number of pre-ferences**
CTI 3.4	Operate GIS systems	0.42	CTI 3.4	Operate GIS systems	7
CTI 3.5	Manage library, archives and other information resources.	0.40	CMP 3.1	Specify management requirements for conservation of habitats and ecosystems	7
CTI 3.3	Operate and maintain computers for advanced functions	0.37	CMP 3.7	Analyse, and present interpret survey and monitoring data.	6
CMP 3.7	Analyse, and present interpret survey and monitoring data.	0.35	HUM 3.1	Brief, supervise, motivate and evaluate performance of individuals and teams.	5
CMP 3.4	Plan evaluate and supervise management of invasive and problem animals and human wildlife conflict.	0.33	CMP 3.2	Specify, and evaluate sustainable quotas for natural resource use using scientific methods	4
CMP 3.6	Lead specialised, scientifically based, taxonomic, habitat and ecosystem surveys and monitoring	0.31	SDC 3.5	Promote development of local networks and organizations.	4
SDC 3.5	Promote development of local networks and organizations.	0.31	HUM 3.3	Determine causes of poor performance and workplace conflicts and take appropriate action	3
SDC 3.6	Provide advice on sustainable community based natural resource use and management.	0.31	SDC 3.3	Develop and negotiate participatory community conservation and management agreements.	3
LAW 3.3	Liaise with local communities to resist and prevent illegal activities.	0.29	RTO 3.3	Identify potential recreation impacts and design impact monitoring and mitigation systems.	3
RTO 3.3	Identify potential recreation impacts and design impact monitoring and mitigation systems.	0.29	CTI 3.2	Give technical presentations and write technical reports/papers.	2
HUM 3.3	Determine causes of poor performance and workplace conflicts and take appropriate action	0.29	CTI 3.3	Operate and maintain computers for advanced functions	2
CTI 3.1	Organize and chair formal meetings.	0.29	CMP 3.3	Specify site based special measures for assisting protection, survival or recovery of key species.	2
SDC 3.4	Plan, coordinate and facilitate community capacity development activities.	0.29	CMP 3.4	Plan evaluate and supervise management of invasive and problem animals and human wildlife conflict.	2
AWA 3.5	Provide information for the media	0.29	SDC 3.1	Plan and conduct scientifically based social and economic surveys (populations, communities, social conditions, livelihoods, resource use, culture etc.)	2
CMP 3.5	Plan and supervise animal capture, transport, care and management.	0.27	AWA 3.4	Deliver formal and informal interpretive/ awareness/ educational presentations	2

				for visitors, local people and educational groups	
CMP 3.2	Specify, and evaluate sustainable quotas for natural resource use using scientific methods	0.25	AWA 3.5	Provide information for the media	2
CTI 3.2	Give technical presentations and write technical reports/papers.	0.25	FRM 3.1	Prepare budgets and keep books and accounts	1
CMP 3.3	Specify site based special measures for assisting protection, survival or recovery of key species.	0.23	HUM 3.2	Prepare detailed work plans for staff and direct, monitor and report on work plan implementation	1
SDC 3.2	Plan and conduct scientifically based historical and archaeological assessments (site history, historical and archaeological sites, historic and cultural landscapes etc.)	0.21	CMP 3.5	Plan and supervise animal capture, transport, care and management.	1
SDC 3.3	Develop and negotiate participatory community conservation and management agreements.	0.21	CMP 3.6	Lead specialised, scientifically based, taxonomic, habitat and ecosystem surveys and monitoring	1
LAW 3.4	Follow correct procedure for dealing with violations, suspects, crime scenes and seized or confiscated evidence.	0.19	CMP 3.8	Curate collections and manage museums	1
RTO 3.1	Identify recreation opportunities and design appropriate recreation activities for a protected area.	0.19	SDC 3.6	Provide advice on sustainable community based natural resource use and management.	1
RTO 3.4	Supervise safety and security of visitors and other users.	0.19	LAW 3.3	Liaise with local communities to resist and prevent illegal activities.	1
FCR 3.5	Inspect and specify maintenance and repair requirements and schedules.	0.18	RTO 3.1	Identify recreation opportunities and design appropriate recreation activities for a protected area.	1
HUM 3.2	Prepare detailed work plans for staff and direct, monitor and report on work plan implementation	0.17	AWA 3.1	Plan and design awareness and education activities and events for visitors, educational groups and local people	1
HUM 3.5	Plan, prepare and deliver formal lectures and presentations	0.17	AWA 3.2	Research, plan, and design awareness and educational publications, exhibits and signs	1
SDC 3.1	Plan and conduct scientifically based social and economic surveys	0.17	AWA 3.3	Research, plan and design special education programmes for schools.	1
CMP 3.1	Specify management requirements for conservation of habitats and ecosystems	0.17		ALL OTHER SKILLS	0
HUM 3.1	Brief, supervise, motivate and evaluate performance of individuals and teams.	0.15			
HUM 3.4	Plan, prepare and deliver formal vocational and skills training for staff	0.15			
AWA 3.4	Deliver formal and informal interpretive/ awareness/ educational presentations for visitors, local people and educational groups	0.15			
RTO 3.2	Plan and implement recreation surveys to gather information about visitors and the use of the site	0.15			
AWA 3.1	Plan and design awareness and education activities and events for visitors, educational groups and local people	0.15			
AWA 3.2	Research, plan, and design awareness and educational publications, exhibits and signs	0.13			
FCR3. 2	Organise and lead search and rescue operations in the field.	0.13			
FCR3. 4	Draw up plans and specifications for small works and basic site infrastructure and supervise construction work	0.13			
FCR3. 6	Locate, mark and inspect boundaries in the field.	0.13			
CMP 3.8	Curate collections and manage museums	0.13			
FRM 3.3	Manage official documentation and reporting on finances, assets, equipment, infrastructure etc.	0.12			

FCR3.7	Identify and assess fire risks and hazards and plan fire prevention and control.	0.12			
LAW 3.2	Lead patrol and law enforcement activities in the field.	0.12			
AWA 3.3	Research, plan and design special education programmes for schools.	0.12			
FRM 3.1	Prepare budgets and keep books and accounts	0.10			
FCR3.1	Plan and organise logistics for field trips, surveys and patrols.	0.10			
FCR3.3	Operate and use base station radio and communication equipment.	0.10			
LAW 3.1	Plan law enforcement activities and programmes.	0.10			
FRM 3.2	Manage purchasing and inventory.	0.08			

RANKING OF INDIVIDUAL COMPETENCES AND PERSONAL PREFERENCES: LEVEL 2 (35 RANGERS AND FIELD STAFF)

Figure 11 Comparison of ranked capacity development priorities of middle managers according to the self-assessment (left) and ranked personal preferences for capacity development (right)

PRIORITIES BASED ON SELF-ASSESSMENTS OF COMPETENCE. GREATEST CAPACITY DEVELOPMENT NEED FIRST.			**PRIORITIES BASED ON PERSONAL SELECTION OF SKILLS. MOST PREFERRED FIRST.**		
CODE	**SKILL**	**CNI SCORE**	**CODE**	**SKILL**	**Number of pre-ferences**
CTI 2.3	Communicate in other languages and/or dialects.	0.58	CTI 2.3	Communicate in other languages and/or dialects.	18
FCR 2.4	Identify, prevent and/or provide primary treatment in the field for illness, diseases and bites (First Aid in the workplace)	0.40	CMP 2.1	Recognise common and typical vegetation and habitat types, plant and animal species and their signs	17
SDC 2.3	Monitor compliance by local communities with agreements and laws affecting them and the protected area.	0.40	CMP 2.2	Accurately record and report wildlife observations using standard forms	6
CMP 2.1	Recognise common and typical vegetation and habitat types, plant and animal species and their signs	0.38	FCR 2.6	Use GPS for Georeferencing locations and for navigation and orientation.	5
SDC 2.2	Provide basic information, guidance and assistance for community-based conservation and sustainable use.	0.31	CMP 2.3	Conduct supervised surveys of wildlife, habitats, natural resources and physical landscape features	5
FCR 2.5	Use compass and chart or map for navigation and orientation.	0.31	CMP 2.6	Conduct practical habitat creation, restoration, management and manipulation work	5
CMP 2.9	Care for captive animals	0.31	FCR 2.5	Use compass and chart or map for navigation and orientation.	4
SDC 2.1	Under supervision, gather and record information about communities and livelihoods and provide basic reports to supervisors	0.31	HUM 2.1	Supervise and motivate work teams under direct supervision	3
FCR 2.3	Fight fires.	0.31	CTI 2.1	Make basic oral presentations to colleagues, local people and visitors	3
LAW 2.5	Deal effectively with hostile situations and defend oneself against physical attack.	0.29	CTI 2.4	Operate and maintain computer for basic functions (word processing, internet, email)	3
CTI 2.5	Operate office and audio visual equipment	0.27	SDC 2.3	Monitor compliance by local communities with agreements and laws affecting them and the protected area.	3
FCR 2.6	Use GPS for Georeferencing locations and for navigation and orientation.	0.27	FCR 2.4	Identify, prevent and/or provide primary treatment in the field for illness, diseases and bites (First Aid in the workplace)	2
CMP 2.7	Assist in the capture / immobilisation, handling and transportation of animals.	0.27	FCR 2.9	Safely operate and maintain small boats and their engines	2
RTO 2.2	Respond to emergencies and accidents to visitors.	0.27	CMP 2.4	Use identification aids to identify plants and animals.	2

LAW 2.1	Recognise and identify signs and evidence of illegal or restricted activities in the field.	0.24	LAW 2.2	Conduct enforcement activities legally and safely	2
CMP 2.5	Use and care for basic scientific instruments used in surveying	0.24	AWA 2.1	Provide basic information about the protected area to visitors, community members and the public.	2
CMP 2.6	Conduct practical habitat creation, restoration, management and manipulation work	0.24	HUM 2.2	Provide training and instruction in the workplace for supervised staff	1
CMP 2.8	Check and replenish feeding stations for wild animals.	0.24	CTI 2.5	Operate office and audio visual equipment	1
LAW 2.2	Conduct enforcement activities legally and safely	0.22	FCR 2.3	Fight fires.	1
FCR 2.9	Safely operate and maintain small boats and their engines	0.22	CMP 2.5	Use and care for basic scientific instruments used in surveying	1
CMP 2.2	Accurately record and report wildlife observations using standard forms (where available)	0.22	SDC 2.1	Under supervision, gather and record information about communities and livelihoods and provide basic reports to supervisors	1
CMP 2.3	Conduct supervised surveys of wildlife, habitats, natural resources and physical landscape features (under guidance of specialists)	0.22	SDC 2.2	Provide basic information, guidance and assistance for community-based conservation and sustainable use.	1
FCR 2.2	Follow good safety and environmental practice in the field.	0.20	LAW 2.1	Recognise and identify signs and evidence of illegal or restricted activities in the field.	1
RTO 2.1	Guide, assist and regulate visitors on site.	0.18	LAW 2.5	Deal effectively with hostile situations and defend oneself against physical attack.	1
CTI 2.4	Operate and maintain computer for basic functions (word processing, internet, email)	0.16	RTO 2.1	Guide, assist and regulate visitors on site.	1
FCR 2.8	Drive and provide basic maintenance for motor vehicles and small engines	0.16		ALL OTHER SKILLS	0
CMP 2.4	Use identification aids to identify plants and animals.	0.16			
LAW 2.4	Report correctly on law enforcement activities	0.16			
CTI 2.1	Make basic oral presentations to colleagues, local people and visitors	0.13			
FCR 2.7	Construct and repair outdoor structures, paths and trails.	0.13			
FCR 2.10	Use and maintain radio handset for field communication.	0.13			
FRM 2.1	Collect and present evidence of expenditure and other financial transactions	0.11			
HUM 2.1	Supervise and motivate work teams under direct supervision	0.11			
FCR 2.1	Care for, check and maintain basic field equipment.	0.11			
FRM 2.2	Manage stores of equipment and supplies.	0.09			
HUM 2.2	Provide training and instruction in the workplace for supervised staff	0.09			
LAW 2.3	Treat suspects and members of the public correctly and legally during patrol and enforcement activities.	0.09			
AWA 2.1	Provide basic information about the protected area to visitors, community members & the public.	0.07			
CTI 2.2	Prepare written reports of work activities using standard formats	0.04			
LAW 2.6	Care for and use firearms correctly and safely (if relevant)	0.02			

4.5.4 OVERALL RANKED NEEDS

Figure 12 shows the overall ranked priorities for capacity development in the ten competence categories for Estonia. The top two needs are consistent across all three levels, the third highest need is REC and Levels 3 and 4/5 and LAW at Level 2.

Figure 12 Ranked country capacity development needs. Estonia

Country capacity development needs ranked by category and level 1 = Highest need 10 = Lowest need. Top 4 priorities highlighted				
		LEVEL 4/5	LEVEL 3	LEVEL 2
FRM	FINANCIAL & RESOURCES MANAGEMENT	**8**	**9**	**8**
HUM	HUMAN RESOURCES MANAGEMENT & DEVELOPMENT	**7**	**6**	**7**
CTI	COMMUNICATION TECHNOLOGY AND INFORMATION	**6**	**1**	**3**
FCR	FIELD CRAFT AND PRACTICAL SKILLS	**10**	**8**	**4**
CMP	CONSERVATION ASSESSMENT PLANNING & MANAGEMENT	**1**	**2**	**2**
SDC	SUSTAINABLE DEVELOPMENT & COMMUNITIES	**4**	**3**	**1**
PAM	PROTECTED AREA POLICY, PLANNING AND PROJECTS	**2**		
LAW	LAW ENFORCEMENT	**9**	**4**	**6**
RTO	RECREATION AND TOURISM	**3**	**4**	**5**
AWA	AWARENESS, EDUCATION AND PUBLIC RELATIONS	**5**	**7**	**9**

5 SUMMARY CONCLUSIONS

The following sections discuss the conclusions from the results of the two questionnaires for Estonia. See the General Report for discussion of the entire regional survey, for comparisons between countries and for an assessment of the limitations and possible inaccuracies in the survey.

5.1 OVERALL CONCLUSION

This survey is not as comprehensive or as representative as it could have been. From Keskkonnaamet, just over 10% of staff completed self-assessments, and Laheema and Karula National Parks declined the opportunity to participate. RMK (The State Forest Management Centre), which is in charge of the management of tourism inside PAs declined to participate in the surveys.

Based on the results from the questionnaires that were completed, personnel in Estonia's protected area system have quite good individual capacity, are well educated and have a good range of experience. The need for training is formally recognised by the existence of central budgets for staff development and the provision of a range of opportunities for training. There is a need to build on this foundation by institutionalising capacity development for PA personnel in order to improve performance and to establish a clearer professional standard and profile for the sector.

5.2 STAFFING OF PROTECTED AREAS IN ESTONIA

As previously mentioned, this survey only covers a sample of the staff of Keskkonnaamet, not all individuals and organisations with responsibility for protected areas. In general, the following conclusions can be made.

- Estonia (36% male/64% female) has an unusual gender balance compared to the rest of the region (average: 66% male/34% female). It would be useful to find out the reasons for this.
- The personnel surveyed are very well educated; almost all have a university education. This indicates good potential for improvement in capacity, and for development of internal training programs, making use of the high educational level of many staff.
- The workforce has quite a good balance of ages and experience. This is encouraging from the perspective of developing capacity and passing on skills, and suggests that many staff stay in protected area work for a long time.

5.3 TRAINING

- Availability of training is quite good, but appears to be very patchy. Whereas some staff have benefited from more than 10 days' training per year, others have had little or none. The overall average of around 1 person day per year is much less than the 5-10 days considered as required in the general assessment.
- Keskkonnaamet has an annual budget for training. The focus of training delivered to date has been quite broad, covering all the listed skills categories. The largest amount of training has been in conservation skills (CMP).
- Training in Estonia is delivered by a range of providers, with an encouraging amount of internal training.
- The preferred modes of capacity development are learning visits, workplace learning and short courses.

5.4 THE COMPETENCE ASSESSMENTS

The following sections discuss each of the competence categories, taking into account the results of both the General Questionnaire and the Self-Assessment Questionnaire.

5.4.1 MANAGEMENT OF FINANCE AND PHYSICAL RESOURCES (FRM)

This category is not seen as a major priority in either questionnaire, and no single skill is prioritised in the self-assessments. This result is unusual for the region, as in most countries skills associated with financing and fund raising are high priorities.

CONCLUSIONS

- Based on the results of the survey, this category is not a major priority for capacity development.

5.4.2 MANAGEMENT OF HUMAN RESOURCES (HUM)

This category is not seen as a major priority in either questionnaire, and no single skill is prioritised in the self-assessments.

CONCLUSIONS

- Based on the results of the survey, this category is not a major priority for capacity development.

5.4.3 COMMUNICATION, TECHNOLOGY AND INFORMATION (CTI)

Results from this category require careful scrutiny, because the skills within it mix personal communication skills with skills associated with using information technology. With the benefit of hindsight, it would have been better to split this into two separate categories.

This category rates most highly as a need at Level 3 where the top three capacity needs are

CTI 3.4 Operate GIS systems

CTI 3.5 Manage library, archives and other information resources.

CTI 3.3 Operate and maintain computers for advanced functions

Although a clear priority, this result should be treated with caution. In the experience of the lead author, much of the investment in training and equipment for computing and GIS (normally through internationally funded projects) brings little long-term benefit. Highly trained individuals tend to leave (for better paid work in the private sector), equipment is not maintained or replaced, and parent protected area agencies have not developed an' IT culture' to institutionalise what has been taught/learned.

At Level 2, foreign language skills are the top ranked need in the self-assessments and the personal preferences.

CONCLUSIONS

- Investment should only be made in GIS and IT training where there is a high likelihood of sustainability and where the protected area institution has adopted an IT culture.
- Many staff would like to have English language training.

5.4.4 FIELD CRAFT (FCR)

This is quite a strong category across all the questionnaires and levels. However, one skill does emerge as a very high priority:

FCR 2.4 Identify, prevent and/or provide primary treatment in the field for illness, diseases and bites (First Aid in the workplace).

CONCLUSIONS

- All protected areas staff should have at least basic training in first aid, safety and security.

5.4.5 CONSERVATION PLANNING, ASSESSMENT AND MANAGEMENT (CMP)

Although this category has been the subject of the most training, it is consistently among the weakest in the assessments, and is identified as the most important priority for future training my senior managers. There could be a number of possible explanations for this.

- The training curriculum and content may not have been relevant. A common issue encountered in the region is that the training that has taken place may have focused on research-oriented biological training, rather than management oriented conservation training.
- The quality of the training may not have been adequate.
- The training may have been attended by the wrong people
- There may be a high staff turnover, leading to a continuous need for training of new entrants.

CONCLUSIONS

- The fact that this category is a priority need, even when it has been the subject of a lot of training, requires further investigation. It may be necessary to determine more precisely what skills are required.
- Training for PA staff in biodiversity conservation should focus on management oriented skills rather than academic studies. The focus should be on developing, applying and monitoring the impact of specific measures designed to achieve the defined conservation goals of protected areas.
- Many senior PA staff would like training in the specific skills related to valuation of ecosystem services.

5.4.6 SUSTAINABLE DEVELOPMENT & COMMUNITIES (SDC)

In the self-assessment, this category was one of the higher capacity development needs for Level 4/5 staff, and particularly for Level 3 staff, who recognise the importance of skills for working with local communities. These results are very similar to those for most other countries in the region.

CONCLUSIONS

- There is a national need for training in working with communities and local stakeholders, and this should be a priority topic in future initiatives.

5.4.7 PROTECTED AREA POLICY, PLANNING AND PROJECTS (PAM)

This category is assessed at Level 4/5 only and is identified as a high-ranking need for senior managers.

Three skills are particularly weak

PAM 4.5 Develop protected area project plans, proposals and budgets using nationally or internationally recognised formats and processes.

PAM 4.6 Develop and negotiate collaborative partnerships, plans and programmes

PAM 4.4 Plan and negotiate trans-boundary protected area and conservation initiatives.

CONCLUSIONS

- This category should be a priority for training of senior and possibly middle managers.
- To be effective, individual capacity building in this topic must take place in parallel with institutional capacity building for improved management and governance of protected area systems and individual sites.

5.4.8 LAW ENFORCEMENT (LAW)

Overall capacity in this category is quite good, but there are some weaknesses at Level 3, specifically:

LAW 3.3 Liaise with local communities to resist and prevent illegal activities.

At Level 4, the following skill was also prioritised.

LAW 4.2 Coordinate protected area law enforcement activities with law enforcement and regulating agencies.

There is likely to be a need for continuous capacity development in this category for the following reasons.

1. Pressures and threats on protected areas and, natural resources are increasing and therefore there is a greater need for law enforcement activities.
2. Laws, regulations, norms and standard operating procedures may change, leading to a requirement for refresher courses for existing staff.

CONCLUSIONS

- Middle managers and all site/field based staff require capacity development in skills related to law enforcement and compliance. This training should include a strong focus on ‘soft’ law enforcement approaches such as working with communities to reduce wildlife crime.

5.4.9 RECREATION AND TOURISM (RTO)

This category is a fairly high priority for senior and middle managers and for technical staff. At Level 3, the main need is related to monitoring and reducing the impacts of recreation and tourism. At Level 4, most aspects of planning of tourism are rated quite highly.

CONCLUSIONS

- Senior managers require training in identifying tourism and recreation opportunities and developing suitable programmes, along with viable business plans.
- Training for middle managers and technical staff should focus on the day-to-day management of tourism, and in particular on impact monitoring and reduction and on visitor management.

5.4.10 AWARENESS, EDUCATION AND PUBLIC RELATIONS (AWA)

This is in general a low to mid ranking need with no major skills requirements, apart from possible for media skills..

CONCLUSIONS

- Training in awareness is probably not required as a separate category, but should be integrated into training in tourism and recreation and in working with local stakeholders.
- Some staff may benefit from media training

6 RECOMMENDATIONS

6.1 OVERALL RECOMMENDATIONS

These overall recommendations are mainly with concerned with developing an internal, sustainable and affordable programme of capacity development for PA personnel, without reliance on external funding and providing learning opportunities for staff that less expensive, but just as effective as formal courses.

1. ESTABLISH A FORMAL STAFF DEVELOPMENT POLICY AND PROGRAMME IN KESKKONNAAMET

This would contribute greatly to improving staff capacity and to professionalizing protected area management in Estonia. The following measures are recommended

1.1 Keskkonnaamet should develop an overall policy strategy and plan for capacity developments of its personnel.

This strategy should be based in part on the results and recommendations arising from this survey.

1.2 Keskkonnaamet should establish basic norms for how much capacity development should be made available to staff.

For example, '*all permanent staff should have access to at least five days' relevant, structured training (or equivalent capacity development) per year'*.

It should be stressed here that budgeting for capacity development does not have to be based on provision of (expensive) formal training courses and study tours: there are many other much cheaper options for providing good quality training and capacity development.

1.3 Records should be kept of all capacity development events, of training attended by all personnel and of the quality and impact of the training.

1.4 RMK (The State Forest Management Centre), which manages all the tourism activities in PAs, should be integrated into capacity assessment and development activities of Keskkonnaamet.

2. ENGAGE WITH REGIONAL INITIATIVES TO IMPROVE THE PROFESSIONALIZATION AND PROFILE OF PA MANAGEMENT.

There is a general movement to improve the profile of PA management across Europe, as recognised in the resolution of the workshop held on the isle of Vilm/Germany from 3- 5 June 2013.

2.1 Estonia should continue to be an active partner in regional initiatives through Europarc, Eurosite, IUCN etc.

3. BUILD INTERNAL CAPACITY FOR CAPACITY DEVELOPMENT

One of the unusual results from the General Questionnaire was the comparatively high ranking given by managers to internal training. The high educational level and the comparatively high number of experienced staff in the Keskkonnaamet indicates that it may be possible to develop a programme that focuses on transfer of skills among existing staff, rather than using external (and much more expensive) training providers. Furthermore, there are many low-cost, easy to organise activities which can help build staff capacity within institutions, without reliance on external investment.

The following specific actions should be considered.

3.1 Appoint a capacity development/training officer (or small team) in Keskkonnaamet and its regional offices.

This person should be responsible for identifying and mobilising a wide range of ways in which staff can improve their skills and knowledge. The role should include

- Organising and coordinating formal training events.
- Providing and sharing information about training opportunities.
- Ensuring that basic learning resources are available in protected areas. Ideally, it should be possible to provide computers and Internet access, but even access to basic library of wildlife identification materials and copies of manuals and textbooks can make a difference.

- Establishing mentoring systems within protected areas, where more experienced staff are required to mentor and guide newer, less experienced staff.
- Identifying expertise within the protected area (and the protected area network) and making use of those with high levels of skills to train newer, less experienced staff.
- Organising regular informal training and learning sessions where staff can discuss and share their skills, provide updates on new policies, laws, regulations, technical advances etc.
- Ensuring that all visiting experts and researchers to the protected area are required to deliver a training session or seminar as part of the conditions of their permission to work there.
- Ensuring that good records are kept of training and capacity development.

3.2 Establish and train a national capacity development team comprising expert practitioners from within protected area institutions.

This team should be trained to provide standard training courses on priority topics across the PA system.

3.3 Provide supervisors in protected areas with training in basic instructional techniques for working with teams and workgroups.

This arises from a need specifically identified at Levels 2 and 3 in the survey.

6.2 SPECIFIC PRIORITY CAPACITY DEVELOPMENT RECOMMENDATIONS

4. DEVELOP A COMMON FOUNDATION PROGRAMME FOR ALL PROTECTED AREAS STAFF

Rather than develop many small courses, it would be more effective and efficient to establish a basic standard foundation course covering essential skills, knowledge for all personnel involved in PAs in Estonia. Suggested basic principles of the programme are that:

4.1 All new or recently appointed protected area staff should complete a two-day induction course that includes basic health, safety, welfare and first aid training.

4.2 National curricula and programmes for the course should be developed, and a set of training materials provided.

4.3 The course should be delivered by a national or regional training team from Keskkonnaamet.

4.4 Completion of the course should be certificated and documented in the personnel records of staff.

Table 11 shows a possible curriculum for the course.

Table 11 Possible curriculum for a general staff induction course

Course Title	**Protected Area Staff Induction**	
Duration	2 days	
Target group	All new ranger, scientific and technical staff with responsibilities in protected areas. All staff who have been employed in the past 3 years.	
Purpose	To ensure that all staff working in protected area have a good understanding of the area, its functions and of basic standards of good and safe practice.	
Assessment	Required attendance for the entire course . Written and practical tests.	
Topic		**Mode of Delivery**
INTRODUCTION Values, purpose and functions of protected areas. Threats to protected areas. Administrative and legal basis and procedures for protected area management. Main conservation and management strategies of protected areas. Functions and duties of protected area staff and partners. Essentials of good personal conduct and environmental practice in the work place.		Lectures, presentations.
OBSERVATION AND COMMUNICATION SKILLS		Presentations with

Record keeping and note taking. Basic leadership, team building and motivation. Communicating with stakeholders and visitors.	examples. Site based instruction. Practical exercises. Follow up by supervisors.
BASIC FIELD WORK SKILLS First aid. Good environmental practice in the workplace and the field. Emergency response procedures. Fire prevention and firefighting. Safe use, care and maintenance of tools and equipment. Maps, navigation and GPS. Basic boat handling and safety (if necessary). Basic vehicle use and safety (if necessary).	Presentations with examples. Site Based instruction. Follow up by supervisors.

5. BUILD CAPACITY FOR TOURISM AND RECREATION PLANNING AND MANAGEMENT.

This topic has been neglected in previous training and was identified as one of the biggest needs for Level 3 and Level 4/5 staff. However, the lack of data from RMK is a concern. The following specific actions are recommended.

5.1 Work with RMK to complete the needs assessment with their tourism staff.

5.1 Develop and deliver a training programme for Keskkonnaamet staff and for RMK in tourism and recreation.

The programme should be developed in collaboration with the tourism sector and with local service providers around protected areas. An outline curriculum is shown in Table 12.

Table 12 Possible curriculum for a tourism and recreation course

Course	**PLANNING AND MANAGEMENT OF TOURISM AND RECREATION IN PROTECTED AREAS**
Duration	5 days or 2 x 3 day modules.
Target group	Level 3 and 4 personnel.
Purpose	To enable staff to develop, manage and monitor appropriate programmes of tourism and recreation.
Assessment	Completion of full attendance at all components. Completion of a practical assignment. Possible written examination.

Topic	**Mode of Delivery**
Background • Fundamentals of the tourism industry in Estonia. • Legal and administrative basis for tourism and recreation in protected areas. • Key concepts in tourism and recreation provision and management. **Planning and design of recreation activities** • Identifying recreation opportunities and design appropriate recreation activities for a protected area. • Planning and implementation of recreation surveys to gather information about visitors and the use of the site. • Identifying potential recreation impacts and design impact monitoring and mitigation systems. • Leading the participatory development of plans and programmes for PA based tourism (Eco-tourism, Nature based tourism etc.) • Developing business and financial plans and forecasts for tourism and recreation (costs, incomes, fees, ticketing, permits, concessions, franchises etc.). **Visitor management** • Establishing safety standards and codes of conduct for protected area users. • Supervising safety and security of visitors and other users. • Responding to emergencies and accidents to visitors.	Formal lectures Seminars and discussions Presentations by tour operators Group work and exercises Study visit to other protected areas

Awareness and interpretation for visitors

- Planning and designing awareness and education activities and events for visitors, educational groups and local people (talks, presentations, guided walks etc.).
- Researching and planning interpretive/tourist/visitor centres and other major infrastructure.
- Researching, planning, and designing awareness and educational publications, exhibits and signs
- Researching, planning, and designing special education programmes for schools.
- Delivering interpretive/ awareness/ educational presentations for visitors, local people and educational groups (talks, guided walks, lectures, audiovisual presentations etc.)

5.2 Engage in regional initiatives to share experience improve standards for tourism and recreation in protected areas.

In particular, Estonia should consider engaging with the European Charter for Sustainable Tourism in Protected Areas (led by the Federation of Regional Nature Parks in France under the umbrella of the Europarc Federation). If possible, Keskkonnaamet personnel from Estonia should be enabled to visit and learn from other protected areas in Europe with well-established and successful tourism programmes.

5.3 Ensure full engagement of Keskkonnaamet personnel in the 7th International Conference on Monitoring and Management of Visitors in Recreational and Protected Areas (MMV) in Tallinn in August 2014.

The conference takes place on August 20-23, 2014 with the then of local community and outdoor recreation.

6. BUILD CAPACITY FOR WORKING WITH COMMUNITIES

The results of the assessments clearly show that there is a need for improved capacity for staff at all levels in working with communities. The training that is offered should not just deal with the underlying principles and theory, it should include training in practical, personal skills associated with working with communities, for example interpersonal communication, conflict resolution or development of local awareness strategies.

6.1 Develop and a training programme for staff working in protected areas where collaborative management with communities and local stakeholders is an important component.

An outline of a possible basic curriculum is shown in Table 13.

Table 13 Possible curriculum for a community outreach course

Course	**Planning and management of community outreach programmes and activities in protected areas**
Duration	5 days or 2 x 3 day modules
Target group	Staff of the Sustainable Use and Community Outreach Department. Director, Deputy Director and other Department Heads.
Purpose	To enable staff to work in a participatory way with protected area and surrounding communities to combine sustainable development with achieving the conservation objectives of the protected area.
Assessment	Completion of full attendance at all components. Completion of a practical assignment. Possible written examination.
Topic	**Mode of Delivery**
Background • Communities living in protected areas, corridors and buffer zones. • Key concepts and principles relating to communities and sustainable rural development. **Survey and Assessment** • Techniques for gathering and recording information about communities and livelihoods. • Planning and conducting basic social and economic surveys. **Working with communities** • Basic communication skills for working with local communities; the participatory	Formal lectures Seminars and discussions Village visits with

approach. • Promoting development of local networks and organizations. • Providing advice on sustainable community based natural resource use and management. • Developing agreements with communities for resource access and use. • Specifying, and evaluating sustainable quotas for natural resource use using scientific methods • Resolving conflicts concerning protected areas, communities and other stakeholders (Disputes, complaints over settlements, resource use, land claims, decisions) • Identifying and mobilising sources of assistance, support and finance for local communities.	expert facilitation Group work and exercises Study visit to protected areas

7. ORGANISE A SERIES OF FACILITATED SEMINARS/LEARNING EVENTS FOR SENIOR STAFF OF KESKKONNAAMET (AND PARTNERS)

At Level 4/5, capacity appears to be strong in some categories and patchy in others, even where they are not assessed as an overall priority. It would probably be impractical to recommend full training courses in all these categories; this would be very expensive and senior staff would probably not have the time to attend them. The proposed solution therefore is to hold a series of quarterly (or six monthly) facilitated seminars on priority topics, each with a specialist facilitator. The following specific recommendations are based on the results of this needs assessments.

7.1 Hold a facilitated seminar/learning event for senior staff on ecosystem valuation.

The seminar should cover the principles and practices of ecosystem valuation and of payments for ecosystem services, in the context of protected areas.

7.2 Hold a facilitated seminar/learning event for senior staff on communication, awareness and public relations.

This topic was, surprisingly, a very high priority at Level 4/5. The event should focus on development of communication and awareness strategies for PAs and PA system and on building partnerships.

7.3 Hold facilitated seminars/learning events for senior staff on protected area planning, management and monitoring.

More than one even may be required. These should cover the following aspects of protected area planning; project planning and proposals, contingency planning, transboundary initiatives, performance and effectiveness monitoring.

7.4 Hold facilitated seminars/learning events for senior staff on project and proposal identification and preparation.

This was the top personal preference among senior managers.

8. BUILD CAPACITY FOR APPLIED CONSERVATION BIOLOGY AND CONSERVATION MANAGEMENT

As discussed in the general conclusions, this category was identified as a priority need, even though it has been the main subject of previous training.

8.1 Design and deliver an updated course on applied, management-oriented conservation management.

The first step should be to work with staff, especially at Level 3, to identify precisely what they need to know and learn. The skills used in the Self-Assessment Questionnaire could be used as the starting point. A course could then be developed in association with universities, but it must take have a strong focus on management oriented rather than research based approaches. A possible curriculum is shown in Table 14.

Table 14 Possible curriculum for a conservation biology course

Course	Conservation biology(biodiversity survey, assessment, monitoring and management of species of conservation concern)
Duration	5 days or 2 x 3 day modules
Target group	Scientific Staff. Deputy Directors and other Department Heads.
Purpose	To enable staff to develop and implement scientifically based programmes for active survey, assessment, conservation and monitoring of key species, habitats and ecosystems

Assessment	Completion of full attendance at all components Completion of a practical assignment Possible written examination	
Topic		**Mode of Delivery**
Background • Understand key concepts and principles of conservation biology: species, populations, communities, ecosystems. • Understand key measures required for the conservation of rare and fragile species and ecosystems. • Understand the legal and policy basis for biodiversity conservation nationally and internationally. **Survey and assessment** • Recognise common and typical vegetation and habitat types, plant and animal species and their signs. • Use identification aids and equipment to identify plants and animals. • Accurately record and report wildlife observations using standard forms (where available). • Conduct and lead scientifically based, taxonomic, habitat and ecosystem surveys and monitoring activities. • Analyse, and present interpret survey and monitoring data. **Conservation management and planning** • Specify management requirements for conservation of habitats and ecosystems • Specify special measures for assisting protection, survival or recovery of key species. • Plan, evaluate and supervise management of invasive and problem animals and human wildlife conflict. • Specify, and evaluate sustainable quotas for natural resource use using scientific methods • Plan, manage and evaluate, long term programmes for scientifically based programmes for species, ecosystem and habitat research, conservation and monitoring. • Understand the principles of determining the value of ecological/environmental services. • Understand the principles, roles and functions of ex-situ conservation measures		Formal lectures Seminars and discussions Field survey exercises Group work and exercises Study visit to protected areas

9. MAINTAIN AND UPDATE SKILLS AND KNOWLEDGE OF PERSONNEL INVOLVED IN LAW ENFORCEMENT AND PROTECTION

This was a specific high priority need for regionally based Level 3 staff. The following specific measures are recommended.

9.1 Develop and deliver a training course/seminar on prevention, compliance and law enforcement for field staff.

The programme should be designed in consultation with the relevant staff. It should include a strong focus on training on 'soft' techniques for ensuring compliance and for coordination of law enforcement, as well as on more direct, enforcement-based approaches.

9.2 Provide regular updates for field staff on legislation, threats and approaches for reducing illegal activities.

These could take the form of circulars or annual updating seminars delivered by a national training team.

7 ANNEXES

1. GENERAL QUESTIONNAIRE

Protected Area Questionnaire

TRAINING AND DEVELOPMENT NEEDS ASSESSMENT

To be completed for.

- Protected Area Administrations.
- Departments at regional or national level responsible for protected areas

A. GENERAL INFORMATION

A1 Country	
A2. Full Name of Protected Area or Institution	
A3. IUCN Category of the Protected Area (if known)	
A4 Area of the Protected Area (hectares)	
A5 Name and Position of Person completing the questionnaire	
A6. Date of completion of questionnaire	

A7. STAFF NUMBERS. Please indicate the numbers of staff in the institution at the levels indicated

Total Number of Staff of the Protected Area or Institution or Department	

STAFF LEVELS	**Support staff (Labourers, cleaners, drivers etc.)**	**Administrative Staff**	**Rangers/ Field Staff**	**Mid-level Managers/ Professional Staff/Head Rangers**	**Directors/ Deputy Directors**
PLEASE RECORD NUMBERS OF STAFF IN THE PA OR INSTITUTION					

A. CURRENT SITUATION FOR TRAINING AND CAPACITY DEVELOPMENT

B1. PREVIOUS TRAINING. Please indicate how much time and resources have been allocated to formal training and capacity development for staff or local stakeholders in the past 3 years

Year	**Title and topic of training**	**Training provider**	**Number of days**	**Number of participants**	**Notes**

B2. RESOURCES AND BUDGET FOR TRAINING. If the institution has its own special budget for training, please state how much it has been for the past 3 years

The institution has a training budget	YES		NO	

Year	Amount of budget	Main uses of budget
2011		
2012		
2013		

B3. SKILLS AND EXPERIENCE. COMPETENCE ASSESSMENTS FOR EACH LEVEL OF STAFF					
Please complete the following table, which is an assessment of the current skills and experience of personnel conducting protected areas work at different levels. For each skills category and staff level please enter a rating of 0-4 as follows					
0 = Staff at this level do not need these skills. **1** = Staff at this level need these skills, but have little or no competence in them: extensive training and development are needed. **2** =Staff at this level need these skills and have some competence in them: Further training and development are needed			**3** = Staff at this level need these skills and have good competence in them: Periodic updating only is needed. **4** = Staff at this level need these skills and are highly competent in them. They could train and instruct others in these skills.		
STAFF CATEGORY.	**Support staff (Labourers, cleaners, drivers etc.)**	**Administrative Staff**	**Rangers/. Field Staff**	**Mid-level Managers/. Professional Staff/Head Rangers**	**Directors/. Deputy Directors**
SKILLS CATEGORY	***Assessment 0,1,2,3 or 4***				
GENERAL SKILLS (GEN). General skills require for any job. Commitment, motivation, positive attitude, honesty, teamwork etc.					
FINANCIAL & RESOURCES MANAGEMENT (FRM). Management and organisation of finances, assets and equipment for the protected area.					
HUMAN RESOURCES MANAGEMENT & DEVELOPMENT. (HUM). Directing, managing, organising and capacity building for staff and others working in the PA					
COMMUNICATION TECHNOLOGY AND INFORMATION (CTI). Communication skills. Presentations, reports, negotiations, conflict resolutions. Use of computers and technology.					
FIELD CRAFT AND PRACTICAL SKILLS (FCR). Skills for field work: navigation, health and safety, basic construction and maintenance and good environmental practice in the field.					
CONSERVATION ASSESSMENT PLANNING & MANAGEMENT (CMP). Identifying, surveying and monitoring species and ecosystems. Identifying the need for and carrying out specific actions for the protection and conservation of species, habitats and ecosystems.					
SUSTAINABLE DEVELOPMENT & COMMUNITIES (SDC). Conducting social and economic assessments in local communities. Working with communities in the Protected Area and Buffer Zone to promote sustainable					

resource use and development					
PROTECTED AREA POLICY, PLANNING AND PROJECTS (PAM). Preparing strategies, master plans and management plans for managing protected areas. Designing and applying for special projects to support the work of Protected Areas					
LAW ENFORCEMENT (LAW). Law enforcement: understanding the law and conducting activities to enforce the law in protected areas.					
RECREATION AND TOURISM (RTO). Planning and managing environmentally sensitive recreation and tourism for visitors to protected areas					
AWARENESS, EDUCATION AND PUBLIC RELATIONS (AWA). Planning and carrying out awareness, education and public relations work with visitors and local people. Presentations, signboards, educational materials, guiding visitors, working with schools groups. Promoting and publicising the Protected Area through the media.					

B4. FUTURE NEEDS AND PRIORITIES. Please indicate what you consider to be the three most important capacity development need(s)of each category of staff

Support staff (Labourers, cleaners, drivers etc.)	Administrative Staff	Rangers/. Field Staff	Mid-level Managers/. Professional Staff/Head Rangers	Directors/Deputy Directors
1	1	1	1	1
2	2	2	2	2
3	3	3	3	3

B. MODES OF TRAINING AND LEARNING

C1. MODES OF LEARNING. Staff capacity can be developed in many ways. Please answer the following questions about different methods of staff development

Please assess how effective and suitable each type of learning would be for each level of staff at the protected area or institution.

0: Not all effective or suitable; 1: -Marginally effective and suitable; Effective and suitable.

3: Highly effective and suitable

MODE OF LEARNING	Support staff (Labourers, cleaners, drivers etc.)	Administrative Staff	Rangers/. Field Staff	Mid-level Managers/. Professional Staff/Head Rangers	Directors/. Deputy Directors
Informal learning in the work place with more experienced colleagues					
Short training sessions provided by supervisors and managers in the work place					
Short Formal Training Courses (<1 week)					
Longer training courses (1-4					

weeks)					
Long Term Study for Formal Qualifications (e.g. University Courses)					
Informal individual learning using training manuals and study materials					
Formal individual study through distance learning. Following courses using internet and correspondence					
Exchanges and study visits with other Protected Areas					
Others (please list)					

C2. ALLOCATION OF TIME FOR TRAINING AND DEVELOPMENT

Please indicate what you consider to be the ideal amount of time to be devoted each year to formal training of staff at different levels Indicate <u>one choice</u> for each staff category

	Support staff (Labourers, cleaners, drivers etc.)	**Administrative Staff**	**Rangers/. Field Staff**	**Mid-level Managers/. Professional Staff/Head Rangers**	**Directors/. Deputy Directors**
0 days					
1-5 days					
6-10 days					
11-15 days					
16-20 days					
>20 days					

C. OTHER COMMENTS

Please add any further comments or suggestions

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COVER PAGE	
COUNTRY	
NAME (Optional)	
GENDER	**M F**
AGE (Circle one answer)	**1: <30 2: 31-45 3: 46-60 4: >60**
Official JOB TITLE AND GRADE	
PLACE OF WORK (NAME AND LOCATION OF PROTECTED AREA OR PA MANAGING INSTITUTION)	
NUMBER OF YEARS' EXPERIENCE IN PROTECTED AREA WORK (Circle one answer)	**1: 0-5 years ; 2: 5-10 years: 3: 10-15 years. 4: 15+ years**
HIGHEST QUALIFICATION LEVEL (Underline ONE answer)	**1. Elementary School 2. High School 3. Bachelors Degree/Higher vocational qualification 4. Masters Degree 5. PhD**
Training received in the past 3 years	
Training Event and provider 1 2 3 4 5	**Dates and duration**
TO BE COMPLETED BY CAPACITY ASSESSMENT SUPERVISOR	
COMPETENCE LEVELS ASSESSED	
GENERAL WORK SKILLS	✓
Circle which levels are assessed in this questionnaire	**1 2 3 4 5**
NAME OF CAPACITY ASSESSOR	
DATE OF ASSESSMENT	
LOCATION OF ASSESSMENT	
UNIQUE ASSESSMENT NUMBER PROTECTED AREA CODE AND NUMBER (e.g. CCR 07)	

3. FULL LIST OF COMPETENCES USED IN THE SELF ASSESSMENT QUESTIONNAIRE

FRM	**FINANCIAL AND RESOURCES MANAGEMENT**
FRM	**LEVEL 2**
FRM 2.1	Collect and present evidence of expenditure and other financial transactions
FRM 2.2	Manage stores of equipment and supplies.
FRM	LEVEL 3
FRM 3.1	Prepare budgets and keep books and accounts
FRM 3.2	Manage purchasing and inventory.
FRM 3.3	Manage official documentation and reporting on finances, assets, equipment, infrastructure etc.
FRM	LEVEL 4
FRM 4.1	Develop and monitor annual financial plans and prepare financial reports
FRM 4.2	Develop detailed business plans, fund raising and revenue generating schemes.
HUM	HUMAN RESOURCES MANAGEMENT AND DEVELOPMENT
HUM	LEVEL 2
HUM 2.1	Supervise and motivate work teams under direct supervision
HUM 2.2	Provide training and instruction in the workplace for supervised staff
HUM	LEVEL 3
HUM 3.1	Brief, supervise, motivate and evaluate performance of individuals and teams.
HUM 3.2	Prepare detailed work plans for staff and direct, monitor and report on work plan implementation
HUM 3.3	Determine causes of poor performance and workplace conflicts and take appropriate action
HUM 3.4	Plan, prepare and deliver formal vocational and skills training for staff
HUM 3.5	Plan, prepare and deliver formal lectures and presentations
HUM	LEVEL 4
HUM4.1	Identify staffing needs and structures, assign roles and responsibilities and set performance standards
HUM4.2	Manage staff recruitment and contracting.
HUM4.3	Plan for and ensure the welfare, health and safety of staff, visitors and other users
HUM4.4	Lead training and development needs analysis.
HUM4.5	Plan, design, supervise and evaluate staff training and capacity development programmes
CTI	COMMUNICATION, TECHNOLOGY AND INFORMATION
CTI	LEVEL 2
CTI 2.1	Make basic oral presentations to colleagues, local people and visitors
CTI 2.2	Prepare written reports of work activities using standard formats
CTI 2.3	Communicate in other languages and/or dialects.
CTI 2.4	Operate and maintain computer for basic functions (word processing, internet, email)
CTI 2.5	Operate office and audio visual equipment
CTI	LEVEL 3
CTI 3.1	Organize and chair formal meetings.
CTI 3.2	Give technical presentations and write technical reports/papers.
CTI 3.3	Operate and maintain computers for advanced functions
CTI 3.4	Operate GIS systems
CTI 3.5	Manage library, archives and other information resources.
CTI	LEVEL 4
CTI 4.1	Negotiate agreements and resolve disputes and conflicts.
CTI 4.2	Institute mechanisms for public consultations, communication and participation over decisions, policies & plans.
FCR	FIELD CRAFT AND PRACTICAL SKILLS

FCR	LEVEL 2
FCR 2.1	Care for, check and maintain basic field equipment.
FCR 2.2	Follow good safety and environmental practice in the field.
FCR 2.3	Fight fires.
FCR 2.4	Identify, prevent and/or provide primary treatment in the field for illness, diseases and bites (First Aid)
FCR 2.5	Use compass and chart or map for navigation and orientation.
FCR 2.6	Use GPS for georeferencing locations and for navigation and orientation.
FCR 2.7	Construct and repair outdoor structures, paths and trails.
FCR 2.8	Drive and provide basic maintenance for motor vehicles and small engines
FCR 2.9	Safely operate and maintain small boats and their engines
FCR 2.10	Use and maintain radio handset for field communication.
FCR	LEVEL 3
FCR3.1	Plan and organise logistics for field trips, surveys and patrols.
FCR3.2	Organise and lead search and rescue operations in the field.
FCR3.3	Operate and use base station radio and communication equipment.
FCR3.4	Draw up plans and specifications for small works and basic site infrastructure and supervise construction work
FCR3.5	Inspect and specify maintenance and repair requirements and schedules.
FCR3.6	Locate, mark and inspect boundaries in the field.
FCR3.7	Identify and assess fire risks and hazards and plan fire prevention and control.
FCR	LEVEL 4
FCR 4.1	Contribute to specification and design of major infrastructure projects.
CMP	CONSERVATION ASSESSMENT, PLANNING AND MANAGEMENT
CMP	LEVEL 2
CMP2.1	Recognise common and typical vegetation and habitat types, plant and animal species and their signs
CMP2.2	Accurately record and report wildlife observations using standard forms (where available)
CMP2.3	Conduct supervised surveys of wildlife, habitats, natural resources and physical landscape features
CMP2.4	Use identification aids to identify plants and animals.
CMP2.5	Use and care for basic scientific instruments used in surveying
CMP2.6	Conduct practical habitat creation, restoration, management and manipulation work
CMP2.7	Assist in the capture / immobilisation, handling and transportation of animals.
CMP2.8	Check and replenish feeding stations for wild animals.
CMP2.9	Care for captive animals
CMP	LEVEL 3
CMP 3.1	Specify management requirements for conservation of habitats and ecosystems
CMP 3.2	Specify, and evaluate sustainable quotas for natural resource use using scientific methods
CMP 3.3	Specify site based special measures for assisting protection, survival or recovery of key species.
CMP 3.4	Plan evaluate and supervise management of invasive and problem animals and human wildlife conflict.
CMP 3.5	Plan and supervise animal capture, transport, care and management.
CMP 3.6	Lead specialised, scientifically based, taxonomic, habitat and ecosystem surveys and monitoring
CMP 3.7	Analyse, and present interpret survey and monitoring data.
CMP 3.8	Curate collections and manage museums
CMP	LEVEL 4
CMP 4.1	Plan, manage and evaluate, scientifically based programmes for ecosystem and habitat research, conservation and monitoring ecosystems)
CMP 4.2	Plan, manage and evaluate, scientifically based programmes for species research, conservation and monitoring (survey, monitoring, control, reintroduction, special protection measures etc.))
CMP 4.3	Plan, manage and evaluate ex-situ animal conservation and projects (rescue centres, captive breeding etc.)

CMP 4.4	Plan, manage and evaluate ex-situ plant conservation and breeding projects (botanic gardens, plant breeding for reintroduction and restoration etc.)
CMP 4.5	Determine the value of ecological/environmental services.
SDC	**SUSTAINABLE DEVELOPMENT AND COMMUNITIES**
SDC	**LEVEL 2**
SDC 2.1	Under supervision, gather and record information about communities and livelihoods and provide basic reports to supervisors
SDC 2.2	Provide basic information, guidance and assistance for community-based conservation and sustainable use.
SDC 2.3	Monitor compliance by local communities with agreements and laws affecting them and the protected area.
SDC	LEVEL 3
SDC 3.1	Plan and conduct scientifically based social and economic surveys (populations, communities, social conditions, livelihoods, resource use, culture etc.)
SDC 3.2	Plan and conduct scientifically based historical and archaeological assessments (site history, historical and archaeological sites, historic and cultural landscapes etc.)
SDC 3.3	Develop and negotiate participatory community conservation and management agreements.
SDC 3.4	Plan, coordinate and facilitate community capacity development activities.
SDC 3.5	Promote development of local networks and organizations.
SDC 3.6	Provide advice on sustainable community based natural resource use and management.
SDC	LEVEL 4
SDC4.1	Develop agreements with communities for resource access and use.
SDC4.2	Resolve conflicts concerning protected areas, communities and other stakeholders (Disputes, complaints over settlements, resource use, land claims, decisions. Disputes between different stakeholder groups)
SDC4.3	Identify and mobilise external sources of assistance, support and finance for local communities.
SDC4.4	Design and implement long socio economic and cultural research and monitoring programmes.
PAM	PROTECTED AREA POLICY, PLANNING AND PROJECTS
PAM	**LEVEL 4**
PAM 4.1	Understand and interpret relevant legislation for the planning and management of protected areas
PAM 4.2	Lead the development of protected area conservation zoning systems and management plans using an appropriate national or international format and process
PAM 4.3	Lead development of contingency plans for potential disasters.
PAM 4.4	Plan and negotiate trans boundary protected area and conservation initiatives.
PAM 4.5	Develop protected area project plans, proposals and budgets using nationally or internationally recognised formats and processes.
PAM 4.6	Develop and negotiate collaborative partnerships, plans and programmes
PAM 4.7	Direct, review and evaluate implementation of special projects (with national or international funding)
PAM 4.8	Monitor management effectiveness of the protected area using standard tools and methods (e.g. IUCN Management Effectiveness Tracking Tool (METT))
PAM	**LEVEL 5**
PAM5.1	Direct and evaluate policy and strategy development for biodiversity conservation and protected area management.
PAM5.2	Direct the design of protected areas, networks, systems and strategies.
PAM5.3	Plan and negotiate trans boundary protected area and conservation initiatives.
PAM5.4	Direct the process of protected area boundary formalisation, rationalisation, gazettement.
PAM5.5	Contribute to updating of policies and legislation related to protected areas and biodiversity conservation
LAW	**LAW ENFORCEMENT**
LAW	**LEVEL 2**
LAW 2.1	Recognise and identify signs and evidence of illegal or restricted activities in the field.
LAW 2.2	Conduct enforcement activities legally and safely
LAW 2.3	Treat suspects and members of the public correctly and legally during patrol and enforcement activities.
LAW 2.4	Report correctly on law enforcement activities

LAW 2.5	Deal effectively with hostile situations and defend oneself against physical attack.
LAW 2.6	Care for and use firearms correctly and safely (if relevant)
LAW	LEVEL 3
LAW 3.1	Plan law enforcement activities and programmes.
LAW 3.2	Lead patrol and law enforcement activities in the field.
LAW 3.3	Liaise with local communities to resist and prevent illegal activities.
LAW 3.4	Follow correct procedure for dealing with violations, suspects, crime scenes and evidence.
LAW	LEVEL 4
LAW4.1	Identify legal requirements and instruments for improving or extending protection and contribute to the development of protected area regulations.
LAW4.2	Coordinate protected area law enforcement activities with law enforcement and regulating agencies
RTO	RECREATION AND TOURISM
RTO	LEVEL 2
RTO 2.1	Guide, assist and regulate visitors on site.
RTO 2.2	Respond to emergencies and accidents to visitors.
RTO	LEVEL 3
RTO 3.1	Identify recreation opportunities and design appropriate recreation activities for a protected area.
RTO 3.2	Plan and implement recreation surveys to gather information about visitors and the use of the site
RTO 3.3	Identify potential recreation impacts and design impact monitoring and mitigation systems.
RTO 3.4	Supervise safety and security of visitors and other users.
RTO	LEVEL 4
RTO4.1	Lead development of detailed recreation and tourism strategies and plans for the protected area and local communities
RTO4.2	Develop business and financial plans and forecasts for tourism and recreation in the protected area
RTO4.3	Establish safety standards and codes of conduct for protected area users.
AWA	AWARENESS, EDUCATION AND PUBLIC RELATIONS
AWA	LEVEL 2
AWA 2.1	Provide basic information about the protected area to visitors, community members and the public.
AWA	LEVEL 3
AWA 3.1	Plan and design awareness and education activities and events for visitors, educational groups and local people (talks, presentations, guided walks etc.)
AWA 3.2	Research, plan, and design awareness and educational publications, exhibits and signs
AWA 3.3	Research, plan and design special education programmes for schools.
AWA 3.4	Deliver formal and informal interpretive/ awareness/ educational presentations for visitors, local people and educational groups
AWA 3.5	Provide information for the media
AWA	LEVEL 4
AWA 4.1	Lead the development of interpretation, awareness and education strategies and action plans and evaluate their impacts
AWA 4.2	Research and plan interpretive/tourist/visitor centres and other major infrastructure
AWA 4.3	Plan and manage marketing, media and public relations activities.