International Water and Sanitation Centre

IRC

Review of the Finnish Water Sector Development Co-operation Meeting the Goals of the 21st Century

Volume II – Water Resources

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IRC Water and Sanitation Centre

IRC facilitates the creation, sharing, and use of knowledge so that sector staff and organisations can better support poor men, women and children in developing countries to obtain water and sanitation services they will use and can sustain. It does this by improving the information and knowledge base of the sector and by strengthening sector resource centres in the South.

As a gateway to quality information, the IRC maintains a Documentation Unit and a website with a weekly news service, and produces publications in English, French, Spanish and Portuguese both in print and electronically. It also offers training and experience-based learning activities, advisory and evaluation services, applied research and learning projects in Asia, Africa and Latin America; and conducts advocacy activities for the sector as a whole. Topics include community management, gender and equity, institutional development, integrated water resources management, school sanitation, and hygiene promotion.

IRC staff work as facilitators in helping people make their own decisions; are equal partners with sector professionals from the South; stimulate dialogue among all parties to create trust and promote change; and create a learning environment to develop better alternatives.

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Executive Summary

The Ministry for Foreign Affairs of Finland invited the IRC International Water and Sanitation Centre to conduct a review of the Finnish water sector development co-operation, demand and resources in light of the latest international declarations and policies developed across the sector.

The overall purpose of the review is to clarify the balance between integrated water resources management and provision of water services, between water supply and sanitation and between rural and urban areas. Additional important issues such as institutional arrangements, including the roles of the public, private and the third sector, financing structures and cost recovery will also be addressed.

A further purpose of the review is to find out and outline the present needs, demands, aspirations and policies of Finland's development co-operation partners in light of the latest international water sector goals. These aspects are discussed in Volume I of the review.

Another aspect of the review is to study and analyse the Finnish water sector resources. The results from this analysis are to be used in matching up demands from partners in the developing world. This report, which is the second volume of the review, concentrates on the Finnish sector resources.

The methodology chosen for mapping the Finnish sector resources is based on a questionnaire which divides the water sector into sectors of involvement. The questionnaire is also categorised into topics and subdivisions of expertise within the above sectors.

There is a wide range of expertise available in Finland and among Finnish actors. The number of specialists in each topic may be modest, but their quality has been proved in previous postings, programmes and projects. This means that development co-operation programmes and projects are possible in all subjects and sub-sectors of the water sector, but naturally the various actors have differences in their availability and skills mix. Future interventions should extend to other sub-sectors of the water sector than those where projects and programmes have so far been operating.

As the available skills mix and expertise in Finnish institutes, universities, technical universities, companies and organisations have sufficient resources to deal with all types of development co-operation interventions, it is recommended that the future Finnish water sector development co-operation continues to include different types of interventions, according to the needs and aspirations of partner countries. Southern partners, as well as partners from countries in transition, are set to benefit from this approach which may lead to balanced institutional capacity-building combined with support for investment programmes of their own. Finland, on the other hand, may benefit from the continued contacts at international forums as well as exchanges with different environments and cultures. All this will contribute to maintain and improve the high quality of the water sector expertise and performance in Finland. It should be noted that many of the water sector issues are international in character, requiring co-operation between several donor and recipient countries.

1. Background

Over a hundred years ago, the German Evangelical Lutheran Church proposed to the Finnish Evangelical Lutheran Church to participate in its missionary work in Africa. Health care services and the provision of safe drinking water became, in addition to education, some of the core areas of humanitarian assistance in these early stages of missionary work. Scientific co-operation in the water sector has also been traditionally strong between Finland and the international scientific community. Universities and technical universities opened and sustained contacts with both industrialised and developing countries. The Ministry for Foreign Affairs played a pivotal role in the water sector co-operation with developing countries and countries in transition since the1960s, since helping poor countries became an important part of Finnish foreign policy.

Today most of the target countries of the Finnish water sector co-operation are still found in Africa. Furthermore Finnish know-how has gained strength as a result of water projects in Eastern Africa bringing about a whole generation of competent water sector experts. The skills and commitment of the Finnish water sector professionals became appreciated in the 1970s and 80s in the Middle East, where the commercial projects of the oil-rich countries gave opportunities to planners, designers and builders to gather experience which was later used in countries in transition closer to Finland.

Finland has also received assistance to its sector development from the World Bank which financed during the 1970s a BOT-project aimed at developing working skills in the water sector. Another interesting development is the involvement of the NGOs or third sector.

2. Methodology

The methodology chosen for mapping the Finnish sector resources is based on a questionnaire which divides the water sector into sectors of involvement. The questionnaire is also categorised into topics and subdivisions of expertise within the above sectors.

The results are grouped according to different types of actor. There is also an index page, where the actors are listed according to their organisation/department/institution/company, as well as their involvement in production, research/laboratory work, management, commerce, policy making, education, consulting, or other. The questionnaire is attached to this report as Annexe 1 and the list of sub-sectors is in Annexe 1/2.

This questionnaire was sent to 41 recipients representing all the above types of organisation. In addition, information on the mapping was distributed using the mailing lists of professional associations, such as Suomen Vesiyhdistys (Water Association in Finland) and WaterFinns (an association of internationally active professionals) and posted on the web-pages of Suomen Vesiyhdistys.

No response was received from construction companies and non-governmental organisations were contacted only with respect to a possible role as intermediaries and clearing houses.

In order to add more clarity, the answers were analysed using the following grouping:

- Consultancy companies;
- Individual consultants;
- Governmental institutions; and
- Universities and technical Universities.

The result is presented in Annexe 2/2 of this report.

The contact information of the organisations/departments/institutions or companies which responded, is presented in Annexe 3.

3. Discussion

General

An interesting feature, which became clear during the discussions with the recipients of the questionnaires, is the networking character of the actors in the sector. Although not working regularly in a position related to development co-operation, resource staff may, when called upon, take up assignments of fixed period – from a week to several years – in projects or programmes in the sector. When the assignment is over, the person returns to his/her original position. This flexibility greatly increases the capacity of the resource base in Finland. It also contributes to the two-way flow of knowledge so important in the industry.

There is a wide range of this kind of expertise available in Finland and through Finnish actors. Although there may not be many specialists in each topic , the quality has been high in terms of education and working references.

Consultancy companies

The responses to our questionnaire by consultancy companies were comprehensive. In addition to merely filling in the questionnaires, companies also provided an explanation of the practices they used. Traditionally networking and putting together consortiums of different types were used to achieve a pool of expertise needed to tender for development co-operation contracts in the target countries. A typical feature of this practice has been its one-off character – targeting a specific project/programme, and not a long lasting co-operation.

The latest trend among consultancy companies is national and international mergers. Several formerly-independent enterprises have become parts of either large Nordic or European enterprises as subsidiaries or daughter companies. In most cases, however, the original companies continued to operate as separate units under the umbrella of the new owner organisation. Staff of the original companies also continued their work as before. The new directives, resolutions and standards of the European Union promote similar development of resources.

The answers indicate that there are actors in almost all sub-sectors. The number of specialists is limited, but a wide range of expertise is available. This has already resulted in a situation where companies have started tapping the international market for more resources. Multinational staff joined Finnish development co-operation projects and programmes, with only key positions being filled by Finnish nationals. Positive cross-fertilisation and the influx of new ideas brought about a decrease in isolation with Finnish faces becoming less conspicuous. At the same time, more opportunities became available for Finnish professionals in the international market.

In the public sector the distribution of expertise is rather different in that each institute has a special niche in the Finnish context. The expertise gained in decades of work is naturally concentrated in the areas for which the institute/ department or even the universities and technical universities have been established. Their duties are guided by legislation. Overlapping does exist but only to a relatively small extent. It might also be noted that the variety of expertise in the above organisations may look similar but in reality it is not, as the original purpose for which the expertise has been created is different.

Individual consultants

A new and interesting development in the water sector in Finland involves the emergence of one-person small consultancy companies. These consultancies have given the Finnish water sector an opportunity to use Finnish independent experts for tasks where independence, professionalism and the absence of personal interest in implementation are needed, without compromising the neutrality of the larger units when competing for implementation assignments. In most cases, these independent experts have a long international experience in international development co-operation organisations and/or Finnish sector companies, institutions and organisations. The fields of activity of these independent consultants are concentrated in water supply and sanitation sub-sectors.

Governmental institutions

The Finnish governmental institutions have developed a more international orientation during the 1990s. First, their senior- and middle-level staff were given leave of absence to undertake international assignments, then the institutions themselves started to play a role in the market. Their fields of activity correlate with their function in the Finnish set-up, which is natural. However, it is considered delicate or inappropriate if a government body is responsible for the administration and, at the same time, competes as a consultant.

There is expertise available in all fields of the sector trades. The experience and expertise of these institutions differ from those of the consultancy companies. In addition to knowledge in the field, they all have experience in acting as part of the public sector. Likewise, the consultancy companies have experience in acting in the private sector, on a commercial basis. Knowledge of both public and private sectors is needed in modern balanced development co-operation in the world market economy .

Universities and technical universities

An example of the way universities and technical universities participate in development co-operation is the establishment of special units for this purpose. This has taken place at two levels – through the establishment of consultancy companies and of groups inside a relevant department/laboratory of the university/technical university. Their special feature is their strength in higher education and also their ability to transfer knowledge. The "scientific community" is famous for its international contacts, as it is a natural lifeline for academia in general.

Non-governmental organisations

There are several Finnish NGOs active in the water sector development co-operation – the oldest, the Finnish Evangelical-Lutheran Mission, being active for over one hundred years. It was, however, difficult to contact them for resources mapping. Instead, a questionnaire was sent to their umbrella/support organisation, KEPA, which reacted positively with an explanatory message but did not send back the questionnaire.

NGOs draw their strength from their grassroots approach. However, their impact is local and quite often of small scale and their expertise base is limited as well as their fields of activity. There is hardly any expertise available for institution-building but their dynamism plays an important role in generating support for the official development co-operation in Finnish domestic opinion.

Construction companies

The construction companies did not respond actively to the questionnaire. This may be due to the fact that investment in the Finnish water sector development co-operation has been reduced to capacity-building only, to the detriment of building higher technology structures. This makes the projects and programmes less attractive for construction companies.

4. Conclusions

The quality of the Finnish resources for development co-operation was found to be good and the experience gained through past work is an asset. The level of education of professional staff available easily meets, and partly exceeds, international standards. In addition, the motivation is generally good, human relations skills prove to be adequate and co-operation partners are met as equals. All in all, these findings show capacity for a wide range of operations in the sector – from budget support to local projects.

The expertise available in Finland enables development co-operation programmes and projects in all subjects and sub-sectors of the water sector. The different actors, however, have natural differences in their available skills mix. This would make it easy to extend future interventions to sub-sectors of the water sector other than where projects and programmes have so far taken place. On the other hand, there is a good reason to keep the public and private responsibilities separate.

Individual consultants, found in the Finnish resource base, open up the possibility for the use of small-scale actors in tasks, which are less appealing to the large organisations as they might be disqualified from competing. This makes it possible to use the professional skills available in Finland for formulating, appraising, evaluating and monitoring tasks without compromising the resource base for the implementation of programmes and projects.

The most important limitation was found to be the lack of language skills other than English. Few Finnish staff master French, and even fewer Spanish or Portuguese. The reported skills mix permit operations in the whole of the water sector.

The results indicate a high level of confidence amongst Finnish sector professionals in the sustainability of the resources in the sector, even though the investment to develop the sector know-how by the Finnish government and the educational structure has been apparently reduced. It is, however, reasonable to conclude that the growth of the role of Finland in the international water sector development co-operation is set to be smaller in line with the reduced human resources, unless there is a change for the better in the investment in the resource base. Development co-operation is a two-way learning process, beneficial to both partners. In addition, the Finnish water sector resource base will be partly wasted, unless investment in it is continued and strengthened.

The latest statements by political leaders in Finland nevertheless indicate their understanding that it is important for a small country to stay in the international market of the water sector, both for humanitarian and economic reasons.

In this mapping the suppliers of materials, machinery and equipment were not addressed. There are Finnish manufacturers and providers who manufacture and sell world-class products. However, with few exceptions, the products are not well known in the co-operation partner countries.

5. Recommendations

As the available skills mix and expertise in Finnish institutes, universities, technical universities, companies and organisations have sufficient resources to deal with all kinds of development co-operation interventions, it is recommended that the future Finnish water sector development co-operation continues to include different kinds of interventions, according to the needs and aspirations of partner countries. Southern partners, as well as partners from countries in transition, are set to benefit from this approach which may lead to balanced institutional capacity-building combined with support to investment programmes of their own. Finland, on the other hand, may benefit from the continued contacts at international forums as well as exchanges with different environments and cultures, which will all contribute to keep-up and improve the high quality of the water sector expertise and performance in Finland.

A self-multiplying type of intervention, made possible by the expertise of Finnish universities and technical universities, is support for formal higher education and vocational training in the South. Previous experience from the courses organised in Finland is very positive. However, it might be even more efficient if the education and training were given in the regions of the target population. This would, in addition to the actual education and training impact, give a boost to the scientific communities in the countries concerned. Hence it is recommended that a component of education and vocational training, which is interwoven with the corresponding structures of the recipient countries, should be reinstated in the Finnish development co-operation in the water sector.

Further, it is recommended that co-operation between the Finnish expertise and experience base and the international resources be encouraged through different kinds of co-operation with recognised partners, like organisations, institutions, departments, companies and NGOs. Working together is a natural way for cross-fertilisation and would lead to increased visibility of the Finnish sector resources and competencies.

Annexe 1

Annexe1/1. Organisation/Department/Institution/Company

1. English name:_____
2. Abbreviated name:_____
3. Department:_____
4. Phone/fax:_____
5. e-mail address:_____
6. Address of organisation/department:_____

   Country:_____

   City:_____

   Street and number:_____

   Post box:_____

   Zip code:_____
7. Web address:_____
8. What is the nature of your organisation (tick one or more):

- ❑ Production
- ❑ Research/Laboratory work
- ❑ Management
- ❑ Commerce
- ❑ Policy making
- ❑ Education
- ❑ Consulting
- ❑ Other, please describe_____

Annexe1/2. Description of sectors

Choose the sector (see table below) your organisation/department/institution/company is involved in by marking the box(es) that best describe your fields of expertise.

AG – Agriculture, irrigation, drainage and rural development

- ❑ Rural development planning
- ❑ Agricultural production
- ❑ Drainage
- ❑ Land use
- ❑ River engineering
- ❑ Water resources appraisal
- ❑ Surface water
- ❑ Ground water
- ❑ Water quality
- ❑ Irrigation
- ❑ Water use
- ❑ Watershed management
- ❑ Dams and reservoirs
- ❑ Land reclamation
- ❑ Well drilling/pumping
- ❑ Forest hydrology
- ❑ Forest conservation

EG – Energy

- ❑ Hydropower
- ❑ Geophysics
- ❑ Drilling engineering
- ❑ Oil and gas exploration
- ❑ Geochemistry
- ❑ Geohydrology
- ❑ Geomatics

EV – Environment

- ❑ Topography and geology
- ❑ Ecology
- ❑ Environmental Impact Assessment
- ❑ Remote sensing/GIS
- ❑ Mapping
- ❑ Water pollution
- ❑ Soil pollution
- ❑ Solid waste disposal
- ❑ Toxic/hazardous waste disposal
- ❑ Mineral/coal mining impacts
- ❑ Marine biology
- ❑ Coastal zone management
- ❑ Urban environmental planning
- ❑ Landscaping
- ❑ Drought and desertification control
- ❑ Clean technologies and waste minimisation
- ❑ Micropollutants
- ❑ Wetlands
- ❑ Environmental health
- ❑ Water table fluctuation

WS - Water supply

- ❑ Water supply
- ❑ Water resources development
- ❑ Water treatment
- ❑ Water distribution
- ❑ System rehabilitation and upgrading
- ❑ Desalination
- ❑ Rural water supplies
- ❑ Water resources management
- ❑ Leakage detection and control
- ❑ Public-Private Parternship

SN - Sanitation

- ❑ Sanitation
- ❑ Sewage treatment
- ❑ Solid waste
- ❑ Leakage detection and control

Annexe 1/3. Subjects and subdivisions of expertise

Plans and policies
1. National water resources policy
2. National plans
3. Basin management plans
4. Groundwater management plans
5. Coastal zone management plans
6. Environmental impact assessment
7. Social and cultural impact assessment
8. Economic impact assessment
9. Decision support systems and multi-criteria analysis
10. Investment policies

Water legislation issues
11. Legislation for water quality
12. Legislation for water use
13. Legislation for water re-use
14. Water rights
15. Reform of existing legislation

Standards and Regulations
16. Water use standards
17. Water quality standards
18. Water re-use standards
19. Service delivery and performance standards
20. Regulations for water quality
21. Regulations for water quantity
22. Regulations for water services
23. Regulations for water re-use
24. Land use planning and nature protection

Regulatory bodies and enforcement agencies
25. Role of central government
26. Role of local authorities (municipalities, etc.)
27. Role of water boards, irrigation districts, etc
28. Platform for planning and co-ordination
29. Jurisdiction issues
30. Enforcement mechanisms
31. Reforming institutions for better governance

Water sector organisations
32. Basin organisations
33. Community-based organisations
34. Non-governmental organisations
35. Participatory planning and management
36. Private sector participation

Supply and demand management
37. Analysis of water resources data
38. Modelling in IWRM
39. Developing water management indicators
40. Improved efficiency of use
41. Improved efficiency of supply
42. Recycling and reuse
43. Demand control strategies
44. Water conservation
45. Water and ecosystems
46. Health hazards and avoidance

Capacity building for IWRM
47. Training (in-house, by dedicated organisations, etc.)
48. Formal education
49. Human Resources Development Planning
50. Education curricula on water management
51. Community outreach programmes
52. Exchange programmes
53. Research planning

Incentive structures
54. Pricing of water and water services
55. Pollution and environmental charges
56. Financing options: grants and internal sources
57. Financing options: loans and equity
58. Water markets and tradable permits
59. Subsidies
60. Cost recovery principles
61. Water fee collection methods

Information exchange
62. Information sharing and transparency
63. Sharing of data
64. Communication techniques
65. Water resources knowledge base

Annexe 2

Annexe 2/1. Sectors with subsectors					
	GI	IC	CC	UT	NGO
AG-Agriculture, irrigation, drainage and rural development					
Rural development planning	1		4	1	2
Agricultural production					1
Drainage			1	1	
Land use	1		2	1	
River engineering			2	1	
Water resources appraisal			2	2	
Surface water	1		2	3	
Ground water	1		3	3	
Water quality			4	4	
Irrigation			1	1	
Water use			3	3	
Watershed management	1		4	4	
Dams and reservoirs			2	1	
Land reclamation			1	1	
Well drilling/pumping			2		1
Forest hydrology	1			1	
Forest conservation				1	
EG-Energy					
Hydropower			1	1	
Geophysics	1		1	1	
Drilling engineering					
Oil and gas exploration					
Geochemistry	1		1	1	
Geohydrology	1		1	3	
Geomatics	1				
EV-Environment					
Topography and geology	1		2	1	
Ecology	1		3	4	
Environmental Impact Asessment	2		4	5	
Remote sensing/GIS	2		2	3	
Mapping	1		3	1	
Water pollution	3		4	6	
Soil pollution	1		4	2	
Solid waste disposal			5	1	1
Toxic/hazardous waiste disposal	1		4	2	
Mineral.coal mining impacts	1		1	1	
Marine biology	1			2	
Coastal zone management	2		1	1	
Urban environmental planning	1		3	1	
Landscaping			3		
Drought and desertification control					
Clean technologies and waste minimisation			3	1	

Sectors with subsectors (Contd)					
	GI	IC	CC	UT	NGO
Micropollutants	2			1	
Wetlands	1		1	1	
Environmental health	2		2	1	
Water table fluctuation	1		1	1	
WS-Water supply					
Water supply		1	5	2	
Water resources development	1		3	4	
Water treatment			5	1	
Water distribution			4	2	
System rehabilitation and upgrading			5	2	
Desalination			1		
Rural water supplies	1	1	5	3	1
Water resources management	1	1	5	3	
Leakage detection and control			3	1	
Public-Private Partnership			3	2	1
SN-Sanitation					
Sanitation		1	5	2	1
Sewage treatment	1		5	1	
Solid waste			4	1	1
Leakage detection and control			3		

GI=Government institute
IC= Independent consultant
CC= Consultancy company
UT= University or technical university
NGO= Non-governmental organisation

The number in columns GI, IC, CC, UT and NGO indicates the number of sources of expertise where one or more experts are available.

Annexe 2/2. Subjects and subdivisions of expertise						
	GI	IC	CC	UT	NGO	CoC
1. National water resources policy			1	3		
2. National plans	1	1	1	2		
3. Basin management plans	1		3	2		
4. Groundwater management plans	1		3	2		
5. Coastal zone management plans	1		1	1		
6. Environmental impact assessment	2		4	5		
7. Social and cultural impact assessment			3	3		
8. Economic impact assessment			3	4		
9. Decision support systems and multi-criteria analysis	2		1	3		
10. Investment policies			1	2		
11. Legislation for water quality	2		1			
12. Legislation for water use	1		1			
13. Legislation for water re-use			1			
14. Water rights			1	1		
15. Reform for existing legislation	1	1	1	2		
16. Water use standards			1	2		
17. Water quality standards	1		2	1		
18. Water re-use standards			1	1		
19. Service delivery and performance standards			1	2		
20. Regulations for water quality			1	2		
21. Regulations for water quantity				2		
22. Regulations for water services			1	2		
23. Regulations for water re-use			1	1		
24. Land use planning and nature protection	2		1	1		
25. Role of central government		1		2		
26. Role of local authorities (municipalites etc.)		1	3	2		
27. Role of water boards, irrigation districts, etc.			1	2		
28. Platform for planning and co-ordination		1		2		
29. Jurisdiction issues				2		
30. Enforcement mechanisms				2		
31. Reforming institutions for better governance	1		4	2		
32. Basin organisations			2	3		
33. Community based organisations	1		4	3		
34. Non-governmental organisations	1		2			
35. Participatory planning and management		1	4	3		
36. Private sector participation			3	2		
37. Analysis of water resources data	1		2	2		
38. Modelling in IWRM			1	2		
39. Developing water management indicators	1	1	2	4		
40. Improved efficiency of use			2	3		
41. Improved efficiency of supply			3	2		
42. Recycling and re-use			4	1		

Subjects and subdivisions of expertise (Contd)						
	GI	IC	CC	UT	NGO	CoC
43. Demand control strategies			2	1		
44. Water conservation	1		3	1		
45. Water and ecosystems	1		2	5		
46. Health hazards and avoidance	2		3	1		
47. Training (in-house, by dedicated organisations , etc.)	1		2	3		
48. Formal education	1			4		
49. Human Resources Development Planning	1		2	1		
50. Education curricula on water management			1	3		
51. Community outreach programmes			2	1		
52. Exchange programmes	1		1	2		
53. Research planning	2		1	4		
54. Pricing of water and water services			4	3		
55. Pollution and environmental charges			1	1		
56. Financing options: grants and internal sources			2	1		
57. Financing options: loans and equity			2			
58. Water markets and tradable permits			1	1		
59. Subsidies			3			
60. Cost recovery principles		1	4	2		
61. Water fee collection methods			4	1		
62. Information sharing and transparency	2		1	2		
63. Sharing of data	2			1		
64. Communication techniques	2			2		
65. Water resources knowledge base	2		1	3		

GI = Governmental institute
IC = Independent consultant
CC = Consultancy company
UT = University or technical university
NGO = Non-governmental organisation
CoC= Construction company

The number in columns GI, IC, CC, UT, NGO and CoC indicates the number of sources of expertise where one or more experts are available.

Annexe 3

Contact information of organisations/departments/institutions or companies, which replied to inquiry

English name	Abbreviated name	Department	Phone and Fax	E-mail address	City	Street and number	Post box	Zip code	Web address	Nature of organisation
Abo Akademi University	AAV	Biology	P +358-2-2154355 F +358-2-2153428	eleppako@abo.fi	Turko	Akademig. 1		20500	www.abo.fi/fak/mnf/biol	Research/Laboratory work/ Education
Plancenter Ltd	SKOY	International operations	P +358-9-15641 F +358-9-1564445	firstname.surname@plancenter.fi	Helsinki	Opastinsilta 6	68	00521	www.plancenter.fi	Consulting
Soil and Water Ltd	S&W	Development Policies	P +358-9-6826534 F +358-9-8782868	sw@poyry.com	Vantaa	Jaakonkatu 3	50	02621	www.soiland.poyry.com	Consulting
University of Joensuu, Karolsom Institute	JOY	Department of Ecology	P +358-13-2513505 F +358-13-2513449	markken.viljanen@joensuu.fi	Joensuu		111	80101	www.joensuu.fi/ktl/index/htm	Research/Laboratory work/ Education
Lahti Science and	Neopoli		P +358-3-	hannu.kokko@neopoli.fi	Lahti	Niemenkatu 73	14	15140	www.neopoli.fi	Research/Laboratory

Business Park Ltd			8114201 F +358-3-8833000							work/Management/ Education/Consulting/Innovation promotion
Tampere University of Technology	TUT /IEEB	Capacity Development in Water and Environmental Services	P +358-3-31152183		Tampere	Korkeakoulunkatu 8	541	330101	www.fut.fi/units/lymp/bio/en	Research/Laboratory work/ Management/Education/ Consulting
Finnish Environment Institute	FEI	Expert Services Department/ Environmental Management Division	P +358-9-40300487		Helsinki	Mechelininkatu 34A	140	00251	www.environment.fi	Research/Laboratory work/ Management
The Finnish Evangelical Lutheran Mission	FELM	Department of Development of Co-operation	P +358-9-12971		Helsinki	Tahtitorminkatu 18	154	00140	www.mission.fi	A mission, but the dpt of Development Co-operation focuses only on dev. co-operation
Finnmap Consulting Oy	FINNMAP		P +358-20-7393301		Helsinki	Ratamestarinkatu 7A	88	00522	www.finnmapcons.fi	Consulting
Hannu Vikman Consulting	Hannu Vikman		P +358-40-7461339 F +358-9-8596060	hannu.vikman@vikman.pp.fi	Espoo	Alakartanonkatu 1A1		023660		Consulting
Global Dry Toilet Club of Finland	GDTCF		P +358-505722257	dry.toilet@jippii.fi	Tampere		225	33101	www.drytoilet.org	Management/Policy making/ Education/Cons

			F +358-5057222 57							ulting
University of Helsinki	UH	Development of Biosciences and Environmental Sciences	P +358-9-1911		Helsinki	Viikinkaari 1	65	00014	www.helsinki.fi	Research/Laboratory work/ Education
University of Helsinki	UH	Department of Geology	P +358-9-19150834		Helsinki	Gustaf Hallstrominkatu 2	64	00014	www.helsinki.fi/geologica	Research/Laboratory work/ Education
Ramboll Finnconsult Oy	RF		P +358-207556500 F +358-207556203	fc@ramboll-finnconsult.fi	Espoo	Piispanmaentie 5	3	02240	www.ramboll-finnconsult.fi	Consulting
Ramboll Finland Ltd			P + 358-207556200 F + 358-207556201		Espoo	Piispanmaentie 5	3	02240	www.ramboll.fi/ www.ramboll.com	Consulting
Helsinki University of Technology	HUT	Department of Civil and Environmental Resources Engineering	P +358-9-4513821 F +358-94513856	webmaster@water.hut.fi	Espoo	Tietotie 1E	5200	02015	www.water.hut.fi/wr/index.en.html	Research/Laboratory work/ Education
HCG Environment Oy	HCGE		P +358-9-19144455 F +358-919144453	hcge@hcg.helsinki.fi	Helsinki	Kaisaniementkatu 6A	1300	00101	www.hcg.helsinki.fi/hcge	Consulting
Geological Survey of Finland	GTK		P +358-2055011		Espoo	Betonimiehenkuja 4	96	02151	www.gtk.fi	Research/Laboratory work/ Consulting

Finnish Institute of Marine Research	FIMR		P +358-9-613941 F +358-9613944 94	info@fmri.fi	Helsinki	Asiakkaank 3A	33	00931	www.fimr.fi	Research/Laboratory work
Skytta Consulting LLC			P + 358-17038839546		McLean	1903 Woodgate Lane		22101		Consulting