

STOCKHOLM CONVENTION ON PERSISTENT ORGANIC POLLUTANTS (POPs)



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Compilation of the capacity and needs of existing national monitoring programmes, including other programmes that can contribute to a GMP

(January 2007)

Secretariat Note

The Conference of the Parties, in its decision SC-2/13, requested the Secretariat to develop a comprehensive regional inventory of capacities and conduct needs assessment with contributions from national Stockholm Convention focal points.

With this request, the Secretariat has distributed questionnaires (Questionnaire II) to countries and international organizations for reporting on their capacity for POPs monitoring. This survey will extend our knowledge of existing monitoring programmes around the world and help identify the needs of programmes that can contribute to a global monitoring plan on POPs for effectiveness evaluation of the Stockholm Convention.

As of 29 January 2007, the Secretariat has received responses from 10 countries, which are: Austria, Canada, Czech Republic, Bulgaria, Japan, Mali, Moldova, Romania, Slovenia and Tanzania. The information from these responses is presented in two annexes to this note. Annex 1 summarises the capacity of the Group-1 programmes to provide capacity strengthening to the Group-2 programmes. Annex 2 summarises the responses from the questionnaire II of the capacity and needs assessment of Group-2 programmes.

Glossary of terms

Activity	Any programme or other activity or project that generates data
	or information on the levels of POPs in the environment or in
	humans that can contribute to the effectiveness evaluation under
	Article 16 of the Stockholm Convention
Group-1	Programmes which immediately provide information for the first
	evaluation, the 1 st TWG applied the criteria for the first
	assessment and identified 19 countries.
Group-2	Programmes that, with identified capacity enhancement, can
	provide information coverage in areas that would otherwise be
	inadequately represented in the first evaluation, the 1 st TWG
	applied the criteria for the first assessment and identified 45
	countries which have infrastructure.
Group-3	Programmes which may be enhanced with capacity building for
	future evaluation, the 1 st TWG applied the criteria for the first
	assessment and identified 64 countries.
Group-4	1 st TWG applied the criteria for the first assessment and
	concluded that further information would be needed to fully
	categorize the capacities of 75 countries.
Limited capacity	"limited" means that institutionally-organised personnel, and
enhancement	basic infrastructure are already in place and available for
	capacity enhancement for the first assessment.
Needs	Specific needs will regard to limited capacity enhancement in
	order to enable full participation in a Phase I monitoring
	activity.

Annex 1:

Capacity of the Group-1 Programmes to Provide Capacity Strengthening to the Group-2 Programmes

Country –	Austria – MONA	ARPOP (Monitoring Network in the Alpine Region for Persistent and other Organic
Programmes	Ploolutants)	
Materials for the	Yes, MONARPO	P has experience in active air and depositions sampling in remote regions under extreme
capacity enhancement	weather condition	ns and can provide capacity building on that for any Group-2 Programme. (MONARPOP
of Group-2	has also experien	ce in soil and vegetation monitoring, however, these are not core media.). See:
programmes	http://www.mona	urpop.at/index.php
Needs to develop such		
materials		
Capacity to provide	Study design	Yes
training to Group-2 programmes	sampling	Yes
	Sample storage	Yes
	Sample preparation	Yes
Needs to provide such	analysis	Yes
training	Data treatment	Yes
Possibilities/needs to provide training in developing regions	Yes, Several year	s ago we have become a Ltd. Therefore, such activities would need to be funded.

Country – Programmes	Canada – GAPS	(Global Atmospheric Passive Sampling)
Materials for the capacity enhancement of Group-2 programmes	Yes, GAPS has e program.	xpertise in passive air sampling and can assist in capacity building for any Group-2
Needs to develop such materials		
Capacity to provide	Study design	Yes, under GAPS we already engaged in capacity building effort in this aspect.
training to Group-2 programmes	sampling	Yes, under GAPS we already engaged in capacity building effort in this aspect.
programmes	Sample storage	Yes, under GAPS we already engaged in capacity building effort in this aspect.
	Sample preparation	Yes, under GAPS we already engaged in capacity building effort in this aspect.
Needs to provide such	analysis	Yes, under GAPS we already engaged in capacity building effort in this aspect.
training	Data treatment	Yes, under GAPS we already engaged in capacity building effort in this aspect.
Possibilities/needs to provide training in developing regions	Yes, as stated abo outreach due to la or for training gro	ove we do this already under GAPS. However, so far we have been restricted in our ack of funding, i.e. we have a limited budget for covering training visits to our laboratories oups off-site.

Country –	Canada – IADN	(Integrated Atmospheric Deposition Network)
Programmes		
Materials for the	Yes, IADN is a b	i-national network between Canada and the United States. IADN monitors for POPs and
capacity enhancement	has expertise in 1	ing-term air monitoring in temperate latitudes, namely the Great Lakes, and can assist in
of Group-2	capacity building	for any Group-2 program. IADN materials are available at
programmes	http://www.epa.g	ov/glnpo/monitoring/air/iadn.html.
Needs to develop such		
materials		
Capacity to provide	Study design	Yes.
training to Group-2 programmes	sampling	Yes
r og a	Sample storage	Yes
	Sample preparation	Yes
Needs to provide such	analysis	Yes
training	Data treatment	Yes
Possibilities/needs to	Yes, study design	n, sampling, storage, extraction, analysis and data treatment conducted under the NCP
provide training in	program is well-	documented (see website above) and are widely available in publications. However, so far
developing regions	we have been res training visits to	tricted in our outreach due to lack of funding, i.e. we have a limited budget for covering our laboratories or for training groups off-site.

Country –	Canada – NCP (Northern Contaminants Program)
Programmes		
Matanials for the	Vag NCD hagalir	a air monitoring for POPs has avnortige in ling term air monitoring in remote locations
Materials for the	res, NCP baselli nomely the Aretic	and can assist in consolity building for any Group 2 program
of Crown 2	namery the Arcus	c, and can assist in capacity bunding for any Group-2 program.
of Group-2		
programmes		
Needs to develop such		
materials		
Capacity to provide	Study design	Yes
training to Group-2 programmes	sampling	Yes
I B G G	Sample storage	Yes
	Sample preparation	Yes
Needs to provide such	analysis	Yes
training	Data treatment	Yes
Possibilities/needs to provide training in developing regions	Yes, study design program is well-or restricted in our of to our laboratorie	h, sampling, storage, extraction, analysis and data treatment conducted under the NCP locumented and are widely available in publications. However, so far we have been outreach due to lack of funding, i.e. we have a limited budget for covering training visits as or for training groups off-site.

Country – Programmes	Czech Republic	- RECETOX/National POPs Centre CR													
Materials for the capacity enhancement	Yes, EMEP Prog	ramme; passive sampling manual; PAS monitoring network design; analytical SOPs.													
programmes	The materials are	The materials are in Czeen language and the translation can be done quickly and easily.													
Needs to develop such materials															
Capacity to provide	Study design	Yes, with respect of actual international standards													
training to Group-2 programmes	sampling	Yes, active sampling for POPs monitoring based on the experience of USEPA and EMEP, sufficient training capacity and all available samplers for potential training													
	Sample storage	Yes, based on internationally standardized methodology													
	Sample preparation	Yes, based on internationally standardized methodology and recent scientific knowledge													
Needs to provide such	analysis	Yes, sufficient training and laboratory capacity based on the international procedures.													
training	Data treatment	Yes, based on internationally standardized methodology and recent scientific knowledge, part of RECETOX fully covered all possible standard statistical methods including data handling and treatment.													
Possibilities/needs to provide training in developing regions	Yes, The training organization of ir part of training ac	of laboratory staffs including the development of appropriate training materials and the iterlaboratory tests were performed as a part of EU 5 th Framework Programme and as a ctivities of Regional pts Centre FOR the Central and Eastern Europe (Armenia, Serbia).													
	Personnel capacit	y enhancement may be needed to provide such training.													

Country –	Japan	
Programmes		
Matarials for the	Vec MOE (Mir	istry of the Environment) has developed the suidence of DODs manitoring (Deckeround
Materials for the	Air Monitoring of	f POPs in East Asian Countries 2004 2006). It describes design sampling analysis
of Group.?	evaluation of res	ults and quality control and is thought to be useful for capacity enhancement of
nrogrammes	programmes in G	roun-?
programmes	programmes in e	noup 2.
Needs to develop such		
materials		
Capacity to provide	Study design	No
training to Group-2	sampling	No
programmes	sumpring	
	Sample storage	No
	Sample	No
	preparation	
	analysis	No
Needs to provide such training	Data treatment	No
Possibilities/needs to provide training in developing regions	No, corporation v	with other programs is the future challenge.

Country –	Romania	
Programmes		
Materials for the capacity enhancement of Group-2 programmes	No	
Needs to develop such materials		
Capacity to provide	Study design	No
training to Group-2 programmes	sampling	No
L - 9	Sample storage	No
	Sample preparation	No
Needs to provide such	analysis	No
training	Data treatment	Yes
Possibilities/needs to provide training in developing regions	Yes, if the condit	ions such equipments and training are accomplishedl.

Country – Programmes	Slovenia	
Materials for the capacity enhancement of Group-2 programmes	Yes, Monitoring	of chemicals in organisms 2005 (trial programme)
Needs to develop such materials		
Capacity to provide	Study design	No, there is a need in study design.
training to Group-2 programmes	sampling	No, there is a need in sampling.
L - 9	Sample storage	No
	Sample preparation	No
Needs to provide such	analysis	Yes
training	Data treatment	No, there is a need in data treatment.
Possibilities/needs to provide training in developing regions	No	

Country –	Tanzania – Cher	mistry Department, University of Dar es Salaam
Programmes		
Materials for the	Yes. We have the	capacity to analyze for all POPs pesticides. We can, in principle, do the PCBs also if we
capacity enhancement	had the reference	standards.
of Group-2		
programmes		
Needs to develop such	We need PCBs re	terence standards.
materials		
Capacity to provide	Study design	Yes
training to Group-2 programmes	sampling	Yes
F - 08- 000000	Sample storage	Yes
	Sample	Yes
	preparation	
Needs to provide such	analysis	Yes
training	Data treatment	Yes
Possibilities/needs to provide training in developing regions		

Annex 2:

Capacity and Needs Assessment of Group-2 Monitoring Programmes

Czech Republic - RECETOX/ National POPs Centre CR

				Fu	ll pa	artic fo	ipat or Pl	ion hase	(incl I of	udiı GM	ng Q IP	A/Q	(C)					Full participation (including QA/QC) for Phase I of GMP after limited capacity enhancement																	
Air Maternal blood Human milk																A	ir			Maternal blood Hur								uma	man milk						
Study design	sampling	sampling Sample storage Sample preparation analysis Data treatment Study design sampling Sample storage Sample preparation analysis Data treatment Data treatment Sample preparation analysis Sample preparation Data treatment										Study design	sampling	Sample storage	Sample preparation	analysis	Data treatment	Study design	sampling	Sample storage	Sample preparation	analysis	Data treatment	Study design	sampling	Sample storage	Sample preparation	analysis	Data treatment						
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Ne	eds	for c	capa	city	enh	ance	eme	nt			•		•	•	•	•	•	•		•	•	•	•	•		•	•	•	•	•	•	•			
Ai	r			Per	son	nel c	apac	ity e	enha	ncen	nent																								
Ma blo	atern ood	al		No	info	orma	tion																												
Hu	man	mil	k	No	info	orma	tion																												
Pr	efer	red	med	ium	for	hum	nan s	sam	ples	:																									

				Fu	ll pa	rtic fo	ipat or Pł	ion (1ase	(incl I of	udir GM	ng Q IP	A/Q	(C)					Full participation (including QA/QC) for Phase I of GMP after limited capacity enhancement																	
Air Maternal blood Human milk														A	ir				Mat	tern	al bl	lood		Human milk											
Study design	sampling	Sample storage	Sample preparation	analysis	Data treatment	Study design	sampling	Sample storage	Sample preparation	analysis	Data treatment	Study design	sampling	Sample storage	Sample preparation	analysis	Data treatment	Study design	sampling	Sample storage	Sample preparation	analysis	Data treatment	Study design	sampling	Sample storage	Sample preparation	analysis	Data treatment	Study design	sampling	Sample storage	Sample preparation	analysis	Data treatment
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Air																																			
Ma blo	terna od	al																																	
Hu	man	mil	k																																
Pro	efern	red 1	med	ium	for 1	hum	ian s	samj	ples:	bot	h blo	ood a	and r	nilk-	ca	paci	ty of	f aro	und	500	samj	ples/	year	eac	h (to	otal 1	.000)							

Czech Republic - Institute of Public Health Ostrava, National reference laboratory for POPs

Bulgaria

				Fu	ll pa	artic fo	ipat or Pl	ion (nase	(incl I of	udir GM	ng Q IP	A/Q	C)									Fu	ll pa fter	rtic fo limi	ipat or Pl ted o	ion (1ase rana	(incl I of city	udir GM enh	ng Q IP ance	A/Q	C)				
		A	ir				Mat	tern	al bl	ood			Hı	ıma	n mi	ilk				A	ir				Mat	terna	al bl	lood			Hı	uma	n mi	ilk	
Study design	sampling	Sample storage	Sample preparation	analysis	Data treatment	Study design	sampling	Sample storage	Sample preparation	analysis	Data treatment	Study design	sampling	Sample storage	Sample preparation	analysis	Data treatment	Study design	sampling	Sample storage	Sample preparation	analysis	Data treatment	Study design	sampling	Sample storage	Sample preparation	analysis	Data treatment	Study design	sampling	Sample storage	Sample preparation	analysis	Data treatment
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Ne	eds for capacity enhancement																																		
Aiı	eds for capacity enhancement No laboratory available for analysis of POPs releases in the arr within the state budget.															bien	t air.	Fur	nds f	or th	ne co	onstr	uctic	on of	suc	h lat	o are	not	avai	lable	2				
Ma blo	tern: od	al		No	info	orma	tion																												
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Mali

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Study design	sampling	Sample storage	Sample preparation	analysis	Data treatment	Study design	sampling	Sample storage	Sample preparation	analysis	Data treatment	Study design	sampling	Sample storage	Sample preparation	analysis	Data treatment	Study design	sampling	Sample storage	Sample preparation	analysis	Data treatment	Study design	sampling	Sample storage	Sample preparation	analysis	Data treatment	Study design	sampling	Sample storage	Sample preparation	analysis	Data treatment
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Ne	eeds for capacity enhancement																																		
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Ma blo	tern: od	al																																	
Hu	man	mil	k																																
Pro	man milk Ferred medium for human samples: milk																												_						

Moldova, Republic of – State Hydrometeorological Servic

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Ma blo	tern od	al																																	
Hu	man	mil	k																																
Pro	eferi	an milk erred medium for human samples:																																	

Romania -	Ministry	of Environment	and Waters	Management
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Slovenia

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Study design	sampling	Sample storage	Sample preparation	analysis	Data treatment	Study design	sampling	Sample storage	Sample preparation	analysis	Data treatment	Study design	sampling	Sample storage	Sample preparation	analysis	Data treatment	Study design	sampling	Sample storage	Sample preparation	analysis	Data treatment	Study design	sampling	Sample storage	Sample preparation	analysis	Data treatment	Study design	sampling	Sample storage	Sample preparation	analysis	Data treatment
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Ne	eds f	for c	capa	city	enh	ance	emer	nt	•						•			•							•		•	•	•	•	•				
Aiı				Stu	dy d	lesig	n, da	ata tr	eatn	nent																									
Ma blo	itern od	al		Stu	dy d	lesig	n, sa	mpl	ing,	data	trea	tmer	nt																						
Hu	man	mil	k	Stu	dy d	lesig	n, sa	mpl	ing,	sam	ple s	tora	ge, d	lata t	treat	men	t																		
Pro	eferi	red 1	nedi	ium	for	hum	an s	samj	ples:	bot	h blo	od a	and r	nilk																					
		erred medium for human samples: both blood and milk																																	

Tanzania

				Fu	ll pa	artic fo	ipat or Pl	ion (nase	(incl I of	udir GM	ng Q IP	A/Q	(C)									Fu af	ll pa fter	artic fo limi	ipati or Ph ted o	ion (nase capa	(incl I of city	udiı GM enh	ng Q IP ance	A/Q	(C)				
		A	ir				Ma	tern	al bl	lood			Ηι	ıma	n mi	ilk				A	ir				Mat	tern	al bl	lood			H	uma	n m	ilk	
Study design	sampling	Sample storage	Sample preparation	analysis	Data treatment	Study design	sampling	Sample storage	Sample preparation	analysis	Data treatment	Study design	sampling	Sample storage	Sample preparation	analysis	Data treatment	Study design	sampling	Sample storage	Sample preparation	analysis	Data treatment	Study design	sampling	Sample storage	Sample preparation	analysis	Data treatment	Study design	sampling	Sample storage	Sample preparation	analysis	Data treatment
N	N N N N Y														Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y		
Ne	IN <																									-									
Aiı				All refe	the erend	nece ce st	essar anda	y eq ırds.	uipn	nent	for a	nir sa	ımpl	ing,	stora	age a	and a	analy	/sis.	And	l, of	cour	rse, t	he n	eces	sary	proc	cedu	res a	nd l	itera	ture	plus	1	
Ma blo	tern od	al		Hir	ing (of m	ore j	perso	onne	l on	part	time	e bas	is, i	f all 1	the c	other	req	uirer	nent	s (ec	lnibi	ment	t, ma	teria	ıls, e	etc.)	are t	aken	car	e of.				
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Pro	eferi	red	medi	ium	for	hun	nan s	samj	ples:	mil	k																								