



Interim Report No 1

TACIS/2005/109244

Caspian Water Quality Monitoring and Action Plan for Areas of Pollution Concern

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**Caspian Water Quality Monitoring and Action Plan for Areas of Pollution Concern
TACIS/2005/109244**

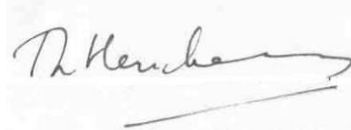
Project Title: Caspian Water Quality Monitoring and Action Plan for Areas of Pollution Concern

Project Number: Tacis contract no. 109-244

Country: TACIS Regional Action Program 2004, Azerbaijan, Kazakhstan, Russian Federation, and Turkmenistan

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ABBREVIATIONS AND ACRONYMS

AE	Assistant Expert
APC	Area of Pollution Concern
AZ	Azerbaijan
CEP	Caspian Environment Program
DPSIR	Driving forces, Pressures, States, Impacts and Responses
EC	European Commission
EU	European Union
EUWI	European Union Water Initiative
GEF	Global Environment Facility
GIWA	Global International Waters Assessment
Glo-Ballast	GEF/UNDP/IMO Global Ballast Water Management Program
IR	Iran
KE	Key Expert
KZ	Kazakhstan
MEL	Marine Environment Laboratories (Monaco)
NATO	North Atlantic Treaty Organization
NCAP	National Caspian Action Plan
N-PAP	National Pollution Action Plan
PM	Project Manager
POPs	Persistent Organic Pollutants ¹
PTS	Persistent Toxic Substances
P-RAG	Pollution Regional Advisory Group
QA/QC	Quality Assurance and Quality Control
RAG	Regional Advisory Group
RPAP	Regional Pollution Action Plan
RU	Russia
RV	Research Vessel
RWQMP	Regional Water Quality Monitoring Plan
SAP	Strategic Action Program for the Caspian Sea ²
SAPIC	Strategic Action Program Implementation Coordinator
SC Meeting	Steering Committee Meeting
SOI	State Oceanographic Institute
TA	Technical Assistance
TACIS	Technical Assistance Commonwealth of Independent States
TBR	Turkmenbashi Refinery
TDA	Transboundary Diagnostic Analysis
TDS	Total Dissolved Solids
TM	Turkmenistan
ToR	Terms of Reference
TSS	Total Suspended Solids
TL	Team Leader
UNDP	United Nations Development Program
UNEP	United Nations Environment Program
WB	World Bank
WMQ	Water Quality Expert

¹ Stockholm Convention on persistent organic pollutants

² (5 November 2003)

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1 PROJECT SYNOPSIS

Table 1-1 Project Synopsis

<p>Project title: Caspian Water Quality Monitoring and Action Plan for Areas of Pollution Concern Project number: Service Contract TACIS/2005/109244 Country's: The Caspian littoral states, AZ, KZ, TM, RU, and as guest and fifth littoral country;</p>
<p>Project objectives: The project objectives are: √ The broad overall objective is to achieve improved quality of the marine and coastal environment of the Caspian Sea through the Caspian Environment Program (CEP). √ The project purpose is to assist in achievement of Target 2.1 (Regional Water Quality Monitoring Program - RWQMP) and Target 3.2 (Regional Pollution Action Plan - RPAP) of Environmental Quality Objective III (Improve Caspian Water Quality) of the Strategic Action Program (SAP) for the Caspian.</p>
<p>Project's outputs: The planned project's outputs are: 1. <i>Developed of an enhanced hotspot-specific Regional Water Quality Monitoring Program (RWQMP) with progress in implementation.</i> 2. <i>Design, planning and support for implementation of enhanced pilot RWQMP over a two year period with relevant specifically justified tasks, based on main principles agreed by the P-RAGs and resulting in execution of four Hotspot-Specific Surveys.</i> 3. <i>Successful deployment of a package of equipment and supplies to support the enhanced RWQMP implementation, procured under a separate contract and Introduction of Quality Assurance procedures in four regional laboratories, resulting in a network of equipped and trained monitoring laboratories.</i> 4. <i>Development of agreed Regional Pollution Action Plan (RPAP) and prioritized investment program.</i></p>
<p>Project activities: The envisaged project's activities are 1. <i>Enhanced RWQMP based on regional components of the National Site Specific ("Hot spot").</i> a) Agreement of key monitoring locations, harmonized methodology, indicators, protocols and administration/management arrangements as well as data reporting and data exchange procedures; (b) Delivery of first two years of enhanced RWQMP. 2. <i>Deployment and survey procurement:</i> (a) Justification and preparation of deployment of equipment and consumables in response and pending to procurement and delivery under a separate contract; (b) Procurement of services linked to implementation of the enhanced RWQMP surveys, notably in regard of updating the current training and equipment needs, considering previous TACIS and GEF assessments done during 2001-2006. 3. <i>Monitoring laboratories</i> a) Agreement of key monitoring locations, assistance in procurement; 4. <i>RPAP:</i> (a) Assessment of available pollution areas of concern information; (b) Updating of pollution assessment; (c) Identification, prioritizing and costing of remediation actions</p>
<p>Target groups: The end-beneficiaries of this project will be the population living around the Caspian, and all concerned with the water quality of the Sea. Other end beneficiaries will include the scientists in the region that are working on aspects of water quality and pollution amelioration. Intermediary beneficiaries will include the national and local government responsible for ambient water quality monitoring and pollution control in the beneficiary countries AZ, RU, KZ, TM and IR.</p>
<p>Project starting date: Date of contract signature: November 27th, 2006; Date of actual start of project activities: December 4th, 2006</p>
<p>Project duration: 2.5 years from November 27th 2006 till May 27th, 2009</p>

2 SUMMARY OF PROJECT PROGRESS SINCE THE START

Though no duty station was available this period, progress was realized in this period by participating in the national and regional dialogues held at the following occasions between December 2006 and June 2007:

- a. The introduction to the Project by PM Tacis and the findings at the CEP Steering Committee Meeting, 5-6 December 2006 in Moscow.
- b. The consultations held with the CEP manager and staff in regard of developments in the CEP-SAP, notably related to APC's, RWQMP and RPAP (as reported in the P-RAGs and N-PAPs), notably in Baku, December 11th, 2006; Tehran, February 5th-7th, 2007, Ashgabat May 17th-18th, 2007 and Tehran June 5th-8th, 2007.
- c. The national dialogues held with beneficiaries and counterparts during fact-finding missions to the Caspian countries from December 2006 to June 2007; eg:
 - √ KE1(TL) in
 - i. Moscow, December 4th-7th, 2006
 - ii. Baku, December 8th-15th, 2006
 - iii. Moscow, January 22nd-27th, 2007
 - iv. Astana/Almaty, January 28th-February 3rd, 2007
 - v. Tehran, February 4th-7th, 2007
 - vi. Baku, February 8th-23rd, 2007
 - vii. Baku March 11th-13th, 2007
 - viii. Ashgabat, March 14th-16th, 2007
 - ix. Baku, March 16th-21st, 2007
 - x. Almaty, April 22nd-26th, 2007
 - xi. Ashgabat, May 14th-24th, 2007
 - xii. Tehran, June 5th-9th, 2007
 - xiii. Ashgabat, June 11th-19th, 2007
 - xiv. Ashgabat, June 25th-July 4th, 2007
 - √ KE2(WQM-expert) in
 - i. Moscow, January 22nd-27th, 2007
 - ii. Odessa (Black Sea) March 23rd, 2007
 - iii. Ashgabat, May 14th-May 19th, 2007
 - iv. Moscow, June 13th, 2007
 - v. Ashgabat. June 17th-30th, 2007
 - √ KE4 (Industrial Engineer)
 - i. Ashgabat, May 16th-May 24th, 2007
 - √ Short Term expert
 - i. Ashgabat, May 15th-May 19th, 2007
- d. The SAPIC consultations during the GloBallast supported Regional Workshop for Caspian Sea Ballast Water Management, 12-13 March, 2007 in Baku; the purpose was to discuss the duty station situation, since AZ had not endorsed the project;
- e. Consultation with Black Sea Marine Pollution Center to discuss Black Sea QA/QC experience on March 23, 2007 in Odessa;
- f. The consultation of Caspian stakeholders at the First Workshop of the European Union Water Initiative (EUWI)-EECCA component, 24-25 April 2007, in Almaty.
- g. The findings of the Inception Workshop, and SAPIC consultation 17-18 May 2007 in Ashgabat and the feedbacks received from this;
- h. The findings of the 4th Regional Meeting of the TDA/NCAP/SAP Revisit Workshop in Tehran, June 6-8, 2007; and the feedback received from this;
- i. Consultations with former Tacis TLs for assistance to CEP during event b, g and i.
- j. Meeting with SOI Moscow on June 13, 2007 to discuss the Terek River sampling campaign planned for September 2007.
- k. The visit to CaspEcoControl in Turkmenbasy on June 26, 2007.
- l. The wrap-up and consolidation of the above findings in Ashgabat, June 11-30, 2007.

3 SUMMARY OF PROJECT PLANNING FOR THE REMAINDER OF THE PROJECT

The activities to be undertaken for the remainder of the project are as follows:

Task 1 Project Management and Reporting

- a. Keeping-up vested relations with PM and riparian state's beneficiaries;
- b. Final selection and contracting of envisaged non-key experts;
- c. Opening project office in Ashgabat and making it operational for all aspects of work;
- d. Implementing and updating the Work Plan based on biannual reviews of results;
- e. Learning from lessons learned in Inception Phase
- f. Bi-annual Meetings with the Regional Project Steering Committee
- g. Presentation of project results in biannual Regional Workshops and SC Meetings to beneficiaries in the five countries;
- h. Preparation of Mid-term Review Report for Europe Aid for the middle of 2008.
- i. Reporting as defined in Section 7 of ToR, including the Final Report in 2009.
- j. Keeping CEP PM and CEP SC informed through mail and visits to Tehran and Brussels.
- k. Effective data dissemination to all contracted parties through a website linked with or incorporated in CEP's website;
- l. Liaison with World Bank, UNDP and UNEP by inviting them to the Regional Workshops; keeping up relations with NATO in order to stimulate applications for NATO's Science for Peace and Stability Funds.

Task 2: Collection of existing data and identifying main pollution sources

- a. Continuation of literature review and dissemination of results through the web-site.
- b. Realization of Project database synchronized with CEP-SAP data base and web-site.
- c. Materializing DPSIR concept as a frame work for action for selected projects.
- d. Dissemination of information assessment for APCs and major riparian rivers through the web-site
- e. Initial water/flow and pollution load estimation ditto.
- f. Implementation of a simplified mass balance model approach for selected land-based pollution sources.
- g. Elaboration of data reliability requirements.

Task 3: Design and implementation of an enhanced RWQMP

- a. Implementation of improved water quality monitoring methods, based on better positioning of sampling locations towards land-based pollution sources, measuring relevant parameters with attention for common water quality parameters, TDS, TSS and sediment quality, including fractional analysis and core sampling of sediment, building on lessons learned from earlier work on POPs and PTS.
- b. Implementation of priorities agreed per country, with emphasis on measuring impact of land-based pollution sources for Volga delta, coast of Dagestan and Terek River in RU, Kura Delta and Abcheron peninsular in AZ, Turkmenbasy and Cheleken in TM and Aktau uranium mine tailings, and oil and gas pollution near Atyrau (Ural delta and marchlands) in KZ.
- c. Implementation of enhanced RWQMP cruises in AZ, KZ, RU and TM.
- d. Identifying needs for laboratory training including QA procedures based on an established network of regional laboratories, making use of internationally renowned accreditation institutes for verification analysis of water and sediment samples collected in the marine environment.

Task 4: Deployment of equipment and procurement of vessels and samples analysis for four RWQMP cruises:

- a. Deployment of monitoring equipment delivered by the parallel Tacis contract to KZ, RU and TM for the Caspian Sea.

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- b. Training on operation and cruise planning
- c. Capacity building through regional training workshops
- d. Implementation of sampling and analysis, procurement of satellite images and ground truth data verification
- e. Extended verification analyses.

Task 5: Production of RPAPs

- a. TA for assessment of current situation
- b. Development of action plan
- c. Feasibility studies of selected projects.
- d. Workshops
- e. Know-how dissemination
- f. Capacity building

4 PROJECT PROGRESS IN REPORTING PERIOD

In the period December 2006-June 2007, the following progress has been made.

Task 1 Project Management and Reporting

Between December 2006 and June 2007 TL visited Moscow (twice), Astana (once), Almaty (twice), Baku (four times), Ashgabat (twice) and Tehran (twice), resulting in following progress, supported by work accomplished in home office (in absence of duty station):

- a. Vested relations with PM and riparian state's beneficiaries were established.
- b. Non-key experts were identified and suggested for selection and contracting; one short term expert was contracted for regional coordination and mediation of the Inception Workshop. In all countries adequate scientific staff was identified for tackling monitoring issues sec. The need for obtaining sustainable results prompted us contacting the Tacis representative office in Russia and Turkmenistan, notably for identifying experts in institutional and legislative affairs, needed for assuring continued financing monitoring of land based pollution sources, also when this project is finished.
- c. Office and office support facilities were prepared for Baku; upon failure of timely endorsement by the Government of AZ, of Baku as duty station, Ashgabat was selected as duty stations where preparations for establishing duty station were started. For acquiring the letter of endorsement from the AZ authorities, Europe House Baku was strongly involved, but it did not result in timely approval. In Ashgabat, it was the Minister of Nature Protection and the Tacis' advisor who helped us settling and registering the project in Turkmenistan.
- d. Work Plan for Inception Report first was prepared for Baku; after disapproval of Baku, the first draft was prepared in home office.
- e. The Inception Workshop was held in Ashgabat and the second draft of the Inception Report and adjusted Work Plan were prepared in Ashgabat.
- f. Bi-annual Meetings with the Regional Project Steering Committee were effectuated by presenting the Project to CEP-SAP SC Meeting in Moscow and consulting the SAPICs at the Inception Workshop in Ashgabat.
- g. Presentation of the Project, the Inception Report and the Work Plan to all five Caspian countries was realized during these visits and by the Inception Workshop in Ashgabat. At the end of this reporting period, the final version not was distributed to beneficiaries. This version was under discussion with PM Tacis.
- h. Preparation of Mid-term Review for Europe Aid is envisaged for the middle of 2008.
- i. Reporting as defined in Section 7 of ToR resulted in submission of second draft Inception Report by early July, 2007, which was approved by PM Tacis August 2007.
- j. Keeping CEP PM and CEP SC informed was realized by mail and visits to Tehran and Brussels. TL attended the CEP SCM in Moscow, December 2006.
- k. Effective data dissemination to all contracted parties is in a status of preparation; an overview of existing information was disseminated in the annexes of the Inception Report.
- l. Liaison with World Bank, UNDP and UNEP was established in Moscow, while representatives were invited and partly attended the Inception Workshop in Ashgabat. Additionally by invitation of EU, the first EUWI Workshop in Almaty and NATO Headquarters in Brussels were visited to present the Project.

At the start of the project in December 2006, Baku was earmarked as duty station. Azerbaijan had not timely endorsed the Project, and therefore a temporary solution was sought by appointing Baku interim duty station. By March 16th, 2007 these attempts were stopped, due to the fact no appropriate documents could be delivered to EC Brussels. Then by invitation of the Turkmenistan Minister of Nature Protection, Ashgabat was proposed to host the Inception Workshop and to function as duty station. Ashgabat was endorsed by the EU to be duty station in June 2007. This situation likely will result in an over run of the contract period, which now is limited up to and including May 2007. There is a note on this in the file. This is a deviation of 4 month relative to the foreseen situation. In fact the deviation is 6 month, since the project office became operational in Ashgabat not earlier than August 2007. In absence of duty station, PM

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Tacis allowed Consultants to draft the Inception Report in home-office. This may violate the at least 80% of man days spending in-country as it was notified to PM Tacis.

Task 2: Collection of existing data and identifying main pollution sources

The Consortium appointed a resident Assistant Expert in Ashgabat, performing his duties in cooperation with KE3 and KE4. This resulted in following progress:

- a. Literature review was initiated and results reported in Inception Report. The reports available at the CEP SAP PMU in Tehran were downloaded. Books on the Caspian Sea were acquired and information was distributed to the experts. As well entry was identified to web-sites in Russian language, notably in the field of oceanography.
- b. Concept for a Project database was studied and needs to be synchronized with CEP-SAP data base and web-site. KE3' travel restrictions prevented this.
- c. Concept of DPSIR framework was presented to beneficiaries at Inception Workshop
- d. Available information assessment APCs and major riparian rivers was initiated based on GIWA.
- e. Initial water/flow and pollution load estimation have not been implemented yet. Partly this was due to KE3's travel restrictions. Otherwise data from the Caspian Thematic Centre for Pollution Control in Baku were not acquired. The whereabouts of this data base is unclear.
- f. Ambitions for mass balance model for the Caspian were reduced based on SAPICs recommendations.
- g. Data reliability requirements still to be elaborated.

Task 3: Design and implementation of an enhanced RWQMP

KE2 visited Moscow and Ashgabat twice, and elaborating TL's findings in home office, resulting in following progress:

- a. An assessment of current situation, pointing at deficiencies in monitoring TDS, TSS and sediment, notably in regard of fractional differentiation of TSS and sediment and lack of sediment core sampling. Need for analyzing some additional toxic substances like TBT and released by painting ships was recognized.
- b. Agreement and implementation of program was discussed with priorities agreed per country, with emphasis on measuring impact of land-based pollution sources for Volga delta, coast of Dagestan and Terek River in RU, Kura Delta and Abcheron peninsular in AZ, Turkmenbasy and Cheleken in TM and Aktau uranium mine tailings, and oil and gas pollution near Atyrau (Ural delta and marchlands) in KZ.
- c. TA for design, planning and execution of enhanced RWQMP cruises was discussed with all beneficiaries during the Inception Workshop in Ashgabat and addressed to stakeholders in RU and TM.
- d. The need for laboratory training including QA procedures and establishing a network of regional laboratories was introduced to all beneficiaries at the Inception Workshop in Ashgabat, including the possible role of Typhoon laboratory in RU and MEL Monaco.

Task 4: Deployment of equipment and procurement of vessels and samples analysis for four RWQMP cruises:

In pace with Task 2, KE2 in cooperation with TL realized following progress:

- a. The TA for deployment of equipment was discussed building on the experiences with the Black Sea program and the envisaged delivery of monitoring equipment by Tacis to KZ, RU and TM for the Caspian Sea.
- b. Training on operation and cruise planning was incorporated in the Work Plan. By instruction of PM Tacis, KE2 paid attention to identifying training needs, which will be implemented under the parallel Tacis equipment contract (Tacis/2005/109245).
- c. Capacity building through regional training workshops was incorporated in the Work Plan
- d. A request for extending the budget for cruises with additional funding for sampling and analysis, procurement of satellite images and ground truth data verification was made.
- e. A ditto request was made for extending funding of verification analyses.

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Task 5: Production of RPAPs

In pace with the Inception Workshop, KE4 in communication with KE3 realized the following progress:

- a. TA for assessment of current situation based on GIWA was provided at Inception Workshop.
- b. The detailed approach for developing the action plan was provided in the Inception report.
- c. Feasibility studies of selected projects need further clarification. The original ToR demanded action planning for APCs. Following CEP SAP strategic amendment we should concentrate on mitigating land based pollution sources. This requires a more accurate delineation of the scope of action planning under the frame work of this contract.
- d. Workshops were incorporated in the Work Plan.
- e. Know-how dissemination will be incorporated in d.
- f. Capacity building ditto.

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Table 4.1 Project Progress Report

Project title: Caspian Water Quality Monitoring and Action Plan for Areas of Pollution Concern				Project number: EuropeAid/122033/C/SV/Multi, TACIS/2005/ 109-244				Country: AZ, KZ, RU, TM AZ, KZ, RU, TM				Page: 1								
Planning period: December 4th, 2006-June 30th, 2007				Prepared on: October 9th, 2007				EC Consultant: Consortium DHV BV (The Netherlands, leading party), COWI A/S (Denmark), ECORYS (The Netherlands) and WL Delft (The Netherlands)												
Project objectives: To improve quality of the marine and coastal environment of the Caspian Sea through the Caspian Environment Program (CEP)																				
No	MAIN ACTIVITIES	TIME FRAME								INPUTS				EQUIPMENT AND MATERIAL		OTHER				
		2006		2007						PERSONNEL [working days]		Planned	Utilised	Planned	Utilised	Planned	Utilised			
Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	EC Consultant	Counterpart	Planned	Utilised							Planned	Utilised	Planned
Task 1	Project Management		XX	XX	XXX	XX	XX	XXX	XXX	61,0	95,0	85,0	20,0	Office rent and operation, conference facilitation	Telephone, and conference facilitation	14 IATs (single and round trips) and visa's; plus 86 DSAs on incidental budget, covering costs for out of duty station for project staff and 8 IATs and 32 DSAs for SAPICs and PRAGs attending Inception Workshop	14 IATs (single and round trips) and visa's; plus 86 DSAs on incidental budget, covering costs for out of duty station for project staff and 8 IATs and 32 DSAs for SAPICs and PRAGs attending Inception Workshop			
Task 2	Collection of existing data and identifying main pollution sources (FACILITARY TO 3, 4 and 5)						XX	XXX				25,0								
Task 3	Design and implementation of an enhanced RWQMP			XX	X	X	X	X	X	40,0	35,0		3,0							
Task 4	Deployment of equipment and procurement of vessels and samples analysis for four RWQMP surveys								X	X	20,0	8,0						2,0		
Task 5	Production of RPAPs					X	X	X		10,0	14,5									
Total									131,0	152,5	110,0	25,0								

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Table 4.2 Resource Utilisation Report

Project title : Caspian Water Quality Monitoring and Action Plan for Areas of Pollution concern		Project number: EuropeAid/122033/C/SV /Multi, TACIS/2005/ 109-244		Country : AZ, KZ, RU, TM		Page : 1 of 1
Planning period : December 4 th , 2006-June 30 th , 2007		Prepared on : October 9 th , 2007		EC Consultant : Consortium DHV BV (The Netherlands, leading party), COWI A/S (Denmark), ECORYS (The Netherlands) and WL Delft (The Netherlands)		
Project objectives : To improve quality of the marine and coastal environment of the Caspian Sea through the Caspian Environment Program (CEP)						
<i>RESOURCES/INPUTS</i>	TOTAL PLANNED	PERIOD PLANNED	PERIOD REALISED (Expected)	TOTAL REALISED TO END OF PERIOD	AVAILABLE FOR REMAINDER	
<i>Personnel</i>						
International Key-Experts	540 person days	131 person days	152,5 person days	152,5 person days	396,7 person days ³	
International Non Key-Experts	100 person days	0 person days	0 person days	0 person days	90 person days ⁴	
Local experts	1000 person days	110 person days	25 person days	25 person days	975 person days	
Sub-total						
<i>Equipment and Material</i>	No procurement during this reporting period,					
Sub-total						
<i>Other Inputs</i>	Incidentals 250,000 €	Incidentals planned 37,744.36 €	Incidental expenditure realized 39,922.38 €	Incidental expenditure realized 39,922.38 €	Incidentals left over 430,077.62 € ⁵	
Sub-total						
TOTAL						

³ 10 days of Non Key International Experts were awarded to TL (equivalent with 9.2 person days) by letter from Tacis, dated September 27th, 2007.

⁴ See i

⁵ **By addendum No 1 to this contract of July 17th, 2007 the amount of 220,000 € was added to the original incidental budget.**

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Table 4.3 Output performance report

Project title: Caspian Water Quality Monitoring and Action Plan for Areas of Pollution Concern	Project number: EuropeAid/1220EuropeAid/122033/C/SV/Multi, TACIS/2005/ 109-244	Country: AZ, KZ, RU, TM,	Page: 1
Planning period: December 4th, 2006-June 30th, 2007	Prepared on: October 9th, 2007	EC Consultant: Consortium DHV BV (The Netherlands, leading party), COWI A/S (Denmark), ECORYS (The Netherlands) and WL Delft (The Netherlands)	
Outputs (to be described and target dates indicated)	Deviation original plan [+ or - %]	Reason for deviation	Comment on constraints & assumptions
Task 1 Project Management and Reporting			
a. Vested relations with PM and riparian state's beneficiaries	√	Delay in establishment of duty station, see progress report. ditto planned for middle of 2008	
b. Non-key experts selected and contracted	-		
c. Office and office support facilities established,.	-		
d. Work Plan for Inception Report	√		
e. Inception Workshop and Inception Report accepted	√		
f. Bi-annual Meetings Regional Project Steering Committee	√		
g. Presentation to all five Caspian countries	√		
h. Preparation of Mid-term Review for Europe Aid	not applicable		
i. Reporting as defined in Section 7 of ToR	√		
j. Keeping CEP PM and CEP Steering Committee informed	√		
k. Effective data dissemination to all contract parties	√		
l. Liaison with World Bank, UNDP and UNEP	√		
Task 2: Collection of existing data and identifying main pollution sources			
a. Literature review	√	ambitions lowered by recommendation of recipients	
b. Project database.	in progress		
c. DPSIR framework	in progress		
d. Available information assessment APCs and major riparian rivers	in progress		
e. Initial water/flow and pollution load estimation.	in progress		
f. Mass balance model	-		
g. Data reliability requirements	in progress		
Task 3: Design and implementation of an enhanced RWQMP			
a. TA for assessment of current situation	in progress		
b. Agreement and implementation of program	in progress		
c. TA for design, planning and execution of enhanced RWQMP cruises	in progress		

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Project title: Caspian Water Quality Monitoring and Action Plan for Areas of Pollution Concern	Project number: EuropeAid/1220EuropeAid/122033/C/SV/Multi, TACIS/2005/ 109-244	Country: AZ, KZ, RU, TM,		Page: 1
Planning period: December 4th, 2006-June 30th, 2007	Prepared on: October 9th, 2007	EC Consultant: Consortium DHV BV (The Netherlands, leading party), COWI A/S (Denmark), ECORYS (The Netherlands) and WL Delft (The Netherlands)		
Outputs (to be described and target dates indicated)	Deviation original plan [+ or - %]	Reason for deviation	Comment on constraints & assumptions	
d. Laboratory training including QA procedures and establishing a network of regional laboratories	in progress			
Task 4: Deployment of equipment and procurement of vessels and samples analysis for four RWQMP cruises				
a. TA for deployment of equipment	in progress			
b. Training on operation and cruise planning	in progress			
c. Capacity building through regional training workshops	in progress			
d. Funding of vessel hire	in progress			
e. Funding of verification analyses	in progress			
Task 5: Production of RPAPs				
a. TA for assessment of current situation,	in progress		need to further delineate the scope (nature and extent) of land based pollution sources	
b. Development of action plan and	in progress			
c. Feasibility studies of selected projects	in progress			
d. Workshops,	in progress			
e. Know-how dissemination	in progress			
f. Capacity building	in progress			

5 PROJECT PLANNING FOR NEXT REPORTING PERIOD

Task 1 Project Management and Reporting

- a. Keeping-up vested relations with PM and riparian state's beneficiaries.
- b. Final selection and contracting of envisaged non-key experts. The need for obtaining sustainable results, demands us to contact the NFPs and SAPICs for assuring input from institutional and legislative experts for assuring continued financing monitoring of land based pollution sources, also when this project is finished.
- c. Opening project office in Ashgabat and making it operational for all aspects of work. This opportunity will enable us to introduce the relevant IFI and oil and gas related actors in TM to our project.
- d. Implementing and updating the Work Plan based on biannual reviews of results;
- e. Learning from lessons learned in Inception Phase
- f. The bi-annual meeting with the Regional Project Steering Committee is planned for December 2007 in Ashgabat in pace with CEP SAPs SCM.
- g. The presentation of project results is planned at the biannual Regional Workshop to be hold prior to the SCM meeting for December 2007 in Ashgabat.
- h. Keeping CEP PM and CEP SC informed through mail and visits to Tehran and Brussels. The assistant expert is intending to visit the Tehran office in this semester.
- i. Effective data dissemination to all contracted parties through a website linked with or incorporated in CEP's website;
- j. Liaison with World Bank, UNDP and UNEP by inviting them to the SC Meeting in Ashgabat. Keeping up relations with NATO in order to stimulate applications for NATO's Science for Peace and Stability Funds. The head of the SPS will be invited at the regional Workshop to introduce beneficiaries to the program.

Task 2: Collection of existing data and identifying main pollution sources

- a. Continuation of literature review and dissemination of results through the web-site.
- b. Development of a Project database synchronized with CEP-SAP data base and web-site.
- c. Materializing DPSIR concept as a frame work for action for selected projects.
- d. Dissemination of information assessment for APCs and major riparian rivers through the web-site
- e. Initial water/flow and pollution load estimation ditto.
- f. Conceptualization of a simplified mass balance model approach for selected land-based pollution sources.
- g. Elaboration of data reliability requirements.

Task 3: Design and implementation of an enhanced RWQMP

- a. Implementation of improved water quality monitoring methods, based on better positioning of sampling locations towards land-based pollution sources, measuring relevant parameters with attention for common water quality parameters, TDS, TSS and sediment quality, including fractional analysis and core sampling of sediment, building on lessons learned from earlier work on POPs and PTS.
- b. Implementation of priorities agreed per country, with emphasis on measuring impact of land-based pollution sources for Volga delta, coast of Dagestan and Terek River in RU, Kura Delta and Abcheron peninsular in AZ, Turkmenbasy and Cheleken in TM and Aktau uranium mine tailings, and oil and gas pollution near Atyrau (Ural delta and marchlands) in KZ.
- c. Detailed preparation and quality assurance criteria for implementation of enhanced RWQMP cruises in AZ, KZ, RU and TM. In case existing boating facilities are below safety and scientific standards alternative solutions will be sought by considering private sector options.
- d. Identifying needs for laboratory training including QA procedures based on an established network of regional laboratories, making use of internationally renowned accreditation institutes for verification analysis of water and sediment samples collected in the marine environment.

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Task 4: Deployment of equipment and procurement of vessels and samples analysis for four RWQMP cruises:

- a. Deployment of monitoring equipment delivered by the parallel Tacis contract to KZ, RU and TM for the Caspian Sea, considering recipient's laboratory infrastructure. This includes a strategic priority setting for deciding how, when, where and *by whom* to do the analysis of samples using our additional funds.
- b. Training on operation and cruise planning
- c. Capacity building through regional training workshops
- d. Implementation of sampling and analysis, procurement of satellite images and ground truth data verification
- e. Extended verification analyses.

Task 5: Production of RPAPs

- a. TA for assessment of current situation
- b. Development of action plan. The need for further delineating the definition of land based pollution sources was recognized in the first semester and will be elaborated in this planning phase
- c. A more accurate delineation of the scope of action planning (feasibility studies) under the frame work of this contract will be prepared taking into account the nature and extent of land based pollution sources.
- d. Workshops
- e. Know-how dissemination
- f. Capacity building

Institutional and legislative embedding of Task 3 to Task 5 will be paramount for assuring sustainable results. The ToR did not cater for this aspect. The Consortium is trying to strengthen this weakness by discussing and analyzing the issue with beneficiaries.

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Table 5.1 Plan Of Operations For The Next Period (Work programme)

Project title:	Project number:	Country:	Page: 1
Caspian Water Quality Monitoring and Action Plan for Areas of Pollution Concern (Hot-MAP)	EuropeAid/122033/C/SV/Multi, TACIS/2005/ 109-244	AZ, KZ, RU, TM	
Planning period: July 1th, 2007 - 1 January, 2008	Prepared on: June 30th, 2007	EC Consultant: Consortium DHV BV (The Netherlands, leading party), COWI A/S (Denmark), ECORYS (The Netherlands) and WL Delft (The Netherlands)	
Project objectives: To improve quality of the marine and coastal environment of the Caspian Sea through the Caspian Environment Program (CEP)			

		TIME FRAME						INPUTS		
		2007						PERSONNEL (working days)	EQUIPMENT AND MATERIAL	OTHER
No	ACTIVITIES	8 July	9 August	10 September	11 October	12 November	13 December	EC Consultant	Counterpart	
Task 1	Project Management							38	65	
Task 2	Collection of existing data and identifying main pollution sources							AE		
Task 3	Design and implementation of an enhanced RWQMP			ru/kz az/tm		ru/az kz/tm		35	80	
3.1	Agreement of key monitoring locations, protocols and contaminants, and regional administration and management for enhanced RWQMP									
3.2	Agreement on participating national authorities and laboratories									

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		TIME FRAME						INPUTS			
		2007						PERSONNEL (working days)	EQUIPMENT AND MATERIAL	OTHER	
No	ACTIVITIES	8 July	9 August	10 September	11 October	12 November	13 December	EC Consultant	Counterpart		
3.3	Agreement on Quality Assurance support to be provided to participating laboratories and verification analysis by accredited international laboratory										
3.4	Design, planning and support for implementation of enhanced RWQMP monitoring cruises and sample analyses;										
AZ				Baku		Baku					
KZ			Asta			Atyrau					
RU			Mosc			Mosc					
TM			Ash			Ash					
Task 4	Deployment of equipment and procurement of vessels and samples analysis for four RWQMP surveys							25	60		IAT, DSA, Visa, non-duty station experts
4.1	Deployment and training in use of equipment specified and procured funded under a separate contract.										
4.2	Hiring of vessels to undertake RWQMP cruises and subsequent sample analyses, including verification analyses from an internationally accredited laboratory.										
AZ											
KZ						Kos at					

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		TIME FRAME						INPUTS			
		2007						PERSONNEL (working days)	EQUIPMENT AND MATERIAL	OTHER	
No	ACTIVITIES	8 July	9 August	10 September	11 October	12 November	13 December	EC Consultant	Counterpart		
RU TM				Terek						Rent of boat , in cooperation with SOI!	
Task 5	RPAP					Turkm		25	60	Rent of boat and accessoires	IAT, DSA, Visa, non- duty station experts
5.1	Assessment of available discharge information in Areas of Pollution Concern (to include assessment of pollution database prepared by Tacis first project and work to undertaken by the Global Plan of Action for the Protection of the Marine environment										
5.2	Updating of Areas of Pollution Concern assessment in the Caspian countries, using results from enhanced RWQMP surveys and field verification;										
5.3 AZ KZ RU TM	Identification, prioritising and costing of remediation actions			Terek						Rent of boat and accessoires	
	REGIONAL WORKSHOPS						Ash				

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		TIME FRAME						INPUTS			
		2007						PERSONNEL (working days)	EQUIPMENT AND MATERIAL	OTHER	
No	ACTIVITIES	8 July	9 August	10 September	11 October	12 November	13 December	EC Consultant	Counterpart		
	OTHER ACTIVITIES:										
	Synchronization with TACIS Equipment Supply Contract										
	Synchronization with TACIS Black Sea Project	Inception Kiev workshop	meeting								
	Identification of pilot projects illegible for financing by NATO's SP Program										
	REPORTING:						first interim report				
	SC Meetings:						SC Meeting (1)			Conference equipment	
	GRAND TOTAL:							123	265		

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6 COLOPHON

Client	: European Commission
Project	: Interim Report No 1.
File	: A4270.10.010
Length of report	: 20 pages
Author	: Gijs Kok
Contributions	: Dirkjan Douma
Project Manager	:
Project Director	: Theo Henckens
Date	: October 9 th , 2007
Name/Initials	:

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