

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



## **Second Tacis Coordination Meeting**

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

**Tacis/2005/109244**

**Ashgabat, Turkmenistan**

**11:15 – 13:15, February 6th, 2008**

**Venue Nissa Hotel**

### **Participants**

#### **Project Managers**

- |   |                                    |                               |
|---|------------------------------------|-------------------------------|
| 1 | <b>Ms. NIELSEN, Lena</b>           | European Commission/EuropeAid |
| 2 | <b>Mr. GHAFARZADEH, Hamidrezah</b> | CEP-SAP - UNDP                |

#### **SAPIC's**

- |   |                                |                 |
|---|--------------------------------|-----------------|
| 3 | <b>Mr. JABBAROV, Mikayil</b>   | Acting SAPIC AZ |
| 4 | <b>Ms. FARSHCHI, Parvin</b>    | SAPIC IR        |
| 5 | <b>Mr. AKMETOV, Serik</b>      | SAPIC KZ        |
| 6 | <b>Ms. BUTYLINA, Tatiana P</b> | SAPIC RU        |
| 7 | <b>Ms. ORAZDURDYEVA, Gozel</b> | SAPIC TM        |

#### **Project team**

- |    |                                      |                                  |
|----|--------------------------------------|----------------------------------|
| 8  | <b>Mr. KOK, Gijs</b>                 | Project Team Leader - DHV        |
| 9  | <b>Mr. VOITSEKHOVYCH, Oleg</b>       | Water Quality Monitoring Expert. |
| 10 | <b>Mr. HØYBYE, Jan Agerholm</b>      | Environmental Management Expert  |
| 11 | <b>Mr. de KONING, Ary</b>            | Industrial Engineer              |
| 12 | <b>Ms. ABDRAHITOVA, Leyla</b>        | Regional Coordinator             |
| 13 | <b>Mr. DOUMA, Dirkjan</b>            | Associate Expert                 |
| 14 | <b>Mr. MYROSHNYCHENKO, Volodymyr</b> | RS/GIS DBM Expert                |
| 15 | <b>Mr. de MORA, Stephen</b>          | Proficiency Testing Expert       |
| 16 | <b>Mr. BRACONI, Stefano</b>          | Project Manager AGMIN            |

### **Agenda**

- 1. Opening**
- 2. Minutes last meeting**
- 3. Progress reports**
- 4. Results first regional workshop**
- 5. Approval of plan of activities**
- 6. Recommendations and decisions**
- 7. Closure**

## Minutes of Meeting

### **Introduction by TL:**

In response to the ToR of the Project, this Second Tacis Coordination Meeting is held in pace with the last CEP SAP Steering Committee Meeting to guide project implementation. In doing so we build on the results of the First Tacis Coordination Meeting held in Ashgabat May 18<sup>th</sup>, 2007.

In the First Tacis Coordination Meeting we discussed the choice of Project Duty Station, which became Ashgabat and the delivery of equipment to KZ, RU and TM, which now is being provided by AGMIN under a separate contract. It is a pleasure, PM Tacis, PM CEP SAP and expert, the SAPICs, the complete international team including Regional Coordinator and PM AGMIN are attending this meeting, and so that we can agree on the results we have achieved in the First Regional Workshop, held in Ashgabat, February 4-6, 2008.

In order to efficiently facilitate the decision-making process, the progress of the project since the start December 2006 up to and including the First Regional Workshop have been presented into a power point presentation, which has been attached to these minutes.

### **Project Synopsis:**

- **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 IR;
- **Project starting date:** Date of contract signature: November 27th, 2006; Date of actual start of project activities: December 4th, 2006
- **Project duration:** 2.5 years from November 27th 2006 till May 27th, 2009

### **Project objectives:**

- 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), converted into: **Target 3.1: "Develop and implement a regional water quality-monitoring program focused on critical contaminants and hotspots, (H) 1-5 years"**; 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, converted into: **Target 1.2: "Undertake a comprehensive land-based source assessment and develop a regional action plan to remediate areas of pollution concern identified, (H) 1-5 years"**.<sup>1</sup>

### **Project activities (ToR):**

1. **Enhanced RWQMP based on regional components of the National Site Specific "Hot spots"**.
  - 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 RQWMP.*
2. **Deployment and survey procurement:**

---

<sup>1</sup> SAP CEP as approved at the CEP Steering Committee Meeting of November 5, 2003, was updated October 2006 and endorsed at the CEP Steering Committee Meeting in Moscow, December 2006. It converted above Target 2.1 into Target 3.1 and above Target 3.2 into Target 1.2:

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

*(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. Monitoring laboratories**

*a) Agreement of key monitoring locations, assistance in procurement;*

### **4. RPAP:**

*(a) Assessment of available pollution areas of concern information;*

*(b) Updating of pollution assessment;*

(c) Identification, prioritizing and costing of remediation actions

### **Project Approach (Consortium)**

- Task 1 Project Management and Reporting
- Task 2: Collection of existing data and identifying main pollution sources
- Task 3: Design and implementation of an enhanced RWQMP
- Task 4: Deployment of equipment and procurement of vessels and samples analysis for four RWQMP cruises
- Task 5: Production of RPAPs

### **Project Progress Dec 2006-Febr 2008**

#### **Task 1: Project Management and Reporting**

##### **Outputs**

- a. Vested relations with PM and riparian state's beneficiaries representatives
- b. Non-key experts selected, approved and contracted for AZ, KZ, RU and TM
- c. Office and office support facilities established, including communication, logistics, administrative support and translations in Ashgabat, opened August 8<sup>th</sup>, 2007 in Ashgabat
- d. Work Plan for Inception Report compiled, drafted, redrafted and approved by EC August 2007.
- e. Inception Workshop holds in Ashgabat May 17-18, 2007.
- f. Bi-annual Tacis Coordination Meeting held May 18<sup>th</sup>, 2007 and now, February 6<sup>th</sup>, 2008
- g. Presentation of Project Work Plan and results to all five Caspian countries at Inception Workshop, May 17-18<sup>th</sup>, 2007.
- h. Preparation of Mid-term Review for Europe Aid planned for middle of 2008.
- i. Reporting as defined in Section 7 of ToR realized with Inception Report, First Interim Report and Second Interim Report (under preparation).
- j. Keeping CEP PM and CEP Steering Committee informed
- k. Effective data dissemination to all contractually annotated parties
- l. Liaison with World Bank, UNDP and UNEP through SCM of the CEP-SAP

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

##### **Outputs:**

- a. Literature review implemented by AE
- b. Project database under construction
- c. DPSIR framework reported in Inception Phase
- d. Available information assessment APCs and major riparian rivers collected based on GIWA
- e. Initial water/flow and pollution load estimation requirements specified
- f. Mass balance model presented
- g. Data reliability requirements discussed

#### **Task 3: Design and implementation of an enhanced RWQMP**

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

### **Outputs:**

An enhanced RWQMP that includes:

- a. TA for assessment of current situation has been completed
- b. Agreement and implementation of programme has been achieved
- c. TA for design, planning and execution of enhanced RWQMP cruises in progress
- d. Laboratory training including QA procedures is in progress

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

### **Outputs:**

Deployment and cruise procurement:

- a. TA for deployment of equipment is in progress
- b. Training on operation and cruise planning is in progress
- c. Capacity building through regional training workshops is being implemented
- d. Funding of vessel hire is secured
- e. Funding of verification analyses is secured

### **Task 5: Production of RPAPs**

### **Outputs: RPAP:**

- a. TA for assessment of current situation is completed
- b. Development of action plan and
- c. Feasibility studies of selected projects are in progress
- d. Workshops are planned
- e. Know-how dissemination and
- f. Capacity building are planned

### **Results of First Regional Workshop**

#### **1. Parameters**

##### **Sampling media: sediments**

##### **Contaminant Parameters:**

- Total Petroleum Hydrocarbons (TPH)
- OCPs: DDTs, Lindane
- PCBs
- Trace Metals: Hg, Cu, Zn
- Radionuclides: 40K, 137Cs, 210Pb, 226Ra, 238U

##### **Complementary parameters:**

- Grain size
- TOC (Total Organic Carbon) and Carbonate
- Al and Fe

#### **2. Proficiency testing**

**Actors:** As suggested and discussed in Inception Workshop in May 2007 and in First Regional Workshop in February 2008 we embark on work done by **IAEA's MEL in Monaco (the Marine Environmental Laboratory of the International Atomic Energy Agency)** in foregoing phases. In doing this we involve independent laboratories in the region for sample preparation and analysis:

These independent laboratories have been selected based on the following criteria and conditions:

1. Experience in the marine environment and bottom sediments contamination studies, and also experience in organizing and conducting inter-comparison analytical laboratory studies and proficiency testing.

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

2. Proper equipment for preparation of the reference material created from bottom sediments, trained personnel adjusted to preparation and processing of the reference samples and related experience in collaboration with the leading analytical laboratories certified in accordance ISO-17025.
3. The Reference laboratories should have high professional experience in analytical studies of the wide range of pollution substances in the bottom sediment such as follows:
  - a) *Trace elements;*
  - b) *Persistent Organic Pollutants (POPs);*
  - c) *Radionuclides having of natural and artificial origin*

Following independent laboratories<sup>2</sup> fulfil these above-mentioned criteria and conditions.

1. **Centre for Monitoring Studies and Environmental Technologies (CMSET) Kiev (Ukraine)** in co-operation with the analytical laboratories of Ukrainian Hydro-meteorological Institute (UHMI) (according to the conditions 1, 2 and 3b)
2. **Ukrainian Centre for Marine Ecology (UCME) Odessa (Ukraine)**, which previously acted as a Thematic Regional Acting Centre for the Black Sea Pollution in frame of BSEP. UCME has great experience according to the conditions 1, 2, 3a and 3b)
3. **Scientific Industrial Association "Typhoon" (SIA Typhoon) Obninsk (Russian Federation) a subsidiary of State Hydro-meteorological Committee of Russian Federation** (according to the conditions 1,3a and 3b)

**Proficiency Test Time Table for 2008**

<b>Jan</b>	Preparation of test sample
<b>Feb</b>	Characterization of test sample
<b>Early March</b>	Distribution to laboratories by DHL (test material, instructions and reporting forms)
<b>April</b>	Chemical analyses in laboratories
<b>Late May</b>	Submission of results to CMSET
<b>June</b>	CMSET interpret data and prepare report

**3. Station Locations**

Number of stations: 5 to 8

Previously proposed locations

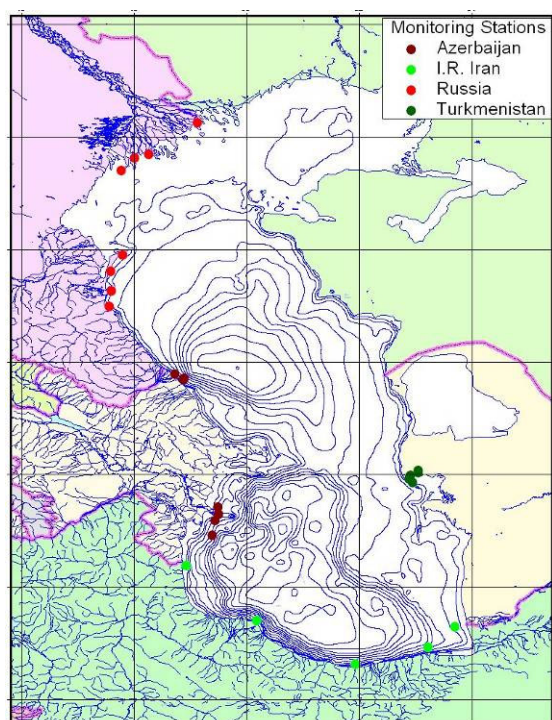
- *Need station locations from Kazakhstan*
- *Additional / different sites in Azerbaijan & Turkmenistan*

The following map has to be updated (coordinated reported in compliance previously proposed locations)

---

<sup>2</sup> PM Tacis has approved the issue of the necessity of using laboratories as close as possible to the place of the sampling. We therefore use the laboratories located in a place where the best available result can be obtained.

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



**4. Sampling & Analysis Time Table Timing for 2008**

<b>Late June</b>	Meeting (Proficiency Test Report; Final plans for monitoring campaign; Training needs)
<b>July - Aug</b>	Sample collection
<b>Sept - Nov</b>	Chemical analyses of samples
<b>Nov</b>	Data interpretation
<b>Late Nov</b>	Submission of data and environmental interpretation to TL
<b>Dec</b>	Regional Workshop to discuss monitoring results

**5. Laboratories selected in riparian countries**

<b>AZ-1</b>	Caspian Complex Env. Monitoring Administration
<b>AZ-2</b>	AzEcolab
<b>IR-1</b>	Department of Environment-Central Laboratory
<b>IR-2</b>	Iranian National Center for Oceanography / Plant Protection Research Center
<b>KZ-1</b>	Aktau-Port HMC Laboratory/Central Laboratory
<b>KZ-2</b>	Atyrau Municipal Analytical Environment Protection Lab.
<b>RU-1</b>	SOI/ Dagestan HMC
<b>RU-2</b>	Shirshov OI  Astrakhan Caspian Center
<b>TM-1</b>	CaspEcontrol Laboratory
<b>TM-2</b>	Turkmen Geology Laboratory

**6. Sampling logistics - vessels & dates**

Country	Mission Dates	Vessel	Areas of Concern	Station total
<b>AZ</b>	<b>03-09 08</b>	<b>Halif Gajiev 4+2 person</b>	<b>Baku bay (5) Kura Avandelta (5) Coast area (3)</b>	<b>13</b>
<b>IR</b>	<b>July-August</b>	<b>Gilan</b>	<b>Sefid Rood River (3), Bandar Anzali (3), Chalus/Noshahr (3), Gorgan Bay (3)</b>	<b>12</b>

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

KZ	24 -29 08	Elen, KAAE 4+2 person	Ural River (2), Agip platforms (5), Bautino (2) Aktau (3), Fetisovo (3)	15
RU	15 -23.08	“Briz” 4+1 person	Volga avandelta (4), Dagestan North (3), Central (3), Samur (3)	13
TM	01 -06 09	Rented 4+2 person	Turkmenbashi (3), Cheleken (3), Ekerem (1), Gasan-Kuli (1), Bekdash (2)	10

**7. Equipment needs**

AZ	Consumables, packing materials, bottles. Box-corer
IR	---
KZ	Consumables, packing materials, bottles. Box-corer, Filtration facilities
RU	Consumables, packing materials, bottles. Box-corer,
TM	Consumables, packing materials, bottles. Box-corer. Filtration facilities

These issues do have to be provided by the countries them selves.

**8. Training needs**

	General	Individual
AZ	1. Shipboard Operations	
IR		
KZ	2. GC analyses, especially for OCPs	
RU		Bottom sediment chronology
TM	3. Data interpretation and pollution assessment	Sediment sampling

**9. Reporting and Meetings**

**Reporting**

- Proficiency test data due **May 30, 2008**

**Meeting - late June 2008** provisionally planned in **Atyrau, KZ**

- Proficiency Test Report
- Final planning meeting before sampling campaign
- Discussion of training programs

**Reporting**

- Chemical data and environmental interpretation due **Nov 30, 2008**

**Meeting - mid December 2008** provisionally planned in **Baku, AZ**

- Discuss results of monitoring program

**10. Action planning toward LBS**

To be developed, particularly at the December workshop, base don the summer sampling campaign;  
Follow-up to outstanding requests for information can be expected in due time meanwhile.

**Discussions:**

The presentation was accepted positively, all participants expressed the necessity to combine efforts in order to improve environmental situation in the Caspian area.

- **Ms. FARSHCHI, Parvin, IR Iran SAPIC**, underlined that IR Iran joins to all of activities indicated in the Action Plan in regard of vessels research, sampling an analysis of samples.
- **Mr. AKHMETOV, Serik, KZ SAPIC**, confirmed readiness of KZ side to participate in vessels research and 2x KZ laboratories to be involved in samples measurement. He described briefly

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

hot spot zones on KZ coast of Caspian Sea. Serik expressed appreciation of the results of the First Regional Workshop.

- **Ms. ORAZDURDYEVA, Gozel, TM SAPIC**, informed about governmental decision to develop Caspian coastal zone and huge investments coming to that area. She confirmed participation of TM experts in all of surveys and promised to discuss with TM MNR alternative vessel and possibility to install equipment delivered by parallel Tacis project, to that vessel on temporary base.
- **Mr. JABBAROV, Mikayil**, acting AZ SAPIC, confirmed participation of AZ team in surveys. He gave description of the activities of Caspian Monitoring centre. Mikayil requested additional time to specify survey's details.
- **Ms. BUTYLINA, Tatiana, RU SAPIC**, informed participants that RU Security Council decided to strengthen environmental activities, to develop legislation. Mr. Korshenko, RU Technical Coordinator, briefly informed Ms. Butylina about WS results and she expressed satisfaction by the First Regional Workshop results. She confirmed RU interest to be involved into the project implementation.
- **Mr. BRACONI, Stefano, Project Manager AGMIN**, informed participants about the equipment to be delivered in the frame of parallel project.