

**INTEGRATED SAFEGUARDS DATA SHEET
CONCEPT STAGE**

Report No.: AC1499

Date ISDS Prepared/Updated: 07/12/2005

I. BASIC INFORMATION

A. Basic Project Data

Country: Turkey	Project ID: P093765
Project Name: GAS SECTOR DEVELOPMENT	
Task Team Leader: Ranjit J. Lamech	
Estimated Appraisal Date: September 19, 2005	Estimated Board Date: December 13, 2005
Managing Unit: ECSIE	Lending Instrument: Specific Investment Loan
Sector: Oil and gas (100%)	
Theme: Public expenditure, financial management and procurement (P)	
IBRD Amount (US\$m.):	300.00
IDA Amount (US\$m.):	0.00
GEF Amount (US\$m.):	0.00
PCF Amount (US\$m.):	0.00
Other financing amounts by source:	
<u>BORROWER</u>	100.00
	100.00

B. Project Objectives [from section 2 of PCN]

To increase the reliability and stability of gas supply and delivery to Turkish gas consumers by implementing critically needed gas storage and network infrastructure, and support BOTAS in strengthening its operation as a commercially run and financially independent corporation capable of accessing capital markets on its own account.

C. Project Description [from section 3 of PCN]

Tuz Golu Underground Gas Storage Facility: This is the main component and will include the surface facilities, the solution mining and cavern formation work, the water pipeline and the gas pipeline, the cushion gas, as well as consulting services such as the owner's engineer. This storage facility is estimated to have a capacity of 960 million cubic meters of working gas (i.e. 0.96 BCM). [Notes: In addition to the working gas, there will be 240 million cubic meters of cushion gas, required for cavern integrity throughout the operating life of the facility. The Gas Market Law (4646) requires every trader/wholesaler of gas to maintain a minimum of 10% of their forecast demand in in-country storage. This translates to a storage requirement of about 3.5 to 4.0 BCM by 2008.]

The facility will be built in an underground salt formation that runs south of the Tuz Golu salt lake - the salt body has an average width of 2-2.5 km, is about 15 km long, and has an average salt thickness of 1,500 meters (exceeding 2,000 meters in several places). Geological screening has ranked Tuz Golu as the preferred location for storing large volumes of gas. The caverns will be 'solution mined' using fresh water drawn from the Hirfanli reservoir through a 130 km pipeline. The fresh water demand is about 10-12 million cubic meters per year for six years.

DSI (the State Water Board) has agreed to allocate this water which represents less than 0.5% of water inflow to the reservoir. The proposed salt caverns are about 20 km from a main gas trunk line near Aksaray making connection to the network easy. The brine from the solution mining will be discharged into an area of the Tuz Golu salt lake where there are no plant or animal life of any special interest. The brine will also help preserve the lake which is evaporating.

Potential Investment in Gas Transmission and Network Infrastructure: In order to meet the growing demand for gas, BOTAS has planned a very large transmission development program, for which they will require financing. The Project may also finance critically needed compressor stations, depending on the consistency between the schedule of the Project and the preparedness of the proposed investments.

Achieving an Investment Grade Credit Rating and Corporate Financial Independence: The Project will support BOTAS in strengthening its institutional capacity to enable it to achieve an investment grade credit rating that will enable it to access capital markets on its own account. The Bank is providing support, through a PPIAF grant, for financial advisors and rating services from one of the top three international credit rating firms. During project preparation, the scope of follow-on support during project implementation will be determined.

D. Project location (if known)

The Gas Storage Project would be located South of the Tuz Golu salt lake in Turkey.

E. Borrower's Institutional Capacity for Safeguard Policies [from PCN]

BOTAS has considerable experience in handling involuntary land expropriation. BOTAS has a special Land Expropriation Department based in Ankara, and experienced, trained staff located in regional offices who meet owners and negotiate compensation, based on information generated by professional land appraisers. The staff are well-acquainted with Turkish expropriation law. Through their ongoing implementation of the Turkish portion of the Baku-Tbilisi-Ceyhan (BTC) pipeline, following the BTC Resettlement Action Plan, staff of the Land Expropriation Department have gained valuable experience on Bank safeguard requirements and practices.

BOTAS' environmental engineers are experienced in Turkish environmental standards and procedures, and also have an understanding of the Bank's safeguard policies.

F. Environmental and Social Safeguards Specialists

Mr Norval Stanley Peabody (ECSSD)

Mr Bernard Baratz (QAG)

II. SAFEGUARD POLICIES THAT MIGHT APPLY

Safeguard Policies Triggered	Yes	No	TBD
Environmental Assessment (OP/BP 4.01)	X		
<p>Turkish Government environment regulations required BOTAS to prepare an Environmental Impact Assessment (EIA). An EIA was prepared by independent experts (ENVY Inc) [Note: Consistent with OP 4.01 paragraph 4 which requires the Borrower to utilize independent EA experts not affiliated with the project to prepare the EA for Category A projects.] about two years ago, and approved by the Ministry of Environment. The project team environmental specialist reviewed the EIA document, which is quite comprehensive. It covers issues related to seismicity, as well as other issues associated with solution mining (such as disruption of aquifers) and disposal of brines in a salt lake (including ecosystems impacts). The Task Team has requested supplemental information, in part since the source of fresh water for solution mining water has shifted from ground water to surface water, and there are additional questions appropriate to satisfy World Bank Category A requirements for Environmental Assessment.</p>			
Natural Habitats (OP/BP 4.04)			X
<p>The team assumes that the Project will not affect any 'Red Book' species located in the general lake basin, and this will be considered in the EA.</p>			
Forests (OP/BP 4.36)		X	
Pest Management (OP 4.09)		X	
Cultural Property (OPN 11.03)		X	
Indigenous Peoples (OD 4.20)		X	
Involuntary Resettlement (OP/BP 4.12)	X		
<p>Rights of way and some limited land acquisition will be required for the three pipelines constructed under the project - a fresh water line from the Hirfanli Reservoir to the storage site, a gas pipeline from the existing pipeline to the storage site, and a brine discharge pipeline from the storage site to Tuz Golu. The pipeline from Hirfanli will follow the alignment of an existing gas pipeline, and will be placed within the existing right of way whenever possible. The alignment area is sparsely populated, especially around Tuz Golu, so inhabited areas will be avoided entirely along the alignment.</p>			
Safety of Dams (OP/BP 4.37)			X
<p>The team will verify the reportedly good condition of the Hirfanli dam, and the procedures being used by DSI to routinely monitor the condition of the dam. This will be adequately documented during the preparation of the project.</p>			
Projects on International Waterways (OP/BP 7.50)		X	
Projects in Disputed Areas (OP/BP 7.60)		X	

Environmental Category: B - Partial Assessment

III. SAFEGUARD PREPARATION PLAN

- A. Target date for the Quality Enhancement Review (QER), at which time the PAD-stage ISDS would be prepared: 08/15/2005

- B. For simple projects that will not require a QER, the target date for preparing the PAD-stage ISDS: N/A
- C. Time frame for launching and completing the safeguard-related studies that may be needed. The specific studies and their timing¹ should be specified in the PAD-stage ISDS.
- o Supplement to the Turkish EIA to satisfy World Bank EA requirements (OP/BP/GP 4.01) by mid-March 2005.
 - o Draft Land Acquisition Plan by May 15, 2005.
 - o If BOTAS requires Bank financing for transmission pipelines and compressor stations, the related safeguards issues could be addressed through either a framework EA/EMP (if the sites are not known at appraisal, or they are known and are low to moderate risk, i.e., category B) and/or site-specific EA/EMP (as appropriate to the EA category) if the sites are known.

IV. APPROVALS

<i>Signed and submitted by:</i>		
Task Team Leader:	Mr Ranjit J. Lamech	04/11/2005
<i>Approved by:</i>		
Regional Safeguards Coordinator:	Mr Ronald N. Hoffer	05/11/2005
Comments: This ISDS is cleared for safeguards		
Sector Manager:		
Comments:		

¹ Reminder: The Bank's Disclosure Policy requires that safeguard-related documents be disclosed before appraisal (i) at the InfoShop and (ii) in-country, at publicly accessible locations and in a form and language that are accessible to potentially affected persons.

