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**Republic of Azerbaijan**

**Trans Anatolian Natural Gas Pipeline (TANAP) Project**

# TRANS ANATOLIAN NATURAL GAS PIPELINE PROJECT (TANAP)

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## CURRENCY EQUIVALENTS

(Exchange Rate Effective as of 04 November, 2016)

Currency Unit = Azerbaijani Manat (AZN)

Currency Unit = Turkish Lira (TL)

AZN 1.68 = US\$1

TL 3.15 = US\$1

## FISCAL YEAR

January 1 – December 31

## ABBREVIATIONS AND ACRONYMS

|       |   |                       |  |
|-------|---|-----------------------|--|
| AGSC  | Azerbaijan Gas Supply Company                           |                       |  |
| AGI   | Above Ground Installations                              |                       |  |
| AiIB  | Asian Infrastructure Investment Bank                    | LNG                   | liquefied natural gas                              |
| APM   | automatic pricing mechanism                             | M&E                   | monitoring and evaluation                          |
| bcm   | billion cubic meters                                    | MENR                  | Ministry of Energy and Natural Resources (Turkey)  |
| BOTAŞ | Petroleum Pipeline Corporation of Turkey                | MoEU                  | Ministry of Environment and Urbanization (Turkey)  |
| BP    | BP plc (formerly known as British Petroleum)            | MoFW                  | Ministry of Forestry and Water Affairs (Turkey)    |
| COP21 | 21 <sup>st</sup> annual Conference of Parties to UNFCCC | MIGA                  | Multilateral Investment Guarantee Agency           |
|       |   | mtCO <sub>2</sub> -eq | million tons of carbon-dioxide equivalent          |
|       |   | MW                    | megawatt   |
|       |   | MWh                   | megawatt-hour                                      |
| EBRD  | European Bank for Reconstruction and Development        | NG                    | natural gas  |
| EC    | European Commission                                     | NGML                  | Natural Gas Market Law                             |
| EIA   | Environmental Impact Assessment                         | PMUM                  | Electricity Market Financial Reconciliation Center |
| ESIA  | Environmental and Social Impact Assessment              | PPP                   | public-private partnership                         |
| ESMS  | Environmental and Social Management System              | RAP                   | Resettlement Action Plan                           |
| EIB   | European Investment Bank                                | RoW                   | right-of-way                                       |
| EMRA  | Energy Market Regulatory Authority                      | SCD                   | Systematic Country Diagnostic                      |
| EPC   | Engineering, Procurement and Construction               |                       |  |
| EPCM  | Engineering, Procurement and Construction Management    | SCP                   | South Caucasus Pipeline                            |
| EPIAŞ | Energy Market Operation Corporation of Turkey           | SCPx                  | SCP Expansion                                      |
| ESES  | Environmental Sustainability and Energy Sector          | SGC                   | Southern Gas Corridor Closed Joint Stock Company   |
| EITI  | Extractive Industries Transparency Initiative           | SEP                   | Stakeholder Engagement Plan                        |
| EU    | European Union  | SOE                   | state-owned enterprise                             |
| EUAŞ  | Electricity Generation Corporation of Turkey            | SOCAR                 | State Oil Company of Azerbaijan Republic           |

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|      |   |        |   |
|------|---|--------|---|
| FM   | financial management                                  | SOFAZ  | State Oil Fund of Azerbaijan Republic                 |
| GDP  | gross domestic product                                | TANAP  | Trans-Anatolian Natural Gas Pipeline                  |
| GHG  | greenhouse gas  | TAP    | Trans-Adriatic Natural Gas Pipeline                   |
| GSDP | Gas Sector Development Project                        |        |   |
| IEA  | International Energy Agency                           | TEİAŞ  | Electricity Transmission Corporation of Turkey        |
| IBRD | International Bank for Reconstruction and Development | TL     | Turkish Lira  |
| IFC  | International Finance Corporation                     | TP     | Turkish Petroleum Corporation                         |
| IFR  | Interim Financial Report                              | UNFCCC | United Nations Framework Convention on Climate Change |
| IFRS | International Financial Reporting Standards           | USAID  | United States Agency for International Development    |
| INDC | Intended Nationally Determined Contribution           | WB     | World Bank  |
| IPA  | Instrument for Pre-Accession Assistance               |        |   |

## 1. Project Summary Sheet

### Trans Anatolian Natural Gas Pipeline (TANAP) Project

|  |   |
|--|---|
| Project No.  | 000011  |
| Client<br>Borrower<br>Guarantor<br>Implementation Agency         | Azerbaijan<br>Southern Gas Corridor Closed Joint Stock Company (SGC)<br>Republic of Azerbaijan<br>TANAP Doğalgaz İletim A.Ş.  |
| Sector(s)<br>Subsector(s)  | Energy<br>Oil & Gas   |
| TANAP Project<br>Project<br>Objectives/Brief Project Description | To integrate Azerbaijan with regional and European energy markets by strengthening its connectivity and transit role and to improve the energy supply security of Turkey and South Eastern Europe.  |
| Project Implementation Period                                    | 01 February 2017 to 31 January 2021   |
| Expected Loan Closing Date                                       | 31 July 2021  |
| Project cost and<br>Financing Plan                               | Total Project Cost: US\$ 8.6 billion<br><u>Expected Financing as per the breakdown below:</u><br>Borrower's contribution: US\$ 1.4 billion<br>World Bank IBRD Loan: US\$ 0.8 billion<br>AIIB Loan: US\$ 0.6 billion<br>EIB Loan: US\$ 1.3 billion<br>EBRD Loan: US\$ 0.5 billion<br>BOTAS, Turkey: US\$ 1.0 billion<br>BP (British Petroleum): US\$ 1.0 billion<br>Private Commercial Sources: US\$ 2.0 billion |
| AIIB Loan<br>(Size and Terms)                                    | US\$ 600 million, 30-year term, including a grace period of 5 years, at the Bank's standard interest rate for sovereign-backed loans  |
| Co-financing<br>(If any)   | World Bank IBRD Loan: US\$ 0.4 billion.<br>(IBRD has extended another loan of US\$ 0.4 billion to BOTAS, Turkey for this project)   |
| Environmental<br>and Social Category                             | A   |
| Project Risk (Low/Medium/High)                                   | High  |
| Conditions for Effectiveness and<br>Disbursement (if any)        | a) All legal agreements are completely signed, b) legal opinions received and c) additional effectiveness conditions in loan agreement are satisfied.   |
| Key Covenants  | None  |

|                  |   |
|------------------|---|
| Policy Assurance | The VP Policy and Strategy confirms an overall assurance that the Bank is in compliance with the policies applicable to the Project |
|------------------|---|

|                                     |  |
|-------------------------------------|--|
| <b>President</b>                    | Liquin Jin   |
| <b>Vice-President</b>               | D.J. Pandian   |
| <b>Director General, Operations</b> | Supee Teravaninthorn   |
| <b>Manager, Operations</b>          | Ke Fang  |
| <b>Project Team Leader</b>          | Hari Bhaskar   |
| <b>Project Team Members</b>         | Chongwu Sun – Environmental Specialist<br>ZongCheng Lin– Social Development Specialist<br>Rudiger Woggon – Lead Counsel<br>Thomas Walenta – Investment Officer<br>Jang Ping Thia – Senior Economist<br>Ian Nightingale – Procurement Advisor<br>Haiyan Wang – Senior Finance Officer<br>Baihui Sun – Project Assistant |

## **2. Strategic Context**

### **A. Country Context**

1. As part of the Southern Gas Corridor Program (“the Program”), the Trans-Anatolian Natural Gas Pipeline (TANAP) Project (“the Project”) will transport natural gas extracted from the Shah Deniz 2 field located in the Caspian Sea in Azerbaijan to Turkey and Europe. Turkey is the host country of the Project.

2. Because of the Program’s strategic significance, AIIB with the World Bank Group, are supporting the Program with other international financial institutions (IFIs) including the Asian Development Bank (ADB), the European Bank for Reconstruction and Development (EBRD), and the European Investment Bank (EIB).

3. Turkey is an upper middle income country with a per capita income of approximately US\$10,000. Turkey’s current economic growth is in the 3-4% range and is expected to remain in this same range in medium term. Turkey’s economic performance since 2000 has been impressive, both before and after the 2008/09 global financial crisis. Turkey recovered well from the global financial crisis of 2008/09, with high economic growth during the 2010-12 period. Economic growth slowed since 2012, per capita income has stagnated around US\$10,000 per year annum, and unemployment is inching upward. These developments need to be addressed for Turkey’s continued progress towards reaching high income and reducing income inequality. Turkey’s geographical location is considered strategic as it is located in between the gas producers in the east (e.g. Azerbaijan) and the consumers in Europe. Turkey will receive 6 billion cubic meters (bcm) per annum of natural gas through TANAP system.

4. Azerbaijan is an upper middle income country with a per capita income of approximately US\$6,700. Azerbaijan’s GDP growth was around 1.1% in 2015 which was significantly lower compared to the period 2002-2010 when growth averaged about 16% per year due to the hydro carbon resource boom. As a consequence of recent low prices for oil, and the associated reduction in oil export revenues, the current account is expected to be in deficit for 2016. Fortunately, the declining oil revenue could be compensated by the increase in gas production which characterizes Azerbaijan’s future energy exports.

### **B. Sectoral and Institutional Context**

5. The Southern Gas Corridor Program connects gas fields in Azerbaijan and transmits the gas through Georgia, Turkey, Greece and Albania to Italy. The program consists of several infrastructure projects aiming to improve the security and diversity of the energy supply of the Turkey and the European Union (EU) by bringing natural gas from the Caspian region to Europe for the first time. The TANAP project, an 1,850 km pipeline, represents 53% of the total 3,500 km of pipeline to be constructed under the Southern Gas Corridor Program.

## **Turkey**

6. The energy sector has been a key contributor to Turkey's economic growth. Turkey made a strategic choice to diversify its energy mix into natural gas starting in 1987, due to its lower investment cost, operational flexibility and environmental advantages compared to coal. Gas typically accounts for 45-50% of the total electricity generation. At about 50 bcm per annum, Turkey's gas consumption is the third largest in Europe after Germany and Italy. Turkey's greenhouse gas (GHG) emissions are much lower today than they would have been without the successful diversification into gas.

7. Six bcm per annum from TANAP will be consumed by Turkey, and this is a major step towards diversification of its imports and its energy security. However, Turkey's heavy dependence on energy imports (mostly oil and gas) constitutes a macroeconomic challenge. Energy imports accounted for more than 70% of Turkey's primary energy supply, 23% of all imports and 58% of the current account deficit in 2014. The Government's efforts are focused on energy efficiency, renewable energy and the introduction and large-scale application of nuclear energy.

8. Constraints to gas imports and gas market inefficiencies threaten Turkey's energy security. BOTAŞ dominates the gas market with nearly 75% market share. Network capacity and storage limitations constrain the flow of gas and also the trading of gas by prospective competitors. Gas storage capacity of 2.6 bcm constitutes only 5% of annual gas consumption (compared to 20-30% in large European countries), and this is insufficient to cover demand spikes<sup>1</sup>. These constraints in the gas market and infrastructure prevent Turkey from achieving gas supply security at a reasonable price, and may also threaten the security of electricity supply as gas-fired power generation accounts for 45-50% of the total electricity generation.

## **Azerbaijan**

9. Azerbaijan is one of the oldest oil producing countries in the world. The country has also been developing its natural gas sector rapidly over the past decade. Proven natural gas reserves are of the order of 1,000 bcm, with the Shah Deniz field making up the largest share of these reserves. Azerbaijan produced about 19 bcm in 2015, primarily from Shah Deniz and Azeri-Chirag-Guneshli fields, and currently exports about 8.1 bcm per annum. With TANAP, another 16 bcm per annum will be exported. Revenues in Azerbaijan from gas production and transportation will be substantial, especially in light of declining oil production, and will enable the Government to enhance its asset base and sustain economic growth in the medium and long term.

10. Azerbaijan joined the Extractives Industry Transparency Initiative (EITI) in 2004 at the outset of this initiative and was the first country to be validated as fully EITI-compliant in 2009. Recent questions posed by civil society organizations in the country

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<sup>1</sup> According to the World Bank-financed Gas Sector Development Project (P093765) which aims to increase the reliability and stability of gas supply in Turkey through gas storage and network infrastructure.



have led to Azerbaijan being required to undergo a compliance check by the EITI. The Government's objectives are to: (a) regain its compliant status; (b) become one of the first countries to mainstream transparency reporting across the government institutions; and (c) enhance its Extractive Industries' Management System by mainstreaming disclosures, improving data reporting for the extractives industries and making transparency an integral part of its management systems.

11. The Government of Azerbaijan created a National EITI Secretariat, housed within SOFAZ (SOFAZ, the State Oil Fund of Azerbaijan Republic, was established in 1999 as the state's vehicle for consolidating earnings from its energy exports and investing into income-generating activities), to coordinate EITI activities in Azerbaijan. SOFAZ is planning to carry out an assessment of the country's extractive industries' management system, including current procedures of awarding contracts and licenses, monitoring operations, enforcing environmental protection and social mitigation requirements, collecting taxes, distributing revenues, and implementing sustainable development policies and projects. Based on the outcomes of this assessment, SOFAZ would develop actions on further improvement of disclosures and transparency for extractive industries, as well as enhance state agencies' capacity to effectively regulate country's mineral resource development in a transparent and efficient manner, and foster the private sector development. This would be a concurrent program implemented by SOFAZ in parallel with the proposed Project. AIIB and other international financial institutions (IFIs) support this initiative and would engage with the relevant stakeholders on ways to participate in its implementation.

### **Southern Gas Corridor and Europe's Energy Supply**

12. As European gas production declined beginning about 10 years ago, the EU now imports more than two-thirds of its gas supply. The decline in European production is projected to continue; the International Energy Agency (IEA) projects annual production in Europe to decline by about 100 bcm by 2040 (of which about 80 bcm inside the EU). Europe will continue to rely on imports to meet the gap between demand and declining production.

13. Europe's gas supply is generally well diversified, but the Baltics and Central and South Eastern Europe, including Italy, are more dependent on gas from one source. The Southern Gas Corridor facilitates connections to a number of existing and proposed pipelines, enabling supply to gas markets throughout South Eastern and Central Europe (and Western Europe through Italy and Austria). Therefore, the development of the Southern Gas Corridor is one of the EU's highest energy security priorities for both supply and route diversification. The 10 bcm/annum gas flow through TANAP to Europe will account for about 3.5 percent of Europe's imports (and about 7 percent after the possible expansion to 20 bcm/annum flow). According to the European Commission, given the potential supplies of gas from the Caspian Region, the Middle East, and the East Mediterranean, if needed the EU could increase the volume of gas imports through the Southern Gas Corridor route to 80-100 bcm in the long term with suitable expansion of the transmission capacity of Southern Gas Corridor.

### 3. The Project

#### A. Rationale

14. The rationale for public sector financing supported by AIIB is that financing needs for the program are significant and in order to ensure financial sustainability for entities such as SGC and BOTAS, a blend of private capital and concessional financing is vital. As the ability to mobilize significant sums of financing from the market is also limited due to market liquidity, exposures and other regulatory factors, financing from the AIIB, World Bank, EBRD and EIB would ensure that investment needs are met at reasonable cost, which in turn would contribute to sustainability of benefits that would be gained from the project.

15. The positive impact of the project on the economic development of associated countries, specifically Turkey and Azerbaijan, are immense and in line with AIIB's mission of promoting and strengthening economic growth in Asia through infrastructure investments. A list of the economic benefits would include but not be limited to the following:

- i. **Diversifying Turkey's energy sources.** The 6 bcm per annum from Azerbaijan will help diversify its energy sources and to strengthen its energy security which are vital to sustain economic growth;
- ii. **Increasing gas storage.** With very low levels of gas storage in Turkey (5% of annual consumption against 20%-30% average storage capacity in Europe), any gas supply interruptions from its existing sources will have serious consequences. In light of this, diversification of sources and strengthening of gas supply security that will be achieved through the project is critical for Turkey's economic growth.
- iii. **Generating employment.** The project is expected to generate employment for 9,000 people directly and for about 5,000 people indirectly during construction. Once in operation, the project will provide permanent employment to 300 people (at the current transmission capacity of 16 bcm per annum) and subsequently, to 500 people when the annual flow is raised to its full capacity of 31 bcm.
- iv. **Integrating Azerbaijan to European markets.** The project helps Azerbaijan's integration with regional and European energy markets, strengthens its connectivity and transit role. The project helps Azerbaijan almost triple its natural gas exports from 8.1 bcm per annum to about 24 bcm per annum. The project will strengthen Azerbaijan's resource industries to observe global standards in transparency and reporting in keeping with the Extractives Industry Transparency Initiative.

- v. **Balancing against decline in oil exports.** In a scenario where the oil production is declining in Azerbaijan, the increase in Azerbaijan's export of natural gas provides it with an additional revenue stream which will enable its government to enhance its asset base and to sustain economic growth. On completion of this project, Azerbaijan would also have successfully diversified its export base from the Caucasus region to Europe.
- vi. **Diversifying Europe's gas imports.** South Eastern Europe will receive and consume 10 bcm per annum from Azerbaijan, thereby diversifying the markets from which Europe imports its gas.

## **B. Objectives**

16. The **project's development objectives** are to: (a) integrate Azerbaijan with regional and European energy markets by strengthening its connectivity and transit role and (b) to improve the energy supply security of Turkey and South Eastern Europe. These objectives will also serve as the result indicators as shown in Annex 1.

17. **Beneficiaries.** The direct beneficiary of the project is TANAP Doğalgaz İletim Anonim Şirketi – i.e., TANAP Natural Gas Transmission Company, a private company established under the Turkish Commercial Code to implement the TANAP project and own and operate the TANAP Pipeline System upon project completion. The ultimate beneficiaries are the citizens of Azerbaijan and natural gas consumers in Turkey and South Eastern Europe. Georgia will also be a beneficiary as part of the agreement on the transportation of Shah Deniz 2 gas through its territory to the Turkish border.

## **C. Project Description and Components**

18. The current project is the 1,850 km TANAP pipeline system running across Turkey (refer Figure 1) to transport 16 bcm per annum of natural gas produced at Shah Deniz 2 field at Azerbaijan. Out of the 16 bcm per annum of natural gas transported through the project, Turkey will consume 6 bcm per annum and the remaining 10 bcm per annum has been contracted by several European gas traders for the South Eastern Europe market, mostly Italy. Full details of the project are described in Annex 2.

**Figure 1: Route of SCPx, TANAP and TAP Pipelines from Azerbaijan to Italy**



19. TANAP will begin at Turkey’s border with Georgia, in the Turkish village of Türkgözü in the Posof district of Ardahan province, and will end at the Greek border in the İpsala district of Edirne province. At that point, TANAP will connect to TAP which will convey the gas to European gas markets. TANAP will connect to the Turkish natural gas network in two locations, at Eskişehir and Thrace, for the delivery of 6 bcm for the Turkish gas market. The pipeline up to Eskişehir will have a diameter of 56 inches; from Eskişehir to the Greek border the diameter will be 48 inches except for two parallel 36-inch pipeline for the 18 km section crossing the Marmara Sea.

20. In addition to two gas off-take points in Greece and Albania for South Eastern Europe, the TAP pipeline will also have the “physical reverse flow” feature that will allow gas from Italy to be transported to South Eastern Europe if gas supplies in South Eastern Europe are disrupted or more pipeline capacity is required to bring additional gas to the region. TAP facilitates connections to a number of existing and proposed pipelines, ensuring that the Southern Gas Corridor opens up to gas markets throughout South Eastern, Central and Western Europe.

21. TANAP Doğalgaz İletim Anonim Şirketi, i.e. TANAP Natural Gas Transmission Company, is a special purpose private company established under the Turkish Commercial Code to implement the TANAP Project and own and operate the TANAP Pipeline System upon its completion. The shareholders of TANAP are as follows:

- i. Turkey’s national gas company, Boru Hatlari Ile Petrol Taşıma Anonim Şirketi (BOTAS), holds a 30 percent share in TANAP.
- ii. The Government of Azerbaijan and the State Oil Company of the Azerbaijan Republic (SOCAR) have established the Southern Gas Corridor Closed Joint Stock Company (SGC CJSC) as their joint investment vehicle for the Southern Gas Corridor. SGC CJSC holds a 58 percent share in TANAP.

- iii. The remaining 12 percent share is held by the international oil and gas company BP plc through BP Pipelines (Tanap) Limited (sometimes also referred to by its former name British Petroleum).

22. **Project Phases and Steps.** The TANAP Pipeline System is designed to be implemented in phases, of which the first phase is the proposed Project, that is designed to reach its contracted 16 bcm per annum capacity<sup>2</sup>. The Project consists of the following two steps:

- i. The first step will initially start with delivery of 1 bcm of gas to Turkey, reaching a plateau level of 6 bcm per annum.
- ii. The second step will start delivery of gas to Trans-Adriatic Pipeline (TAP) for Europe and will reach a plateau level of 10 bcm per annum.

#### **D. Cost and Financing**

23. The current cost estimate is about US\$8.6 billion. Shareholders have committed to provide TANAP all funds required for the implementation of the project. Table 1 summarizes TANAP’s financing plan resulting from these shareholdings. These costs are well below original estimates prepared by international firms, in part due to competitive bidding. As all major contracts have been awarded, there is relative certainty on the costs moving forward, especially since the estimate includes a conservative US\$1.4 billion as a contingency provision.

**Table 1: TANAP Financing Plan (Amounts in US\$ billions)**

| <b>Shareholder</b> | <b>% of Financing</b> | <b>Financing Amount</b> |
|--------------------|-----------------------|-------------------------|
| SGC                | 58%                   | 5.0                     |
| BOTAS              | 30%                   | 2.6                     |
| BP plc             | 12%                   | 1.0                     |
| <b>Total</b>       | <b>100%</b>           | <b>8.6</b>              |

24. The breakdown of the costs (in US\$ billions) is as shown in Table 2.

---

<sup>2</sup> TANAP and TAP pipelines are designed to be expandable to 31 bcm and 20 bcm, respectively. With the addition of compressor stations, transit to Europe could double to 20 bcm and offtake by Turkey could increase to 11 bcm (or a higher volume of gas could be delivered to the Turkish market with less transit). This potential future project phase would be highly attractive as the low incremental investment requirement (mainly compressor stations) would enable a substantial reduction in transmission charges. However, such expansion is dependent on the availability of additional gas beyond the currently committed 16 bcm/annum of gas production from Shah Deniz 2. Going above the 31 bcm/annum towards 80-100 bcm/annum volumes would also require expansion of the transmission capacity of the Southern Gas Corridor.

**Table 2: Project Cost Breakdown (US\$ billion, rounded)**

| <b>Project Components</b>   | <b>Project cost</b> |
|---|---------------------|
| <b>Direct Costs of the Project</b>  | <b>6.1</b>          |
| Onshore and Offshore Pipelines  |                     |
| Compressor Stations   |                     |
| SCADA/Telecom System  |                     |
| Services including studies, design, engineering, procurement, construction management, supervision and monitoring |                     |
| <b>Other Costs of the Project</b>   | <b>1.1</b>          |
| Owner's Items   |                     |
| Commissioning and Pre-Operation   |                     |
| Land Acquisition  |                     |
| <b>Contingencies</b>  | <b>1.4</b>          |
| <b>Total Cost of the Project</b>  | <b>8.6</b>          |

25. **Co-financing arrangements:** AIIB and WB are proposing to jointly co-finance the Project, with WB taking the lead. WB is planning to provide sovereign backed IBRD loans to both SGC and BOTAS, (a Government of Turkey owned company and a shareholder of TANAP) while AIIB is considering providing a sovereign backed loan to SGC (i.e., guaranteed by the Government of Azerbaijan). The Multilateral Investment Guarantee Agency (MIGA), a member of the World Bank Group, is considering a guarantee product known as Non Honoring of Sovereign Financial Obligations (NHSFO) of about US\$750 million as a credit enhancement instrument allowing SGC to leverage commercial financing at improved terms.

26. The co-financing arrangements for the Project between WB and AIIB will follow the co-financing framework agreement signed by the respective Presidents of the two institutions in April 2016. In essence, the WB's policies and procedures on safeguards, procurement, financial management, project monitoring, and reporting will be used for the Project activities to be financed in whole or in part out of the loan proceeds (including activities to be financed by AIIB).

27. Procurement is ongoing and all the major supply and construction contracts have been awarded by TANAP. Given the massive scale of the project, early progress was necessary for achieving the completion dates of the project. As a result of WB's due diligence review; the contracts found suitable for financing by WB is defined at around US\$3.4 billion.

28. The current expectation is that AIIB's share of the financing of the total of the contracts will be US\$ 600 million as shown in Table 3.

**Table 3: AIIB and Other IFI Expected Loan Financing  
(US\$ millions)**

| <b>IFI</b> | <b>BOTAS</b> | <b>SGC</b> | <b>Total</b> |
|------------|--------------|------------|--------------|
| WB         | 400          | 400        | 800          |
| AIIB       | -            | 600        | 600          |
| EIB        | 800          | 500        | 1,300        |
| EBRD       | -            | 500        | 500          |
| Total      | 1,200        | 2,000      | 3,200        |

### **E. Implementation Arrangements**

29. **Implementation Supervision.** The WB will be the lead co-financier and will supervise the Project and administer the AIIB loan on behalf of the AIIB, in accordance with the WB’s applicable policies and procedures, and a Project Co-Lenders’ Agreement, to be signed between the Bank and the WB, in accordance with the Co-financing Agreement between the Bank and the WB. WB plans to visit the project sites as needed to monitor progress. Given the importance of the project, the Bank will send out team to join force with WB in the project supervisions. Proper resources will be made available to match the frequency of the WB supervision visit.

30. AIIB has reviewed all of the applicable World Bank’s Operational Policies (OP) and WB Business Procedures (BP), including OP/BO 4.01 (Environmental Assessment), 4.12 (Involuntary Assessment); WB’s Procurement and Consultant Guidelines, and the WB’s sanctions policies and procedures, including the WB’s Anti-Corruption Guidelines. AIIB has found them all satisfactory for application to the project activities to be financed in whole or in part out of the loan proceeds, in accordance with the requirements, respectively of the: (a) Bank’s Environmental and Social Policy (ESP) and Environmental and Social Standards (ESSs) (ESS1 – Environmental and Social Assessment and Management, and ESS2 – Involuntary Resettlement Assessment; (b) the requirements of the Bank’s Procurement Policy; and (c) the Bank’s Policy practices on Prohibited Practices. AIIB will rely on the WB’s determination of compliance with the above WB policies and procedures applicable to the project. Project monitoring and reporting, as well as financial management, will also be carried out in accordance with the WB’s requirements. This approach ensures that one set of policies will apply to the Project activities to be financed in whole or in part out of the loan proceeds. It will also provide a single point of contact for borrowers and therefore facilitate a more efficient and seamless approach to Project Implementation.

31. **Funds Flow and Disbursements.** Payments made by TANAP to its contractors under contracts found suitable for AIIB financing will form the basis of disbursements from the Bank. A high level disbursement plan (disbursement per year) has been worked out with inputs from WB. Subsequently, disbursement plan per contract package per year will be worked out during implementation. The estimated high level disbursement plan is as follows:

**Table 4: Estimated Disbursement (in US\$ millions)**

| Fiscal Year | 2017 | 2018 | 2019 | 2020 | 2021 |
|-------------|------|------|------|------|------|
| Actual      | 375  | 150  | 75   | 0    | 0    |
| Cumulative  | 375  | 525  | 600  | 600  | 600  |

#### **4. Project Assessment**

##### **A. Technical**

32. The technology involved in this project is quite standard. TANAP is responsible for the overall management and implementation of the Project to ensure the pipeline system is realized per the required standard, within time, budget and safety requirements. Front-end engineering design (FEED) of the pipeline system was carried out for TANAP in 2013-14 by an international engineering firm. In May 2014 TANAP employed an internationally renowned company as their EPCM contractor under a large multi-year contract to review the FEED and provide detailed engineering, procurement and construction management; logistics and materials management; and project management services through construction completion and initial operation.

33. Project construction started in 2014. The project is being implemented in two steps: the first step, to be completed by mid-2018, will initially start with the delivery of 1 bcm per annum to Turkey, reaching a plateau level of 6 bcm per annum in 2021 (barring further expansion). The second step, to be completed by early 2020, will start delivery of gas to TAP for Europe and will reach a plateau level of 10 bcm per annum in 2022. The project will have then reached its contracted 16 bcm per annum capacity.

34. TANAP and the EPCM contractor have recently executed a major change order to reflect the higher volume of engineering and procurement work since 2014. Following a memorandum of understanding, they have also negotiated two new framework contracts under which the EPCM contractor and its main sub-contractor will provide project management services as part of an Integrated Project Management Structure, where contractor staff are embedded in the TANAP organization.

35. A key risk requiring close monitoring would be potential delays to the construction schedule. There could be delays due to social, environmental and weather (during winter) conditions. The project's progress monitoring process will be conducted by WB and TANAP in close consultation with AIIB.

##### **B. Economic and Financial Analysis**

36. Where specific information was not available, the analysis has used World Bank estimates.



37. **Economic Viability.** The approach used in the quantitative economic analysis of the TANAP Project is to use estimated gas transmission revenues as a proxy for economic benefit and compare this conservative measure of benefits against TANAP's investment and estimated operational cost excluding VAT and tax payments to the Government. The economic rate of return (ERR) is estimated at 9.6%. The net present value (NPV) is estimated at about US\$2.6 billion using an economic discount rate of 6% (in accordance with the World Bank Guidelines for Economic Analysis of Power Sector Projects).

38. **Financial Viability.** The entire 16 bcm per annum production of Shah Deniz 2 and gas transmission capacity of the pipelines including TANAP have been contracted under long-term agreements. The TANAP Project's financial viability was assessed by comparing TANAP's estimated revenues from transmission services against TANAP's investment and operational cost (including VAT and tax payments to the Government). The financial rate of return (FRR) is estimated at 8.6% which exceeds the estimated cost of capital of SGC CJSC. The NPV for the project is estimated by the Bank to be US\$1.0 billion at a financial discount rate of 7% (equals the yield to maturity at issuance of the inaugural Eurobond).

39. **Sensitivity Analysis.** The financial and economic viability of the TANAP Project has been analyzed in various downside scenarios. Full capacity of the pipeline has been contracted under long-term agreements. The estimated ERR and FRR are sensitive to changes in the capital cost of the project: a 10% capital cost overrun would reduce both the ERR and the FRR by about 1%, with the resulting Economic and Financial NPV being US\$1.9 billion and US\$381 million, respectively, at discount rates of 6% and 7%, respectively. On the other hand, such an increase is unlikely as all main contracts have been awarded and the original US\$9.2 billion cost estimate has been revised to US\$8.6 billion, while still retaining a conservative US\$1.4 billion contingency provision. The capital cost estimate was in fact reduced by about US\$500 million in the comprehensive bottom-up contract-by-contract review that TANAP carried out in early 2016 and a further reduction of US\$700 million brought it down to the current US\$8.6 billion. The analysis also simulated an unlikely delay in construction activities of one year and another scenario of a 20% increase in operations and maintenance cost to assess the impact on the ERR and the FRR. Results of the sensitivity analysis are summarized in Annex 3.

40. **Job creation and other benefits.** The economic benefits of gas supply facilitated by TANAP are greater than the ERR for the pipeline suggests. According to the World Bank, supply from Shah Deniz 2 will double Turkey's gas imports from Azerbaijan from about 6.5 to about 12.5 bcm/annum. This will help meet the growing demand for natural gas and meet Turkey's energy supply security and diversification objectives. The across-the-country pipeline will ease congestion on BOTAS transmission network by providing much needed East-to-West transmission capacity. TANAP estimates that during construction the project will employ about 5,000 people directly and another 10,000 people indirectly through construction, support services, pipe manufacturing and other areas of the project.

### **Financial Analysis of TANAP**

41. Key financial indicators for 2013-06/2015 are provided in Annex 3. Based on World Bank estimates, TANAP AŞ is projected to be able to repay the shareholder loans and return shareholders' original equity investment in less than 10 years by 2029.

### **Financial Analysis of SGC**

42. SGC will be a direct recipient of loans from AIIB. Given SGC's ability to repay debt is fully dependent on the success of the overall Program, the debt sustainability of SGC was evaluated through its future cash flow and debt amortization profile (refer to Annex 3). The primary source of revenue and cash generation for SGC is through TANAP given its' large majority share in the project compared to the rest of the SGC projects. The World Bank has assessed that SGC's overall financing strategy is robust, and is being carried out with support of reputable international financial advisors with an objective to meet all of its financing obligations at the lowest possible costs. Based on the assessment shown in Annex 3, SGC would be able to meet all its obligations.

### **Financial Analysis of BOTAS**

43. Key financial indicators for 2013-2015 are provided in Annex 3. The World Bank rates the risk of BOTAS' ability to finance its shareholder obligations to TANAP as low and considers the risk of BOTAS defaulting on its debt service negligible.

### **C. Fiduciary and Governance**

44. TANAP's shareholders (SGC, BOTAS and BP plc) are involved at the level of Board of Directors, the General Assembly and also through various Shareholder committees including the TANAP Contract Committee (TCC). TCC's approval is needed for significant contracts, for example, TCC's approval is mandatory for any procurements and change orders above a certain threshold.

45. TANAP has the following governance and organization structure:

- a. Board of Directors: The business and affairs of the Company are managed and supervised by the Board of Directors ("Board") consisting of 10 directors elected by the general assembly. One of the Directors acts as the chairman of the Board (President);
- b. Chief Executive Officer: The Chief Executive Officer is appointed and removed by the Board. The powers and authorities of the Chief Executive Officer are delegated by the Board and are set out in the signature circular;
- c. Compliance Officer: A Compliance Officer is appointed by the Board in accordance with the Anti-Bribery and Corruption Policy of the Company;
- d. Technical Advisory Committee: The Technical Advisory Committee assists and advises the Board in relation to technical matters pertaining to the Project activities;

- e. Audit Committee: The Audit Committee established for the supervision of the Company's internal audit mechanism;
- f. Finance Committee: Finance Committee provides the Board and the management team with access to finance, banking, cash management, use of financial derivatives, budgeting and forecasting, accounting, performance management and taxation expertise from all Shareholders;
- g. TANAP Contract Committee (TCC): The TCC reviews any updates or changes to the Master Procurement Plan or an Annual Procurement Plan before its submission to the Board of Directors and
- h. Implementation Departments: Following Departments are involved in the implementation of the Project: Project Directorate (involving Engineering, Construction, Quality Control and Quality Assurance), Land Acquisition, Project Controls, Pre-Operations, Document Controls, Health and Safety (including Environmental and Social functions) and Security departments (total number of staff 156); Procurement and Contracts Directorate (19 staff); Finance Directorate (11 staff); Human Resources Directorate (6 staff); Legal Affairs Directorate (4 staff); Quality Directorate (3 staff); Corporate Communication Directorate (3 staff); IT Department (8 staff); Administrative Department (9 staff).

## **Financial Management and Disbursement**

46. The SGC has established reliable and solid financial management system for project management. The SGC finance department director and his subordinates responsible for financial management and disbursement arrangement of the project have all relevant knowledge and skills despite SGC's lack of prior experience with IFIs funded projects and operations. The company is being audited by an independent auditor from its inception and received unmodified audit opinion in accordance with International Financial Reporting Standards (IFRS) for 2014 and 2015.

47. The proposed AIIB loans will finance SGC's payments to TANAP (as Equity investor) for investment expenditures incurred by the company. Disbursements will be based on the investment expenditures made by TANAP for the Trans-Anatolian Natural Gas pipeline. These expenditures will be under contracts that would have been already awarded by the time of project effectiveness. These contract have been procured under the TANAP's procurement policy (discussed below). Payments made by TANAP to its contractors under contracts selected for Bank financing will form the basis of disbursements from AIIB, according to procedures to be designated but mirroring that used by the World Bank.

48. SGC, BOTAS, and TANAP would submit their audited entity financial statements annually to the WB. These statements will be prepared in accordance with the International Financial Reporting Standards (IFRS). Interim Unaudited Financial Reports (IFRs) for the project and audited project financial statements will also be submitted. The IFRs will

be submitted to the WB on a quarterly basis and within 45 days following the end of the quarter, all audited statements will be submitted within six months of the end of each calendar year. The format of the IFRs and project financial statements are as already agreed among IBRD, SGC and TANAP during the loan negotiations.

49. SGC has highlighted that a substantive part of the investment expenditures will be made by the time the project becomes effective and requested retroactive financing for payments made since July 2015 and up to 60 percent of the loan amount. The Bank normally provides for retroactive financing up to 20 percent of the loan amount for eligible expenditures up to 12 months prior to the date of the loan agreement. Between July 2015 and November 2016, BOTAŞ has provided about US\$565 million to TANAP. Amounts transferred by SGC to TANAP are twice as high. SGC's shareholding in TANAP is 58 percent compared to BOTAŞ' 30 percent. SGC also provides its 5 percent financing to BOTAŞ directly to TANAP. Contracts and expenditures determined to be eligible for retroactive financing have been identified and a waiver to exceed the Bank's standard terms for retroactive financing have been approved by management

## **Procurement**

50. The World Bank's new Procurement Framework, "World Bank Procurement Regulations for IPF Borrowers" (effective from July 2016) will be applied for the proposed Project. The World Bank's "Guidelines on Preventing and Combating Fraud and Corruption in Projects Financed by IBRD Loans and IDA Credits and Grants", dated October 15, 2006 and revised in January 2011 and as of July 1, 2016 (Anti-Corruption Guidelines) will apply to contractors, suppliers and consultants benefiting from AIIB's financing under this Project. The following paragraphs summarize the World Bank's due diligence.

51. TANAP has established a comprehensive procurement system, including a Procurement Policy and a Procurement and Contracting Manual. TANAP's Procurement Policy specifies that procurement of all services, works, goods and equipment (including for pre-construction, construction, installation, commissioning and decommissioning of the pipeline system) shall be in compliance with internationally accepted competitive procurement practices. TANAP's Procurement Policy requires TANAP to exercise due care with respect to awards of contracts, receipts, payments, and accounting of funds and internal controls, in accordance with TANAP's Anti-Bribery and Corruption Policy and all relevant anti-corruption legislation. The Procurement Policy further requires TANAP to include, to the extent practically possible, in its contracts with independent contractors, provisions which constitute a statement/warranty from the contractor confirming that it will comply with all relevant anti-corruption legislation, including those listed above.

52. Procurement is one of the tasks of the EPCM contractor employed by TANAP in May 2014. All major procurements are supervised by a shareholder level TANAP Contracts Committee (TCC) consisting of members nominated by BOTAŞ, BP and SGC. The TCC reviews any updates or changes to TANAP's Master Procurement Plan and Annual Procurement Plan before submission to the Board of Directors. Following review

and endorsement by the TCC, contracts up to the thresholds specified in the Procurement Policy are approved by TANAP's General Manager; awards for contracts higher than the threshold are submitted for approval to TANAP's Board of Directors.

53. Project construction started in 2014 and all EPC and equipment/material supply contracts have been awarded. Onshore 56 inch pipeline construction contracts were awarded in 2014 and site works are underway. The SCADA/Telecom contract was awarded in October 2015 and the 48 inch pipeline construction contract were awarded in January 2016. EPC contract for metering and compressor stations was awarded in February 2016 and the EPC contract for off-shore pipelines and fiber optic cables was awarded in July 2016. TANAP has since awarded all remaining major contracts which mean that all contracts to be financed under the proposed WB loans to BOTAS and SGC, and AIIB's loan to SGC, will have been awarded prior to the approval of the two loans.

54. An assessment of SGC has been carried out by the WB that concluded that SGC has adequate capacity to oversee the procurement activities implemented by TANAP. However, SGC has limited knowledge about the WB's new Procurement Framework. The associated risks will be mitigated through training to be provided by the WB's procurement specialist.

55. WB's review of TANAP's procurement policy and procedures has determined that TANAP's procedures included certain eligibility exclusions relating to EU sanctions that were applicable at the time of the procurement and that these are not fully consistent with the provisions of its Procurement Policy. The WB is therefore seeking a waiver to the eligibility principle of their Procurement Policy from the Board. The Bank has reviewed the grounds for the waiver and found it to be appropriate.

56. TANAP has agreed that the World Bank's Anti-Corruption Guidelines (ACGs) will apply to the contracts financed out of the proceeds of the two loans. Given that procurement has already been completed there are practical limits to its application with regard to the particular provision that unsuccessful bidders under the project are required to comply with the provisions of the ACGs. The WB is therefore seeking a waiver from the Board for this particular provision of the ACGs. The Bank has reviewed the grounds for the waiver and found it to be appropriate.

57. Given the complexity of the Project and the large size of the contracts the overall procurement risk is assessed as *High* for the Project. WB's due diligence on TANAP's procurement arrangements have been completed and the risk rating is maintained by WB as substantial. Accordingly, the Bank will maintain its procurement risk rating as '*High*'.

#### **D. Environmental and Social**

58. **Environmental and Social Policies.** The Bank has decided to use the WB's environmental and social safeguard policies (Safeguard Policies) since (i) they are consistent with the Bank's Articles of Agreement and materially consistent with the provisions of the Bank's Environmental and Social Policy and relevant Environmental and

Social Standards; and (ii) the monitoring procedures that the WB has in place to ascertain compliance with its Safeguard Policies are appropriate for the Project. Four of the WB's safeguard policies have been applied to the Project: OP/BP 4.01 Environmental Assessment, OP/BP 4.04 Natural Habitats, OP/BP 4.11 Physical Cultural Resources, and OP/BP 4.12 Involuntary Resettlement. Under the WB's Safeguard Policies the Project has been assigned Category A.

59. **Key Environmental and Social Issues.** A comprehensive Environmental and Social Impact Assessment (ESIA) was prepared for the Project. Four main issues were identified in the ESIA and addressed by TANAP: (i) widespread presence of species of conservation concern and ecologically sensitive areas along the pipeline route; (ii) cultural heritage sites on the route and in the vicinity; (iii) the significant level of potential cumulative impacts that the project may generate through other similar future projects; and (iv) the disproportion between the impacts and benefits for the local communities. Addressing these issues in an effective manner was the focus of a series of studies and programs for management, mitigation and monitoring as part of the Project

60. The ESIA package contains a Biodiversity Action Plan (BAP) with a baseline methodology that goes beyond Turkey's national requirements. The BAP evaluated designated protected/sensitive sites and also reviewed potential sites for designation under the European Nature Information System (EUNIS), Natura 2000 and internationally recognized important areas. The BAP provides a framework for management actions to conserve biodiversity along the proposed route. Cultural Heritage Assessment was also conducted for the Project, annexed to the ESIA, and disclosed as a part of the ESIA package. A Guide to Land Acquisition and Compensation, a Resettlement Action Plan and a Stakeholder Engagement Plan based on international good practices and standards, including the 2012 IFC Performance Standards, were also prepared and implemented. The documents were disclosed in both English and Turkish

61. TANAP is an underground pipeline project with limited, localized and temporary impacts. Most of the impacts are related to disturbance of land, dust emissions, and surface water quality impacts during the construction phase. The Project also consists of several compressor stations that will be above ground and which will have more permanent but limited impacts. The WB's environmental due diligence showed that the quality of TANAP's safeguard documents is generally satisfactory and TANAP's environmental and social management system (ESMS) for checking the compliance of works undertaken by construction contractors is working well. The due diligence concluded that TANAP's ESMS is an effective system that sets the rules for successful implementation of the recommendations of the ESIA for TANAP and its construction contractors. TANAP also hired a local environmental and social monitoring consultancy firm, which is providing quarterly monitoring reports to TANAP and the Ministry of Environment and Urbanization. Visits to Turkey during September and October 2016 by environmental and social specialists from the Bank reconfirmed these conclusions

62. **Land Acquisition and Livelihood Aspects.** Measures to Address Social Aspects. Institutional and implementation arrangements are in place to deal with land acquisition

and livelihood impacts. Though the Project requires 6,600 hectares of land, including 4,300 hectares that are privately owned, 96 percent of these lands need to be acquired only for a temporary period of three years for temporary easement to be used for construction (20m) and rest to be taken under exclusive and unrestricted land right basis (16m), as is the case in most pipeline projects. The total number of affected land owners is estimated to be about 95,000 and includes some informal settlers (less than 200 families) who are cultivating public lands. The land that is privately owned will be returned to the land owners after construction, without restrictions for about 50 percent of the land corresponding to temporary easement, and with some restrictions on the planting of trees and construction of buildings for the remaining 46 percent) under exclusive and unrestricted easement. Thus, most of the impacts due to land acquisition are temporary. About 260 hectares of land (4 percent) have been acquired on an ownership basis for the above ground installations (AGI). The number of land owners affected by permanent land acquisition is less than 1,000 (about 1 percent of the total).

63. Since most of the land acquisition is for a temporary period of about 3 years, and as there is no physical displacement, the impact of land acquisition is not considered a major issue in this Project. A separate RAP has been prepared for the permanent land acquisition impacts associated with AGIs; it describes the land acquisition impacts, compensation payment procedures and livelihood restoration mechanisms to assist those who have lost livelihoods.

64. BOTAS (the Lands Rights Entity) has obtained access to almost all lands (about 99%). Since the land acquisition was substantially completed at the time of the WB's involvement with the Project, the WB undertook due diligence of RAP implementation to identify the gaps, if any, in relation to OP 4.12 Involuntary Resettlement policy provisions in TANAP's project design and implementation practices. Based on the Bank's due diligence findings, TANAP has updated and retroactively applied the Entitlement Matrix to include transaction costs required for the purchase of replacement land or assets, transitional allowances to those who lose more than 20 percent of their lands permanently, provision for acquisition of unviable land parcels, additional crop loss compensation for the unviable land parcels in case of pipe line route, and measures for livelihood support to vulnerable groups and others who have lost source of livelihood.

65. TANAP has a Social and Environment Investment Program (SEIP). USD 23 million has been earmarked to support the SEIP. The aim of this program is to create sustainable development opportunities for the local population and improve quality of life.

66. The WB's environmental due diligence also assessed TANAP's Occupational Health and Safety (OHS) management and labor procedures. The results of this due diligence showed that TANAP's OHS system addresses identification of dangerous conditions, evaluation of associated risks, and implementation of control measures on a continuous basis. TANAP has an adequate system of policies and procedures to address management of labor relations including issues such as hiring, training, compensation, benefits, work hours and grievances. The human resources policies and procedures of

engineering, procurement and construction management contractor (EPCM) and the construction contractors are reviewed and approved by TANAP.

67. **Public Consultations and Citizen Engagement.** TANAP held extensive public consultation meetings as part of the ESIA process. Sixty-three public participation meetings were held to inform the Project-affected communities about the Project and to gather any concerns, feedback and suggestions. Three consultation meetings with local and international NGOs have been held, as part of Turkish legislation requirements, where in about 1,250 people participated. In addition, 25 focus group meeting, 15 in-depth interviews with village headmen were also conducted as part of the preparation of the RAP for the AGIs. Most of the issues raised in the meetings were about the project and compensation related issues. The impacts to land and livestock, and grievance redress mechanism to deal with construction related impacts during construction were also raised. One significant issue brought up during consultations was the local employment opportunities during construction and reinstatement works.

68. **Gender Aspects.** These consultations were sensitive to gender inclusivity with separate consultations for women. In addition, the Project provides for: (i) having gender-specific investments under the social investment program; and (ii) setting up feedback mechanisms during the construction and operations phase of the project that they are equally accessible to both women and men. Even though most of the impacted land owners are men, women are informed about the project, land acquisition procedures, its benefits, local employment opportunities, safety trainings and its planned social investment program. Among the affected communities (mostly in rural settlements), TANAP has provided local employment opportunities through its contractors for unskilled women to be able to earn additional income for their households.

69. **Project Level Grievance Redress.** In addition, TANAP has a solid community relation management, grievance redress and stakeholder engagement mechanism in place. TANAP has established procedures for receiving grievances from the affected communities. In each pipeline lot, the grievance redress mechanism is made accessible and shared with affected communities in consultations and project information meetings. All complaints received are registered online and their resolution is tracked. In addition to the TANAP stakeholder engagement mechanism, communities and individuals who believe that they are adversely affected by a WB-supported project may submit complaints to WB's Grievance Redress Service (GRS). The GRS ensures that complaints received are promptly reviewed in order to address project-related concerns.

70. **WB Waiver of "Associated Projects" Policy Provisions Outside of Turkey.** The WB has requested a waiver from their Board of Executive Directors concerning application of the "Associated Projects" aspects of its four safeguard policies (i.e., OPs/BPs 4.01 – Environmental Assessment, 4.04 – Natural Habitats, 4.36 – Forests, 4.09 – Pest Management, 4.11 – Physical and Cultural Resources, 4.12 – Involuntary Resettlement, 4.37 – Safety of Dams) to the three projects associated with TANAP that are outside of Turkey, namely (i) "Shah Deniz 2" (SD2) in Azerbaijan; (ii) "SCPx" that runs through Azerbaijan and Georgia to Turkey's eastern border; and (iii) "TAP" that runs from



Turkey's western border through Greece and Albania to Italy (collectively, "Associated Projects).

71. The waiver of these policies is requested with regard to these Associated Projects, as the World Bank has little to no reasonable expectation that it will: (a) be able to have access to all of the project documentation of the Associated Projects; (b) be allowed to take part in the supervision of the Associated Projects; or (c) be able to negotiate a legal framework that would allow the World Bank to exercise remedies in the case of non-compliance with safeguard instruments under the Associated Projects, all of which are necessary for the proper application of the World Bank's environmental and safeguard policies. As the lead co-financier, World Bank has reviewed the publicly available environmental and social documents of these associated projects and the available documents and information identified no significant compliance issues, and so, the World Bank concluded that the SD2, SCPx and TAP projects are of moderate risk, well planned, and executed with documentation and procedures comparable to the World Bank's environmental and social safeguard policy requirements.

72. **Climate Aspects.** Natural gas is a transition fuel that could play an important role in decarbonizing electricity systems because it helps compensate for the intermittence of renewable energy, emits half the carbon of coal, and allows for storage. GHG emissions in the Southern Gas Corridor pipeline system and for TANAP are lower than the expected GHG emissions in their LNG and pipeline alternatives. Apart from the lower emissions in gas transmission, the supply of 16 cm/year of Shah Deniz 2 gas from Azerbaijan is expected to result in zero "net GHG emissions" in Europe and Turkey because without the development of the Southern Gas Corridor Program, Turkey and Europe are likely to import similar quantities of natural gas from other sources. The Program is designed to improve the security and diversity of the energy supply in Turkey and South Eastern Europe and is part of Turkey's and Europe's broader energy strategies, including the development of renewable energy and improvements in energy efficiency. Gas can also have an adaptation/resilience benefit by helping countries such as Turkey deal with hydropower vulnerability.

## **E. Risks and Mitigation Measures**

73. **Overall Risks Rating.** A *Moderate* overall risk rating has been assigned by the WB after the completion of their extensive due diligence process (while their initial risk rating was *Substantial*). AIIB have reviewed the rationale for this risk rating that is summarized below. The Bank assigns a *High* risk rating to this project, especially considering the complexities involved in Procurement (large size of contracts, retroactive financing) and Environmental and Social (cross country pipeline) aspects although sound procedures are in place to manage such risks.

74. BP is the lead developer and operator of Shah Deniz 2 and investor in each part of the entire Southern Gas Corridor Program. In view of its scale and complexity, BP considers the Program to be "*the global oil and gas industry's most significant and ambitious undertaking yet.*" The Southern Gas Corridor involves seven governments and

several companies, as well as the European Union and the European Commission as sponsors, and the European Commission also in an important role as the overseer of the EU's energy acquisition. Following more than a decade of dialogue and development, the implementation of the entire program has started. The Shah Deniz 2 gas field is under development; its entire output of 16 bcm per annum and gas transmission capacity of the Southern Gas Corridor have been contracted under long-term gas sale and transportation agreements. This reflects the strategic priority of the program for realizing EU's and Turkey's energy security and sustainable energy goals and the competitiveness of Shah Deniz 2 gas. In many countries in the EU and in Turkey, natural gas can make an important contribution to improving the sustainability of the energy sector as gas emits half as much CO2 as coal.

75. Given below is WB's risk assessment table (Table 5: WB's Risk Rating) based on their Systematic Operations Risk-Rating Tool (SORT). The Bank has had extensive discussions with the WB team and agrees with the risks and mitigation measures reviewed by WB. Even though WB has determined the final risk rating of this project as *Moderate* (reasoning for this rating is explained in Paragraph below), the Bank would like to retain the rating as *High*, especially considering the complexities involved in Procurement (large size of contracts, retroactive financing) and Environmental & Social (cross country pipeline) aspects although sound procedures are in place to manage such risks.

**Table 5: WB's Risk Rating**

| <b>Systematic Operations Risk- Rating Tool (SORT)</b>           |               |
|---|---------------|
| <b>Risk Category</b>  | <b>Rating</b> |
| 1. Political and Governance                                     | Moderate      |
| 2. Macroeconomic  | Moderate      |
| 3. Sector Strategies and Policies                               | Moderate      |
| 4. Technical Design of Project or Program                       | Moderate      |
| 5. Institutional Capacity for Implementation and Sustainability | Moderate      |
| 6. Fiduciary  | Moderate      |
| 7. Environment and Social                                       | Substantial   |
| 8. Procurement  | Substantial   |
| 9. Stakeholders   | Moderate      |
| <b>OVERALL</b>  | Moderate      |

76. WB's overall risk rating Moderate at this advanced stage of project implementation is premised on the following considerations: (a) the governments of Azerbaijan and Turkey have entered in gas sale and transit, intergovernmental and host country agreements and TANAP has entered in long-term Gas Transportation Agreements (GTAs) for the entire 16

bcm capacity of its pipeline system ; (b) project sponsors have established, capitalized and staffed a special purpose company, TANAP, to implement the project; (c) TANAP has contracted a major engineering firm project design, engineering and procurement and to provide construction/project management services as part of TANAP's integrated project management structure for the project; (d) all major contracts have been awarded and reviewed as part of the financier's due diligence; (e) construction is underway; and (f) environmental and social impact studies and mitigation plans have been completed and reviewed as part of the WB's due diligence. Successful completion will nevertheless require competent and relentless project and contract management and supervision of TANAP's contractors including their environmental and social management plans.

77. **The main commercial risk** to the Southern Gas Corridor Program is likely to be the price of gas in Europe's increasingly competitive gas markets. It is carried by the Shah Deniz 2 consortium. Turkey's still emerging gas market is less competitive and the price risk in the Turkish gas market is effectively shared between the consortium and BOTAŞ. However, it is to be noted that the TANAP pipeline project does not carry this risk.

## Annex 1: Results Framework and Monitoring

### Project Development Objectives

#### PDO Statement

The Project's Development Objective is to: (a) integrate Azerbaijan with regional and European energy markets by strengthening its connectivity and transit role and (b) to improve the energy supply security of Turkey and South Eastern Europe.

**These results are at** | Project Level

### Project Development Objective Indicators

| Indicator Name   | Baseline | Cumulative Target Values |      |      |      |      |      |                   |                     |
|--|----------|--------------------------|------|------|------|------|------|-------------------|---------------------|
|  |          | 2016                     | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 <sup>3</sup> | End (1/2021) Target |
| Diversifying Azerbaijan's Gas Export Markets (bcm/annum)     | 0.0      | n/a                      | n/a  | n/a  | n/a  | 4.0  | 7.0  | 10.0              | 4.0                 |
| Improving the Security of Turkey's Energy Supply (bcm/annum) | 0.0      | n/a                      | n/a  | 1.0  | 2.5  | 4.5  | 5.0  | 5.5               | 4.5                 |
| Improving the Security of South East Europe's Energy Supply  | 0.0      | n/a                      | n/a  | n/a  | n/a  | 4.0  | 7.0  | 10.0              | 4.0                 |

<sup>3</sup> Project closing date is January 31, 2021, and the End Targets are therefore set for year 2020. SD2 gas field is expected to reach full production capacity by 2022, enabling gas flow through TANAP to reach 16 bcm/annum.

|             |  |  |  |  |  |  |  |  |  |
|-------------|--|--|--|--|--|--|--|--|--|
| (bcm/annum) |  |  |  |  |  |  |  |  |  |
|-------------|--|--|--|--|--|--|--|--|--|

### Intermediate Results Indicators

| Indicator Name   | Baseline | Cumulative Target Values |      |                  |      |      |      |      |                     |
|--|----------|--------------------------|------|------------------|------|------|------|------|---------------------|
|  |          | 2016                     | 2017 | 2018             | 2019 | 2020 | 2021 | 2022 | End (1/2021) Target |
| Availability of TANAP for Gas Supply to Turkey (bcm/annum)                         | 0.0      | n/a                      | n/a  | 5.4 <sup>4</sup> | 5.4  | 5.4  | 5.4  | 5.4  | 5.4                 |
| Turkish Gas Consumers benefitting from gas supply (million)                        | 11       | 11                       | 12   | 13               | 14   | 15   |      |      | 15                  |
| Registered grievances addressed within the stipulated time frame (%) <sup>5</sup>  | 91%      | 90%                      | 90%  | 91%              | 92%  | 93%  |      |      | 93%                 |
| Number of community consultations held as of the total number of communities along | 100%     | 100%                     | 100% | 100%             | 100% | 100% |      |      | 100%                |

<sup>4</sup> 5.4 bcm at 90% availability. TANAP expects the actual availability of its pipeline system to be higher.

<sup>5</sup> Except those subject to seasonality and third party assessments and decisions.

|  |                  |                |                 |                 |                 |                    |  |  |                    |
|--|------------------|----------------|-----------------|-----------------|-----------------|--------------------|--|--|--------------------|
| the actively worked sections of the pipeline (%)   |                  |                |                 |                 |                 |                    |  |  |                    |
| Number of community consultations held for women as of the total number of communities along the actively worked sections of the pipeline (and % of consultations held separately for women) | 18%              | 25%            | 30%             | 35%             | 40%             | 40%                |  |  | 40%                |
| Progress in registration of affected private land parcels (Number and %)   | 6,072<br>(32.0%) | 6,572<br>(35%) | 11,267<br>(60%) | 16,900<br>(90%) | 18,590<br>(99%) | 18,778<br>(100.0%) |  |  | 18,778<br>(100.0%) |
| Share of women employed by construction contractors out of total employee number (%).  | 5%               | 5%             | 5%              | 5%              | 5%              | 5%                 |  |  | 5%                 |

## Indicator Description

### Project Development Objective Indicators

| Indicator Name  | Description (indicator definition)  | Frequency | Data Source / Methodology            | Responsibility for Data Collection                     |
|---|---|-----------|--------------------------------------|--|
| Diversifying Azerbaijan's Gas Exports                       | Azerbaijan's natural gas exports are diversified by the supply of 10 bcm/annum to a new market in Europe.   | Annual    | Azerbaijan Gas Supply Company (AGSC) | Southern Gas Corridor Closed Joint Stock Company (SGC) |
| Improving the Security of Turkey's Energy Supply            | The security of Turkey's energy supply is improved by the additional supply of 6 bcm/annum to its gas market from one of its current minor supply countries.  | Annual    | AGSC                                 | SGC  |
| Improving the Security of South East Europe's Energy Supply | The security of South East Europe's energy supply is improved by the supply of 10 bcm/annum to its gas market by opening the Southern Gas Corridor to bring Caspian gas to the European gas market. | Annual    | AGSC                                 | SGC  |

### Intermediate Results Indicators

| Indicator Name                             | Description (indicator definition etc.)  | Frequency | Data Source / Methodology   | Responsibility for Data Collection |
|--|--|-----------|---|------------------------------------|
| Gas Supply to Turkey Through TANAP         | The 1,334 km 56" section of TANAP to be completed by July 2018 to enable gas flow to Turkey ahead of the full completion of TANAP in 2020. | Quarterly | TANAP Monthly Progress Reports  | TANAP                              |
| Turkish Gas Consumers receiving gas supply | Number of gas consumers in Turkey benefiting from this gas supply.   | Annual    | The National Gas Distribution Companies Association of Turkey (GAZBIR). | The World Bank                     |

|                                      |   |             |                                |       |
|--------------------------------------|---|-------------|--------------------------------|-------|
| Citizen Engagement                   | Local Villagers along pipeline route are consulted annually on a variety of topics to ensure citizen feedback is received and considered, a system for responding to specific concerns is established. Indicator is for communities with active construction and/or other TANAP activities.                         | Semi-annual | TANAP Monthly Progress Reports | TANAP |
| Gender                               | Proportion of consultations held separately for women only in order to ensure the female villagers have an opportunity to provide feedback (25% of total annual consultations) and also gender breakdown for locally employed. Indicator is for communities with active construction and/or other TANAP activities. | Semi-annual | TANAP Monthly Progress Reports | TANAP |
| Registration of Private Land Parcels | Tracking of progress in land acquisition through registration indicates that land owners have received full and final compensation and land ownership has been transferred in favor of BOTAŞ.   | Quarterly   | RAP Monitoring Report          | TANAP |
| Female Employment <sup>6</sup>       | Share of women employed by construction contractors out of total employee number (%).   | Annual      | TANAP Monthly Progress Reports | TANAP |
| Grievance resolved                   | Mechanism in place for fair treatment to the complaints from local people.  | Monthly     | TANAP Monthly Progress Reports | TANAP |

<sup>6</sup> TANAP encourages female employment and will continue to monitor the share of female employment by its contractors.



## Annex 2: Detailed Project Description

### A. AZERBAIJAN AND TURKEY: Trans-Anatolian Natural Gas Pipeline Project Trans-Anatolian Natural Gas Pipeline and the Southern Gas Corridor

1. The Trans-Anatolian Natural Gas Pipeline (TANAP) is part of the Southern Gas Corridor - a program of gas development in Azerbaijan and gas transmission from Azerbaijan through Georgia, Turkey, Greece and Albania to Italy. The Shah Deniz 2 gas field in Azerbaijan is being developed to produce 16 bcm per annum. A 3,500 km pipeline system is being developed to carry the Shah Deniz gas from Azerbaijan to Turkish and European gas markets.

2. The Program from Azerbaijan to Italy consists of three projects:

- a. The existing South Caucasus Pipeline will be expanded by looping with a new parallel pipeline called SCPx, across Azerbaijan and Georgia to Turkey;
- b. TANAP will transport Shah Deniz 2 gas across Turkey; and
- c. TAP will carry the gas through Greece and Albania and under the Adriatic Sea before coming ashore in Southern Italy to connect to the Italian natural gas network operated by Snam Rete Gas, from which all Italian gas exit points to European destinations can be reached.

3. At 1,850 km TANAP accounts for over one half of the 3,500 km Southern Gas Corridor pipeline system from Azerbaijan to Italy. TANAP will start from the Turkish border with Georgia, beginning in the Turkish village of Türkgözü in the Posof district of Ardahan, will run through 20 provinces - Ardahan, Kars, Erzurum, Erzincan, Bayburt, Gümüşhane, Giresun, Sivas, Yozgat, Kırşehir, Kırıkkale, Ankara, Eskişehir, Bilecik, Kütahya, Bursa, Balıkesir, Çanakkale, Tekirdağ and Edirne - and will end at the Greek border in the İpsala district of Edirne. At this point, TANAP will connect to TAP which will convey the gas to European gas markets. TANAP will connect to the Turkish natural gas network in two locations, at Eskişehir and Thrace, for the delivery of 6 bcm for the Turkish gas market. The pipeline up to Eskişehir will have a diameter of 56 inches; from Eskişehir to the Greek border the diameter will be 48 inches except for two parallel 36-inch pipeline for the 18 km section crossing the Marmara Sea.

4. The transmission capacities of TANAP and TAP are designed to be expandable to 31 bcm and 20 bcm, respectively. These provisions envision that, *inter alia* subject to the availability of additional gas, transit to Europe could double to 20 bcm and offtake by Turkey could increase to 11 bcm (or a higher volume of gas could be delivered to the Turkish market with less transit). Initially two compressor stations are included in TANAP. In the future, the throughput can be increased from 16 bcm to 23 bcm by 2024 and to TANAP's full 31 bcm pipeline capacity by 2026 with the addition of compressor stations (for a total of seven). The capacity of the TAP pipeline can be doubled from 10 bcm to 20 bcm with the addition of compressor stations. TAP pipeline will also have the so-called "physical reverse flow" feature, allowing gas from Italy to be transported to South

East Europe if energy supplies are disrupted or more pipeline capacity is required to bring additional gas into the region.

5. TAP will have two gas off-take points in South East Europe, one each in Greece and Albania. TAP can facilitate connections to a number of existing and proposed pipelines, ensuring that the Southern Gas Corridor opens up to gas markets throughout South Eastern, Central and Western Europe. TAP's routing facilitates gas supply to several other South Eastern European countries, including Bulgaria (from Greece), Montenegro, Bosnia and Herzegovina and Croatia (from Albania through the proposed Ionian-Adriatic Pipeline) and others.

6. Furthermore, TAP's landfall in Italy provides multiple opportunities for further transport of gas to other large European markets in Central and Western Europe and even to the United Kingdom (UK). Gas transported via TAP can reach: (a) Austria and Central Europe via the Trans Austria Gas pipeline and the Central European gas hub in Baumgarten, Austria; (b) France and Germany through the Transitgas pipeline and Switzerland; and (c) even the UK - the Italian gas grid operator Snam Rete Gas and European gas infrastructure group Fluxys have agreed to develop physical reverse flow capabilities between Italy and the UK by interconnecting the gas markets of Italy, Switzerland, Germany, the Netherlands and Belgium, enabling Caspian gas to reach the UK.

## **B. Detailed Description of the TANAP Pipeline System**

7. The TANAP Pipeline System comprises:

a. Onshore Pipeline Section:

- i. A main natural gas pipeline from the Turkey-Georgia Border to the Turkey-Greece border.
- ii. Diameter: 56 inch from Turkey-Georgia Border to Eskişehir off-take and 48 inch from Eskişehir to Turkey/Greece border.
- iii. Total Length: 1,334 km of 56 inch and 468 km of 48 inch, (approximate).

b. Offshore Pipeline Section:

- i. Diameter: 2 x 36 inch.
- ii. Length: 2 x 18 km (approximate).

c. Compressor Stations:

- i. Two compressor stations included in the 16 bcm project.
- ii. Possible gas throughput expansion (not part of the 16 bcm project) to 24/31 bcm (31 bcm is the maximum capacity of the pipeline) through the addition two/five compressor stations, respectively to achieve higher pipeline pressure requirements.

d. Gas Off-take Points

- i. Eskişehir
  - ii. Thrace
- e. Metering Stations:
- i. Custody receiving border metering station at the entry point on the Georgian border.
  - ii. Metering station at Eskişehir off-take point.
  - iii. Metering station at Thrace off-take point.
  - iv. Custody delivery border metering station at the exit point at Edirne on the Greek border.
- f. Pig Launcher and Receiver Facilities (Pigging stations are installed to allow cleaning of the pipeline and prevent corrosion):
- i. At each compressor station.
  - ii. At the custody receiving border metering station at the entry point.
  - iii. At the custody receiving border metering station at the exit point.
  - iv. At Eskişehir off-take point.
  - v. At each side of Dardanelle strait crossing.
  - vi. At three intermediate points along the pipeline route.
- g. Block Valve Stations
- i. 49 block valves
- h. Communication and Control
- i. Supervisory Control and Data Acquisition (SCADA) system.
  - ii. Main Control Centre in Ankara.

8. The Project will finance land acquisition<sup>7</sup> that is required for the TANAP Pipeline System covering: (a) cash compensation for private land acquisition (i.e. compensation for permanent, exclusive and temporary land rights basis; damages to crops and assets; and legal administrative expenses); (b) other assistance such as implementation of livelihood restoration plans and payments under the Resettlement Action Plan (RAP) Fund to assist affected informal land users settlers and other expenses payment of other costs not payable under the Turkish law, but required to meet OP 4.12 provisions; (c) expenses for the forestry lands (i.e. entry costs and annual leases); and (d) design, implementation and monitoring of RAPs.

9. The Project will also finance consulting services for studies, design, engineering, procurement, construction management, supervision and monitoring.

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<sup>7</sup> The proceeds of the WB and AIIB loans will not be used for land acquisition.

### **ANNEX 3: ECONOMIC AND FINANCIAL ANALYSIS**

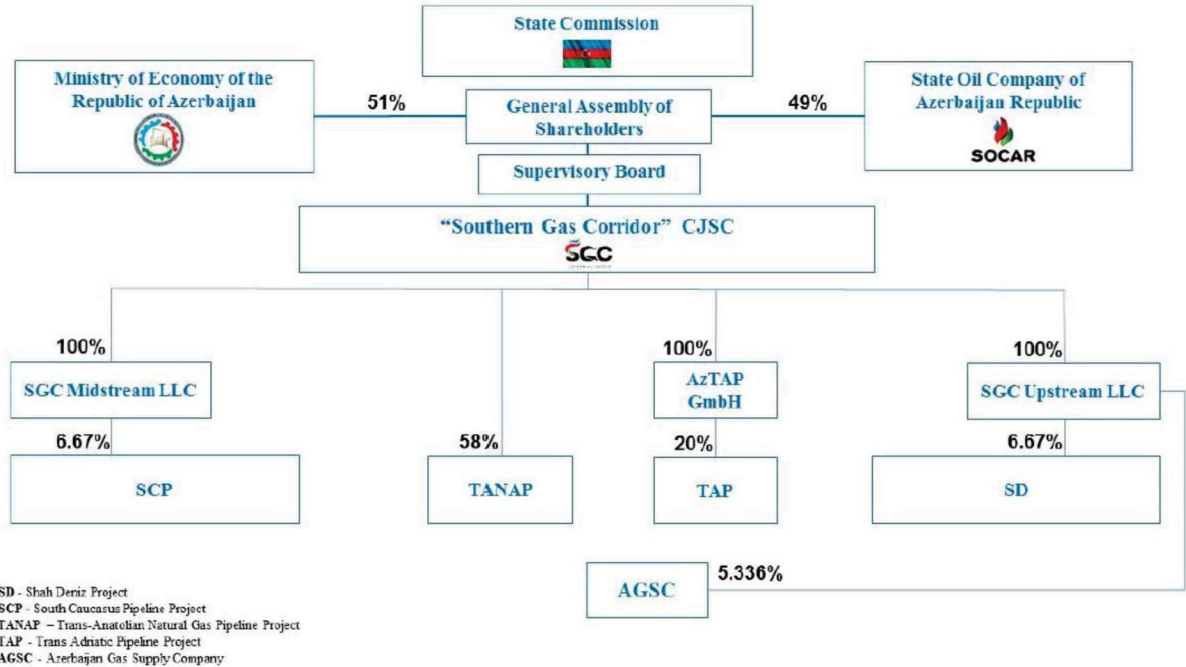
1. The economic and financial analysis covers the borrower Southern Gas Corridor Closed Joint-Stock Company (“SGC CJSC”), the proposed TANAP Project, the Project company TANAP Doğalgaz İletim A.Ş. (“TANAP AŞ”), as well as other key stakeholders such as the off-taker Boru Hatları ile Petrol Taşıma A.Ş. (“BOTAŞ”) and the guarantor the Republic of Azerbaijan. The Bank has entered into a Confidentiality Agreement with SGC CJSC. In line with this agreement, SGC CJSC has provided the Bank access to some information for the Bank’s due diligence including carrying out the analysis that is summarized below. However, some information including the gas supply and gas transportation agreements have not been released to the Bank due to commercially sensitive information and SGC CJSC’s confidentiality undertakings to other concerned parties in associated projects of the Southern Gas Corridor (“SGC”). Where specific information was not available, the analysis uses World Bank estimates. Considerable amount of information was also drawn from public sources and documents including SGC CJSC’s audited financial statements. Figures are rounded off.

#### **I. Borrower-level Financial Analysis**

2. Southern Gas Corridor Closed Joint-Stock Company (“SGC CJSC”) was incorporated on 31 March 2014 pursuant to Presidential Decree No. 287 dated 25 February 2014. SGC CJSC was established to consolidate, manage and finance the Republic of Azerbaijan’s interests in the projects of the Southern Gas Corridor. SGC CJSC holds an economic interest in each, but is not the direct operator of any of the projects.
3. SGC CJSC’s capital is directly and indirectly wholly owned by the Republic of Azerbaijan, with 51% of the capital held by the Ministry of Economy of the Republic of Azerbaijan and 49% held by the State Oil Company of Azerbaijan Republic (“SOCAR”), which in turn is wholly owned by the Republic of Azerbaijan. As of 30 June 2016, SGC CJSC’s share capital was US\$1,740.8 million.
4. In October 2015, the management of SOCAR Turkey Enerji A.Ş sent a letter to SGC CJSC indicating its interest in acquiring a 7% interest in the TANAP Project from the Group. The acquisition is expected to take place in 2017. Following the sale, the Group will continue to own a controlling interest in TANAP.
5. SGC CJSC has a 6.67% interest in the production sharing agreement relating to the Shah Deniz gas-condensate field, and a 5.336% share in Azerbaijan Gas Supply Company Limited, which is a marketing vehicle in respect of the natural gas produced from the Shah Deniz field. SGC CJSC holds a 6.67% interest in the South Caucasus Pipeline Company Limited, which owns the South Caucasus Pipeline. SGC CJSC also has a 58% share in TANAP Doğalgaz İletim A.Ş., which is the operating company for TANAP. In addition, SGC CJSC holds a 20% share in Trans Adriatic Pipeline AG, which is the operating company for Trans Adriatic Pipeline. Operational management of SGC CJSC’s stakes in the projects is conducted by SOCAR’s affiliates, pursuant to

an operator services agreement between SGC CJSC and some of its subsidiaries, and SOCAR. The following chart sets forth the organizational structure of SGC CJSC:

**Figure A3.1: SGC CJSC Organizational Structure**



6. For the six months ended 30 June 2016, the Group’s total revenue was US\$61.7 million and its total comprehensive loss (including exchange differences on translation of foreign operations and associate) was US\$25.5 million. As of 30 June 2016, the Group’s total assets were US\$6,910.3 million and its total equity was US\$2,156.6 million.

**Table A3.1: SGC CJSC Financials**  
Confidential information deleted

## II. SGC CSJC Consolidated Project-level Analysis

7. The Southern Gas Corridor comprises the following four projects:
- the Shah Deniz gas-condensate field (“SD1” and “SD2”);
  - the South Caucasus Pipeline (“SCP”) and its Expansion (“SCPX”) through Azerbaijan and Georgia to Turkey;
  - the construction of the Trans Anatolian Pipeline (“TANAP”) through Turkey and Greece; and
  - the construction of the Trans Adriatic Pipeline (“TAP”) through Greece, Albania and the Adriatic Sea to Southern Italy.

8. Day-to-day operations of each of the projects are managed by their respective operating companies. The projects comprise upstream and midstream operations located principally in Azerbaijan as well as in Turkey. SCP transports natural gas from the Shah Deniz field to the Georgian-Turkish border. The gas transported through SCP will also be further transported via TANAP (once constructed) to consumers in Turkey as well as to Italy and other European countries through TAP which will run from the Turkish-Greek border via Greece and Albania across the Adriatic Sea to southern Italy. The Projects have been developed in partnership with major international companies in the oil and gas industry and anticipate the first deliveries of natural gas from the Shah Deniz field to Turkey in 2018 and the first deliveries of gas to European customers in 2020.
9. The Shah Deniz field was discovered in 1999 and is considered one of the world's largest gas condensate fields and currently has reserves of approximately 1,200 billion cubic metres of natural gas and 2.2 billion barrels of condensate, according to BP. Total production from the Shah Deniz field during the period from 2007 to 2045 is expected to reach 501.2 billion cubic meters of natural gas and 665.2 million barrels of condensate, according to BP. In the year ended 31 December 2015, SGC CJSC's share of the Shah Deniz field's natural gas and condensate production was 0.53 billion cubic metres and 0.97 million barrels, respectively.
10. The total investments required for all Southern Gas Corridor projects combined for the years 2014-2019 are US\$46.3 billion and SGC CJSC's share of these investments amounts to about US\$11.9 billion<sup>8</sup>, out of which about US\$6.0 billion has been already spent up to date. This is a significant amount that is difficult to be raised solely from commercial lenders. As major investor in these projects, it is also essential for SGC CJSC to ensure adequate debt sustainability for the overall viability of the combined projects. Therefore, financing from the AIIB, the World Bank and other IFIs provides SGC CJSC with longer tenor and lower cost financing to balance the commercial borrowings with shorter tenure and higher cost that are needed.
11. SGC CJSC's funding has been through a combination of several instruments. As a holder of about US\$2.5 billion of bonds issued by SGC CJSC in the local market in 2014 and maturing in 2024 (with the first lump-sum payment of the accumulated interest at the end of the 7-years grace period in 2021), the State Oil Fund of the Republic of Azerbaijan ("SOFAZ") has been a major debt provider to SGC CJSC. Moreover, in March 2016 SGC CJSC closed its inaugural 10-year Eurobond offering to investors from Europe, the United States and the Middle East with a face value of US\$1 billion and a yield to maturity of 7%. SGC CJSC is willing to raise debt financing to fund its committed capital investments to the projects until 2019. These investments amount to US\$5.9 billion and result in a net funding need of US\$5.1 billion (taking into account proceeds from the operation of Shah Deniz Stage 1 and SGC CJSC's recent inaugural Eurobond).

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<sup>8</sup> Excluding other expenses of about US\$0.9 billion that include operating activity expenses and debt service obligations during the construction period.

12. Of the total SGC CJSC financing requirements for TANAP of about US\$5.4 billion, US\$2.3 billion have already been financed by SGC CJSC as to date with a remaining balance of US\$3.1 billion yet to be financed until 2019. Any residual financing needs beyond what can be raised from IFIs and commercial lenders would be met by SGC CJSC equity and/or SOFAZ bonds. For the SGC CJSC bonds issued to date (US\$1.0 billion Eurobond and US\$2.5 billion SOFAZ bonds) the full amounts are distributed amongst SGC CJSC's investments in SD2, SCPX, TANAP, and TAP, as required.
13. Up to 2016, SGC CJSC financed its investments from its equity and through bonds purchased by SOFAZ, in recognition of the high priority of the projects to the Government of Azerbaijan. The sources of financing being considered by SGC CJSC comprise: (i) loans from AIIB, EBRD, EIB and the World Bank; (ii) proceeds from SGC CJSC bonds; and (iii) commercial loans (in part backed by a MIGA guarantee). Raising of SGC CJSC debt is informed by market soundings conducted by SGC CJSC with support from its financial advisor Lazard Frères SAS ("Lazard"). Upon completion of the financing, the funding structure of SGC CJSC is expected to comprise equity of US\$2.4 billion (19%), bonds due to SOFAZ of US\$2.5 billion (20%), the inaugural Eurobond of US\$1.0 billion (8%), additional debt of US\$5.5 billion (43%), and revenues from the projects and sale of shares of US\$1.4 billion (10%).

## **II.1 Key Assumptions**

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## **II.2 Base Case Scenario**

14. The primary source of revenue for SGC CJSC is the TANAP Project given its majority shareholding in the project company compared to the rest of the projects. Starting in mid-2018 when first gas is expected to flow through the TANAP pipeline system, SGC CJSC is expected to receive a reliable revenue stream from TANAP. Before the start of commercial operations of the projects, SGC CJSC is receiving revenues through its 6.67% share of the existing Shah Deniz field cash flows through cost recovery and profit sharing.<sup>9</sup> SGC CJSC has no other material revenue sources prior to the start of production from SD2, except for some other non-cash revenue, mainly in recognition of government grant and other deferred revenue.

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<sup>9</sup> SGC CJSC's share of cash flows for SD2 will increase to 16.67% when it acquires an additional 10% of shares through a Deferred Share Purchase Agreement that materializes around 2023.

**Figure A3.2: Base Case Revenue Breakdown**  
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16. SGC CJSC also receives revenues through its 6.67% shares in the upstream Shah Deniz 2 project. The revenue is shared between the government and joint venture partners on the basis of a Production Sharing Agreement. The revenue sharing arrangement in this agreement includes proceeds from both gas and condensate sales. Sensitivity analysis was performed to assess the impact of low oil price on the revenue for SGC CJSC from Shah Deniz field. In a US\$40/bbl flat oil price scenario, the revenue loss would be about 9% of the total annual Shah Deniz project revenue, whereas under a US\$30/bbl flat scenario, the revenue loss is about 17%. According to the World Bank's Commodities Price Forecast, oil prices are expected to gradually rebound, reaching US\$82.6/bbl in 2025.

**Table A3.4: World Bank Commodities Price Forecast in Nominal US\$<sup>10</sup>**

| Commodity              | Unit     | 2013  | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2025 |
|------------------------|----------|-------|------|------|------|------|------|------|------|------|
| Coal, Australia        | \$/mt    | 84.6  | 70.1 | 57.5 | 51.0 | 51.9 | 52.9 | 53.8 | 54.8 | 60.0 |
| Crude oil, avg, spot   | \$/bbl   | 104.1 | 96.2 | 50.8 | 43.0 | 53.2 | 59.9 | 62.7 | 65.6 | 82.6 |
| Natural gas, Europe    | \$/mmbtu | 11.8  | 10.1 | 7.3  | 4.5  | 4.8  | 5.1  | 5.5  | 5.8  | 8.0  |
| Natural gas, US        | \$/mmbtu | 3.7   | 4.4  | 2.6  | 2.3  | 3.0  | 3.5  | 3.7  | 3.9  | 5.0  |
| Natural gas LNG, Japan | \$/mmbtu | 16.0  | 16.0 | 10.4 | 7.0  | 7.3  | 7.6  | 7.9  | 8.2  | 10.0 |

17. In light of a significant funding requirement in the next three years to meet the cash calls for the various projects, SGC CJSC has developed a financing plan with support of international financial advisors. In addition to equity contributions by its shareholders, SGC CJSC is focused on securing debt financing through a mix of commercial borrowing and bond issuance, blended with longer-term financing from IFIs that reduces the overall cost of financing. More specifically, SGC CJSC's gross funding requirements in the projects are about US\$11.9 billion (or US\$10.5 billion net of SGC CJSC's proceeds from SD1 and SCP operations), out of which US\$1.7 billion have been invested by its shareholders (i.e. the Republic of Azerbaijan and SOCAR), US\$2.5 billion financed through a bond offer placed to SOFAZ, and US\$1 billion debt has been arranged through a Eurobond issuance in March 2016. The remaining requirements are expected to be financed through additional debt such as long-term loans from IFIs, commercial Banks, and future bond issuance. The Government of Azerbaijan is committed to finance any residual balance through budget allocations. In addition, SGC CJSC is also perusing credit enhancement instruments such as a MIGA guarantee cover, to leverage commercial debt at improved terms.

**Figure A3.3: Base Case Total Equity and Total Debt**  
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<sup>10</sup> Released: 26 July 2016.



18. SGC CJSC's investment requirements for the TANAP Project are approximately US\$5.4 billion. After accounting for equity and loan contributions, share divestment to SOCAR Turkey Enerji A.Ş. (expected to be concluded in 2017) the net financing requirement is US\$4.9 billion. In addition to the proposed AIIB loan of US\$600 million and IBRD loan of US\$400 million, SGC CJSC is in discussions with EIB and EBRD for loans of US\$1.2 billion and US\$500 million, respectively, and expects to raise US\$1 billion of commercial lending for the Project. The balance of financing needs will be met from the proceeds of the Eurobond, SOFAZ bonds and the state budget of the Republic of Azerbaijan.
19. Between the years 2014-2019 the construction work takes place and the bulk of capital investments are being made. By 2020 (when TAP is expected to be commissioned and gas starts flowing to European customers), SGC CJSC becomes net project cash flow positive with a significant proportion of its annual income from that year onwards estimated to be derived from gas transportation. In the years 2021 and 2022, SGC CJSC has a challenging net cash position as well as a low debt service coverage ratio due to large lump-sum payments of the accumulated interest on the SOFAZ bonds at the end of the 7-years grace period. SGC CJSC has several options to maintain its financial sustainability, including restructuring of the SOFAZ bonds and additional equity injections by shareholders. .

**Figure A3.4: Base Case Cash Flows Available for Debt Service and Debt Service Coverage Ratios**

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20. SGC CJSC is a single purpose vehicle that relies on the underlining projects to generate and distribute cash to repay debt and distribute dividend. Up to 2016, SGC CJSC financed its investments entirely from its equity and through bonds purchased by SOFAZ, in recognition of the high priority of the projects to the Government of Azerbaijan. It is reasonable to expect such financing would also be available in case of cash shortfalls to help ensure uninterrupted production and debt service to lenders. A summary of the SGC CJSC's base case key balance sheet ratios is provided below.

**Table A3.5: Base Case Key Balance Sheet Ratios (Estimated by the Bank)**

|                                      | 2014Adj | 2015Adj | 2016  | 2017  | 2018  | 2019  | 2020  | 2021  | 2022  | 2023  | 2024  | 2025  |
|--------------------------------------|---------|---------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Current ratio                        | n.a.    | n.a.    | n.a.  | n.a.  | n.a.  | n.a.  | 0.70x | 0.61x | 1.20x | 3.51x | 5.83x | 1.91x |
| Liabilities/Shareholders' equity     | 27.34x  | 2.26x   | 1.80x | 2.97x | 4.28x | 5.49x | 4.82x | 5.08x | 4.65x | 3.15x | 2.34x | 1.83x |
| LT Liabilities /Shareholders' equity | 27.34x  | 2.26x   | 1.80x | 2.97x | 4.28x | 5.46x | 4.64x | 4.76x | 4.50x | 3.04x | 2.26x | 1.54x |
| ST Liabilities /Shareholders' equity | 0.00x   | 0.00x   | 0.00x | 0.00x | 0.00x | 0.03x | 0.17x | 0.32x | 0.15x | 0.11x | 0.08x | 0.29x |
| Equity ratio                         | 3.5%    | 30.7%   | 35.7% | 25.2% | 18.9% | 15.4% | 17.2% | 16.4% | 17.7% | 24.1% | 29.9% | 35.3% |
| Debt ratio                           | 96.5%   | 69.3%   | 64.3% | 74.8% | 81.1% | 84.6% | 82.8% | 83.6% | 82.3% | 75.9% | 70.1% | 64.7% |

### **III. TANAP Project-level Analysis**

21. TANAP Doğalgaz İletim AŞ. (“TANAP AŞ”) was established on 17 December 2012 as a 100% owned subsidiary of State Oil Company of the Azerbaijan Republic (“SOCAR”) with the aim of building and operating a new pipeline to distribute Azerbaijan natural gas along the Republic of Turkey and to transit the natural gas through to European countries according to the Intergovernmental Agreement between the Government of Turkey and the Government of Azerbaijan, which was signed on 26 June 2012. SOCAR has transferred its entire shares in TANAP to the Southern Gas Corridor Closed Joint-Stock Company (“SGC CJSC”) in July 2014. Boru Hatları ile Petrol Taşıma Anonim Şirketi (“BOTAŞ”) and BP Pipelines (TANAP) Limited (“BP”) became shareholders of TANAP AŞ in April 2015. The number of personnel in TANAP AŞ is 220 as of 30 June 2016.

#### **Table A3.6: TANAP AŞ Financials** **Confidential information deleted**

22. TANAP AŞ’s shareholders have decided to pursue shareholder finance instead of project finance to reduce time requirements, complexity and cost of financing. Each shareholder is responsible in line with its share in TANAP AŞ: SGC CJSC (58%), BOTAŞ (30%) and BP (12%). This structure means that while TANAP AŞ is responsible for the overall management and overseeing the realization of the Project to ensure the pipeline system is realized per the required standard, within time, budget and safety requirements, the shareholders will provide TANAP AŞ all necessary financing and will recover their debt and equity investments at the pace which TANAP’s revenues exceed its investment, operational cost and working capital requirements. Shareholders provide financing, as needed, until 2019. From 2020 onwards, TANAP AŞ will start generating distributable cash surpluses and shareholders will start recovering their debt and equity investments. The shareholders have set a conservative capital structure. Based on World Bank estimates, TANAP AŞ is projected to be able to repay the debt and return shareholders’ original equity investment in less than 10 years by 2029.

#### **III.1 Economic Viability**

23. The approach used in the quantitative economic analysis of the TANAP Project is to use estimated gas transmission revenues as a proxy for economic benefit and compare this conservative measure of benefits against TANAP’s investment and estimated operational cost excluding VAT and tax payments to the Government. The economic rate of return (ERR) is estimated at 9.6%. The net present value (NPV) is estimated at about US\$2.6 billion using an economic discount rate of 6% (in accordance with the World Bank Guidelines for Economic Analysis of Power Sector Projects).

#### **III.2 Financial Viability**

24. The entire 16 bcm/annum production of Shah Deniz 2 and gas transmission capacity of the pipelines including TANAP have been contracted under long-term agreements. The TANAP Project's financial viability was assessed by comparing TANAP's estimated revenues from transmission services against TANAP's investment and operational cost (including VAT and tax payments to the Government). The financial rate of return (FRR) is estimated at 8.6% which exceeds the estimated cost of capital of SGC CJSC. The NPV for the project is estimated to be US\$1.0 billion at a financial discount rate of 7% (equals the yield to maturity at issuance of the inaugural Eurobond).

### **III.3 Sensitivity Analysis**

25. The financial and economic viability of the TANAP Project has been analyzed in various downside scenarios. Full capacity of the pipeline has been contracted under long-term agreements. The estimated ERR and FRR are sensitive to changes in the capital cost of the project: a 10% capital cost overrun would reduce both the ERR and the FRR by about 1%, with the resulting Economic and Financial NPV being US\$1.9 billion and US\$381 million, respectively, at discount rates of 6% and 7%, respectively. On the other hand, such an increase is unlikely as all main contracts have been awarded and the original US\$9.2 billion cost estimate has been revised to US\$8.6 billion, while still retaining a conservative US\$1.4 billion contingency provision. The capital cost estimate was in fact reduced by about US\$500 million in the comprehensive bottom-up contract-by-contract review that TANAP carried out in early 2016 and a further reduction of US\$700 million brought it down to the current US\$8.6 billion. The analysis also simulated an unlikely delay in construction activities of one year and another scenario of a 20% increase in operations and maintenance cost to assess the impact on the ERR and the FRR. Results of the sensitivity analysis are summarized below.

**Table A3.7: Downside Scenarios**

|                               | <b>ERR</b><br>(%) | <b>ENPV</b><br>(US\$ million) | <b>FRR</b><br>(%) | <b>FNPV</b><br>(US\$ million) |
|-------------------------------|-------------------|-------------------------------|-------------------|-------------------------------|
| Base case                     | 9.6%              | 2,559.0                       | 8.6%              | 1,009.8                       |
| 10% capital cost overrun      | 8.5%              | 1,902.9                       | 7.6%              | 381.4                         |
| 20% increase in O&M cost      | 9.2%              | 2,234.7                       | 8.2%              | 725.6                         |
| 1-year delay in commissioning | 9.5%              | 2,487.8                       | 8.5%              | 943.1                         |
| Worst case (all combined)     | 8.0%              | 1,518.2                       | 7.1%              | 40.7                          |

26. If additional gas supplies are available, the throughput of the TANAP pipeline system could be raised to 23 bcm/annum (e.g. by 2023 as currently envisioned) and 31 bcm/annum (e.g. by 2026) with relatively small investments in additional compressor stations. These would be highly attractive incremental investment projects for TANAP and its shareholders.

#### **IV. Other Key Stakeholders Analysis**

27. Other key stakeholders include the off-taker Boru Hatları ile Petrol Taşıma A.Ş. (“BOTAŞ”) and the guarantor the Republic of Azerbaijan.

##### **IV.1 Off-taker: Boru Hatları ile Petrol Taşıma A.Ş. (“BOTAŞ”)**

28. Boru Hatları ile Petrol Taşıma A.Ş. (“BOTAŞ”) was established with the purpose of transporting Iraq’s crude oil to İskenderun Bay, in accordance with the Crude Oil Pipeline Agreement signed between the Governments of the Republic of Turkey and the Republic of Iraq on 27 August 1973. BOTAŞ was restructured as a state owned enterprise on 8 February 1995. BOTAŞ, established according to the provisions of private law, is a state owned enterprise with a joint-stock company status.

29. BOTAŞ’ capital belongs to the Republic of Turkey Undersecretariat of Treasury and is a related institution of the Republic of Turkey Ministry of Energy and Natural Resources. It engages in the transportation of crude oil for customers in the Gulf of İskenderun. It also transports oil by pipelines and engages in the transportation, distribution, import, storage, marketing, and trade and export of natural gas. The company provides its services for various projects worldwide and is based in Ankara, Turkey.

**Table A3.8: BOTAŞ Financials**  
**Confidential information deleted**

30. Up to mid-2015, the depreciation of the Turkish Lira (TL) against the U.S. dollar since the beginning of 2014 cost BOTAŞ more than it gained from the fall in its gas import prices in U.S. dollar terms. A full and timely pass-through of BOTAŞ’ gas import cost in TL was not applied, BOTAŞ profits in 2013 turned into losses for 2014 (US\$186 million, based on an exchange rate of US\$1 = TL 3.15) and resulted in an increase in BOTAŞ import duty arrears to the Government and related delayed payment penalties. After complying with the financial covenants agreed with the World Bank (including

a DSCR of 1.2x) for 2013, BOTAŞ could not comply for 2014. Due to the significant recovery in the last quarter of 2015, partially due to the full impact of the fall in gas import prices, BOTAŞ realized a significant profit for 2015 (US\$172 million), achieving compliance with the financial covenants for 2015 and beyond, notwithstanding a 10% sale price reduction from October 2016. Past experience has shown that at the time of cash shortfalls, BOTAŞ meets all of its payment obligations except for the payment of customs duties and taxes to the Government. Such arrears and related delayed payment penalties had reached US\$2 billion by mid-2015. The financial turnaround since mid-2015 enabled BOTAŞ to make significant payments which reduced this amount to below US\$1 billion. BOTAŞ expects to be able to eliminate its arrears by end-2016.

31. The World Bank rates the risk of these issues affecting BOTAŞ' ability to finance its shareholder obligations to TANAP nevertheless as low and considers the risk of BOTAŞ defaulting on its debt service negligible.

#### **IV.2 Guarantor: Republic of Azerbaijan**

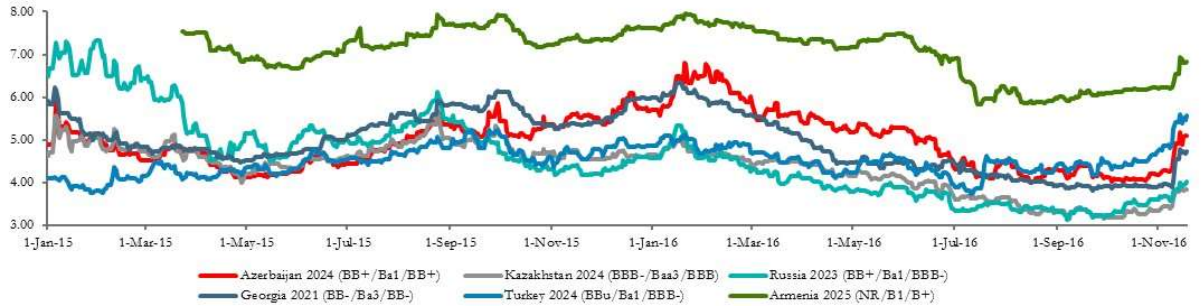
**32. Confidential information deleted.**

**33. Confidential information deleted.**

34. A concern with this project is that it would make Azerbaijan more dependent on fossil fuel production and export, instead of truly diversifying its economy. However, it should be noted that Azerbaijan has already announced a suite of reforms to support the development of other sectors of the economy. To this end, the revenues received from the projects will allow Azerbaijan to diversify its economy to non-hydrocarbon sectors. With Azerbaijan's oil production declining, the development of the gas fields and export of gas is thus positioned as a measure to balance the decline of oil exports and to stabilize the economy over the longer-term.

35. Even though in the near to medium-term, the economy of Azerbaijan will face considerable headwinds (see Annex 4 for further details), it is to be noted that for a large project with high capital expenditures such as this, it is also important that there should be a realistic but benign borrowing cost for the economics to work.

**Figure A3.5: Mid Yields to Maturity: Azerbaijan vs. Rating Peers**



36. On the whole, this project will present Azerbaijan with an opportunity to stabilize its economy as oil production declines. Given the high capital cost, it may result in near-term difficulties as debt levels increase, and the project will only pay off over the longer-term. Notwithstanding these considerations, there are important upsides that should not be discounted. For example, it should be noted that the gas pipeline can potentially be increased to carry 31 billion cubic meters per annum. There may also be a more robust recovery in energy prices, allowing Azerbaijan to take a larger profit on the project. The option to scale up production and export of natural gas will be a key aspect of the project for Azerbaijan and its partners.

## Annex 4: Sovereign Credit Fact Sheet

### Turkey

#### A. Recent Economic Development

Turkey's GDP tripled in nominal U.S. dollar terms since 2001, underpinned by a comprehensive macroeconomic and structural reform program. As a result, Turkey's per capita income of roughly US\$10,500 puts it in the group of upper-middle-income countries.

After 2011, growth moderated because of weaker private investment. Economic growth in 2014 was only 2.9 percent. Due to supportive domestic demand, accommodative monetary and fiscal policies, growth was resilient at 4 per cent in 2015, and 3.7 per cent in first half of 2016. Nevertheless, despite the currency depreciation, the external sector saw only slight improvement in 2015 as the decrease in energy bill (due to lower oil price) was offset by fall in export (due to weak growth in trading partners).

#### B. Economic Indicators.

##### Selected Macroeconomic Economic indicators (2014-2018)

| Economic Indicators                         | 2014        | 2015*       | 2016*       | 2017*       | 2018*       |
|---|-------------|-------------|-------------|-------------|-------------|
| National income and prices (change %)       |             |             |             |             |             |
| Real GDP                                    | 2.9         | 4**         | 3.8         | 3.4         | 3.5         |
| Private domestic demand                     | 1.0         | 3.3         | 4.1         | 3.5         | 3.2         |
| CPI inflation                               | 8.9         | 7.7         | 9.8         | 8.8         | 7.3         |
| Central government operations (% of GDP)    |             |             |             |             |             |
| Central government surplus                  | 0.7         | 0.7         | 0.1         | 0.7         | 0.7         |
| <b>External debt (% of GDP, end period)</b> | <b>50.4</b> | <b>56.0</b> | <b>57.3</b> | <b>57.1</b> | <b>56.9</b> |
| Gross external financing need (%of GDP)     | 26.5        | 27.2        | 26.7        | 25.0        | 25.3        |
| Nominal gross public debt                   | 33.5        | 32.6        | 30.5        | 29.0        | 27.9        |
| Public gross financing needs                | 8.3         | 5.1         | 5.1         | 3.9         | 4.8         |
| Money and credit                            |             |             |             |             |             |
| Broad money (M2, % end period)              | 11.9        | 19.4        | 20.7        | 17.4        | 15.9        |
| Foreign direct investment (net, % of GDP)   | 0.7         | 1.6         | 1.4         | 1.5         | 1.5         |
| Gross reserves (billions \$)                | 127.3       | 110.5       | 110.5       | 110.5       | 110.5       |
| Current account balance (% of GDP)          | -5.5        | -4.4        | -3.5        | -4.1        | -4.3        |
| Exchange rate (TL/\$, end period) ***       | 2.321       | 2.910       | --          | --          | --          |

Note: \* denotes projected figures. Source: IMF, 2016. \*\* World Bank Website. \*\*\*CEIC.

#### C. Economic Outlook and Risks.

Looking ahead, Turkey's medium term growth is projected to stabilize at around 3.5 per cent per annum, supported by domestic demand. The IMF states that internal risks to Turkey's economy will rise due to low domestic savings, lower investors' confidence (because of the deterioration of the political situation), as well as the negative impact on employment, corporate profits and private investment arising from the 30 percent increase in minimum wage. The external risks mainly arise from the large annual financing needs, low and declining net international reserves, the short-term nature of capital inflows, and the ever larger negative net international investment position.

For debt outlook, IMF pointed out that Turkey’s external debt continued to increase, and was estimated to exceed 50 per cent of GDP in 2015. While the debt path remains sustainable and robust under most stress tests, debt sustainability would worsen considerably with a large Lira depreciation. In addition, a large part of the debt is of shorter maturity, and the annual external financing needs of 25 per cent of GDP expose the economy to high liquidity and rollover risks.

Turkey’s public debt ratio is well below its historical ten-year average. Gross public sector financing needs have decline significantly and will remain low over the medium term. Debt sustainability analysis (DSA) suggests that Turkey’s government debt is sustainable even under different shock scenarios. Only the impact of lower GDP growth rates represents a significant threat to debt dynamic. While all public debt profile indicators are below early warning benchmarks, the high external financing requirements give rise to risks.<sup>11</sup>

## Azerbaijan

### A. Recent Economic Development

Oil and gas are central to Azerbaijan's economy. Over the past decade, Azerbaijan’s economic advancement has been remarkable, with Azerbaijan transiting into a middle-income country. Economic growth averaged 13 per cent per year during the 2002-2013 period, bolstered by high foreign direct investment in the oil sector and also growing oil and gas production and exports, and higher prices. Azerbaijan built large buffers and invested heavily during the oil boom years, but efforts to diversify the economy had lagged. The low oil prices, weak growth of the main trading partners and slow pace of structural transformation are now having an adverse impact on the Azerbaijan economy. This has resulted in (i) a lower growth at 1.1 percent in 2015 compared with 2.8 percent in 2014, (ii) a decrease in current account balance (CAB) from 3.9 per cent of GDP in 2014 to -0.4 per cent of GDP in 2015, (iii) a fiscal deficit, (iv) a significant depreciation against the dollar in 2015 and (v) an increase in inflation to 11 per cent by mid-2016.

The shock of lower oil prices has also negatively impacted Azerbaijan’s Banking sector, pushing up level of nonperforming loans (NPLs) due to economic slowdown and market uncertainty.

### B. Economic Indicators.

#### Selected Macroeconomic Economic indicators (2014-2018)

| Economic Indicators                      | 2014 | 2015 | 2016* | 2017* | 2018* |
|--|------|------|-------|-------|-------|
| National income and prices (change %)    |      |      |       |       |       |
| Real GDP                                 | 2.8  | 1.1  | -2.4  | 1.4   | 2.3   |
| Of which: Oil sector                     | -2.4 | 0.3  | -0.4  | -0.1  | 3.0   |
| CPI inflation                            | 1.5  | 4.1  | 10.2  | 8.5   | 4.2   |
| Central government operations (% of GDP) |      |      |       |       |       |

<sup>11</sup> International Monetary Fund (IMF), 2016. Country Report No. 16/104– 2016 Article IV consultation— Press release; Staff report; and Statement by the Executive Board for Turkey. April, 2016.



|   |        |       |       |       |       |
|---|--------|-------|-------|-------|-------|
| Central government surplus                | 3.2    | -6.8  | -9.9  | -3.9  | -0.4  |
| Nominal gross public debt (%of GDP)       | 11.2   | 28.3  | 37.5  | 37.4  | 36.0  |
| Public gross financing needs (%of GDP)    | -2.6   | 7.7   | 13.0  | 7.4   | 3.2   |
| Money and credit                          |        |       |       |       |       |
| Manat Broad money (Annual % change)       | 6.1    | -50.6 | 2.8   | 13.2  | 16.8  |
| Foreign direct investment (net, % of GDP) | 2.9    | 1.6   | 2.4   | 1.8   | 1.6   |
| Gross reserves (millions of US\$)         | 13,758 | 5,017 | 4,117 | 4,617 | 5,117 |
| Current account balance (% of GDP)        | 13.9   | -0.4  | 0.7   | 3.1   | 9.0   |
| Exchange rate (Manat/\$, end period)      | 0.784  | 1.550 | --    | --    | --    |

Note: \* denotes projected figures. Source: IMF, 2016.

### C. Economic Outlook and Risks.

Looking ahead, Azerbaijan's near term economic prospects are weak. Growth is expected at -2.4 per cent in 2016 and only around 1-2 per cent for next few years. IMF mentioned that additional oil price declines associated with a deteriorating global outlook would worsen external balances, increase exchange rate pressures, expose fiscal vulnerabilities and further dent consumer and business confidence.

For debt<sup>12</sup> outlook, nominal gross public debt for general government increased to 28 percent in 2015 from about 11 per cent in 2014, and is projected to reach 38 per cent in 2016. It is expected to stabilize at that level through to 2021. Exchange rate depreciation and an increase in primary deficit were main causes for the debt increase, as the debt is largely denominated in foreign currencies or held by non-residents. However, the majority of Azerbaijan's debt has long maturities, which can mitigate financing pressure.

IMF indicates that any further shocks to real GDP growth could raise the debt burden higher, and negatively affect the gross financing needs of the government. In addition, market perception is another potential risk to the debt profile. The stress tests of IMF debt sustainability showed that shocks to real GDP growth and real exchange rate depreciation could lead to potentially high ratios of debt to GDP.<sup>13</sup>

<sup>12</sup> No DSA regarding external debt analysis in IMF Country Report No. 16/296 for Azerbaijan.

<sup>13</sup> IMF, 2016. Country Report No. 16/296– 2016 Article IV consultation—Press release; Staff report; and Informational Annex for Republic of Azerbaijan. September, 2016.

## **Annex 5: Coordination with other Financiers and Private Sector**

1. The entire Program is a public-private partnership between Azerbaijan and its public and private sector partners, the most important of which are Turkey and BP, respectively.
2. An Advisory Council on the Southern Gas Corridor has been set up as a joint initiative of the European Commission and Azerbaijan. The Council brings together all the countries and stakeholders involved to steer the implementation of the Southern Gas Corridor at the political level in order to have the Corridor operational by 2019-2020.
3. TANAP is a partnership between Turkey, Azerbaijan and BP. Turkey is the host country, 30 percent minority investor in TANAP and purchaser of 6 bcm of the 16 bcm annual gas production from Shah Deniz 2 gas field. Azerbaijan is the host country of Shah Deniz 2, 58 percent majority investor in TANAP and will become a major gas exporter doubling its exports to Turkey and opening the Southern Gas Corridor for the supply of gas to Europe. BP is the lead developer and operator of the Shah Deniz gas field and a 12 percent minority investor in TANAP.
4. TANAP is the implementation agency of this project and has engaged a renowned international company as their EPCM contractor. TANAP has also engaged consultants in other disciplines (e.g. social, environmental). Payments made by TANAP to its contractors under contracts eligible for AIIB financing will form the basis of disbursements from the Bank.
5. The WB will be the lead co-financier and will supervise the Project and administer the AIIB loan on behalf of the Bank, in accordance with the WB's applicable policies and procedures, and a Project Co-Lenders' Agreement, to be signed between the AIIB and the WB, in accordance with the Co-financing agreement between the Bank and the WB. WB plans to visit the project sites three times per year to monitor progress. AIIB may participate.
6. AIIB has reviewed all of the applicable World Bank's Operational Policies (OP) and WB procedures (BP), including OP/BO 4.01 (Environmental Assessment), 4.12 (Involuntary Assessment); WB's Procurement and Consultant Guidelines, and the WB's sanctions policies and procedures, including the WB's Anti-corruption Guidelines. AIIB has found them all satisfactory for application to the project. AIIB will rely on the WB's determination of compliance with the above WB policies and procedures applicable to the project. Project monitoring and reporting, as well as financial management, will also be carried out in accordance with the WB's requirements. This approach ensures that one set of policies will apply to the entire Project. It will also provide a single point of contact for borrowers and therefore facilitate a more efficient and seamless approach to Project Implementation.