IGB PROJECT

Energy Security in Southeast Europe: the Greece-Bulgaria Interconnector

26 November 2018

Teodora Georgieva
Executive Officer
IGB Project: Key Facts

- **Length:** 182 Km
- **Capacity:** 3-5 bcm/y
- **Diameter:** 32”
- **Construction CAPEX:** 220 M€
- **COD:** H2 2020
- **Sovereign guarantee:** 110 M €
IGB project Strategic Role in Bulgaria and SE-CE Markets

- **Enhancement of the Security of Supply** by doubling the entry capacity.
- **Increase of the Transit capacity** into SEE countries; taking advantage of other interconnections, such as IBR (BG-RO), IBS (BG-SER), linked through the BTG network.
- **Bulgarian Hub building up**

- **Diversification of imported gas** through Greece with complementary supply sources from the Caspian Region, Middle East, East Med and LNG (through existing/new terminals in Greece and/or Turkey).

- **In particular IGB will be physically connected to** DESFA, TAP and Bulgartransgaz and to Greek and Turkish LNG systems:
  - Enabling the access of the SEE markets to the Southern Corridor.
  - Enabling the access of Ukraine and Central Europe to the Southern Corridor.
  - Contributing to vertical corridor implementation as sponsored by the EU within the CESEC framework.

- **The Bulgarian system currently relies almost exclusively on a single source (95% of the whole market) and on a single North to South route for its supply and market needs. IGB will be the first Bulgarian Cross-Border route that will be at disposal for new-entry Shippers.**
Stakeholders Involved in the Project Implementation

- EWRC (BG)
- RAE (GR)
- TAP
- BULGARTRANSGAZ
- DESFA

ICGB

- EC (DG Energy – Comp - Regio)
- IGI Poseidon
- BEH
- NRAs
- TSOs
- SHIPPERS
- GREECE
- BULGARIA
- GOVs
- EIB

- Managing Authority BG
- EPC
- OWNERS ENGINEER
- LINE PIPE
- ARCHEOLOGY (BG)
- SUPERVISION (BG)
- ARCHB.
Key Project Achievements

1. EEPR, ESIF and Sovereign Guarantee by the Republic of Bulgaria

✓ EUR 45 mln. under the European Energy Program for Recovery. The EEPR grant contributes to the reduction of the CAPEX impact on the level of the tariff.
✓ EUR 39 mln. grant financing from the Operational Program Innovation and Competitiveness (OPIC). Expected to be approved by DG Regio by the end of Q4 2018.
✓ EUR 110 mln. EIB loan financing secured by a State Guarantee. A loan financing agreement to be concluded with EIB in December 2018.
✓ DG Comp decision on State Aid notification for approval of all measures – taken on 08 November 2018.

2. PCI and CESEC Enlisting

✓ IGB is listed among the PCIs (Projects of Common Interest) and is included as a leading project in the CESEC initiative (Central and South - Eastern European Gas Connectivity).
✓ IGB is included in the Greek and Bulgarian Ten Years Network Development Plan and is currently applying for renewing its presence in the ENTSOG TYNDP.

Interconnection agreements

✓ Joint declaration for Vertical gas corridor signed between TSO’s of Greece, Bulgaria, Romania, Hungary and ICGB.
✓ MoU with all operators from Vertical corridor signed on 19 July 2017.
✓ Cooperation agreement between IGB and TAP for connectivity of the two gas pipelines, signed on 29 June 2018.
✓ Cooperation agreement for interconnection between IGB and DESFA, signed on 29 June 2018.

3. Permits

✓ Environmental Impact Assessment approved for both countries.
✓ Technical Development Activities (FEED, Routing and Technical Design) completed in both countries.
✓ Rights of Way and land acquisition, including expropriation procedure in Bulgaria finalized – for all affected plots and owners.
✓ Construction Permit – for Bulgarian territory entered into force on 04 October 2017;
➢ Installation Permit – for Greek territory to be obtained by the end of January 2019.
Key Project Achievements

Market Test (MT) and Exemption Application

✓ Market test for capacity reservation completed in November 2016. 5 binding offers received on a long term basis for a total capacity of 1,57 bcm forward flow;
✓ Advanced Reservation Capacity Agreements concluded with the shippers – March 2017;
✓ Exemption application filed to the NRAs – July 2017;
✓ On 8 August 2018, following the approval of the EC, a Joint Decision on the Exemption of IGB has been adopted by the National Regulatory Authorities of Greece and Bulgaria.

Pursuant to the Decision, ICGB is granted exemption from:
- Third party access for the capacity reserved as a result of the Market test
- Regulated tariff for the total capacity of the pipeline
- Exemption from ownership unbundling

The award of the Exemption decision is a key step to establishing the commercial status of the pipeline.

➢ Post Exemption actions:
  - Tariff Code – submitted for approval to the NRAs on 5th of November 2018
  - Network Code – target date for approval by the end of February 2019
  * The Network code is a precondition for the elaboration and the conclusion of the GTAs with the shippers.

FID

✓ On 10th of December 2015 the Shareholders took the Final Investment Decision, allowing the project to enter into the final phase of development and to proceed with construction once the financial requirements are fulfilled and all the necessary permits are obtained.
✓ On 29th of June 2018 the Shareholders signed a joint declaration for confirmation of their commitment for development of the project, approval of a final business plan and an irreversible commitment for readiness to start the construction of the pipeline.
### Key Project Achievements

<table>
<thead>
<tr>
<th>Tender Procedure</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Owner’s Engineer for IGB Project</td>
<td>8 November 2017</td>
</tr>
<tr>
<td>Line pipe manufacture and supply</td>
<td>8 December 2017</td>
</tr>
<tr>
<td>Design, Procurement and Construction</td>
<td>30 April 2018</td>
</tr>
<tr>
<td>Archeological Research along the pipeline route on Bulgarian territory</td>
<td>6 August 2018</td>
</tr>
<tr>
<td>Construction supervision for the Bulgarian section of IGB</td>
<td>10 October 2018</td>
</tr>
</tbody>
</table>

All of the listed tender procedures are expected to be concluded by the end of Q1 2019 and the construction phase is expected to start by the end of Q2 2019.
ICGB Project Development – Timeframe

By the end of November 2018:
- Official Application OPIC;
- Submission of the Network Code to the NRAS;
- Adoption of new organizational structure;

By the end of December 2018:
- Conclusion of the EIB loan agreement;
- Approval Major Project OPIC;
- Completion of the OE tender evaluation;
- Conclusion of EPC prequalification phase;
- BoD approval of new organizational structure for construction phase;

By the end of January 2019:
- Finalization of the evaluation of the Line Pipe tender’ technical offers;
- Installation Permit issued in Greece;
- On-lending agreement with BEH for the Sovereign Guarantee;
- General Assembly for approval of final financial structure of the project and SHA;
- Starting recruitment process for additional staff for construction phase;

By the end of February 2019:
- Submission of Technical offers for the EPC;
- Opening of the Price offers for the Line Pipe Tender;
- Conclusion of the Tie in Agreement with TSOs;
- ASFA license obtained in Greece;

By the end of March 2019:
- Conclusion of EPC, Line Pipe, Constr. Supervision and Owner’s Engineer Contracts;
- Adoption of the ICGB Tariff and Network code, approved by the NRAs.

By the end of April 2019:
- Conclusion of the GTAs with the allocated shippers;

6 month before COD:
- Submission of application for ITO (unbundling requirements) to EWRC and RAE

Up to COD:
- Conclusion of the Interconnection agreements with the TSOs;
- Ratification of the IGA;

By the end of January 2019:
- Finalization of the evaluation of the Line Pipe tender’ technical offers;
- Installation Permit issued in Greece;
- On-lending agreement with BEH for the Sovereign Guarantee;
- General Assembly for approval of final financial structure of the project and SHA;
- Starting recruitment process for additional staff for construction phase;

By the end of February 2019:
- Submission of Technical offers for the EPC;
- Opening of the Price offers for the Line Pipe Tender;
- Conclusion of the Tie in Agreement with TSOs;
- ASFA license obtained in Greece;

By the end of March 2019:
- Conclusion of EPC, Line Pipe, Constr. Supervision and Owner’s Engineer Contracts;
- Adoption of the ICGB Tariff and Network code, approved by the NRAs.

By the end of April 2019:
- Conclusion of the GTAs with the allocated shippers;