# **From Energy Market Regulatory Board:**

#### **BOARD DECISION**

Decision No: 2586/2 Date of Decision: 03/06/2010

In the Energy Market Regulatory Board meeting dated 03/06/2010, it is decided that the annexed "Petroleum Pipeline Corporation, Basic Usage Procedures and Principles for Liquefied Natural Gas Storage Facility", which is drawn up within the framework of Provisional Article 1 of Regulations on the Determination of Basic Usage Procedures and Principles for Liquefied Natural Gas Storage Facility published on Official Gazette no: 27230 dated 16 May 2009, to be certified and be valid as of the date of this Decision hereby.

# **ANNEXES:**

ANNEX-1: Petroleum Pipeline Corporation, Basic Usage Procedures and Principles for Liquefied Natural Gas Storage Facility

# BOTAŞ MARMARA EREĞLİSİ LNG TERMINAL

# **BASIC USAGE PROCEDURES AND PRINCIPLES**

#### **INDEX**

1.	BASIC APPLICATIONS
2.	DEFINITIONS AND INTERPRETATION
3.	CAPACITY
4.	PROGRAMMES, REVISED PROGRAMMES
5.	ALLOCATIONS
6.	OPERATIONAL CONDITIONS
7.	LIMITATION AND SUSPENSION
8.	BALANCING
9.	OPERATIONAL FLOW INSTRUCTIONS (OFI)
10.	QUALITY
11.	MEASUREMENT
12.	WEBSITE
13.	PRICING AND PAYMENTS
14.	RESPONSIBILITIES, OBLIGATIONS
15.	FORCE MAJEURE
16.	SCHEDULED MAINTENANCE
17.	RESOLUTION OF DISPUTES
18.	CONFIDENTIALITY
19.	AMENDMENTS IN UPP
20.	OTHER
21	TEMPORARY PROVISIONS

Annex-2 Information To Be Included In Land Tanker Manufacturing And Test File

Annex-1 Explanation Concerning The Operation Of Filling Ramp

# BASIC USAGE PROCEDURES AND PRINCIPLES FOR LIQUEFIED NATURAL GAS (LNG)

#### 1. BASIC APPLICATIONS

#### 1.1. INTRODUCTION

- **1.1.1** Basic Usage Procedures and Principles for Liquefied Natural Gas (LNG) Storage Facility, (in short, UPP) is a document prepared to set forth the rights and responsibilities of parties and to make arrangements for technical and operational issues related to LNG Terminal within the framework of Natural Gas Market Act No.4646 and regulations in accordance with this Law, the provision of Standard and/or Supplementary Services.
- **1.1.2.** Each Service User signs a "Standard Terminal Service Contract" (in short, "STSC) with BOTAŞ and the provisions of this UPP hereby are the inseparable parts of STSC. In STSC, mutual rights and obligations of parties and special conditions, which are not against the regulations and without prejudice to non-discrimination principle between equal parties, are set forth concerning the use of LNG Terminal between BOTAŞ and Service User.
- **1.1.3.** General principles which regulate the mutual rights and responsibilities of BOTAŞ and Service Users concerning capacity allocations, operating conditions, measurement and quality features, daily operation and maintenance requirements and other issues are addressed to in UPP.
- **1.1.4.** A clear, fair, transparent and indiscriminate application is intended to be created for LNG Terminal Users in UPP, in accordance with the related regulations. In this context, BOTAŞ carries out the Standard Service and Supplementary Services separately from its other activities, especially LNG import and wholesale activities, and accepts that BOTAŞ itself is a Service User provided that it procures services from the Terminal. BOTAŞ undertakes that it shall comply with the provisions of Standard Terminal Service Contract provisions as a Service User.
- **1.1.5.** Entry into force and change of UPP are subject to the approval of EPDK.
- **1.1.6..** This UPP hereby is an inseparable part of STSC signed by BOTAŞ and each Service User.
- **1.1.7.** None of the provisions stated in this UPP hereby shall, in any way, grant a right or right to claim to the Customer of Service User which can be used by the Customer of Service User against BOTAS and vice versa, neither shall they be construed as such.
- **1.1.8** BLNG undertakes that it shall comply, as Storage Company, with the provisions of Connected System Delivery Contracts concluded with the Storage Companies of the Transmission Company, which carry out similar activities.
- **1.1.9.** Rejection of entry to the system is subject to the provisions of the related Regulations.

#### 1.2. BASIC PRINCIPLES

Usage Procedures and Principles are based on the following principles:

- **1.2.1.** To manage the terminal storage capacity to assist in the coordinated and safe operation of the System and, provided the System allows for it, to provide services in an unbiased manner, with the principle of non-discrimination between equal parties,
- **1.2.2.** To perform an economical, efficient and safe management,
- **1.2.3.** To provide Supplementary Services without disrupting the Standard Services and without posing an obstacle to the efficient use of Terminal,
- **1.2.4.** To provide the Service Users and the Transmission Company with sufficient and accurate information to allow the BLNG to provide services in an unbiased and equal manner and the safe and efficient operation of natural gas system,
- **1.2.5.** LNG delivered by the Service Users to the Terminal will be mixed with the LNG of other Service Users and right of disposition of the LNG in the Terminal, according to the operational conditions, belongs to BLNG, subject to the provisions specified in this UPP hereby and the provisions of related Regulations.

#### 1.3. INFORMATION CONCERNING BLNG TERMINAL

BLNG Terminal is established at Sultanköy site, which is close to the District of Marmara Ereğlisi in the Province of Tekirdağ, 85 kilometres west of Istanbul. Operating since 1994, the Terminal has four main functions:

- 1. Unloading of LNG from Vessels and storage.
- 2. Gasification of stored LNG and delivery to Transmission Network.
- 3. Loading of stored LNG on Land Tankers.
- 4. Loading of stored LNG on LNG Vessels.

Provided that the Transmission Network and the Terminal operational conditions are optimal, minimum gas delivery capacity of the Terminal is 8 Billion Nm<sup>3</sup>/year.

The jetty is 380 meters long and is formed up of steel supports. It is designed to allow berthing of Vessels with a LNG shipping capacity of  $40,000 - 130,000 \,\mathrm{m}^3$ . Delivery of LNG with a Vessel outside these limits is subject to the pre-assessment and approval of BLNG.

There are 3 LNG storage tanks, each having a LNG utilisation capacity of 85,000 m<sup>3</sup>.

LNG is gasified using 3 Open Rack Vaporiser and 4 Submerged Vaporisers. Measured Gas is sent to Transmission Network. Delivery Point pressure is maximum 83 bar(g) and minimum 35 bar(g).

LNG loading onto Land Tankers is performed via 3 units of Land Tanker Filling Ramps, each having a filling capacity of 25 tankers/day. Likewise, 3 units of Land Tanker Filling Ramps with filling capacity of 25 tankers/day each are available for operation with additional investment.

Filling is performed on each LNG Vessel that is able to berth to the jetty of BLNG using systems that will load 3,300 m<sup>3</sup> LNG under atmospheric pressure.

# 1.4 APPLICATION CONDITIONS FOR USERS WHO WISH TO PROCURE SERVICES FROM BLNG

#### 1.4.1 Applications

BOTAŞ continuously announces, via its Website, all capacities which are to be allocated for the related Gas Year prior to each Gas Year until 15<sup>th</sup> of August. Applicants who wish to procure services of the terminal shall, no later than 1<sup>st</sup> of September, make an official application to the BLNG terminal by;

- Filling out "Capacity Demand Application Form" to be published at BOTAŞ website and,
- Issuing a provisional bank security to BOTAŞ, along with the Capacity Demand Application Form,

The Applicants shall have an Import/Wholesale/Export Licence.

1.4.2. Information to be included in Capacity Demand Application Form

The following information shall be included in Capacity Demand Application Form:

- Concerning the LNG to be delivered by the Applicant:
- 1. Amount demanded by the Applicant to be reserved from Annual Maximum Storage Capacity to be announced by BOTAŞ
- 2. Concerning the amount of reserved capacity to be demanded by the Applicant
  - i) How they will use such capacity with the Vessels to be transferred, extending to years
  - ii) Vessel arrival dates with a tolerance of  $\pm 2$  days
  - iii) The amount of LNG to be delivered by each Vessel
- 3.) General and Technical information related to the Sea Tankers that will be used for the transportation of LNG delivered by the Applicant,
- 4.) Declaration by the Seller, which includes the following information:
  - i. Date of initiation of imports,
  - ii. Contract period or date of intervals of delivery,
  - iii. Total annual amount or amount and number of cargo, 3-month distributions of the annual amount and the amounts and distributions of the annual ship schedule in 10-day intervals.

- 5. Quality values of the LNG in Gas form, which is to be delivered by the Applicant (shall comply with the analysis values specified in Section 10)
- 6) For Applicants with a Wholesale License, provisions of the contract, concerning the delivery, concluded with the Importer Company (BOTAŞ will accept that it received the LNG purchased by Wholesale Companies, which sign a STSC, from the Importer Companies at the Unloading Point).
- Concerning the LNG of Applicant, which is to be Gasified:
- 1. Minimum and maximum amounts for the LNG to be gasified and monthly distribution of the annual amount.
- 2. Minimum temperature and pressure values demanded for the Delivery Point
- Concerning the LNG of Applicant, which is to be loaded onto Land and Sea Tankers:
- 1. Daily maximum and minimum amounts, annual amounts and monthly distribution of annual amounts demanded for the LNG, which is to be delivered to the Land Tankers,
- 2. Related provisions of the contract between the Applicant and the company with the LNG Transmission Licence, who will carry out the delivery of Applicant's LNG via Land Tankers,
- 3. General and technical information concerning the Land Tankers, which will perform the delivery of LNG of Applicant,
- 4. If the LNG of Applicant is to be delivered via Sea Tankers, amount of LNG to be loaded on each vessel and Vessel arrival dates, with a  $\pm 2$  days of tolerance.
- 5. If the LNG of Applicant is to be delivered via Sea Tankers, general and technical information concerning the Sea Tankers to be used in the transportation of LNG.

In addition, it is obligatory to include in the Capacity Demand Application Form the originals or notary certified copies of the documents of authorization and the circular of signatures for the persons authorized to represent and bind the legal person, i.e. the Applicant signing the Capacity Demand Application Form,

After the Applicant fills a Capacity Demand Application form and issues it to BOTAŞ LNG Terminal officially, it shall be deemed to accept the provisions of this UPP hereby.

BLNG responds to the Applicants which provide the aforementioned information and documents within until 15<sup>th</sup> of September.

#### 1.5. CONDITIONS FOR SIGNING STSC

After the capacity allocations are certified by BLNG;

- 1.5.1. If BLNG rejects the application; Applicants will be notified of the reasons for such rejection. Bid securities, which are specified in 1.4 of this UPP hereby, will be returned to rejected Applicants within 5 work days as of the date of notification of rejection.
- 1.5.2. If BLNG accepts the application; Applicants whose applications are accepted by BLNG shall, within 7 work days, issue a performance security and sign STSC. Bid securities will be returned to the Applicants, which issue a performance security and sign STSC within 7 (seven) work days, within 5 days as of the date of signing STSC.
- 1.5.3. In addition to the Letter of Performance Security specified in this Section hereby, the Applicants shall, in the phase of signing STSC, (according to the related Inventory Transfer provisions) issue a second letter of performance security to BOTAS.
- 1.5.4. The period of the STSC's to be signed with the BOTAŞ shall be maximum one Gas Year.
- 1.5.5. In addition, it is obligatory to enclose in the STSC the originals or notary certified copies of the documents of authorization and the circular of signatures for the persons authorized to represent and bind the legal person who will sign STSC.

#### 1.6 CONDITIONS FOR ENCASHING THE SECURITIES

- 1.6.1. If the Applicants whose applications are accepted by BLNG do not, within 7 (seven) work days, issue a performance security and sign STSC, their bid securities shall be encashed and registered as revenue for BOTAS.
- 1.6.2. If the monthly bills arranged by BLNG on behalf of Service User are not paid and/or Service User fails to fulfil its obligations related to this UPP, STSC or obligations imputed to Service User according to the regulations, performance security specified in Article 1.5.2. of this UPP hereby shall be encashed and registered as revenue for BOTAŞ after the notification period.
- 1.6.3. If the Service User performs a unilateral termination before the expiration date of STSC, performance security specified in Article 1.5.2. of this UPP hereby shall be encashed and registered as revenue for BOTAŞ after the notification period.
- 1.6.4. According to the provisions of Inventory Transfer stated in this UPP hereby, if Transferee Service User fails to return the LNG obtained to the Transferor Service User in kind, in time and in the amount obtained for reasons other than force majeure, BLNG shall be entitled the right to and be liable to encash the performance security specified in Article 1.5.3. of this UPP and pay it to the Transferor Service User. If such security specified in Article 1.5.3 is not sufficient to compensate for the claims by the Transferor Service User, security specified in Article 1.5.2 shall also be encashed and the losses incurred on the Transferor Service User shall be compensated using such security.

#### 2. DEFINITIONS AND INTERPRETATION

#### 2.1 **DEFINITIONS**

- "Month" defines the period which starts at 08:00 of the first day of any calendar month and ends at 08:00 of the first day of next calendar month; the definition of annual is also interpreted in the same manner.
- "Idle Capacity" defines the remaining available capacity following the capacity allocations of BLNG.
- "Bar" defines the same meaning specified in ISO 1000:1981(E).
- "BOTAS" defines Petroleum Pipeline Corporation.
- **"BLNG"** defines BOTAŞ unit, which is responsible and authorised for the operation of BOTAŞ LNG Terminal.
- "Maintenance" defines maintenance, repair, control, connection or replacement in any section of Terminal, as well as the preparation required for these and, following these, all works required for recommissioning of any section of Terminal.
- "Maintenance Days" defines the days in which BLNG may decrease the amount of LNG t be obtained or delivered by the Terminal and the amounts of Gasified LNG (up to zero, if required) by reason of scheduled maintenance.
- "Maintenance Programme" defines the maintenance programme arranged by BLNG for each year.
- **"Applicant"** defines legal entities which apply to BOTAŞ concerning service procurement from BLNG Terminal and which possess a Wholesale License/Export License/Import License.
- **"Unloading Point"** defines the Terminal side of flange to which the unloading manifold system of LNG Vessel connects via BLNG Terminal unloading arm.
- "Unloading Period" defines the period which starts from of the point which the Vessel of Service User gives "Notice of Readiness", unloads its load and ends as it is pulled to the same point.
- **"Permanent Transfer"** defines the transfer of a part of or whole capacity of a Service User to another Service User for a period of at least 10 Gas Days, during which the Transferee Service User is responsible for all obligations.
- **"Storage Usage Amount" or "SUM".** Half of the total of Service User's LNG in the storage tanks as of 08:00 at D-1 and the remaining LNG as of 08:00 at D gives daily Storage Usage Amount of that Service User for D-1. Unit is Sm<sup>3</sup> x Day.

- "Storage" is the storing of Service User's LNG in the tanks at BLNG Terminal for periods specified in this UPP.
- **"Stored Volume"** defines the amount of LNG that is stored by BLNG in the Terminal LNG Tanks on behalf of Service User at any time.
- **"Transferee Service User"** defines any Service User who is transferred a capacity from Transferor Service User.
- "Transferor Service User" defines a Service User which transfers part of the or whole capacity reserved.
- "Natural Gas" or "Gas" defines natural hydro-carbons in the gas form that has been extracted or that can be extracted from the ground and the other forms of it that has been liquefied, compressed or physically processed (except for Liquefied Petroleum Gas LPG) by certain methods to be presented to the market.
- **"Supplementary services"** defines rendering of services such as berthing and unloading of LNG vessel, storage of LNG in tanks, delivery of LNG to the national transmission network after being gasified, loading of LNG into land tankers, loading of LNG into the vessel and similar services, separately.
- **"Gas Burned in Equipments"** is the gas that is used to gasify LNG in submerged vaporisers. Payment for such is paid to BLNG by Service User in kind.
- "EPDK" defines Energy Market Regulatory Board.
- "Day", "Gas Day" or "Service Day", (in short, D) defines the period of time which starts at 08:00 of any day and ends at 08:00 of the next day.
- **"D-1"** defines the Day before the Day.
- **"D+1"** defines the day after the Day.
- **"Gas Year"** defines the period of time which starts at 08:00 on 1<sup>st</sup> of January and ends at 08:00 on the next 1<sup>st</sup> of January.
- "Gasified LNG" defines LNG which is transformed from liquid state at gas state via mechanical vaporisation.
- "Temporary Transfer" defines the transfer of a part of or whole capacity of a Service User to another Service User for a period of at least 10 Gas Days, during which the Transferor Service User is responsible for all obligations.
- "Gelibolu PBS" defines the place where TDI (Turkey Maritime Organisation) pilot boards or leaves the vessel at the area, where Dardanelles strait meets Marmara Sea.
- **"GIIGNL"** (Groupe International des Importateurs de Gaz Naturel Liquéfié) defines International Group of LNG Importers.

- **"Service User"** defines the importer/wholesale/exporter company which has signed a service contract with BOTAŞ or defines the BOTAŞ itself, with the capacity of importer/wholesale/exporter company.
- "Vessel of Service User", "LNG Vessel", "Vessel" or "Sea Tanker" defines sea vehicles which are under control of Service User or staff commissioned by Service User, used for LNG transportation.
- "Transmission Network" defines the Natural Gas pipeline network and related facilities used for the transportation of Natural Gas, which are the property of and operated by BOTAŞ.
- "Transmission Company" defines the legal entity which carries out transmission activities.
- "Related Regulations" defines Laws, regulations, communiqués, circulars, Board regulations and license or licenses owned by the related legal entity.
- **"British Thermal Unit"** or **"Btu"** is an energy unit equal to 252 Calories and 1 million Btu is written as 1MMBtu. One MMBtu is 293.071 Kwh or 0.003412 MMBTU= 1 Kwh.
- "Work Day" is the period of time between 8:00 am and 5:00 pm, from Monday to Friday, except for official holidays.
- "Calorie" is an energy unit that is equal to the amount required to raise the temperature of 1 gram of pure water from 14.5°C to 15.5°C under normal atmospheric pressure (1.01325 Bar).
- "Act" defines Natural Gas Market Act No: 4646 dated 18/04/2001.
- **"Land Tanker"** defines the vehicle/vehicles under control of a Service User or a LNG Transmission Company, which has signed a LNG Transportation Contract with the licensed company to which the Service User sells LNG that is/are used for LNG Transportation.
- "Board" defines Energy Market Regulatory Board.
- "Authority" defines Energy Market Regulatory Authority.
- **"Maximum Storage Capacity"** defines the amount of storage capacity announced by BOTAŞ, prior to a Gas Year, for the Terminal usage of that Gas Year.
- "Maximum Contract Storage Capacity (MCSC)" defines the amount of LNG that can be unloaded to tanks by a Service User, which has signed a Standard Terminal Service Contract, throughout the contract period.
- "Maximum Daily Compulsory Delivery Capacity" defines the maximum amount of liquid or gasified LNG that can be provided at the delivery point, on behalf of a Service User, for one day. Will be provided as Sm<sup>3</sup>. This value shall be specified in STSC, which is to be signed with the Service Users obtaining LNG in gas or liquid state.
- "Amount" or "Amounts" will be defined as m<sup>3</sup> LNG, Nm<sup>3</sup>, STDm<sup>3</sup>, MMBTU, KWh, kcal, MJoule, Cm<sup>3</sup> (revised according to 9155), kg.

- "Minimum Daily Compulsory Delivery Capacity" defines the minimum amount of liquid or gasified LNG that can be provided at the delivery point, on behalf of a Service User, for one day. Will be provided as Sm<sup>3</sup>. This value shall be specified in STSC, which is to be signed with the Service Users obtaining LNG in gas or liquid state.
- "Mehmetçik PBS" defines the place where BOTAŞ pilot and TDI (Turkey Maritime Organisation) pilot board or leave the vessel at the area, where Dardanelles strait meets Aegean Sea, west of Kumkale Lighthouse.
- "Normal cubic meter" in short, "Nm<sup>3</sup>" defines the amount of natural gas which occupies a volume of 1 cubic meter under 0°C and 1.01325 bar absolute pressure.
- "Operational Flow instruction (OFI)" defines an instruction given by BLNG to a Service User.
- **"Programme"** defines daily, monthly and annual information concerning LNG amounts to be delivered to BLNG storage tanks by the Service Users and the amount of LNG and/or Gasified LNG to be obtained, which are approved by BLNG.
- "Ramp" or "Filling Ramp" is the unit at the BLNG Terminal, from which LNG filling in Land Tankers is performed.
- "Liquefied Natural Gas" or "LNG" is a natural gas in liquid state, under atmospheric pressure and at boiling point.
- "System" defines the facilities and equipment installed to perform production, transmission, storage and distribution of natural gas.
- **"Standard Service"** The rendering of services as a whole regarding the unloading of LNG vessel, the storage of LNG during the period specified in the basic usage procedures and principles, and delivery thereof to the national transmission network after being gasified within the gasification capacity allocated to it by this context.
- **"Standard Terminal Service Contract"** in short, **"STSC"** defines the contract concluded by BLNG and Service User, which is arranged and signed as specified in this UPP and in writing and in which standard and supplementary services such as unloading and storage of LNG and, following this, delivery of LNG or Gasified LNG are provided.
- "Standard cubic meter" in short, "Sm<sup>3</sup>" defines the amount of natural gas, which fills a volume of 1 cubic meter under 15 °C and 1.01325 absolute pressure, does not include water vapour and has a Gross Calorific Value of 9,155 Kcal. 1 Sm<sup>3</sup> is 10.64 Kwh.
- **"STD cubic meter"** defines the amount of natural gas, which occupies a volume of 1 cubic meter under 15 °C and 1.01325 absolute pressure.
- **"End Users"** define legal or private entities which have signed an agreement with the Service Users to purchase and/or use the natural gas that has been procured by the Service User as LNG or Gasified LNG.

- **"Estimated Saturated Pressure"** defines the pressure at the point when, after LNG Vessel berths to Terminal jetty and the systems which burn the Boil-off Gas or process it are inactivated prior to the measurement, pressure rise in the vessel tanks stops.
- **"Estimated Time of Arrival"** defines the notifications which specify the Estimated Time of Arrival for the vessels, which arrive in the BLNG Terminal to unload their LNG or to obtain LNG, to Mehmetçik PBS. These notifications are issued to BLNG by the vessel or by the agency to which the vessel is associated.
- "Tariff" defines any arrangement which consists of prices, terms and conditions applicable to transmission, distribution, storage in LNG or gas state, and sale of natural gas and the associated services which is determined according to the "Natural Gas Market Tariffs Regulation".
- **"Basic Usage Procedures and Principles"**, in short, "**UPP**". The procedures and principles for BOTAŞ LNG Terminal usage, drawn up and submitted to the EPDK for approval by BLNG in order to determine the rights and obligations of the parties related to standard and supplementary services.
- "Terminal" or "Storage Facility" defines the land and facilities at Marmara Ereğlisi, which are the property of BLNG and where activities such as the obtaining, storage, gasification and delivery of LNG.
- "Terminal Operation Gas" defines the gas used by the Terminal equipment as fuel for standard and supplementary services, gas burned in the flue, gas used for heating, gas required for minimum stock (Foot LNG), gas leaks that may occur in the process installation and gas which cannot be calculated due to a difference in the measurement by reason of the sensitivity limits of measurement equipment in the terminal and the vessel.
- "Delivery Point" defines the points where the gasified LNG is delivered to Natural Gas Main Transmission Network and where it is loaded onto land or Sea Tankers in LNG state.
- "Foot LNG" is defined in Article 6.6.
- "Gross Calorific Value" or "GCV" defines the amount of heat which is referred to in terms of kcal and, when applied for Natural Gas, which is created as one m<sup>3</sup> of gas is fully burned under 1,01325 Bars of absolute pressure and 15°C constant temperature, provided that all water created during the burn phase condenses under 15°C.
- "Due Date" is defined in Article 13.3.1.
- **"Summer Period"** defines the period which starts at 08:00 on 1<sup>st</sup> of April and ends at 08:00 on 1<sup>st</sup> of October.
- **"Winter Period"** defines the period which starts at 08:00 on 1<sup>st</sup> of October and ends at 08:00 on 1<sup>st</sup> of April.

- "Annual Maximum Contract Storage Capacity (AMCSC)" defines the amount of LNG which the Service User signing a Standard Terminal Service Contract has the right to unload to the storage tanks for one year.
- **"Zero Send-out"** defines the operation mode in which certain critical equipment and lines are kept cool, by transmitting minimum amount of LNG thru them, when the Terminal is at zero send out; and in which the gas in these and the gas that is self-created by the LNG in the tanks are delivered to the transmission network via base and line compressors.
- **"Website"** defines the web site which is created by BLNG in order for the parties within the natural gas market to be able to follow market activities and which is accessible via internet.

(http://www.botas.gov.tr)

#### 2.2 INTERPRETATION

Unless otherwise specified, in UPP,

- **2.2.1** The definition of any acts, statutory decrees, bylaws, regulations, notifications, decision and circulars shall also include the amendments, revisions or additions that may be made in the related regulations and other regulations to be put into effect according to these regulations.
- **2.2.2** The definition of any agreements, contracts or documents shall also include the amendments and additions that may be made in the related agreements, contracts or documents.
- **2.2.3** The definition of "time" shall be interpreted as the local time used in Turkey.
- **2.2.4** Singular definitions shall also be interpreted as plural and vice versa.
- **2.2.5** For the sections of UPP, where a word or definition is defined, similar words and definitions shall also be interpreted according to these words and definitions.
- **2.2.6** Sections, articles, paragraphs and subparagraphs specified in UPP are only given for ease of use; they shall not have any effect on the content of the aforementioned sections, articles, paragraphs and subparagraphs.
- **2.2.7** The definitions of "UPP" or "Basic Usage Procedures and Principles" shall include the sections and annexes of this UPP hereby and be comprehended as a single document.
- **2.2.8** In case of any discrepancies between the provisions of UPP and any STSC provision, the provisions of UPP shall prevail.
- **2.2.9.** In this UPP, words whose first letter is written with a capital letter (excluding the proper nouns) are used with the meanings specified in the "Definitions" section.

#### 3. CAPACITY

BLNG performs the capacity reservations related to the Terminal service, with the principles that storage capacity of LNG Terminal will be used for storage purposes for periods specified in this UPP hereby, LNG unloaded in the storage will be gasified after a limited period of time and sent to Natural Gas Main Transmission Network, as the main function of Terminal and be loaded on land/Sea Tankers in LNG state.

In this aspect, capacity reservations of STSC shall be performed over the total service to be demanded prior each Gas Year and are announced as of 15<sup>th</sup> of August prior to each Gas Year, with respect to the annual service capacities that can be provided by BLNG with the principle of uninterrupted service and in a safe fashion, gasification capacity that can be provided as daily maximum and the capacity to perform loading on Land/Sea Tankers in LNG form.

While performing capacity allocations, BLNG takes the following Terminal possibilities and specifications into consideration:

- 1. Maximum speed of unloading from the vessel to the Terminal storage tanks is 10500 m<sup>3</sup>/hour.
- 2. Terminal minimum send-out capacity is 150 m<sup>3</sup> LNG/Hour (= 97,000 Sm<sup>3</sup>/hour Gas). If the terminal falls below this value, Zero Send out operation mode is activated.
- 3. Terminal daily maximum Land Tanker filling capacity is 75 tankers/day.
- 4. The terminal is capable of filling the vessels berthing to its jetty with a capacity of 3,300 m<sup>3</sup> LNG/hour.

#### 3.1.1 Capacity Reservations prior to Gas Year and Idle Capacity Applications

- 1 BLNG announces the following information on its website until 15<sup>th</sup> of August prior to each Gas Year:
- 1. Maximum Storage Capacities reserved and unreserved for storage service (as Sm<sup>3</sup>/year),
- 2. The annual maximum number of vessels on which the terminal may perform unloading on monthly basis,
- 3. Number of vessels reserved and unreserved for the related Gas Year, on monthly basis,
- 4. Amount of LNG which can be unloaded from LNG vessels to LNG storage tanks on any day,
- 5. Send-out amounts in Gasified LNG state, on daily basis,
- 6. Amounts reserved for annual Land Tanker fillings and idle capacities, on daily basis,

7. If a send-out from BLNG Terminal in LNG state will be performed by LNG Vessels, related information.

### 3.1.2 Evaluation of Capacity Applications and Capacity Allocations

Applicants apply to BLNG Terminal, with Capacity Demand Application Form and other documents and information requested in Article 1.4., until 1<sup>st</sup> of September.

Demands from all Applicants are evaluated collectively by BLNG. If the total of maximum storage capacities demanded is lower than the total capacity announced by BLNG, the capacity demanded is allocated to the Applicant.

If the total of maximum storage capacities demanded is higher than the total capacity announced by BLNG; demanded capacities are allocated to the Applicants according to the rate of demanded capacities over total capacity (prorate allocation). Daily maximum and minimum send-out capacities of Applicants are lowered in the same rate, depending on the fall in the maximum storage capacity demanded by the Applicants.

If there is a conflict between the vessel arrival dates or if it is not possible to unload the vessel with the delivery programmes given for the dates of arrival of Applicants' LNG vessels, vessel arrival dates and/or the amount of daily LNG to be unloaded are/is changed by BLNG.

While making these changes, written and/or oral opinions of Applicants which cause a conflict are evaluated. In case of taking an oral opinion, the changes are recorded by drawing up a minute. If the problem of conflict is not solved by changing vessel arrival dates, amount delivered or the unloading programme, BLNG arranges a programme which will propose a capacity and/or inventory transfer, notifies the parties of such programme and such programme shall be binding on all parties. Service Users' failure to comply with such programmes that propose a capacity transfer and/or inventory transfer shall constitute violation of UPP provisions.

While sending out gasified LNG, if the capacity demanded daily or for a timed period is higher than the daily maximum send-out capacity of Terminal, the excess amount is rescheduled, in a way which will not affect vessel arrival programmes of Applicants, to the next days on which daily send-out capacity of the Terminal is not used completely. If the problem cannot be solved, the amount of LNG delivered by vessels and arrival dates are changed. Throughout such process, written and/or oral opinions of Applicants which cause a conflict are evaluated. If the problem cannot be solved in such way, BLNG arranges a programme which will propose a capacity and/or inventory transfer, notifies the parties of such programme and such programme shall be binding on all parties.

BLNG finalises its capacity reservations as of 15<sup>th</sup> of September and specifies maximum service details to be provided to each Applicant on daily basis, extending to years. Capacity reservations of Applicants are finalised with the fulfilment of conditions specified in Article 1.5 of this UPP. With the start of new Gas Year in 1<sup>st</sup> of October, BLNG announces the reserved capacity and Idle Capacity extending to months.

### 3.1. Idle Capacity Allocations

Idle capacity, which is the capacity remaining after the applications are evaluated and the capacity allocations are finalized, is declared on 1<sup>st</sup> of October by BLNG. Service Users which have signed a STSC for the related Gas Year and applicants which have not yet signed a STSC may apply to obtain from such Idle Capacity.

Provided that the applications of the Service Users and applicants (which have not yet signed a STSC) who wish to obtain from Idle Capacity are accepted, the following procedures shall be applied:

- 1. Service Users and applicants which have not yet signed a STSC shall fill the Capacity Demand Application form (in accordance with Article 1.4) and make an application to BLNG Terminal with the letter of guarantees drawn up in accordance with Article 1.5.
- 2. Idle capacity reservation applications which are made for and prior to the Gas Year in which the capacity reservation will be valid shall be made to BLNG until 15<sup>th</sup> of October. Idle capacity reservation applications which are made within the Gas Year in which the capacity reservation will be valid shall be made to BLNG between the 1<sup>st</sup> and 5<sup>th</sup> dates of the month before the month in which such reservation is demanded. Idle Capacity applications are evaluated by BLNG in accordance with the related provisions of UPP and a written notification concerning the acceptance, partial acceptance or rejection of the demand is issued to the applicant until 20<sup>th</sup> of September for idle capacity reservation applications which are made for and prior to the Gas Year in which the capacity reservation will be valid and until 10<sup>th</sup> of date of the application month for idle capacity reservation applications which are made within the Gas Year in which the capacity reservation will be valid. If the amount and quality of LNG, means of transportation, period of LNG storage in the storage tanks and means of delivery in gas or liquid state are agreed upon, an additional contract shall be concluded by and between BOTAŞ and the Service User or a STSC shall be signed with the applicants which have not yet signed a STSC.
- 3. Idle capacity allocations are performed in a descending order from the highest reservation demand to the lowest reservation demand. In case that the demanded idle capacity reservation amount is equal, the User with the STSC is given priority.
- 4. Service Users who are using the Idle Capacity may make monthly, daily and intra-day programme changes in accordance with Articles 4.2.3, 4.2.4. and 4.2.5.
- **3.1.34.** Service User accepts the following issues concerning the usage of reserved capacity.

Following the unloading of at least 95% (ninety five percent) of LNG from LNG Vessel, Service User shall arrange its daily programmes to perform gasification and delivery to transmission network or to load on land/Sea Tankers in LNG state within max. 8 days for Winter Period and max. 15 Days for Summer Period. In any case, the amount of LNG unloaded to the storage by a LNG Vessel shall be taken from the storage within max. 30 days. If these numbers for days which are specified as max. 8 days for Winter Period and max. 15 days for Summer Period are not complied with, Service User shall be deemed to violate its liability related to the specified number of dates until the 30<sup>th</sup> date.

For the amounts remaining in storage as of the 30<sup>th</sup> (thirteenth date), the provisions of Article 6.4.2. shall be executed.

If unloading from a LNG Vessel pending at the Terminal cannot be performed, within the proposed time, by reason of an expiration of the dates specified above (8 days for Winter Period, 15 days for Summer Period), BLNG shall be entitled the right to gasify Service User's LNG, which causes such pending, and deliver it to the transmission network or to load it onto land/Sea Tankers of Service Users to execute the daily programme of Service User whose LNG Vessel is pending. Delivery of LNG in the storage after being gasified is performed within the frame of Article 6.5.1. and with the approval of Transmission Company.

Daily maximum LNG unloading capacity, gasification capacity and capacity for loading to land tankers reflect a total for all Service Users demanding such services on the same day and shall not be comprehended as the individual rights of any Service User.

If the daily gasified LNG amounts or amounts of LNG to be loaded on land/Sea Tankers, which are demanded by the Service Users, exceed the daily maximum capacities announced by BLNG, the capacity demands of Service Users which have not demanded a capacity increase shall be met and, following this, the remaining capacity shall be allocated to the Service Users which demand an increased delivery capacity, according to the ratio.

# 3.2 Capacity Transfers within a Gas Year

Service User may temporarily transfer part of the or whole capacity reserved within a Gas Year to other Service Users for the periods given in Article 3.2.6., provided that BLNG's approval is obtained.

Service User may permanently transfer part of the or whole capacity reserved within a Gas Year to other Service Users and/or third persons for the periods given in Article 3.2.6. Written approval of BLNG is required for permanent transfers. In the written approval to be issued by BLNG, the Transferee shall also be notified whether it has a liability arising from the inventory transfer of the Transferor Service User.

For the permanent transfers; in case that the Transferor Service User has a STSC signed with the BLNG for the current Gas Year, a Supplementary Policy shall be drawn up concerning the capacity transferred. Where such STSC does not exist, the provisions of Articles 1.4. and 1.5. of UPP shall be executed for users who will sign STSC for the first time.

For the temporary and permanent transfers, BLNG shall respond to the approvals and written notification demands within 5 work days.

#### 3.2.1 Suitable Capacity for Delivery

- **3.2.1.1.** Capacity which can be allocated to Transferee Service User is limited to the remainder of the capacity allocated to Transferor Service User as of the date of transfer.
- **3.2.1.2. BLNG** announces the necessary notification concerning the availability of the capacity in its Website and continues to sell the Idle Capacity and the capacity which is reserved but not programmed.

**3.2.1.3.** If, other than force majeure, the reserved capacity is not used, such state persists in a continuous manner and hinders the execution of Terminal service programme and prevents efficient use of Terminal, such capacity is announced by the BLNG and, if there is a demand for such unused capacity, the unused capacity is cancelled and reserved to the applicant(s). In this case, necessary changes are made in the STSC of the Service User whose capacity is cancelled.

#### 3.2.2. Capacity Transfer Announcements of Service Users

**3.2.2.1.** A Service User which wishes to transfer part of the or whole capacity allocated to it shall inform BLNG concerning the intention for the transfer of capacity and transfer conditions.(Shall be hereinafter referred to as "Service User Notification"). Service User Notification shall be announced on the Website by BLNG.

Service User Information includes the following information:

- 1. STSC number of the Transferor Service User,
- **2.** Amount of capacity to be transferred,
- **3.** Whether the transfer demand is temporary or permanent,
- **4.** Time and period for capacity transfer.
- **3.2.2.2.** If unexpected conditions arise, Service User may revoke its Notification at any time before the expiration of offer period stated in Service User Notification.
- **3.2.2.3.** The conditions set forth by the Transferor Service User shall not be in conflict with any of the provisions in UPP. In case such conflict occurs, BLNG shall revoke the Service User Notification.

#### 3.2.3 Rights and Liabilities of Transferor Service User and Transferee Service User

- **3.2.3.1.** For temporary transfers, (unless otherwise decided by BLNG, in writing and prior to transfer) Transferor Service User shall be responsible for all kinds of fees and financial obligations, regardless of the amount of capacity transferred within the scope of this Section 3
- **3.2.3.2.** If a temporary transfer is performed with the written approval of BLNG, Transferor Service User shall be exempted from payment obligations concerning STSC.

In case of such temporary transfer, performance security of Transferor Service User shall be returned if:

- i. Transferor Service User issues a new performance security to BLNG, which is to be arranged according to the new reserved capacity and which bears the qualities stated in Article 1.5.2. of this UPP hereby,
- ii. Transferee Service User issues a new performance security with the qualities which bears the qualities stated in Article 1.5.2. of this UPP hereby.
- **3.2.3.3.** For temporary transfers; if the Transferee Service User is a Service User which has a previous STSC with BLNG, transfer shall be performed after such Service User issues an additional letter of guarantee by extending the existing performance security in accordance

with the capacity transferred (issues a new performance security with the qualities which bears the qualities stated in Article 1.5.2. of this UPP hereby) and an additional Supplementary Policy to the existing STSC.

For temporary transfers; if the Transferee Service User does not have a previous STSC with BLNG, the transfer shall be performed after it issues the documents and information provided in Article 1.4. of this UPP hereby, performance securities stated in Article 1.5 and signs a STSC.

- **3.2.3.4.** After the capacity is transferred to Transferee Service User, Transferor Service User shall either revise or reconfirm its programmes to reflect the transferred capacity. BLNG shall not affect the transfer unless such programmes are revised or reconfirmed.
- **3.2.3.5.** For both the temporary and permanent transfers; if only a part of the MCSC is transferred, such state shall also mean that the capacity within the scope of STSC is transferred in the same rate. For temporary transfers, a Supplementary Policy shall be added to the STSC of the Transferor Service User's STSC and Transferor Service User shall not use the transferred capacity within the transfer period.
- **3.2.3.6.** For both the temporary and permanent transfers; if the Transferor Service User has LNG in the storage as of the date of capacity transfer, Transferor Service User shall be liable to lower such LNG to the rate which remains in its MCSC after the transfer. Transferor Service User may fulfil the obligation for lowering the LNG volume in the storage by loading the LNG on the Sea/Land Tankers of Service Users, delivering the Gasified LNG or transferring the Stored Volumes to another Service User according to Article 6.4.1.

#### 3.2.4 Other Rights and Obligations of Transferee Service User

- **3.2.4.1.** In case of a temporary transfer, Transferee Service User shall be responsible for all payments and financial liabilities that account for the amounts transferred to it.
- **3.2.4.2.** In case of a temporary transfer, Transferee Service User shall be granted all rights and responsibilities which are stated in the STSC of the Transferor Service User and which are arranged within the scope of this UPP hereby, including the right to transfer the capacity transferred to in accordance with this Section.

#### 3.2.5 Rights and Obligations of BLNG

BLNG shall be entitled the right to partly or wholly reject the conditions of Service User Notification of capacity transfer demand which are in conflict with the provisions of STSC or UPP.

BLNG notifies the Service User of its justification(s) for rejecting the capacity transfer demand, along with the notification concerning the rejection of transfer demand. BLNG shall not be responsible to any Service User, Transferor Service User, Transferee Service User or any other party concerning the fulfilment of obligations within the scope of capacity transfer programme.

## 3.2.6 Capacity Transfer Periods

The period of capacity transfers which will be realized within the scope of this Article 3 hereby shall be limited to the shortest of the periods specified below;

- 1. Last day of the related Gas Year,
- **2.** When the transfer includes the whole contract period, expiration date for the STSC of Transferor Service User.
- **3.** Expiration date specified by the Transferor Service User in Service User Notification.

#### 4. PROGRAMMES, REVISED PROGRAMMES

#### 4.1 Programme Content

**4.1.1** Programmes for delivery of LNG to BLNG within the scope of Terminal Service:

Service Users shall submit the prepared programmes to BLNG's approval and the programmes shall be in effect upon approval of BLNG. Each programme shows the contract number of Service User and the following required information concerning the amounts of LNG to be taken into the storage.

- 1. Day/days in which the LNG will be delivered to BLNG Terminal,
- 2. Amount of LNG to be delivered,
- 3. LNG's estimated composition and calorific value,
- 4. LNG source,
- 5. Estimated saturated pressure and temperature as LNG arrives in the Terminal,
- 6. Management programme for Boil-off gas, which is created during the unloading of vessel, including the Delivery Point,
- 7. Information concerning LNG vessel (compliance shall be approved by BLNG).
- 8. Vessel delivery amounts and delivery schedule in accordance with STSC and Article 3.1.3.
- **4.1.2** Programmes for the LNG or Gasified LNG to be obtained from BLNG:
- **4.1.2.1.** Programmes concerning the Service User's obtaining of LNG via Land Tankers:

Each programme shows the contract number of Service User and the following required information concerning the amounts of LNG to be obtained.

- 1. Estimated towing weight, trailer weight and estimated light and gross weights of Land Tanker
- 2. Document concerning the approval for the transportation of LNG by the Ministry of Transportation
- 3. Land Tanker manufacturing file (information specified in Annex-2 shall be included).
- 4. Annual and monthly programme as "number of tanker/day", in a way which will not exceed the capacity taken at the Land Tanker Filling Ramps as number of tanker/day.

Service User may demand a change of programme for the next day or days within the month,

by using the "Timed Programme Change Cycle" in Article 4.2.4.

4.1.2.2. Programmes concerning the Service User's obtaining of LNG via Sea Tankers

Each programme shows the contract number of Service User and the following required information concerning the amounts of LNG to be obtained.

- 1. Information concerning LNG vessel (compliance shall be approved by BLNG),
- 2. Whether the LNG Vessel obtaining LNG from BLNG requires cooling or not,
- 3.Day/rays in which LNG will be obtained from BLNG Terminal,
- 4. LNG amounts to be obtained,
- 5. Management programme for Boil-off gas, which is created during the unloading of vessel, including the Delivery Point.
- 4.1.2.3. Programme concerning Gasified LNG delivery:
  - 1. Service User whose vessel is unloaded at unloading days shall issue a programme which includes the management for Boil-off Gas, along with the amount of gas to be delivered to Natural Gas Transmission Network.
  - 2. In days when a vessel unloading is not performed, amount of Gas to be delivered to the Natural Gas Transmission Network shall be specified.
  - 3. Service User may demand a change of programme for the next day or days within the month, by using the "Timed Programme Change Circulation" in Article 4.2.4.
- **4.1.3** The programmes shall include the means specified in STSC. However; after approval which states that proper arrangements are made for the delivery is taken, to the extent allowed by the operation conditions of BLNG without any harmful effect on other Service Users, programmes which include means not specified in STSC may be accepted with the approval of BLNG. In case where Service User demands to deliver LNG with a vessel not specified in STSC, Service User shall issue the necessary information along with the programmes. Such programmes are approved after the vessel's compliance is confirmed.
- **4.1.4** By issuing a programme, Service user accepts and undertakes that it has taken all regulative approvals required for the delivery of LNG to the Terminal, contract arrangements required for the delivery of LNG to the Terminal are present and LNG or Gasified LNG shall be delivered from the Terminal. BLNG considers the information issued as part of the programme as a final information concerning the confirmation of programmes and programming of service.
- **4.1.5** Means for Issuing the Programmes

The programmes may be issued to the following addresses in writing.

BOTAŞ LNG TERMİNAL İŞLETME MÜDÜRLÜĞÜ

PK: 17 59740

MARMARA EREĞLİSİ / TEKİRDAĞ

TEL: 02826130250 FAX: 02826130258

#### 4.2 Dates for Issuing the Programmes

#### **4.2.1.** LNG Unloading Programme for the first year

Includes the period between the date of signing STSC and 31<sup>st</sup> of December. Following the signing of STSC, Service User shall make a monthly arrangement for the arrival programme of LNG Vessel/Vessels and issue this to BLNG. BLNG will evaluate the Vessel programme, confirm or rearrange it according to the Terminal operation conditions and notify Service User within 5 days. Programmes approved by such means are finalised. For monthly programmes, the provisions Gas Year LNG Unloading Programme shall be executed.

#### **4.2.2.** Gas Year LNG Unloading Programme

Includes the period between 1<sup>st</sup> of January and 31<sup>st</sup> of December. Each Applicant shall notify BLNG of its LNG vessel arrival programmes until 1<sup>st</sup> of September. BLNG will determine the arrival date of each LNG Vessel, until 15<sup>th</sup> of September at the latest, issue approval and notify Applicants. Thus, annual vessel LNG obtaining programme shall be created and be valid for 1 year as of 1<sup>st</sup> of January.

**4.2.3.** Projected programmes concerning the Terminal service to be procured throughout the month shall be issued to BLNG as of the first day of the previous month. BLNG will evaluate these projected programmes within 10 days at the latest and, after BLNG issues approval, the programmes shall be finalised. In case where Service User does not issue a projected programme and if the Service User had not issued a default programme for the mentioned month previously, BLNG may consider the programme of Service User as null. A conflict concerning Service Users' vessels in the monthly programme shall not be allowed to arise.

#### **4.2.4.** Next Day Service

Service User shall notify BLNG of its demand for a change in the programme of the next day by issuing a Notification by 10:00. Such change in the new or revised programme shall be in accordance with the requirements of Articles 4.1.1., 4.1.2., 4.1.3.

Programme schedule of the day before the gas flow is as follows:

Timed Programme Change Cycle

- 10:00 Service User notifies BLNG of its programme change.
- 10:15 Programme change is received by BLNG.
- 10:30 BLNG issues a response in order for the data issues to be valid.

- 12:30 Confirmation by parties related to the transmission system operator.
- 13:30 Programmed amounts issued by BLNG to be obtained by Service User and transmission system operator.

Service User shall specify a start and finish date for each programme change. Such start and finish dates shall be within the STSC period of the Service User. If Service User wishes to make amendments in a programme change of a Gas Day, it shall issue a new programme change for such day. After a programme change for a certain period is obtained, such programme change is deemed to be applied for each day within such period. If a programme change for one or more days within such period is obtained, programme change is applied only for the days specified.

Days within the previous programme change, which are excluded from the following programme change, shall not be affected by this. Programme change shall only have future-related effects. If Service User fails to issue the programme change before the specified final day, BLNG may consider the programme change of Service User as null.

#### **4.2.5.** Intraday Programme Change

Each programme change issued after the date specified in Article 4.2.3. shall be accepted as an intraday programme change. Arrangements concerning the intraday programme change are specified below:

# (1) 1<sup>st</sup> Intraday Programme Change

- 18:00 Service User notifies BLNG of its programme change.
- 18:15 Programme change is received by BLNG.
- 18:30 BLNG issues a response in order for the data issues to be valid.
- 20:30 Confirmation by parties related to the transmission system operator.
- 21:30 Programmed amounts issued by BLNG to the affected Service Users, transmission system operator and parties which are in conflict (notification to parties in conflict).
- 06:00 1<sup>st</sup> Intraday Programme is valid.

Programmed amounts are programmes resulted from a 1<sup>st</sup> intraday programme change, which do not negatively affect another Service User.

If another Service User is negatively affected, programmed amounts shall be valid as of 08:30 on the Gas Day. Negatively affected parties are notified of such negative affect via Website, telephone or fax within the shortest period of time possible as of receiving related notification.

# (2) <u>2<sup>nd</sup> Intraday Programme Ch</u>ange

10:00 Service User notifies BLNG of its programme change.

- 10:15 Programme change is received by BLNG.
- 10:30 BLNG issues a response in order for the data issues to be valid.
- 12:30 Confirmation by parties related to the transmission system operator.
- 13:30 Programmed amounts issued by BLNG to the affected Service Users, transmission system operator and parties which are in conflict (notification to parties in conflict).
- 17:00 2<sup>nd</sup> Intraday Programme is valid.

# (3) 3<sup>rd</sup> Intraday Programme Change

- 17:00 Service User notifies BLNG of its programme change.
- 17:15 Programme change is received by BLNG.
- 17:30 BLNG issues a response in order for the data issues to be valid.
- 19:30 Confirmation by parties related to the transmission system operator.
- 20:30 Programmed amounts issued by BLNG to the affected Service Users, transmission system operator and parties which are in conflict (notification to parties in conflict).
- 23:00 3<sup>rd</sup> Intraday Programme is valid.
- (F) BLNG shall be entitled the right to reject the obtaining of LNG and Boil-off Gas or the delivery of Gasified LNG and LNG which are not suitably programmed in time.

#### 4.3 Additional Information Requirements

- **4.3.1.** Service User shall comply with the demands from BLNG concerning the additional information required to provide services within the scope of this UPP hereby.
- **4.3.2.** Regardless of the notification times specified hereby, Service User shall immediately notify BLNG concerning unexpected changes in the amounts with respect to obtaining or delivery.
- **4.3.3.** Service User shall make the necessary notifications to enable compliance by each vessel, Land Tanker or transmission network operator, which are commissioned within the scope of a programme or programme change, to such programmes or programme changes before they are implemented by BLNG.

#### 5. ALLOCATIONS

#### 5.1 General Explanations

BLNG allocates the daily amounts of Gasified LNG, LNG unloaded from Vessel and LNG loaded onto Vessel, which are calculated according to the data of measurement performed within the frame of Article 11, to the Service Users in a transparent and fair fashion, in accordance with the provisions of this Article 5 hereby.

#### 5.2 Allocations

#### 5.2.1 Initial Allocations

This is performed by BLNG until 10:00 in D+1, in accordance with the programmes of Service Users concerning the daily obtained Gasified LNG amounts.

$$AA = M \times (OM / OTM)$$

AA : Amount allocated to Service User

A : Total amount allocated to Service Users for the day subject to allocation

PA : Programme amount of the Service User for the day subject to allocation

TPA : Total programme amounts of all Service Users for the day subject to

allocation

These allocations are announced to Service Users via Website.

# **5.2.2** Objection to Allocations

If none of the Service Users object to the initial allocations between 10:00 of D+1 and 15:00 of D+1, initial allocation will be finalised as of 15:00 of D+1. If an objection is made to the initial allocation amounts, BLNG shall re-evaluate the situation and announce the initial allocations on its Website at 17:00 of D+1 at the latest.

#### 5.2.3. Allocations for Loading/Unloading of Vessels

In case where more than one Service User's LNG is loaded/unloaded in the same cargo, the allocation of loaded/unloaded LNG between the related Service Users shall be performed in accordance with the notification issued to BLNG by the Service Users.

#### 6. OPERATIONAL CONDITIONS

#### 6.1 General

- 6.1.1. BLNG/Service User makes all arrangements with the other parties at Unload Point and Delivery Point and ensures that such arrangements comply with facility operations of BLNG.
- **6.1.2.** BLNG shall be entitled the right to mix the LNG procured from different sources, which is required by itself for Foot LNG, and the LNG obtained and storage within the scope of this UPP hereby. Service User knows and accepts that obtained LNG or Gasified LNG may not be of the same gas composition as the LNG delivered.

# 6.2 Operational Conditions for Obtaining LNG from the Vessel of Service User and Delivery of LNG to the Vessel of Service User:

**6.2.1.** Vessel/Vessels of Service User shall be within the following minimum and maximum sizes. Even if the size is within the following limits, BLNG may, after performing necessary evaluations in accordance with this UPP hereby and prior to the arrival of Service User's Vessel to the Terminal, accept, conditionally accept or reject the Vessel and notify the Service User of reasons thereof. If LNG is to be delivered or obtained with a Vessel whose size is not within the following sizes, BLNG may, after performing sufficient inspection and evaluation, accept, conditionally accept or reject the Vessel.

	Minimum	Maximum
Total Length	194.2 meters	281.7 meters
Width	30.40 meters	-
Water Draft	-	15 meters

**6.2.2.** The rules proposed by "BOTAŞ LNG Terminal Navigation Procedure" shall be followed during the passage of LNG Vessels through Dardanelles Strait, in forward or backward directions and as empty or loaded, during berthing to LNG Terminal and leaving the port.

BLNG provides Service Users services such as pilotage, escort, tug and mooring during the passage of LNG Vessels through Dardanelles Strait in forward or backward directions, during berthing to LNG Terminal and leaving the port. For this, Service User shall sign a Maritime Service Agreement with BOTAŞ LNG Terminal. Payment for services provided with such agreement shall be collected within 10 days as of the date for providing such service. Related payment principles and payment conditions shall be specified in a separate agreement with BLNG. "BOTAŞ LNG Terminal Navigation Procedure" and an example of "Maritime Service Agreement" are published on BLNG Website.

Services to be provided to Vessels delivering LNG to BLNG or obtaining LNG from BLNG and payment for such services are detailed in the agreements signed by the parties.

- **6.2.3.** BLNG provides facilities for (or get the facilities provided for) berthing, loading and unloading, including the following;
- 1. Equipment for berthing;

- 2. Sufficient lighting to perform safe berthing manoeuvres, during the day or at night, to a scale allowed by the port officers;
- 3. Pump, unloading arms, piping systems and other facilities to enable 10,500 m<sup>3</sup> LNG/hour unloading of LNG from the Vessels, and 3,300 m<sup>3</sup> LNG/hour loading.
- 4. There is an existing gas return line, laying from LNG Vessel to the shore facilities, with a size suitable for maintaining proper operational pressure at the tanks of Service User's Vessel.
- **6.2.4.** Unloading of LNG and loading onto Vessels are performed in accordance with the safety procedures specified in "BOTAŞ LNG Terminal Navigation Procedure" and other arrangements.
- **6.2.5.** Service User issues the information related to the specifications of LNG Vessel, date and time of arrival in Terminal, estimated amount of LNG to be loaded or unloaded, temperature, density and estimated saturation pressure of LNG to BLNG. Service User issues the following ETA's to the BLNG (or get them issued):
- (1) First ETA is issued after the Vessel of Service User leaves the departure port with the notification for estimated time of arrival to Mehmetçik PBS. Such notification shall also include the specifications of the Vessel which will load LNG to BLNG or obtain LNG from BLNG, information concerning the LNG to be unloaded and whether the Vessel will get fuel, liquid nitrogen or food-beverage.
- (2) Second ETA is sent 72 hours before the estimated time of arrival in Mehmetçik PBS.
- (3) Third ETA is sent 48 hours before the estimated time of arrival in Mehmetçik PBS.
- (4) Fourth ETA is sent 24 hours before the estimated time of arrival in Mehmetçik PBS.
- (5) Last ETA is issued as "Notice of Readiness" when the Vessel arrives in the waters of Terminal.
- **6.2.6.** After Service User's Vessel berths to the jetty and gets ready for load/unload, captain of the Vessel shall make a written notification to BLNG which states that the Vessel is ready for unload/load (Ready to Discharge). After that, BLNG shall take all required precautions to unload or load the Vessel of Service User.
- **6.2.7.** In case where Service User's Vessel fails to arrive in the Terminal as planned, BLNG shall perform loading or unloading of Service User's Vessel in a suitable time, which will not negatively affect other planned services.
- **6.2.8.** Unloading Period and Loading Period: This is the period which starts from of the point which the Vessel of Service User gives "Notice of Readiness", unloads its load and ends as it is pulled to the same point.

While unloading, Unloading Period is 27 hours if the Maximum Saturated Pressure of LNG is below 1,140 milibars and 30 hours if it is equal to or higher than 1,140 mbar.

Loading Period shall be determined with the negotiations between the Service User and BLNG, according to the size of Service User's Vessel.

- **6.2.9.** Vessels which deliver LNG to BLNG shall have P&I Club insurance policies.
- **6.2.10.** All required customs, agency and other required processes related to import and sale of LNG shall be carried out by Service Users within their legal periods and in accordance with the regulations.

## 6.3 Conditions for loading LNG on the Service User's Land Tanker

**6.3.1.** Sizes of Land Tankers/Sea Tankers of Service User shall not exceed the following maximum sizes:

Width:
Height of Driver's Seat
Trailer Height:
Estimated gross weight

2.60 m
4 m
4 m
4 m
42,000 Kg

Axle load

- **6.3.2.** Loading of LNG shall be performed in accordance with the existing safety procedures and other arrangements.
- **6.3.3.** Service User shall, at least twenty four (24) hours before the estimated time of arrival, issue a written notification to BLNG, concerning the date and time of Terminal arrival for Land Tankers/Sea Tankers.
- **6.3.4.** In case where Service User's Land Tanker fails to arrive in the Terminal as planned, BLNG shall perform loading of Service User's Land Tanker in a suitable time, which will not negatively affect other services.
- **6.3.5.** It is compulsory that the Land Tanker/Tankers of the company which is used for the delivery of LNG obtained from BLNG terminal be insured properly. Service User shall issue insurance certificate to BLNG prior to the departure of Service User's or Transmission Company's Land Tanker to BLNG area. This condition shall not limit, in any way, other insurances specified in this UPP hereby or required by laws.
- **6.3.6.** Service User shall ensure that the company, which Service User uses to obtain and deliver LNG at the Terminal and which possesses a LNG Transmission License, complies with the requirements proposed in Article 6.3.
- **6.3.7.** If the Boil-off gas, which is created under Zero Send-out conditions of Terminal, is required to be burned in the flue, BLNG shall be entitled the right to lower the amount of loading on Land Tankers or to stop it completely.
- **6.3.8.** With respect to the technical safety of Terminal, BLNG shall request from Service User a manufacture and test file for the Land Tanker, whose manufacturing has finished and which will obtain LNG from the Filling Ramp for the first time. Information which is required to be included in such file is specified in Annex-2.

#### 6.4 Operational Conditions concerning the Storage of LNG

#### **6.4.1.** Transfer of Stored Inventory

#### **6.4.1.1.** Inventory Transfer between the Service Users

Service User may, in the following situations, transfer a part or all of the Stored Volume to another Service User which benefits from Terminal Service within the scope of STSC, via sale or by another means:

- (a) Parties issue a written confirmation to BLNG, specifying that Stored Volume is transferred.
- (b) If the transfer causes the Stored Volume to be higher than the Transferee Service User's MCSC stated in STSC, a Supplementary Policy shall be added to STSC. The Transfer shall not release Transferor Service User of its payment obligations within the scope of Section 13.
- (c) After the approval required within the scope of Article 6.4.1.1.(a) is taken, BLNG shall accept the transfer, within one Work Day, to make calculations for the current Stored Volume with respect to future.
- (d) If required, capacity transfer is also taken into consideration in inventory transfers.

# **6.4.1.2.** Inventory Transfer proposed by BLNG

BLNG Terminal has a limited LNG storage and delivery capacity; in order to ensure that more users are able to benefit from the possibilities of the Terminal simultaneously, BLNG will make inventory transfers between the Service Users at the start of Gas Year, when the capacity allocations are performed, and during the times within the year, when considered necessary by BLNG. These transfers are made in accordance with the following rules.

- a) Transferred LNG amount shall be specified in MMBTU unit. For the conversion of MMBTU-Sm<sup>3</sup>, conversion factors specified in Article 2 shall be used. With respect to the provision of 6.4.1.1, same method shall be used for the transfer by both Service Users.
- b) Transfer shall also include the condition concerning the return of transferred LNG at the same amount in terms of energy, with a tolerance of  $\pm 2$  days as of the date specified for the return, by taking into consideration the uninterrupted performance of proposed programmes.
- c) If the LNG transferee returns the transferred LNG to the transferor, within time and in the same amount, transferee shall not make any payments
- d) BLNG shall not make any demands for transfer which may interrupt the LNG loading programme throughout the transfer period of the Transferor Service User.
- e) As of the time in which Transferee Service User's Vessel starts to unload LNG to BLNG Terminal, if the Service User has an expired transfer return and the amount of LNG

unloaded from the Vessel reaches the amount of LNG to be transferred, transfer conditions required for the transfer return shall be deemed to arise.

f) In addition to the performance security specified in Article 1.5.2, a performance security specified in Article 1.5.3cc shall be obtained from the Service User (who wishes to procure services from BLNG Terminal) at the start of Gas Year, on the phase of signing STSC

This security shall be an irrevocable, unconditional and full security, which is payable upon first demand and within limits, and shall be encashed by BLNG and paid to the Transferor Service User if the Transferee Service User fails to return the LNG to Transferor Service User, in time and in the amount transferred, except force majeure. If such security specified in Article 1.5.3 is not sufficient to compensate for the claims by the Transferor Service User with regard to the transferred inventory, security specified in Article 1.5.2 shall also be encashed and the losses incurred on the Transferor Service User shall be compensated using such security

- g) While performing capacity reservations between the Service Users, transfer for max. 3.200.000 MMBTU shall be made to a Transferee Service User. Programmes concerning vessel arrival dates, LNG amount to be delivered by each Vessel and amounts of delivery in gas or liquid state shall be determined in accordance with this.
- h) If the Transferee Service User fails to transfer the LNG transferred to it, partially or wholly (except for force majeure), within the transfer date (with a tolerance of ±2 days and by taking into consideration the uninterrupted performance of proposed programmes and if Transferee Service User has an inventory for the storage tanks, these inventories shall be transferred to Transferor Service User by BLNG. Transferee Service User, whose inventory is transferred by reason of such obligatory transfer, shall not be entitled to make any claims against BLNG.
- i) In case where Transferee Service User fails to transfer the transferred LNG in time (with a tolerance of ±2 days and by taking into consideration the uninterrupted performance of proposed programmes), except for force majeure, Transferee Service User shall pay the sum accounting for the amount of non-transferred LNG in term of MMBTU to Transferor Service User, by making calculations using the method below:

If the Transferee Service User fails to pay Transferor Service User the sum of non-transferred LNG , performance security issued by the Transferee Service User for the Inventory Transfer shall be encashed by BLNG and paid to the Transferor Service User.

In addition, STSC of the Transferee Service User, which fails to return the transferred LNG on the due transfer date in kind, shall be unilaterally terminated by BLNG.

#### 6.4.2. Sanctions

In cases where Service User is unable to obtain the programmed amounts by reason of operational conditions within the Terminal of BLNG or force majeure, BLNG shall extend the period granted to Service User to obtain the LNG from the storage, for one day per each day.

Without prejudice to the operational conditions within the Terminal or force majeure, BLNG shall be granted the following rights where LNG is not obtained suitably:

- (1) BLNG shall be granted the right of disposition for the related amount, free from all kinds of exceptions and rejections.
- (2) All kinds of financial liabilities arising by reason of storing the LNG until the day on which BLNG is granted the right of disposition and failure to obtain the LNG within the time, shall be collected from such sale price.
- (3) If the sale price does not meet the financial liabilities specified in subclause (2); the unmet sum is collected by encashing the performance security provided by the Service User during the signing of STSC.
- (4) If there is a remaining balance after aforementioned cuts are made from sale price, such remaining balance shall be transferred to the Service User.
- (5) In addition to the processes specified in subclauses (1),(2) and (3) above, direct and indirect losses which may possibly incur against BLNG shall be compensated by Service User.

#### 6.5 Operational Conditions concerning the Delivery of Gasified LNG

- **6.5.1.** BLNG performs delivery to the transmission network within the reliable operation intervals of measurement system at the Delivery Point. Hourly amounts to be delivered to the Transmission Network shall be determined in coordination with the Transmission Company.
- **6.5.2.** BLNG shall not be obliged to perform delivery of Gasified LNG if the total daily amount of Gasified LNG is less than  $150 \text{ m}^3 \text{ LNG/hour} (= 97,000 \text{ Sm}^3/\text{hour})$ .

#### 6.6 Foot LNG

- **6.6.1.** Foot LNG amount: This is the LNG amount corresponding to the minimum LNG amounts which can be lowered, safely and without damage, by the submerged pumps in storage tanks. In addition to the storage tanks, the amount of LNG in the equipment and pipes are also added to this.
- **6.6.2.** Foot LNG Amount for each tank: 9,000 m<sup>3</sup> LNG
- **6.6.3.** LNG Amount to be maintained within the equipment and pipes: 1,000 m<sup>3</sup>
- **6.6.4.** Total Foot LNG Amount: 28,000 m<sup>3</sup> LNG

**6.6.5.** Distribution of Foot LNG among the Service Users: As the New Service User delivers LNG with its first LNG Vessel, Foot LNG amount of such Service User's portion shall be determined, according to the method specified below, and such LNG amounts is maintained in the tanks as Foot LNG, on behalf of new Service User. Foot LNG of the Service Users, which have previously delivered LNG to the BLNG Terminal and which have LNG in the storage tanks as Foot LNG, is distributed according to their portions within the Foot LNG and deducted from their Foot LNG amount.

X : MCSC obtained from BLNG by New Service User

(A+B+C+...) : Amounts of MCSC obtained by the Service Users, which have previously obtained capacities from BLNG

Foot LNG Amount of the New Service User=(28,000 m<sup>3</sup> LNG x X) / [(A+B+C+...) + X]

- **6.6.5.1.** In case where a Service User transfers the MCSC obtained from BLNG, partly or wholly, to another Service User, Foot LNG Amount of the Transferor Service User shall be lowered according to the transfer rate and Foot LNG Amount of the Transferee Service User shall be increased according to the transfer rate.
- **6.6.5.2.** In case where a Service User, which has signed a STSC with BLNG, does not renew its contract with BLNG at the expiration date for contract, the contract is terminated for any reason and there are existing Service Users of Terminal, Foot LNG portion of this Service User shall be reset and Foot LNG amounts of other Service Users shall be increased, according to the rates in MCSC.
- **6.6.5.3.** If the Terminal undergoes a major maintenance that requires all tanks to be heated or operation of the facility is required to be suspended by reason of force majeure, necessary attempts will be made to deliver the Foot LNG to all existing Service Users until such date, according to their portions, in Gasified LNG and/or LNG state and by pushing the equipments used in the system to their limits. The part which cannot be obtained in LNG and Gasified LNG state shall be considered as loss for existing Service Users.

#### 7. LIMITATION AND SUSPENSION

### 7.1 Limitations and Suspension

BLNG, if considered necessary, shall be entitled the right to limit and/or completely suspend the Terminal Service by reason of force majeure and natural gas leak in storage facility or if the safety of the storage facility is under a serious risk, the pressure and quality of a LNG delivered in gasified form or LNG acceptance to Terminal poses a danger in terms of safety of life and property or in cases of maintenance, repair, control and renovation, subject to the following provisions. According to the situation, BLNG shall issue the notification concerning such limitation to Service Users.

# 7.2 Limitation Reports and Notifications

- 7.2.1. BLNG shall make all attempts necessary to issue the notification to the Service User, under the existing circumstances, within a reasonable time and by reasonable means BLNG shall confirm the issued notification in writing or by fax message. In such situation, fax message shall be considered as a notification.
- 7.2.2. BLNG shall not have any obligations related to the informing the customers of Service User, other transporters and other persons within the process concerning any limitation notifications.

### 7.3 Acting in accordance with the Limitations

After a limitation notification is issued, the related Service User shall carry out the required process specified in the limitation notification. In case where Service User fails to act in accordance with the limitation notification, such limitation notification shall be considered as an Operational Flow Instruction and the provisions of Article 9 of this UPP hereby are executed. In addition to this, if Service User fails to act in accordance with the limitation notification, penal provisions specified in Article 6.4.2.shall also be executed.

#### 8. BALANCING

Service User shall be liable to make the balancing between the amount of LNG delivered to BLNG, Boil-off Gas, transfer of inventory in the storage, LNG loaded onto Land/Sea Tankers and LNG delivered to transmission network after being gasified. Detailed provisions concerning terminal operation gas are mainly stated in Articles 6 and 8 of this UPP hereby.

#### 8.1 Balancing of Boil-off Gas

#### 8.1.1. Balancing of Boil-off Gas on the Days with no Vessel Unloading

The amount of Boil-off Gas produced hourly is approximately 5,500 kg/hour (7,300 Sm³), when there is not a delivery, vessel unloading or loading and under Zero Send-out conditions, and there are compressor systems which process such amount and pressurise it to reach the line pressure of BOTAŞ. Apart from this, if there is a delivery equal to or higher than 150 m³ LNG (= 97,000 Sm³/hour), Boil-off Gas that is produced in the Tanks under regular conditions is added to the delivery and is disposed. If such delivery is not possible, Boil-off gas is delivered to the line via line compressor. If delivery to transmission line is also not possible, Boil-off Gas is burned at the flue and is disposed of. The amount of gas burned in the flue is determined, portioned between Service Users according to their LNG amount in storage tanks and rates and deducted from the existing stock amounts.

In cases where there is not a Vessel discharge, Service Users shall not be requested a programme concerning the management of Boil-off Gas created during gas delivery and under Zero Send-out conditions.

#### 8.1.2 Balancing of Boil-off Gas on the Days with Vessel Unloading and on the Next Day

Boil-off Gas created during the unloading of a Service User's Vessel is tried to be disposed of by adding it to the delivery (if any) via existing compressor systems. If Boil-off Gas is utilised by adding it into the delivery instead of burning it, the delivery has to be increased up to  $760 \text{ m}^3$  LNG/hour (=  $490,000 \text{ Sm}^3$ /hour).

If there are not enough deliveries to remove the Boil-off Gas, which is created during Vessel unloading, from the environment and if the agreement signed between the Service User and the operator of LNG Vessel allows for a discharge at slow rates, thereby decreasing the Boil-off Gas but increasing the Vessel unloading time, such option may be preferred. If enough delivery could not be performed or Vessel unloading rate could not be lowered, excess Boil/off Gas is burned in the flue. The amount for such burned gas is deducted from the LNG amount that is taken into the tanks on behalf of the Service User.

Although the unloading of ship is finished after 24 hours, high of Boil-off Gas production rate, in certain situations, continue to prevail on the next day by reason of temperature and chemical composition of LNG and mixing of this with the LNG in the tanks. If a burning is performed for such situation, the gas burned in the flue for the next 24 hours as of the finish of Vessel unloading shall also be deducted from the Service User's LNG amount in the tank. If unloading is performed for a second vessel within 24 hours as of the unloading, Boil-off Gas increase from the first Vessel shall not be taken into consideration as the unloading starts. Along with this, BLNG carries out assessments required for a fair determination of Boil-off Gas amount for each Service User.

Service User, for whose Vessel an unloading is performed, is requested a programme concerning the management of Boil-off Gas created during the unloading of Vessel and the next day. If the Boil-off Gas could not be removed from the environment by using the Boil-off management issued by Service User and by using Boil-off management issued by Service User for Vessel delivery and for the next day, excess gas shall be burned in the flue. The amount of gas burned shall be deducted from the amounts of LNG in the LNG tanks of Service User whose Vessel is unloaded.

#### 8.2 Gas Delivered to Service User's Vessel

In order to ensure the continuity of safe and high-rate unloading of LNG in the Service User's Vessel to the storage tanks of Terminal, Vessel tanks shall be maintained at positive pressure. To do that, a part of the Boil-off Gas, which is created in the Terminal storage tanks during unloading, shall be delivered to the Vessel tanks. Amount of gas delivered to the ship shall be calculated in terms of energy and deducted from the amount delivered by the Service User. Calculation for the amount of gas delivered in terms of energy is explained in Article 11.1.8.

#### 8.3 Gas burned in Flue

#### 8.3.1 Gas burned in Flue on the Days with no Vessel Unloading

Part of the burned gas is composed of gas burned in the flue pilot tips, to keep the flue burning, and the remaining is composed of gas leaking from equipments. Such value is taken as 1,000 Sm<sup>3</sup>/ day in BLNG. Gas burned in the flue is portioned between Service Users according to their LNG amount in storage tanks and rates and deducted from the amounts of LNG in the tanks.

#### 8.3.2 Gas burned in Flue on the Days with Vessel unloading

The number of base compressors used to process the Boil-off Gas is higher in the days with Vessel unloading, compared to days without Vessel Unloading. Such amount is 7,000 Sm³/vessel in BLNG and this amount is deducted, after the unloading is finished, from the tank LNG amounts of Service User whose ship is unloaded.

#### 8.4 Gas burned in Equipments

In order to gasify LNG in BLNG Terminal, BLNG uses Open Rack Vaporisers and Submerged Combustion Vaporisers (SCV). If SCV is used for the vaporisation of delivery gas, volume of the used gas shall be deducted from the LNG amounts, by portioning it among the gas delivering Service Users according to their delivery rates and by taking into consideration the measurement station values monitored on the meters or calculated in terms of value or energy. Such balancing is performed at 08:00 each morning.

#### 8.5 Gas used for Heating

Gas used for heating is the gas used for heating of control room, laboratory, maintenance buildings, technical safety building, silo building, Land Tanker Filling Ramp control room and social building and buildings of administrative and social facilities. Records concerning such gas amounts are kept by BLNG. At the end of each month, Gas used for the heating of

such locations is retrospectively proportioned among the Service Users according to their rates and Storage Usage Amounts for LNG stored on behalf of the Service Users in the storage tanks within the related month.

#### 8.6 Daily Balancing

BLNG keeps the records for the following information, in terms of energy, as of 08:00 on each day and for each Service User and makes a notification to the Service User at 10:00.

- 1. Total amount of LNG in the tanks for the previous day and proportion of each Service User within the tanks,
- 2. Total amount of Gasified LNG delivered to the Transmission Network and proportion of each Service User within the Gasified LNG,
- 3. Total amount of LNG loaded onto Land Tankers and proportion of each Service User within the total amount of LNG loaded onto Land Tankers,
- 4. Total amount of LNG unloaded from the Vessel and proportion of each Service User within the total amount of LNG unloaded from the Vessel,
- 5. Amount of LNG loaded onto the Vessel and proportion of each Service User within the amount of LNG loaded onto the Vessel.
- 6. Amount of gas burned in the flue and proportion of each Service User within the amount of gas burned in the flue,
- 7. Gas used for heating and proportion of each Service User within the amount of gas used for heating,
- 8. Gas burned in equipments and proportion of each Service User within the amount of gas burned in equipments,
- 9. Total amount of LNG in the tanks as of 08:00 and proportion of Service User within the total amount of LNG in the tanks as of 08:00,
- 10. Daily Storage Usage Amounts for Service Users.

# 8.6.1. Calculation for the Difference in Measurement when there is not a Vessel Unloading

Deliveries performed in gas or liquid state and internal consumption of Terminal are deducted from the total amount of LNG in the tanks as of 08:00 on the previous day. If the value acquired is lower than the total amount of LNG in the tanks as of 08:00 on that day, there is a benefit, if it is higher, there is a loss. The value for such benefit or loss is proportioned among the Service Users according to their shares in the delivery, in gas or liquid state, performed within the last 24 hours before 08:00 of that day.

#### 8.6.2. Calculation for the Difference in Measurement when there is a Vessel Unloading

Total amount of LNG in the tanks as of 08:00 of the previous day is added to the amount of LNG, in terms of energy, that is unloaded from the Vessel within 24 hours before 08:00 of the current day. Delivery amounts of LNG and Gasified LNG, internal consumption of Terminal and the amount of Gas loaded on the Vessel within the 24 hours before that day is deducted from such amount and; if the amount of LNG calculated using such means is lower than the amount of LNG within the tanks as of 08:00 of that day, there is a benefit, if it is not, there is a loss. This is proportioned among the Service Users according to their shares within the total of amounts of LNG delivered in gas and liquid state, within 24 hours before 08:00 of that day and the amount of LNG unloaded within such period of time.

#### 8.7 Final Balancing in case of System Quit

#### 8.7.1 Regular Expiration of Contract

Service User may withdraw all its Stored Volume, or dispose of it otherwise, as of the date of STSC expiration. The provisions of Article 6.6 shall be executed for the Service User's Foot LNG amount

Service User shall take all necessary precautions to enable withdrawal or disposal of all its Stored Volume prior to the expiration of STSC. Otherwise, the provisions of Article 6.4.2. shall be executed, free from any claims.

The Service User may, not later than 20 days prior to the expiration date of STSC, demand a notification from BLNG concerning the amount of volume stored in the storage on its behalf. A notification related to the amount Stored Volume, which is stored in the storage by BLNG on behalf of Service User, shall be issued to the Service User within max. 5 days as of the date of such demand

In case where the Service User does not accept the amount of Stored Volume specified in the notification above, Service User may, after the notification and within the period of STSC, make a written objection to BLNG and demand reconciliation.

In case where a final agreement could not be reached concerning the amount of Stored Volume specified in BLNG's notification, BLNG's records shall be taken as the basis and the following procedures shall be carried out within the frame of these records.

The Parties shall go to reconciliation within 15 days as of the date of STSC expiration. In case where the parties fail to reach an agreement within such period, the provisions of Article 17 shall be executed.

Such period shall be extended for one day per each day of period, within which the Service User fails to withdraw the gas, as programmed, by reason of operational conditions within BLNG Terminal or force majeure.

#### 8.7.2 Termination of Contract by BLNG or Service User

**8.7.2.1.** As of the date of termination; if the Service User whose STSC is terminated has an existing inventory and Foot LNG in the BLNG tanks and an inventory to be transferred by reason of inventory transfer proposed by BLNG, BLNG and Service User whose STSC is terminated shall arrange a withdraw programme to perform withdrawal from the Terminal within 15 days, including the amount which is to be transferred within 15 days as of the date of termination.

Within such programme, BLNG delivers the inventory to the Service User whose STSC is terminated in Gasified LNG and/or LNG state, as proposed by such programme. If the BLNG and the Service User whose STSC is terminated fail to reach an agreement on the programme to withdraw the remaining inventory, BLNG shall arrange a programme to deliver the remaining inventory to the Service User whose STSC is terminated within 15 days as of the date or termination, in Gasified LNG and/or LNG state.

If the Service User whose STSC is terminated fails to act in accordance with the withdrawal programme arranged by BLNG and to withdraw the remaining inventory in time, BLNG shall execute the provision of 6.4.2. for the remaining inventory. The sum acquired after the expenses are deducted shall be paid to the Service User whose STSC is terminated. At the end of 15-day period, the letter of guarantee, which accounts for the value of 3.200.000 MMBTU LNG and which is issued by the Service User, shall be returned to the Service User.

If the Service User whose STSC is terminated has an inventory to receive transfer of, by reason of inventory transfer proposed by BLNG after a date following the 15-day period as of termination date, proprietary rights for the inventory of Service User shall be transferred to BLNG as of the date of return for inventory and BLNG shall execute the provision of Article 6.4.2. for such inventory. The sum acquired after the expenses are deducted shall be paid to the Service User whose STSC is terminated.

8.7.2.2. If the Service User whose STSC is terminated has an inventory to transfer, by reason of inventory transfer proposed by BLNG, the inventory and Foot LNG which exist in the BLNG tanks as of termination date shall be used to compensate the inventory to be transferred in kind. If the Foot LNG and inventory amounts, which exist in the tanks as of the date of termination, of Service User whose STSC is terminated are higher than the amount of LNG to be transferred, BLNG and Service User shall arrange a programme to withdraw such remaining inventory within 15 days as of the date of termination. If BLNG and Service User fail to reach an agreement on a withdrawal programme, BLNG shall arrange a programme to deliver the inventory, which remains as of the date of termination, to the Service User whose STSC is terminated, within 15 days and in Gasified LNG and/or LNG state. If the Service User whose STSC is terminated fails to act in accordance with the withdrawal programme arranged by BLNG and to withdraw the remaining inventory in time, BLNG shall execute the provision of 6.4.2. for the remaining inventory. The sum acquired after the expenses are deducted shall be paid to the Service User whose STSC is terminated.

If the inventory and Foot LNG of Service User (whose STSC is terminated), which remain in the tanks as of the date of termination, fails to compensate the inventory transfer to be performed in kind, the sum of the uncompensated LNG shall be paid to the Service User, to whom the LNG is to be transferred by BLNG, by encashing the letter of guarantee which is obtained from the Service User whose STSC is terminated and which has a value accounting

for the value of 3.200.000 MMBTU LNG. The remaining sum shall be returned to the Service User whose STSC is terminated.

**8.7.2.3.** The 15-day withdrawal period as of the date of termination shall be extended for one day per each day of the period during which the Service User whose STSC is terminated fails to withdraw its remaining LNG inventory and Foot LNG by reason of Terminal operational conditions and force majeure.

If there is a difference between the tank inventory kept by the Service User whose STSC is terminated and the inventory kept by the BLNG, BLNG's records shall be taken as the basis and the following procedures shall be carried out within the frame of these records. The Parties shall go to reconciliation within 15 days as of the date of STSC termination; if the parties fail to reach an agreement within such period, provisions of Article 17 shall be executed.

If BOTAŞ does not have any rights or claims according to the provisions of this UPP hereby, STSC and the regulations; letter of guarantee issued by Service User whose STSC is terminated shall be returned to such Service User.

#### 9. OPERATIONAL FLOW INSTRUCTIONS (OFI)

#### 9.1 Conditions for the Issuance of Operational Flow instructions

**9.1.1** Where BLNG requires to relieve the conditions that threaten the integrity, safety or the service of the Terminal or wishes to ensure compliance to the provisions of this UPP hereby, it shall be granted the right to issue mandatory Operational Flow instructions, which are in the quality of instructions to the Service Users for the arrangement of obtaining or delivery.

Certain situations in which OFI's may be issued are specified below, these instructions may also be issued where BLNG requires to relieve the conditions that threaten the integrity, safety or the service of the Terminal or wishes to ensure compliance to the provisions of this UPP hereby.

- 1. If Service User's Vessel/vessels or Land Tanker/Tankers fail/fails to arrive in the Terminal on the planned date,
- 2. If unscheduled cases which affect the capacity and require maintenance and repair for the facility or transmission network arise,
- 3. If limitation orders are not obeyed and situation threatens secure operation of BLNG Terminal,
- 4. If LNG or Gasified LNG is not delivered according to the delivery programme and such situation negatively affects BLNG's ability to provide the programmed services,
- 5. If Transferor Service User fails to fulfil the following obligation: "Where the capacity is delivered within the scope of Article 3, Transferor Service User shall lower the amount of LNG in the storage tanks to the amount of its remaining storage capacity (if any) as of the date on which the capacity is transferred. Transferor Service User may fulfil such obligation for lowering the storage volume by withdrawing LNG, delivering Gasified LNG or transferring the Stored Volumes to another Service User in accordance with Article 6.4.1."
- 6. Where the capacity is withdrawn within the scope of Article 3; if the Transferor Service User fails to lower the amount of LNG in the tanks according to the withdrawn capacity.

Where the Service User fails to withdraw such gas amounts from the BLNG Terminal as instructed, BLNG shall be granted the right of disposition for such amounts, free from all claims, on its option; in such a case, if the Service User fails to withdraw such amounts from the BLNG Terminal in time, the provisions of Article 6.4.2. shall be executed.

- **9.1.2** A OFI may be issued for a specified period of time or be valid until the issuance of another OFI. Prior to the issuance of an OFI, BLNG shall be liable to take all reasonable precautions to minimise the negative effects which may arise as a result of the issuance of OFI.
- **9.1.3** BLNG's right to execute processes for arranging the actual obtaining and delivery of gas, which may be required to make relief for the conditions that may threaten the safe

operation of its Terminal, shall not be limited in any way. In such situations, all Service Users shall be liable to cooperate with BLNG.

#### 9.2 Situation Reports, Notification and Compensation

**9.2.1.** BLNG shall, within the shortest period of time, issue the notification of OFI to the Service User, via Website, telephone, fax or e-mail. The notification shall include the start date and time of OFI, period during which OFI will be in effect, processes to be carried out by the Service User, reason for the issuance of OFI, operational variables that may form the basis for such issuance and all other information which may be required accordingly. Under normal circumstances, the notification shall be arranged and issued to Service Users at 10:00 of the Gas Day before the Gas Day on which the OFI will be in effect. Under normal circumstances, OFI shall be in force as of 08:00 of the Gas Day after the Gas Day on which the notification is issued.

Where required by the operational conditions, a notification with a period of three hours or less may be issued. Such notification shall be issued to the person who is commissioned by Service User to issue or confirm the programmes and/or to any authorised person of Service User.

BLNG shall publish the OFI, the reasons for the issuance of OFI and updated information on its Website from the start of the Gas Day until BLNG notifies Service Users concerning the expiration of OFI. BLNG shall publish a descriptive report on its Website, concerning the issuance and expiration of OFI.

**9.2.2.** BLNG shall not have any responsibilities related to notifying Service User's customers of any OFI.

#### 10. QUALITY

- **10.1** LNG, which is to be obtained for Terminal service within the scope of this UPP hereby, shall have commercial value and have the following properties in gas state:
- 1. Gross Calorific Value shall be min. eight thousand eight hundred and seventy (8,876) Kcal/STDm<sup>3</sup> and max. ten thousand four hundred and twenty seven (10,427) Kcal/STDm<sup>3</sup>, under 15 °C and 1.01325 bar.
- 2. Components within the following percentage intervals (as molar percentage):

Nitrogen	0.00 - 1.41
Methane	84.55 - 100
Ethane	0.00 - 9.20
Propane	0.00 - 3.52
Isobutene	0.00 - 1.00
Normal butane	0.00 - 1.50
Pentane Plus	0.00 - 0.23

- 3. Max. 0.5mg/m<sup>3</sup> hydrogen sulphate content,
- 4. Max. 50 mg/m<sup>3</sup> total sulphate content,
- 5. Max. 5 mg/m<sup>3</sup> mercaptan sulphate content,
- 6. Max. 5 mg/m<sup>3</sup> hydrocarbon sulphate content,
- 7. Max. 15 mg/m<sup>3</sup> carbonyl sulphate and hydrogen sulphate content,
- 8. Max. 10 mg/m<sup>3</sup> mercury content.
- 9. Dew point of hydrocarbons shall not be higher than -5°C under pressure interval of 1-70 bar(a).
- 10. Shall not contain water, carbon dioxide or mercury.
- 11. Shall not contain active bacteria or bacterial agents including, but not limited to, sulphate reducing bacteria or acid producing bacteria.
- 12. Shall not contain hazardous or toxic agents.
- **10.2** BLNG shall be entitled the right to reject the LNG which does not comply with the standards specified in Article 10.1.
- 10.3 LNG or Gasified LNG delivered by BLNG to the Service User or on behalf of the Service User shall comply with the quality standards specified in Article 10.1.

**10.4** Gasified LNG, which is delivered by BLNG to the Service User or on behalf of the Service User, is delivered with a pressure suitable for transmission to Natural Gas Main Transmission Network.

#### 11. MEASUREMENT

## 11.1 Measuring of LNG which is delivered from or to Service User's Vessel

- 11.1.1.Amount of LNG delivered from or to Service User's Vessel is determined by measuring the levels of LNG loaded onto or unloaded from Vessel tanks and calculating the volume according to such levels. Therefore, BLNG ensures that first measurement is performed after the Vessel Captain issues "Ready to Discharge/Filling" notification and prior to loading or unloading process. Second measurement is performed immediately after the loading or unloading process. BLNG and the representatives of Service User shall be present during such measurement processes. Absence of a party shall not stop the first and second measurements and arranging of reports. Measurement results are reported by the Vessel captain and approved by the representatives of BLNG and Service User.
- 11.1.2. For each Vessel tank used for loading/unloading within the scope of this UPP hereby, Service User shall issue a confirmed copy of measurement standards, which is confirmed by an institution with an accreditation that is internationally accepted, in terms of metric units and correction graphs (list, contraction of tanks, trim etc.) to BLNG. These standards or graphs are used within the STSC period; however, in case of a change in the physical condition of tanks, Service User shall issue new confirmed standards and graphs to BLNG. In such case, these new confirmed standards and graphs will be used.

LNG level measurement devices shall be approved by both BLNG and the Service User. Each tank shall be equipped with two levels of measurement devices of different types.

- 11.1.3. Custody transfer equipments, tank calibration diagrams and tables of the Vessel tanks, in which the LNG is stored, are used to calculate the volume of LNG loaded to or unloaded from the Vessel. Operation, maintenance and periodical calibration of custody transfer equipments, which are used to measure the loaded or unloaded LNG, and the certification of these shall be performed by the Service User. For the calculation of volume of LNG loaded onto or unloaded from Vessel, calculation procedures and standards specified in the most recent version of "LNG Custody Transfer Handbook", which is published by GIIGNL, shall be used. The result shall be used in terms of m<sup>3</sup>.
- **11.1.4.** For the calculation of density of loaded/unloaded LNG, Revised Klosek-Mc Kinley (1980) Method shall be used. For the calculation of density, the calculation specified in the most recent version of "LNG Custody Transfer Handbook", which is published by GIIGNL, shall be taken as the reference. The result shall be used in terms of kg/m³ LNG.
- 11.1.5. Gross Calorific Value for the loaded/unloaded LNG shall be calculated using the tables given in ISO 6976 1995-E. While performing Gross Calorific Value calculation, the gas and liquid calculation examples specified in the most recent version of "LNG Custody Transfer Handbook", which is published by GIIGNL, shall be taken as the reference. The result shall be found in terms of Megajoule/kg and Megajoule/Sm<sup>3</sup>.
- 11.1.6. The temperature of LNG in the tanks of Service User's Vessel shall be determined using the arithmetical average of the temperature monitored on the special thermocouples or resistance thermometers, which are placed on various parts of each tank (from the top to the bottom), with an accuracy of  $\pm 0.2$  of one degree (minus or plus two-tenth).

- 11.1.7. LNG samples shall be obtained from a suitable point between the loading/unloading point and BLNG's storage facilities, under maximum unloading/loading speed. It shall be obtained until the number of active pumps is lowered and continuously analysed via a suitable chromatograph. For the gasification of LNG to be analysed, water-heated gasifiers shall be used first. Electricity-heated gasifiers shall be used as their backup. Prior to each unloading, the calibration of two chromatographs, which are the backup of each other, shall be performed using a certified calibration gas. The representatives of Service User may be present during the analyses; however, absence of the duly invited Service User's representative shall not stop the performance of calibration and analyses.
- **11.1.8.** For the determination of gas returned to the vessel, in terms of energy, calculation method specified in the most recent version of "LNG Custody Transfer Handbook", which is published by GIIGNL, shall be used and related exemplary calculations shall be taken as reference.

$$E_{GAS} = V_{LNG} x (273.15 / (273.15 + T)) x (P / 1.01325) x GCV_{GAS}$$

E<sub>GAS</sub> : Calorific value of the gas delivered to vessel, mega joule

V<sub>LNG</sub> : Volume of unloaded LNG, m<sup>3</sup> LNG

 $GCV_{GAS}$ : Gross Calorific Value of the gas delivered to vessel, mega joule/kg

T : Average temperature of gas in the vessel tanks after discharge (°K)

P : Average pressure of gas in the vessel tanks after discharge (bar)

**11.1.9.** For the determination of unloaded LNG in terms of energy, calculation method specified in the most recent version of "LNG Custody Transfer Handbook", which is published by GIIGNL, shall be used.

$$E=(V_{LNG} \times D_{LNG} \times GCV_{LNG}) - E_{GAS}$$

E : Net unloaded LNG, mega joule

V<sub>LNG</sub> : Volume of unloaded LNG, m<sup>3</sup> LNG

D<sub>LNG</sub>: Density of unloaded LNG, kg/m<sup>3</sup> LNG

GCV<sub>LNG</sub> : Gross Calorific Value of unloaded LNG, mega joule/kg

E<sub>GAS</sub> : Calorific value of the gas delivered to vessel, mega joule

The amount for net unloaded LNG is found by subtracting the amount of LNG, which is unloaded from the Vessel on behalf of Service User, from the amount of gas delivered to the Vessel (both in terms of energy). In case of a conflict between Service User, Vessel operator and BLNG concerning the equipment, tools and methods used in the calculations and methods, GIIGNL may be consulted.

The value of unloaded LNG, which is found in terms of mega joule, shall be converted into the values of MMBTU and kwh, using the conversion factors specified in the most recent version of "LNG Custody Transfer Handbook" published by GIIGNL. By multiplying MMBTU with 252,000 and dividing the result into 9,155, Sm<sup>3</sup> value is acquired.

#### **11.1.10** Measurement Equipment

- 11.1.10.1. Service User supplies, operates and performs maintenance of the custody transfer equipments required for an accurate measurement of liquid levels and liquid temperature in the Vessels of Service User and provides certification for these. BLNG provides, operates and performs maintenance of all equipments, tools and devices used for the sampling and determination of the density, quality and composition of the unloaded LNG and provides certification for these.
- **11.1.10.2.** All measurements and calculations related to the LNG density and testing of LNG's quality and content shall be performed by BLNG. The representatives of Service User may be present during the analyses; however, absence of the duly invited Service User's representative shall not stop the performance of calibration and analyses.
- **11.1.10.3.** The parties shall have the right to be present during the processes of inspection, measurement and calibration of test equipment, provided that a notification is issued within a reasonable time and the required expenses are undertaken. All test data, graphs, calculations and similar information shall be provided to the parties and kept for at least five (5) years.
- 11.1.10.4. If the chromatograph systems, which analyse the unloaded LNG and enable the calculation of density of LNG and Gross Calorific Value, fail during the unloading and the analysis cannot be performed, the calculation shall be performed by taking as the basis the average of analyses for the LNG amounts in the LNG vessels, which are delivered to BLNG from the same liquefaction facility. In the calculation, the average of three (and more) Vessels before the last Vessel, which has performed delivery to BLNG from the same liquefaction facility and with the similar quality, is taken. If such procedure cannot be followed, the analysis, density and Gross Calorific Value of LNG is determined with bilateral negotiations between the Service User and BLNG, by taking the "Unloading Report" of the Vessel as the basis.

#### **11.1.11.** Confirmation of Accuracy

Accuracy of the tools used shall be confirmed upon a demand by one of the parties. Such confirmations may be performed before the demanding party and in accordance with the methods proposed by the manufacturers of measurement tools.

- **11.1.12.** Installation and operation of the devices which are used to measure the LNG level and the temperature at the tanks of Service User's Vessel/Vessels and the chromatographs used to analyse Gasified LNG is performed by the related parties in accordance with the manufacturer's specifications.
- **11.1.13.** All tools and measurement devices used for the measurement of LNG obtained and delivered within the scope of this UPP hereby shall be calibrated as specified below:
- (1) cubic meter (m<sup>3</sup>)

- (2) degree centigrade
- (3) dual scale calibrated as bar and milibars at one side and pounds per square inch at the other side.

#### 11.2 Measurements and Tests for the Delivery of Gasified LNG

Measurements performed during the delivery of Gasified LNG shall be performed at the Transmission Network Delivery Point. These measurements shall be performed in accordance with the regular applications of BLNG or transporter concerning measurement and testing and the provisions of delivery contract concluded between BLNG and Transmission Company for such aim. Two units of chromatographs (with pay and check function) which confirm the accuracy of each other and a flow computer shall be used for calculations.

#### 11.3 Measurement of LNG Amount Delivered to Service User's Land Tanker

- **11.3.1.** Service User's Land Tanker shall be weighed before and after loading. The difference between two weights, which is defined in terms of kg, shall be the weight of delivered LNG. A weighbridge receipt and delivery note is arranged and issued to the Service User's LNG delivery authorised personnel (driver). Weighbridge system, which weighs Service User's Land Tankers, is periodically calibrated by authorised institutions according to the related regulations of Ministry of Industry and Trade.
- **11.3.2.** For the delivery of LNG to Land Tankers, energy value shall be taken as the basis. The unit of Sm<sup>3</sup> is taken as the basis for invoicing. The integer is taken into consideration for conversion into Sm<sup>3</sup>.

BLNG arranges a delivery note, which includes the weight and total kilocalorie (kcal) value of the LNG obtained by the Service User's Land Tankers on D-1 and Gross Calorific Value and relative density information used for the calculation of this, and issues it to the Service User within the same day. This information shall be used for invoicing.

For the conversion of relative density into reference density, air density is taken as 1.2254 kg/STDm<sup>3</sup>. Amount of LNG in terms of kcal, which is delivered according to this, is calculated using the formula below:

$$A = (C \times H) / D$$

A = Amount of delivered LNG in terms of kilocalorie (kcal)

C = Weight of delivered LNG in terms of kilograms (kg)

H = Calorific value of the Natural Gas (kcal/STDm<sup>3</sup>)

D = Reference density of the Natural Gas (kg/STDm<sup>3</sup>)

D = Relative density of Natural Gas x air density

For the determination of average calorific value and average relative density, the average of daily analysis performed by the chromatograph at the BLNG Terminal delivery gas measurement station on D-1 is taken as the basis.

In case of an inaccuracy in the analysis of chromatograph device for any reason, output values of the previous day is taken as the basis and therefore, the day on which the accurate measurement is performed is retrospectively tracked.

#### 11.4 Testing of Measurement Devices

The accuracy for any measurement device, which is the property of one of the parties, under its operation and used for LNG and Gasified LNG, shall be confirmed with reasonable intervals by the responsible party, after the other party is notified. In case one of the parties wish to conduct a special test on a measurement device of the other party, such party shall inform the other party and following this, the parties act in cooperation to confirm the accuracy of the equipment in the shortest time possible. However, the parties shall not be liable to confirm the accuracy of their equipment in intervals shorter than 14 (fourteen) days.

#### 11.5 Malfunctioning of Measurement Devices

If a commercial measurement device is out of service or is malfunctioning, the volume of LNG obtained or delivered within the scope of this UPP hereby is determined as follows:

- 1. Use of records by a controller measurement device or equipment, which is readily installed and performs accurate records
- **2.** If such inaccuracy can be determined via calibration, test or mathematical calculation, correction of inaccuracy
- **3.** Use of method specified in Article 11.1.10.4 where the articles 1 and 2 cannot be exercised.

#### 11.6 Correction of Inaccuracies of Measurement Devices

**11.6.1.** If, according to the tests conducted, the inaccuracy of a measurement equipment used for Gasified LNG measurement is determined to be less than 2% (two percent), previous records of such equipment shall be deemed accurate concerning the calculation of deliveries within the scope of this UPP hereby. However, such equipment shall immediately be adjusted to perform the most accurate record.

If, according to the tests conducted, the inaccuracy of a measurement equipment is determined to be higher than 2% (two percent), concerning the records of average hourly flow rate, as of the last test, previous records of such equipment shall be corrected, for a period of time which is certainly determined or arranged for a Service User, as if they had zero-error or correction is carried out for a period equal to half of the period as of the last test date, with such period not exceeding a correction period of sixteen (16) days.

**11.6.2.** If, during such confirmation process, the inaccuracy of a measurement device is determined to account for less than 1% (one percent) of LNG loaded on or unloaded from the

Vessel and loaded onto Land Tankers, previous measurements by such equipment is deemed to be accurate with respect to delivery calculations.

If, during such confirmation process, the inaccuracy of a measurement device is determined to account for more than 1% (one percent) of LNG loaded on or unloaded, previous measurements by such equipment is arranged to have a zero difference, by comparison with the calibration results for a period during which such equipment is known to have inaccurate measurements or which is agreed upon for being affected by such inaccuracy, and the calculation for the deliveries performed within such period is corrected accordingly; however, if the period with such inaccuracy is unknown or is not agreed upon for being inaccurate, corrections are performed for the amounts obtained or delivered within the second-half of the period as of the last date of calibration.

11.6.3. If measurement cannot be performed at Gasified LNG Delivery Point by reason of technical faults, hourly amount of LNG delivered to the gasifiers within the period, during which measurement is unable to be performed, is taken as the basis for calculation. Total LNG amounts transmitted by each gasifier, LNG density, gas density and gross calorific value of the LNG of such day acquired by chromatograph measurements are used for the calculation.

#### 11.7 Storing Records

Parties shall keep the all the test data related to the equipment mentioned in the previous provisions of Section 11, all graphs and other similar records for a period of at least 5 (five) years.

#### 12. WEBSITE

BLNG shall create a Website to be used by all parties, including Service Users and potential Service Users. Information to be published and processes to be carried out via the Website are specified below:

- UPP
- Storage and gasification capacity for the next Gas Year
- Daily Programmes
- Allocations for D-1
- Idle Capacity notifications, capacity transfer demands
- Gasified LNG amounts delivered hourly to the transmission network within a day
- Current stored amount, amount gasified and sent to transmission network and daily amounts loaded on Land/Sea Tankers at the end of each Gas Day
- Example of Standard Contract
- Capacity Demand Application Form
- OFI's
- Terminal maintenance and repair information
- Information concerning Land Tanker Filling Ramps
- Boil-off Gas Information
- Form for recommendations for changes in UPP
- Notifications by Service Users
- Maritime Services Contract
- BLNG Terminal Navigation Procedure
- Other information required to be published according to UPP

#### 13. PRICING AND PAYMENTS

Sums to be paid to BLNG shall be invoiced and paid in accordance with this Section 13 hereby.

#### 13.1 Payment Items related to Services within the scope of STSC

Unit prices to be used during the calculation of prices within this Article shall be specified in the tariff by taking into consideration the investments realized to perform related services and operational costs related to the phase of provision for such services, costs arising from Terminal Operation Gas and a reasonable amount of benefit.

#### 13.1.1 Monthly Capacity Fee

Monthly Capacity Fee is the maximum rate of sum to be paid to the storage company for the capacity reserved by the Service User, depending on the amount of Reserved Capacity which is subject to the contract of Service User which reserves Capacity in accordance with this UPP hereby. Payments for such fee shall be made as monthly payments in a manner specified in the tariff in each month, regardless of the use of reserved Terminal capacity.

Even if the STSC is terminated on the first day of the current month, Monthly Capacity Fee determined for such month shall be fully paid by the Service User whose STSC is terminated. Such Monthly Capacity Fee collected shall be the last Monthly Capacity Fee collected from the Service User whose STSC is terminated.

## 13.1.2 Storage Usage Fee

. Storage Usage Fee is the maximum rate of sum to be paid for the gas which will be stored in the storage in liquid state by the Service User, provided that storage service is procured within the scope of Standard Services or Supplementary Services and within the periods specified in UPP. It is calculated as monthly sums by taking the Service User's daily Storage Usage Amount into consideration. Throughout the contract period, BLNG will arrange the invoice of the related month on the first Work Day of the following month. In case where the contract expires within a month, the invoice is arranged on the first Work Day following the contract expiration date.

#### 13.1.3 Unloading and Delivery Fee

Unloading and Delivery Fee is the total of maximum rate of sums to be paid by Service User for each Sm³ of natural gas, provided that the services of Unloading, Gasification and Loading onto Land Tankers are procured within the scope of Standard Services or Supplementary Services and within the periods specified in UPP. It is calculated in daily basis within the direction of amounts of LNG unloaded from the Vessels and LNG delivered in LNG or Gasified LNG state throughout the month. Different price tariffs may apply for delivery in Gasified LNG state and delivery in LNG state.

#### 13.1.4. Capacity Exceeding Fee

Capacity Exceeding Fee is calculated by using the capacity unit price specified in the tariff for each day on which the Service User's reserved capacity is exceeded, by taking into

consideration the number of capacity exceeds within a Gas year, in accordance with the following equation and is realized for the amount of capacity exceed.

Capacity Exceeding Fee = Capacity exceeding amount \* unit capacity price \* n

n = Capacity exceeding coefficient. Shall be specified in the tariff.

#### 13.1.5. Irregular Unloading and Delivery Fee

Irregular Unloading and Delivery Fee is calculated in case that the Unloading, Gasification or Loading onto Land Tankers cannot be carried out within the time period in the programme specified within the frame of conditions set forth in UPP by reason Service User's fault, by taking into consideration the difference between the amounts and periods specified in the programme and the realized amounts and periods. Service User which exceeds the periods specified in the programme shall pay, at the start of each hour, a recurring fee for amounts which are planned but not unloaded or delivered, as of the end of time specified in the programme.

**13.1.6.** Service User shall be liable to compensate all direct and indirect damages arising on behalf of the Terminal operation before BLNG by reason of Service User Vessel's failure to arrive in the Terminal as planned.

Shall compensate all costs incurred on BLNG. In addition; if the Service User fails to issue a written notification to BLNG and state that the Service User Vessel will be delayed, at least thirty six (36) hours prior to the planned time of arrival, Service User shall pay BLNG a fee specified in the tariff for each similar case.

#### 13.2. Service Interruption Fees

In case where Service Users are affected by Service Interruptions arising by reason of faults of BLNG, the compensation shall be made as follows:

- (A) In case where the Service User Vessel cannot be berthed to the Terminal and/or is kept waiting at the Terminal without unloading by reason of faults of BLNG, the related direct costs incurred on Service User shall be paid by BLNG.
- **(B)** In case where the services, which are to be provided by the storage company according to UPP, are interrupted or could not be provided, the storage company shall pay a Service Interruption fee to Service User for the amount of interrupted services or amount of services which could not be provided and such Fee shall be specified in the tariff.
- **(C)** A Storage Usage Fee shall not be paid for the amounts of LNG which could not be delivered and compulsorily stored in the storage by reason of BLNG's operational faults until the delivery of such LNG is realized by BLNG. BLNG shall not pay any compensation for service interruptions in case of force majeure or, if specified, in cases of Emergencies.

#### 13.3. Letter of Guarantee

For the provisional security to be provided with the Capacity Demand Application Form during capacity application, demanded Maximum Contract Storage Capacity is taken into

consideration and for the performance security to be provided during the conclusion of STSC, finalized Maximum Contract Storage Capacity is taken into consideration. Securities shall be unconditional, full and irrevocable bank bid security, which is payable upon first demand and within limits, and the amount is 20% (twenty percent) of total capacity fee, which is to be calculated by taking the capacity fee for the current Gas Year as the basis.

The sum for the performance security, which will be obtained from the Service Users for the inventory transfer proposed by BLNG, shall be the sum which is acquired by multiplying the possible maximum inventory transfer amount for the Service User within the year by the sum that is acquired by adding 5,00 (Five) US dollars (In order to protect the rights of Transferor Service User, BOTAŞ reserves the right to increase such sum to be added into NBP price during the phase of signing STSC, within the scope of international market conditions) to the arithmetic average of the DES delivery value, in units of \$/MMBTU, of National Balancing Point (NBP) price for a period of 10 days prior to the date of signing STSC. This security shall be unconditional, full and irrevocable bank bid security, which is payable upon first demand and within limits. In case where such security of the Service User fails to cover the proposed transfer, BLNG may demand an additional security. Provided that Service Users notify BLNG in writing that Service Users have reached a mutual agreement concerning the inventory transfer to be concluded by and between the Service Users, a security will not be requested for amounts subject to transfer.

#### 13.4 Content of Invoice

Each invoice shall include the following:

- 13.4.1 Identity of Service User,
- 13.4.2 Time period for invoice,
- **13.4.3** Each payment item specified in Article 13.1 concerning Standard Service within STSC,
- **13.4.4** Reference Number to identify the invoice,
- **13.4.5** Information required by the provisions of Turkish Trade Act (T.T.A) and Tax Procedural Law (TPL)

#### 13.5 Payments

- **13.5.1** Service User shall pay the total amount specified in the invoice arranged by BLNG, within 15 days as of the date for arranging such invoice (If the payment due date is an official holiday, first Work Day following the official holiday) to BLNG. However, BLNG's delivery of the invoice to the Service User, within 10 days as of the date for arranging such invoice, constitutes the basis.
- **13.5.2** Payments to be made according to this UPP hereby shall be made in Turkish Liras, to the bank branch and account issued to the Service Users. In case of a change in such information, Service Users will be notified in writing.
- **13.5.3.** Sums to be paid in accordance with this UPP hereby

- 1. Shall be independent, free and unconditional, without any limitations.
- 2. Service User shall not make any deductions from the sums which are required to be paid as compensation or any other sums.

#### **13.6** Taxes

- **13.6.1** Invoice includes all the taxes in force, which are required to be included in the related invoices concerning all product and service items within the invoice.
- **13.6.2** Unless an otherwise application is required by the laws in force, invoice sums to be paid within the scope of this UPP hereby shall be paid to BOTAŞ without any tax-related cuts or constraints.

#### 13.7 Interest

- **13.7.1** In cases where Service User fails to make payments until due date, an interest will be charged on the overdue debt. The sum of interest shall be calculated for the period between the due date until the date of payment, using the interest rate specified in Article 51 of Law No. 6183 on Collection Procedure of Assets.
- 13.7.2 In case where Service User fails to make payment within thirty (30) days as of the invoice due date, BLNG may, for the twenty one-day (21) annunciation period to be allowed for the Service User following the expiration of such thirty-day (30) period, suspend all its liabilities before the Service User, in accordance with the related STSC. In case where a payment in the sum of invoice is not made after the 21-day annunciation period, along with the interest calculated in accordance with Article 13.7.1, provisions of Article 1.6.2., Article 6.4.2. of this UPP hereby and other provisions related the operational conditions shall be executed by BLNG. In addition, Service User which fails to make such payment shall be responsible for the direct and indirect damages which may possibly incur on BLNG and other Service Users by reason of suspension of services for the 21 day annunciation period and the following periods.
- **13.7.3** If Service User fails to pay the capital and the interest demanded via the notification specified in Article 13.7.2, BLNG shall be entitled the right to immediately terminate the STSC of Service User. Service User shall not make any claims against BLNG by reason of such termination.

#### 13.8 Conflicts

- **13.8.1** In case of a problem or conflict, which may arise with regards to the calculation of a sum for an invoice to be paid by the Service User or whether such invoice sum will be paid or not, Service User shall notify BLNG of such problem or conflict and make a notification to BLNG, within eight (8) days as of the date of Service User's receiving such invoice, with its objections and state its reasons of the conflict on the invoice sum; however, in all cases, Service User shall pay the full sum of invoice, which is subject to such conflict, in accordance with the provisions specified in this Section 13 hereby.
- **13.8.2** If a debt on behalf of Service User or BLNG arises after resolution of conflict, such sum shall be invoiced to the other party via a new invoice. Such invoice shall be paid within 7 work days as of receiving the notification.

#### 14. RESPONSIBILITIES AND OBLIGATIONS

Responsibilities and obligations which are not specified within the scope of this UPP hereby shall be arranged in STSC.

#### 15. FORCE MAJEURE

### 15.1 Situations Deemed to be Force Majeure

- **15.1.1** Force majeure defines a case or situation, which arises without any fault of the affected party, cannot be averted although all necessary attention is paid and which makes it impossible for the affected party to fulfil its obligations within this UPP hereby, partly or wholly.
- **15.1.2** Being subject to the conditions proposed in paragraph 15.1.1., the situations of force majeure include, but are not limited to, the following conditions:
- 1. Natural disasters such as earthquakes, floods, lightning, landslide, adverse weather conditions and epidemics,
- 2. War and terrorist acts, piracy,
- 3. Acts by or precautions of a military or civil authority,
- 4. Any legal or administrative decisions or regulations,
- **5.** Fire, explosion, sabotage, gas or liquid leaks in Terminal,
- **6.** Strike, lock-out or other employer-employee disputes in the Terminal,
- 7. Power failure in Terminal,
- **8.** Archaeological findings,
- 9. Structural changes or developments which may affect a part/parts of the transmission network or an area/areas on the pipeline in general,
- **10.** Malfunctioning of or damage on the jetty's berthing dolphins, mooring dolphins, loading arms, discharge lines and Boil-off Gas processing compressor; in a way which will not allow the LNG vessels to safely berth and unload to Terminal jetty.
- 11. BLNG's suspension of delivery of Gasified LNG or LNG loading on land and Sea Tankers, partly or wholly, by reason of faults which may occur on LNG storage tanks, mutual pipe system, LP and HP pumps, utility systems, boil-off gas compressor systems, ORV and SCV gasifiers, measurement station and/or Land Tanker, according to the scale of fault.
- **15.2** In case where the parties affected by force majeure cannot fulfil their obligations within this UPP hereby or STSC, partly or wholly, by reason of force majeure, the obligations of parties shall be suspended.
- **15.3** Force majeure shall not relieve the parties of their responsibilities or obligations concerning a notification required by UPP.
- 15.4 Party affected by force majeure shall, within max. 2 Work days, notify the other (unaffected) party in writing and inform other Service Users which may be affected by the situations. Affected party shall the other party concerning all details of the force majeure

status, projected effects, possible scope and period for suspension, actions that may be taken to overcome such force majeure and to restore regular work Organisation.

- 15.5 By taking these notifications into consideration, the Parties specify a date to restore regular work Organisation and such date shall be updated throughout the force majeure period.
- **15.6** Following the situation of force majeure, the parties shall take all reasonable precautions to restore normal conditions of execution and, if they fail to prove that they are taking the reasonable action to overcome the effects of such force majeure situation, their obligations shall not be suspended.

## 15.7 Conflicts of Force Majeure

If the party unaffected by the force majeure claims that the situation reported by the other party is not a force majeure, such party shall notify the affected party, within 10 days as of receiving the notification, of such objection in writing and, if it fails to do so, he shall be deemed to waive its right of objection. If the unaffected party makes the duly notification, as specified above, the parties shall find a resolution for the conflict within 30 days. In case where the parties fail to reach an agreement, the conflict shall be solved in accordance with the procedures for resolution of disputes specified in Article 17.2 of STSC.

#### 16. PLANNED MAINTENANCES

### 16.1 Maintenance Planning

Service User shall issue all information required for the preparation, programming and execution of planned maintenance in LNG Terminal to BLNG in the shortest time possible.

BLNG shall notify Service User of its maintenance programme prepared for each Gas Year, prior to the related Gas Year. Services which are to be affected by programmed maintenance and, if possible, the period of maintenance shall be specified in the maintenance programme.

BLNG shall, to the extent possible, try to carry out its maintenance programme concurrently with the maintenance planned to be carried out for the transmission network.

#### 16.2 Schedule

Preparation schedule for the maintenance programme of each Gas Year is as follows:

- **1.** BLNG shall discuss the maintenance plans of the Gas Year with the Service Users in the meetings to be assembled in April and May of the previous Gas Year.
- **2.** BLNG shall announce the maintenance programme for each Gas Year until the 1<sup>st</sup> of July of the previous Gas Year.

If conditions unforeseen by the BLNG occur, BLNG may change the content, periods, dates and maintenance period in the maintenance programme by consulting to the Service Users, provided that the affected Service Users are notified at least 30 days prior to such change.

### 16.3 Obligations of BLNG

If the service capacity of Terminal is decreased by reason of programmed maintenance or maintenance caused by force majeure, BLNG's obligations concerning the delivery and storage, according to the UPP and STSC, shall be suspended on the same scale. BLNG shall carry out the decrease in Terminal services by reason of maintenance, in a manner which is fair, transparent (subject to the related confidentiality obligations) and indiscriminate for all directly affected Service Users.

#### 16.4 Maintenance Period

BLNG shall limit the programmed maintenance within a Gas Year with a total of 30 (thirty) maintenance days.

Where unforeseen conditions occur, BLNG shall be entitled the right to carry out non-programmed maintenance in addition to the programmed maintenance,, which may be required for the operation of LNG Terminal, provided that affected Service Users are notified in the shortest time possible and the Service Users shall be notified of such situation.

## 16.5 Obligations of Service User

Service User's payment obligations concerning the capacity reservation shall continue to exist during the maintenance period.

#### 17. RESOLUTION OF DISPUTES

- 17.1 The disputes which may arise, by reason of execution of UPP, between the BLNG and Service User concerning
- Capacity reservations, cancellations,
- Allocations,
- Limitations and Cuts, OFI

Shall be resolved by EPDK. The decision to be taken by the Board, within 30 (thirty) days at the latest, shall be binding on the parties. Cases to be filed by the Parties against Board decisions shall be tried before the Council of State as the court of first instance.

**17.2** Procedure for the resolution of disputes other than those described in Article 17.1 shall be regulated in STSC.

#### 18. CONFIDENTIALITY

#### 18.1 Confidential Information

"Confidential information" defines the commercial information and documents of Service User, which may be obtained by the BLNG, and commercial information and documents of BLNG or another Service User, which may be obtained by the Service User, within the period of UPP and STSC. Public information, information which is already known by public and information published on BLNG's Website as required by UPP are not confidential.

#### 18.2 Disclosure

- **18.2.1** Confidential information shall not be disclosed to any other persons, without the written permission of the other party, other than:
- 1. EPDK and Competition Authority, by reason of audit and inspection by the same,
- 2. Consultant of BLNG or Service User.
- **3.** Bank or financial Organisation, which BLNG or Service User consults to for financial assistance or obtains financial assistance from,
- **4.** A state Organisation or institution, as required by law
- **5.** Any legal authorities.
- **18.2.2** If BLNG or Service User discloses information to a third party other than those specified under articles 1, 4 and 5 of paragraph of 18.2.1, it shall set forth a precondition to obtain the necessary guarantee of the third party so that such third party will not disclose information to others without its permission.

#### 18.3 Continuity

The provisions of this Section 18 hereby shall continue to be binding on BLNG and Service Users throughout the STSC period and 5 years thereafter.

#### 18.4 Data Ownership

- **18.4.1** Subject to the provisions of this Section 18 hereby, any data that is processed, recorded or stored at the various systems of BLNG Terminal shall be the property of BLNG and BLNG shall use such data to provide storage service.
- **18.4.2** Where a Service User provides data to BLNG, it acknowledges that it grants all the rights to use, copy and to handle this data by any means whatsoever, without claiming any copyrights and without limitation, for the implementation purposes of STSC and UPP and other purposes specified in UPP.
- **18.4.3** If BLNG transmits a data to a Service User or makes such data available for it, Service User shall be granted the right to use such data for the implementation purposes of UPP and other purposes specified in UPP, free of any charge.

#### 18.5 Sanctions

In case where the provisions of confidentiality are not complied with, the party determining such action shall notify EPDK of such situation. In addition, the right to file cases against the other party shall be reserved.

#### 19. AMENDMENTS IN UPP

BLNG, Service Users and other parties related to UPP may propose a recommendation for an amendment in UPP. UPP amendment recommendations shall be issued to EPDK. BLNG's opinions shall be taken regarding the recommendations of amendments issued to EPDK. An amendment shall not be made in UPP without the decision of EPDK.

#### 20. OTHER

- **20.1** STSC's shall be executed and evaluated in accordance with the related regulation.
- **20.2** STSC's shall not grant any rights in favour of the third parties.
- **20.3** Unless otherwise specified in a STSC, a proposed notification, demand, request, declaration or invoice or any other notification that may be issued to BLNG by the Service User, or vice versa, shall be in writing and the party shall be deemed to be duly notified if such aforementioned documents are sent, as registered mail, to the other party's mail address specified in STSC or any other address that is declared via official notification. Routine correspondence may be carried out or notifications concerning the programmes may be issued via fax or electronic mail.

#### 21. TEMPORARY PROVISIONS

- **21.1.** All the previous rights and obligations of BOTAŞ concerning the use and operation of BLNG Terminal, which may exist with regard to the LNG Purchase-Sale agreements that had been signed before this UPP was put into force, shall be reserved until the expiration of such LNG Purchase-Sale Agreements.
- **21.2.** Until BOTAŞ is restructured as horizontally integrated legal entity in accordance with the market activities and as required Provisional Article 2. of Law No: 4646;

It accepts that its units which carry out Natural Gas export/wholesale/import activities are Service Users before its unit which carries out storage activities. Within this scope, BOTAŞ units which carry out Natural Gas export/wholesale/import activities are subject to the provisions of UPP, excluding those related to signing of STSC, financial liabilities of Service Users before BLNG and vice versa and disputes. BOTAŞ will apply the same fees, which it applies for all Service Users, for all of its wholesale/import/export activities. BLNG shall not be liable to sign a Connected System Delivery Contract with the transmission company under whose legal entity activities are carried out.

- **21.3.** Capacity allocations to the Applicants who wish to obtain LNG via Land Tankers shall be carried out in accordance with the provisions of "Explanations concerning the Operation of Filling Ramp" given in Annex 1 and "Protocol for LNG Ramp Construction", which is signed on 03.01.2006 by and between BOTAŞ, who acts as a basis for such explanations, and persons who have undertaken the ramp construction.
- **21.4.** While determining the amounts for the securities given for the capacity reservations for 2011, unit prices in the current Tariff shall be taken into consideration. Such securities shall be renewed after the 2011 Tariffs are determined, by taking into consideration the Capacity Price for the related year.

Annex-1

## **Explanations concerning the Operation of Filling Ramp**

The provisions of "PROTOCOL FOR LNG RAMP CONSTRUCTION", which is signed on 03.01.2006 by and between BOTAŞ and the firms which have undertaken the construction of Land Tanker Filling Ramps, is an annex to this UPP until their date of expiration.

Annex-2

### Information to be Included in Land Tanker Manufacturing and Test File

- Document which certifies that a third party is used to control various phases of project and manufacturing and a copy of the contract concluded with the third party
- Manufacture and quality certificates for all material used
- Document which certifies that all valves are manufactured to function under cryogenic conditions
- Test reports which state that all safety valves used are tested
- Welding maps used during the construction of inner and outer tanks, welder qualification certificates, welder name list, reports concerning the tests conducted on the welds, which are performed by welders used especially for cryogenic parts, under cryogenic conditions
- PI Diaphragm: This diaphragm shall be included in the file and, after being stamped on a metal sheet, riveted on a location on the tank which can be clearly seen. While creating such PID, drawings shall be performed according to the manifold arrangement proposed by BLNG. Manufacturing of system shall be carried out in accordance with this.
- Information which shows the tanker Id shall be included in the file and, after being stamped on a metal sheet, riveted on a location on the tank which can be clearly seen.
- Safety valve group, which control internal tank pressure, shall exist in two sets; with the help of a triple valve, one set can be activated while the other is deactivated. Each set has shall have two safety valves. One shall be set for design pressure of tanker and the other shall be set to minimum 0.3 bar below this.
- Bottom filling, top filling and gas return lines as well as the valves on these lines shall be  $\emptyset 2$ ".
- Pressure test reports shall be available for inner and outer tanks.
- There shall be reports available, which state that inner and outer tanks are dried up to the -30 °C dew point.
- Inner and outer tanks shall have oxygen-free reports, stating that the oxygen is removed from the tanks.
- There shall be a test report which states that the tanker is tested by cooling the tanker up to -160 °C, using liquid nitrogen, and no problems are encountered.
- Tanks shall be delivered to the BLNG Terminal in a liquid nitrogen cooled state, under cold conditions and positive nitrogen pressure.

BLNG is entitled the right to refuse loading onto a Tanker or to load provided that the recommended revisions and modifications are completed.