

Meeting of UNECE Group of Experts on Gas

Best Practice Policy Guidelines for Liquefied Natural Gas



Geneva, Palace of Nations



- 1. Main objectives and results**
- 2. Scope of work**
- 3. Main work stages**
- 4. Task Force members**
- 5. Work activity management**

Main objectives and results



Objectives:

- Defining best practices for LNG taking into account current market trends
- Support the work Group of Experts on Gas from UNECE in use of best practices

Results:

- **Mapping** of the different international organizations which are following and working on a regular basis with LNG. The mapping shall include the specific contact persons of the organizations and the topics with which each organization is currently working on.
- Create a **database** containing all the information that exists either publicly or non-publicly with regards to: Information on Import/Export terminals, Business Operations, LNG Small Scale services, LNG as Fuel, Technical Regulation and Standardization
- **Best Practice Policy Guidance** for LNG: the Group, on the basis of the developed Mapping and the database with all relevant documentation, will explore topics which are currently creating barriers to trade in the LNG market and will propose best practice policy guidelines.



Interpretive Note

Introduction

Chapter 1. Basic concepts

Chapter 2: Assessment of Trends in Liquefied Natural Gas Markets

Chapter 3: Best practices in LNG management

Chapter 4: Development of small-scale LNG plants

Chapter 5: Regulations and standards

Chapter 6: Policy Guidance

Creating of an analytic database on the LNG market

- ✓ Development of the database structure

Basic concepts

- ✓ Description of Physical and chemical properties of LNG
- ✓ Analysis of the role of LNG in the world natural gas trade
- ✓ Definition of the role of natural gas and LNG in the transition to a sustainable energy future

Assessment of Trends in Liquefied Natural Gas Markets

- ✓ The role of LNG in providing diversification of supply, flexibility and market liquidity
- ✓ Assessment of advantages of LNG over natural gas from the grid
- ✓ Analysis of production costs and cost trends through the whole gas and LNG value chains
- ✓ Price and price trends in LNG market analysis
- ✓ Classification of trends in global gas market integration
- ✓ Recommendations

Best practices in LNG management

- ✓ Analytic database development:
 - Liquefaction plants and LNG export terminals
 - Construction of LNG vessels and tankers
 - Compatibility of LNG terminals and LNG vessels
 - Regasification plants and LNG import terminals
 - Utilization of LNG as fuel and as chemical feedstock
- ✓ Recommendations
- ✓ Case studies

Development of small-scale LNG plants

- ✓ Recommendations
- ✓ Case studies

Regulations and standards

- ✓ Security and safety of LNG operations along the value chain
- ✓ Other technical regulations and standardization
- ✓ Recommendations
- ✓ Case studies

Policy Guidance

- ✓ Policy Guidance development



Proposals on Task Force members

- **Mr. Alexandre Karasevich**
- **Mr. Dirk van Slooten**
- **Mr. Francisco de la Flor Garcia**
- **Mr. Benjamin Schlesinger**
- **Mr. Diego Portoghese**
- **Mr. Ramón Díaz Casado**
- **Mr. Víctor Tuñón**
- **Mr. Alfredo Puente**
- **Mr. Luis I. Parada**
- **Ms. María de los Ángeles de Vicente**
- **Mr. Luis Gorospe**
- **Mr. Pedro Moraleda**
- **Mr. Jean-Yves Robin**
- **Mr. Kristof Kovacs**
- **Mr. Rodrigo Pinto Scholtbatch**
- **Ms. Natasha Udensiva**
- **Ms. Katherine Spector**



- 1. Approve the content of the work**
- 2. Develop and approve the work plan**
- 3. Form a working group**
- 4. Appoint the responsible persons for work stages**



Thank you for attention



Contents of Terms of Reference (Chapters 1 and 2)

Current version	Improvement proposals
Chapter 1: Basic concepts	
1.1 Physical and chemical properties of LNG. 1.2 The role of natural gas and LNG in the transition to a sustainable energy future.	1.1 Physical and chemical properties of LNG. 1.2 The role of LNG in the global trade of natural gas. 1.3 The role of natural gas and LNG in the transition to a sustainable energy future. 1.4 Terms and definitions summary.
Chapter 2: Assessment of Trends in Liquefied Natural Gas Markets	
2.1 The role of LNG in providing diversification of supply, flexibility and market liquidity. 2.2 Advantages of LNG over natural gas from the grid. 2.3 Analysis of production costs and cost trends through the whole gas and LNG value chains. 2.4 Price and price trends in LNG market analysis. 2.5 Market integration: towards a single global gas market. 2.6 Recommendations	2.1 Global LNG production: existing production capacities, development prospects. 2.2 LNG tanker and vessel fleet structure: transport capacities, shipping terms. 2.3 LNG terminals, utilization rate on terminals in Europe. 2.4 LNG marketing. Diversification of sales areas. 2.5 The role of LNG in providing diversification of supply, flexibility and market liquidity. 2.6 Advantages of LNG over natural gas from the grid. 2.7 Analysis of production costs and cost trends through the whole gas and LNG value chains. 2.8 Price trends in LNG market and its liquidity analysis. 2.9 Determination of LNG niches on the global market taking into account the demand for it 2.10 Market integration: towards a single global gas market. 2.11 Current barriers to LNG market development and ways to overcome them 2.12 Recommendations



Contents of Terms of Reference (Chapters 3 and 4)

Current version	Improvement proposals
Chapter 3: Best practices in LNG management	
3.1 Liquefaction plants and LNG export terminals 3.2 Constructing LNG vessels and tankers 3.3 Compatibility of LNG terminals and LNG vessels 3.4 Regasification plants and LNG import terminals 3.5 Utilization of LNG as fuel and as chemical feedstock 3.6 Recommendations 3.7 Case studies	3.1 Liquefaction plants and LNG export terminals 3.2 Constructing LNG vessels and tankers 3.3 Compatibility of LNG terminals and LNG vessels 3.4 Regasification plants and LNG import terminals 3.5 Utilization of LNG as fuel and as chemical feedstock 3.6 Proposals on best policy guidance with LNG 3.7 Recommendations 3.8 Case studies 3.9 Global markets analysis 3.9 Proposals on formation of a network model of Global LNG markets (a rational strategy of corporate guidance on the market along the LNG value chain)
Chapter 4: Development of small-scale LNG plants	
4.1 Recommendations 4.2 Case studies	4.1 Analysis of LNG production technologies, determination of best available technologies. 4.2 Perspective markets for small-scale LNG. 4.3 Integration of small-scale LNG into the global gas market. Terms of cost-effectiveness. 4.4 Process standardization for high product quality and competitiveness 4.5 Recommendations 4.6 Case studies



Contents of Terms of Reference (Chapters 5 and 6)

Current version	Improvement proposals
Chapter 5: Regulations and standards	
5.1 Security and safety of LNG operations along the value chain 5.2 Other technical regulations and standardization 5.3 Recommendations 5.4 Case studies	5.1 Analysis of current regulatory basis, aimed at LNG market development. 5.2 Security and safety of LNG operations along the value chain 5.3 Other technical regulations and standardization 5.4 LNG development incentives 5.5 Recommendations 5.6 Case studies
Chapter 6: Policy Guidance	
	6.1 Policy guidance for LNG market.



1. Determination of the amount of information as a compromise between UNECE disclosure requirements and maximum possible information amount (financial, technological, statistical) on companies working with LNG.
2. Collection of information for further analysis of the global LNG market state, its evaluation, trends study, study of the competitive environment. Review and analysis of companies and institutions working on LNG markets in different global regions (their location, business type). Selection of leading transport and logistic service providers and LNG producers.
3. Development of a structured list of companies working in different LNG sectors (suppliers of raw materials, LNG producers, equipment producers and others).



5. Creation of a database (with up-to-date information technologies) that contains information on leading companies on the global LNG market, export/import large- and small-scale LNG, producers of vessels and tankers for LNG transport, use of LNG as fuel (including industrial consumers and housing facilities), as raw material (by chemical industries), natural gas vehicle market development and business activities of companies on the market.
6. Analysis of the current regulations, aimed at LNG market development of UNECE members, creation of a database containing the information on regulations and their validity.
7. Identification of the regulations (or their lack) that negatively affect on LNG market and constrain its development, based on the result of the analysis of current regulations and information on current LNG market state.



8. LNG price trends and its liquidity analysis on the global market, its role in diversifying the global gas market in highly competitive circumstances, identification of market niches for LNG on the global market, taking into account the demand for it by industries – as fuel, by transport companies – as vehicle fuel, for chemical industries – as raw material.
9. Proposals on most effective guidance on LNG, their standardization, market policy guidance including proposals on each segment of the LNG value chain on the global market (LNG plants, import/export terminals, regasification stations, transport vessels etc.)
10. Development of guidelines for small-scale LNG plants: possible markets, terms of cost-effectiveness etc. Process standardization aimed at high product quality and its competitiveness.
11. Development of Policy Guidance aimed at efficient LNG trade.