

Strengthening Subregional Connectivity in East and North-East Asia through Effective Economic Corridor Management Training-Workshop Series: Workshop 1

Lecture 3: Energy Transit

Kanat Botbaev
Energy Charter Secretariat

7 October 2020



Learning Materials on
Energy Transit

Content

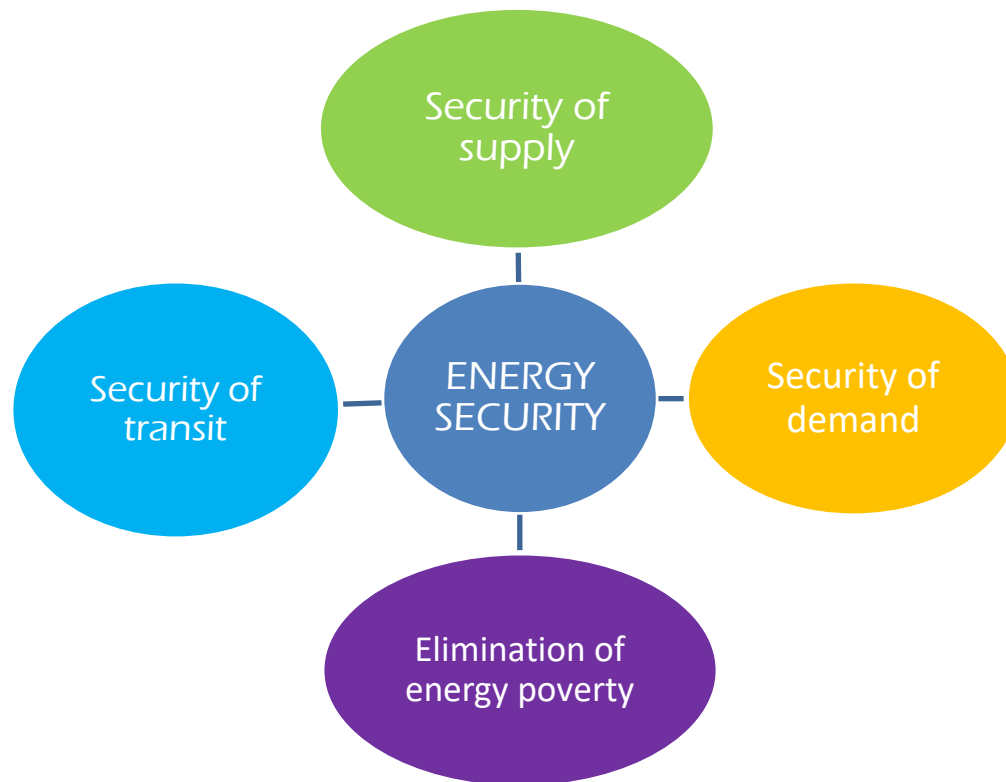
- Energy security and the role of transit
- Explaining energy transit
- Main challenges of transit
- Organisational and regulatory aspects of energy transit
- Instruments facilitating energy transit
- Case studies



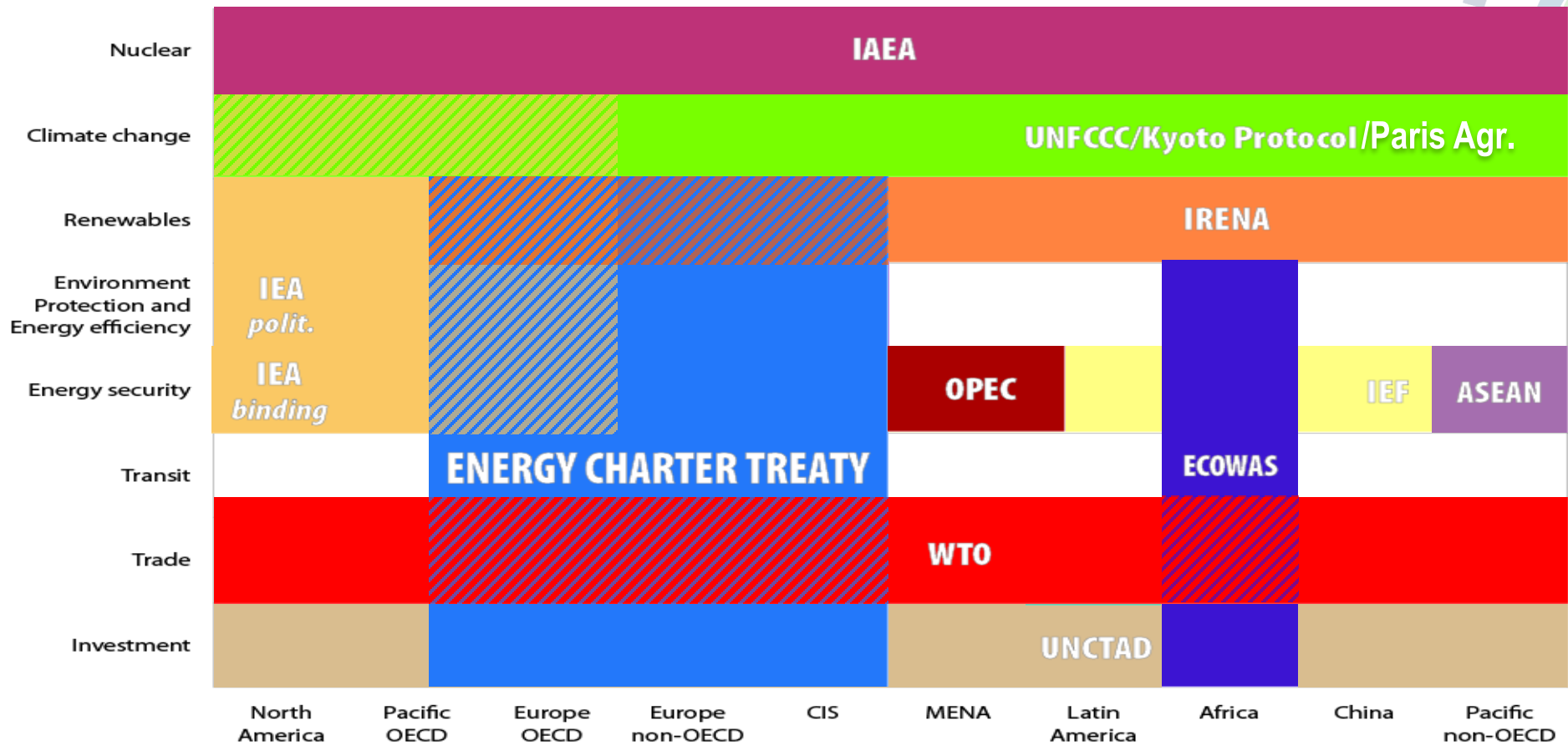
Energy security and the role of transit



Dimensions of energy security



Energy-Related Organisations with More Legally-Binding Requirements



Achieving energy security

- Diversification of supply sources and routes
- Supply expansion
- Stockpiling of energy reserves
- Energy subsidies
- Demand control
- Security measures
- Energy trade



Recap and practice

- What are the priorities of your government in terms of energy security?
- Which energy security policy options and measures are currently being implemented in Mongolia?
- In your opinion, which of them are the most promising to meet the strategic goals?



EU Energy Security

- Secure gas supplies
- Diversification of gas supply sources and routes
- EU oil stocks
- Offshore oil and gas safety
- Oil and gas licensing
- Security of electricity supply
- Critical infrastructure and cybersecurity
- Energy supply and pandemics



What is energy transit?



International legal frameworks on transit

- General conventions and agreements:
 - 1921 Barcelona Convention & Statute on Freedom of Transit;
 - 1947 GATT (replaced by 1994 GATT/WTO Treaty);
 - 1965 Convention on Transit Trade of Land-Locked States;
 - 1982 UN Convention on the Law of the Sea (UNCLOS);
 - 1994 Energy Charter Treaty (ECT);
- Special transit agreements (pipeline-specific).

1921 Barcelona Convention & Statute

- General rules related to transit
- Not applicable to pipelines, but...
- Main provisions:
 - ‘Non-discrimination’
 - ‘Reasonable transit tariffs’
 - ‘Non-deviation’ from the conventional provisions, except in case of an emergency affecting the safety or the vital interests of the transit State.

1947 GATT, Art. V

- Applies to the transit of goods (“traffic in transit”)
- Transit States’ obligations regarding:
 - “non-discrimination”
 - imposition of “reasonable charges and regulations”
 - “exemption” from customs duties and all other transit duties or charges (with some exceptions with respect to transportation charges, administrative expenses, or costs of services)
- Art V incorporates a “most-favoured-nation treatment” clause with respect to all charges, regulations and formalities in connection with transit, as well as with respect to products, which have been in transit through the territory of any contracting party
- New GATT/WTO Agreement adopted in 1994 did not introduce any changes to the provisions of Art V
- The freedom of transit under Art V reflects to a large extent the principles embodied in the 1921 Barcelona Convention.

Transit Trade of Land-Locked States

1965 Convention:

- Objective: access to the high seas for LLS;
- Does not immediately apply to pipelines but parties may agree to include them;
- Main provisions: 'freedom of transit', 'non -discrimination', 'non-interruption' (except in cases of force majeure).

1982 UNCLOS:

- The right of access & transit of LLS to & from the sea;
- LLS and transit States may, by agreement between them, include as means of transport pipelines;
- A general right of all States to lay submarine cables & pipelines on the continental shelf of third states.

Transit in multilateral trade framework

- Energy trade is covered by general WTO rules
- BUT general transit rules are not designed to tackle :
 - Access to infrastructure and conditions of access, tariffs
 - Creation of new infrastructure
 - Non-interruption of flow (incl. dispute), etc.
- + Energy companies-incumbents can obstruct transit
- Many transit states are not WTO Members
- The ECT contains a balanced approach facilitating transit based on non-discriminatory & transparent rules
- Art. 7 of ECT: Freedom of energy transit, based on GATT

What is special about energy transit?

- Energy transportation is capacity restricted and energy is difficult to store => time aspect matters
- Reliance of energy trade on fixed infrastructure - built specifically for transporting energy;
- Energy transportation remains very expensive - significant share of the overall cost/large economy of scale
- Fixed infrastructure investment – capital intensive;
- Energy transportation is capacity restricted;
- Pipelines/grids often controlled by incumbent companies, natural monopoly, access to pipelines;
- Sensitive for energy security.

Energy Charter Treaty

- Specifies GATT V:
 - for Energy Materials and Products and
 - for grid bound energies
- Non-discrimination as to origin, destination or ownership
- Facilitate transit and secure established transit flows
- Not to impede the creation of new capacity
- Non-interruption of flow (including in a case of dispute)
- Obligation not to obstruct the establishment of new capacity
- Conciliation procedure for transit disputes



ECT Article 7 on Transit: coverage

Transit of *Energy Materials and Products*

Crude oil, oil products, natural gas, electricity, coal

Transit through fixed infrastructure (*Energy Transport Facilities*)

High pressure gas pipelines

High voltage electricity grids and transmission lines

Crude oil transmission lines and product pipelines

Coal slurry pipelines

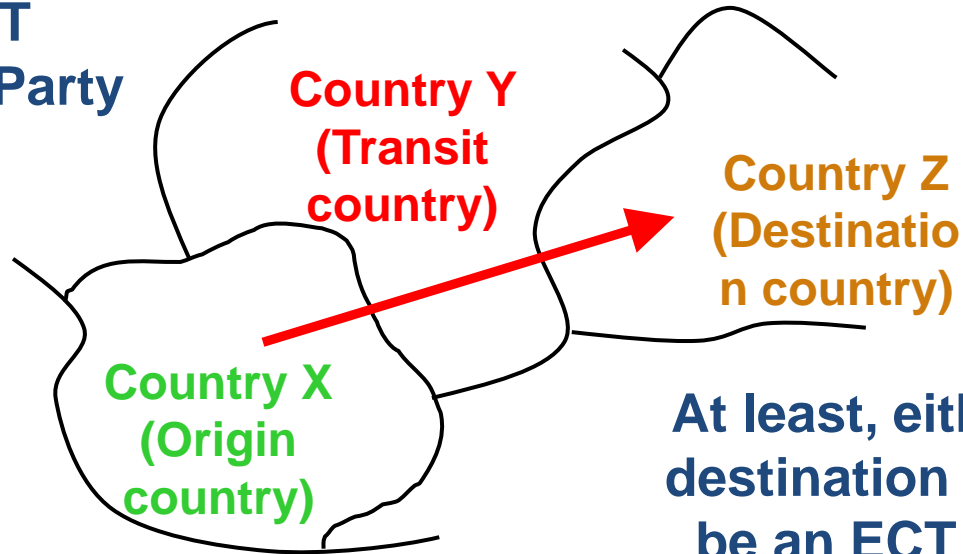
Other fixed infrastructure

Maritime transport excluded

ECT Article 7 on Transit:

What constitutes transit

Transit country must
be an ECT
Contracting Party



At least, either source or
destination country must
be an ECT Contracting
Party

Recap and practice

- What kind of energy infrastructure is covered by the ECT transit provisions?
- What are the obligations of a transit state under Article 7 ECT?
- What is the status of the countries along proposed Economic Corridor in the Energy Charter Conference?



Challenges of energy transit



Draft Transit Protocol

Mandate (1999) by the Energy Charter Conference to negotiate a Transit Protocol to:

- Ensure secure, efficient, uninterrupted and unimpeded transit
- Promote more efficient use of transit infrastructure
- Facilitate the construction or modification of transit infrastructure



Transit Protocol negotiations

Further elaborate and detail the ECT Article 7

Basic text agreed at the end of 2002:

- Definition of available capacity;
- Principles of transit tariffs;
- Transparent and non-discriminatory congestion management rules;
- Detailed provisions for new capacity creation.

Remaining open issues were discussed in bilateral consultations between certain CPs:

- Avoidance of mismatch between the duration of supply and transit contracts
- Application of the TP inside the EU

UNGA Resolution 67/263

- Sponsored by Turkmenistan and 72 UN members;
- The need for extensive international cooperation for promoting the reliable transportation of energy;
- Turkmenistan committed to host international meeting of experts;
- Four expert meetings held so far:
 - Ashgabat (December 2014)
 - Brussels (April 2015)
 - Beijing (November 2015)
 - Tirana (July 2016)



Issues and difficulties of transit

- Investment procedures;
- Access to infrastructure and capacity allocation;
- Transit tariffs;
- Safety, operational and environmental standards;
- Authorisation procedures;
- Cross-border cooperation between network operators;
- Dispute settlement.



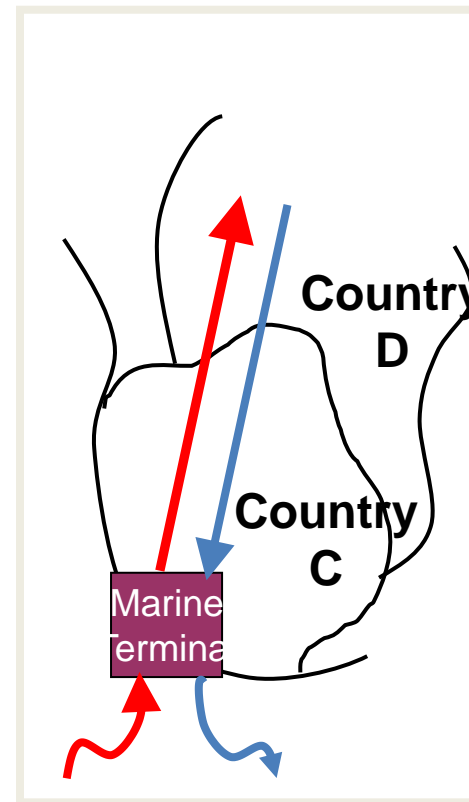
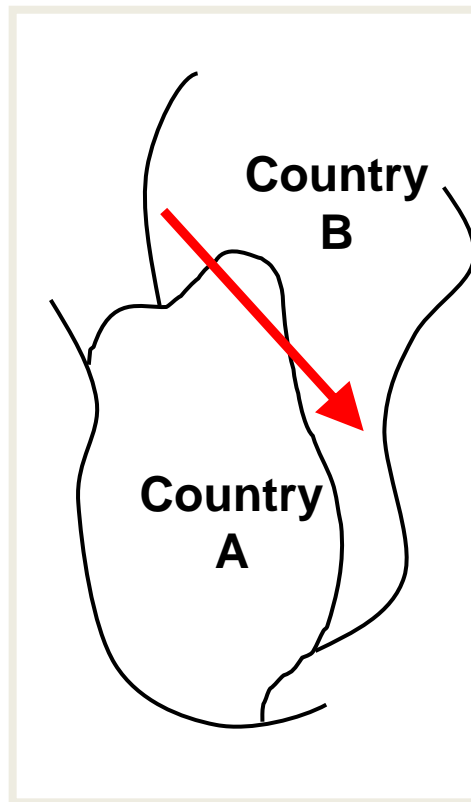
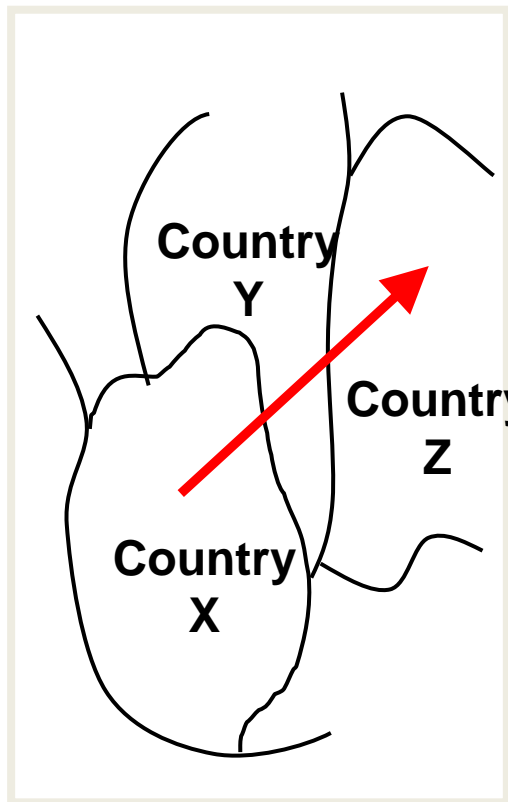
Recap and practice

- Chapter 3 of the Module refers to four types of risks – technical, deliverability, commercial and political.
- In light of the proposed energy corridor, how would you rank these four types of risk?



Organisational aspects of transit

Organisation of transit



Types of transit systems

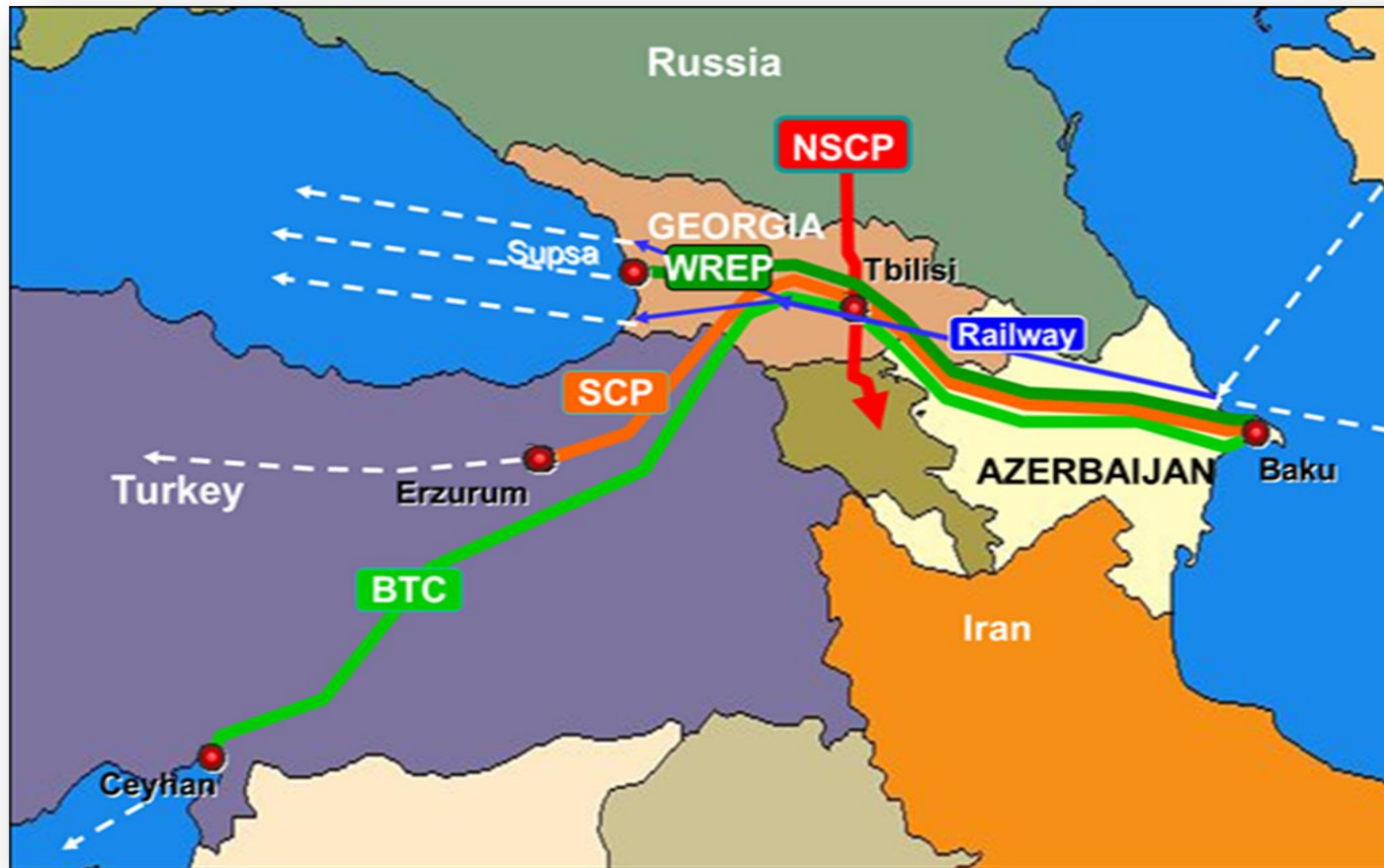
- a. Pipeline crossing the territory and carrying transit gas without any connection to the gas system of the transit country.
- b. Pipeline which is owned by a separate entity and which is used for gas transit, but also to supply gas to the transit country.
- c. Transit pipeline system which is integrated into the domestic supply system and which is owned and operated by the national TSO.
- d. Systems where transit volumes commingle with a highly meshed national grid.



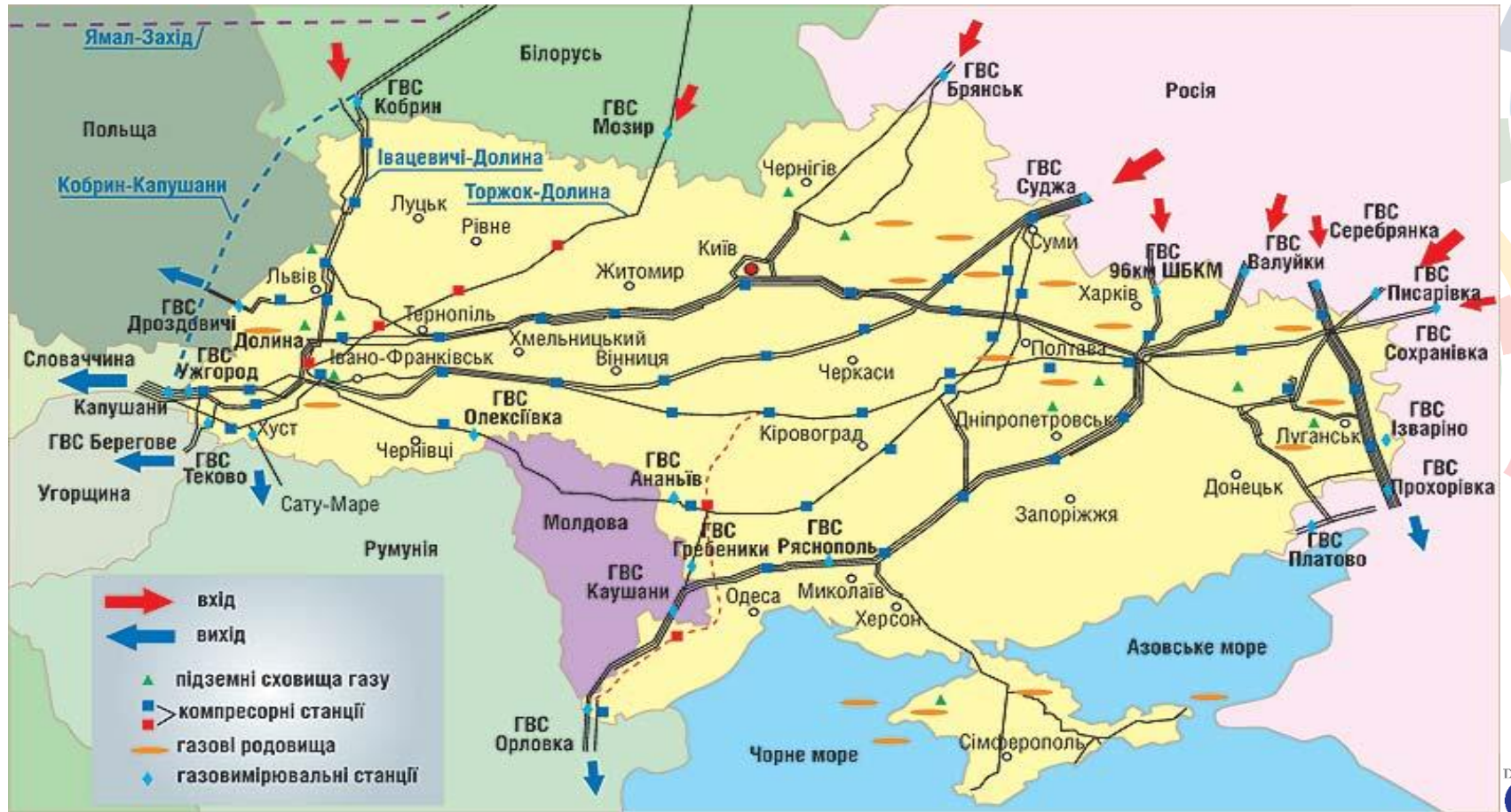
(a) Central Asia – China pipeline



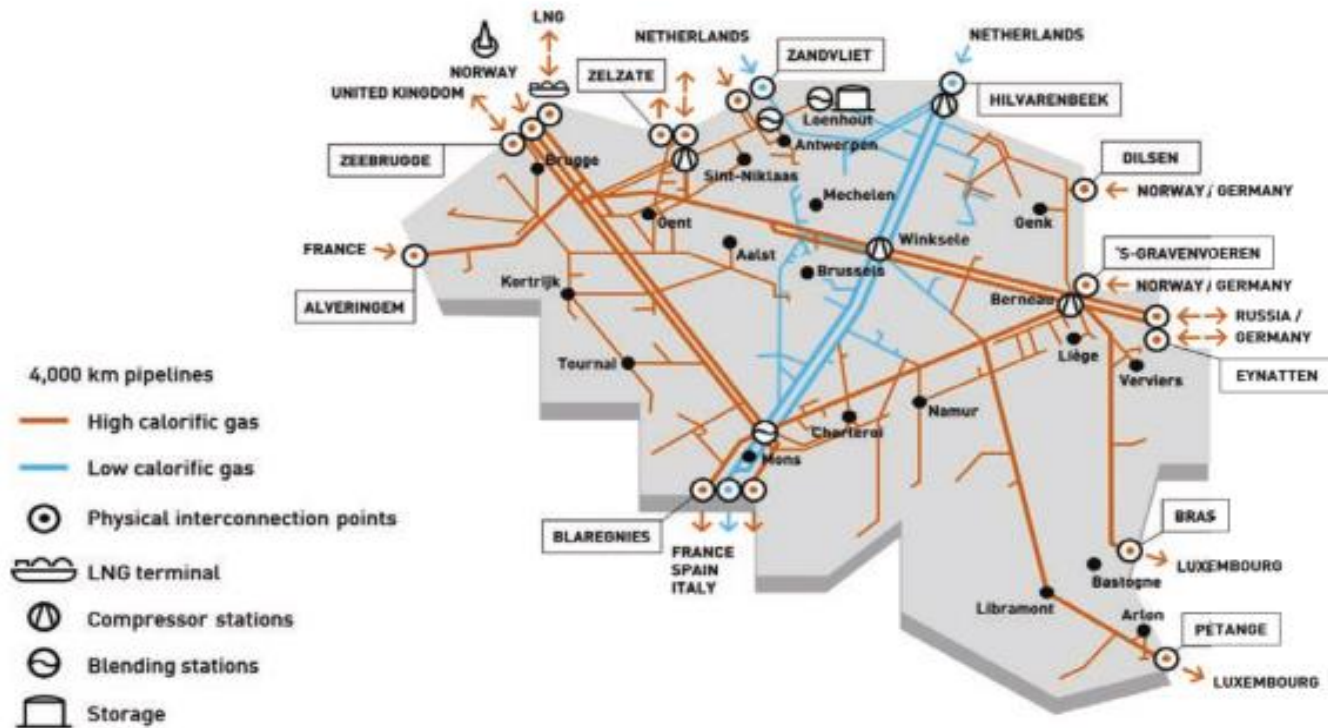
(b) South Caucasus Pipeline



(c) Gas transmission system of Ukraine

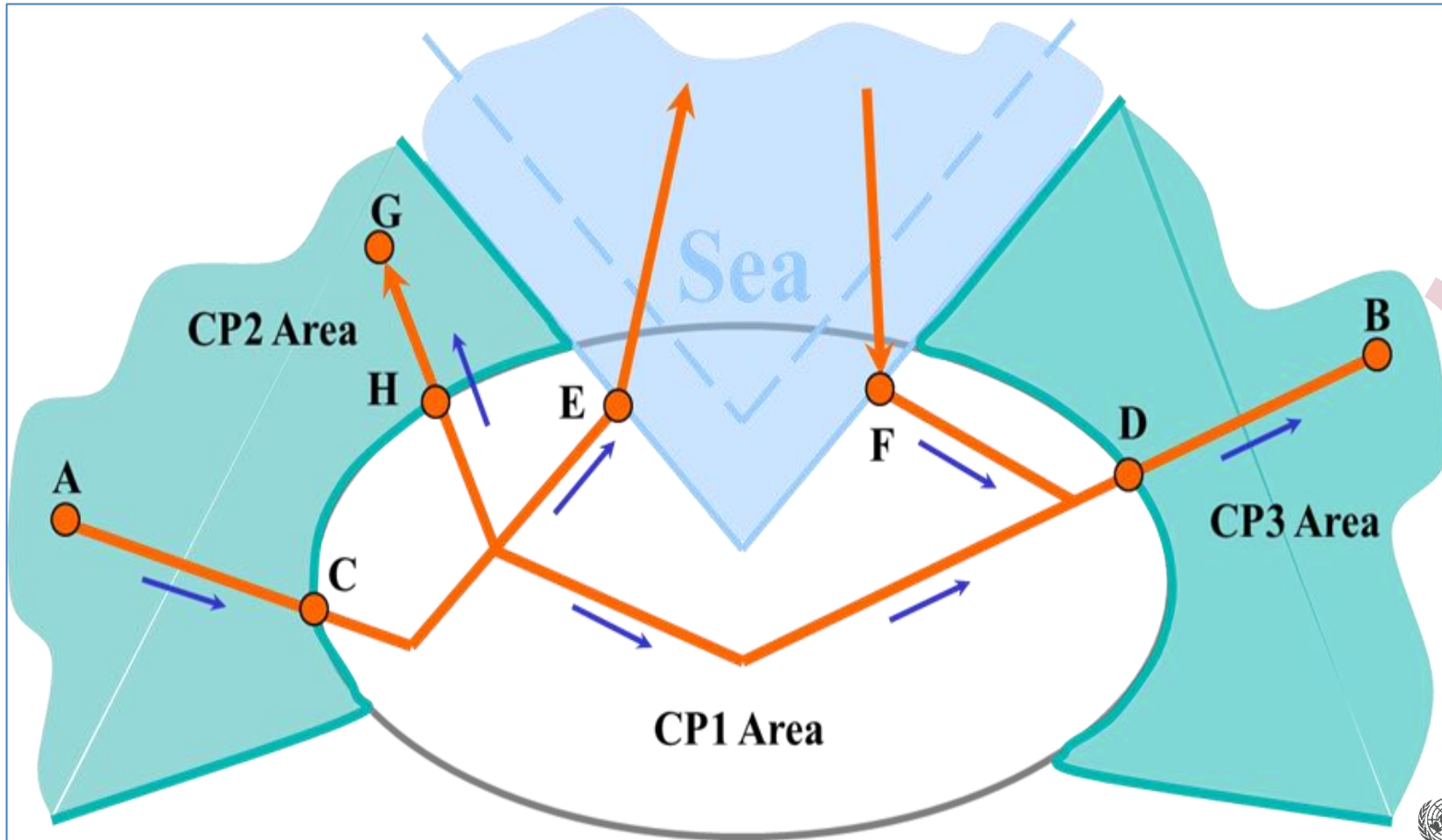


(d) Gas system of Belgium



Fluxis 2018

Transit is not the only option...



Regulatory aspects of transit



Pipeline Economics

- High share of transportation costs in market value (LNG and Pipeline)
- Costs predominantly investment and financing
- Profitability depends on high utilization
- Difference pipeline and LNG:
 - LNG bound to a specific project due to high share of transport costs, but flexible in principal
 - Pipeline investment ties a specific production to a specific market.



ACER

Agency for the Cooperation of Energy Regulators established in 2009 under the 3rd Energy Package:

- complements and coordinates the work of national regulatory authorities,
- participates in the creation of European network rules,
- takes, under certain conditions, binding individual decisions on terms and conditions
- for access and operational security for cross border infrastructure,
- gives advice on various energy-related issues to the European institutions,
- monitors and reports developments at the European energy markets.

ENTSO-G

European Network of Transmission System Operators for Gas established in 2009 under the 3rd Energy Package:

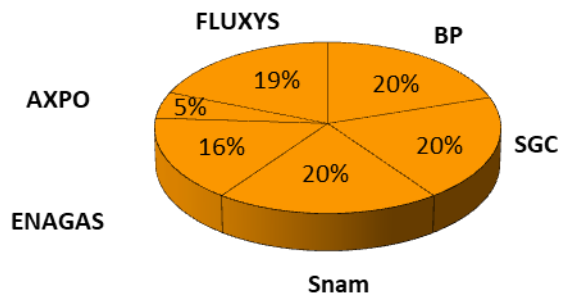
- facilitate and enhance cooperation between TSOs across Europe;
- promote the completion of the internal market for gas and stimulate cross-border trade;
- ensure the efficient management and coordinated operation of the European gas network.



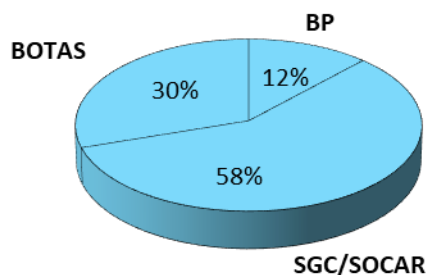
The Southern Gas Corridor



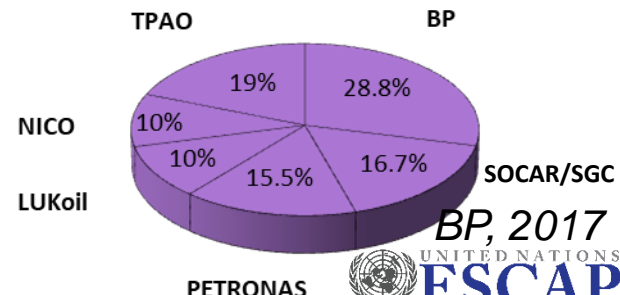
Trans-Adriatic Pipeline (TAP)



Trans-Anatolian Pipeline (TANAP)



Shah Deniz 2 and SCP Expansion (SCPX)



TPA Exemptions

- the investment must enhance competition in gas supply and enhance security of supply;
- the level of risk attached to the investment must be such that the investment would not take place unless an exemption was granted;
- the infrastructure must be owned by a natural or legal person which is separate at least in terms of its legal form from the system operators in whose systems that infrastructure will be built;
- the exemption must not be detrimental to competition or the effective functioning of the internal market in natural gas, or the efficient functioning of the regulated system to which the infrastructure is connected.

Recap and practice

- What is the organisational structure of the energy sector in Mongolia? Briefly describe key entities and their responsibilities.
- What is the role of the Energy Regulatory Authority?
- What are the key functions of the Regulator?



Principles of transit tariffs

- Objective
- Reasonable
- Transparent
- Non-discriminatory
- Cost-based - operational and investment costs, including a reasonable rate of return



Revenue Requirement and Unit Tariff



$$T = R/V$$

R = total planned yearly revenue of the TSO

V = total annual volume of transportation of natural gas

Unit tariff methodology

Postal tariffs

- may be justified by social aspects

Distance-based tariffs

- most useful for linear (transit) flows, cost-reflective

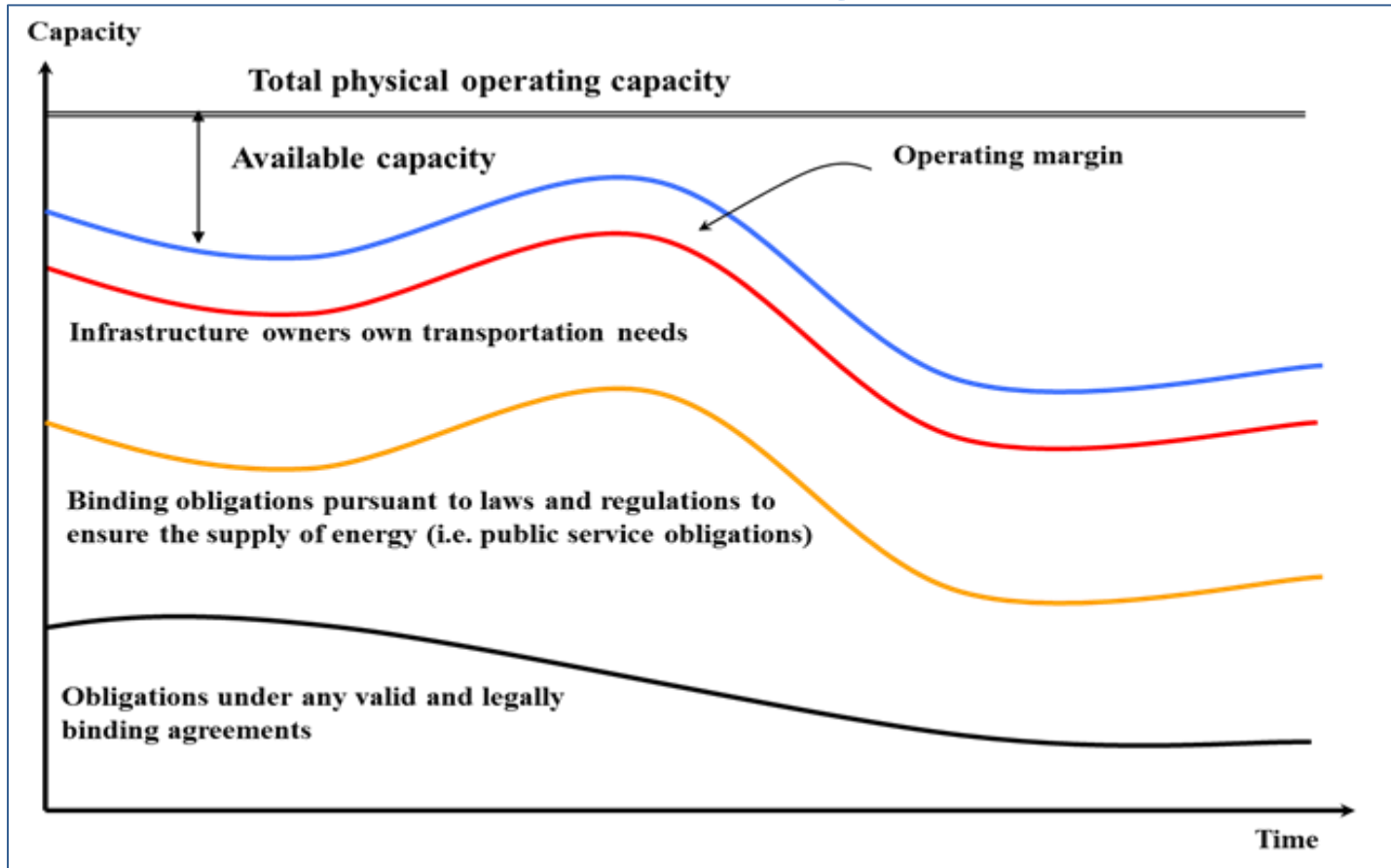
Point-to-point tariffs

Entry-exit tariffs

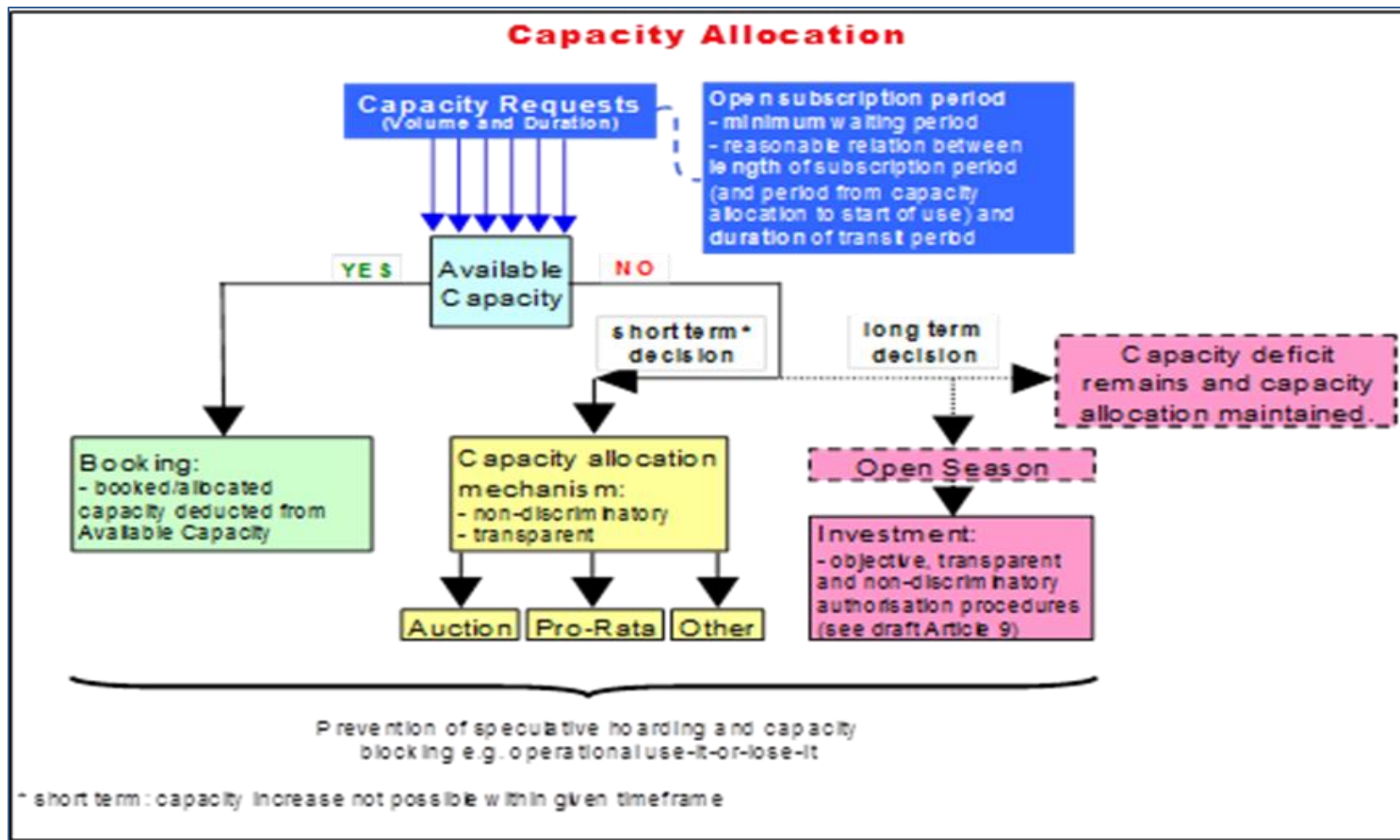
- Complex, but believed to favour efficient allocation of costs and rational use of capacity
- Risk of cross-subsidisation
- Mandatory in EU, but derogations possible



Available capacity



Capacity allocation



Case Study: Transit Tariffs



Oil and Gas Pipelines

Oil Transportation

Owned by GOGC

1. Western Route Export Pipeline (Baku-Supsa Pipeline) (“WREP”)

- /// The WREP is a transit pipeline built to transport crude oil from oil fields in the Caspian region, including the main source of supply, the Azeri-Chirag-Guneshli oil fields, through Azerbaijan to Georgia.
- /// The pipeline connects the Sangachal Terminal in Azerbaijan with the Supsa oil terminal in Georgia, which is owned by the Company.

2. Baku-Tbilisi-Ceyhan Pipeline (“BTC”)

- /// The BTCP is a transit pipeline that transports crude oil extracted from the Azeri-Chirag-Guneshli oil fields from the Sangachal Terminal through Azerbaijan and Georgia to the Ceyhan marine terminal in Turkey on the Mediterranean Sea.

Gas Transportation

Owned by GOGC

1. North South Gas Pipeline (“NSGP”)

- /// Serves to transit natural gas from Russia to Armenia

2. South Caucasus Pipeline (“SCP”)

- /// Transports natural gas from Azerbaijan to Turkey and onward to Europe.

Georgian Oil and Gas Corporation, 2018

North-South Gas Pipeline (NSGP) Overview

Design parameters				Real and Planned Capacity (bcm/y)			Expected load for 2020 (bcm/y)
Length (km)	Diameter (mm)	Pressure (bar)	Design Capacity (bcm/y)	Current Capacity	Actual load 2017	Current Capacity reserve	
253	1200/1000	55	12	8.5	2.0	6.5	2.2

Highlights

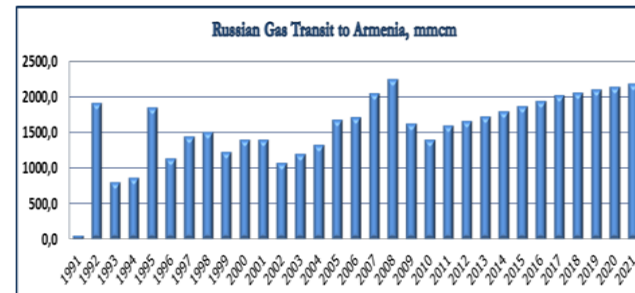
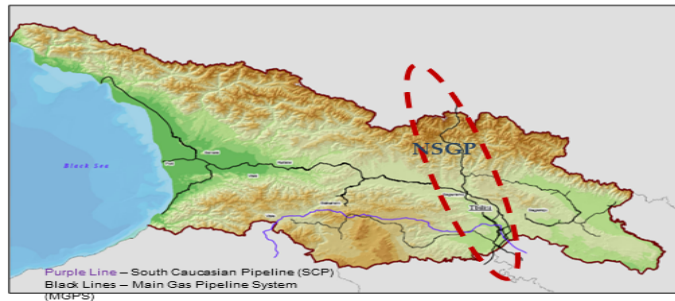
- NSGP is a part of MGPS (Main Gas Pipeline System of Georgia) owned by GOGC.
- It is operated by GGTC.

Utilization and Rehabilitation

- NSGP is dedicated to Russian gas transit to Armenia.
- After rehabilitation NSGP is capable to transport 8.5 bcm gas per year. Installation of two compressor stations along the NSGP will allow further increase of throughput capacity up to 12 bcm/y.

Contractual Framework and Income

- GGTC receives a Transit Fee for transit services and purchase gas volumes with sales and purchase agreement



Georgian Oil and Gas Corporation, 2018

Transit tariffs in Turkey

Transit Tariff?

REPUBLIC OF TURKEY
MINISTRY OF
ENERGY AND
NATURAL RESOURCES



- **Transit Tariff** is a payment made to the transit country for the usage of its territory and/or facilities and business transactions carried out for transit passage of the commodity.

Price of the commodity in transit should not be a component of Transit Tariff calculation methodology.

MENR, Turkey

Transit tariffs in Turkey (cont.)

Transit Tariffs in Turkey

REPUBLIC OF TURKEY
MINISTRY OF
ENERGY AND
NATURAL RESOURCES

Baku-Tbilisi-Ceyhan Crude Oil Pipeline:

(TRANSIT TARIFF= TAXES AND OPERATING FEE)

- MEP Participants exempted from all taxes in Turkey instead they are liable to pay a fixed amount of Corporation Tax.
 - Corporation tax is a fixed rate for per barrel crude oil in accordance with the terms defined in the HGA.
 - As the Turkish section of the pipeline operated by BIL (a state owned company), MEP Participants are also subject to pay an 'operating fee' for per barrel crude oil transported through the Turkish section of the pipeline.
 - Lower rates for the Corporation tax and operating fee were set for the initial operation period in order to promote the investment.
 - Nonenforcement of discriminatory tax measures have ensured.

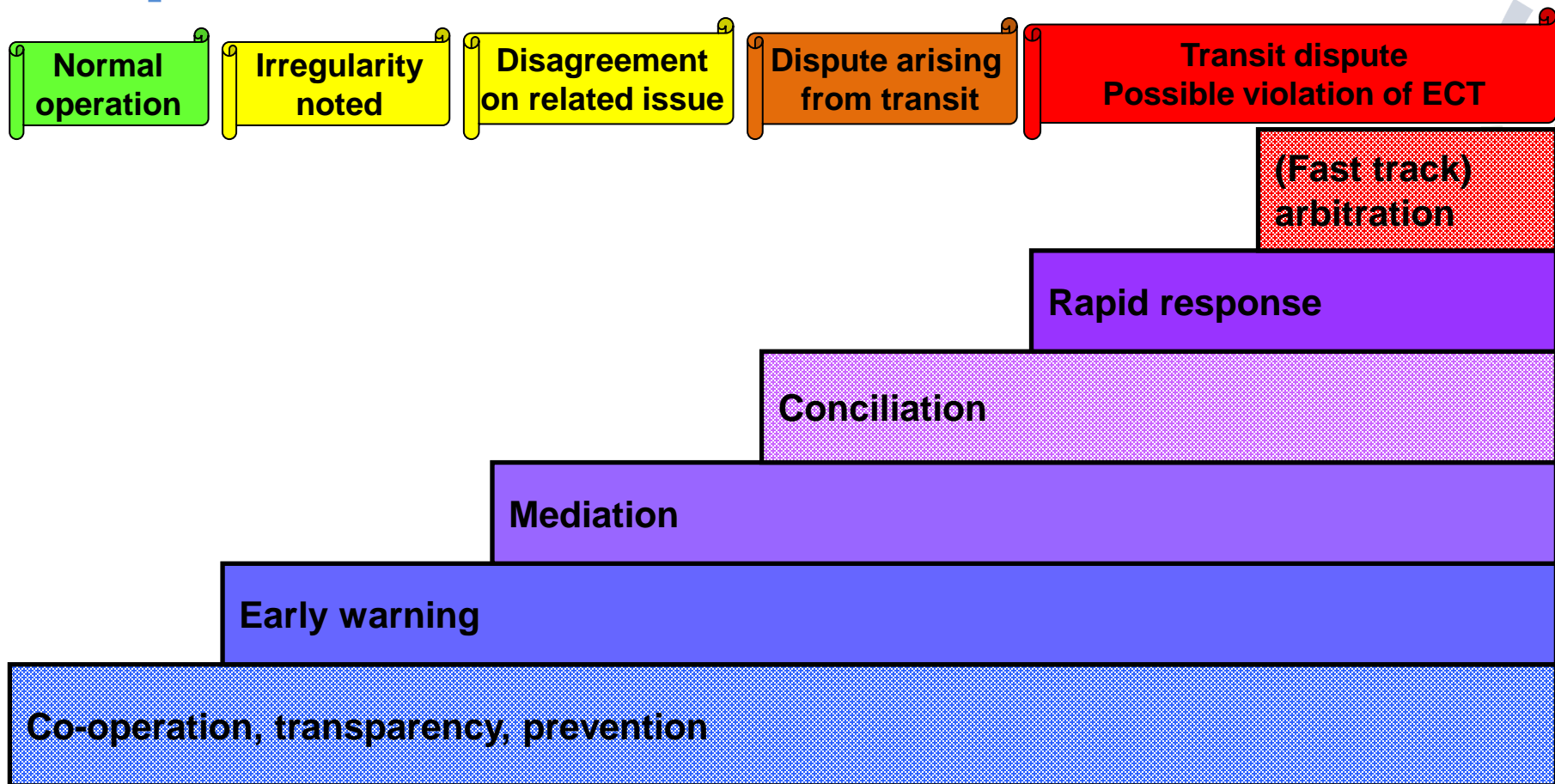
Collection process of tax related to oil and gas transportation, under the 'Corporation Tax' as a single tax item, is preferable both in terms of project finance and predictability of the investment.

MENR, Turkey

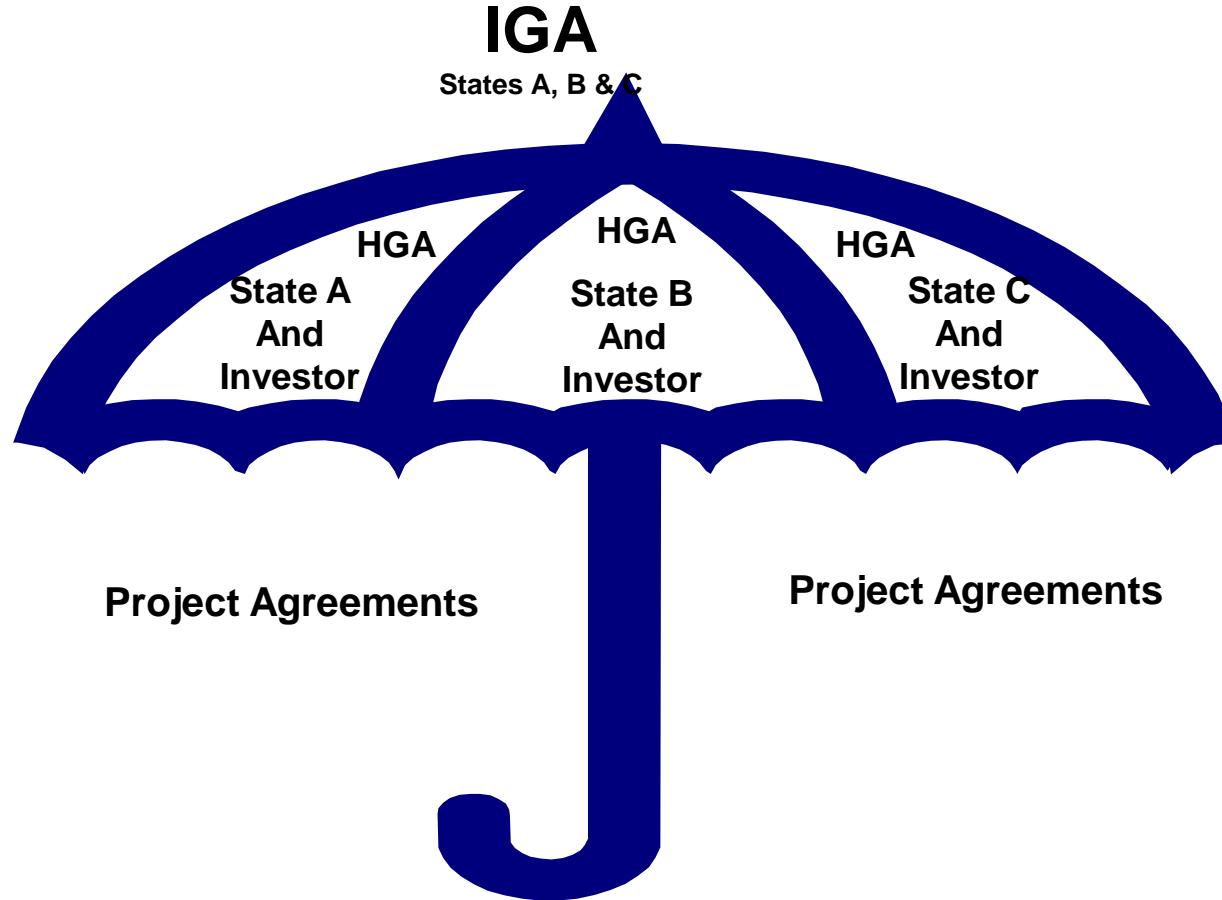
Instruments facilitating transit



Dispute Settlements



Model Agreements



Model Agreements for Cross-Border Pipelines

- Work on Model Agreements in conjunction with the development of the Transit Protocol
- A Legal Advisory Task Force on Model Agreements (LATF) established by the Energy Charter Secretariat elaborated Model Agreements for:
 - **Intergovernmental Agreements (IGA)**
among the states through whose territories an identified pipeline system is to be constructed and operated
Horizontal issues concerning the pipeline infrastructure as a whole – co-operation, land rights, tax structures, issues relevant to the implementation of the project
 - **Host Government Agreements (HGA)**
between individual states within whose territory the pipeline system is to be realized and the project investor(s)
Vertical issues concerning the project activity within the territory of each state – governmental obligations, investor duties, relevant standards, liability, issues relevant to the implementation of the project in each specific territory

The Model Agreements package

- Model Agreements (MA) – a practical guide to international best practice
- Model IGA and HGA – a package approach
- Basis of the package approach:
 - IGA and HGAs are interdependent and linked
 - IGA is an international treaty; HGAs are State contracts
 - Entry into force of HGAs is conditional on that of the IGA
 - All agreements refer to one identified project with identified project investors
 - MA updated periodically

Legal framework of TAP

Solid contractual framework

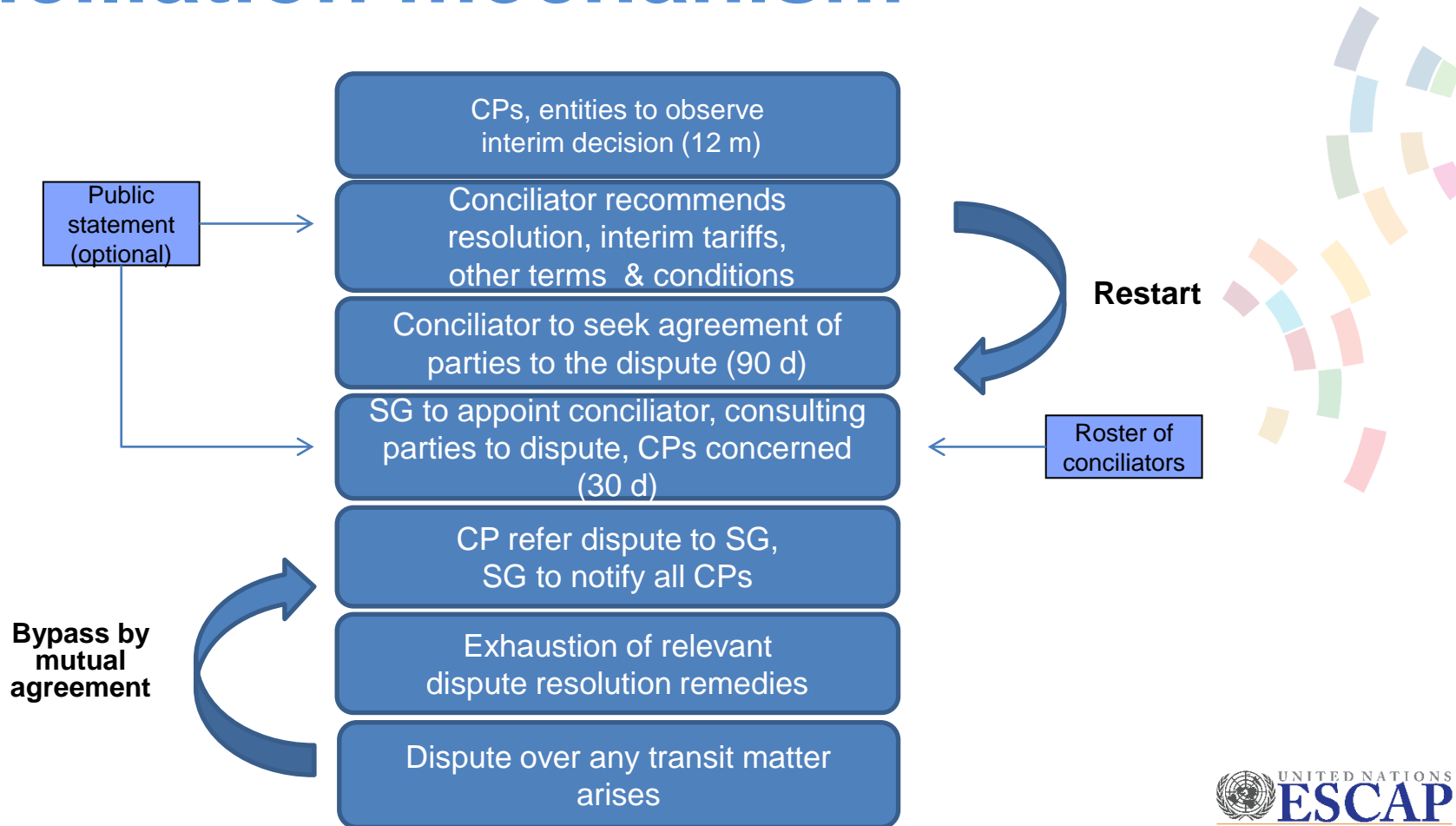
Key elements underpinning the TAP project



TAP, 2016

Note: GTAs and GSAs have been directly negotiated by the SD Consortium

Conciliation mechanism



Early Warning Mechanism

Underlying principles:

- Mechanism for preventive diplomacy, confidence building and emergency measures
- Based on voluntary acceptance by the Parties

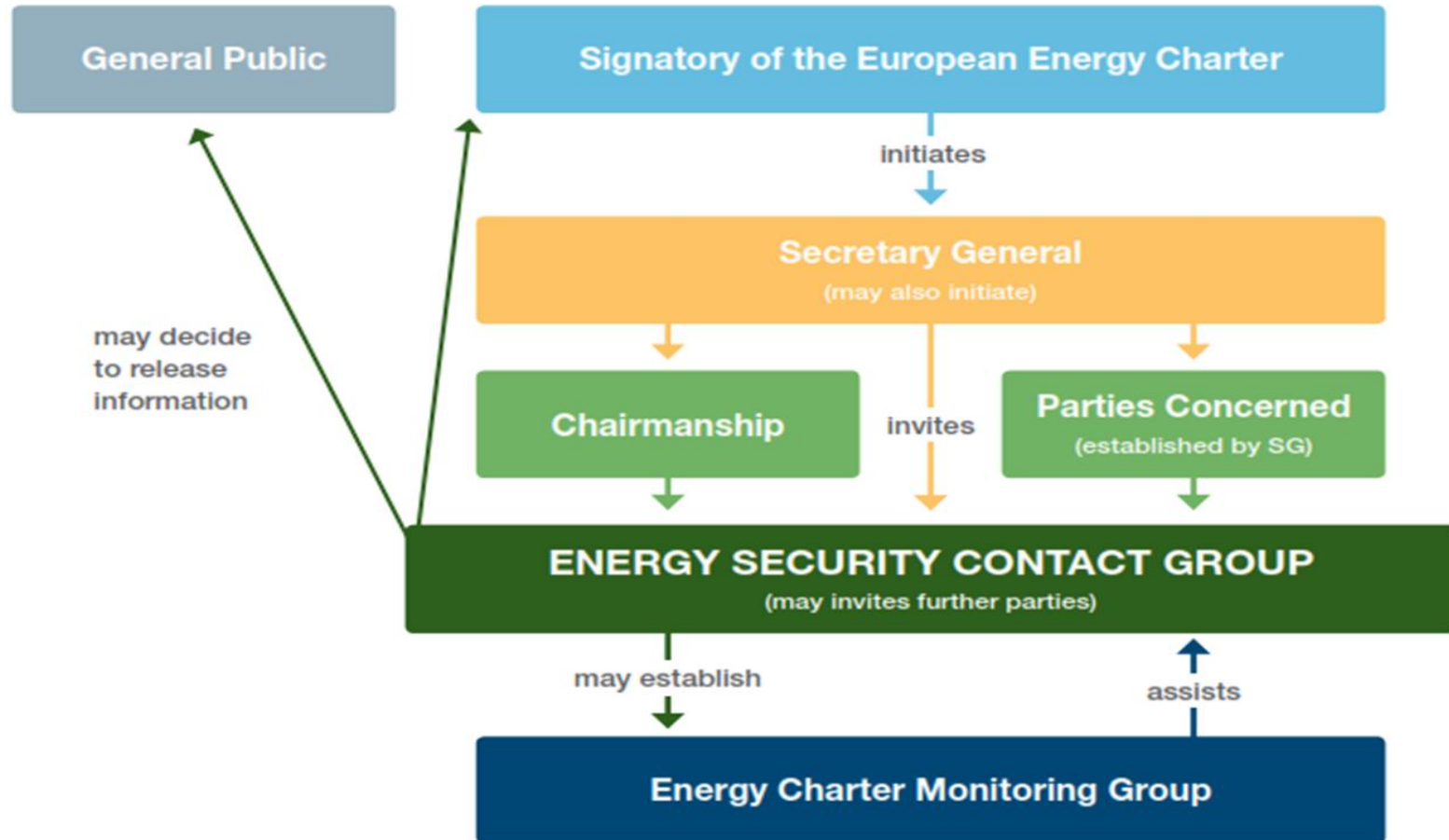


Mandate

Prevention of emergency situations and rapid response, model mechanisms for preventing and overcoming interruptions of energy supplies through pipelines and grids:

- Draw on the examples of existing bilateral early warning mechanisms
- Explore the possibility of making use of this experience in the multilateral context
- Use the Energy Charter's policy forum (Conference, subsidiary bodies, the Secretariat) to exchange information among the member states on developments that might imply risks to the energy security of a country or region

Case study - Functioning of the EWM



EWM – public communication



INTERNATIONAL
ENERGY CHARTER

 [PROCESS](#) ▾ [WHAT WE DO](#) ▾ [WHO WE ARE](#) ▾ [MEDIA](#) ▾ [CONTACT](#)

Media / Events

Energy Security Contact Group on the energy situation in Ukraine: Meeting on 4 April 2014

8 April 2014 | [News](#) | [Transit](#) | [Trade](#)

The **Secretary General Dr. Rusnák** chaired the fourth meeting of the Energy Security Contact Group on the **Ukraine** Crisis attended by representatives of **Kazakhstan** (holder of the organisation's chairmanship in 2014), the **Russian Federation**, Ukraine and the **European Union** on 4 April 2014. The meeting was held at the office of the **Energy Charter Secretariat**.



The Secretary General reiterated the proposal which he had first outlined at the second meeting of the Contact Group on 13 March 2014. His proposal was that having learned the lessons from the previous crises in 2006 and 2009, a system for collecting relevant data on the physical flow in gas, oil and electricity be put in place by the Energy Charter Secretariat. This would benefit the Contact Group discussions and build confidence among the parties concerned.

It was agreed that the Contact Group would convene again when the representatives of the Russian Federation and Ukraine had received instructions from their respective capitals on the provisions of the necessary data, or on any other alternative proposal which might be addressed in the format of the Contact Group.



EASAP
Economic and Social Commission for Asia and the Pacific

Thank you

