

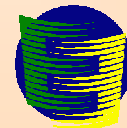
**Towards a single Eurasian energy market:
the role of the Energy Charter process**

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Deputy Secretary General
The Energy Charter Secretariat**

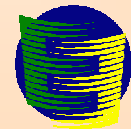
**Conference on Natural Gas Markets, Supply and Technology
1-2 July 2003, Paris**

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- 1. Energy markets development trends, incl. evolution of pricing mechanisms and contractual structures**
- 2. Evolution of energy security concepts and its legal instruments**
- 3. The LTC issue**
- 4. Energy Charter process and what is its value for gas business**
- 5. Energy Charter Transit Protocol: key elements**
- 6. Russian position on ECT and gas transit: major concerns and draft solutions**
- 7. Conclusions**



1. Energy markets development trends, incl. evolution of pricing mechanisms and contractual structures



EVOLUTION OF GAS MARKETS DEVELOPMENT

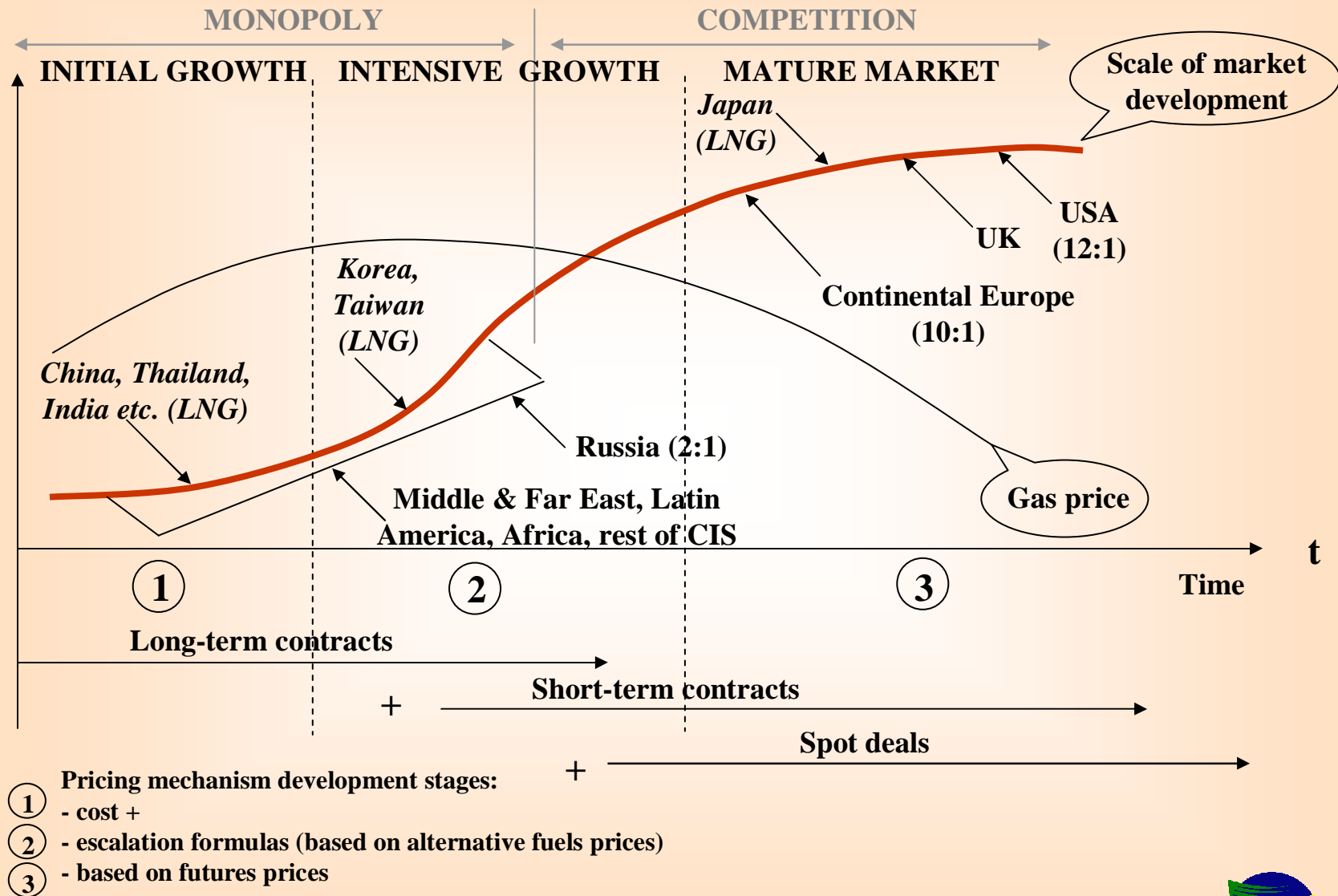
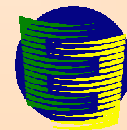


Figure 1

2. Evolution of energy security concepts and its legal instruments



ENERGY SECURITY

***ENERGY SECURITY* = stable, cheap & environmentally friendly energy cycle (primary supplies + transportation + refining + transformation + final consumption)**

***ENERGY SECURITY* =**

- (1) minimum volume risk +**
- (2) minimum price risk**

EVOLUTION OF *ENERGY SECURITY* INSTRUMENTS:

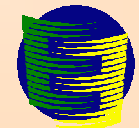
- (1) colonies + traditional concessions,**
- (2) military instruments + modernized concessions, PSAs, RSCs,**
- (3) strategic reserves + stocks,**
- (4) international law instruments**

EFFECTIVE *ENERGY SECURITY* INSTRUMENTS are different at different stages of energy markets development:

- from monopoly to competition as a driving force of energy markets development,**
- from energy independence to energy interdependence,**
- from local markets of individual energy resources to global energy market**

Further to growth of energy interdependence, international law becomes more and more effective (relatively cheap per unit of supplies/final consumption) instrument of providing *energy security*

Figure 2



DEVELOPMENT OF ENERGY MARKETS AND MECHANISMS FOR INVESTORS PROTECTION / STIMULATION

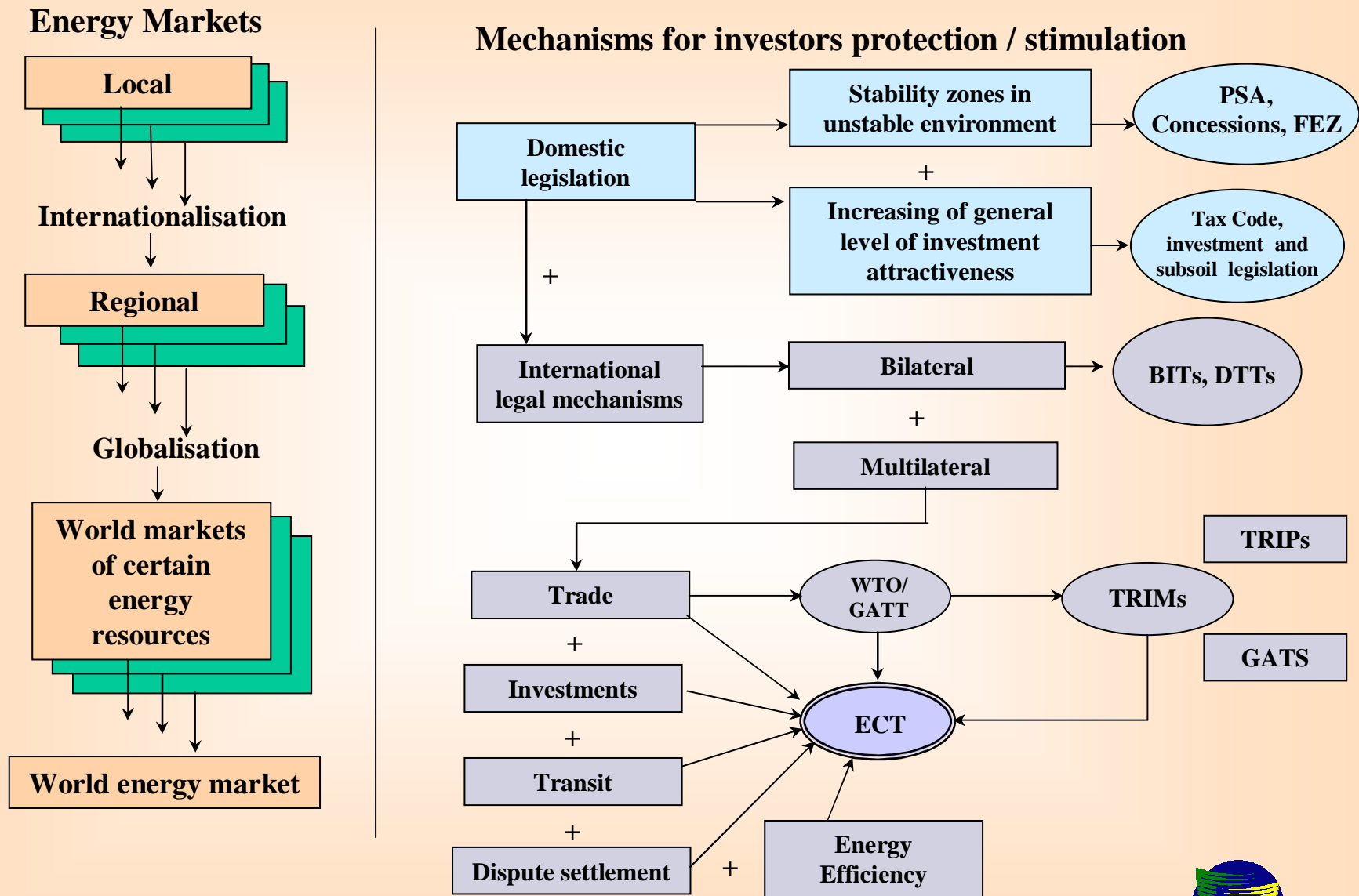
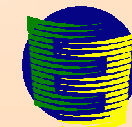
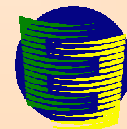


Figure 3



2. The LTC issue



ROLE OF THE LONG TERM CONTRACTS

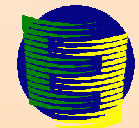
At initial stages of market development LTCs plays role of (the then almost absent) legislation, i.e. LTC secure investor from common & specific risks:

- (a) common risks = due to low state of development of legal environment,**
- (b) specific risks = related to particular energy supply projects**

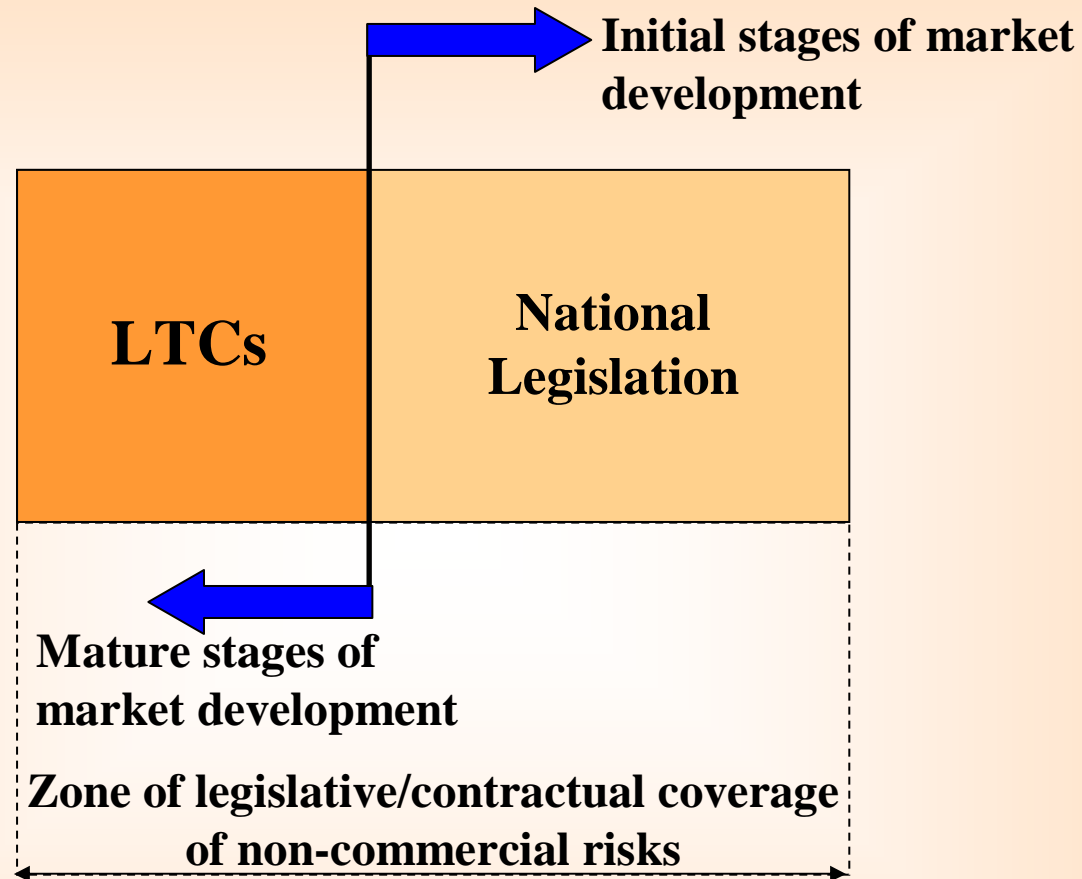
LTC = analog to PSA = anclave of stability = effective way to diminish project financing risks

Two ways of further development:

- (1) framework of LTCs (analogy to BITs), but:
high probability that due to confidentiality clauses conditions of different LTCs will differ => model LTC (?)**
- (2) development of legislation that will cover major common risks, previously covered by LTCs**

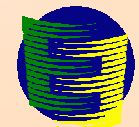


ENERGY MARKETS DEVELOPMENT : LTCs vs. NATIONAL LEGISLATION



Further to development of national legislation, LTC-zone will diminish due to objective reasons, but some effective niche for LTCs will be left anyhow

Figure 5



GAS: DIFFERENT PROJECTS – DIFFERENT CONTRACTS

(1) New projects in mature regions with existing infrastructure, with available transportation capacities (usually less capital-intensive projects, relatively small to the existing market) =

(a) short-term contracts (“take and/or pay”) – for the duration of payback period (?)

(b) spot deals – when payback period is over (?):

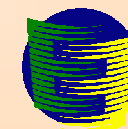
- dated
- forward
- futures

Regions: Western, Central & Eastern Europe

(2) New projects in new regions with no/lack-of infrastructure for both production and transportation (usually more capital-intensive projects, relatively big to the existing market) =

(a) long-term “take and/or pay” contracts

Regions: Russia, CIS, Asia



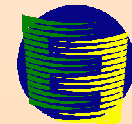
GAS: LONG-TERM TAKE AND/OR PAY CONTRACTS (LTC TOP) AND PROJECT FINANCING RISKS

$$\text{Financing} = f(\text{revenue}) = f(\text{volume} \times \text{price})$$

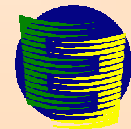
- (1) LTC TOP = mechanism of supply risks («volume» risks) reduction**
 - (2) LTC TOP + adequate pricing mechanism = mechanism of “price” risks reduction:**
 - prior to exchange pricing: escalation formulas**
 - exchange pricing: futures + hedging**
- (1) + (2) = mechanism of project financing risks reduction (long-term capital-intensive Greenfield projects, i.e. in new regions with no/lack-of production & transportation infrastructure)**
-
-

LTC TOP as a mechanism of risks reduction related to investments into new (Greenfield) gas projects yet has no alternatives at the emerging energy markets

Figure 7



4. Energy Charter process and what is its value for gas business



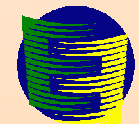
ENERGY CHARTER HISTORY

June 25, 1990	Lubbers' initiative on common broader European energy space presented to the European Council
December 17, 1991	European Energy Charter signed
December 17, 1994	Energy Charter Treaty (ECT) and Protocol on Energy Efficiency and Related Environmental Aspects (PEEREA) signed
16 April, 1998	ECT enters into force
As of today	<ul style="list-style-type: none"> • ECT signed by 51 states + European Communities = 52 ECT signatories • ECT ratified by 46 states + EC (excl. 5 countries: Russia, Belarus, Iceland, Australia, Norway) • Russia and Belarus : provisional application of ECT

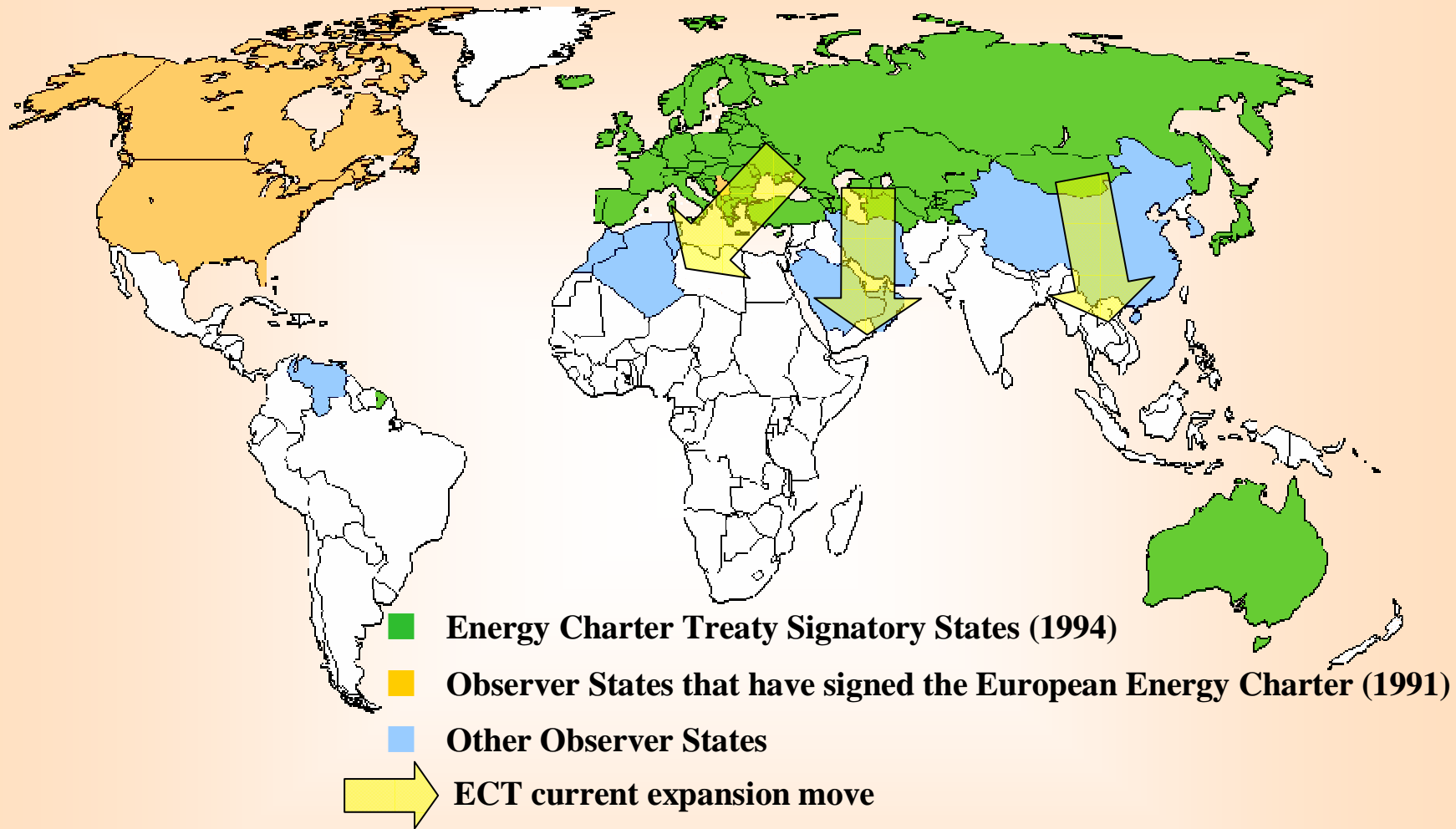
Russia has started ratification process in 1996

RF State Duma (2001): Russia will ratify ECT, but not yet (depending on Transit Protocol)

Figure 8



ENERGY CHARTER TREATY: GEOGRAPHY



1. From trans-Atlantic political declaration to broader Eurasian single energy market
2. ECT expansion is an objective and logical process based on economic and financial reasons

Figure 9



ENERGY CHARTER AND RELATED DOCUMENTS

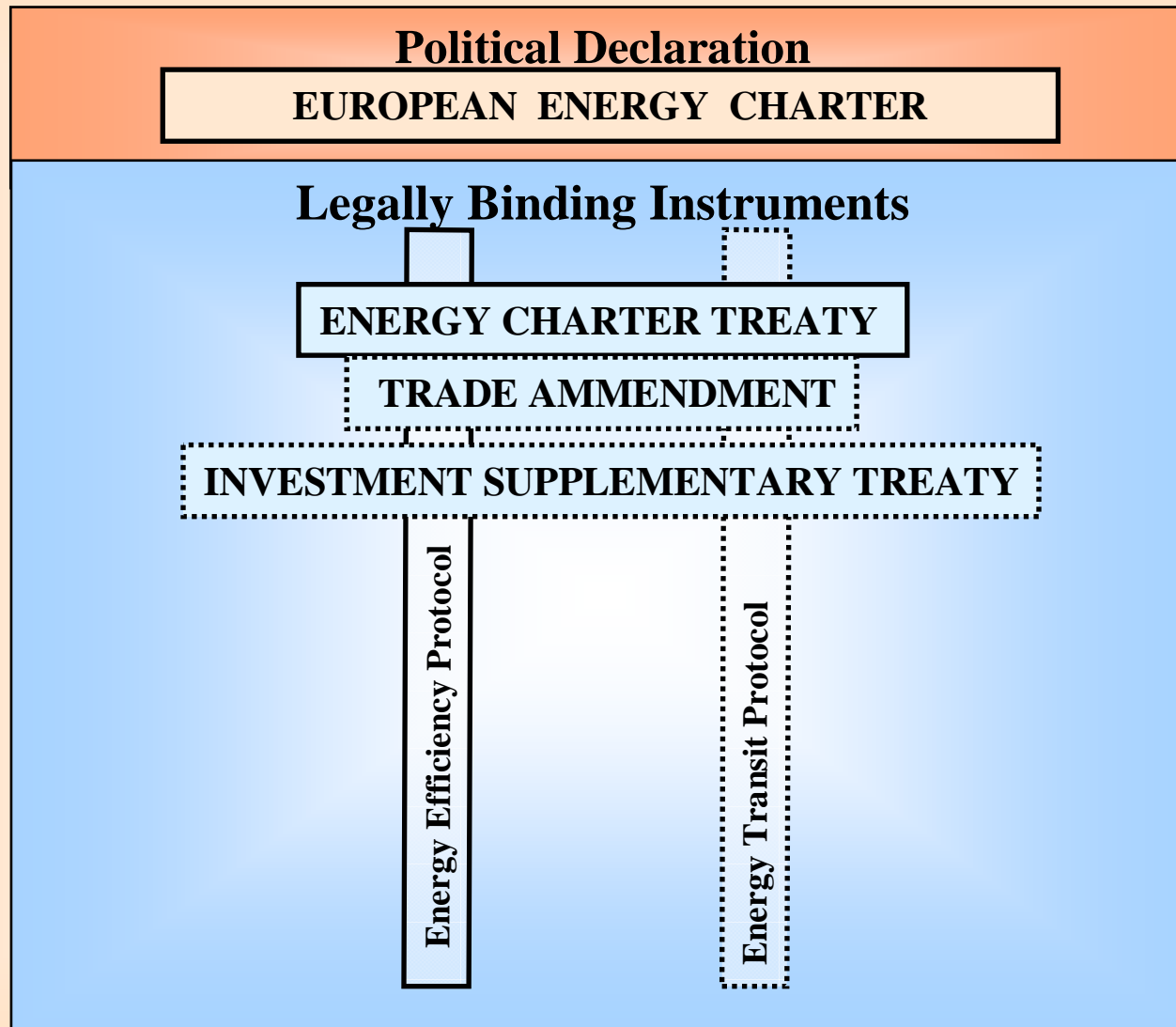
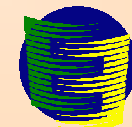


Figure 10



FINANCING ENERGY PROJECTS: FROM EQUITY TO DEBT FINANCING

Equity/debt financing ratio:

Pre-1970's = ~ 100 / ~ 0

Nowadays = ~ 20-40 / ~ 60-80,

f.i. most recent:

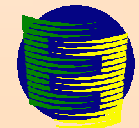
BTC pipeline = 30 / 70

Sakhalin-2 (PSA) = 20 / 80

(2 fields+pipeline+LNG plant)

- ➔ Increased role of financial costs (cost of financing) of the energy projects
- ➔ Availability and cost of raising capital = one of major factors of competitiveness with growing importance in time

Figure 11



RUSSIAN GAS FOR EUROPE

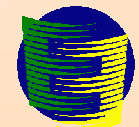
Competitive disadvantages (distances, natural conditions of producing areas)

→ Highest stimuli to diminish technical and financial costs of production and transportation

(a) technical costs ← investments ← legal environment in host and transit countries

(b) financial costs ← cost of capital ← credit (sovereign, corporate, project) ratings ← legal environment

**→ ECT and related documents =
= common legal environment, minimizing risks and technical and financial costs**



ECT IS BUSINESS-ORIENTED TREATY

ECT/Legislation → ↓ risks → ↓ financial costs (cost of capital) = ① →
 ↑ inflow of investments (i.e. ↑ FDI, ↓ capital flight) → ↑ CAPEX → ↓ technical costs = ② →
 ① + ② = ③ → ↑ pre-tax profit → ↑ IRR (if adequate tax system) → ↑ competitiveness →
 ↑ market share → ↑ sales volumes → ↑ revenue volumes

ECT provides multiplier legal effect in diminishing risks with consequential economic results in cost reduction and increase of revenues and profits

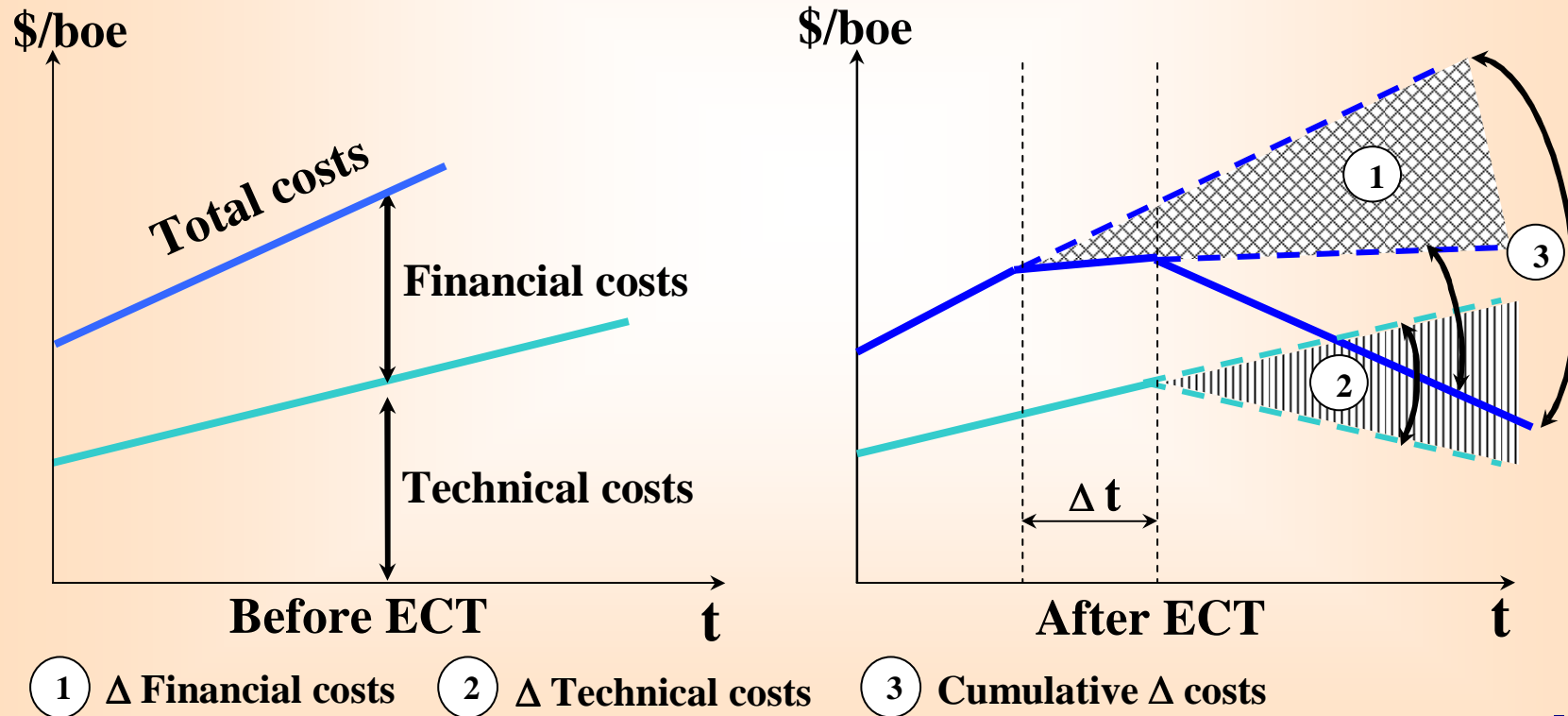
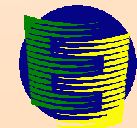


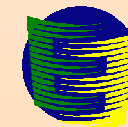
Figure 13



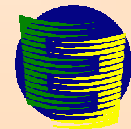
ECT PROCESS: THEN & NOW

	INITIALLY	CURRENTLY
Driving force	Motivated & dominated by interests of consumers	Consumer-producer balance of interests
Policy vs. economy dominance	Politically initiated	Economically driven
Approach to energy security	Physical security of supplies from economies in transition	Security of supplies + security of demand (by economic, not administrative means)
Geography	(1) “Trans-Atlantic” Europe (i.e. in political / OSCE terms) (2) OECD+CIS+EE	(1) Broader Eurasia, incl. North Africa, Australasia (i.e. in energy & economic terms) (2) OECD+CIS+EE+others
Competitiveness	To decrease final energy prices to consumers even by diminishing producer’s ROR	To decrease full investment-cycle risks → to diminish both technical & financial costs → to increase competitiveness and protect adequate ROR at each step of energy & investment cycle

Figure 14



5. Energy Charter Transit Protocol: key elements



ENERGY CHARTER WORLD AND MAJOR ENERGY FLOWS IN THE EASTERN HEMISPHERE

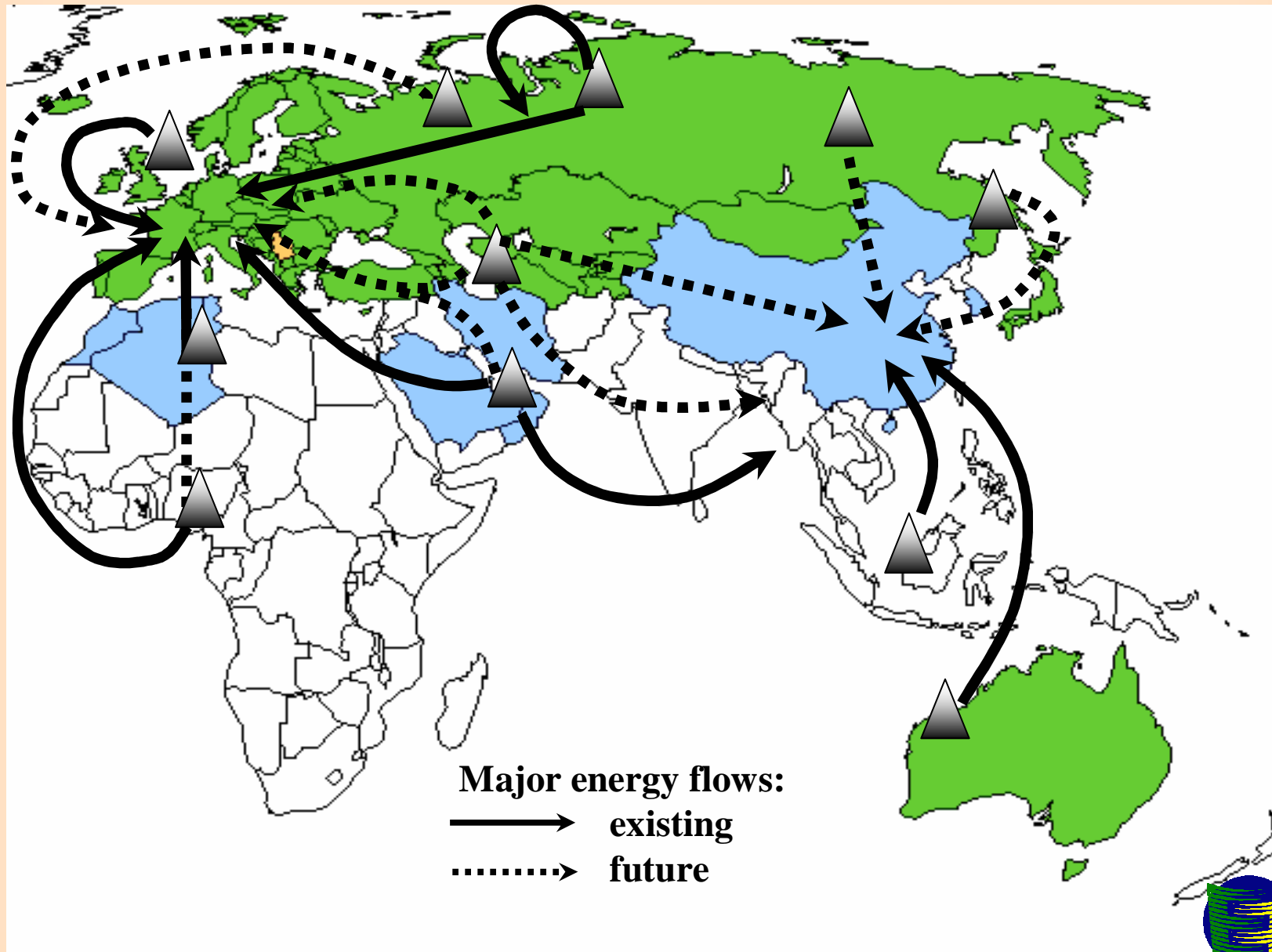


Figure 15

GAS TRANSIT ROLE FOR MAIN EXISTING (1999) AND PROSPECTIVE EXPORTERS TO EUROPE

Country-exporter	Direct supplies, % of volume of exports	Transit through the territory of: % of volume of exports			
		one country	two countries	three countries	four countries
EXISTING EXPORTERS					
Netherlands	76,2	13,8	10,0	-	-
Norway	67,7	7,5	21,4	3,4	-
Algeria	44,9	14,8	9,6	24,3	6,4
Russia	39,5	9,4	11,4	28,1	11,6
PROSPECTIVE EXPORTERS					
Turkmenistan:					
- NW bound	√	--	--	--	--
- SW bound (x)	--	√	√	√	√
Kazakhstan:					
- NW bound	√	--	--	--	--
- SW bound (x)	--	--	--	--	?
Azerbaijan (x)	--	√	√	√	√
Iran (x)	√	√	√	√	√
Nigeria	--	--	√	√	√

(x) Turkey = market and transit hub

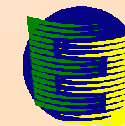
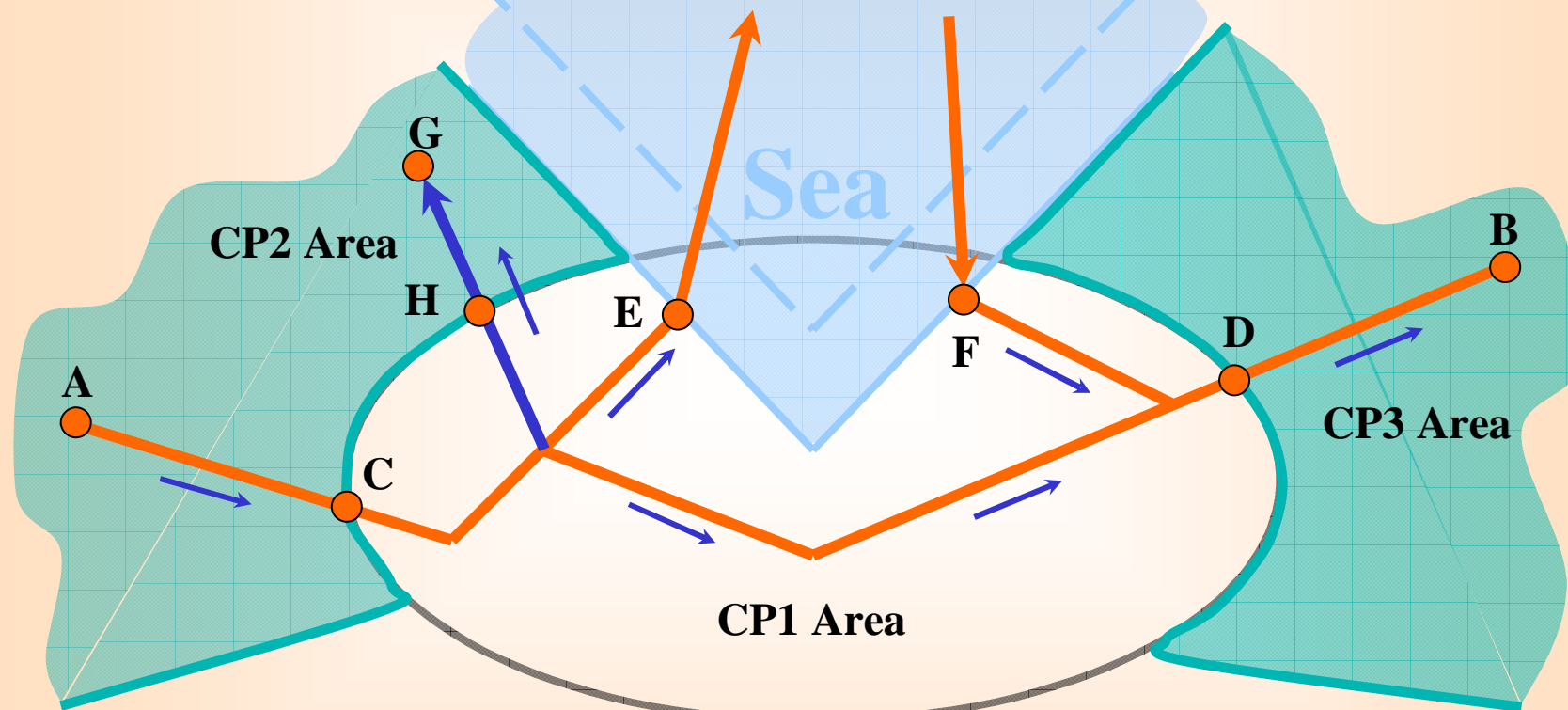


Figure 16

DEFINITION OF TRANSIT (Art. 7(10) ECT)

“...(a) Transit means: (i) the carriage through the Area of a CP, or to or from port facilities in its Area for loading or unloading, of EMP originating in the Area of another state and destined for the Area of a third state, so long as either the other state or the third state is a CP; or (ii) the carriage through the Area of a CP of EMP originating in the Area of another CP and destined for the Area of that other CP ...”

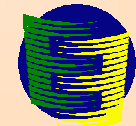


3 possibilities of energy supplies from A to B:

No transit (on-boarder sales at C and D), f.i. RUF-EU, Turkm-RUF, Kaz-RUF

Transit: • through the pipe owned/leased by shipper, f.i. Fr-Germ, Norw-Fr; planned RUF-CIS/EE
• through the pipe not owned by shipper

Figure 17

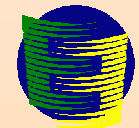


ECT TRANSIT PROTOCOL

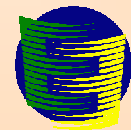
- 1. Obligation to observe Transit Agreements**
- 2. Prohibition of unauthorized taking of Energy Materials and Products in Transit**
- 3. Negotiated access of third parties to Available Capacity in Energy Transport Facilities used for Transit (mandatory access is excluded)**
- 4. Facilitation of construction, expansion or operation of Energy Transport Facilities used for Transit**
- 5. Transit Tariffs shall be non-discriminating, objective, reasonable and transparent, not affected by market distortions, and cost-based incl. reasonable ROR**
- 6. Technical and accounting standards harmonized by use of internationally accepted standards**
- 7. Energy metering and measuring strengthened at international borders**
- 8. Co-ordination in the event of accidental interruption, reduction or stoppage of Transit**
- 9. Protection of International Energy Swap Agreements**
- 10. Implementation and compliance**
- 11. Dispute settlement**

Result:

- risks & costs related to transit diminishes**
- competitiveness of transit supplies increases**
- improves “energy security” (“security of supplies”+”security of demand”+”security of infrastructure”)**



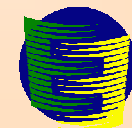
6. Russian position on ECT and gas transit: major concerns and draft solutions



ECT MAJOR OPPONENTS IN RUSSIA AND THEIR ARGUMENTS

Arguments against ECT ratification	Comments
<p><u>Gazprom:</u></p> <ol style="list-style-type: none"> 1) ECT demands mandatory TPA to Gazprom’s pipelines for cheap gas from Central Asia 2) Obligation to transit Central Asian gas at low (subsidised) domestic transportation tariffs 3) ECT will “kill” LTCs 	<p>No such obligation. ECT excludes mandatory TPA (ECT Understanding IV.1(b)(i)).</p> <p>No such obligations (ECT Article 7(3)). Transit and transportation are different in non-EU.</p> <p>Not true. ECT documents do not deal with LTC at all. Economic niche for LTCs will become more narrow due to objective reasons, but they will continue to exist as a major instrument of financing greenfield gas projects.</p>
<p><u>Ministry of Nuclear:</u></p> <ol style="list-style-type: none"> 1) Bilateral RF-EU trade in nuclear materials is not regulated by ECT 	<p>Prior to ECT signing in 1994, RF and EU has agreed to regulate nuclear trade bilaterally (P&CA).</p>

Major Russia’s concern regarding ECT ratification relates to gas transit issues

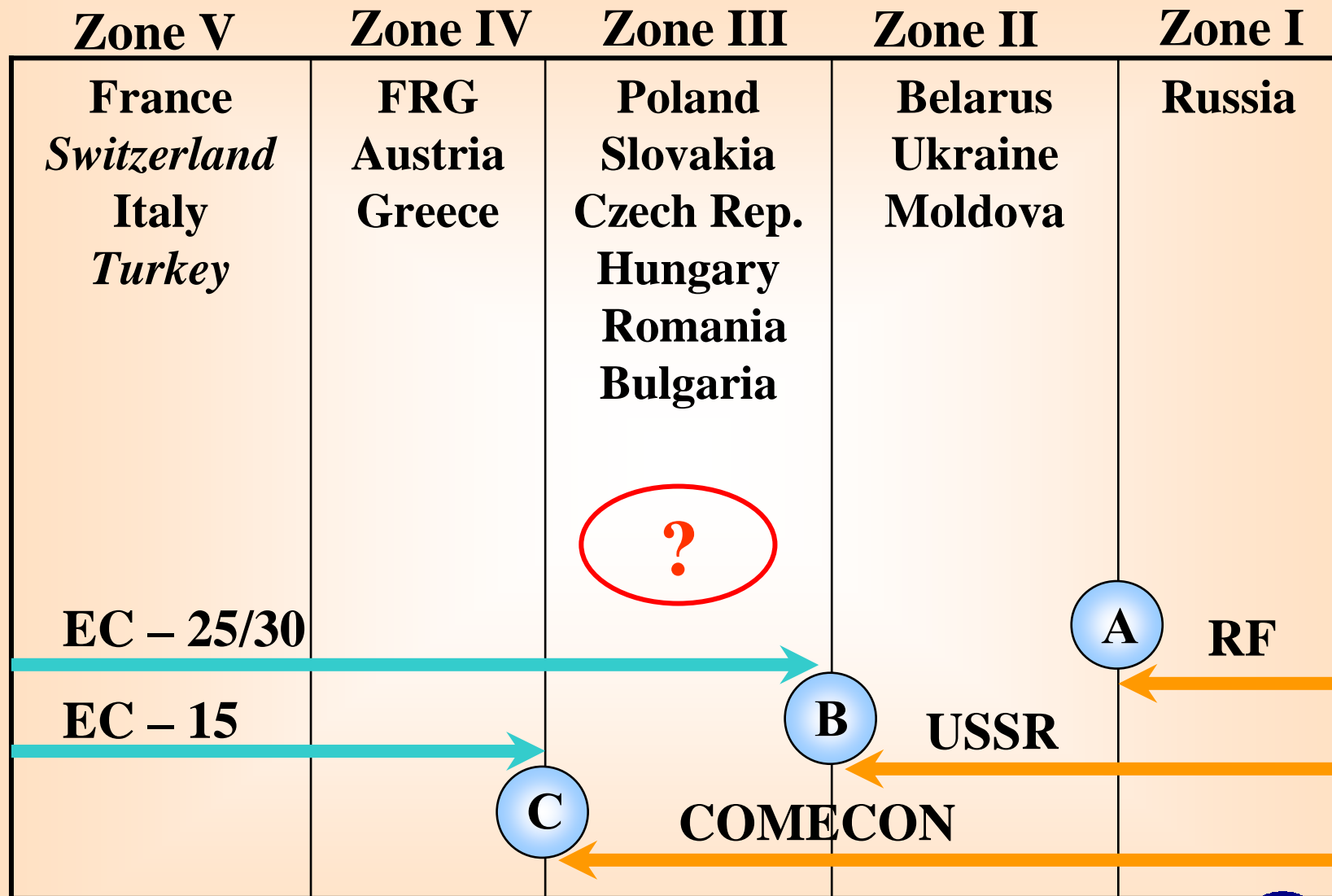


RIGHT OF FIRST REFUSAL AND INTEREST OF DIFFERENT COUNTRIES IN ITS APPLICATION IN EUROPE (1)



Figure 20

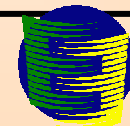
RIGHT OF FIRST REFUSAL AND INTEREST OF DIFFERENT COUNTRIES IN ITS APPLICATION IN EUROPE (2)



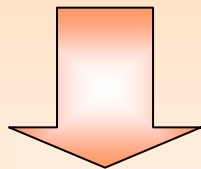
Italic – non-EC countries

A, B, C – points of change of ownership for gas and/or pipeline

Figure 21

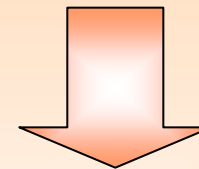


TWO SCENARIOS OF RUSSIAN GAS EXPANSION FURTHER IN EUROPE



1) Gazprom = owner of pipeline
(construction of new pipeline capacities, purchase of pipeline companies shares)

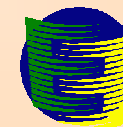
- More expensive
- Decreasing rights of pipeline owners on decisions for transit/ transportation conditions according to EC legislation



1) Gazprom = shipper (from gas sales at the border to wholesale buyers/resellers – to sales to final consumers inside the country)

- Less expensive
- Increasing rights of transporters on decisions... according to EC legislation

Figure 22



ECT & LEGISLATIVE PRIORITIES OF PRESIDENT PUTIN

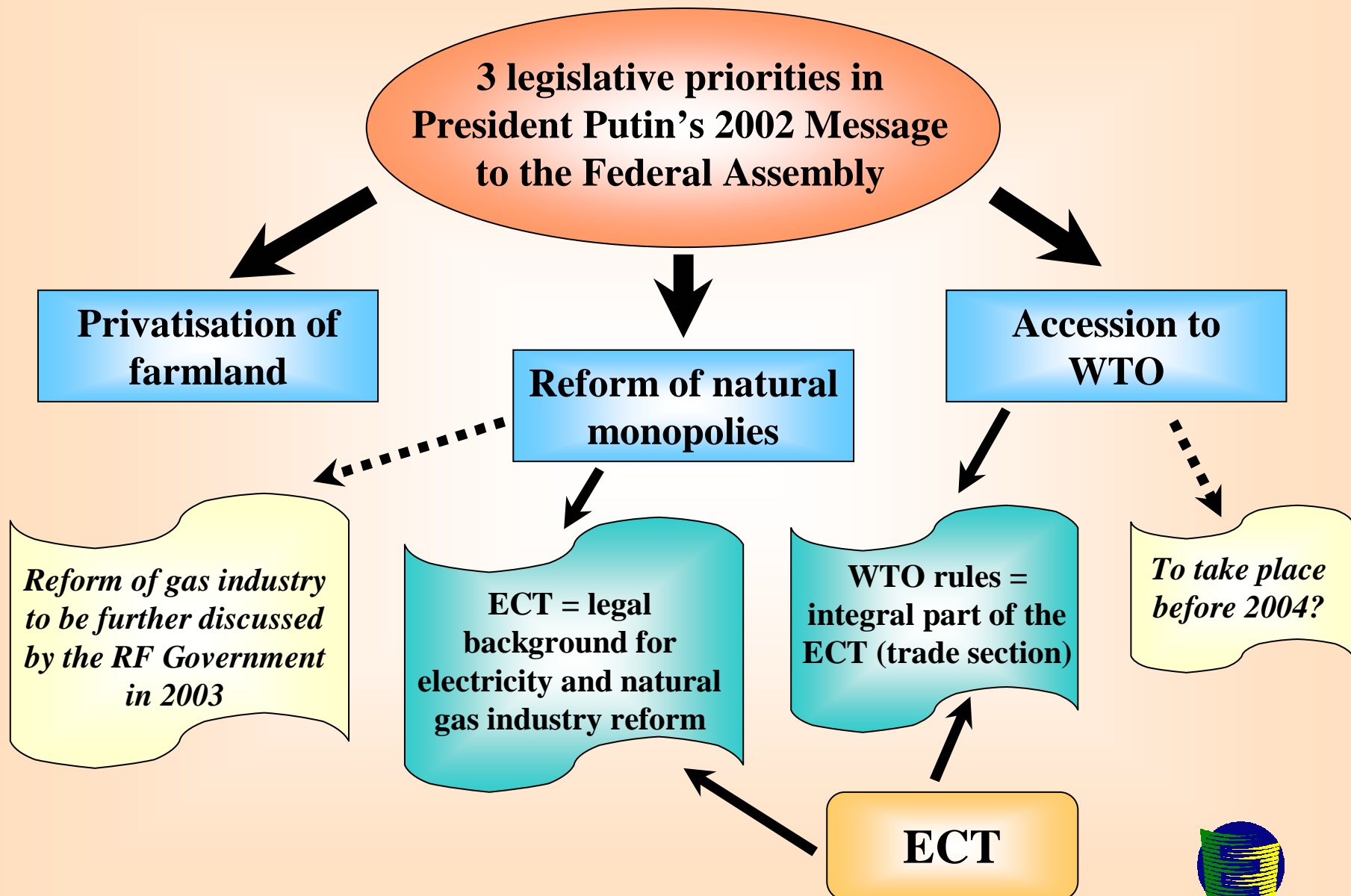
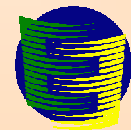


Figure 23

7. Conclusions



THE ENERGY CHARTER TREATY

ARTICLE 2

PURPOSE OF THE TREATY

This Treaty establishes a legal framework in order to promote long-term cooperation in the energy field, based on complementarities and mutual benefits, in accordance with the objectives and principles of the Charter.

ARTICLE 3

INTERNATIONAL MARKETS

The Contracting Parties shall work to promote access to international markets on commercial terms, and generally to develop an open and competitive market, for Energy Materials and Products.

