

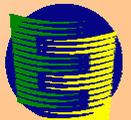
Energy Security and Energy Cooperation within the Energy Charter process – especially: the role of the Russian Federation

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The Energy Charter Secretariat

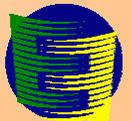
**Lecture at the Institute of Mining and Energy Law,
The Ruhr University of Bochum,
Germany, October 28, 2004**

CONTENTS

1. **Evolution of energy markets and energy security instruments**
2. **Development of energy markets and mechanisms of investor's protection & stimulation:**
 - **the growing role of international law instruments,**
 - **competitive niche for the Energy Charter Process**
3. **General characteristics of the Energy Charter Process:**
 - **History of the Energy Charter process**
 - **Package of Energy Charter documents**
 - **ECT ratification status and concerns of the opponents to ratification**
 - **Energy Charter emerging geography (expansion)**
4. **Business role of the Energy Charter process (with particular emphasis on Russia):**
 - **Financing energy projects: increasing role of risk management**
 - **Credit ratings and risks: comparative picture**
 - **How ECT would diminish the risks, increase the ratings and improve competitiveness**
5. **Case study: Russian gas supplies to Europe (how Energy Charter could help)**
(optional)
6. **Conclusions: Energy Charter process then and now**



1. Evolution of energy markets and energy security instruments



ENERGY SECURITY: CONCEPT

***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 SPECIFIC *ENERGY SECURITY* INSTRUMENTS:

- (1) colonies (non-energy raw materials),**
- (2) concession system,**
- (3) strategic reserves + stocks,**
- (4) international law instruments**

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

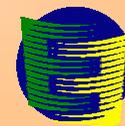
- from monopoly to competition as a driving force of energy markets development,**
- from energy independence to energy interdependence,**
- from local markets of individual energy resources to global energy market**

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*



PARTICULAR MECHANISMS OF DIMINISHING VOLUME AND PRICE RISKS UNDER DIFFERENT ENERGY SECURITY INSTRUMENTS

Mechanisms of diminishing:	Concession system	Strategic reserves + stocks	International law
- volume risk	Traditional & modernized concessions, PSAs, risk-service contracts (direct control of supplies via LTC for duration of agreement between host-country & foreign company)	Producer states production & export quotas + strategic reserves + stocks in both producer and consumer states (idle producing capacities, float tanker storage vs. SPR, government & company owned commercial stocks) + LTCs	Diversified energy supply infrastructure (multiple supplies concept) + consumers with switching (competitive supplies)
- price risk	Stable & low posted prices + transfer pricing + cost-plus (isolated projects)	Spot + forward pricing = unstable prices; increased price volatility to be compensated by producers export quotas (major exporters = swing producers) + consumers stocks regulation policy + escalation formulas	Exchange pricing = futures + options = unstable prices; increased price volatility to be compensated by hedging (derivatives)
Basis for pricing (traded item)	Physical energy (oil, gas)	Physical energy (oil, gas)	Paper energy (oil, gas contract)
Driving force of market development	Monopoly (individual consumer states/cartel of private companies)	Monopoly (cartel of producer states/state companies)	Competition

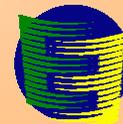
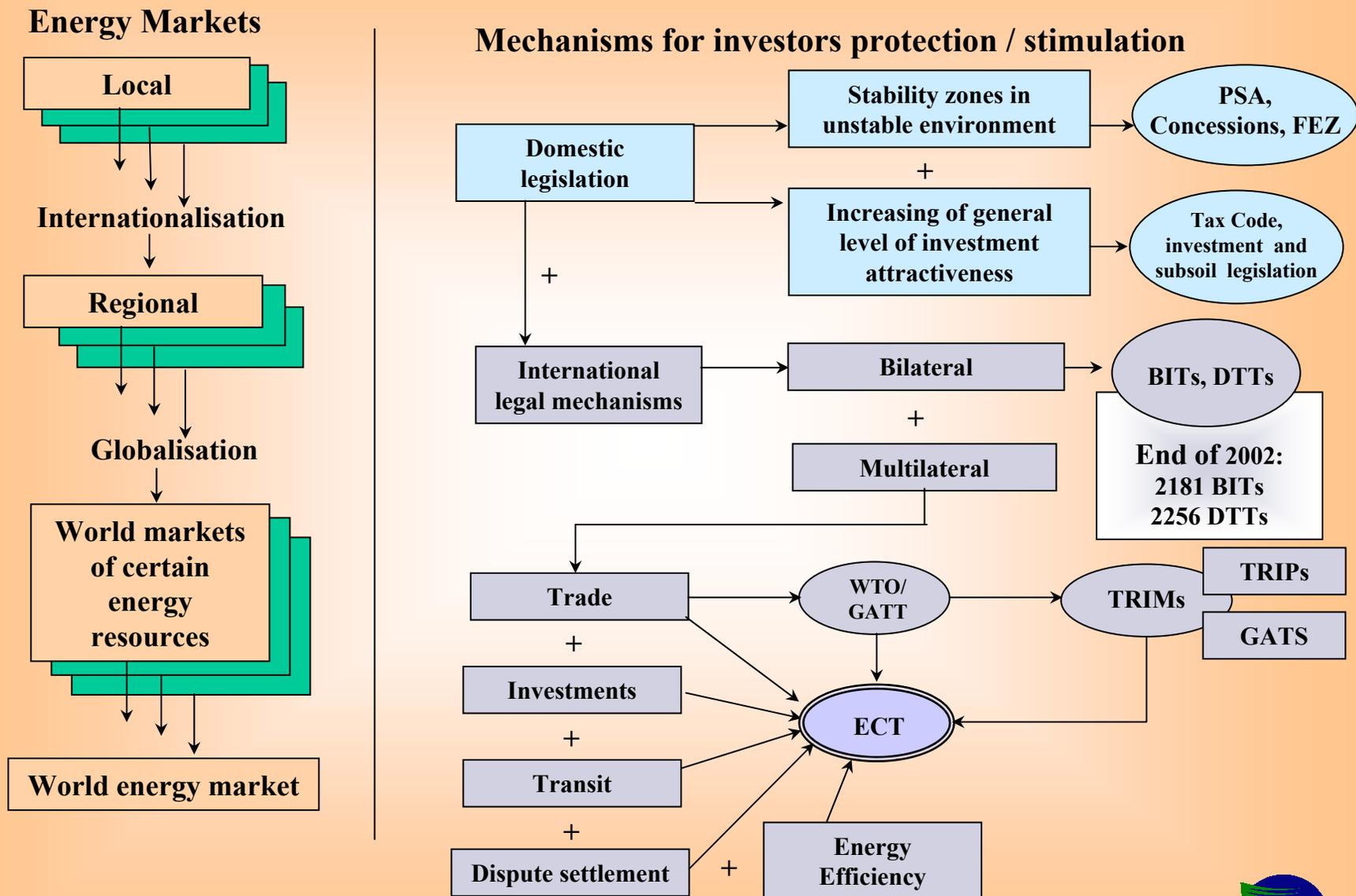


2. Development of energy markets and mechanisms of investor's protection & stimulation:

- the growing role of international law instruments,**
- competitive niche for the Energy Charter Process**



DEVELOPMENT OF ENERGY MARKETS AND MECHANISMS FOR INVESTORS PROTECTION / STIMULATION

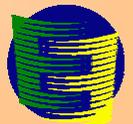


MAIN CONTENT OF SELECTED INTERNATIONAL INVESTMENT-RELATED AGREEMENTS

Organisation	Legal Status	Scope	Investment	Trade	Transit	Energy Efficiency	Dispute Settlement
ECT	LB	Energy	Yes	Yes	Yes	Yes	Yes
WTO	LB	General	(Yes) Services	Yes	Yes/No*	No	Yes
NAFTA	LB	General	Yes	Yes	No	No	Yes
MERCOSUR	LB	General	Yes	Yes	No	No	Yes
OECD	LB	General	Yes	No	No	No	No
APEC	Non-LB	General	Yes	Yes	No	No	No

Source: J.Karl, Senior Expert, DEI, Energy Charter Secretariat

* - application of GATT Art.V to grid-bound transportation systems is under debate
 Plus specialised energy-related organisations: OPEC, IEA, IEF, UN ECE
 Plus specialised “regional” organisations: BSEC, BASREC, ...



ENERGY CHARTER PROCESS IN A GLOBAL FRAMEWORK

- General vs. specific risks,
- Global vs. regional scope



ENERGY CHARTER PROCESS IN A GLOBAL FRAMEWORK: GENERAL VS. SPECIFIC RISKS

Q.: Are there any specific risks in energy to be addressed in a special forum / documents?

A.: Yes. Energy projects (compared to other industries):

- Highest capital intensity (absolute & unit CAPEX per project),**
- Longest project life-cycle,**
- Longest pay-back periods,**
- Geology risks (+ immobile infrastructure, etc.),**
- Highest demand for legal & tax stability,**
- Role of risk management.**

So, a competitive niche exists for energy-related multilateral international organisations – at least to address specific character of energy risks.

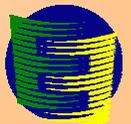
Are these organisations complimentary or competitive to each other?

What is their optimal correlation?



ENERGY CHARTER PROCESS IN A GLOBAL FRAMEWORK: GLOBAL VS. REGIONAL SCOPE

- Investment = global (BITs, DTTs, [MAI?])
- Energy Efficiency = global (partly IEA and UNECE)
- Trade = global (WTO)
- Dispute settlement = global (ECT covers all available DS types/procedures):
 - State-to-State
 - Investor-to-State
- Transit = regional (no other international organization deals with transit except ECT)



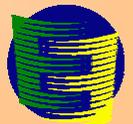
3. General characteristics of the Energy Charter Process:

- **History of the Energy Charter process**
- **Package of Energy Charter documents**
- **Energy Charter emerging geography (expansion)**

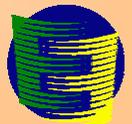
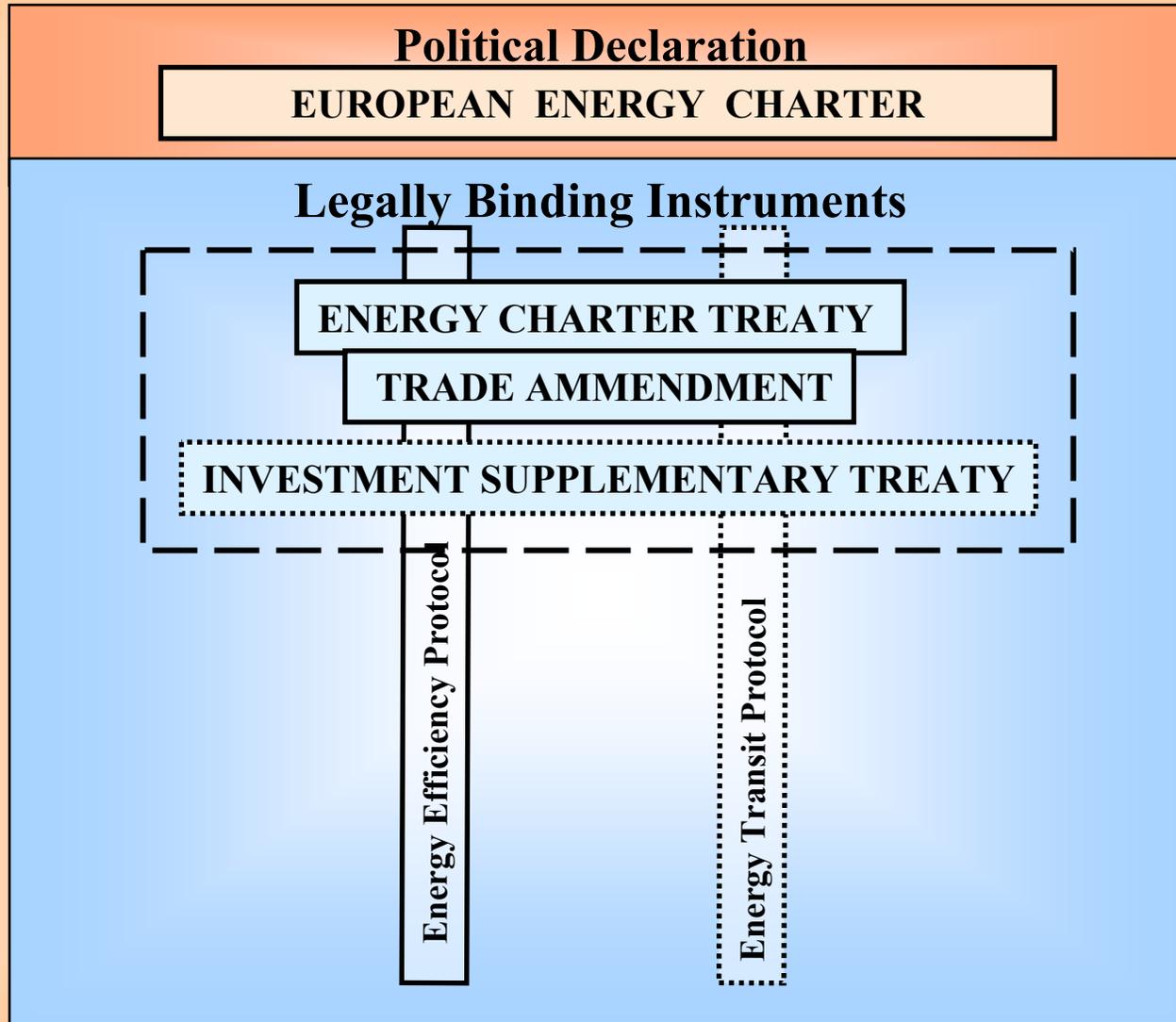


ENERGY CHARTER HISTORY

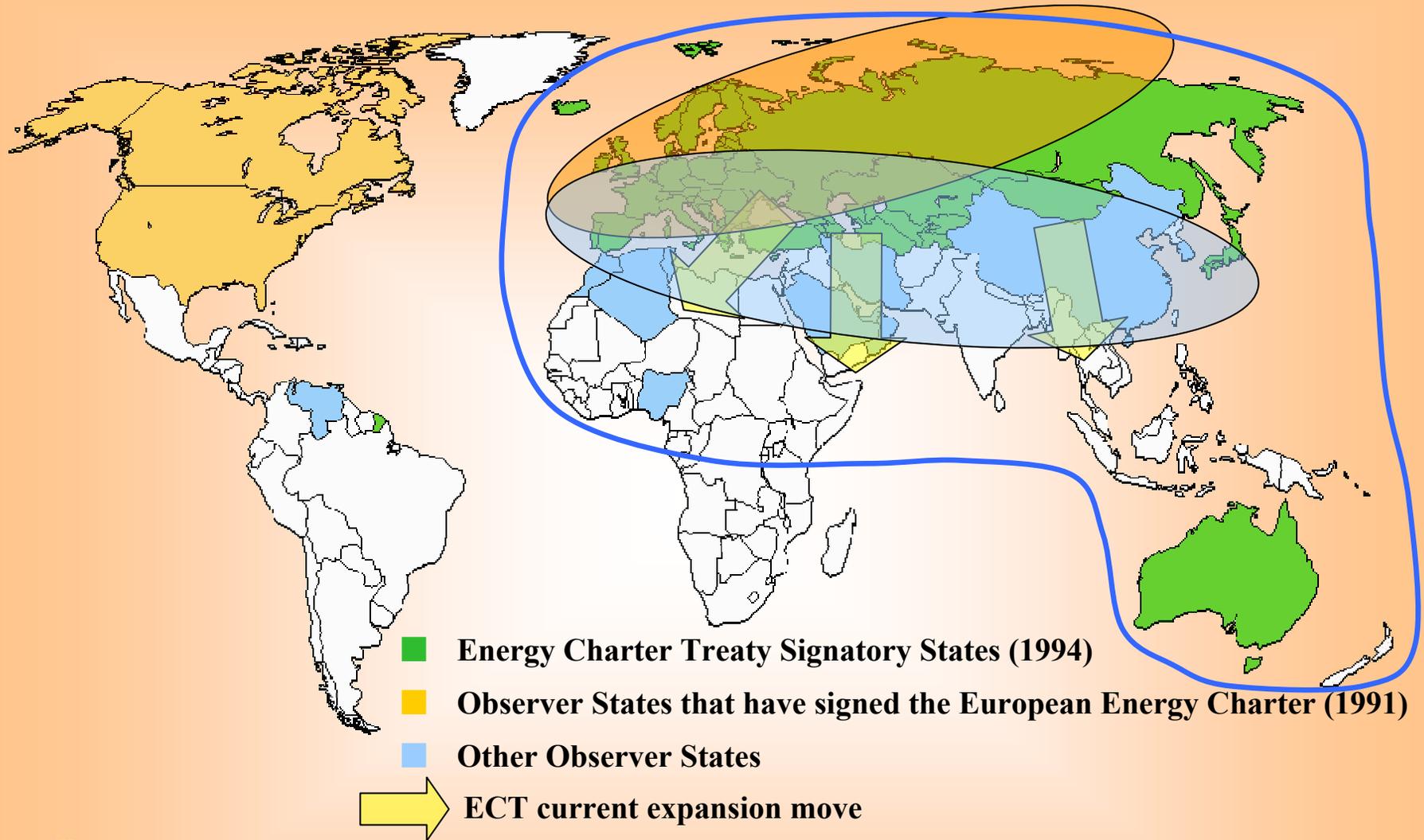
June 25, 1990	Lubbers' initiative on common broader European energy space presented to the European Council
December 17, 1991	European Energy Charter signed
December 17, 1994	Energy Charter Treaty (ECT) and Protocol on Energy Efficiency and Related Environmental Aspects (PEEREA) signed
16 April, 1998	ECT enters into force and became an integral part of international law
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



ENERGY CHARTER AND RELATED DOCUMENTS



ENERGY CHARTER PROCESS: GEOGRAPHICAL DEVELOPMENT



A prospective area of broader Eurasian single energy market

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

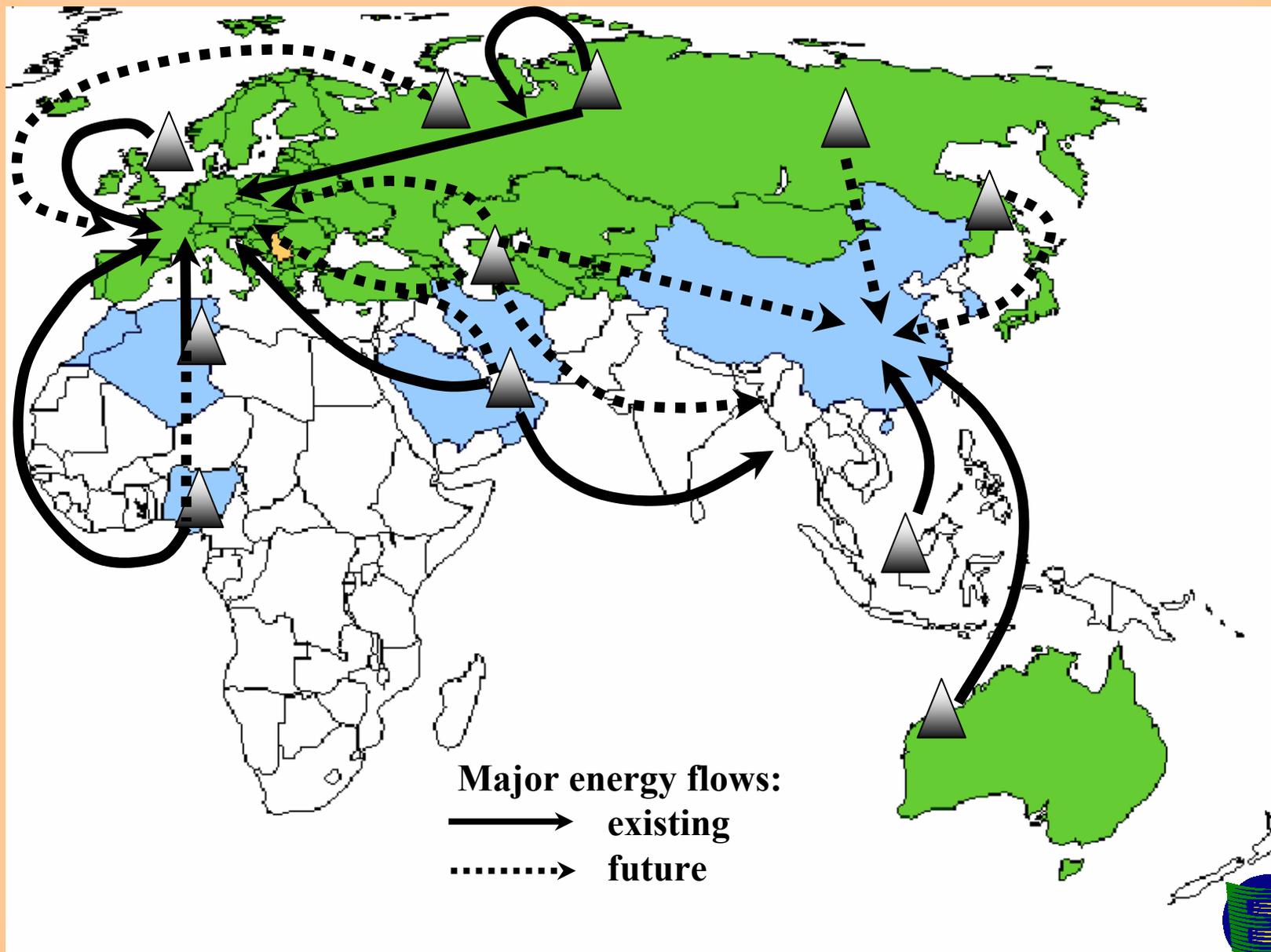


4. Business role of the Energy Charter process (with particular emphasis on Russia):

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ENERGY CHARTER WORLD AND MAJOR ENERGY FLOWS IN THE EASTERN HEMISPHERE



FINANCING ENERGY PROJECTS: FROM EQUITY TO DEBT FINANCING

Equity/debt financing ratio:

Pre-1970's = ~ 100 / ~ 0

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

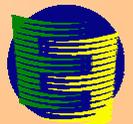
f.i. most recent:

BTC pipeline = 30 / 70

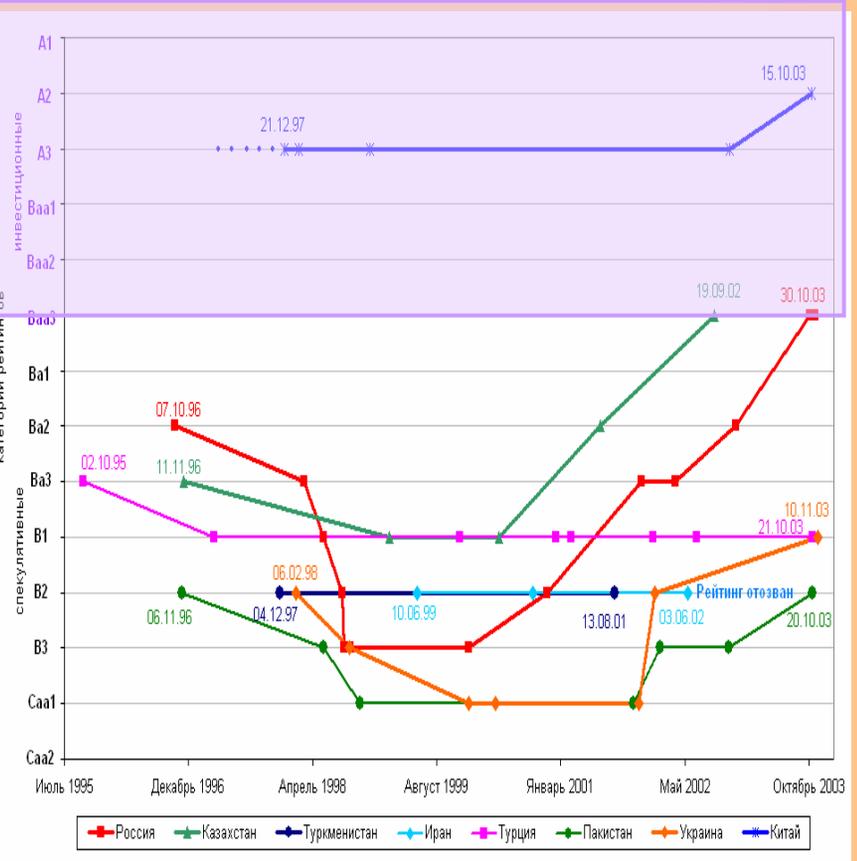
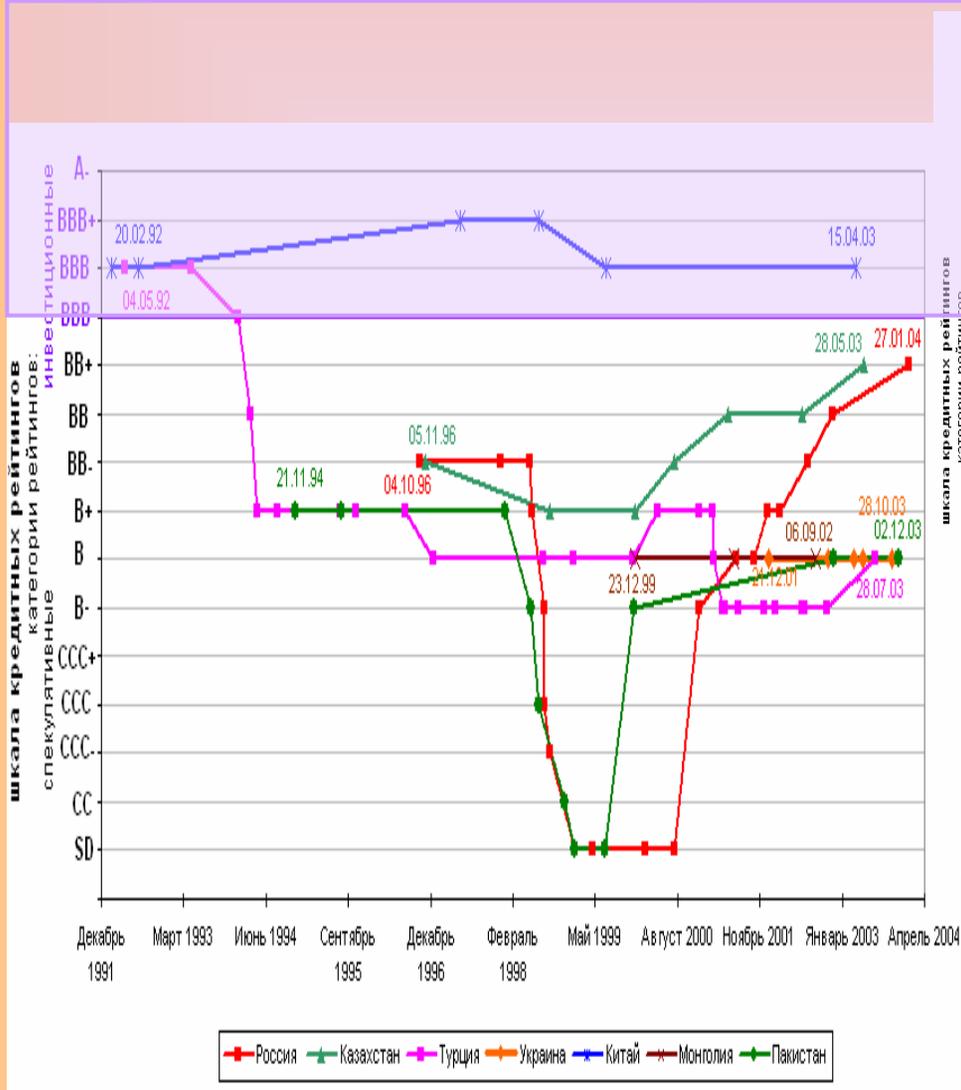
Sakhalin-2 (PSA) = 20 / 80

(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



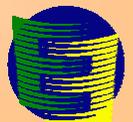
RATING HISTORY OF SOME ECT MEMBER-STATES IN THE CASPIAN AREA AND AROUND (MOODY'S AND STANDARD & POOR'S)



**Moody's hasn't yet assigned credit rating to:
Armenia, Georgia, Kyrgyzstan, Tajikistan, Uzbekistan,
Azerbaijan and Mongolia**

S&P hasn't yet assigned credit rating to:

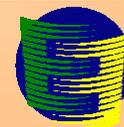
Armenia, Georgia, Kyrgyzstan, Turkmenistan, Tajikistan, Uzbekistan, Azerbaijan, and non-members - Iran and Pakistan



DIFFERENT COUNTRIES POSITIONS AT THE MOODY'S RATINGS SCALE & COST OF FINANCING (long-term credit ratings vs. LIBOR+)

	Moody's scale	Short description	2003 spread diapason basic points (1)	Practical example (LIBOR=4%)	
“Investments ratings”	Aaa	Maximum security level	5-25	< 4,25%	Australia (Aaa), Netherlands (Aaa), Norway (Aaa), United Kingdom (Aaa), Qatar (A3)
	Aa1	High security level			
	Aa2				
	Aa3				
	A1	Upper middle security level			
	A2				
	A3				
	Baaa1	Lower middle security level	25-200	< 6%	Malaysia (Baa1), Saudi Arabia (Baa2)
	Baaa2				
Baaa3					
“Speculative ratings”	Ba1	Non-investment, speculative level	200-1000	< 14%	Russia (Baa3)
	Ba2				
	Ba3				
	B1	High speculative level	1000-1500	< 19%	Iran (B2, 10.06.99- 13.06.02, rating was called-back), Turkmenistan (B2), Indonesia (B2)
	B2				
	B3				
	Caa	Significant risk, issuer is facing hard difficulties			
	--				
	--				
	Ca	Highest speculative level, possibility of default			
	C				
	--	Default	1500-2000	< 204%	
--					

(1) Spread = difference between factual interest rate and the same one for first-class borrower, 100 basic points = 1%



NON-RATIFICATION OF ECT BY RUSSIA = ITS COMPETITIVE DISADVANTAGE

Russia's objective competitive disadvantages: longest distances to markets + falling production at major fields + more complex geology (from Senoman gas of W.Siberia to Valanzhin, Achimov, offshore and Yamal gas) + harsh natural conditions of producing areas

Russia: 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 ratings (sovereign, corporate, project) ← legal environment in host
and transit countries**

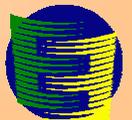
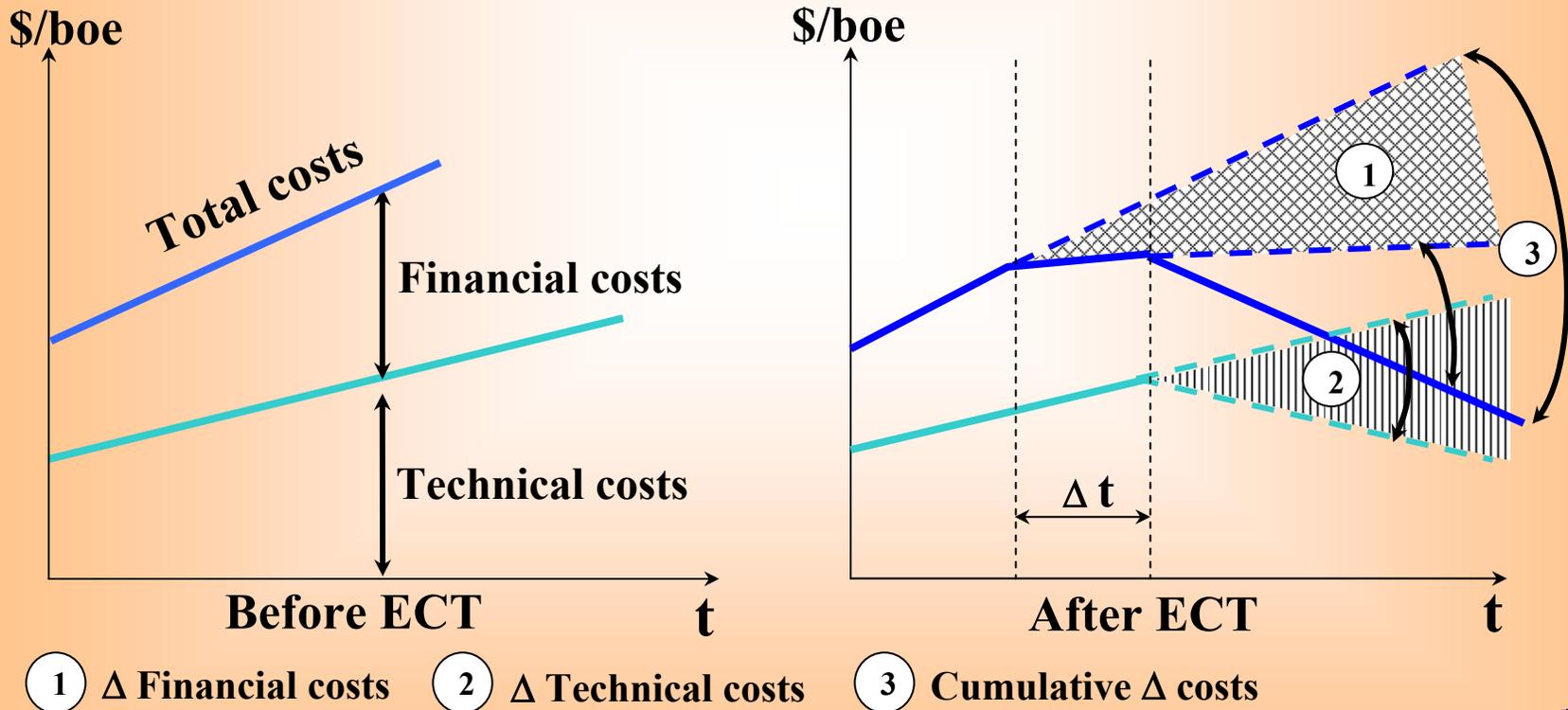
ECT and related documents (if ratified) = common legal environment minimizing risks and technical & financial costs



ECT IS BUSINESS-ORIENTED TREATY (how it works)

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

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



**5. Case study: Russian gas supplies to Europe
(how Energy Charter could help)**

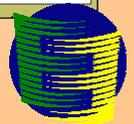
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DELIVERY POINTS OF RUSSIAN GAS IN EUROPE



Figure 17

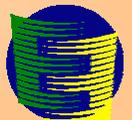
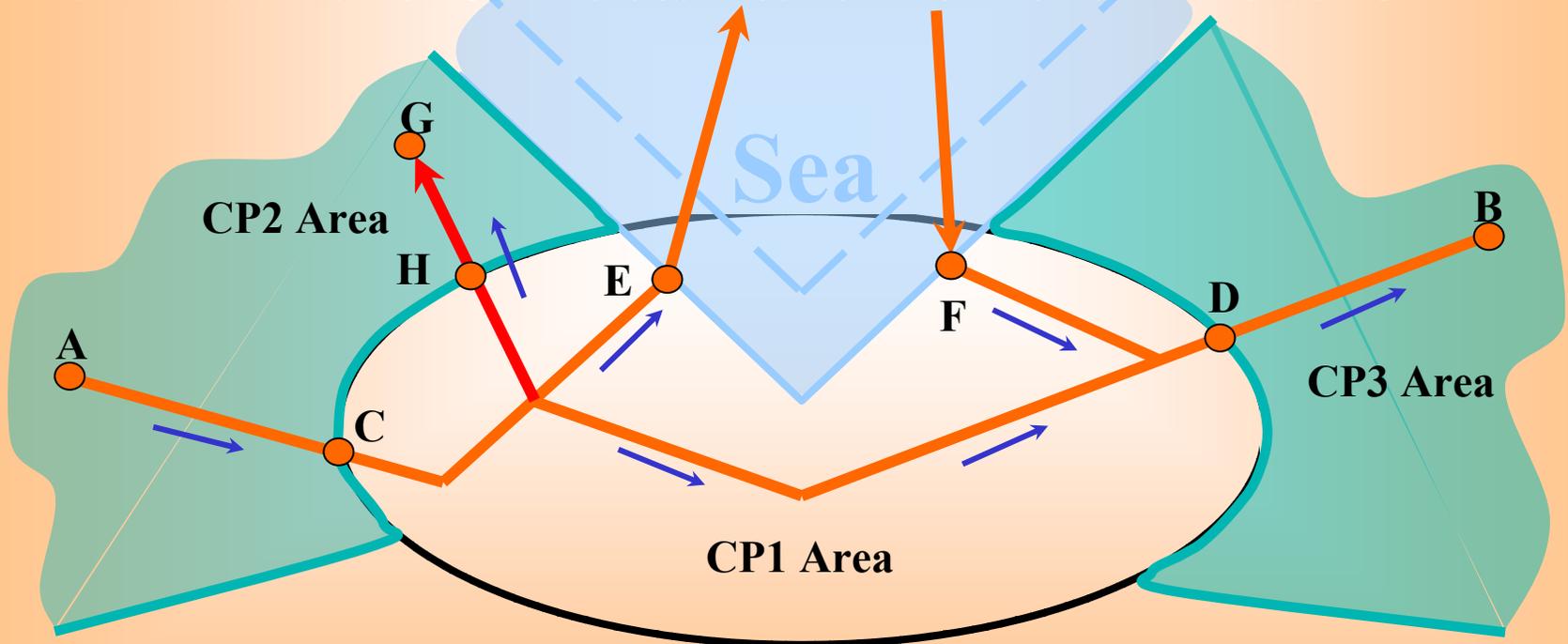


DEFINITION OF TRANSIT (Art. 7(10) ECT)

“... (a) Transit means:

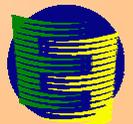
(i) the carriage through the Area of a CP, or to or from port facilities in its Area for loading or unloading, of EMP originating in the Area of another state and destined for the Area of a third state, so long as either the other state or the third state is a CP; or

(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 ...”



ECT TRANSIT PROTOCOL: MAJOR PROVISIONS (1)

- 1. Obligation to observe Transit Agreements**
- 2. Prohibition of unauthorized taking of EMP in Transit**
- 3. Definition of Available Capacity in Energy Transport Facilities used for Transit**
- 4. Negotiated access of third parties to Available Capacity (mandatory access is excluded)**
- 5. Facilitation of construction, expansion or operation of Energy Transport Facilities used for Transit**
- 6. Transit Tariffs shall be non-discriminating, objective, reasonable and transparent, not affected by market distortions, and cost-based incl. reasonable ROR**

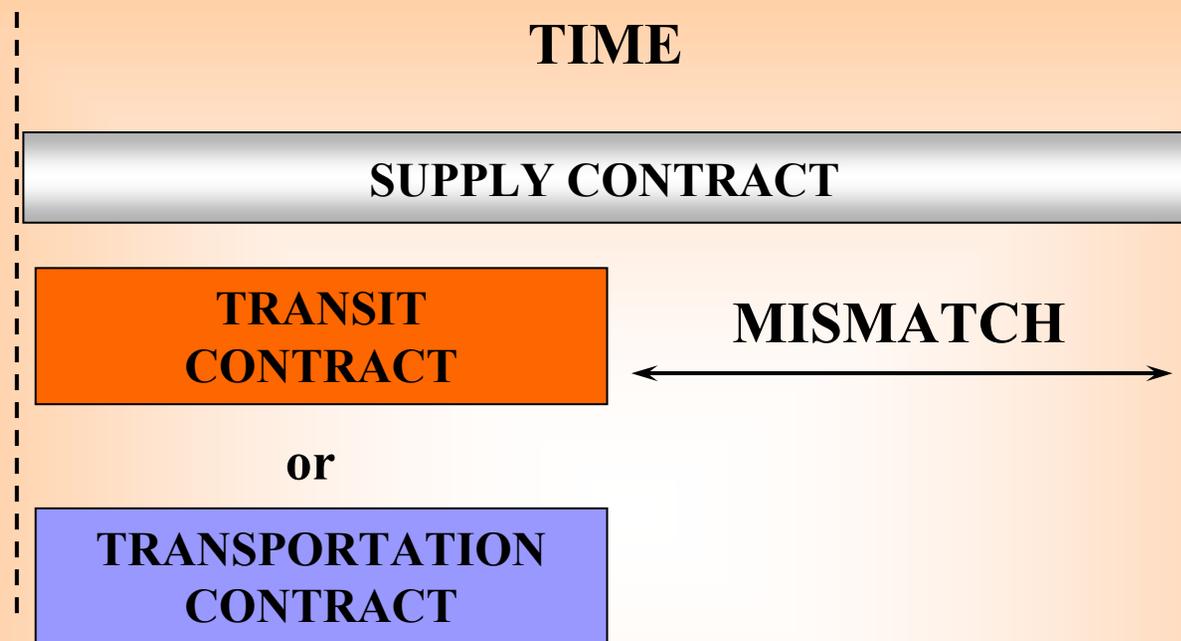


ECT TRANSIT PROTOCOL: MAJOR PROVISIONS (2)

- 7. Technical and accounting standards harmonized by use of internationally accepted standards**
- 8. Energy metering and measuring strengthened at international borders**
- 9. Co-ordination in the event of accidental interruption, reduction or stoppage of Transit**
- 10. Protection of International Energy Swap Agreements**
- 11. Implementation and compliance**
- 12. Dispute settlement**



MISMATCH BETWEEN LONG-TERM SUPPLY CONTRACT AND CONTRACTED TRANSPORTATION / TRANSIT CAPACITY

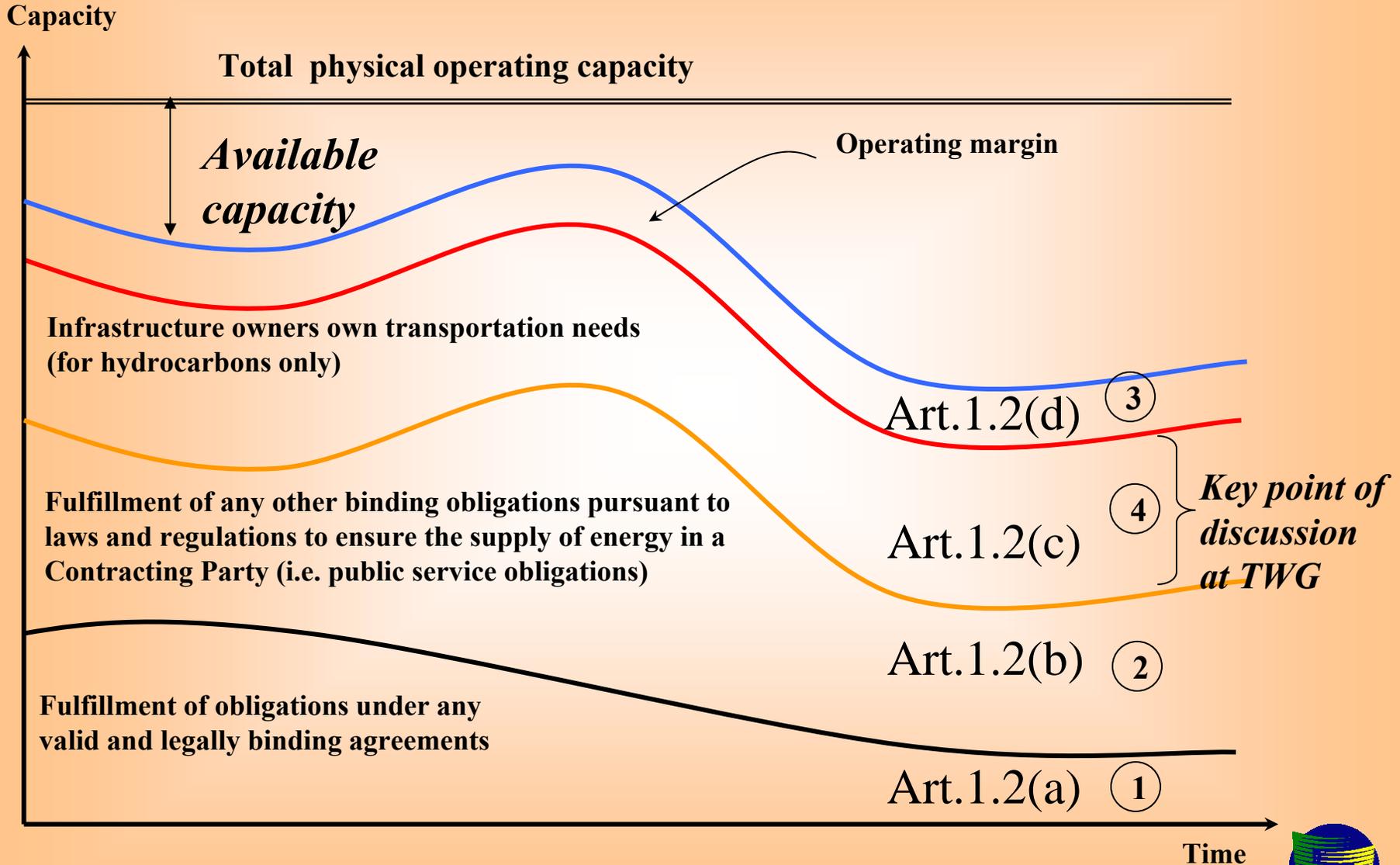


Mismatch between expiration dates of long term supply (delivery) contract and transit/transportation contract as integral part to fulfill the delivery contract creates a risk of non-renewal of transit/transportation contract.

Core issue: guarantee of access to transportation capacity within the duration of existing (in force) delivery (supply) contract.



EXAMPLE: DEFINITION OF AVAILABLE CAPACITY (Art.1)



**EXAMPLE : DEFINITION OF AVAILABLE CAPACITY:
KEY POINT FOR DISCUSSION = INVESTMENT-ORIENTED
PROVISION**

TP Art.1.2(c) : In the CPs where transportation and supply are not disunited, EC TP definition of AC protects for VICs (producers + shippers + pipeline-owners), within the particular time-frame, access to throughput capacity for the future oil/gas production volumes from the fields where production licenses belongs to such VICs.

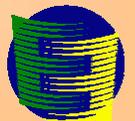
(That is an objective investment-oriented provision based on “project financing” demands of financial institutions)



ROLE OF LONG-TERM SUPPLY CONTRACTS IN GAS SUPPLIES TO EU MEMBER-STATES

	Italy	France	Germany	Spain	Belgium	Greece
Total supplies in 2002 (BCM)	72.5	44.2	94	23	17.5	2.1
Share of imports in total supply (%)	80	96	82	99.5	100	100
Share of LTC in total supply (%)	>90	94	>90	44	91	100
Average residual duration of contracts (years)	14	15	11	NA	NA	13

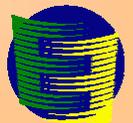
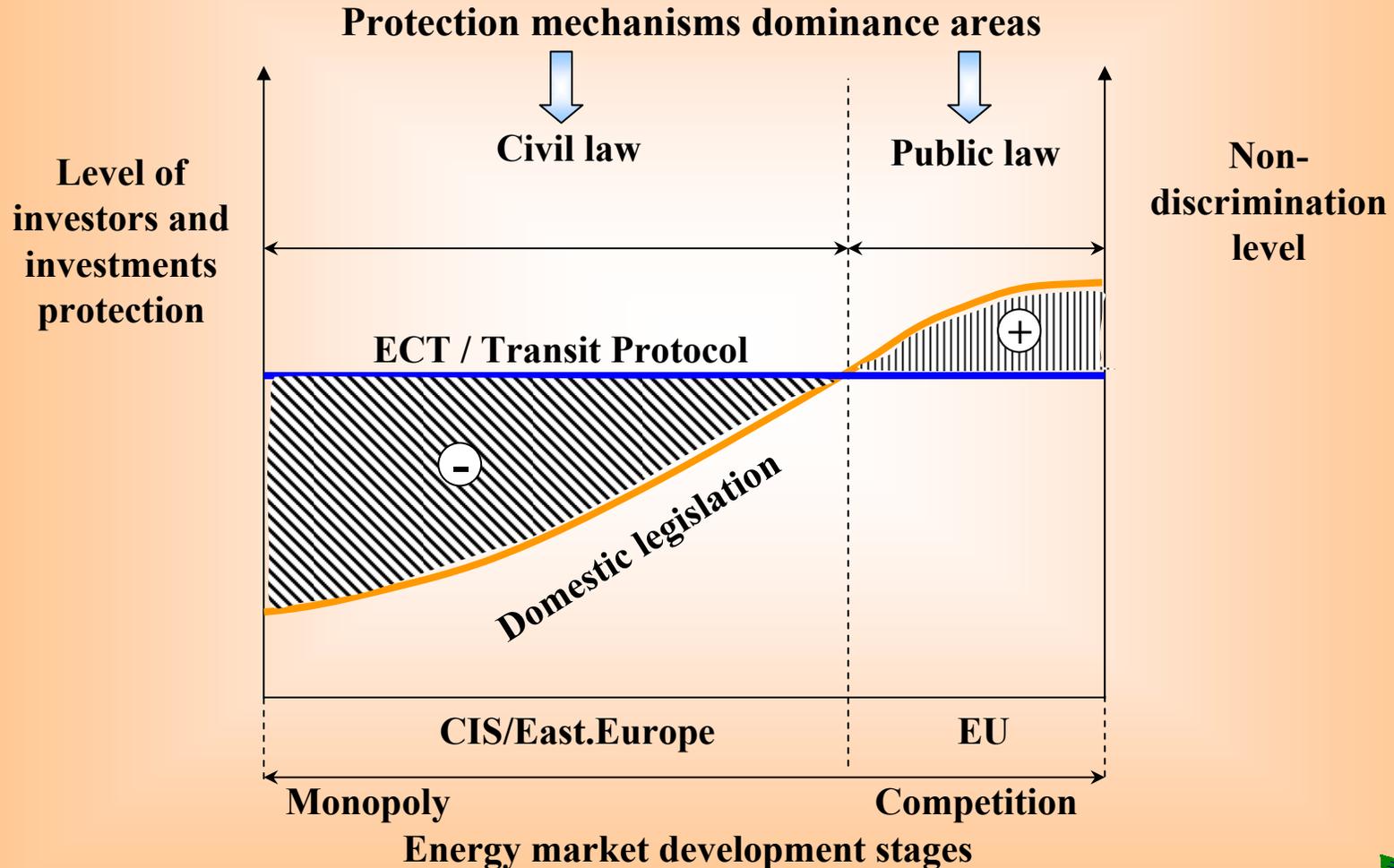
Source: ECS calculations



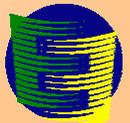
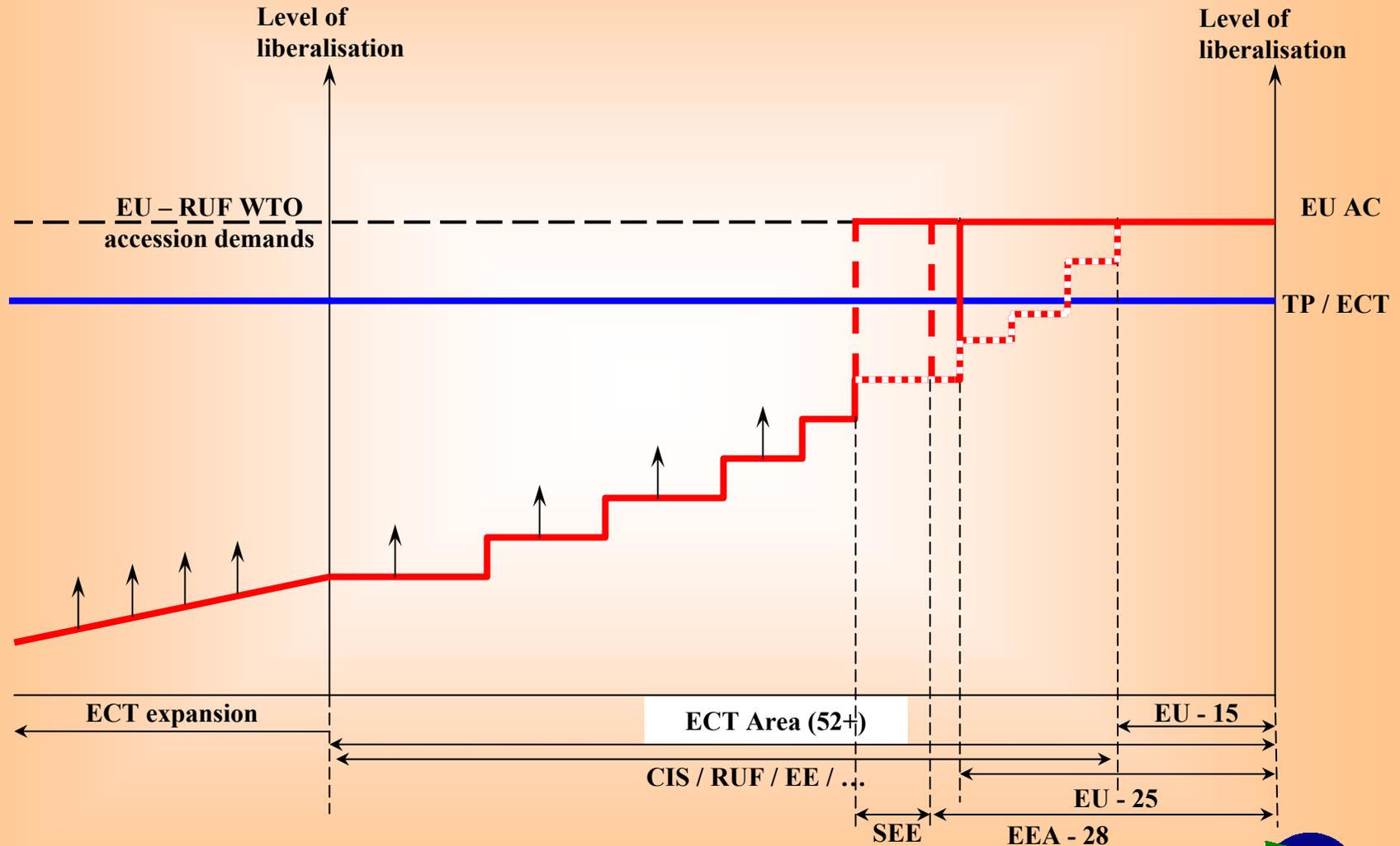
6. Conclusions: Energy Charter process then and now



ECT / TRANSIT PROTOCOL AS INSTRUMENTS TO FOSTER COMPETITION, NON-DISCRIMINATION, INVESTMENT



CORRELATION BETWEEN EU AND ECT EXPANSION PROCESSES



ENERGY CHARTER 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 and legal (business supportive legislation) and not administrative means
Geography	<p>(1) “Trans-Atlantic” Europe (i.e. in political / OSCE terms)</p> <p>(2) OECD+CIS+EE</p>	<p>(1) Broader Eurasia, incl. North Africa, Australasia (i.e. in energy & economic terms)</p> <p>(2) OECD+CIS+EE+others</p>
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

