

# ***Transport Capacity Allocation on Interstate Pipelines***

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# Legal framework



# Energy Law

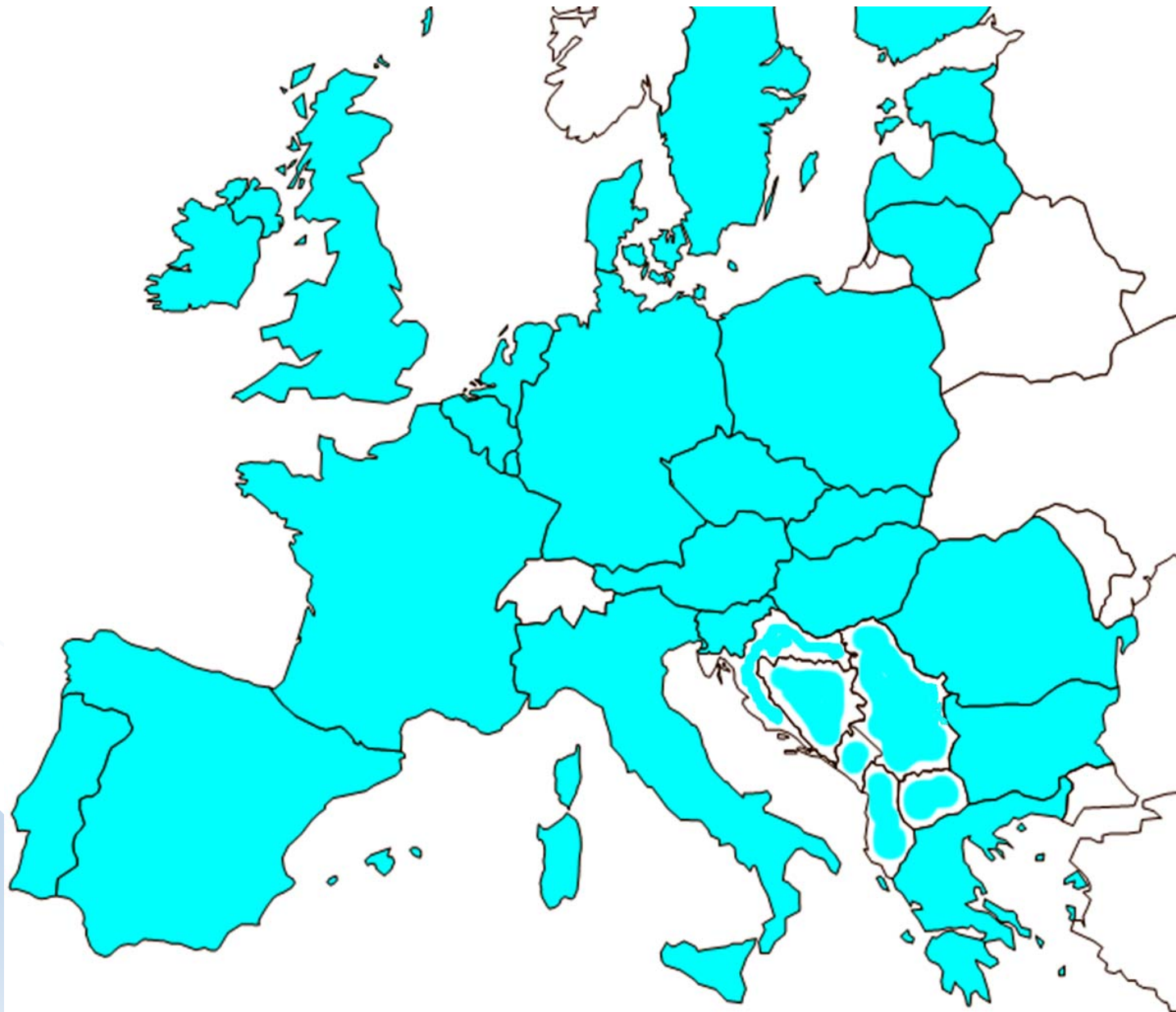
- Energy Law (Official Gazette of the RS, No 84/2004)
- Define trade in natural gas sector as a energy activity and EARS issued license for:
  - Wholesale - activity of public interest (1)
  - Retail (29)
  - Natural gas trade on free market (10)
- According to Energy Law EARS published :
  - Methodology for setting tariff element for calculations prices for access to and use of system for natural gas transportation (Official Gazette of the RS, No 116/2006)
  - Tariff system for natural gas transport system access and utilisation (Official Gazette of the RS, No 1/2007), Gov. approve
  - Decision on determination of minimal annual natural gas consumption needed for obtaining the status of eligible customer (Official Gazette of the RS, No 21/2008)
- TSO shall adopt Grid Code
  - and after approval of the EARS publish in Official Gazette

# International obligations


- Ratification Treaty establishing the Energy Community (Official Gazette of the RS, No 62/2006)
- Obligations to implement EU regulation
- Ambitious deadlines for implementation in natural gas
  - Directive 2003/55/EC concerning common rules for the internal market in natural gas sector, deadline 1.July 2007.
  - Regulation (EC) 1775/2005 on condition for access to the natural gas transmission network, deadline 31. December 2008
  - Directive 2004/67/EC concerning measures to safeguard security of natural gas supply, deadline 31. December 2009

# Geographic Scope -South East Europe

AL  
B and H  
CRO  
MNE  
MN  
SRB  
UNMIK



# The EU directive 2003/55/EC


AREAS	DIRECTIVE 2003/55/EC	Compliance 
PSO and Customer Protection	Article 3	
Authorisation procedures, new infrastructure	Article 4, 22	
Technical Rules	Article 6	
Monitoring Security of Supply	Article 5	
Designation and tasks of TSOs/ DSOs	Art. 7, 8,11, 12	
Unbundling and Access to Accounts	Art. 9, 13, 15-17	
Third Party Access	Article 18	
Market Opening	Article 23	
Regulatory Authorities	Article 25	

Full compliance

Partial compliance

Non- compliance

# Regulation 1775/2005

Cross Border Trade Mechanism	Reg. 1775/2005	Compliance 
Tariffs for access to networks	Article 3	
TPA services	Article 4	
Capacity allocation and congestion management	Article 5	
Transparency requirements	Article 6	
Balancing rules and imbalance charges	Article 7	
Trading of capacity rights	Article 8	
Guidelines	Article 9	
Regulatory authorities	Article 10	

Full compliance

Partial compliance

Non- compliance



## **Actual situations with capacity**



# Challenges

- Physical congestion on transmission entry point in peak periods
- One company supply on wholesale level
  - Only one eligible customer, but the same supplier
  - PE Srbijagas trader on free market instead PE Srbijagas retailer
- No mechanisms for capacity allocation defined in legal act
- Tariff system for transmission is not implemented yet
- Tariff system for transmission
  - Capacity is calculate using data from previous year
  - Capacity is offer on 1 year basis
  - No possibility for interruptible capacity
  - No secondary trade with capacity

# Reasons

- Domestic production cover only about 8% market
- UGS Banatski Dvor is not start to produce
  - PE Srbijagas expect about 20 mcm this winter, 0,5-1 mcm/day
- Only one entry point for import natural gas
- Physical congestion on border Ukraine – Hungary
  - 42 mcm/day max. capacity (30,5 for Hungary, 10 for Serbia and 1,5 B&H)
- Physical congestion on border Hungary - Serbia
  - 12, 5 mcm/day max. capacity (11 for Serbia and 1,5 B&H)
- TSO have non-adequate metering and IT infrastructure
  - limited number of exit points have daily meters
  - most meters on exit points is not conected to SCADA system
  - no softver to manage nominations and capacity and commodity trade<sup>11</sup>

# Import entry capacity

Defined with long - term contract between Hungarian TSO and PE Srbijagas (1998-2007)

- Contracted capacity =  $1,1 \times Q_{\text{year}} / 365(366)$ 
  - ship or pay obligations
  - $Q_{\text{year}}$  should be nominated 5 years in advance
  - $Q_{2008} = 2,4 \text{ bcm}$ ,  $Q_{\text{maxd}} = 7.21 \text{ mcm/day}$
  - $Q_{2009} = 2,45 \text{ bcm}$ ,  $Q_{\text{maxd}} = 7.38 \text{ mcm/day}$
  - $Q_{2010} = 2,5 \text{ bcm}$ ,  $Q_{\text{maxd}} = 7.53 \text{ mcm/day}$
- Guarantee capacity up to 10 mcm/day
  - higher price than contracted capacity
  - should be nominated in april for next year in monthly breakdown
- Additional capacity up to 11 mcm/day
  - sources for gas: austrian-hungarian border, UGS in Hu, production in Hu
  - natural gas was bought from production in Hungary last two winters
  - it was rented 0,5 mcm/day as a firm and 0,5 mcm/day as a interruptible capacity

# Domestic entry capacity

- UGS Banatski Dvor
  - previous year only injection, without withdrawal
  - this winter first withdrawal
  - expected capacity 0,5 -1 mcm/day and quantity about 20 mcm
- Domestic production
  - capacity 0,5 mcm/day
  - very limited possibility to increase production (0,05 mcm/day)
  - decrease trend

# Possible expansion of entry capacity

- Capacity on import entry-point with Hungary
  - increase of capacity on border Ukraine – Hungary in 2009
  - who will contact Hungarian TSO to increase capacity for Serbia ?
- Increase withdrawal capacity in UGS B. Dvor to 5 bcm/day
  - depends on cushion gas injection
  - before winter 2011/2012 is not real
- Connection to new Mega project
  - South Stream or Nabucco
  - not before 2013

# Mega projects and new interconnections



# Conditions for gas market creation

- **Tariff system**
  - We expect implementation during this year
  - Modification in 2009 for 2010
- **Network code**
  - We expect to be published in 2009
- **Enough entry capacity**
- **Different source of supply**
- **Procedure for switch supplier**
  - In secondary legislation or in network code
  - We expect to be published in 2009 and implement in 2010
- **Mechanisms for capacity allocation**
  - In secondary legislation or in network code
  - We expect to be published in 2009 and implement in 2010



# Capacity allocation contracting- proposal



# Capacity allocation (1)

- Together with modification of the tariff system which include
  - network user define capacity for next year
  - charge for overrun capacity
  - interruptible capacity
  - better connection between tariff system and transmission network
- TSO publish capacity on exit points before 01 September
  - capacity is defined using hydraulic test (max. daily consumption in last 3 years)
  - firm capacity can not be greater than available entry capacity
- Network users applied for capacity before 20 September
  - firm and interruptible capacity for all exit points
  - prove which ensure quantity and capacity on entry points
  - finance instruments which guarantee payment 30% transmission charges/year
  - argument that customer want to become eligible (all except wholesaler)
- TSO open request for capacity 01 October
  - all network users which applied are present during the process
  - TSO check request correctness
  - TSO reject all non correct request

## Capacity allocation (2)

- More than one network users applied for the same customer
  - Serbian gas production company has first priority
  - natural gas traders on free market have second priority
  - wholesale supplier has third priority
  - capacity for all customers all calculate only one, decreasing capacity to network user who has less priority
  - when two natural gas traders on free market request for the same customer, TSO will give customer 15 day to define trader
- TSO define real requests for capacity
- Requests for firm capacity are less than available capacity,
  - Capacity is allocate according to requests
- Requests for firm capacity are more than available capacity,
  - Capacity is allocate according to the procedure

# Procedure for capacity allocation (1)

- System operator has first priority – max. 4% available capacity
  - for own consumption
  - for balancing system
- Wholesale trader has second priority
  - in case when has sign, before this procedure, long-term contract with “take or pay” or/and “ship or pay” obligations which can cause serious financial problems
  - this priority can be max. 10 mcm/day
- Capacity is allocate “pro-rata”
  - neighborhood country had bad experience with “first come first serve”
  - auctions results with different capacity charges
- Natural gas traders can give up from their request
  - in case when allocated capacity is not enough for consumers
  - Wholesale supplier is responsible for this customers

# Procedure for capacity allocation (2)

- Network users can request for interruptible capacity
  - for difference between requested and allocated firm capacity
  - deadline for new request is 15 October
- TSO inform network users about allocated capacity
  - writing information
  - deadline 20 October
- Network users have right to appeal to EARS
  - in case when their request for capacity was all or partly rejected
  - deadline 01 November
- EARS make final decision about appeal
  - decision is obligatory for TSO and network users
  - deadline 15 November
- Congestion revenues are not planed
  - different situation comparing with electricity
  - possible partly TPA exemption

# Gas allocation rules- proposal



# Allocation after gas day

- Actual allocation (n-1 principle)
  - two network users (Wholesale supplier and transit)
  - flow regulation on import entry point and transit exit point
  - transit quantity on import entry point = measured quantity on exit point
  - Wholesale supplier on entry point is difference
  - when Wholesale supplier on import point have different gas sources, smaller sources is equal to nomination, dominant source is difference
  - deadline for allocation is 2 hour after gas day
  - reconciliation is possible during the same month
  - no charges for difference between nomination and allocation
- Problem with more network users
  - how to define allocation procedure
  - exit points without daily meters and not connected to SCADA system
  - network users can supply eligible customers on distribution level

# Allocation after gas day - proposal

- Allocation on entry point
  - single entry point - allocation according to measurement
  - multiple entry point if 1 network user book more than 80% capacity
  - n-1 principle
  - else “pro-rata” according to nomination
- Allocation on exit point
  - single exit point - allocation according to measurement
  - multiple exit points, eligible consumers according to measurement, captive consumers is difference
  - in case when eligible customer have not daily meters, allocation is “pro-rata” according to nomination
  - TSO inform network users and DSO about measurement quantity
  - DSO have obligations to install daily meters to all customers with consumption more than 250 m<sup>3</sup>/hour



# Time table and charges - proposal

- Time table

- TSO shall send quantity measured on exit point to DSO and network users 2 hour after gas day
- DSO shall allocate daily quantity and send to TSO and network users 4 hour after gas day
- If DSO fail to send allocation, TSO shall allocate quantity “pro-rata” according to nomination

- Reconciliation

- TSO shall send to DSO final daily quantity from exit point based on the measurement data read from data log, 5 days after month
- DSO shall send to TSO and network users final daily allocation based on the measurement data read from data log, 10 days after month
- TSO shall send final settlement to network users, 15 days after month

- Charges for difference between nomination and allocation

- if difference is more than 5%
- only in case when network user have on-line data about consumption

# Final remarks



# Final remarks

- Problems
  - physical congestion on entry point
  - TSO non-adequate metering and IT infrastructure
  - capacity allocations is not defined in any legal act
- No competition in Serbian natural gas market
- It should be changed
  - first step is proposed
  - next step is Regulation 1775/2005 full implementation

***Thank you for your attention!***

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