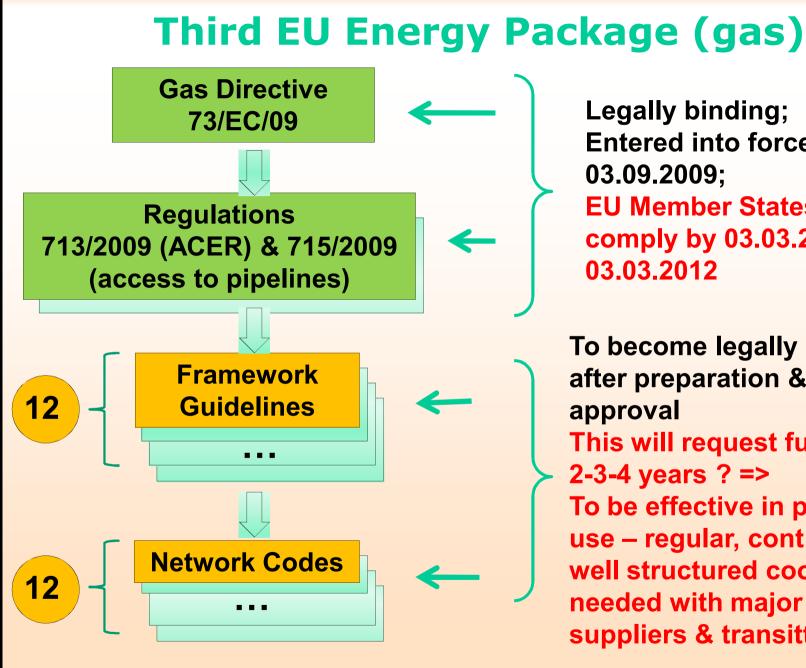
"Formation of the European Union's internal gas market under Third Energy Package: how to make it workable with due consideration of the fair concerns of non-EU gas exporters"

> Dr. Andrey A.Konoplyanik, Consultant to the Board, Gazprombank, and Professor, Russian State Oil & Gas University (Moscow, Russia) <www.konoplyanik.ru>

Presentation at Energy Delta Convention 2010 "Gas fuels Energy Transition" Conference, Martiniplaza, Groningen, Netherlands, 23-24 November 2010

- Future architecture of the EU internal gas market according to 3<sup>rd</sup> EU Energy package (2009)
- Some key problems of the 3<sup>rd</sup> EU Energy package – and possible solutions:
  - Contractual mismatch problem to provide long-term access to transportations capacity
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  - Gas pricing: total spot/futures pricing
     or slow adaptations of LTGEC pricing formulas



Legally binding; **Entered into force** 03.09.2009; **EU Member States to** comply by 03.03.2011 / 03.03.2012

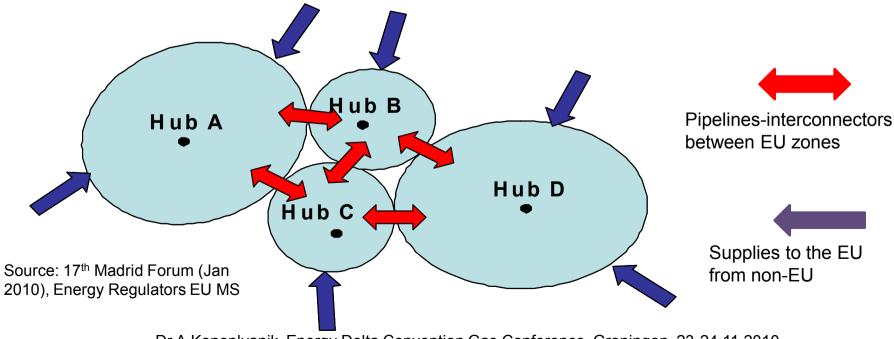
To become legally binding after preparation & approval This will request further 2-3-4 years ? => To be effective in practical use – regular, continuous & well structured cooperation needed with major suppliers & transitters

## Future organization of the common internal EU gas market according to 3<sup>rd</sup> EU Energy Package

No single (homogenous) internal EU gas market in the near future even as an economic model
 All market areas to be organized as entry-exit zones with virtual hubs => Towards uniform capacity allocation mechanisms ("bundled products") & gas pricing mechanisms ("liquid hubs"), but:

(1) Capacity allocation: **short**-term vs. **long**-term? At zone borders? At hubs? Bundled products – only on volumes (of throughput capacity) or on duration of access as well? How to overcome inconveniences of the 3<sup>rd</sup> Package? (f.i.: long-term = (1 year+) => "contractual mismatch" problem)

(2) Gas pricing at hubs: on **all** gas volumes *or* just on a **portion** of gas supplies? When hubs would become really liquid? All or only few of them? Which ones?



Dr.A.Konoplyanik, Energy Delta Convention Gas Conference, Groningen, 23-24.11.2010

## **Key provisions of the EU Gas Directives (1998/2003/2009) and the** problems they created

- Key CEC/DG COMP assumption: "The more competition (number of players / intermediaries) the better it is for end-users" (???) => the policies:
- Segmentation of VIOC (unbundling) splitting gas business between "competitive" (production / consumption) and "monopolistic" (transportation / distribution) spheres of activity,
- Mandatory third party access (MTPA) to gas transportátion infrastructure,
- Switch from LTGEC to spot trade, etc.
- => In result: incremental risks (trade + investments), incl. problems:
  - "Contractual mismatch",
  - Bankability of investment projects (project financing),
  - Price volatility / predictability (guidance for long-term & capital-intensive investment decisions)

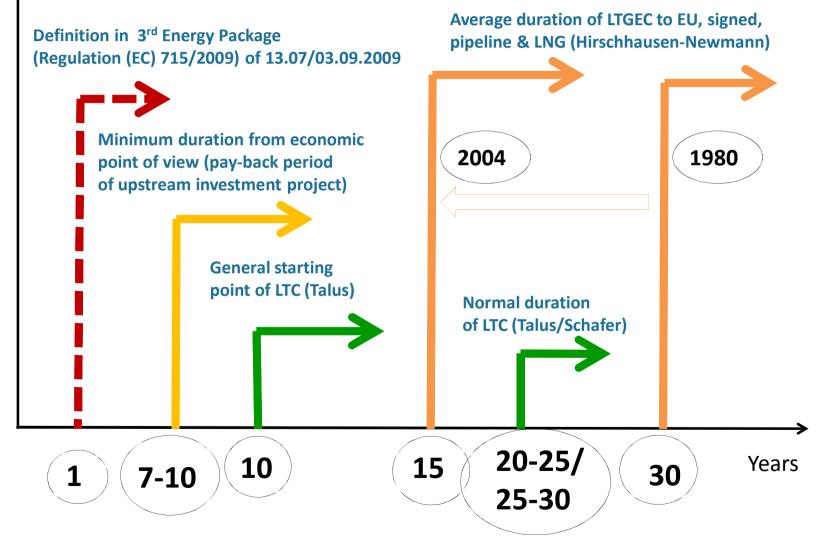
## Instruments for implementing key provisions of EU Gas Directives outside the EU

Export of EU «acquis communautiare» through:

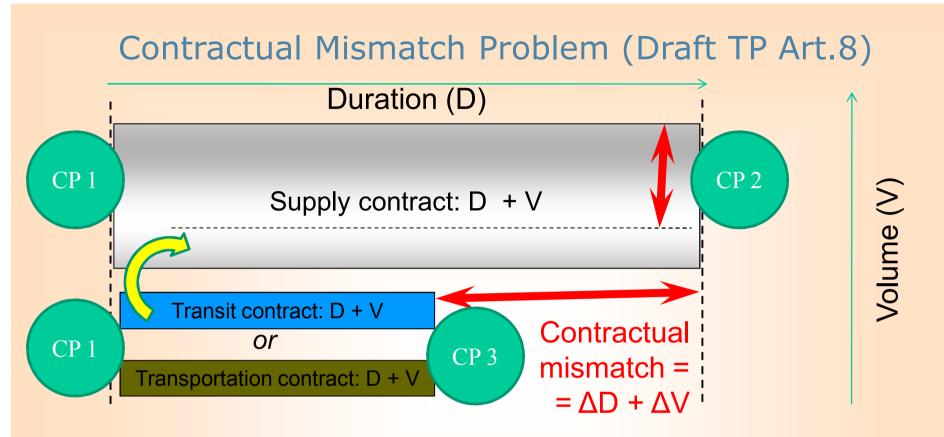
- First EU Gas Directive (1998) => Energy Charter Treaty (1994/98)
- Second EU Gas Directive (2003) => Energy Community Treaty EU-SEE (2006)
- Third EU Gas Directive (2009) => "Third party clauses" of Directive 73/EC/09 + sanctions for violation of Directive's provisions (up to 10% of global turnover of mother company) => legal collision (?): how EU law (acquis communautaire) corresponds with international law provisions (ECT, etc.)

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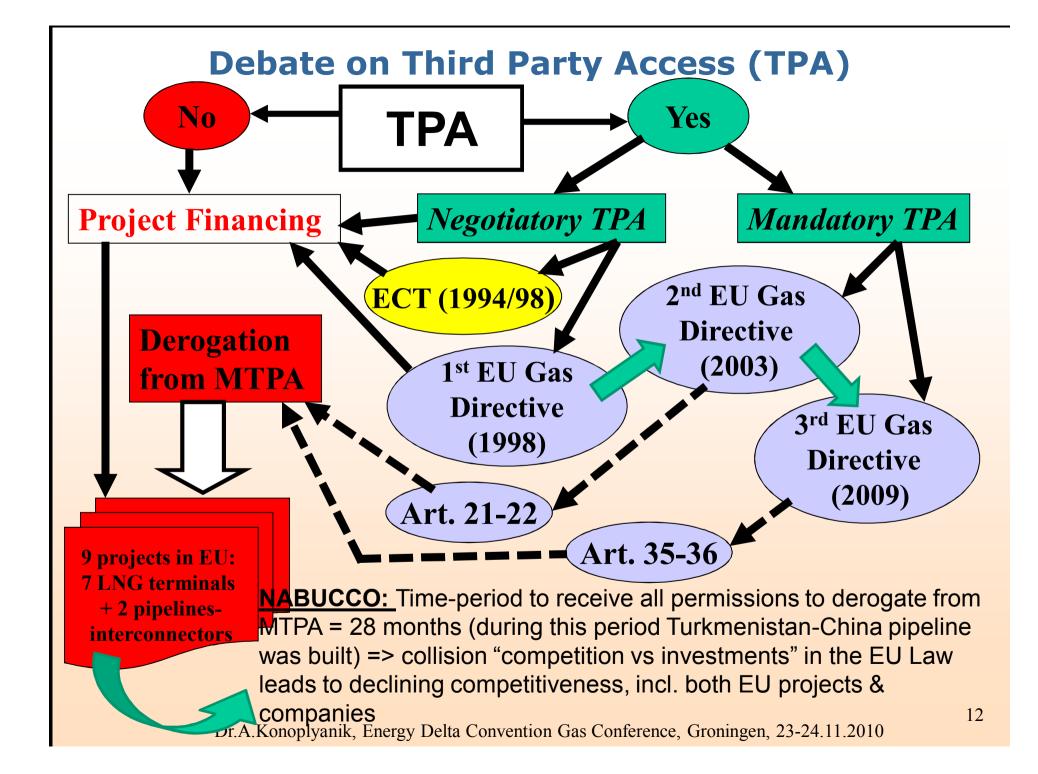


**Contractual mismatch:** between duration/volumes (D/V) of long term supply/delivery contract (LTGEC; CP1-CP2) and transit/ transportation contract (CP1-CP3); the latter is integral part to fulfill the delivery contract => risk non-renewal transit/ transportation contract => risk non-fulfillment supply/delivery contract. **Core issue:** guarantee of access to/creation of adequate transportation capacity for volume/duration of long term contracts

#### Long-term vs short-term capacity allocation: problem & draft solutions

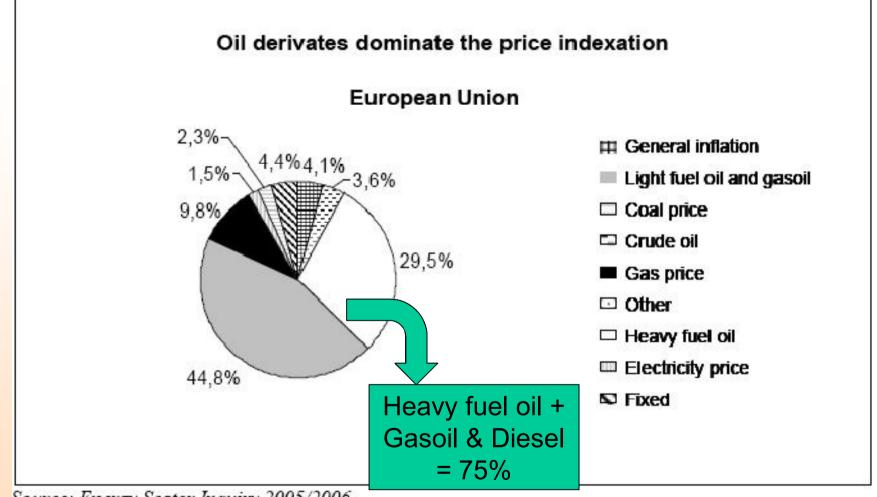
- Problem: in 3<sup>rd</sup> package "long-term" = 1 year+ (Regulation (EC) 715/2009) => this will de-stipulate long-term investment supply projects which are to be supported by long-term contracts (duration to be long enough to guarantee pay-back of long-term upstream investments)
- Two draft solutions:
  - "Right of First Refusal" (if available only short-term capacity products) => appropriate for suppliers, but as if incompatible with EU acquis - due to RF-EU bilateral informal consultations on Energy Charter Protocol on Transit in 2004-2007,
  - To provide long-term capacity allocation products => "bundled capacity products" to refer NOT only to volumes, but to durations as well => two-dimensional model of "bundled capacity product" (volume & duration) to escape contractual mismatch problem => draft procedure jointly developed by RF & EU experts during RF-EU informal bilateral consultations on Energy Charter Protocol on Transit in 2004-2007

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## **Price indexation structure in the EU**

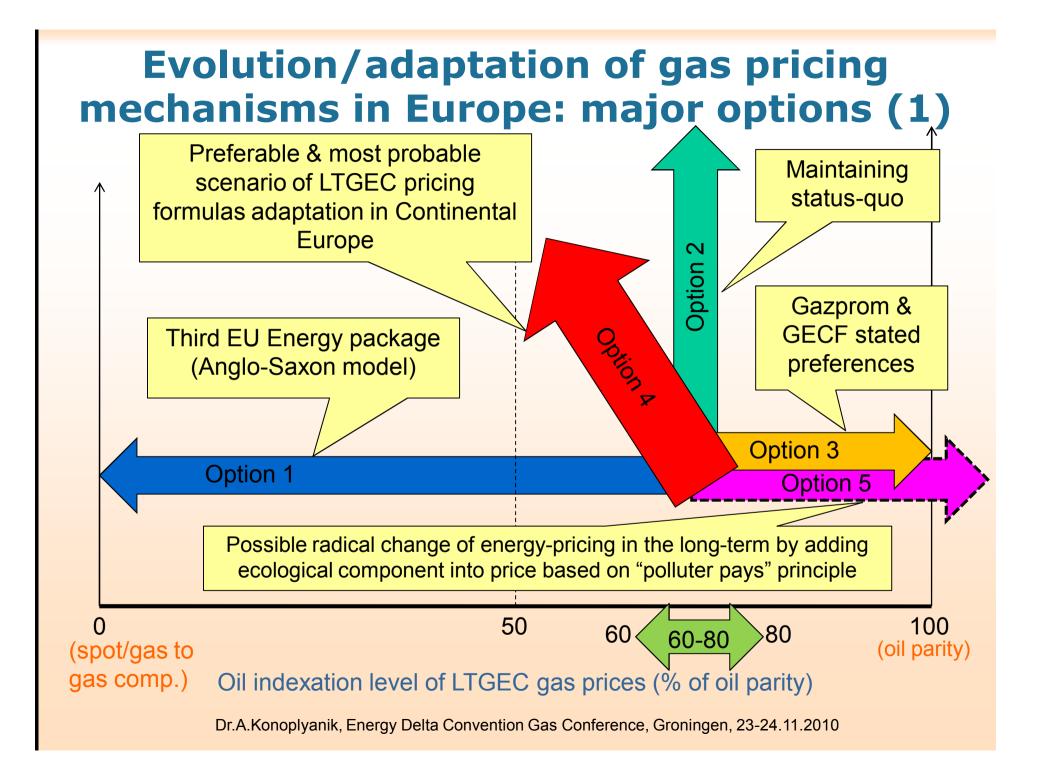


Source: Energy Sector Inquiry 2005/2006

### Liquidity of European gas hubs, Q4-2009

| United Kingdom: National Balancing Point (NBP)                 | 14.9 |           |
|--|------|-----------|
| Belgium: Zeebrugge (ZEE)                                       | 4.9  |           |
| <ul> <li>Austria: Central European Gas Hub (CEGH)</li> </ul>   | 3.2  |           |
| <ul> <li>Netherlands: Title Transfer Facility (TTF)</li> </ul> | 3.0  |           |
| <ul> <li>Italy: Punto di Scambio Virtuale (PSV)</li> </ul>     | 1.9  |           |
| • France: Point d'Echange de Gaz (PEG) (av.2009)               | 1.9  |           |
| <ul> <li>Germany: NetConnect Germany (NCG)</li> </ul>          | 2.4  |           |
| For comparison:  |      |           |
| <ul> <li>USA (oil): NYMEX (WTI) (Feb.2010)</li> </ul>          |      | 1680-2240 |
| <ul> <li>UK (oil): ICE (Brent) (Feb.2010)</li> </ul>           |      | 2014      |
| <ul> <li>USA (gas): NYMEX Henry Hub (av.2009)</li> </ul>       |      | 377       |
| Break-even churn level for liquid marketp                      | lace | 15        |

*Churn* is the commonly used parameter for measuring liquidity level of marketplaces & is defined as the ratio of traded volumes to physical gas deliveries after trades Source: "Gas Matters", IHS-CERA, M.Kanai (ECS)



#### **Evolution/adaptation of gas pricing & contractual** mechanisms in Europe: major options (2)

- Option 1: to substitute gas price indexation in LTGECs by spot/futures quotations => NO
- Option 2: to maintain status-quo (LTGEC with dominant oil indexation) => NO
- Option 3: to maintain oil-indexation within LTGEC and to move to oil parity => NO
- Option 4: to adapt mostly oil-linked gas price indexation in LTGEC by pricing formulas linked to broader spectrum of parameters & non-oil gas replacement values => YES (longterm capacity allocation *must* be available to exclude contractual mismatch problems - supply vs. transportation):
  - Long-term supplies (basic/base-load) : more flexible LTGEC (n x 1 year) + "modified" gas replacement value formulas (price indexation *not* limited to oil-pegging);
  - Short-term supplies (supplementary/peak- & semipeak load) : short-term (< 1 year)/spot contracts + futures quotations
- Option 5: to develop new pricing concepts leading to exceeding oil parity by gas prices (LTGEC + new indexation ingredients, like comparative ecological (dis)advantages of different fuels, etc.) => NOT NOW

# Thank you for your attention

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