

Third EU Energy Package in the context of EU- Russia energy cooperation

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(Based on Walter Boltz’s & Andrey A. Konoplyanik’s joint presentation
at the EU-Russia Gas Advisory Council meeting,
24 January 2012, Vienna)



Outline

**Changes in the European Gas Market & informal EU-Russia
Regulatory Consultations on the Third EU Energy Package**

**Topics discussed & results achieved in EU-Russia Regulatory
Consultations since January 2010**



Outline

Changes in the European Gas Market & informal EU-Russia Regulatory Consultations on the Third EU Energy Package



Third EU Energy Package in gas

**3rd EU Gas Directive 73/EC/09
(on common rules in gas)**

**Regulation
713/2009 (ACER)**

**Regulation 715/2009 (access
to natural gas networks)**

Announced Sept.2007,
entered into force
03.09.2009, to be
transposed into national
law by MSs to 03.03.2011;
as of Jan.2012 19 (?) MS
has transposed

**EU Gas Target
Model**

**Framework
Guidelines**

**Network
Codes**

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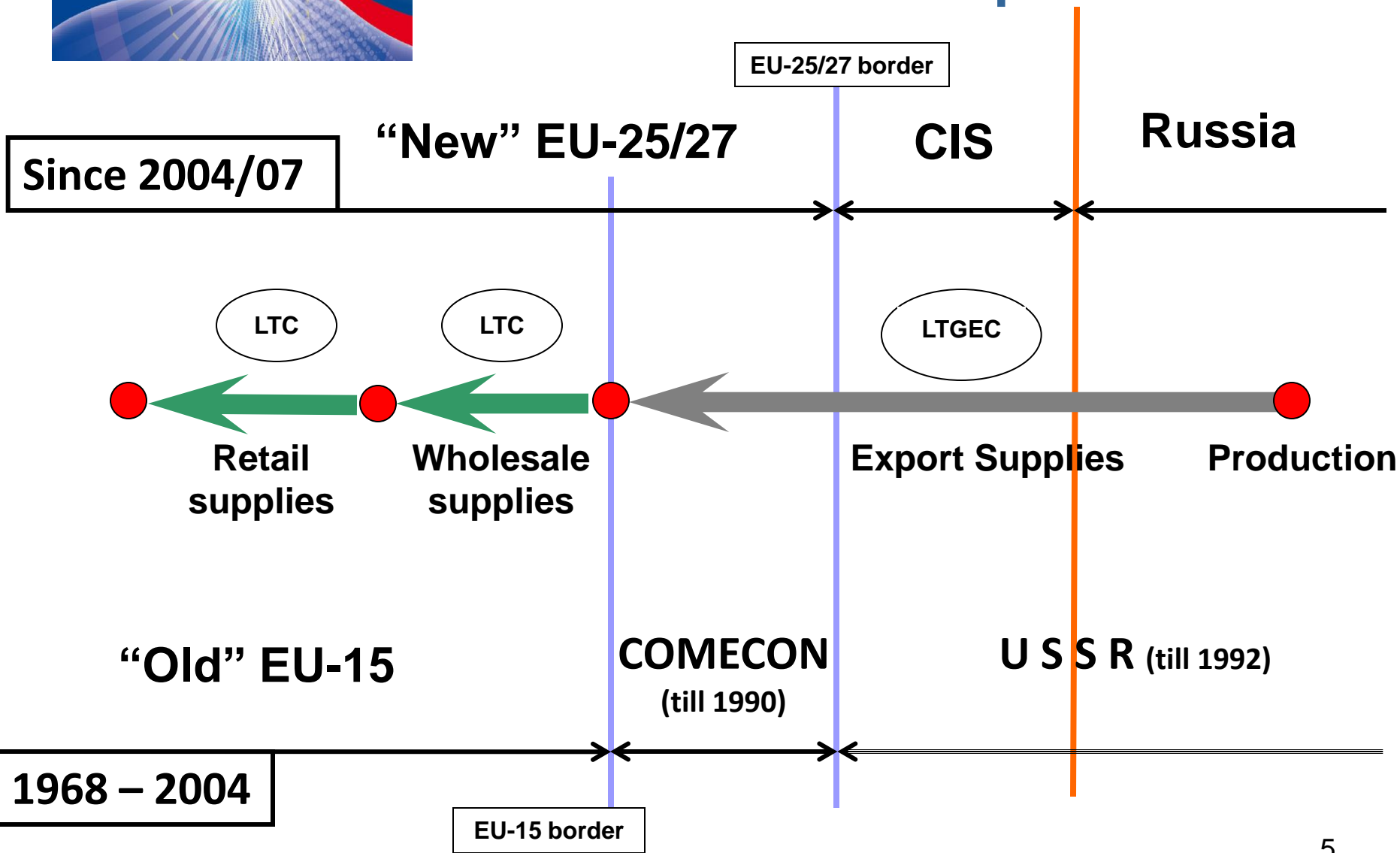
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Work in progress



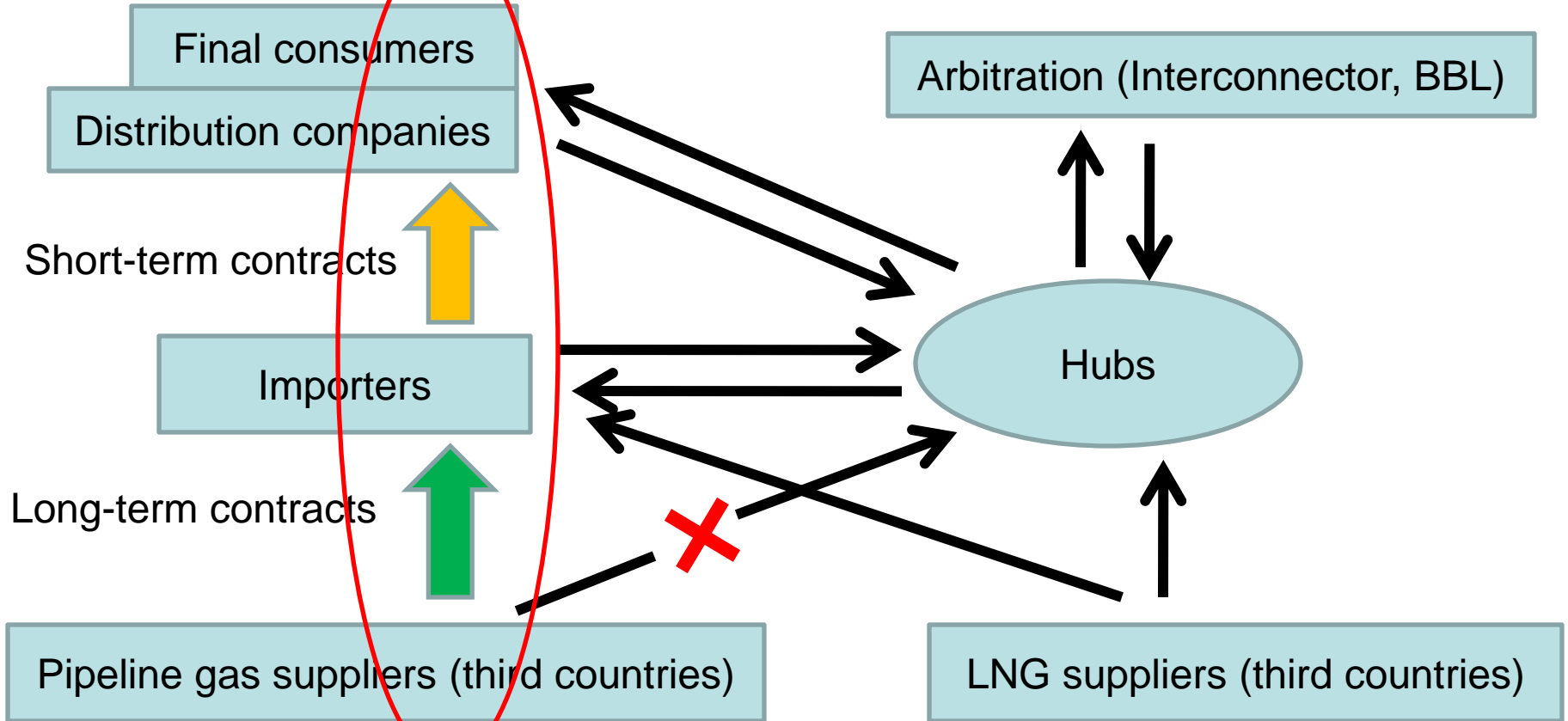
Russia-EU gas value chain – three-step LTC structure





Current overall gas supply structure to Continental Europe

Russia-EU gas value chain

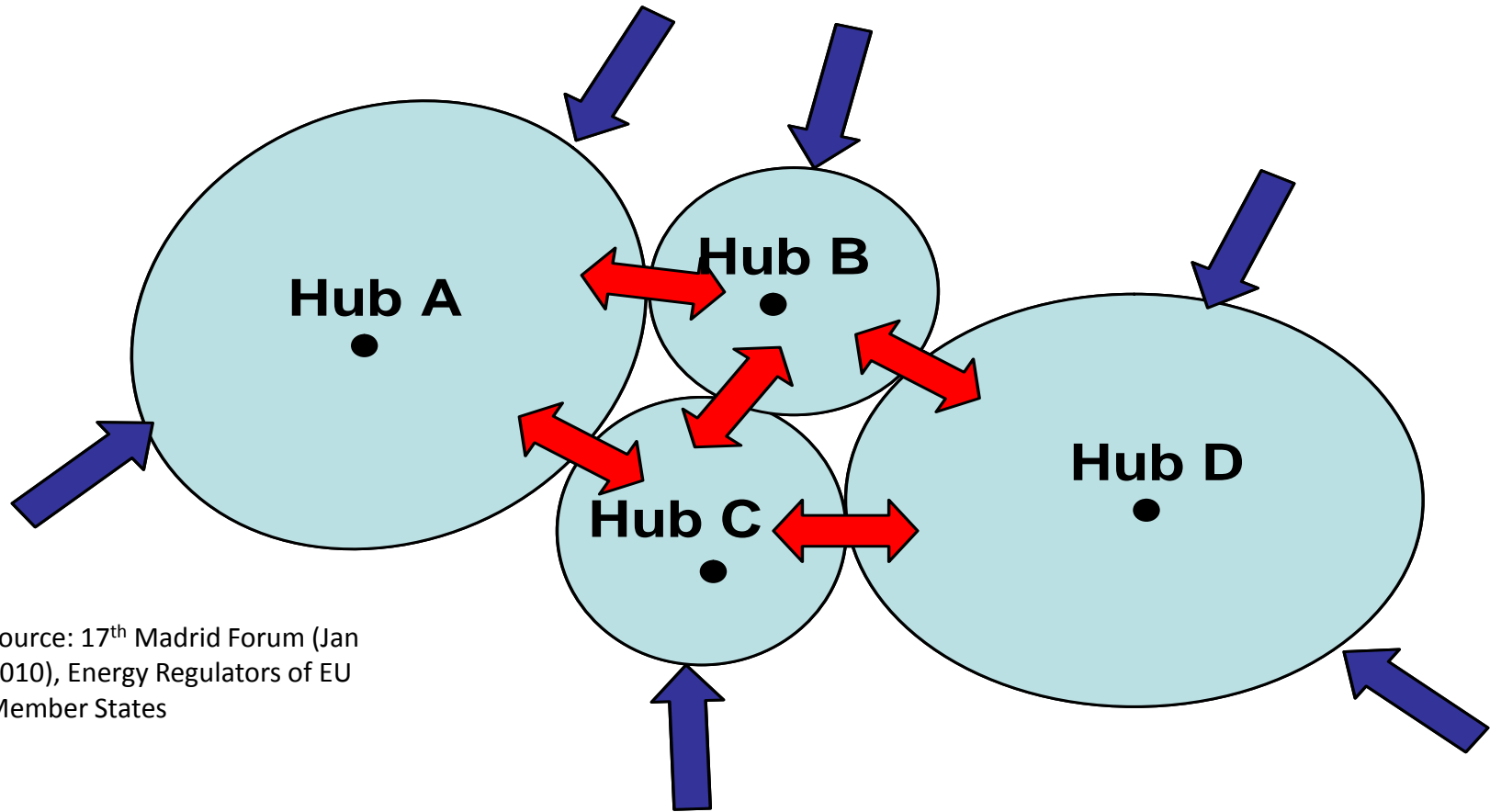


X Since LNG flexibility is objectively much higher than of pipeline gas





3rd Package changes EU gas market architecture

(entry-exit zones with virtual trading points)



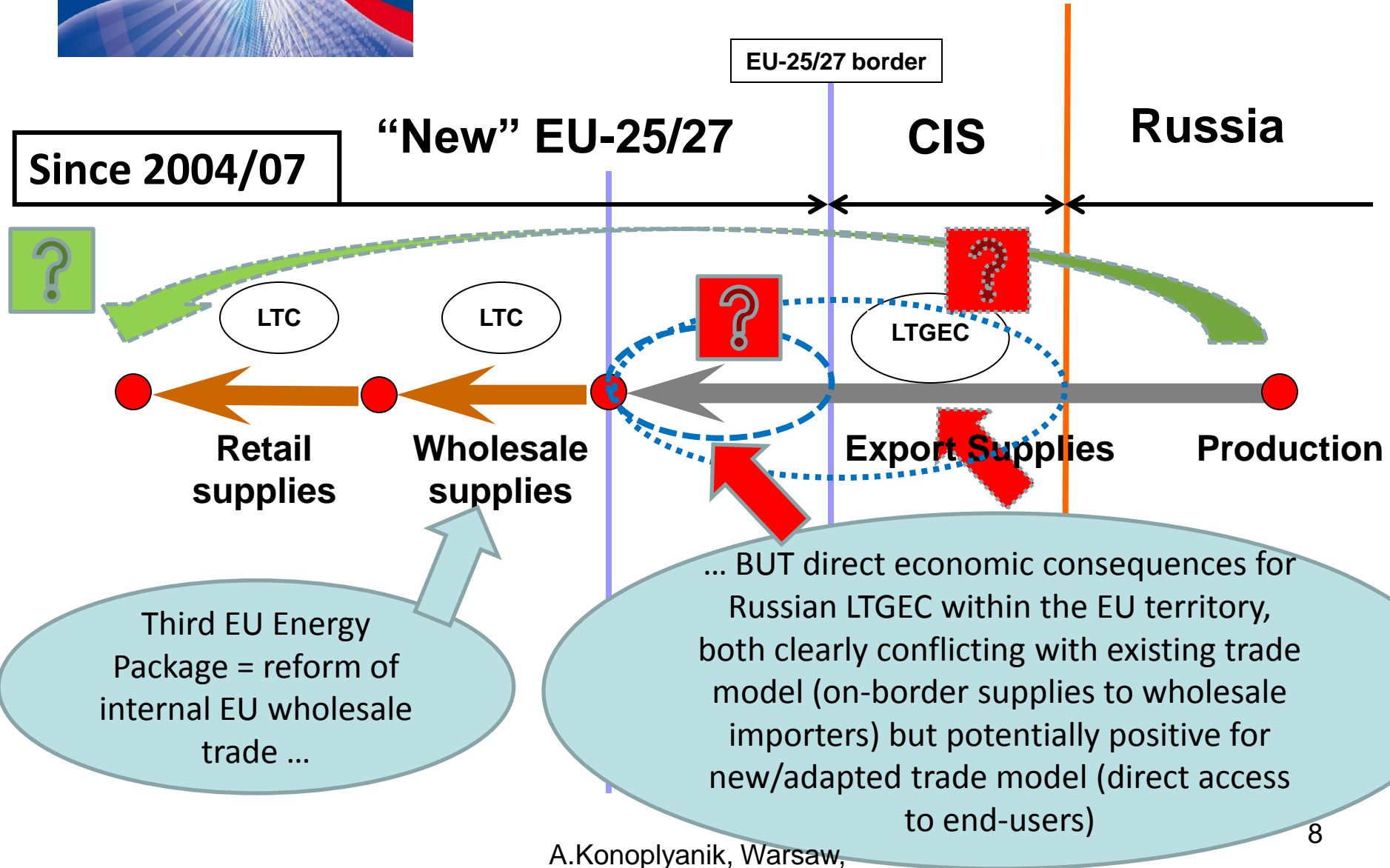
Source: 17th Madrid Forum (Jan 2010), Energy Regulators of EU Member States

 Pipelines-interconnectors between EU zones (covered by 3rd EU Energy Package)

 Supplies to the EU from non-EU (*not directly* addressed / covered by 3rd EU Energy Package – but *direct economic consequences*)



Third EU Energy Package affects Russia-EU Gas supply chain

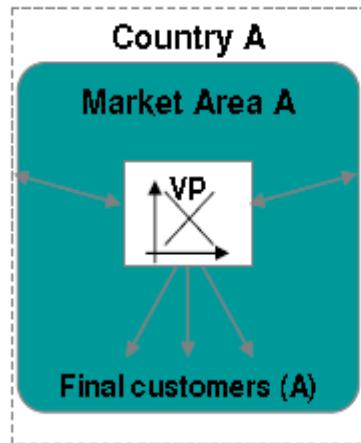




EU Cross Border Market Integration - Models proposed

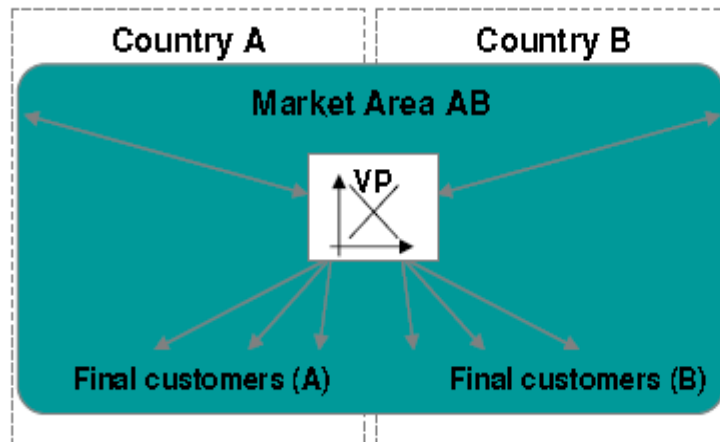
(Market Area approach)

National market area



- Fully integrated wholesale market
- One virtual point for wholesale trading
- Entry-contracts entitle the shipper to inject gas into the market area; the injected gas is then deemed to be at the "virtual point"
- Exit-contracts entitle the shipper to ship gas from the virtual point to a final customer exit (or a market exit, in that case on the basis of nominations)
- One balancing zone from entry points to final customers (i.e. including all forecasting errors)
- Full integration of DSO networks (cost allocation, provision of balancing information)
- Single set of balancing rules
- Single set of final customer consumption measuring/estimation (incl. SLP) rules
- Single balancing entity

Cross-border market area

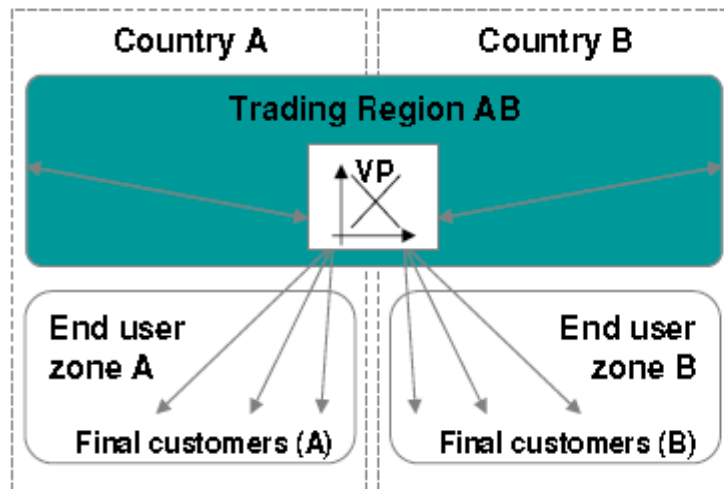


Symbols

- Virtual point of the market area serving as the sole marketplace of the market area
- Entry or exit contract
- Exit contract



EU Cross Border Market Integration - Models proposed (Trading Area approach)



- Fully integrated wholesale market
- One virtual point for wholesale trading (including for trading balancing energy)
- Entry-contracts entitle the shipper to inject gas into the trading region; the injected gas is then deemed to be at the "virtual point"
- Exit-contracts entitle the shipper to ship gas from the virtual point to an end user zone (or another exit) on the basis of nominations
- Trading region is basically kept free of imbalances
- Final customers (i.e. the forecasting errors relating to them) are balanced in national end user zones that may reflect national specifics
- End user balancing may be done by national balancing entity
- Congestion-free interconnection between trading region and end user zones through the common virtual point (→ virtual exit to end user zone)
- Storage may be (taking into account the technical situation) allocated to either the trading region or an end user zone (or even both balancing systems – storage customers would decide by nomination)

Legend and Symbols

End user zone = National balancing zone for national final customers, no matter the system (distribution or transmission) they are connected to

Trading Region AB = Cross-border entry/exit system including all nominated points on the transmission systems of countries A and B

→ Entry or exit contract

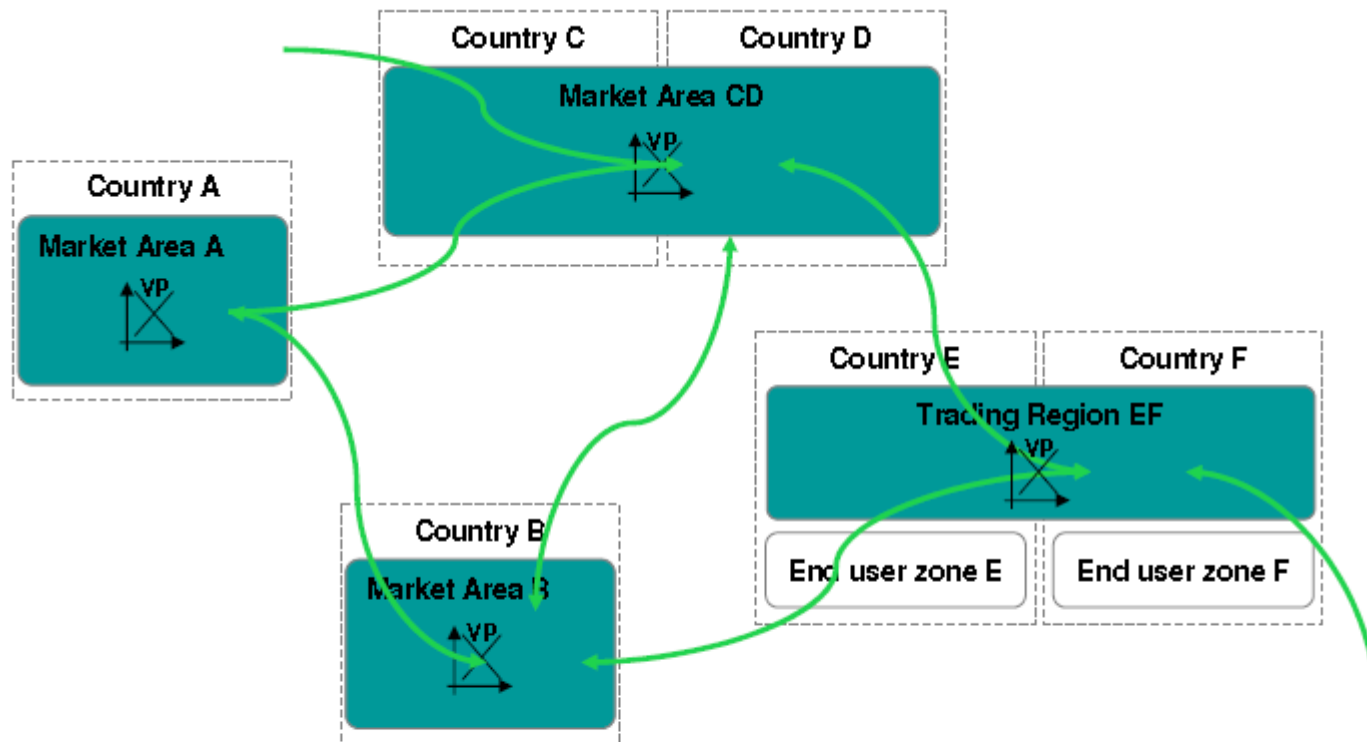
VP Exit contract





Virtual point of the trading region serving as the sole marketplace of the trading region and all attached end user zones. Shifting of gas between trading region and end user zone is done by nominating a virtual exit on the VP.



EU Gas Market Architecture at a Large



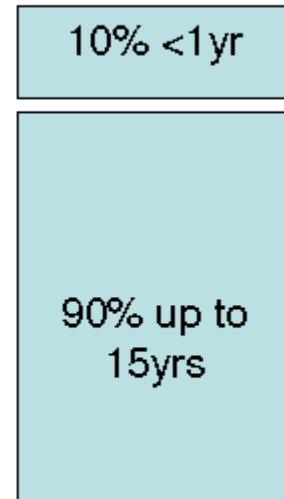
Legend and Symbols

-  *VP2VP* (also called *Hub to Hub*) capacity product
-  Virtual point.



Long Term Capacity bookings in the EU Regulatory Framework

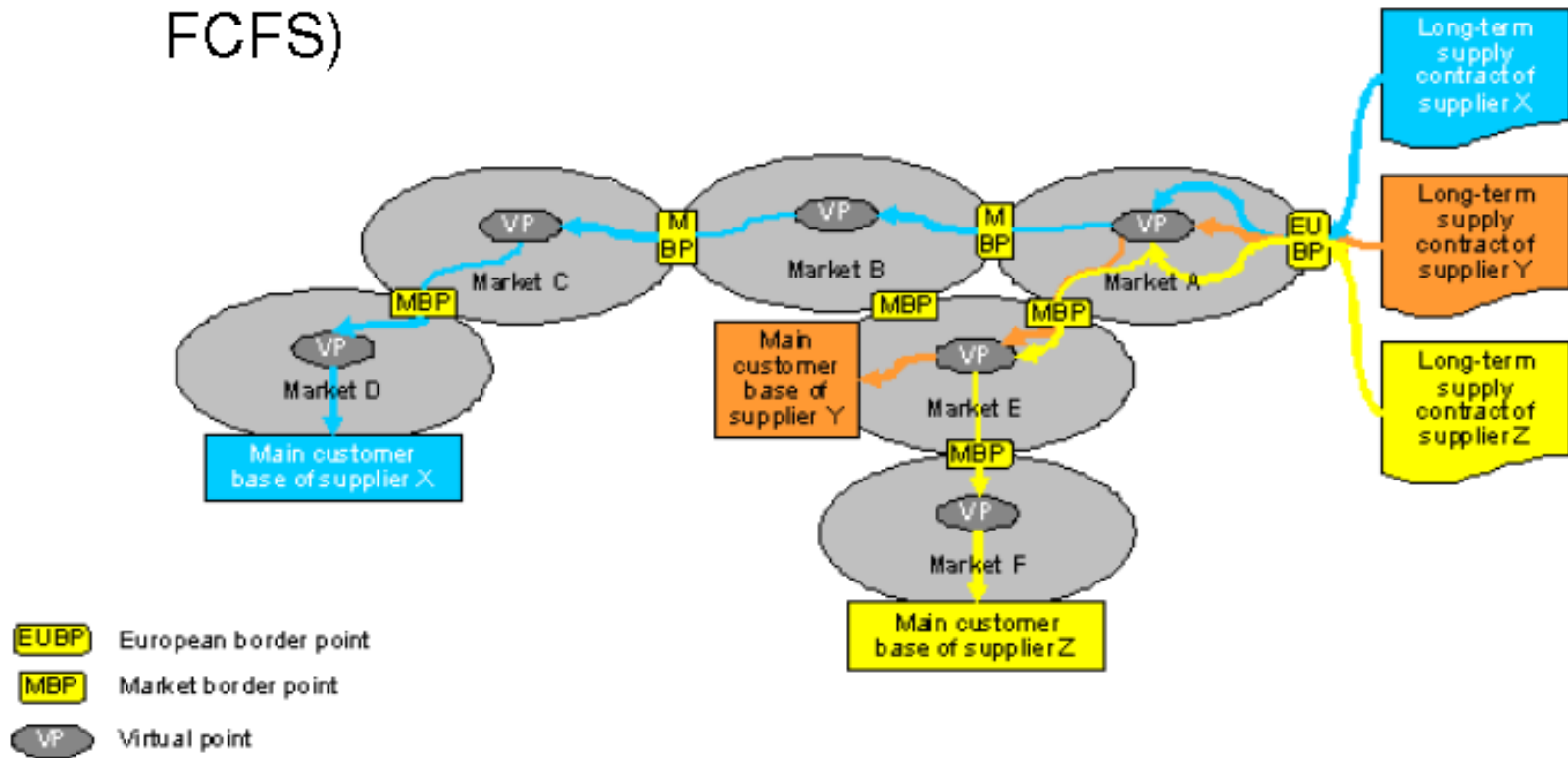
- FG CAM reserves (at least) 10% for short-term, i.e. 90% can be booked on long-term Basis
- Capacity can be booked and structured for 15 years in advance (cf. ENTSOG NC)
- Inclusion of “incremental capacity”? [FG CAM: Coherence]





Long Distance capacity bookings in the EU Regulatory Framework

- Introduction of Entry-Exit System in all countries
- Auctions as standard allocation (instead of, e.g. FCFS)





EU-Russia Regulatory Consultations on Third EU Energy Package

- Sharp political reaction from Russian officials on Third EU Energy Package since its announcement in Sept.2007
- 02.09.2009 a proposal voiced to start informal discussions (EU energy regulators vs Russia/Gazprom Group experts) on Third EU Energy Package issues:
 - EU regulators motivation – explain intentions, clarify misunderstandings, provide more clarity about new rules,
 - Russia/Gazprom Group experts motivation – provide justified concerns, sparring partner in drafting regulatory doc's to Third package, help to create effectively working internal EU gas market with due consideration of non-EU suppliers' interests
- Since January 2010 till now – 8 meetings plus participation of Russia/Gazprom Group experts in internal EU public consultations process; 9th meeting – 16 March 2012 in Vienna



Outline

Topics discussed & results achieved in EU-Russia Regulatory Consultations since January 2010



Correlation between EU-Russia Regulatory Consultations & EU-Russia Gas Advisory Council

Specific items presented to regular GAC meetings to be organized in 3 groups:

- Items discussed and settled to the mutual benefit => informative purpose (GAC takes note),
- Items discussed and not yet settled to the mutual benefit, but discussions are continued with the expectation that mutually beneficial results can be reached => informative purpose & advanced indication to GAC of the issues where GAC involvement might be needed at later stage,
- Items discussed, not settled to the mutual benefit, and it came clear to the parties that they have exhausted all arguments for finding a mutually beneficial solution; thus they decide to transfer this issue to the GAC for its consideration => GAC to decide:
 - either in substance, or
 - for procedural decision on further actions, or
 - for transmitting it as unsettled to the political level of Coordinators of RF-EU Energy Dialogue (the latter is the least desirable outcome).



Specific items & results achieved (proposed format of presentation on each item to Gas Advisory Council)

- 1) Identification of the problem,
- 2) Risks & uncertainties that have been identified/discussed during Consultations,
- 3) Possible negative consequences for market players alongside gas value chain,
- 4) Draft solutions proposed in the course of Consultations,
- 5) EU side motivated reaction,
- 6) Compromise solution, if achieved, f.i. new version of the debated provision of the document, etc.,
- 7) Motivated refusal of the EU side (if compromise solution is not achieved),
- 8) ...if so, further actions of the parties (ways and means of narrowing the gap of disagreement – further agreed procedure),
- 9) Additional comments of the parties (if available and/or necessary),



Specific items & results achieved during Regulatory Consultations (list of items presented to 2nd GAC meeting 24.01.2012)

Item 1. GAS TARGET MODEL

**Item 2. FUTURE EU GAS MARKET CONTRACTUAL
STRUCTURE**

Item 3. CONTRACTUAL MISMATCH & OPEN SEASON

Item 4. DELIVERY POINTS & VIRTUAL HUBS

Item 5. RENOMINATION

Item 6. BUNDLED PRODUCTS

Item 7. ZONING & ROUTING

Item 8. GTM STRUCTURE/COVERAGE

Item 9. DEFINITIONS

**(other items – open renewed list – continue to be discussed at
further rounds of Consultations & presented to GAC)**



Item 1: GAS TARGET MODEL

- 1) Necessity to develop Gas Target Model argued (Jan.2010)
- 2) EU initial Decision on preparation of 12 Framework Guidelines (FG) and 12 Network Codes (NC) for implementation of the Third Energy Package (TEP) without advanced / simultaneous consolidated view on the new architecture of the internal EU gas market based on TEP principles
- 3) Lack of consolidated vision & coordination during preparation of FGs & NCs between their drafters and, as result, related discrepancies in their rules & procedures
- 4) To prepare a document with common vision of the new architecture of the internal EU gas market
- 5) 18th Madrid Forum (Sept 2010) took decision on developing Gas Target Model (GTM)
- 6) Latest GTM version took into consideration a number of justified concerns raised by Russian/Gazprom Group's experts in the course of Consultations (see further items)



Item 2: FUTURE EU GAS MARKET CONTRACTUAL STRUCTURE

- 1) Contractual structure of new internal EU gas market in GTM (long-term and/or short-term)
- 2) Initial contractual structure predetermined only spot transactions at virtual liquid hubs – no long-term contracts even mentioned in earlier GTM versions
- 3) Impossibility of EU gas market operations based on spot transactions only => diminished stability & security of its supply pattern; necessity to renegotiate, re-write or to pass through court procedures all existing long-term gas export contracts (LTGEC); EU hubs are not liquid yet; additional costs in mead-stream part of gas value chain (e.g. related to balancing, structuring, etc.); thus decrement of EU gas market competitive advantages (if only spot-contract-based)
- 4) Proposed two-segment contractual structure of the EU internal gas market:
(a) long-term contracts for base-load demand and (b) spot / futures transactions for semi-peak & peak-load demand
- 5) Latest version of GTM (July 2011) describes both long-term supplies as well as spot transactions;
- 6) Two-segment contractual model of the EU internal gas market (if really agreed by the EU) still need to be further clarified in more details



Proposal on the “hybrid” (two-segment) EU gas market model under GTM (for joint discussion & consideration)

➤ **Long-term supplies (firm contracts, main/basic demand load):**

More flexible LTGEC (off-taking of contractual volumes & pricing formulas & price review rules)

+ long-term access to transportation capacity for full duration & volume of LTGEC (open seasons)

+ modified pricing formulas linking gas to its replacement fuels (indexation not only to petroleum products)

➤ **Short-term supplies (interruptible contracts, additional/semi-peak & peak demand load):**

Spot contracts

+ exchange pricing (futures, gas indexes, forward curves)

Initially GTM did not consider risks & uncertainties for this market segment => these questions have been added on a step-by-step basis in result of RF-EU informal expert Consultations

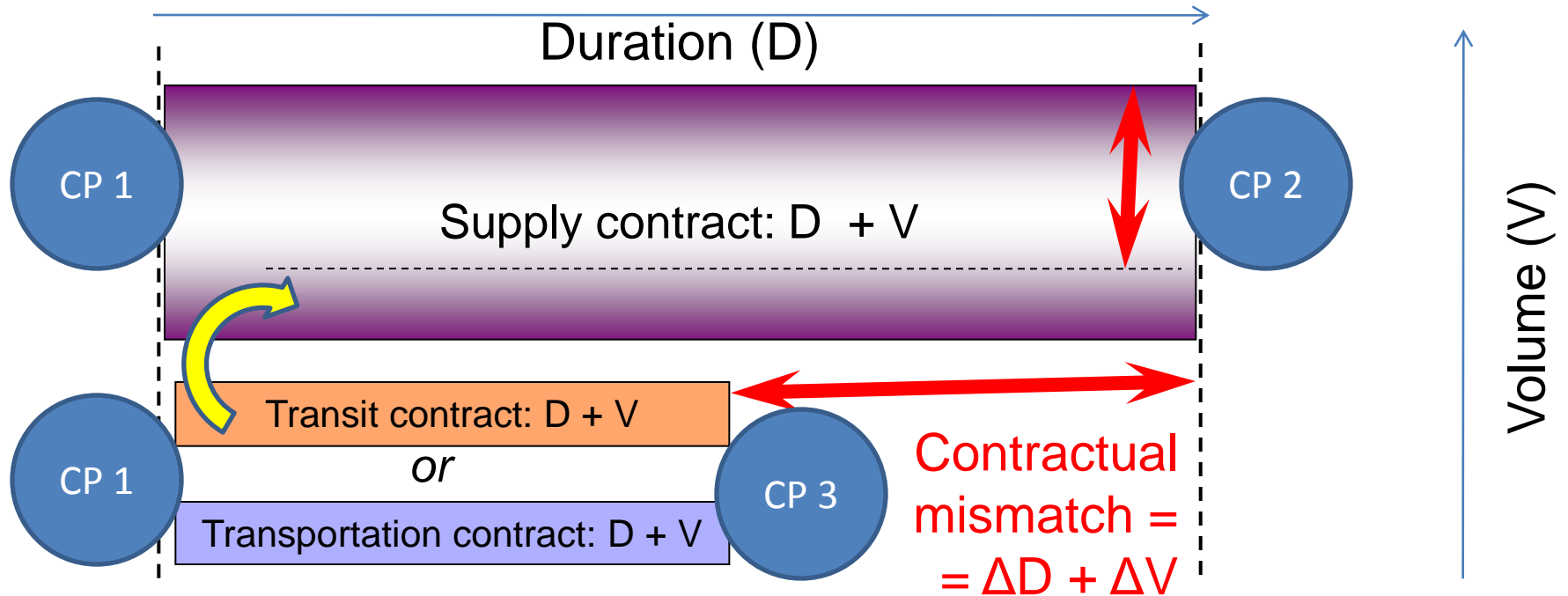
Initial drafts of GTM covered only this segment of gas market, long-term long-distant supplies and related risks & uncertainties stayed beyond consideration of justified concerns of market participants



Item 3: CONTRACTUAL MISMATCH & EU-INTEGRATED OPEN SEASONS

- 1) “Contractual mismatch” in midstream gas value chain
- 2) Risk of non-renewal of transportation contract (after its expiration, within the unbundled gas system) with the required structure & adequate costs to meet volume, duration, flexibility, delivery (destination) points agreed between parties of supply contract
- 3) (i) Breach of LTGEC supply obligations by exporter (non-delivery in time of contracted volumes) because of “transportation force majeure” and consequent reduction of security of supply; (ii) Additional end-user costs as result of transportation constraints and due to market (spot) marginal purchase of gas
- 4) Revolver-type “open season” procedure with obligation of TSO to invest in case of justified market demand for incremental (booked) capacity (presented June 2011). This will prevent appearance of transportation capacity deficit (in few years years) & thus will exclude necessity to use auctions as a regular instrument of congestion management. Proposal to integrate 10YNDP (evaluating demand for/creation of future capacities) with capacity allocation mechanisms for existing capacity (CAM Code) and efficient utilisation of booked capacity (CM Annex to Regulation 715) to ensure efficient provision and allocation of transportation capacity.
- 5) Discussion on integrated within EU proposed revolver-type open-season procedure is continued

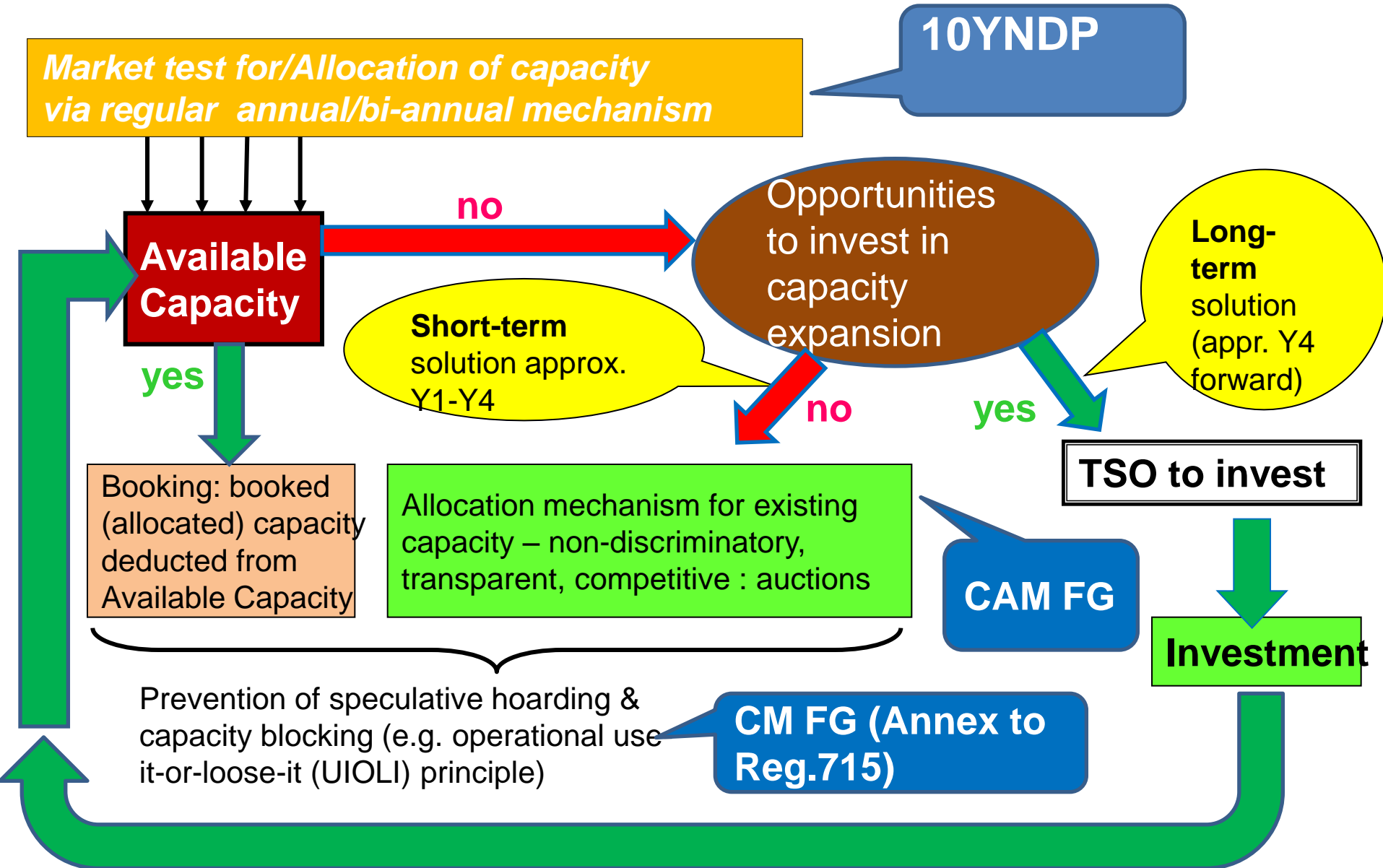
Contractual Mismatch Problem



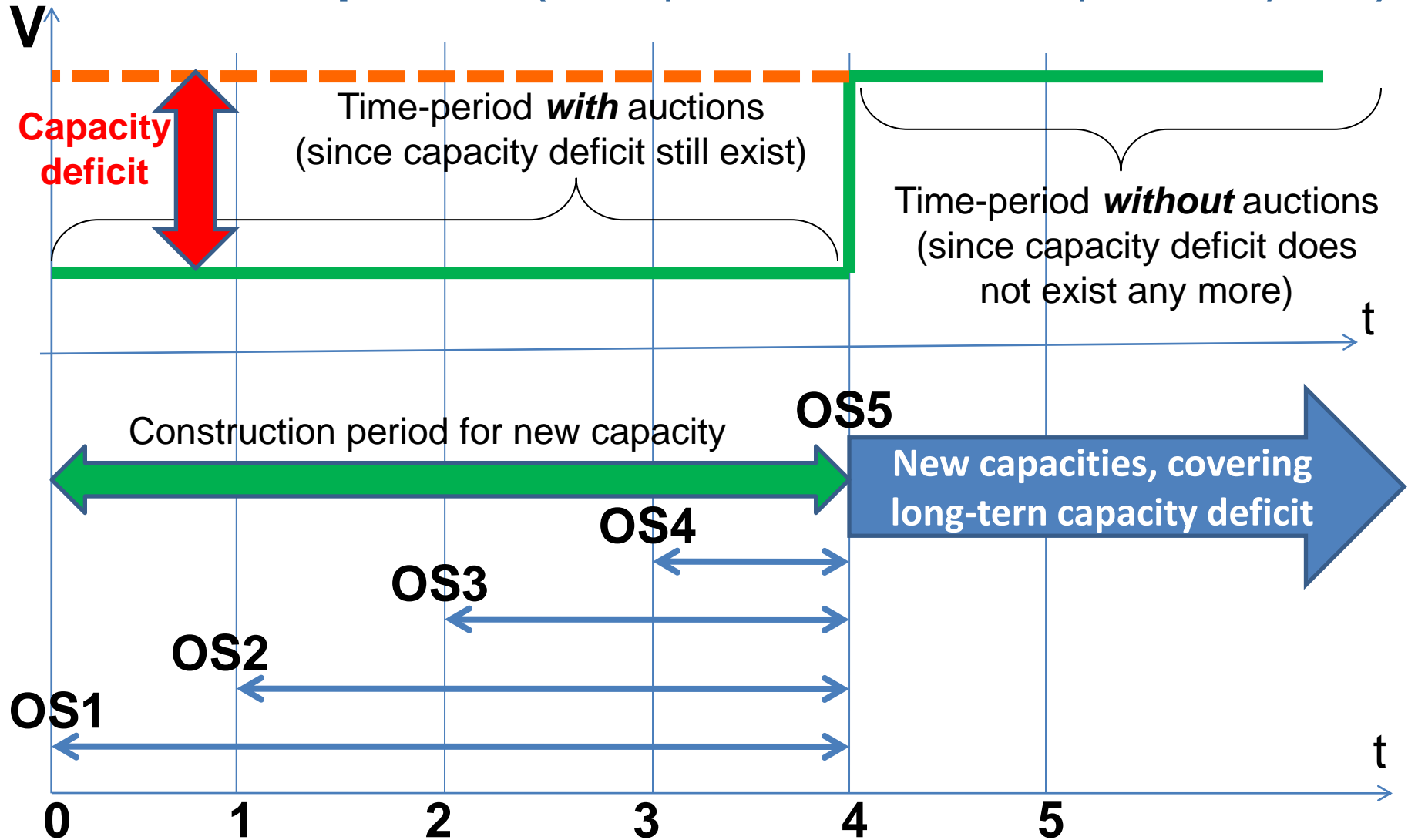
Contractual mismatch: between duration/volumes (D/V) of long term supply/delivery contract (LTGEC; CP1-CP2) and transit/transportation contract (CP1-CP3); the latter is integral part to fulfill the delivery contract => risk non-renewal transit/transportation contract => risk non-fulfillment supply/delivery contract.

Core issue: guarantee of access to/creation of adequate transportation capacity for volume/duration of long term contracts

Open Season as Universal Mechanism of Long-, Medium-, and Short-Term Allocation of Capacity



“Open Season” procedure makes auctions as just temporary capacity allocation instruments – only for duration of construction period of new capacities covering tested market demand for capacities (example for construction period 4 years)





Item 4: DELIVERY POINTS & VIRTUAL HUBS

- 1) Delivery points in existing LTGEC vs. virtual hubs in entry-exit zones
- 2) EU proposal to organize all trade (supply / delivery to) only at virtual liquid hubs and thus to change existing delivery points in current LTGEC to future (still not yet identified & not yet liquid) hubs
- 3) Necessity to rewrite all existing LTGEC - legal risks, arbitration procedures; possible collapse of all EU gas supply system due to dramatic alteration of risk sharing scheme between traditional long-term partners
- 4) Coexistence of virtual hubs and on-border/ EU's internal delivery points of LTGEC
- 5) Distinct and clearly articulated disagreement with possibility of simultaneous coexistence of virtual hubs as presented in GTM and on-border/ EU's internal delivery points as in existing LTGEC
- 6) Unsolved; discussions to be continued or to be forwarded to GAC?



Item 5: RENOMINATION

- 1) Renomination procedure
- 2) Restrictions of renominations as part of CMP proposals; discrimination (decrease) of buyers flexibility to request delivery volumes by pipelines within short-term
- 3) Inconsistency with Balancing Network Code which encourages shippers to ensure markets balance; discriminatory by focusing on pipeline gas only disadvantages countries which rely on pipeline gas (as opposed to storage and LNG) to meet flexibility; limits suppliers ability to meet their contractual obligations where it is buyer which nominates the flow of gas.
- 4) Use of other congestion management tools e.g. overselling and buyback and interruptible to minimize use of re-nomination restrictions
- 5) Pending, to be discussed



Item 6: BUNDLED PRODUCTS

- 1) Incompleteness of “bundled products” concept
- 2) CAM FG present concept of “bundled products” related to access to transportation capacity as related to volume of capacity only, non-related to duration of access to capacity
- 3) Possibility of appearance of “contractual mismatch” problem (see above)
- 4) “Bundled products” need to present a two-dimension instrument of access to capacity: with unit volume and unit duration parameters with opportunity to book a *portfolio of bundled products* both packing its volume units as well as duration units suchwise to guaranty a traditional long-term suppliers to deliver appropriate volumes of gas in due time according to buyers daily nominations and flexibility
- 5) Discussions started – to be continued



Item 7: ZONING & ROUTING (1)

- 1) GTM assumes that every shipper has to design its own-made sequence of entry-exit zones his gas should penetrate through to be delivered. For this sake he should participate and win at all the related auctions. If he loses at least one such auction, he should construct another chain of zones at his route to delivery point and repeat the procedure.
- 2) In theory such activity could be successful without central dispatching if the number of zones is small (i.e. gas transportation system is rather simple/primitive) or load factor is low. Otherwise, numerous shippers, suffering from the lack of experience and, moreover, from insufficient information, but taking nevertheless their own uncoordinated decisions, may simply cause chaos which may lead the system to collapse. No central dispatch service is contemplated in TEP documents.



Item 7: ZONING & ROUTING (2)

- 3) Existing interpretations of Entry-Exit and Zones approach in GTM papers totally separate them from gas flows – a result would be a huge under-utilization of pipeline capacity: danger of large-scale excessive demands for investment or significant under-running of the network (up to 20-30% or more); danger of TSO refusal to guarantee long-distant cross-border flows; danger of destabilization of LTGEC and, in result, requests for such their adaptation which would undervalue their role & diminish SOS
- 4) It was argued (agreed?) that effective functioning of diversified, integrated, complex gas transportation system (GTS) is possible only under management of united dispatch service supported by strong IT service. Such service should provide each shipper with possibility to reserve & allocate transportation capacities to deliver gas to consumer. This service should also support related auctions & calculation of transportation tariffs. Such optimization can rationale use of available capacities & diminish OPEX (& thus tariffs) by at least by 15-20%. Such service, not existed in the EU now, should be created. Gazprom (A.Medvedev) invited EU drafters of FG & NC to visit Gazprom's Dispatch Center to learn about USSR/RF experience in organizing such service & managing its GTS
- 5) Invitation accepted. Renewed visit is planned for May-June 2012 (DTBD).



Item 8: GTM STRUCTURE / COVERAGE

- 1) Whether GTM & related doc's cover all necessary aspects of gas market functioning to exclude further "grey zones" with related risks & costs
- 2) No clear vision yet on:
 - The compatibility of LT oil indexation and Take-or-Pay provisions with the current and future European market situation/structure and legal framework (yet to be discussed);
 - How medium term developments resulting from the changes in the EU gas market should be reflected in LT supply contracts – transition measures (yet to be discussed), etc.
- 3) Lack of clear vision destimulates trade & investment, increase risks & costs through all segments of cross-border gas value chain
- 4) Yet to be discussed with possibility to add new chapters to GTM and/or develop new doc's on these issues (like, pricing, contractual structures, transitional measures, etc.)



Item 9: DEFINITIONS

- 1) Definitions of key terms
- 2) Sometime different meaning of the same terms used in the TEP & related draft documents by different market players both on EU and non-EU side as well as within EU side
- 3) “Grey zones” for different on-side & non-balanced interpretations
- 4) Glossary of terms need to be developed by EU side (& to be jointly discussed by the parties) on the list of terms provided by Russian (& the EU) side
- 5) Agreement to develop a non-legally binding glossary of key terms – say, as an attachment for GTM and specific FG/NC
- 6) First draft of glossary (prepared by the EU side on basis of the list of terms prepared by the Russian side) to be discussed on March 16, 2012



**Thank you for your
attention**

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