



# Network code on harmonised transmission tariff structures for gas (NC TAR)

## Implementation of NC TAR in the Netherlands

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# Publication according to publication requirements of article 30

- Article 30 specifies information which has to be published before the tariff period
- This article has already entered into force
- This information can be published by NRA or TSO, as decided by NRA
- ACM decided to publish this information
- The information will be published on the ACM website: [acm.nl/nctar](http://acm.nl/nctar)

# Agenda

- Subjects this session:
  - Classification of services
  - RPM: Methodology
  - RPM: Entry-exit split
  - Adjustments
- Subjects next session:
  - Multipliers
  - Seasonal factors
  - Interruptible discount
  - Non-transmission tariff structures
- Per subject: assessment of GTS' proposal and alternative(s) ACM

# General remark

- ACM presents and explains her choice for a RPM, entry-exit split and adjustments based on her current thinking.
- Goal of presentation is to hear relevant arguments of stakeholders regarding ACM's current thinking.
- ACM also presents relevant alternatives to hear stakeholders' thoughts on these alternatives.
- ACM will consider the GTS proposal if the proposal:
  1. Is in line with NC TAR and other relevant rules and regulations;
  2. Correctly weighs different aspects/interests; and
  3. Is sufficiently explicable and motivated

# Article 4: transmission and non-transmission services

# Defining and classifying services (1)

- Proposal GTS:
  - All-in transmission service
  - No non-transmission services
  - Gas heating fee classified as ‘secondary service’
  - Different list of services used for counterfactual RPM
- ACM is still assessing how to define service. However, independent of the defined services the division between transmission and non-transmission will presumably be:
  - Everything except gas heating fee → Transmission tariffs
  - Gas heating fee (service for specific requests for specific, higher, temperature) → Non-transmission tariff(s)
  - Same list of services should be used for counterfactual RPM
- Shorthaul and wheeling to be discussed (see next slides)

# Defining and classifying services

- Shorthaul:
  - Transmission capacity between an entry- and an exit point, where the distance between entry- and exit point is less than 50 km
  - In = out (no balancing)
  - Tariffs cheaper than sum of entry- and exit tariff
- Wheeling:
  - Transmission capacity between an entry- and an exit point, where the distance between entry- and exit point is close to zero
  - In = out (no balancing)
  - Tariffs cheaper than sum of entry- and exit tariff

# Defining and classifying services

- NC TAR doesn't allow for discounts on the reference price other than those specified in 6(4) → No discount on shorthaul and wheeling capacity
- Article 4(2) doesn't change this
- Discount is the essence of wheeling and shorthaul as separate services
- Conclusion: shorthaul and wheeling not allowed by NC TAR
- Is that a problem?
  - There are currently no shorthaul contracts
  - Is there added value of wheeling when VIP's are implemented?



# Defining and classifying services (3)

- Questions:
  - Do you have any remarks regarding the definition and classification of services?
  - Do you see any issues if shorthaul and wheeling are no longer offered as services? If so, why? Do you see a solution?

# RPM: Methodology (excluding the entry-exit split)

# Remark

- The entry-exit split is part of the RPM
- However, we discuss the entry-exit split separately from the rest of the methodology, for practical reasons

# Assessment framework ACM

Article 13 No 715/2009	Article 7(a)-7(e) NC TAR	Goal
<ul style="list-style-type: none"> <li>✓ The tariffs shall be transparent</li> </ul>	<ul style="list-style-type: none"> <li>✓ The reference price methodology should enable network users to reproduce the calculation of the reference prices and their accurate forecast</li> </ul>	<p>Reproducibility, predictability</p>
<ul style="list-style-type: none"> <li>✓ reflect the actual costs incurred, insofar as such costs correspond to those of an efficient and structurally comparable network operator and are transparent, whilst including an appropriate return on investments</li> </ul>	<ul style="list-style-type: none"> <li>✓ The reference price methodology takes into account the actual costs incurred for the provision of transmission services considering the level of complexity of the transmission network;</li> </ul>	<p>Cost reflectivity</p>
<ul style="list-style-type: none"> <li>✓ Tariffs, or the methodologies used to calculate them, shall be applied in a non-discriminatory manner.</li> <li>✓ When setting tariffs cross-subsidisation should be avoided</li> </ul>	<ul style="list-style-type: none"> <li>✓ The reference price methodology should ensure non-discrimination and prevent undue cross-subsidisation including by taking into account the cost allocation assessments set out in Article 5;</li> <li>✓ The reference price methodology should ensure that significant volume risk related particularly to transports across an entry-exit system is not assigned to final customers within that entry-exit system;</li> </ul>	<p>Cost reflectivity</p>
<ul style="list-style-type: none"> <li>✓ Tariffs for network access shall neither restrict market liquidity nor distort trade across borders of different transmission systems.</li> <li>✓ Tariffs shall facilitate efficient gas trade and competition.</li> </ul>	<ul style="list-style-type: none"> <li>✓ The reference price methodology should ensure that the resulting reference prices do not distort cross-border trade</li> </ul>	<p>Consequence of cost reflective tariffs</p>

# Assessment framework ACM

## Cost reflective

- To each entry- or exit point at least the direct costs plus a reasonable share of the indirect costs are allocated;\*
- The same allocation mechanism is used to allocate the indirect costs to each entry- and exit point;
- The parameters used in the allocation mechanism should reflect the use of the network through an entry- or exit point;
- The costs allocated to each entry- or exit point should be converted to a reference price by dividing the costs through a reliable forecast of the contracted capacity at the entry- or exit point;

\* Allocation of direct costs not possible/suitable

## Reproducible & predictable

- The calculations of the RPM are public information
- The inputs for the application of the RPM are public information\*
- The inputs for the application of the RPM can be predicted to a reasonable extent

\* As much as possible; some inputs may be confidential

# Assessment framework ACM

- Goal: cost reflective, reproducible and predictable reference prices
- Required characteristics of the RPM:
  1. The same allocation mechanism is used to allocate the indirect costs to each entry- and exit point;
  2. The parameters used in the allocation mechanism should reflect the use of the network through an entry- or exit point;
  3. The costs allocated to each entry- or exit point should be converted to a reference price by dividing the costs through a reliable forecast of the contracted capacity at the entry- or exit point;
  4. The RPM (calculation steps) is public information;
  5. The inputs for the application of the RPM are public information; and
  6. The inputs for the application of the RPM can be predicted to a reasonable extent.

# Proposal GTS

- Proposal GTS:
  - Postage stamp methodology

# Assessment by ACM

- The postage stamp methodology contains all required characteristics. However:
  - ACM should consider whether a RPM that better fits the framework is available
  - ACM should compare the proposed RPM with the counterfactual RPM

Required characteristics of the RPM	Assessment of postage stamp
The same allocation mechanism is used to allocate the indirect costs to each entry- and exit point	Yes
The parameters used in the allocation mechanism should reflect the use of the network through an entry- or exit point	Yes
The costs allocated to each entry- or exit point are converted to a reference price by dividing the costs through a reliable forecast of the contracted capacity at the entry- or exit point	Yes
The calculations of the RPM are public information	Yes
The inputs for the application of the RPM are public information	Yes
The inputs for the application of the RPM can be predicted to a reasonable extend	Yes



# Counterfactual RPM

- Counterfactual RPM in proposal GTS:
  - Uses a different classification of services
  - Classifies statutory tasks quality conversion, balancing, existing connections and new connections as non-transmission services
  - Charges non-transmission tariffs on top of the reference price when selling (standard) capacity products
- Assessment ACM:
  - The counterfactual should use the same list and qualification of services. Thus, the CWD methodology should be applied on the ‘all-in transmission service’.

# Alternatives RPM's

- During previous sessions the following alternatives have been discussed:
  1. CWD for all-in transmission service
  2. CWD + postage stamp QC → a.k.a. 'hybrid'
  3. CWD + non transmission QC → same outcome as 'hybrid' through non transmission service QC
- ACM considers options 2 and 3 too problematic to move forward:
  - Option 2: may be seen as two reference price methodologies combined as one
  - Option 3: non-transmission tariff on top of the reference price contradicts definition of reference price (the price of a capacity product)

# Options RPM

- Thus, two realistic options:
  - Postage stamp for transmission service(s)
  - CWD for transmission service (counterfactual)

Required characteristics of the RPM	Postage stamp	CWD
The same allocation mechanism is used to allocate the indirect costs to each entry- and exit point	Yes	Yes
The parameters used in the allocation mechanism should reflect the use of the network through an entry- or exit point	Yes	Yes
The costs allocated to each entry- or exit point are converted to a reference price by dividing the costs through a reliable forecast of the contracted capacity at the entry- or exit point	Yes	Yes
The calculations of the RPM are public information	Yes	Yes
The inputs for the application of the RPM are public information	Yes	Yes*
The inputs for the application of the RPM can be predicted to a reasonable extend	Yes	Yes

\* As much as possible; some inputs may be confidential

# Options RPM

- Both RPM's meet basic requirements, but they strike a different balance

## Postage stamp

- Capacity as cost driver → ignores distance
- Few input parameters on aggregated level → easy to reproduce (public information) and forecast reference prices (few inputs)

## CWD

- Capacity and distance as cost drivers → Including distance as a cost driver may increase cost reflectivity, because distance is a parameter that reflects the use of the grid (however, also costs of QC are allocated based on distance)
- Many input parameters → more difficult to reproduce (confidential data) and forecast reference prices (forecasted contracted capacity for each point needed).

# Proposal ACM

- ACM proposes the postage stamp methodology
- Reasons:
  - Reasonable level of cost reflectivity combined with a high level of reproducibility and predictability
  - During previous sessions market parties have expressed a preference for postage stamp for several different reasons.

# Questions

- Do you agree think the postage stamp methodology leads to a higher level of reproducibility and predictability compared to the CWD?
- Do you think that the CWD leads to a higher level of cost reflectivity than the postage stamp?
- How should ACM weigh cost reflectivity versus reproducibility and predictability? Why?
- Do you favour the postage stamp or CWD? Why?
- Do you see any other relevant alternatives?

# RPM: entry-exit split

# Proposal GTS

- Proposal GTS:
  - Entry-exit split of 35/65 in 2020 and 2021
  - Entry-exit split of 0/100 from 2022 onwards

- Motivation:

Ultimately, GTS believes that an entry/exit revenue split of 0%-100% will be most favourable for attracting gas and avoiding increases in the gas commodity price (in the current situation most end users pay already transport at their exit point plus a TTF commodity price, which is entry paid gas, or put in other words end users already pay for entry and exit transport and for the commodity of the gas). Several stakeholders do believe the same and are in favour of such a split. But we also acknowledge that several parties have expressed concerns that it is difficult to prove that the benefits of (relatively) lower commodity prices will offset higher exit transport cost. Some parties are also concerned that higher exit tariffs harm transit flows. Some parties are in favour of a 50-50 split, partly based on the prescribed split in the counterfactual, but this is not a general NCTAR obligation for other RPMs than the counterfactual.



# Assessment by ACM

- Attracting gas is not a goal of the NC TAR
  - Relevant goals follow from article 7 (see slide 13)
  - Goal of the RPM is to set cost reflective, reproducible and predictable reference prices
  - In a well-functioning market gas flows to where its net value is highest, that doesn't have to be The Netherlands.
  - Gas flows to where its net value is highest if the transmission tariffs are cost-reflective.

# Assessment by ACM

- ACM analysed the effect of a changing entry-exit split on the demand and supply of gas on the TTF, by setting up a simple model (see memo).
- Goal of the analysis:
  - Examine the effect of the entry-exit split under different assumptions
  - Explore the causes of a potential effect

# Assessment by ACM

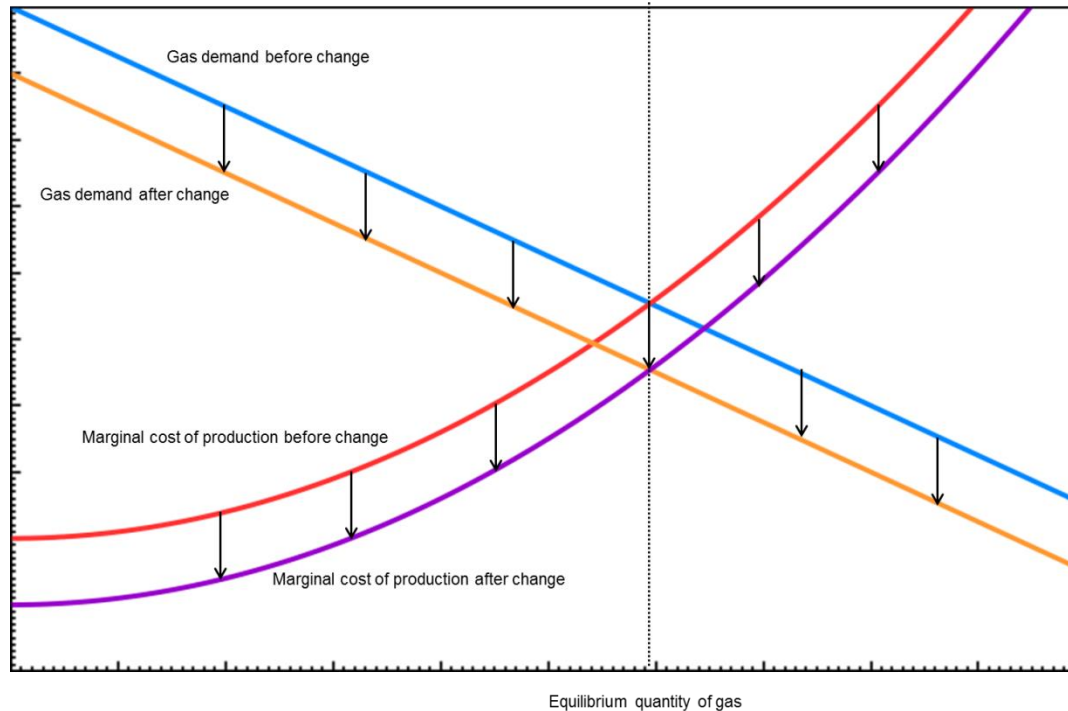
- Result of the analysis (see memo):
  - Depending on the applied assumptions, the entry-exit split either:
    - Does not have an effect on the quantity of gas transported; or
    - Does have an effect on the quantity of gas transported, but the effect is ambiguous and accompanied by issues (contractual congestion, capacity hoarding and distorted investment signals) if the entry-exit split is skewed.
- Conclusion 0/100 entry-exit split:
  - Insufficiently motivated:
    - Attracting gas is not an NC TAR goal
    - Unclear benefits of 0/100 split
  - Undesired effects (as long as issues are not resolved):
    - Risk of contractual congestion, capacity hoarding and distorted investment signals → distorts cross-border trade, doesn't facilitate efficient gas trade and competition

# Assessment by ACM

- Assumptions of the model:
  1. There is a 'pure' postage stamp tariff, such that the sum of the entry- and the exit tariff is equal for each combination of an entry- and an exit point;
  2. The usage rate of entry capacity (nominations/booked capacity) is equal for all entry points;
  3. The usage rate of exit capacity (nominations/booked capacity) is equal for all exit points;
  4. The usage rate is exogenous (to increase production/consumption by 1 unit, the booked capacity increases proportionally)

# Assessment by ACM

Graph 1 – The effect of decreasing entry-tariffs on TTF gas demand, supply and equilibrium



Under the assumptions, a change of the entry-exit split doesn't have an effect. Demand and supply adjust by the same amount, so the market equilibrium doesn't change.

# Assessment by ACM

- Intuitively:
  - Gas 'on the TTF' cannot be consumed → demand for gas on TTF takes into account the exit tariffs
  - Setting entry tariffs to zero leads to lower TTF-prices, but higher exit tariffs
  - Under the assumptions, the decreased TTF prices exactly offset the increased exit tariffs
  - However, that implies that the equilibrium quantity of gas doesn't change

# Assessment by ACM

- How do the assumptions influence the outcome?
  - Relaxing assumptions 1-3 has an ambiguous effect (gas flows may increase or decrease):
    - A 0/100 entry-exit split will lead to free transport through GTS-grid from Germany/Norway to UK
  - Relaxing assumption 4 may lead to issues hampering competition in the gas market:
    - Relaxing this assumption implies that demand for capacity depends on the applicable tariff
    - Tariffs incentivise network users to limit their capacity bookings to the required capacity to flow gas
    - Low entry- or exit tariffs may lead to contractual congestion
    - Low entry- or exit tariffs may induce capacity hoarding
    - Low entry- or exit tariffs may distort investment signals

# Assessment by ACM

- The issues raised by relaxing assumption 4 are also mentioned in GTS' proposal:

In case of a 0%-100% split, several issues need to be solved and considered: Contracting capacity, nominating, preventing possible hoarding, right incentives for investing at entry points, considering the effect on long term contracts, and transport via the TTF market area through BBL. The 0-100% split should not lead to inefficient investments or non-prudent behaviour. Incentives will most likely include upstream and downstream transport information, which is also logical from the perspective that virtualisation will further increase in future.



# Assessment by ACM

- Result of the analysis (see memo):
  - Depending on the applied assumptions, the entry-exit split either:
    - Does not have an effect on the quantity of gas transported; or
    - Does have an effect on the quantity of gas transported, but the effect is ambiguous and accompanied by issues (contractual congestion, capacity hoarding and distorted investment signals) if the entry-exit split is skewed.
- Conclusion 0/100 entry-exit split:
  - Insufficiently motivated:
    - attracting gas is not an NC TAR goal
    - unclear benefits of 0/100 split
  - Undesired effects (as long as issues are not resolved):
    - Risk of contractual congestion, capacity hoarding and distorted investment signals → distorts cross-border trade/doesn't facilitate efficient gas trade and competition

# Proposal ACM

- ACM proposes a 50/50 entry-exit split
- Arguments:
  - Entry- and exit tariffs incentivise shippers to limit capacity bookings to capacity required to inject or extract gas (efficient capacity bookings)
  - Incentives should be equal on entry- and exit side, because that:
    - Limits risk of contractual congestion
    - Reduces risk of capacity hoarding
    - Promotes efficient investment

# Alternatives considered by ACM

- Alternative 1:
  - Keep the current entry-exit split, which is 40/60 (this is the current split if QC, BT, BAT and AT are included)
  - Arguments:
    - No change
    - Close to 50/50
- Alternative 2:
  - No ex ante entry-exit split, but the outcome of the RPM
  - Example: same entry- and exit tariffs with postage stamp methodology  
→ results in split of 47/53 (before adjustments)

# Questions

- Do you think that a 0/100 split as proposed by GTS would be beneficial? If so, why?
- Do you recognise the potential detrimental effects of a 0/100 split? If so, which?
- Which entry-exit split do you think is justified? Why?
- Do you prefer a 50/50 entry-exit split, a 40/60 entry-exit split or an ex post split? Why?

# Article 9: Gas storage discount and LNG discount

# Article 9

- Article 9:

*“Adjustments of tariffs at entry points from and exit points to storage facilities and at entry points from LNG facilities and infrastructure ending isolation*

- 1. A discount of at least 50% shall be applied to capacity-based transmission tariffs at entry points from and exit points to storage facilities, unless and to the extent a storage facility which is connected to more than one transmission or distribution network is used to compete with an interconnection point.*
- 2. At entry points from LNG facilities, and at entry points from and exit points to infrastructure developed with the purpose of ending the isolation of Member States in respect of their gas transmission systems, a discount may be applied to the respective capacity-based transmission tariffs for the purposes of increasing security of supply.”*

# Gas storage discount

- Recital (4)

“In order to avoid double charging for transmission to and from storage facilities, this Regulation should set a minimum discount acknowledging the general contribution to system flexibility and security of supply of such infrastructure. Storage facilities with direct access to the transmission systems of two or more transmission system operators in directly connected entry-exit systems, or simultaneously to a transmission system and a distribution system allow for transporting gas between directly connected systems. Applying a discount at entry points from or exit points to storage facilities in cases where storage facilities are used to transport gas between directly connected systems would benefit these network users compared to other network users booking capacity products without a discount at interconnection points or using storage facilities to transport gas within the same system. This Regulation should introduce mechanisms to avoid such discrimination.”

# Gas storage discount

- Minimum required gas storage discount is 50%
  - Considering the recital, this discount meets the goal that storages do not pay twice given their contribution to system flexibility and security of supply
- GTS proposes a 50% discount
- ACM considers that NC TAR gives a clear direction for a 50% discount. That clear direction is dictated by the goal of the discount as mentioned above. Therefore, only in the case of exceptional circumstances, ACM could consider a higher discount.
- ACM does not consider such circumstances to be applicable in the Netherlands at the moment
- Do you have any remarks regarding the gas storage discount?



# Gas storage discount

- The discount is at least 50%, unless and to the extent gas storages compete with IP's
- There is no indication that gas storages compete with IP's in the Netherlands, so ACM sees no reason to apply a lower discount for certain gas storages.
- Do you have any remarks regarding a lower discount for certain gas storages?

# LNG-discount

- Recital (5):

*“In order to promote security of supply, the granting of discounts should be considered for entry points from LNG facilities, and at entry points from and exit points to infrastructure developed with the purpose of ending the isolation of Member States in respect of their gas transmission systems.”*

# LNG discount

- ACM is of the opinion that in the Netherlands security of supply is stable; given that SoS risk assessment is positive
- Therefore it is currently not necessary to apply a discount on LNG terminals to increase the security of supply
- GTS does not propose a discount for LNG
- ACM sees no rationale for applying a discount for LNG
- Do you have any remarks regarding the LNG discount?

# Article 6(4): Adjustments

# Adjustments – benchmarking

- Article 6.4:  
*“Adjustments to the application of the reference price methodology to all entry and exit points may only be made in accordance with Article 9 or as a result of one or more of the following:*
  - a) *benchmarking by the national regulatory authority, whereby reference prices at a given entry or exit point are adjusted so that the resulting values meet the competitive level of reference prices;”*
- Article is about *tariff* benchmarking
- There is no tariff benchmark, so not applicable
- GTS does not propose tariff benchmarking
- ACM sees no reason to apply tariff benchmarking
- Do you have any remarks regarding adjusting tariffs by tariff benchmarking?

# Adjustments – equalisation

- Article 6.4:
  - “Adjustments to the application of the reference price methodology to all entry and exit points may only be made in accordance with Article 9 or as a result of one or more of the following:*
    - a) *[...];*
    - b) *equalisation by the transmission system operator(s) or the national regulatory authority, as decided by the national regulatory authority, whereby the same reference price is applied to some or all points within a homogeneous group of points;”*
- There should be sound arguments for proposing equalisation of the reference prices of certain (groups of) points
- Only relevant if RPM is other than a postage stamp

# Adjustments – equalisation

- GTS does not propose equalisation
- ACM sees no reason to apply equalisation
- Do you have any remarks regarding adjusting tariffs by equalisation?

# Adjustments – rescaling

- Article 6.4:

*“Adjustments to the application of the reference price methodology to all entry and exit points may only be made in accordance with Article 9 or as a result of one or more of the following:*

*a) [...];*

*b) [...];*

*c) rescaling by the transmission system operator(s) or the national regulatory authority, as decided by the national regulatory authority, whereby the reference prices at all entry or all exit points, or both, are adjusted either by multiplying their values by a constant or by adding to or subtracting from their values a constant.”*

- This adjustment will have to be used to divide the revenues that are not recovered, due to e.g. adjustments
- Default: rescaling by multiplying with a constant, unless sound reasons are given to use addition or subtraction



# Adjustments – rescaling

- GTS proposes rescaling by multiplying with a constant
- ACM sees no reason to do otherwise
- Do you have any remarks regarding rescaling?