Autoriteit Consument & Markt

gasunie transport services

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

Implementation of NC TAR in the Netherlands

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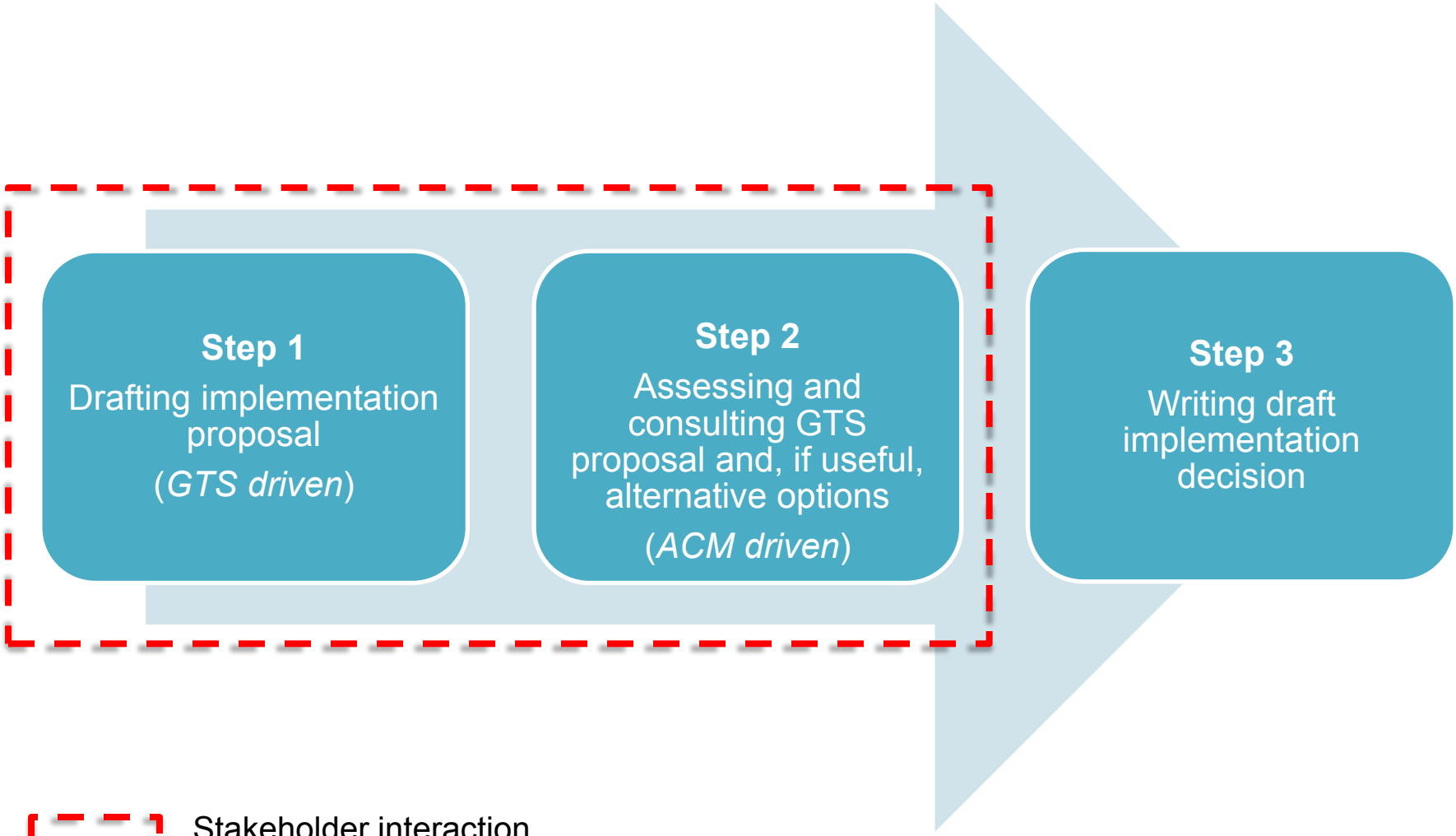
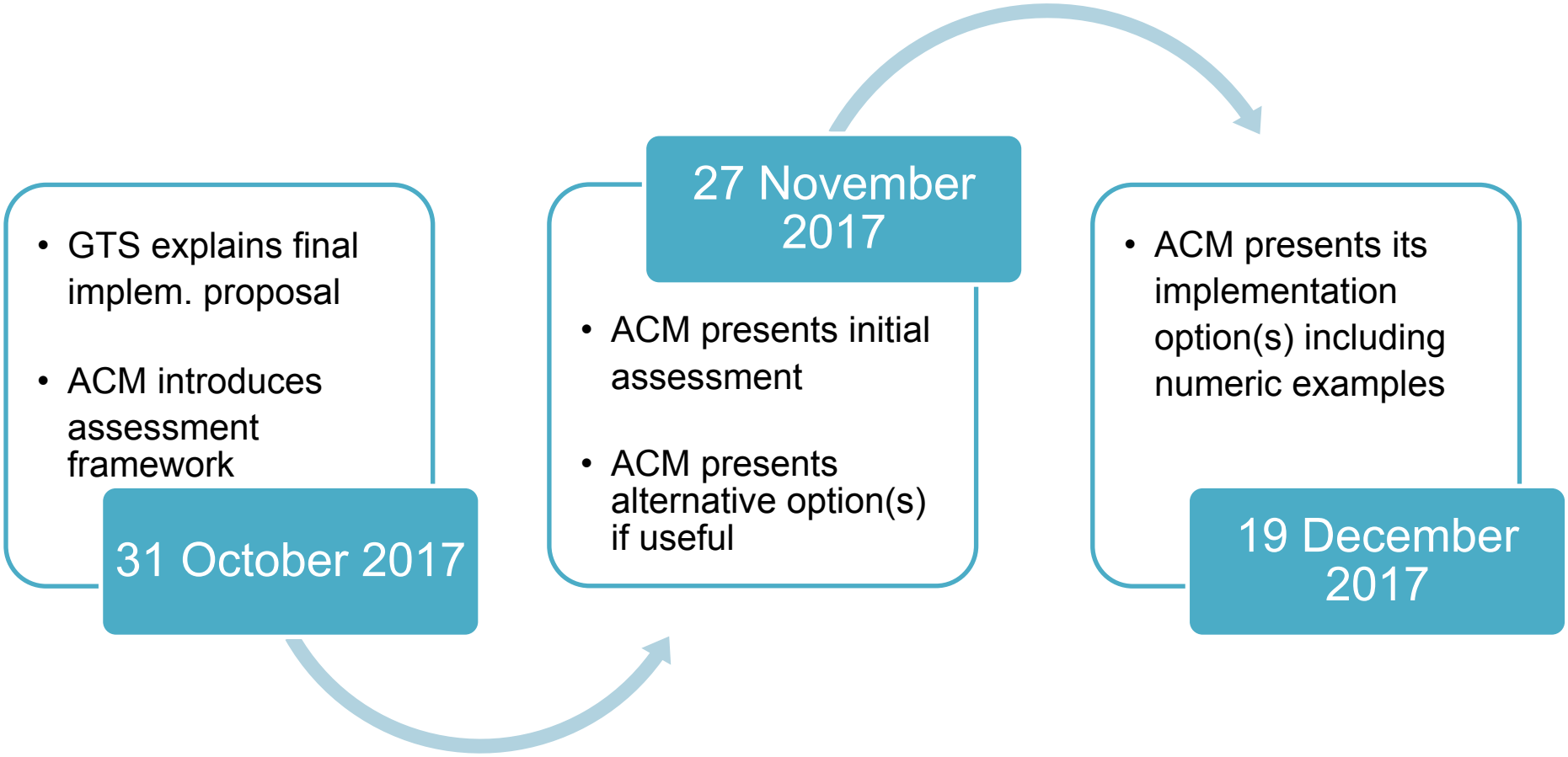
Three step approach until 1 March 2018



Content of meetings organised by ACM



Agenda

- Explanation of implementation proposal by GTS
- Introduction to assessment framework of ACM

NC TAR Implementation process

GTS Implementation Proposal

NC TAR session 31 October 2017

Stakeholders response

- We have received several written comments, also after our previous session of 13 October 2017
- We have shared your comments with ACM (for those parties who explicitly agreed to that)
- We have incorporated your feedback in our proposal

GTS NC TAR Implementation Proposal

- In our proposal we summarise the discussion with our stakeholders over the last few months and, based on that, propose a future tariff structure.
- Proposed tariff structure is intended to enhance the well functioning Dutch gas market, also given the changes coming to the market in near future.
- The proposal supports the goals that we, together with our stakeholders, have identified for the Dutch gas market.
- Key element is the further virtualisation of delivering services to our customers.
- We explain the compliance of our proposal with the NC TAR requirements as well as with the European gas regulation.
- Our proposal is meant to serve as input for the next phase, in which ACM will assess our proposal.

GTS NC TAR Implementation Proposal: key elements

NC TAR element	Implementation proposal
Transmission service (TS)	All-in (TT, QC, BT, BAT, AT): Obligatory TS
Non Transmission service	None
Reference Price methodology (RPM)	Postage stamp, no distance dependency
Entry/Exit revenue split	Stepped approach: 2020-2021: 35%-65% 2022 onwards: 0%-100%
Storage discount	50%
LNG discount	0%
Multiplier/seasonal	One methodology for all points: NC TAR based *Multiplier:* Investigate if German algorithm is applicable for the Dutch situation *Seasonal:* Apply NC TAR seasonal algorithm for all points, with parameter power=2
Calculation of reserve price for interruptible capacity	Ex-ante, similar to current situation

Entry/exit revenue split

- 2020-2021: 35%-65%
- 2022 onwards: 0%-100%
- Identified issues will be further analysed in order to find a proper solution
  - Incentives for investments
  - Transport via BBL
  - Operational process
  - Effects on long term contracts

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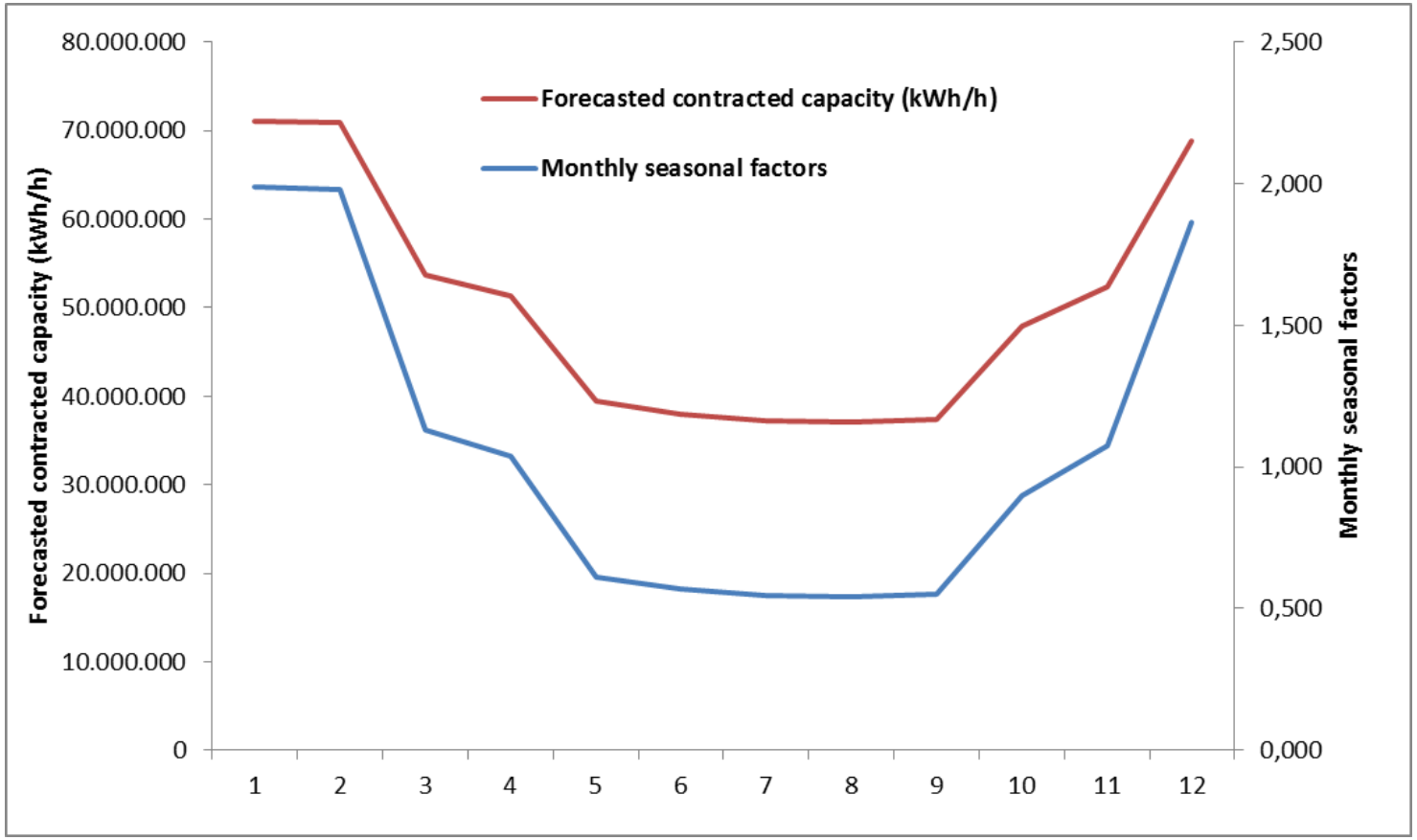
Indicative Seasonal factors



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Numerical results of proposed implementation - 1

- Tariff results for tariff year 2018, expected revenues based on Tariff Proposal 2018 (entry/exit revenue split 35%-65%)
- Forecasted contracted capacity identical to “rekenvolumes” used in TV18
- Indicative tariffs based on web based tariff calculation tool

	NCTAR implementation proposal	
Segment	% revenue	Postage stamp (€/kWh/h/y)
Entry border point	8,5%	€ 1,241
Entry production point	12,5%	€ 1,241
Entry storage	9,6%	€ 0,620
Exit border point	30,3%	€ 2,066
Exit industrial point	9,1%	€ 2,066
Exit local distribution point	24,9%	€ 2,066
Exit storage	5,1%	€ 1,033

CAA before price adjustments	2%
CAA after price adjustments	5%

Numerical results of proposed implementation - 2

- Tariff results for tariff year 2018, expected revenues based on Tariff Proposal 2018 (entry/exit revenue split 0%-100%)
- Forecasted contracted capacity identical to “rekenvolumes” used in TV18
- Indicative tariffs based on web based tariff calculation tool

	NC TAR implementation	proposal
Segment	% revenue	Postage stamp (€/kWh/h/y)
Entry border point	0%	€ 0,000
Entry production point	0%	€ 0,000
Entry storage	0%	€ 0,000
Exit border point	43,6%	€ 2,974
Exit industrial point	13,1%	€ 2,974
Exit local distribution point	35,9%	€ 2,974
Exit storage	7,4%	€ 1,487
CAA before price adjustments		9%
CAA after price adjustments		3%

Other GTS activities, outside NC TAR

Activity category	
Associated primary service	Oversubscription and Buy Back (OBB), Auction premium, Balancing action and Line pack Flexibility Service (LFS)
Secondary products, Amendments and conditions	Diversion, Shift of capacity, Assignment (full transfer of all rights and obligations or ToC), Transfer of usage rights (ToU), Surrender of capacity, Capacity conversion, Decrease of capacity, Start-up service, Gas heating compensation, Capacity exceeding's, Overshoot agreement, SFA conditions, Capacity reduction due to transport restrictions, reconciliation, Metering/allocation correction

Questions?

Scope of NC TAR

- ACM and GTS have analysed which legal tasks of GTS fall within the scope of NC TAR
- This has resulted in the following division of tasks:

In scope	Not in scope
Transport task (TT)	Peak supply
Quality conversion task (QC)	Wobbe quality adaptation (WQA)
Balancing task (BT)	
Existing connections task (BAT)	
New connections task (AT)	

Assessment Framework of ACM

Introduction

- The assessment framework consists of an interpretation by ACM of the articles that require a substantive decision:
  - Article 4: transmission and non-transmission services
  - Article 6 and 7: the reference price methodology
  - Article 9: gas storage discount and LNG discount
  - Article 13 and 28: level of multipliers and seasonal factors

- This interpretation can lead to a range of possibilities or sometimes to only one conclusion. If the latter is the case, the assessment framework includes the conclusion

Article 4: transmission and non-transmission services

Article 4(1)

- Article 4(1) determines how the services of GTS should be divided into transmission and non-transmission services. A service is classified as a transmission service when:
  - 4(1)(a): the costs of such service are caused by the cost drivers of both technical or forecasted contracted capacity and distance; and
  - 4(1)(b): the costs of such service are related to the investment in and operation of the infrastructure which is part of the regulated asset base for the provision of transmission services.

- For every service we first have to determine whether both conditions are met

Article 4(1)(a)

- 4(1)(a): the costs of such service are caused by the cost drivers of both technical or forecasted contracted capacity and distance

- ACM is of the opinion that this condition is met when the costs of a service are correlated with both distance and capacity
  - e.g. if the length of the network increases, the costs of operating the network increase. If the capacity of the network increases, the costs of operating the network increase.

Article 4(1)(b)

- 4(1)(b): the costs of such service are related to the investment in and operation of the infrastructure which is part of the regulated asset base for the provision of transmission services.

- ACM considers this condition is met when the costs of a service are determined by the investments in the infrastructure and those investments are part of the regulated asset base.

Defining the services

- As discussed before, the services are defined by looking at the current practice
- Every activity with a tariff or tariff component is defined as a service, except:
  - Some activities for which GTS currently charges a tariff are not defined as a service, because these activities are a condition when a network user contracts capacity. The income from these services is reconciled with the allowed revenue

Activities that are considered a service

Services
Transport Entry/exit (Firm, Interruptible, backhaul, storage)
Shorthaul
Wheeling
Quality conversion (QC)
Balancing (BT)
Existing Connection (BAT)
Connection point (AT)
Connection (DSO)
Gas heating fee

Activities that are not considered a service

Condition	Where is or will it be regulated?
Diversion	Code/TSC condition
Transfer of Capacity/Usage (TOC/TOU)	Code/TSC condition
Capacity shift	Code/TSC condition
Capacity exceeding	Code/TSC condition,
Cancellation	Code/TSC condition
Overshoot agreement	Code/TSC condition
Capacity decrease	Code/TSC condition
Reconciliation LDC	Code/TSC condition
Metering/allocation correction	Code/TSC condition
Over subscription and buy back (OBB) & reverse auction	CMP
Surrender of Capacity (SOC)	CMP
Auction premium	NC CAM
Capacity conversion	NC CAM

Qualification of the services on the basis of 4(1)(a)

Services	Distance	Capacity	Result
Transport Entry/exit (Firm, Interruptible, backhaul, storage)	Yes	Yes	TS
Shorthaul	Yes	Yes	TS
Wheeling	No	Yes	Choice
Quality conversion (QC)	No	Yes	Choice
Balancing (BT)	Yes	Yes	TS
Existing Connection (BAT)	Yes	Yes	TS
Connection point (AT)	No	Yes	Choice
Connection (DSO)	No*	Yes	Choice
Gas heating fee	No	Yes	Choice

* Whether or not this service has distance as a cost driver depends on which costs are included in the service

Classifying services when one of the conditions is not met

- If one of the services does not meet both conditions, ACM has a choice to qualify the services as a transmission service or as a non-transmission service
- ACM considers that a service should be qualified as a transmission service if the costs of that service should be recovered by selling entry- and exit capacity since there should be one price for a capacity product (see later in this presentation)

Article 6 and 7: the reference price methodology

Article 6 and 7

- Articles 6 and 7 describe the application of the reference price methodology and the choice of a reference price methodology

Article 6

- The application of the reference price methodology leads to a *reference price*
- The *reference price* is defined in NC TAR as the price for a capacity product for firm capacity with a duration of one year, which is applicable at entry and exit points and which is used to set capacity-based transmission tariffs
- Article 6(3) states that the same reference price methodology shall be applied to all entry- and exit points in the entry-exit system

→ From this ACM concludes that within one entry-exit system one reference price should be determined for each entry- and exit point on the basis of one RPM*. This reference price can differ per entry- or exit point

* Subject to article 10 and 11

Article 6 cont.

- In article 6(4) and 9 the only possible adjustments to the RPM are introduced.

→ ACM concludes that first the RPM should be applied and then the reference prices can be adjusted

→ After the reference prices are adjusted, the consequent steps (e.g. applying the multiplier) will lead to the reserve price

Article 7

- ACM concludes from article 7 the RPM should lead to:
  - Cost reflective reference prices
  - Reproducible reference prices
  - Predictable reference prices

- In the next slides we will explain how we come to this conclusion

Article 7

Article 13 No 715/2009	Article 7(a)-7(e) NC TAR	Goal
✓ The tariffs shall be transparant	✓ The reference price methodology should enable network users to reproduce the calculation of the reference prices and their accurate forecast	Reproducibility, predictability
✓ 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	✓ 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;	Cost reflectivity
✓ Tariffs, or the methodologies used to calculate them, shall be applied in a non-discriminatory manner. ✓ When setting tariffs cross-subsidization should try to be avoided	✓ 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; ✓ 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;	Cost reflectivity
✓ Tariffs for network access shall neither restrict market liquidity nor distort trade across borders of different transmission systems.	✓ The reference price methodology should ensure that the resulting reference prices do not distort cross-border trade	Consequence of cost reflective tariffs

Reproducibility and predictability

- A reference price methodology is reproducible when:
  - The calculation steps are clear
  - The input parameters are known*
- and predictable when:
  - The calculation steps are clear
  - The input parameters are predictable

* Some parameters can be confidential.

Cost reflectivity

- The reference price methodology is a mechanism to allocate the allowed revenue of GTS to the entry- and exit points
- The allowed revenue is based on the efficient costs including a reasonable return.
- Therefore we speak of the RPM as a cost allocation mechanism and of cost reflectivity of the RPM

Cost reflectivity

- According to article 7 the reference price methodology should take the actual costs into account, ensure non-discrimination and prevent undue cross-subsidisation. From these requirements it follows that the reference price methodology should lead to cost-reflective reference prices.
- The reference prices should not restrict market liquidity or distort cross-border trade. Cost reflective reference prices meet these requirements.

Conditions for a good cost allocation mechanism

- ACM is of the opinion that there are four conditions for a good cost allocation mechanism
  1. All costs for offering capacity on entry- and exit points are allocated
  2. At least the direct costs for the use of the network and a reasonable share of the indirect costs are allocated to each entry- and exit point
  3. The same allocation mechanism is used to allocate the indirect costs to each entry- and exit point
  4. The parameters used in the allocation mechanism should reflect the use of the network by an entry- or exit point

Conditions for a good cost allocation mechanism

- These conditions can be used to show which cost allocation mechanism leads to cost reflective reference prices
- Several reference price methodologies meet the conditions for a good cost allocation mechanism

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
- According to ACM tariff benchmarking should be done in accordance with the Commission staff working document*

  → Effective pipe-to-pipe competition is condition for using tariff benchmarking

* Commission staff working document on tariffs for access to the natural gas transmission networks regulated under Article 3 of Regulation 1775/2005, SEC(2007) 535:

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 – 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

(Please note that within rescaling, the reference prices of all entry-points and all exit points, or both, are adjusted. I.e. if the rescaling is used to recover revenue that cannot be recovered due to the gas storage discount, then also references prices on the entry- and exit points of gas storages are rescaled)

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

- Current gas storage discount is 25%
- 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
- A discount higher than 50% should be motivated with sound arguments that a 50% discount is not enough to attain the goals of the recital

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

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 neccessary to apply a discount on LNG terminals to increase the security of supply

Article 13: Multipliers and seasonal factors

Scope multipliers and seasonal factors

- ACM proposes to have one set of multipliers and seasonal factors for IP's and non-IP's
  - The IP's and non-IP's are part of one entry-exit system
  - There are gas storages connected to an IP and gas storages that are only connected to non-IP's. It makes no sense to treat these points differently
- For the rest of this presentation ACM assumes that the multipliers and seasonal factors are the same for the entire system

Article 13

Article 13:

1. The level of multipliers shall fall within the following ranges:
    a) for quarterly standard capacity products and for monthly standard capacity products, the level of the respective multiplier shall be no less than 1 and no more than 1.5;
    b) for daily standard capacity products and for within-day standard capacity products, the level of the respective multiplier shall be no less than 1 and no more than 3. In duly justified cases, the level of the respective multipliers may be less than 1, but higher than 0, or higher than 3.
2. Where seasonal factors are applied, the arithmetic mean over the gas year of the product of the multiplier applicable for the respective standard capacity product and the relevant seasonal factors shall be within the same range as for the level of the respective multipliers set out in paragraph 1.

What is the effect of the multiplier? (1)

- The multiplier defines the price-relation between short term and long term capacity products:
  - **Multiplier > 1** → For a 'flat profile' it is cheaper to buy a long term product
  - **Multiplier = 1** → For a 'flat profile' it is equally expensive to buy a long term product or consecutive short term products

- The multiplier determines what a shipper with a profiled portfolio should pay relative to a shipper with a flat portfolio

What is the effect of the multiplier? (2)

- It is possible to calculate after how many days it becomes cheaper to buy a long-term product
- Turning point from month to year:

Month multiplier = 1 *(minimum allowed by NC TAR)*	**Month multiplier = 1,5** *(maximum allowed by NC TAR)*	**Month multiplier = 1.25** *(German multiplier)*
12 Months	8 months	9,6 months

- Turning point from day to month given month multiplier above:

Day multiplier = 1 *(minimum allowed by NC TAR)*	**Day multiplier = 3** *(maximum allowed by NC TAR)*	**Day multiplier = 1.4** *(German multiplier)*
30 days	15 days	27 days

Multipliers

- Article 28 states that the following should be taken into account when determining the multipliers:

  (i) the balance between facilitating short-term gas trade and providing long-term signals for efficient investment in the transmission system;

  (ii) the impact on the transmission services revenue and its recovery;

  (iii) the need to avoid cross-subsidisation between network users and to enhance cost-reflectivity of reserve prices;

  (iv) situations of physical and contractual congestion;

  (v) the impact on cross-border flows;

Multipliers

Aspect to be taken into account	High multiplier	Low multiplier
The need to avoid cross-subsidisation between network users and to enhance cost-reflectivity of reserve prices	+	-
Preventing situations of physical and contractual congestion	-	+
Facilitating short term gas trade	-	+
Providing long-term signals for efficient investments in the transmission system	0	0
The impact on the transmission service revenue and its recovery	0	0
The impact on cross-border flows	0	0

Multipliers

- ACM concludes that:

→ The levels of the current monthly factors are not compliant with NC TAR. This means that the multipliers will have to become lower than the current monthly factors

→ The level of the multipliers should strike the balance between cross-subsidisation and facilitating short term trade. To assess this, ACM will look at the turning point

Seasonal factors

- Article 28 states that the following should be taken into account when determining the seasonal factors:

  (i) the impact on facilitating the economic and efficient utilisation of the infrastructure;

  (ii) the need to improve the cost reflectivity of reserve prices.

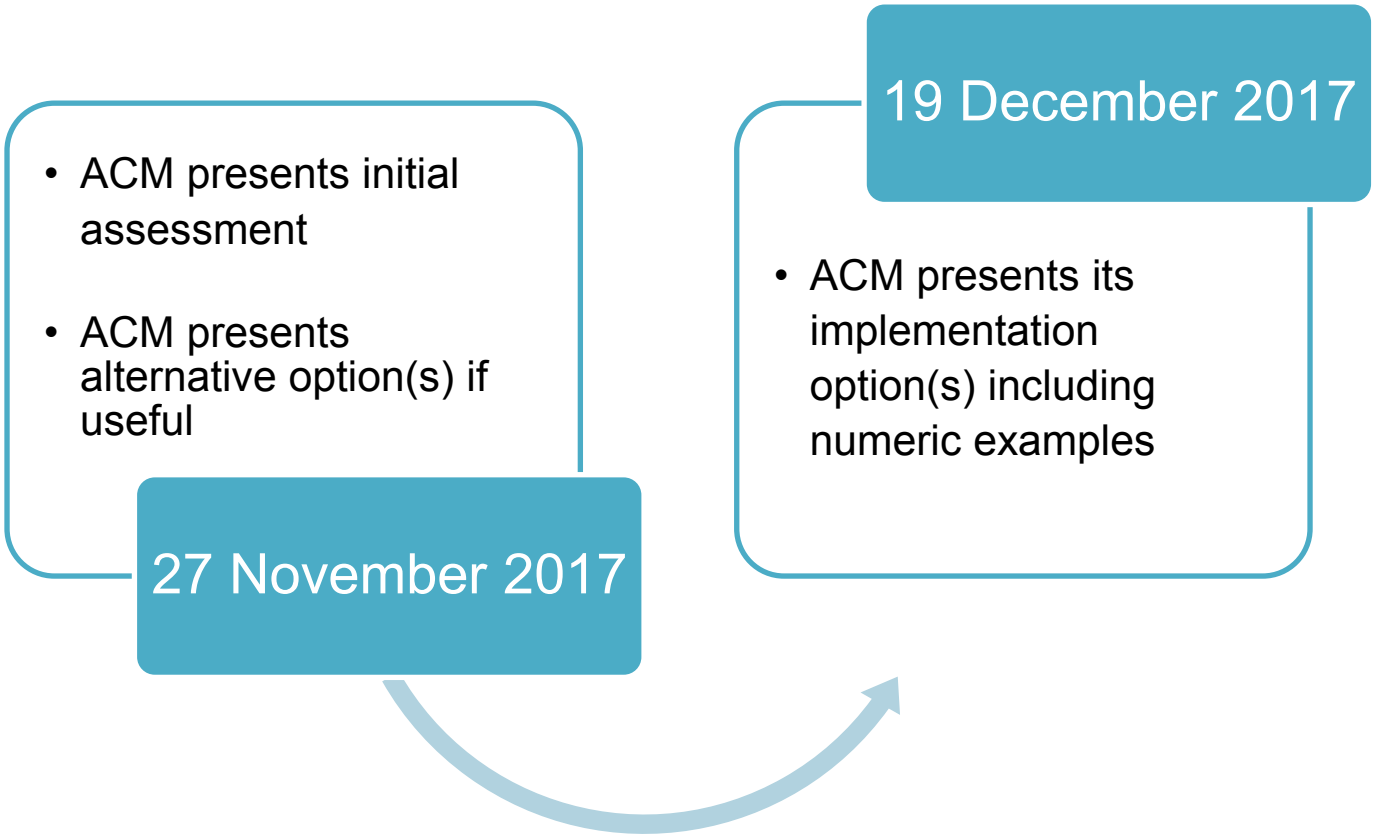
Consequences of seasonal factors

- Seasonal factors can be considered cost reflective
  - The costs of the grid are determined by the peak flow, so from a cost reflectivity point of view the periods with peak flow (winter) should be priced higher than other periods (summer)
- Seasonal factors promote use of the grid at off-peak moments
- Seasonal factors can, on average, increase the costs of buying short term products
  - Prices increase in months when a lot of capacity is used; prices in months when little capacity is used decrease
  - The costs of buying short-term products increase when seasonal factors are applied, because the sum of the product of price x capacity increases
- Seasonal factors make setting the reserve prices more complex

Seasonal factors

- It is not obligatory to apply seasonal factors
- The use of seasonal factors depends on the way cost reflectivity is taken into account in the RPM
- Seasonal factors should only be applied when it can be argued that they improve cost reflectivity. This argumentation has to be linked to the RPM.

Next steps


27 November 2017
• ACM presents initial assessment
• ACM presents alternative option(s) if useful
19 December 2017
• ACM presents its implementation option(s) including numeric examples