

Gas Charging Review



NTSCMF – 3 August 2016

Update provided on 29 July 2016. All slides added or updated are marked with a blue star



Agenda

Area	Detail
Objectives / Terms of Reference	<ul style="list-style-type: none">• Discussion for any potential changes for objectives• Review of changes discussed at previous NTSCMF and any comments received and sent to Waters Wye• Objectives and measures against them for any potential changes
EU Tariffs Code – Current Outlook	<ul style="list-style-type: none">• Key updates relevant to Gas Charging Review• Areas under discussion
Revenue and Income treatment current and under EU Tariffs Code	<ul style="list-style-type: none">• Knowledge share on current framework and how services and products relate to revenues• Transmission and Non Transmission Services under EU Tariffs Code• Discussion on products / services and their revenue treatment to help as developing potential changes
Next Steps	<ul style="list-style-type: none">• Developing strawman for charging modelling and continued stakeholder input• Developing objectives and measures to assess potential changes

Gas Charging Review



Terms of Reference and Objectives

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Terms of Reference / Objectives: Discussion

- At July NTSCMF we discussed the objectives of the review and the potential drivers of what may cause issues against each of them
 - E.g. what are the key drivers of volatility in the current framework?
- We also discussed if it would be helpful to add some thoughts on the potential range of measures that could help address these
- Here we present some thoughts for discussion that we hope will
 - Highlight the areas that may cause issues against each objective;
 - Show where an area may cross more than one objective and if they are solely charging related or do they interact wider;
 - Help to prioritise aspects of the charging review;
 - Encourage and provide greater understanding of the current charging framework;
 - Help in considering how the review could measure potential changes against the current framework



Objectives, drivers, and measures (1/3)

Objective to address / improve	Summary (Waters Wye words from NTS CMF 08/07/16)	Issue currently driven by	Thoughts on range of measures to that could potentially improve
Volatility	Changes within year, sensitivity of inputs in the overall reference price methodology and overall framework (inclusive of all adjustments, alternative products)	Low Capacity revenues, high commodity leaves reliance on commodity leading to volatile changes within year as commodity is the balancing charge.	Review balance of capacity and commodity charges and drivers behind charges (e.g. competitive auctions or revenue recovery), investment signals or use, purpose of commodity in light of capacity changes, links to revenue recovery and alignment to formula year / gas year.
		Commodity changes	Review how commodity charges are influenced by other charges (e.g. NTS Optional Commodity), capacity revenues (e.g. reductions).
Predictability	Use of charges in their own charging frameworks, timing of changes and transparency . Including ability to understand methodology and reproduce/forecast charges	Forecast of Capacity / Commodity charges	Review how charges would need to change in order to meet objectives to potentially reduce likelihood of significant changes helping to improve predictability. (e.g. less reliance on commodity, review of short term pricing, links to revenue recovery and alignment to formula year / gas year)
		Understanding Methodology (overall methodology, not just linked to capacity)	If linked to complexity, should simplicity be an option to improve understanding, also changes to the scale of interactions of charging products and, where possible, similar methods applied across the board.
		Transparency / Forecasting	Review transparency, linked to required information for modelling from feedback. Changes may be linked to the complexity of any overall framework.



Objectives, drivers, and measures (2/3)

Objective to address / improve	Summary (Waters Wye words from NTS CMF 08/07/16)	Issue currently driven by	Thoughts on range of measures to that could potentially improve	
Stability of Prices	Changes year to year, sensitivity of inputs in the overall framework	Merit Order of matching supply to meet demand	Review Merit Order - could be a minor amendment (like that considered for UNC 0517), or more significant, if the merit order is required. Under a new reference price methodology merit order as it stands may not be required.	
		Revenue Input method	Review how revenue is used in the reference price methodology and also the wider charging framework	
		Undiversified 1-in-20 Peak day demand at the relevant exit point	Review the demand level used as an input, potentially moving away from 1-in-20 Peak.	
		Supplies used in Modelling	Review which supply levels are used in modelling	
		LRMC principles and underlying methodology of investment focused method	Review LRMC and see if minor changes help address stability	Review the underlying reference price methodology of pricing Capacity (e.g. move away from LRMC)
		Capacity used in modelling	Review the capacity used in the modelling (i.e. not using obligated / baseline levels)	Change the capacity used in modelling to something closer to expectations or use, potentially including change to reference price methodology (e.g. move away from LRMC)



Objectives, drivers, and measures (3/3)

Objective to address / improve	Summary (Waters Wye words from NTS CMF 08/07/16)	Issue currently driven by	Thoughts on range of measures to that could potentially improve
Fairness	Same treatment for users where appropriate, how the design and application of discounts, exemptions and alternative products is done	Charges reflecting system use, expectations for sold capacity, alignment to the ambitions of the reference price methodology / overall framework	Review of Capacity charging (including short term pricing - discount structures), links to capacity used in modelling, intentions for commodity charges. Reviewing what charges should be paid for what purpose.
		Interactions and use of charging products within the overall framework	Review of specific products and arrangements (e.g. NTS Optional Commodity, Storage treatment, interruptible) and how these interact and influence charges as part of the overall framework and also how these drive other objectives (e.g. volatility, stability, etc)
Network efficiency	Charges should encourage efficient use and operation of the system. In a future of falling demand, the charging framework should facilitate optimal utilisation of the network (and signal redundancy)	See Fairness, and also linked to Stability.	
Security	Facilitate cross border trade and offshore/onshore/LNG supplies and gas storage. Charges should facilitate delivery of flexible supplies and demand side response.	Use of undiversified 1-in-20 Peak day demand at the relevant exit point	Review the demand level used as an input, potentially moving away from 1-in-20 Peak.
		Appropriate balance of Long Term and Short Term Capacity and means to Price it	Review of Capacity charging (including short term pricing - discount structures), links to capacity used in modelling, intentions for commodity charges. Reviewing what charges should be paid for what purpose and the access required for specific products / purposes for GB
Mix of the Objectives, may feed more than one	(no words provided - this is supplemental)	Non Charging specific matters that could, either in isolation, or in conjunction with how the charging framework operates may drive some issues	Consider things like range of Capacity products, capacity booking rules, substitution processes and, if relevant, how charging contributes. May not form part of the charging review however there may be areas that may influence the review or the review needs to consider.



Terms of Reference / Objectives: Summary

- There are several aspects that drive issues with the current framework if considering these objectives (Volatility, Stability, etc)
- With industry input and comments, these can:
 - Form a basis to provide measures for assessing potential changes to the framework compared to the current arrangements;
 - Continue to be refined to use as we move through the review

Gas Charging Review



EU Tariff Code – Current Outlook

Colin Hamilton

EU Tariffs Code: Process Steps

- **Summer 2016:** translation of NCs
 - MSs can submit further comments on the English language drafts. However, any further changes will be implemented only at the 2nd Comitology Meeting in September.
- **29-30 September:** due to time constraints on translation, 2nd Comitology Meeting now scheduled
 - the formal invitations and the translations of the TAR NC and the CAM NC into the official languages will be circulated at least two weeks in advance of meeting
 - Still intended as a voting meeting even if changes made.

EU Tariffs Code: Process Steps

- **Oct 2016 – Jan 2017:** 3 months validation by Council and Parliament
- **Feb-Mar 2017:** EC Formalities to adopt NCs
- **1 Apr 2017:** expected Entry into Force
- **31 May 2019:** deadline for end of implementation period of TAR NC

EU Tariffs Code – update

- **Article 3:** new definitions for “domestic” and “cross-border” network users
 - *‘domestic network user means a network user supplying gas to customers within an entry-exit system’;*
 - *‘cross-border network user means a network user supplying gas to network users in other entry-exit system(s)’;*
- **Article 4:** new line added on transmission tariffs
 - *Transmission tariffs may be set in a manner as to take into account the conditions for firm capacity products stipulated in the transport contracts.*
 - Possible route for short haul?

EU Tariffs Code – update

- **Article 5:** Cost allocation text clarified but meaning unchanged
 - *NRA just need to explain if “cost allocation comparison” indexes exceed 10%*
- **Article 7:** new criteria added to choice of reference price methodology
 - *ensure that significant volume risk related particularly to transports between entry-exit systems is not assigned to final customers within an entry-exit system;*
 - Article on asset cost split has been removed

EU Tariffs Code – update

- **Article 9:** storage article updated
 - Discount of at least 50%
 - Transfer fee for storages connecting more than one entry/exit system
 - Discount now allowed at any entry point “*for the purposes of increasing security of supply through the diversification of sources*”

EU Tariffs Code – update

- **Article 12:** general provisions concerning reserve prices allows prices to be changed mid year
 - *“Where the tariff period and gas year do not coincide, separate reserve prices may be applied respectively:*
 - *for the time period from 1 October to the end of the prevailing tariff period; and*
 - *for the time period from the beginning of the tariff period following the prevailing tariff period to 30 September.”*

EU Tariffs Code – update

- **Article 13:** level of multiplier ranges
 - Quarterly, and monthly capacity
 - Higher than **0**, and no more than **1.5**
 - Daily and within-day capacity
 - Higher than **0** and no more than **3**.
 - Maximum no more than **1.5** by 1 April 2023 unless ACER recommends otherwise by 1 April 2021

EU Tariffs Code – update

- **Article 20:** Reconciliation regulatory account
 - Each TSO must use one regulatory account
 - Silent on the use of sub-accounts
 - Reconciliation carried out using NRA approved methodology

- **Article 35:** Existing contracts
 - Protection of fixed price element of long-term bookings now applies to all bookings before date of Gas Committee opinion (e.g. 30 September 2016)

Gas Charging Review



Overview: Classification of Revenues, Services and Products

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Overview: Classification of Revenues, Services and Products

- This section is intended to provide an overview of:
 - How Revenues are made up at a high level;
 - How the revenues are recovered through the charging products in the current framework;
 - How certain products interact at a high level
- The purpose is to help understanding as we move into modelling in the coming months and specifically
 - How revenues from chargeable products would be treated, how revenues get reconciled and how they fit with EU Tariffs code



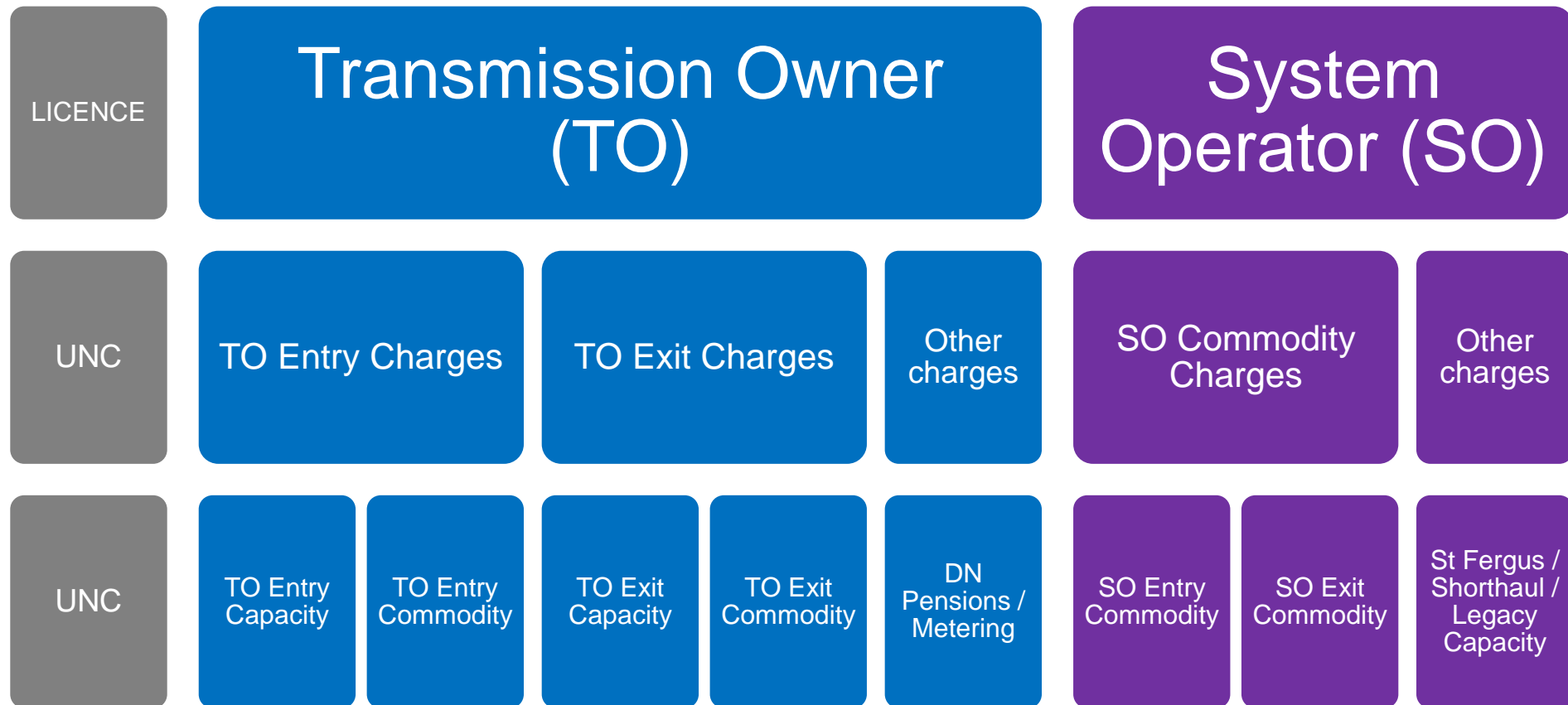
Revenues and Charges

- All charges, in combination, recover the target allowed revenue, with appropriate under / over recovery mechanisms where recovery does not equal the target
- Revenues are essentially derived from a combination of allowances, costs, reconciliations and incentives in accordance with National Grid's Licence under the RIIO-T1 price control to cover NTS activities (TO and SO)
- Therefore we could consider a service to either be something that National Grid is funded to do (therefore having a revenue associated to it under the allowed revenue) and / or the product used to recover it.
- This is an important point to keep in mind due to the use of certain wording in the EU Tariffs Code and to be able to relate to the current charging framework



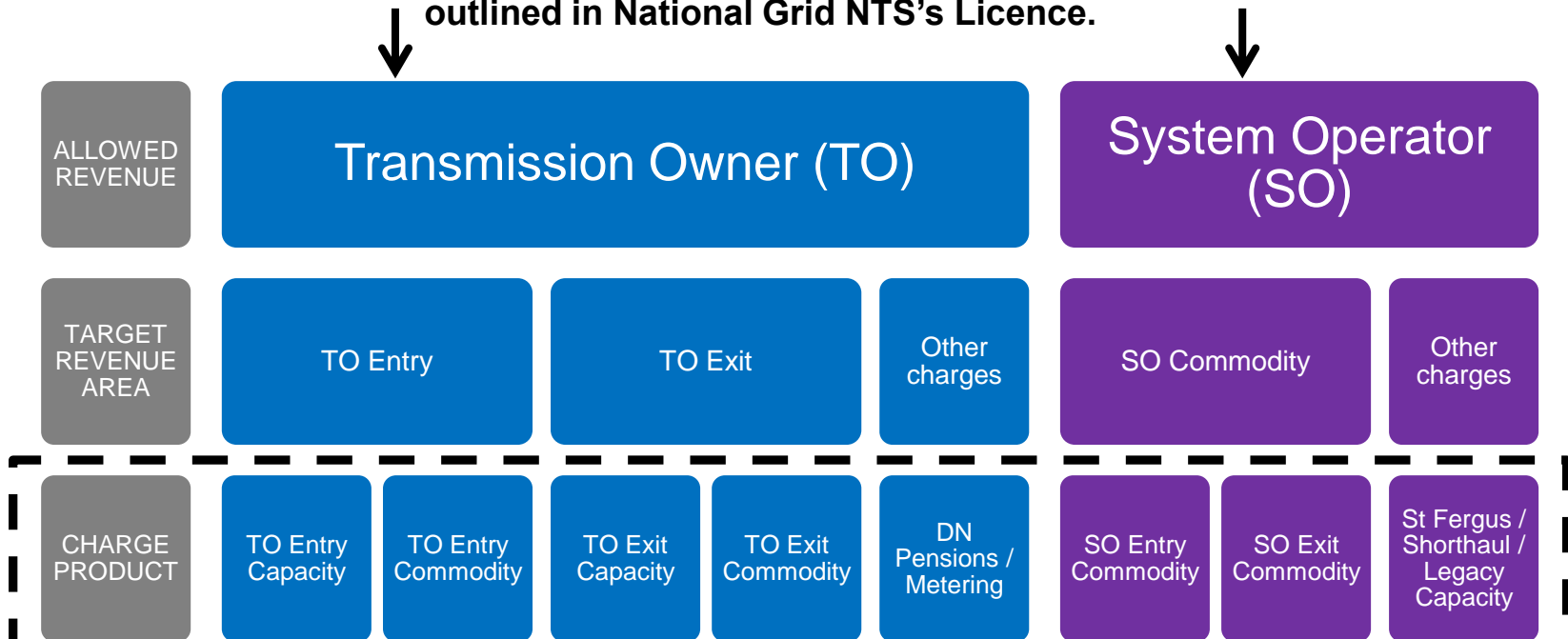
Current GB Framework for Revenues and recovery – High Level

The TO and SO Allowed Revenues are determined in accordance with the Licence and then the UNC prescribes the method by which charges are calculated.





Combination of Allowances, costs, incentives and reconciliations make up the overall TO and SO Allowed Revenue, the amount National Grid NTS is allowed to recover for a given year as outlined in National Grid NTS's Licence.



- *These are the chargeable products that recover the TO and SO Allowed revenues. Each have their own methodology for calculation. Some will have a target revenue as an input. Income treatment aligns revenue from each product to either TO or SO.*
- *The framework of chargeable products may not have a target revenue recovery linked to the TO or SO Allowed Revenue however they do contribute towards the collection of this revenue. As a result there are several interactions between the charges in order to collect the allowed revenue.*



Examples (for illustration) to show the interaction between charges* / revenues nationalgrid

- NTS TO Entry Charges
 - Capacity has no revenue based input
 - Commodity is a balancing item using TO Entry target revenue less capacity income
- NTS TO Exit Charges
 - Capacity charges do have a revenue input
 - Commodity is a balancing item using TO Exit target revenue less capacity income
- NTS SO Charges
 - Shorthaul has no revenue target, prices against flows bring in a forecasted amount of revenue
 - St Fergus compression has forecast cost
 - SO Commodity is a balancing item using a SO target revenue less Shorthaul, St Fergus Compression and Legacy Capacity
- Shorthaul influences all commodity charges by reducing the charging base over which all TO and SO Commodity charges are recovered

**This is not an exhaustive list and provided for illustration*



EU Tariff Code General Revenue

nationalgrid

Reconciliation / recovery structure (simplified)

Transmission Services Revenue

Non
Transmission
Services
Revenue

Entry charges

Exit charges

Other
Charges (if
applicable)

All Non
Transmission
Services
charges

To be recovered by a framework of Charges

The Products used to collect the Transmission and Non Transmission Services revenues will therefore likely have some interactions and their definition may determine whether they contribute towards Transmission or Non Transmission.



EU Tariffs Code: Some key definitions from Article 3: Definitions

- ‘transmission services revenue’ means the part of the allowed or target revenue which is recovered by transmission tariffs;
- ‘transmission tariffs’ means the charges payable by network users for transmission services provided to them;
- ‘transmission services’ means the regulated services that are provided by the transmission system operator within the entry-exit system for the purpose of transmission

- ‘non-transmission services revenue’ means the part of the allowed or target revenue which is recovered by non-transmission tariffs;
- ‘non-transmission services’ means the regulated services other than transmission services and other than services regulated by Regulation (EU) No 312/2014 that are provided by the transmission system operator;
- ‘non-transmission tariffs’ means the charges payable by network users for non-transmission services provided to them



Transmission and Non Transmission Services

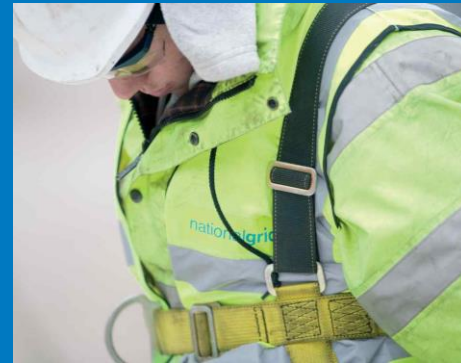
- Working assumption that:
 - TO as we have it today equates to Transmission Services
 - SO we have today equates to the Non Transmission Services
- This is an area we will share more information on in coming NTSCMF meetings as we review



Summary – Key points to remember

- Under the EU Tariffs Code a “service” for Transmission or Non Transmission could relate to either:
 - the amount being recovered (if that service is catered for under the allowed revenues; and / or
 - the product used to recover or contribute to allowed revenues
- As we move through the charging review this is something to keep in mind as it will help in understanding the interactions between charges and how revenue reconciliations will likely work

Gas Charging Review

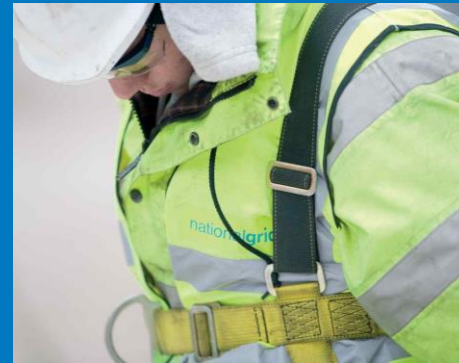


Next Steps

Next Steps

- Develop Strawman for modelling potential options
 - Adding in and sharing the understanding of key inputs and assumptions
 - Assess and measure against the current framework for the Objectives and drivers under review
 - Keep EU Compliance assessment against EU Tariffs Code as Comitology moves on
- Keep objectives, drivers and measures under review alongside the strawman including reviewing current performance against them
- Keep use of NTSCMF / additional Workgroups or workshops under review
- Continued industry engagement is vital to continually develop, refine, build on and assess potential changes to charging arrangements

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