



# Transmission Services Charging: Future Developments and High Level Analysis

NTSCMF Discussions

March 2024

Version 1.1 – Updates from V1.0 have slides marked up with red text (V1.0 available here: <https://www.gasgovernance.co.uk/NTSCMF/050324>)



# Transmission Services Introduction

- Reviewing and discussing elements of the Transmission Services charging methodology is in response to a number of items
  - GCD13 – Existing Contracts and potential changes to charges (e.g. a new commodity charge). In the light of UNC0790’s rejection for implementation and the reasons given, a separate charge under Transmission charging we do not see as likely.
  - GCD13 does provide a platform to discuss some of the wider benefits or issues of reviewing elements of Transmission Services charging more broadly
  - Entry / Exit split was an example and it has been a topic that has attracted some discussion over time and was notably not included in UNC0621/UNC0678 developments.
- Now feels a suitable time to give the subject of the Entry / Exit split a solid discussion and time to bring out benefits or impacts of any such change.
- To have a facilitated and comprehensive discussion on this would also help address items discussed in NTSCMF that have been raised over time.

# Transmission Services – Introduction and Shaping the discussion with Stakeholder input

- We recognise that reviewing and potentially changing the 50/50 split can have significant impacts and will need to be considered and incorporated into the discussion and assessment.
- This is starting the process to develop analysis and support the discussion on the potential benefits or issues on a different Entry / Exit split to the current 50% Entry and 50% Exit.
- This sets a basis to start the analysis and hopefully serves as a basis to build on to expand, refine and focus on the key impacts that Stakeholders will find most useful.
- The main focus of this initial analysis, noting there will be a number of updates and refinements to make this as representative and informative as possible, is to provide a delta impact to prices
- It requires a number of assumptions to help support this, which are provided across these slides
  - It will differ from those prices published due to the assumptions made to help isolate the impact of changes to the % split
- We note that this means a range of impacts will need to be accommodated however we feel it beneficial to structure the analysis in a phased way to build this up over time

# Transmission Services: Entry/ Exit Split Analysis

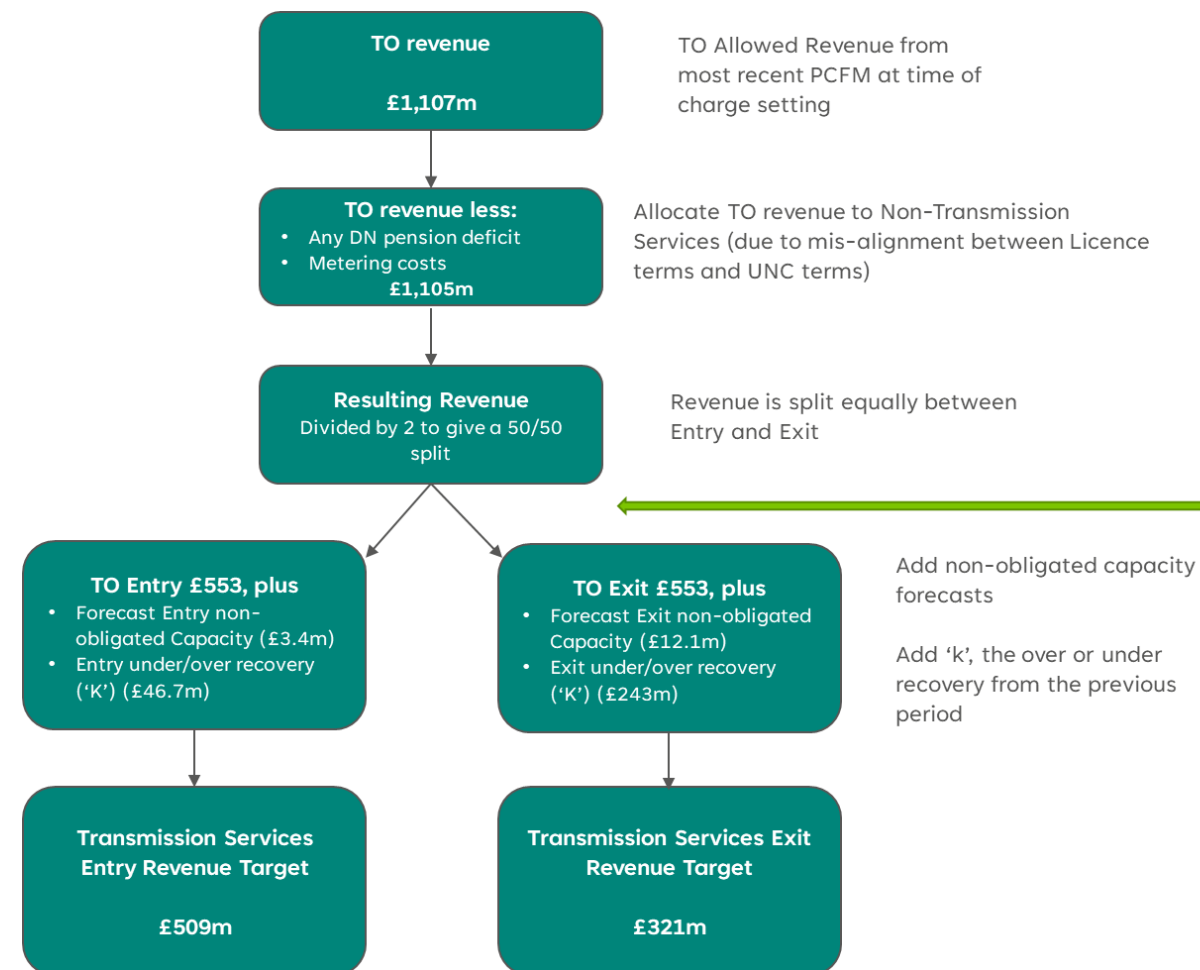
- Overview of current arrangements
  - Transmission Services Revenue
  - Apportionment to Gas Year
- Analysis: Aims and Assumptions\*
- Entry /Exit Split modelling
  - Allowed Revenues
  - Gas Year Revenues
  - Impact on Prices
- Next steps

\* Please note that some assumptions have been updated since the first publication on the JO website, 27th February 2024

# Transmission Services Revenue

- Ofgem set the target revenue we can recover. This is split in to two distinct revenue streams; Transmission Owner (TO) and System Operator (SO)
- Transmission Services Revenue broadly aligns to the TO revenue stream. Any TO revenue associated with Non Transmissions services is reallocated.
- The resulting revenue is then split between Transmission Services Entry and Transmission Services Exit. The split is 50:50, as determined by UNC, TPD, Y, 1.5.3
- Other factors are then accounted for:
  - the levels of non-obligated capacity (due to mis-alignment between Licence terms and UNC terms)
  - any under or over recovery, referred to as 'K<sub>t</sub>'
- We publish a Transmission Services Revenue model<sup>1</sup> which outlines how the revenues are split
- The next step in to then determine the Target revenue for the Gas Year, which is detailed within the revenue model

1. <https://www.nationalgas.com/document/144311/download>



# Apportionment of AR to Gas Year (Entry)

		Gas Year 23/24			
		Regulatory Year 23/24		Regulatory Year 24/25	
		Apr-Sep	Oct-Mar	Apr-Sep	Oct-Mar
Entry Target Revenue RY 23/24. As per the PCFM allowed revenues (including 'K')	Target Revenue (Regulatory Year)	509.3		505.5	
Revenue collection projection from Apr-Sep, collected under charges for GY 22/23	Forecast Revenue Collection (GY-1)	310.7			
	Revenue to be Collected		198.5		
Difference to be collected (Difference between RY 23/24 Target Revenue and Forecast Revenue Apr-Sep)	Derived 'K'			12.7	
	Target Revenue including 'K'			492.8	
% Split of GY revenue collected across the 6 months (Driven by FCC and levels of existing contracts)	Seasonal Profile Revenue (GY)		0.45	0.55	
	6 Monthly Target Revenue (Apr-Sep 23/24)			271.1	
	Gas Year Target Revenue		469.7		
	Forecast Revenue Collection	310.7	211.2		
GY 23/24 target revenue (469.7) multiplied by Seasonal Revenue profile (0.45) to forecast actual revenue collection Oct-Mar	Forecast Revenue Collection (Reg. Year)		522		
	Revenue Variance to Target ('K')		12.71		
	Sum of Forecast Revenue Collection for RY 23/24				
	Difference between Forecast and Target Revenue for the RY. This value becomes the derived 'K'				

# Analysis: Aims and Assumptions (1/2)

Demonstrate price sensitivity to various changes to the Entry: Exit apportionment

- Prices Entry/Exit based on 0/100\*\*, 25/75, 50/50 (status quo), 75/25. We have chosen these to help provide some ranges for reference, not based on any preference.
  - \*\*N.B. Accommodating Existing Contracts as we have in this assessment, means 0/100 is not possible – if 0/100 was to be achieved further thinking on Existing Contracts would be required.
- Will use gas year 2023/24 as a starting point
- Isolate sensitivity – ‘K’ – under / over recovery is not included
  - Therefore assumed no over/under recovery as this will mask impact (for example, Exit allowed revenue for RY 23/24 is £553m, but when accounting for previous years’ over-recovery, this is reduced by £243m)

# Analysis: Aims and Assumptions (2/2)

Demonstrate price sensitivity to various changes to the Entry: Exit apportionment

- ‘Normalised’ 6 months prior revenue recovery (Rpt in the model)
  - For example, For RY 23/24 anticipated revenue recovery for the first six months (Apr-Oct 23) is based on the previous GY prices, which would have been based on a 50/50 split. If we are modelling a proportion change, we need to account that there would be an corresponding change to this. For modelling purposes, as a starting point we **have applied the average Seasonal Allocation Factor (Fry)\***.
- **For simplicity, an average Seasonal Allocation Factor (Fry) has been applied across the Gas Year modelling\***
- For simplicity, forecasts for non-obligated capacity remain unchanged
- Any feedback on these assumptions will help us to help us refine and focus this analysis, adapt and ensure relevance to Stakeholders in ways of sharing the outputs

\* These assumptions have been updated since the first publication on the JO website, 27th February 2024



# Transmission Services Revenues

Existing methodology:

	2023/24	2024/25	2025/26
TO Allowed Revenue	1106.97	1009.97	988.79
DN Pension	0.00	0.00	0.00
Meter Maintenance	1.85	1.91	1.97
Target (excl 'K')	1105.12	1008.06	986.82
50/50 split	552.56	504.03	493.41
Entry Non-Ob	3.41	3.41	3.41
Entry 'K'	46.71	1.95	0.00
<b>Tx Entry Target</b>	<b>509.26</b>	<b>505.49</b>	<b>496.81</b>
Exit Non-Ob	12.11	12.11	12.11
Exit 'K'	243.44	1.95	0.00
<b>Tx Exit Target</b>	<b>321.23</b>	<b>514.20</b>	<b>505.52</b>

Existing split with revised assumptions:

	2023/24	2024/25	2025/26
TO Allowed Revenue	1106.97	1009.97	988.79
DN Pension	0.00	0.00	0.00
Meter Maintenance	1.85	1.91	1.97
Target (excl 'K')	1105.12	1008.06	986.82
50/50 split	552.56	504.03	493.41
Entry Non-Ob	3.41	3.41	3.41
Entry 'K'	0.00	0.00	0.00
<b>Tx Entry Target</b>	<b>555.96</b>	<b>507.44</b>	<b>496.81</b>
Exit Non-Ob	12.11	12.11	12.11
Exit 'K'	0.00	0.00	0.00
<b>Tx Exit Target</b>	<b>564.67</b>	<b>516.14</b>	<b>505.52</b>

# Revised Allowed Revenues: Regulatory Year\*

The table below shows the output revenues for the Regulatory Year with the revised assumptions as highlighted in the previous slides for the four main scenarios.

Reg. Year	2023/24			2024/25			2025/26			2026/27		
	Entry	Exit	Total	Entry	Exit	Total	Entry	Exit	Total	Entry	Exit	Total
75/25	832.25	288.39	1120.64	759.45	264.13	1023.58	743.52	258.82	1002.34	765.72	266.22	1031.94
50/50	555.97	564.67	1120.64	507.44	516.14	1023.58	496.81	505.52	1002.34	511.62	520.32	1031.94
25/75	279.69	840.95	1120.64	255.42	768.16	1023.58	250.11	752.23	1002.34	257.51	774.43	1031.94
5.1/94.9*	60.14	1060.50	1120.64	55.16	968.42	1023.58	54.07	948.27	1002.34	55.59	976.35	1031.94

\* **Note:** 5.1% is the lowest that can be modelled due to the value of existing contracts. **This has been updated due to revised assumptions following the first publication on the JO website, 27th February 2024**

# Examples of producing an updated Target Revenue for the Gas Year

Entry / Exit Revenue Scenario shown	Overview
TS Revenues – Gas Year (Entry, 50% baseline)	<ul style="list-style-type: none"> <li>Using Regulatory Year revenues per slide 10</li> <li>Modelling TS revenues (Entry 50%)</li> <li>Updated Rpt values using an assumed Seasonal allocation Factor (Fry)</li> <li>No K</li> </ul>
TS Revenues – Gas Year (Entry, 25%)	<ul style="list-style-type: none"> <li>Using Regulatory Year revenues per slide 10</li> <li>Modelling TS revenues (Entry 25%)</li> <li>Updated Rpt values using an assumed Seasonal allocation Factor (Fry)</li> <li>No K</li> </ul>
TS Revenues – Gas Year (Entry, 25% - not amending RPt)	<ul style="list-style-type: none"> <li>Using Regulatory Year revenues per slide 10</li> <li>Modelling TS revenues (Entry 25%)</li> <li>Existing Rpt values</li> <li>No K</li> </ul>
TS Revenues – Gas Year (Exit, 50% baseline)	<ul style="list-style-type: none"> <li>Using Regulatory Year revenues per slide 10</li> <li>Modelling TS revenues (Exit 50%)</li> <li>Updated Rpt values using an assumed Seasonal allocation Factor (Fry)</li> <li>No K</li> </ul>

# TS Revenues – Gas Year (Entry, 50% baseline)\*

	Regulatory Year 2023/24		Regulatory Year 2024/25		Regulatory Year 2025/26	
	Apr-Sep	Oct - Mar	Apr-Sep	Oct - Mar	Apr-Sep	Oct - Mar
Seasonal Allocation Factor (Fry)		0.450	0.550	0.465	0.535	0.449
Entry Target Revenue (Regulatory Year)	509.259		505.489		496.814	
Derived K	0.000		<b>12.710</b>		<b>-1.441</b>	
Entry Target Revenue (Regulatory Year)	509.259		492.780		498.254	
Expected Entry Revenue (Rpt)	310.722					
Predicted / Required Revenue to meet RY		198.538		234.346		230.213
Resulting Revenue for first 6 months on next RY			271.143		266.601	
<b>Entry Modelled Revenue (GY)</b>		<b>469.681</b>		<b>500.947</b>		
Forecast Revenue Collection (6 months)	310.722	211.247	258.434	232.906	268.041	
Forecast Revenue Collection (RY)	521.969		491.339			
Revenue Variance to Target	<b>12.710</b>		<b>-1.441</b>			

	Regulatory Year 2023/24		Regulatory Year 2024/25		Regulatory Year 2025/26	
	Apr-Sep	Oct - Mar	Apr-Sep	Oct - Mar	Apr-Sep	Oct - Mar
	<b>0.516</b>	0.484	0.516	0.484	0.516	0.484
	555.965		507.436		496.814	
	0.000		<b>-9.697</b>		<b>-0.053</b>	
	555.965		517.133		496.867	
	287.130					
		268.835		240.360		240.205
			267.076		256.609	
		<b>535.910</b>		<b>496.969</b>		
	287.130	259.137	276.773	240.307	256.662	
	546.268		517.081			
	<b>-9.697</b>		<b>-0.053</b>			

# TS Revenues – Gas Year (Entry, 25%)\*

	Regulatory Year 2023/24		Regulatory Year 2024/25		Regulatory Year 2025/26	
	Apr-Sep	Oct - Mar	Apr-Sep	Oct - Mar	Apr-Sep	Oct - Mar
Seasonal Allocation Factor (Fry)		0.450	0.550	0.465	0.535	0.449
Entry Target Revenue (Regulatory Year)	509.259		505.489		496.814	
Derived K	0.000		<b>12.710</b>		<b>-1.441</b>	
Entry Target Revenue (Regulatory Year)	509.259		492.780		498.254	
Expected Entry Revenue (Rpt)	310.722					
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Forecast Revenue Collection (RY)	521.969		491.339			
Revenue Variance to Target	<b>12.710</b>		<b>-1.441</b>			

	Regulatory Year 2023/24		Regulatory Year 2024/25		Regulatory Year 2025/26	
	Apr-Sep	Oct - Mar	Apr-Sep	Oct - Mar	Apr-Sep	Oct - Mar
	<b>0.516</b>	0.484	0.516	0.484	0.516	0.484
	279.685		255.420		250.109	
	0.000		<b>-4.849</b>		<b>-0.026</b>	
	279.685		260.269		250.135	
	144.444					
		135.241		121.003		120.925
			134.417		129.183	
		<b>269.657</b>		<b>250.187</b>		
	144.444	130.392	139.266	120.977	129.210	
	274.836		260.242			
	<b>-4.849</b>		<b>-0.026</b>			

# TS Revenues – Gas Year (Entry, 25% - not amending Rpt)

	Regulatory Year 2023/24		Regulatory Year 2024/25		Regulatory Year 2025/26	
	Apr-Sep	Oct - Mar	Apr-Sep	Oct - Mar	Apr-Sep	Oct - Mar
Seasonal Allocation Factor (Fry)		0.450	0.550	0.465	0.535	0.449
Entry Target Revenue (Regulatory Year)	509.259		505.489		496.814	
Derived K	0.000		<b>12.710</b>		<b>-1.441</b>	
Entry Target Revenue (Regulatory Year)	509.259		492.780		498.254	
Expected Entry Revenue (Rpt)	310.722					
Predicted / Required Revenue to meet RY		198.538		234.346		230.213
Resulting Revenue for first 6 months on next RY			271.143		266.601	
<b>Entry Modelled Revenue (GY)</b>		<b>469.681</b>		<b>500.947</b>		
Forecast Revenue Collection (6 months)	310.722	211.247	258.434	232.906	268.041	
Forecast Revenue Collection (RY)	521.969		491.339			
Revenue Variance to Target	<b>12.710</b>		<b>-1.441</b>			

	Regulatory Year 2023/24		Regulatory Year 2024/25		Regulatory Year 2025/26	
	Apr-Sep	Oct - Mar	Apr-Sep	Oct - Mar	Apr-Sep	Oct - Mar
		0.450	0.550	0.465	0.535	0.449
	279.685		255.420		250.109	
	0.000		<b>64.360</b>		<b>-14.572</b>	
	279.685		191.060		264.681	
	<b>310.722</b>					
		-31.037		150.293		108.486
			105.127		141.623	
		<b>74.091</b>		<b>291.915</b>		
	310.722	33.324	40.767	135.721	156.195	
	344.045		176.488			
	<b>64.360</b>		<b>-14.572</b>			

# TS Revenues – Gas Year (Exit, 50% baseline)\*

	Regulatory Year 2023/24		Regulatory Year 2024/25		Regulatory Year 2025/26	
	Apr-Sep	Oct - Mar	Apr-Sep	Oct - Mar	Apr-Sep	Oct - Mar
Seasonal Allocation Factor (Fry)		0.504	0.496	0.503	0.497	0.449
Entry Target Revenue (Regulatory Year)	321.234		514.197		505.522	
Derived K	0.000		<b>86.108</b>		<b>-18.843</b>	
Entry Target Revenue (Regulatory Year)	321.234		428.090		524.365	
Expected Entry Revenue (Rpt)	279.070					
Predicted / Required Revenue to meet RY		42.163		301.919		245.131
Resulting Revenue for first 6 months on next RY			212.278		260.390	
<b>Entry Modelled Revenue (GY)</b>		<b>254.441</b>		<b>562.310</b>		
Forecast Revenue Collection (6 months)	279.070	128.271	126.170	283.076	279.233	
Forecast Revenue Collection (RY)	407.341		409.247			
Revenue Variance to Target	<b>86.108</b>		<b>-18.843</b>			

	Regulatory Year 2023/24		Regulatory Year 2024/25		Regulatory Year 2025/26	
	Apr-Sep	Oct - Mar	Apr-Sep	Oct - Mar	Apr-Sep	Oct - Mar
	<b>0.502</b>	0.498	0.502	0.498	0.502	0.498
	564.672		516.143		505.522	
	0.000		<b>-9.706</b>		<b>-0.171</b>	
	564.672		525.849		505.692	
	283.249					
		281.423		252.369		251.858
			263.775		253.664	
		<b>545.198</b>		<b>506.032</b>		
	283.249	271.718	273.480	252.198	253.834	
	554.967		525.678			
	<b>-9.706</b>		<b>-0.171</b>			

# Revised Target Allowed Revenues: Gas Year\*

- The table below shows the output revenues from the method highlighted in the previous section that can be used to calculate a range of updated prices for the four main scenarios that can provide a range of impacts

Gas Year	2023/24			2024/25			2025/26			2026/27		
	Entry	Exit	Total	Entry	Exit	Total	Entry	Exit	Total	Entry	Exit	Total
75/25	802.16	278.66	1080.82	743.75	259.07	1002.82	752.64	261.74	1014.38	777.96	270.18	1048.14
50/50	535.91	506.03	1041.94	496.97	506.03	1003.00	502.90	511.36	1014.26	519.78	528.25	1048.02
25/75	269.66	811.74	1081.40	250.19	752.99	1003.18	253.15	760.98	1014.13	261.59	786.31	1047.91
5.1/94.9*	58.08	1023.55	1081.63	54.08	949.24	1003.32	54.69	959.34	1014.04	56.43	991.38	1047.81

\* **Note:** 5.1% is the lowest that can be modelled due to the value of existing contracts

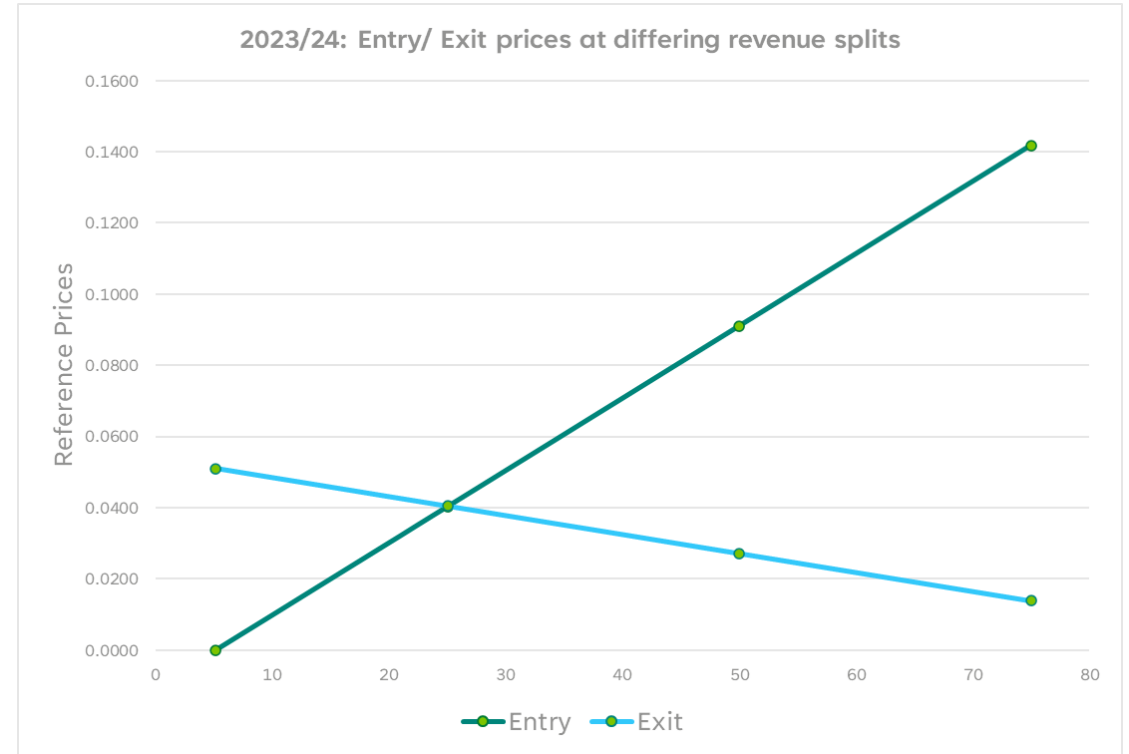
- The output Entry and Exit prices are shown on the next slide



# Price Impact 2023/24\*

2023/24	Entry Reference Price	Exit Reference Price
50/50 Baseline	0.0910	0.0272
25/75	0.0403	0.0405
5.1/94.9	0.0000	0.0510
75/25	0.1418	0.0139

- **Note 1:** 5.1% is the lowest that can be modelled due to the value of existing contracts
- **Note 2:** At a revenue split of 25.06/ 74.94 Entry and Exit prices are equal for GY 23/24 at 0.0404
- **Note 3:** Every percentage change to entry split leads to a c. 0.00203 change to entry prices and a c. 0.00053 change to exit prices



# Price Impact – indicative forward prices\*

**Baseline**

50/50	2023/24	2024/25	2025/26	2026/27	2027/28
Entry	0.0910	0.0859	0.0905	0.0901	0.0873
Exit	0.0272	0.0257	0.0262	0.0276	0.0284

25/75	2023/24	2024/25	2025/26	2026/27	2027/28
Entry	0.0403	0.0384	0.0411	0.0419	0.0418
Exit	0.0405	0.0382	0.0390	0.0410	0.0423

5.1/94.9	2023/24	2024/25	2025/26	2026/27	2027/28
Entry	0.0000	0.0007	0.0019	0.0036	0.0056
Exit	0.0510	0.0482	0.0492	0.0517	0.0534

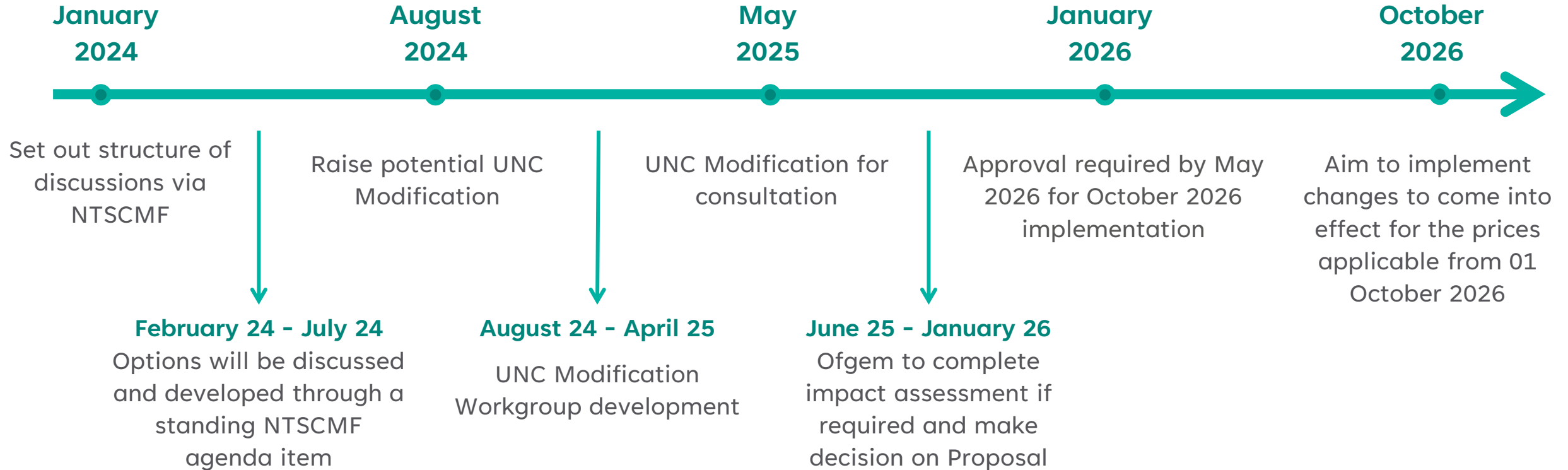
75/25	2023/24	2024/25	2025/26	2026/27	2027/28
Entry	0.1418	0.1334	0.1398	0.1383	0.1329
Exit	0.0139	0.0132	0.0134	0.0141	0.0145

# Discussion Points and Next Steps

From April NTSCMF onwards:

- We welcome reflections on what has been presented so far
- Continued development of assumptions & impact on prices based on feedback
- Building and maintaining a list of topics that need to be accommodated into the analysis and present areas where further thinking is required:
  - E.g. 'K', any transition period from status quo to a changed % split, accommodating Existing Contracts
- Analysis can be shaped following comments and feedback as we go through
- Reviewing potential benefits and / or issues of reviewing this or any associated topic as we work it through and how/if they can be accommodated or tested through the analysis process
- Stakeholders input, through NTSCMF or direct, will be invaluable as this topic is given time for discussion.

# Draft Timeline



The above dates are indicative only. The outcome of discussions will inform the plan going forwards.

# Thank you

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