



Transmission Services Charging: Future Developments and High Level Analysis

NTSCMF Discussions

March 2024



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

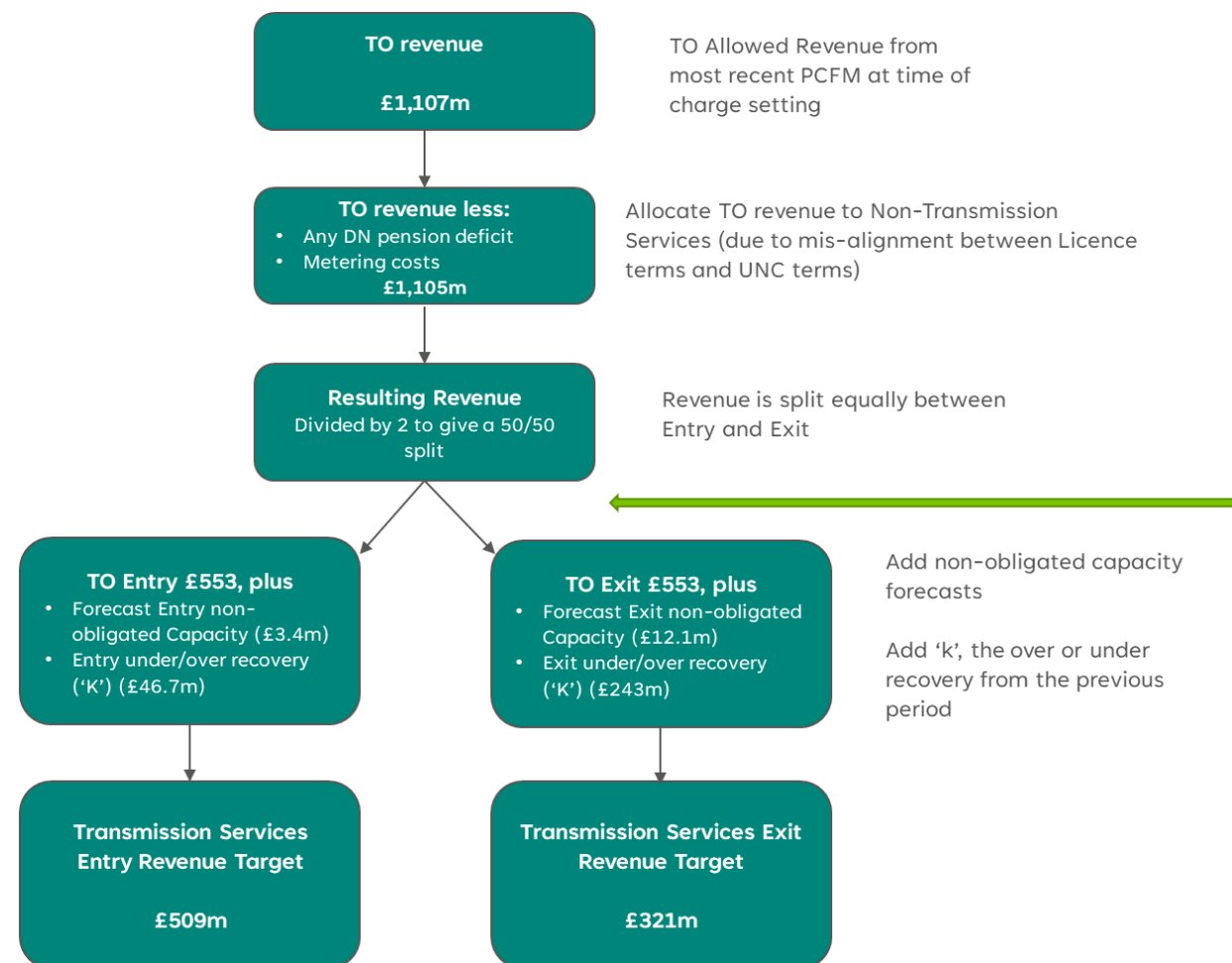
Transmission Services: Entry/ Exit Split Analysis

- 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

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_t'
- We publish a Transmission Services Revenue model¹ 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')		509.3		505.5	
Revenue collection projection from Apr-Sep, collected under charges for GY 22/23	Target Revenue (Regulatory Year)	310.7			
	Forecast Revenue Collection (GY-1)		198.5		
Difference to be collected (Difference between RY 23/24 Target Revenue and Forecast Revenue Apr-Sep)	Revenue to be Collected			12.7	
	Derived 'K'			492.8	
% Split of GY revenue collected across the 6 months (Driven by FCC and levels of existing contracts)	Target Revenue including 'K'		0.45	0.55	
	Seasonal Profile Revenue (GY)			271.1	
	6 Monthly Target Revenue (Apr-Sep 23/24)				
	Gas Year Target Revenue		469.7		
	Forecast Revenue Collection	310.7	211.2		
	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 6 month Seasonal Profile percentage to the FY target revenue.
- 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

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
Tx Entry Target	509.26	505.49	496.81
Exit Non-Ob	12.11	12.11	12.11
Exit 'K'	243.44	1.95	0.00
Tx Exit Target	321.23	514.20	505.52

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
Tx Entry Target	555.96	507.44	496.81
Exit Non-Ob	12.11	12.11	12.11
Exit 'K'	0.00	0.00	0.00
Tx Exit Target	564.67	516.14	505.52

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			
	Split	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
5.5/94.5*		64.14	1056.50	1120.64	58.81	964.77	1023.58	57.64	944.70	1002.34	59.27	972.67	1031.94

* **Note:** 5.5% is the lowest that can be modelled due to the value of existing contracts

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

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		12.710		-1.441	
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	
Entry Modelled Revenue (GY)		469.681		500.947		
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	12.710		-1.441			

	Regulatory Year 2023/24		Regulatory Year 2024/25		Regulatory Year 2025/26	
	Apr-Sep	Oct - Mar	Apr-Sep	Oct - Mar	Apr-Sep	Oct - Mar
	0.597	0.450	0.550	0.465	0.535	0.449
	555.965		507.436		496.814	
	0.000		1.754		0.767	
	555.965		505.682		496.047	
	331.712					
		224.253		229.193		231.395
			278.243		265.419	
		502.496		494.612		
	331.712	226.006	276.489	229.961	264.652	
	557.719		506.450			
	1.754		0.767			

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		12.710		-1.441	
Entry Target Revenue (Regulatory Year)	509.259		492.780		498.254	
Expected Entry Revenue (Rpt)	310.722					
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Revenue Variance to Target	12.710		-1.441			

	Regulatory Year 2023/24		Regulatory Year 2024/25		Regulatory Year 2025/26	
	Apr-Sep	Oct - Mar	Apr-Sep	Oct - Mar	Apr-Sep	Oct - Mar
	0.597	0.450	0.550	0.465	0.535	0.449
	279.685		255.420		250.109	
	0.000		0.912		0.387	
	279.685		254.508		249.722	
	166.872					
		112.813		115.381		116.490
			140.039		133.619	
		252.852		249.000		
	166.872	113.725	139.127	115.768	133.232	
	280.597		254.895			
	0.912		0.387			

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		12.710		-1.441	
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	
Entry Modelled Revenue (GY)		469.681		500.947		
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	12.710		-1.441			

	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		64.360		-14.572	
	279.685		191.060		264.681	
	310.722					
		-31.037		150.293		108.486
			105.127		141.623	
		74.091		291.915		
	310.722	33.324	40.767	135.721	156.195	
	344.045		176.488			
	64.360		-14.572			

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		86.108		-18.843	
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	
Entry Modelled Revenue (GY)		254.441		562.310		
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	86.108		-18.843			

	Regulatory Year 2023/24		Regulatory Year 2024/25		Regulatory Year 2025/26	
	Apr-Sep	Oct - Mar	Apr-Sep	Oct - Mar	Apr-Sep	Oct - Mar
	0.518	0.504	0.496	0.503	0.497	0.449
	564.672		516.143		505.522	
	0.000		-4.788		-1.327	
	564.672		520.932		506.848	
	292.400					
		272.273		257.828		253.830
			258.316		251.692	
		530.588		509.520		
	292.400	267.484	263.104	256.501	253.019	
	559.884		519.605			
	-4.788		-1.327			

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	752.14	271.19	1023.33	740.22	260.85	1001.08	768.82	262.48	1031.29	718.75	269.62	988.37
50/50	502.50	530.59	1033.08	494.61	509.52	1004.13	513.70	512.80	1026.50	480.21	527.16	1007.37
25/75	252.85	789.99	1042.84	249.00	758.19	1007.19	258.59	763.13	1021.72	241.68	784.69	1026.37
5.5/94.5*	58.09	992.36	1050.45	57.38	952.19	1009.57	59.56	958.42	1017.98	55.58	985.61	1041.19

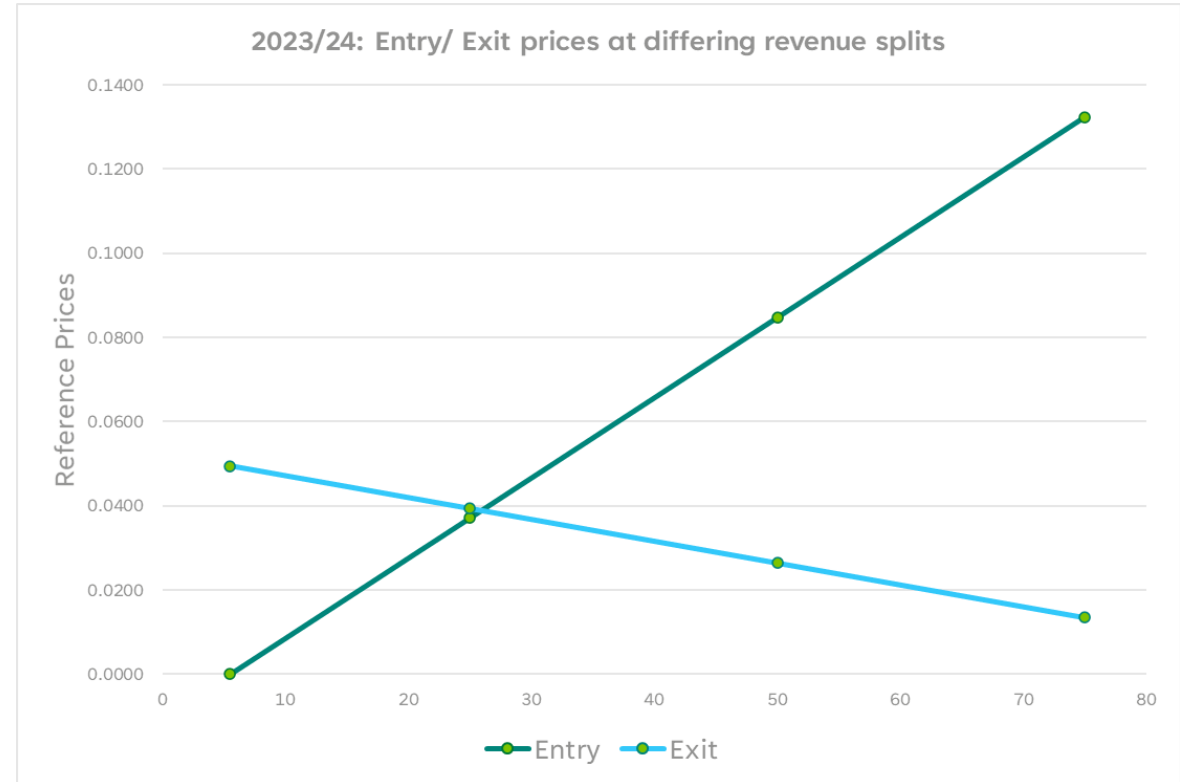
* **Note:** 5.5% is the lowest that can be modelled due to the value of existing contracts

- 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	0.0847	0.0264
25/75	0.0371	0.0394
5.5/94.5	0.0000	0.0495
75/25	0.1322	0.0135

- **Note:** 5.5% is the lowest that can be modelled due to the value of existing contracts
- **Note 2:** At a revenue split of 25.94/ 74.06 Entry and Exit prices are equal for GY 23/24 at 0.0389
- **Note 3:** Every percentage change to entry split leads to a c. 0.0019 change to entry prices and 0.0005 change to exit prices



Price Impact – indicative forward prices

Baseline

50/50	2023/24	2024/25	2025/26	2026/27	2027/28
Entry	0.0847	0.0855	0.0926	0.0827	0.0848
Exit	0.0264	0.0259	0.0263	0.0275	0.0285

25/75	2023/24	2024/25	2025/26	2026/27	2027/28
Entry	0.0371	0.0382	0.0422	0.0382	0.0405
Exit	0.0394	0.0385	0.0391	0.0410	0.0424

5.5/94.5	2023/24	2024/25	2025/26	2026/27	2027/28
Entry	0.0000	0.0014	0.0029	0.0034	0.0060
Exit	0.0495	0.0484	0.0491	0.0514	0.0533

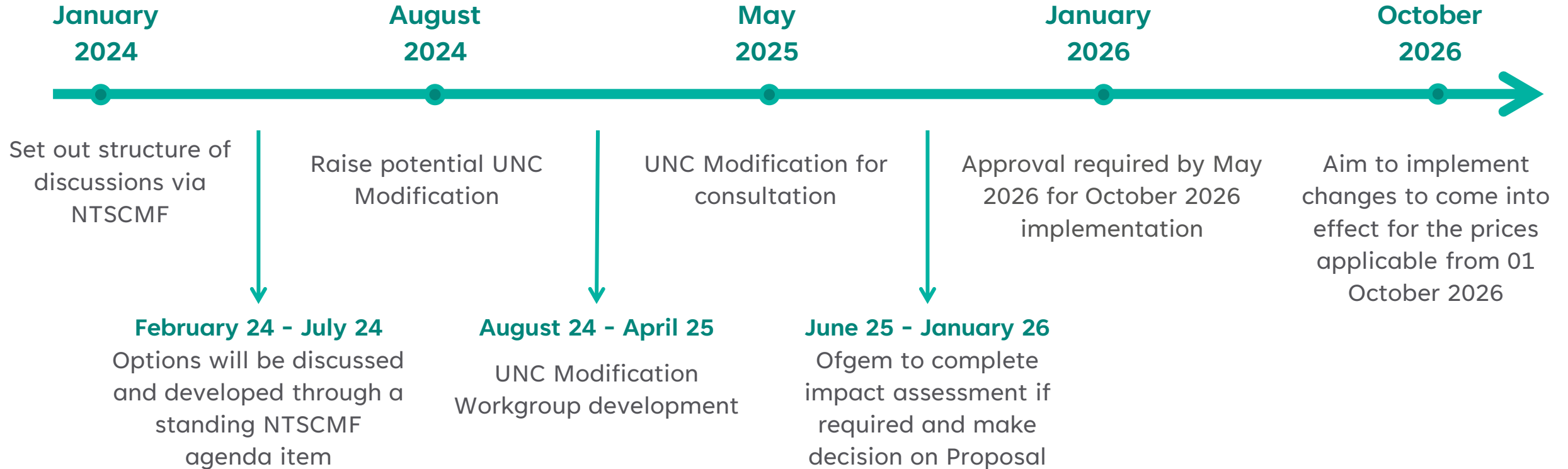
75/25	2023/24	2024/25	2025/26	2026/27	2027/28
Entry	0.1322	0.1327	0.1430	0.1272	0.1290
Exit	0.0135	0.0132	0.0135	0.0141	0.0146

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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