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17 May 2021

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RATINGS

Electricity Supply Board (ESB)

Domicile	Dublin, Ireland
Long Term Rating	A3
Baseline Credit Assessment	baa1
Outlook	Stable

Source: Moody's Investors Service

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Electricity Supply Board (ESB)

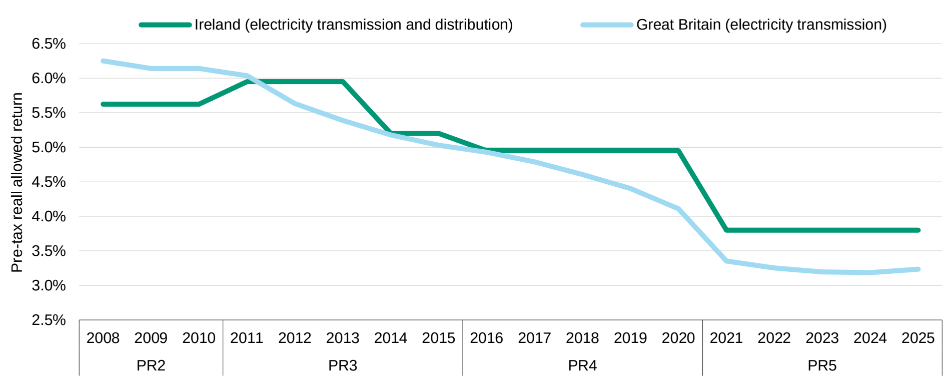
Supportive PR5 determination confirms Irish regulation among world's most stable and predictable

On 18 December, Ireland's Commission for Regulation of Utilities (CRU) published its final determinations for Price Review 5 (PR5), setting the allowed revenue for ESB Networks (the main operating company of Electricity Supply Board, ESB, A3 stable) and EirGrid for the five-year period starting in January 2021. The proposals continue the stable and predictable application of regulation in Ireland since 2001 and are supportive of ESB's credit quality.

PR5 is the fifth consecutive price control under the CRU's current regulatory principles, covering a period of 25 years. The regulator's decision followed an extensive consultation, a draft determination in July 2020[1], and engagement with ESB that the CRU described as "constructive and co-operative." ESB received a pre-tax real allowed return of 3.8% and cost allowances around 45% higher than in the previous period and only 6% below the company's proposals, reflecting significant investments required to deliver Ireland's Climate Action Plan.

Following the determination, we affirmed ESB's rating and increased our score for the "Stability and Predictability of the Regulatory Regime" to Aaa from Aa under our rating methodology for regulated networks, reflecting the transparency of decision-making, the CRU's long track record of stable, predictable and independent regulation, and the consistent application of well-established principles that clearly define risk allocation between companies and customers. We also upgraded Gas Networks Ireland, which is also regulated by the CRU.

Exhibit 1
ESB's real allowed returns will fall sharply, but remain above recent precedents in Great Britain



Note: GB electricity transmission is based on Ofgem final determination and Moody's estimate of future interest rates, and converted from vanilla to pre-tax terms at an assumed 19% tax rate
Source: CRU, Ofgem, Competition and Markets Authority, Moody's Investors Service

Allowed return falls in new regulatory period, but remains higher than in comparable regimes

The CRU has allowed ESB Networks to set tariffs based on a pre-tax real return of 3.8%, in line with its draft determination. The 30% cut from PR4 entirely reflects low yields on global debt markets, and is above the midpoint (specifically, at the 67th percentile) of the range estimated by the CRU's economic consultants. It is also within the 3.7-4.5% range proposed by ESB in its business plan.

The allowed return is higher than Ofgem's determinations for energy transmission in Great Britain, which is around 3.2% on an equivalent pre-tax basis over the 2021-26 period despite GB's higher corporate tax rate. Historically, the CRU has reached similar conclusions to Ofgem.

Exhibit 2

While the allowed return has fallen, it compares favourably to recent decisions

Allowed return determinations in Ireland and Great Britain

Company	ESB	ESB	ESB	NGET, SPT	Gas Networks Ireland
Price Control	ROI – PR5 (2021-2025)	NI – RP6 (2017-2024)	ROI – PR4 (2016-2020)	GB – RIIO-2 (Mar 21-Apr 26)	ROI – PC4 (Oct 17-Sep 22)
Decision date	Dec-20	Jun-17	Dec-15	Dec-20	Aug-17
Risk-free rate	-1.20% - 0.80%	1.25%	1.90%	-1.58%	1.90%
Equity risk premium	6.90% - 7.55%	5.25%	4.75%	8.08%	4.75%
Total market return	5.70% - 6.75%	6.50%	6.65%	6.50%	6.65%
Equity beta	0.78 - 0.89	0.61	0.89	0.76	0.93
Expected cost of equity (from CAPM)	4.18% - 5.92%	4.45%	6.12%	3.55%	6.32%
Assumed outperformance	n.a.	n.a.	n.a.	-0.22%	n.a.
Gearing equivalence				-0.31%	
Allowed cost of equity (post-tax)	**4.18% - 5.92%**	**4.45%**	**6.12%**	**4.02%**	**6.32%**
Corporate Tax Rate	12.5%	12.5%	12.5%	19.0%	12.5%
Allowed cost of equity (pre-tax)	**4.78% - 6.77%**	**5.08%**	**7.00%**	**4.96%**	**7.22%**
Allowed cost of debt	**1.00% - 1.70%**	**1.63%**	**2.90%**	**1.82%**	**2.50%**
Notional gearing	55%	45%	55%	55%	55%
Allowed return pre-adjustments	2.70% - 4.38%	3.53%	4.74%	3.00%	4.63%
Inflation expectations	0.00% - 0.40%	n.a.	n.a.	n.a.	n.a.
Aiming-up & uncertainity	Implicit in point estimate	n.a.	0.21%	n.a.	Implicit in point estimate
Allowed return (pre-tax, HICP)	**3.80%**	**3.53%**	**4.95%**	**3.23%**	**4.63%**
Allowed return (vanilla)		**3.18%**	**4.35%**	**2.81%**	**4.22%**

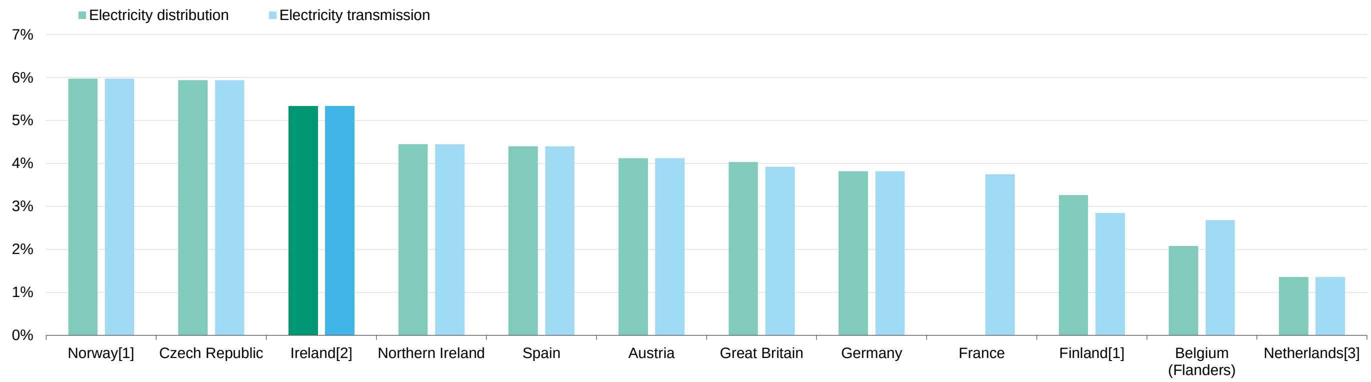
Ofgem's draft determination vanilla WACC of 2.63% has been restated on a pre-tax basis.
Source: CRU, Ofgem, Moody's Investors Service

ESB's PR5 allowed return is also higher than other comparable European regimes. The exhibit below compares the post-tax return on equity. This gives the best measure of relative supportiveness because the allowed cost of debt in each market tends to track actual borrowing costs and because tax rates also vary significantly.

Exhibit 3

ESB Networks' allowed return in PR5 is higher than most European regimes

Real, post-tax allowed return on equity



[1] Moody's estimate
[2] Based on 67th percentile of range, consistent with point estimate for allowed return
[3] Draft determinations for distribution and onshore transmission
Note: Returns as of December 2023. Real returns are presented based on local inflation benchmark. Where returns are set in nominal terms, they are converted to real based on an assumed 2% inflation rate.
Source: Moody's Investors Service based on regulatory data

Significantly expanded investment programme, with greater opportunities to adjust allowances as needs evolve

ESB's final determinations include allowances for capital and operating expenditure of €5.9 billion in 2019 prices, a 45% increase from actual PR4 expenditure, to allow ESB to provide the infrastructure needed to meet Ireland's Climate Action Plan and Clean Energy Package. A significant driver of the increase is Ireland's smart metering programme, which aims to roll out 500,000 meters per year between 2021 and 2024, and is expected to cost €0.9 billion over PR5.

In its business plan, ESB had requested €6.2 billion. At draft determination, the CRU applied a €0.7 billion efficiency challenge, including €108 million which will be subject to a low carbon technology reopener. The CRU noted that “this is a cost challenge and will not necessarily result in a disallowance” at final determinations if ESB could provide sufficient justification. Consistent with this, a majority of these costs were allowed in the final determination.

Exhibit 4

The CRU allowed totex 45% above the prior period and only 6% below ESB's request

	PR4			PR5		
	Ex ante allowance	Ex post allowance	Outturn	ESB request	Draft determination	Final determination
Distribution opex	1,384	1,408	1,406	1,696	1,547	1,632
Distribution capex	1,765	1,566	1,564	3,122	2,527	2,844
Transmission opex	308	303	303	330	320	327
Transmission capex	888	685	685	978	919	978
TSO network capex	110	88	88	70	68	70
Total	**4,455**	**4,050**	**4,046**	**6,195**	**5,381**	**5,850**
PR4 outturn vs ex post allowance			*-0.1%*			
PR5 vs PR4 outturn				*53%*	*33%*	*45%*
PR5 determination vs ESB request					*-13%*	*-6%*

Source: CRU, Moody's Investors Service

The CRU has acknowledged the changing role of the electricity network as Ireland transitions towards a lower-carbon economy, and the difficulties in forecasting the timings and level of investment required. To increase the flexibility under the fixed five year price control, the regulator has included the following mechanisms which enable allowances to be adjusted in period:

» In distribution, volume drivers for the level of domestic connections and pay-as-you-go (PAYG) meter installations,

» In distribution, additional funding if the level of large customer and data centre connections, or the take up of low carbon technologies differs from ex-ante forecasts,

» In distribution, a flexibility mechanism that allows ESB to reallocate allowances between Opex and Capex (bi-directional). This measure recognises that “there may be cases where the DSO identifies during PR5 that a capex solution would be more efficient than an opex solution that was assumed in setting the ex-ante allowance – or vice versa.”

» In transmission, a capex allowance reopener if cumulative expenditure is forecast to exceed allowances by 10% or ESB projects to underspend by 20%.

In addition, the regulator retained the force majeure mechanism from PR4, which allowed ESB to recover exceptional storm costs in 2017.

PR5 uses a rolling retention mechanism to incentivise capex efficiency. ESB can retain the benefits of any underspend against cost allowances for five years after they occur. By default, allowances are then reset to outturn expenditure, unless ESB can prove the underspend was due to efficiency savings and not due to differences in forecasts or volumes of work. The CRU can disallow any expenditure it finds inefficiently occurred. If outturn expenditure exceeds cost allowances, ESB can request additional funded at the end of the price control. Including these adjustments, ESB's performance in PR4 was broadly in line with its allowances for the period.

Continuing the PR4 approach, the CRU will review outturn PR5 expenditure as part of the PR6 determination. The CRU is proposing to move its ex-post review to focus on output delivery rather than amount spent on inputs where possible, although it does not expect to fully transition the framework until the end of PR6.

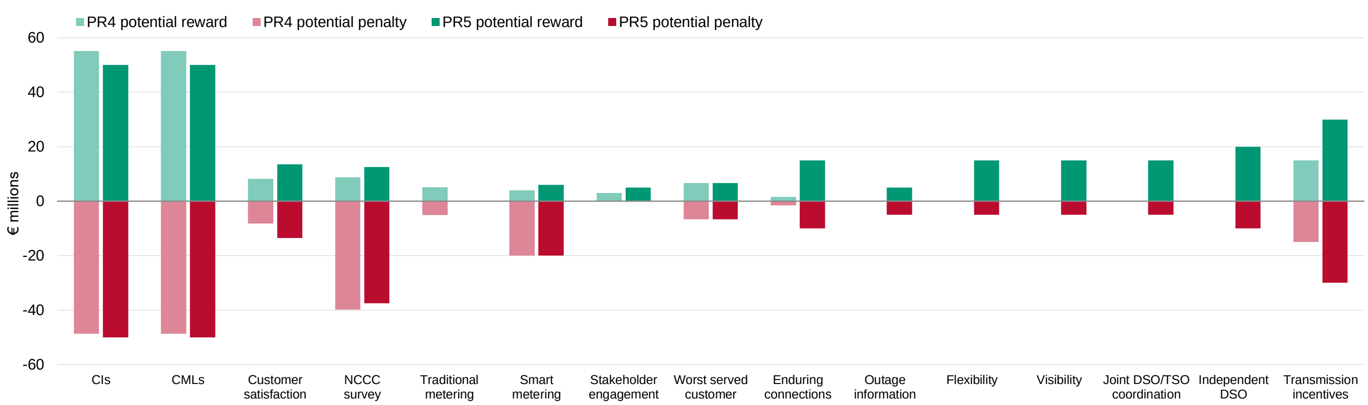
Potential incentives worth 5% of allowed revenue

The CRU introduced output incentives to the regulatory framework during PR4, although due to delays in implementation they only applied for the final three years of the price control. The PR5 determination contains a balanced portfolio of incentives, where ESB could potentially earn cumulative rewards or penalties of €214 million in its distribution networks and a further €30 million in transmission, equivalent to 5% of allowed revenues. Potential incentive payments have increased compared to PR4, where they had a potential impact of +3.57% to -4.33% of allowed revenue when summing individual incentives, with a 4% cap. ESB supported the expansion of financial incentives, and had proposed a wider range (+8.2% to -5.7%).

Exhibit 5

PR5 has more and higher-powered incentives

Maximum potential rewards and penalties in PR4 and PR5, € millions



Source: CRU, Moody's Investors Service

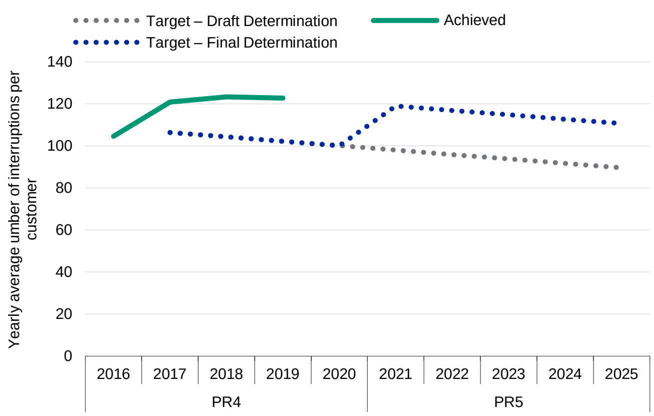
The most valuable incentives continue to be associated with the frequency and duration of customer interruptions – known as Customer Interruptions (CIs) and Customer Minutes Lost (CMLs), respectively. Each of these incentives is worth +/-€50 million, or 45% of the entire incentive package. Financial incentivisation began on these measures in 2018 (a non-financial target was set for 2017), with targets decreasing by 2.1% each year. ESB has underperformed both measures in 2018 and 2019, accruing €16 million of incentive penalties.

In its draft determination, the CRU proposed targets similar to those that had been missed in PR4, tightening each year, and said that rebasing targets would "not be consistent with the PR5 objectives and the general ambition for [Irelands Climate Action Plan] 2030". It also increased the reward/penalty rate by 137% for CIs and 87% for CMLs. As a result, there was a risk that ESB would have incurred significant financial penalties in PR5. However, in its final determinations the CRU eased these targets to the level of ESB's average performance during PR4 for CIs and the PR3/4 average for CMLs "to ensure that the scheme remains achievable by the DSO." As a result, we no longer expect ESB to underperform on this metric.

Exhibit 6

Targets have been relaxed for interruption frequency...

Customer Interruptions



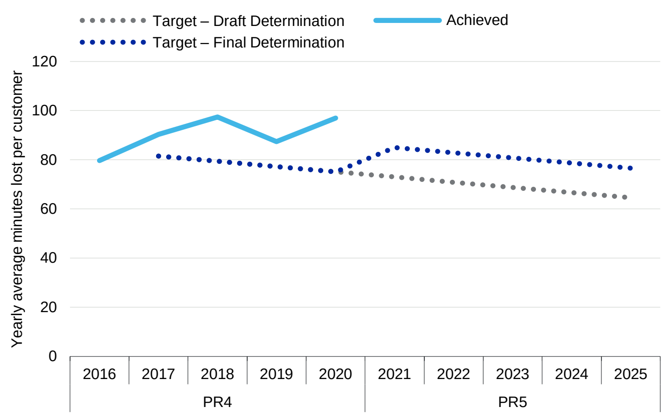
Note: 2020 data not available

Source: CRU, ESB, Moody's Investors Service

Exhibit 7

... as well as average duration

Customer Minutes Lost



Note: 2020 based on ESB annual report, as ESB Networks performance report is not yet available.

Source: CRU, ESB, Moody's Investors Service

Determinations confirm stability and predictability of CRU's regulatory regime

Following the ESB final determination, we score the "stability and predictability of the regulatory regime" for both electricity and gas networks in the Republic of Ireland as Aaa under our rating methodology for regulated networks. Ireland's CRU is now scored in line with Britain's Ofgem, the United States' FERC and Australia's AER (see Regulated Electric & Gas Networks – Cross Region: Lower returns hit key ratios, but regulatory consistency still supports credit quality, 8 September 2020).

Exhibit 8

Characteristics of regulatory regimes that are scored highly for stability and predictability of the regulatory regime

	Weight	Aaa	Aa	A
Stability and predictability of the regulatory regime	15%	Regulation is independent, well established (> 15 years of being predictable and stable) and transparent (well-established regulatory principles clearly define risk allocation between companies and customers and are consistently applied, with public or shared financial models). These conditions are expected to continue.	Regulation is independent, well established (> 10 years of being predictable and stable) and transparent (well-established regulatory principles clearly define risk allocation between companies and customers and are generally consistently applied). These conditions are expected to continue.	Regulation is generally independent and developed (regulatory principles define risk allocation between companies and customers and are based on established precedents in the same jurisdiction). These conditions are expected to continue.

Source: Moody's Investors Service, Regulated Electric & Gas Networks rating methodology, March 2017

In each of these regimes, our Aaa score for stability and predictability is underpinned by (1) a long-standing track record of consistent application of regulatory rules; (2) exemplary transparency around the regulatory decision-making process as well as publication of detailed and forward-looking company-specific regulatory parameters and revenue building blocks; (3) relatively rare challenges to regulatory decisions and their timely resolution; and (4) overall very low political interference in regulatory proceedings.

Exhibit 9
Detailed considerations reflected in Aaa scores for stability and predictability of regulatory regimes in Ireland, Australia, GB and the US

Country	Republic of Ireland, TOs/DSOs	Australia All incumbent TSOs/DSOs	GB All incumbent TSOs/DSOs	US FERC-regulated TSOs
Score	Aaa	Aaa	Aaa	Aaa
Length of incentive-based regulation (as at 2020)	20 years (since 2000)	22 years (since 1999)	31 years (since 1990)	> 80 years (FERC has been regulating interstate electricity and interstate natural gas pipelines and wholesale sales since 1935 and 1938, respectively, when it was the Federal Power Commission); a revised return methodology applied from 2005
Number of regulatory periods completed (as at 2021)	4	5	5	no specific regulatory period defined
Length of regulatory periods	5 years	5 years	5-8 years	no specific regulatory period defined
Public consultation on regulatory methodologies	Yes	Yes	Yes	Yes
Publication of regulatory parameters, including RAB	Yes	Yes	Yes	Yes, but rate base and returns only published at decision
Publication of detailed regulatory models/revenue building block reconciliations	Yes, at rate case decision	Yes	Yes	Yes, at rate case decision
Independent adjudication process for regulatory appeals	Yes (judicial process)	Yes (judicial process)	Yes (CMA)	Not codified but court appeals possible
Expected time for conclusion of appeals	Can take several years	Under 6 months for normal judicial procedures; up to 2 years if appeal is taken to Federal court	6-12 months	Can take several years
Use of appeals	No price determinations have been subject to appeal or judicial review, although there have been review of other CRU decisions	Rare (since abolition of limited merit review feature in 2018)	Rare	Rare
Appeal decisions that significantly differ from regulatory determination	No	No	No	Some cases of lower RoEs after customer appeals
Political interference	Low	Low	Low	Low

Source: Moody's Investors Service

Regulatory regimes continue to evolve, and stability does not mean that the rate-setting approach should be static. We would expect regulators to adapt their approach in the face of challenges including, for example, climate change, but also a growing debate around affordability and legitimacy. However, transparency is paramount when changes are introduced.

Endnotes

1 CRU, Price Review 5 Electricity Networks, July 2020

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