

# Contents

1	Introduction	1
1.1	Change in contract period	1
2	Cost review	2
2.1	Operating costs	2
2.2	Depreciation	4
2.3	Financial costs	5
3	Call volumes	6
3.1	Call volumes to date	6
3.2	Call volume forecast	7
3.3	Change in call volumes	8
4	Calculation of the CHF	9
5	Summary	11



Ref: 796848285-431

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Analysys Mason Limited Suite 242 The Capel Building Mary's Abbey Dublin 7 D07 R6F3 Ireland

Tel: +353 1 602 4755 dublin@analysysmason.com www.analysysmason.com Registered in Ireland IR304061



#### Introduction 1

In Ireland, the emergency services are called by dialling 999 or 112, and these calls are initially received by the Emergency Call Answering Service (ECAS). Emergency calls are currently free of charge to the caller on all networks. The ECAS is funded through the Call Handling Fee (CHF). The CHF is charged by the ECAS operator, BT Communications Ireland Limited (BT), to the operator on whose network the emergency call originates.

The current CHF is EUR3.12 per call, as determined by the Commission for Communications Regulation (ComReg) in January 2024, pursuant to Section 58D (1) of the Communications Regulation Act 2002 (as amended). The contract with the ECAS operator is approaching its annual review point, which triggers an assessment of the maximum permitted CHF that the ECAS operator can charge for handling emergency calls.

ComReg has selected Analysys Mason to provide assistance in relation to the CHF review. This report sets out the findings of our work:

- Chapter 2 sets out our cost review
- Chapter 3 presents our review of call volumes
- Chapter 4 sets out the new CHF and our explanation and quantification of the main contributors to the change in CHF

Items in this report marked with [%] have been redacted in the version for publication due to confidentiality requirements.

#### 1.1 Change in contract period

The current ECAS contract is due to expire in November 2025. DECC has the option to extend the existing services with BT for up to 24 months until November 2027. DECC has advised ComReg that the option to extend services will be required. This has been reflected in the model produced by BT for calculation of the CHF, with a 105-month period now being considered. To enable a likefor-like comparison against last year's CHF model, this report includes total costs, revenues and call volumes on an 84<sup>1</sup> month basis as well as a 105 month basis.

The contract duration in the model has been extended by 21 months instead of 24 months to bring it into line with the correct termination date of end November as per the ECAS contract rather than end February.



### Cost review

The cost review provides an assessment of whether or not the costs borne by BT in operating the ECAS since 1 April 2023 and the associated cost forecasts are reasonable and that none could be considered unnecessary, avoidable or excessive.

The main cost components of the ECAS are operating costs, depreciation and financial costs, as shown in Figure 2.1 below. Total costs are presented in this report as follows:

- 'Bid Total' represents the total projected costs at the time the ECAS contract was awarded to BT.
- 'Contract Total (2023)' represents the total costs projected by BT during the 2023 CHF review.
- 'Contract Total (2024)' represents the total costs projected by BT during the current CHF review for the original contract period of 84 months.
- 'Contract Total (2024) incl. extension' represents the total costs projected by BT during the current CHF review for the newly proposed, extended 105-month period.

Figure 2.1: Total costs [Source: BT, Analysys Mason, 2024]

[**>**<]

The total projected costs for the 84-month ECAS contract period are estimated at [X] million, an increase of [X] compared to the 2023 costs. The total projected cost represents a net cost increase of  $[\times]$  compared to the Bid Total.

We have reviewed the operating costs, depreciation and financial costs included in the proposed contract extension for the additional 21 months beyond the original 84-month ECAS contract period. We have determined that these are reasonable and in line with forecasts seen for the original contract period.

While our CHF review has been supported by multiple meetings with BT, multiple iterations of a model with revenues and costs broken out on a quarterly basis and a written question and answer process, we have not had visibility of BT's audited accounts or quarterly management accounts. We recommend that this documentation be considered in future CHF reviews.

The following subsections present an assessment of the changes within each of the three cost categories: operating costs, depreciation and financial costs.

### 2.1 Operating costs

The main components of ECAS operating costs are shown in Figure 2.2 below.



Figure 2.2: Operating costs [Source: BT, Analysys Mason, 2024]

[**>**<]

As of October 2024, the total projected operating costs for the 84-month ECAS contract period are estimated at [%] million, an increase of [%] compared to 2023, the period under review. The total projected cost represents a net cost increase of [X] compared to the Bid Total.

The main causes of change in the operating costs for the period under review are described below.

### Total staff costs

Since the previous review, total staff costs (general BT staff and call centre staff) have increased by approximately  $[\times]$  or  $[\times]$  over the current 84-month ECAS contract period.

Several factors contributed to this increase with a key factor being cost-of-living-related increases in base pay for call centre operators of  $[\times]$  and  $[\times]$  on average for other staff as of June 2024. There has also been an increase in operator time requirements due to an increasing complexity associated with connecting calls as a result of technology developments in particular silent and abandoned calls as discussed in Section 3.1.1. Staff additions have also contributed to increased costs with a net addition of 2 call operators.

On a combined basis, total forecast staff costs for Year 6 (year ending March 2025) have increased by [X] compared to last year's CHF model while total forecast call volumes for the same period have decreased by 8.9%. This results in an increase in total forecast staff cost per call of [X]. While some of this increase in unavoidable due to the factors mentioned above as well as human resources constraints (e.g. timing between new call volume trends emerging and headcount adjustments), we recommend that BT reviews its overall staffing solution ahead of the next CHF review to ensure that staff costs are reasonable throughout the proposed contract extension period.

#### Network services

Since the previous review, network service costs have increased by approximately [X] over the current 84-month ECAS contract period. This increase is due to incurred costs being slightly higher than forecasted.

#### Premises

Since the previous review, premises costs have increased by approximately [X] over the current 84month ECAS contract period. This is a relatively immaterial adjustment primarily due to some additional facilities management costs.



Other

Since the previous review, costs categorised as 'other costs' have decreased by approximately [X] over the current 84-month ECAS contract period. This change is not material.

### 2.2 Depreciation

The main components of ECAS depreciation costs are shown in Figure 2.3 below.

Figure 2.3: Depreciation [Source: BT, Analysys Mason, 2024]

[**>**<]

As of October 2024, the total projected depreciation costs for the ECAS contract period including extension are estimated at [X], an increase of [X] in comparison to the previous review<sup>2</sup>. The total projected cost represents a net cost increase of [X] compared to the Bid Total.

The key contributors to that change are described below.

Set-up costs

Since the previous review, set-up costs<sup>3</sup> have decreased for the ECAS contract period including extension. There is a decline in costs of approximately [X] which is not considered to be a material change.

Other

Refresh costs are costs put in place to allow for replacement of certain network items during the lifetime of the ECAS contract as well as feature additions approved by DECC. Since the previous review, refresh costs have increased by approximately [\infty] for the ECAS contract period including extension. Additional costs have been included to provide a new NG e-call feature and real time text (RTT) functionality which will be funded via the CHF and sinking fund respectively over the remaining contract period. As RTT has been funded by DECC through the use of the sinking fund, it does not impact on the CHF.

The net effect of these changes compared to the previous review is an additional [X] of cost which is to be recovered via the CHF.

<sup>3</sup> Set-up costs are those costs which allow BT to recover the initial capital expenditure associated with its deployment of the ECAS.



We have excluded the 2024 contract totals for the original contract period from Figure 2.3 because the timing of some depreciation costs that have already been assessed as reasonable have been deferred such that they now fall into the extension period.

NGX refresh costs

ComReg previously understood that BT was seeking to have "NGX refresh" costs in excess of the depreciation costs outlined above considered reasonable and therefore recovered from the CHF. BT has since clarified that these costs are already provided for within the depreciation line items above and ComReg has confirmed that no further analysis is required. Compared to last year's CHF model, no additional NGX costs are included in this year.

#### 2.3 Financial costs

The main components of ECAS financial costs are shown in Figure 2.4 below.

Figure 2.4: Financial costs [Source: BT, Analysys Mason, 2024]

 $[\times]$ 

As of October 2024, the total projected financial costs for the 84-month ECAS contract period are estimated at  $[\times]$ , a decrease of  $[\times]$  compared to 2023, the period under review. The total projected cost represents a net cost decrease of  $[\times]$  compared to the Bid Total.

Both the sinking fund cost and the guaranteed return are fixed for the duration of the contract period. The small change described above is the result of the requirement to select a CHF rounded to the nearest cent to provide the necessary guaranteed return.

We have reviewed the financial costs included in the contract extension for the additional 21 months beyond the original 84-month ECAS contract period. We have determined that these are reasonable and in line with forecasts seen for the original contract period.



#### 3 Call volumes

#### 3.1 Call volumes to date

In updating the call volume forecast, BT and ComReg have been mindful of the contribution of silent and abandoned calls to total ECAS call volumes. Silent calls are those in which the calling party does not speak or provide input to the operator when the call is answered, whilst abandoned calls are those calls of extremely short duration which are terminated before the call can be answered by an operator.

The volume of silent calls saw a significant rise in 2023, due to software changes on certain Android mobile devices. In June 2023 a software update to Android mobile devices was made and we have seen the volume of silent calls from these devices return to normal levels. This however occurred faster than was anticipated during last year's CHF review and contributes to a large decline in call volumes between 2023 and the forecast for 2024 as shown in figure 3.1 below. This resulted in an under-recovery of costs by BT.

Figure 3.1: Contribution to total annual (calendar year) call volumes by type<sup>4</sup> [Source: BT, Analysys Mason, 2024]

[><]

As identified in last year's review the trend of declining noisy calls is expected to continue, having started in the final months of 2021 and persisting throughout 2022 and 2023. The contribution of these calls for 2024 is expected to be approximately 18 000 fewer calls than in 2023.

#### 3.1.1 Silent and abandoned call volumes

The software update mentioned in section 3.1 caused silent call volumes to revert back to levels seen previously, normalising from September 2023 onwards. However, another rise in silent call volumes occurred after February 2024 accompanied by a simultaneous decrease in abandoned calls. This is the result of a change in the technology used at the ECAS centres. Due to an increase in the speed at which calls can be answered by ECAS operators, calls which would have previously been recorded as abandoned calls are now recorded as silent. This trend can be seen in Figure 3.2 below.

Figure 3.2: Actual silent and abandoned call volumes by month 2024 [Source: BT, Analysys Mason, 20241

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<sup>&</sup>lt;sup>4</sup> Numbers may differ slightly from last year's report due to rounding in source data.



This trend is anticipated to continue, with abandoned calls expected to decline by 102 877 calls on an annualised basis to end August 2025, partially countered by an increase of 63 143 silent calls.

#### 3.2 Call volume forecast

BT's call volume forecast has allowed for an increase in normal calls for future year forecasts owing to population and economic growth, whilst noisy and abandoned calls are expected to decline. A slight decrease in silent calls is anticipated due to the new platform causing calls previously being registered as abandoned to migrate to the silent category.

Figure 3.3: Forecasted call volumes 2025 vs 2024 for year ending August [Source: BT, Analysys Mason, 2024]

	Sep 2023-24		Forecast 2025		
Classification	Daily volume	Yearly volume	Daily volume	Yearly volume	Change
Normal calls	3128	1 144 820	3250	1 186 250	3.9%
Noisy	63	23 171	35	12 775	-44.7%
Abandoned	481	175 877	200	73 000	-58.4%
Silent	2051	750 807	2230	813 950	8.7%
Other	362	132 351	320	116 800	-11.5%
Total	6085	2 220 941	6035	2 202 775	-0.8%

The annual call volumes for the contract to date and the forecast for the remaining contract period are shown in Figure 3.4 below. Note that the period ending March 2020 (Year 1) was a 13-month period, while the period ending November 2027 (Year 9) is an 8-month period, which contributes to volumes that are respectively higher and lower than average<sup>5</sup>.

Figure 3.4: Call volume forecast per financial year [Source: BT, Analysys Mason, 2024]



While the previous CHF review forecast that total call volumes for the 12-month period ending March 2024 (Y5) would be c.2 524 171, the actual outcome was 2 384 706, or 6.4% fewer calls than forecast. This decrease in calls to date is primarily due to the decline in silent mobile calls explained in section 3.1.

Looking ahead, while the total call volume for the 12-month period ending March 2025 (Y6) remains to be seen, the sharp decline of silent calls in 2023 suggests that the total may be 2 190 000, or ~8.2% lower than the 2 380 000 forecast in the previous CHF review. Total call volumes in Year 7 (the

Based on a review by the Department of Environment, Climate and Communications we understand that the operational period of the current ECAS contract will conclude end November 2027 if an extension is granted



final year of the original contract period) are expected to increase by 0.5% year-on-year should the contract extension be given, owing to a rise in normal calls. For the proposed additional years of 8 and 9, call volumes are expected to continue on this trend of modestly increasing volumes due to the rise in normal calls. The apparent decline in year 9 is due to the shorter financial year.

This forecast appears reasonable based on the data available, recent trends and the requirement to ensure that the CHF is set to ensure recovery of costs without large adjustments to the CHF in the final years of the contract period.

### 3.3 Change in call volumes

The net change in total call volumes across the contract period is shown in Figure 3.5 below.

Figure 3.5: Call volumes [Source: BT, Analysys Mason, 2024]

[×]

As of October 2024, the total projected call volumes for the 84-month ECAS contract period are estimated at 16.01 million, a decrease of 3.2% compared to the previous CHF review. This decrease in call volumes has a significant impact on the CHF. The total projected call volume represents a net increase of 29.9% compared to the Bid Total.

We have reviewed the call volumes included in the contract extension for the additional 21 months beyond the original 84-month ECAS contract period. We have determined that these are reasonable and in line with forecasts seen for the original contract period.



## Calculation of the CHF

The ECAS model requires the calculation of the CHF to take account of actual and forecast costs and volumes, such that the ECAS operator achieves the guaranteed return over the contract period.

To support the calculation of the CHF, Analysys Mason reviewed a draft CHF model provided by BT and participated in workshops with ComReg and BT to determine reasonable costs and volumes. Subsequently, BT provided an updated cost model<sup>6</sup> and supporting information, taking account of the feedback provided.

Based on the reasonable cost review and updated CHF model, the new CHF is calculated at EUR3.93 for the period commencing 12 February 2025 to 11th February 2026.

Explanation and quantification of the main contributors to the change in CHF

In summary, the primary contributors to the change in CHF as discussed in Section 2 of this report are:

- an increase in depreciation costs to cover for new technology introductions to ECAS, which are to be recovered over the remaining, extended contract period
- a significant decrease in actual and forecast call volumes arising due to the accelerated fix of a mobile phone software issue which had been triggering excess silent calls
- an increase in operating costs as outlined in section 2.1

The amount by which each of these contributors affected the CHF is set out in Figure 4.1 below.

<sup>6</sup> Filename: "ECAS II QMA (OBM format) to Q1 24-25 (to 30-06-2024) 105 mths V3" (provided via email 3rd October 2023)



Figure 4.1: Contribution of changes to the new CHF for 2025/26 [Source: Analysys Mason, 2024]

Item	EUR	Inputs
CHF 2023/24 (EUR)	3.12	
1. Increase in depreciation (EUR)		[×]
Corresponding volumes (12 Feb 2025 to proposed extended contract end 30 November 2027)		6 014 850
Impact on CHF (EUR)	[×]	
2. Increase in operating costs (EUR)		[※]
Corresponding volumes (12 Feb 2025 to original contract end)		2 303 183
Impact on CHF (EUR)	[※]	
3. Impact due to lower than expected call volumes	[※]	
CHF 2024/25 (EUR)	3.93	



Ref: 796848285-431

# Summary

Overall compared to the previous CHF review, total costs over the contract period are slightly higher and there are less calls. The main impact on the CHF is due to this decrease in call volumes expected over FY25, FY26 and FY27. Based on the reasonable cost review and updated CHF model, the CHF is calculated at EUR3.93 for the period commencing 12 February 2025 to 11 February 2026, an increase from the current CHF of EUR3.12.

