



Report for ComReg

# Review of maximum permitted emergency call handling fee for 2022/2023

28 October 2022

Ref: 887968698-4453

# Contents

<b>1</b>	<b>Introduction</b>	<b>1</b>
<b>2</b>	<b>Cost review</b>	<b>2</b>
2.1	Operating costs	2
2.2	Depreciation	4
2.3	Financial costs	4
<b>3</b>	<b>Call volumes</b>	<b>5</b>
3.1	Impact on volumes of ‘noisy’ and abandoned calls	5
3.2	Call volume forecast	6
3.3	Change in call volumes	7
<b>4</b>	<b>Calculation of the CHF</b>	<b>8</b>
<b>5</b>	<b>Summary</b>	<b>10</b>

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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](mailto:dublin@analysysmason.com)  
[www.analysysmason.com](http://www.analysysmason.com)  
Registered in Ireland IR304061

# 1 Introduction

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 EUR2.83 per call, as determined by the Commission for Communications Regulation (ComReg) in December 2021, 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 describes our calculation of the CHF.

Items in this report marked with [§<] have been redacted due to confidentiality requirements.

## 2 Cost review

The cost review provides an assessment of whether or not the costs borne by BT in operating the ECAS since 1 April 2021 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 (2021)’ represents the total costs projected by BT during the 2021 CHF review.
- ‘Contract Total (2022)’ represents the total costs projected by BT during the current CHF review.

Figure 2.1: Total costs [Source: BT, Analysys Mason, 2022]

[REDACTED]

The total projected costs for the full ECAS contract period are estimated at [REDACTED] million, an increase of [REDACTED] compared to the restated 2021 costs, the period under review. The total projected cost represents a net cost increase of [REDACTED].

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, 2022]

[REDACTED]

As of October 2022, the total projected operating costs for the full ECAS contract period are estimated at [REDACTED] million, an increase of [REDACTED] compared to 2021, the period under review. The total projected cost represents a net cost increase of [REDACTED] compared to the Bid Total.

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

#### *BT staff costs*

Since the previous review, total BT staff costs have increased by approximately [REDACTED] over the contract period. This is primarily due to the allowance by ComReg of certain helpdesk costs and the cost for the

ECAS System Architect, both of which had previously been deferred pending provision of further supporting information from BT demonstrating that these items were part of its original bid.

#### *Call-centre staff costs*

Since the previous review, total costs for call-centre staff have decreased by approximately [X]. This is primarily due to a saving in actual costs for years 3 and 4 of the project arising due to a deferral of first-line manager (FLM) staff costs and reforecasting in light of actual costs to date.

#### *Network services*

Since the previous review, network service costs have increased by approximately [X] over the contract period. This is driven primarily by the allowance of part of the ECAS operator's network costs for the previous ECAS<sup>1</sup> while the current ECAS was being brought into operation (also known as dual running costs). These costs had previously been deferred pending provision of further supporting information from BT.

Following clarification between ComReg and the ECAS operator and in line with the provisional agreement with the DECC, approximately [X] of dual running costs are allowable for recovery from the CHF, while approximately [X] have been removed from the cost model and will be borne by the ECAS operator, as they are considered to be unreasonable.

#### *Premises*

Since the previous review, premises costs have increased by approximately [X] over the contract period. This is driven primarily by an updated forecast for cleaning costs (where Covid-19 standard cleaning is now expected to continue for the remainder of the contract period) and electricity costs (which, although increased in the short term, are anticipated to revert to normal levels after a period of six quarters).

#### *Other*

Since the previous review, costs categorised as 'other costs' have decreased by approximately [X] over the contract period. This is driven by reforecasting to reflect lower actual costs.

Maintenance costs have marginally decreased over the contract period, although not enough to materially affect the CHF.

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<sup>1</sup> The previous ECAS was also operated by BT.

## 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, 2022]

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[X]

As of October 2022, the total projected depreciation costs for the full ECAS contract period are estimated at [X], with no increase compared to 2021, the period under review. The total projected cost represents a net cost increase of [X] compared to the Bid Total.

The key cost components have not changed for the period under review.

### *Set-up costs*

Since the previous review, set-up costs have not changed.

### *Other*

Refresh costs are costs put in place to allow for replacement of certain network items during the lifetime of the ECAS contract. There has been no change in these costs since the previous review.

## 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, 2022]

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[X]

As of October 2022, the total projected financial costs for the full ECAS contract period are estimated at [X], an increase of [X] compared to 2021, the period under review. The total projected cost represents a net cost increase of [X] compared to the Bid Total.

Both the sinking fund cost and the guaranteed rate of 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 rate of return.

### 3 Call volumes

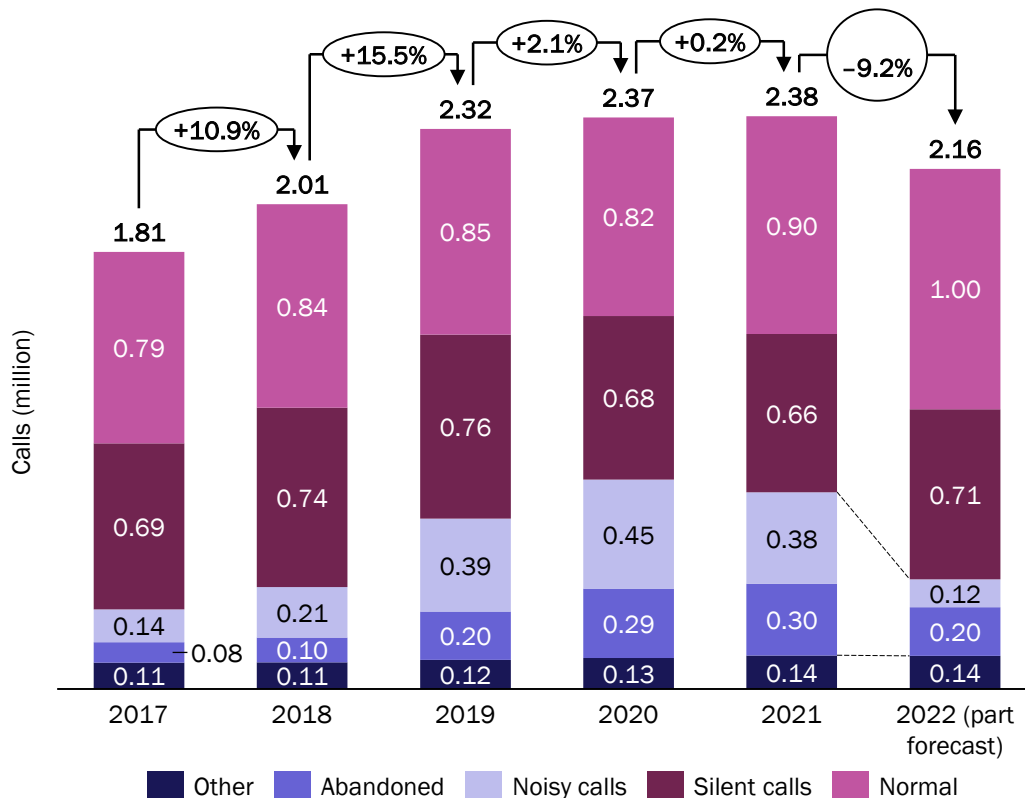
#### 3.1 Impact on volumes of ‘noisy’ and abandoned calls

In updating the call volume forecast, BT and ComReg have been mindful of the contribution of ‘noisy’ calls (also known as ‘ghost calls’) and abandoned calls to total ECAS call volumes. Noisy calls are those which occur as a result of network faults on fixed networks simulating an emergency call, while abandoned calls are those calls of extremely short duration which are terminated before the call can be answered by an operator.

In recent years, the sum of the contribution of noisy and abandoned calls to total ECAS volumes has risen steadily, from 222 000 in 2017 to 741 000 in 2020, as shown in Figure 3.1 below. At the time of the previous CHF review in 2021, the volume of noisy and abandoned calls was expected to persist in the short term. However, a trend of declining noisy and abandoned calls starting in the final months of 2021 persisted throughout 2022, with the result that the sum contribution of these calls for 2022 is expected to be approximately 318 000 fewer calls.

The cause of this decline cannot be easily identified, but we note that it coincides with the time period in which large-scale fibre networks were deployed by operators and at least one large operator likely renewed its focus on network maintenance for strategic reasons, both of which may have contributed to fewer network faults.

Figure 3.1: Contribution to total annual (calendar year) call volumes by type [Source: BT, Analysys Mason, 2022]





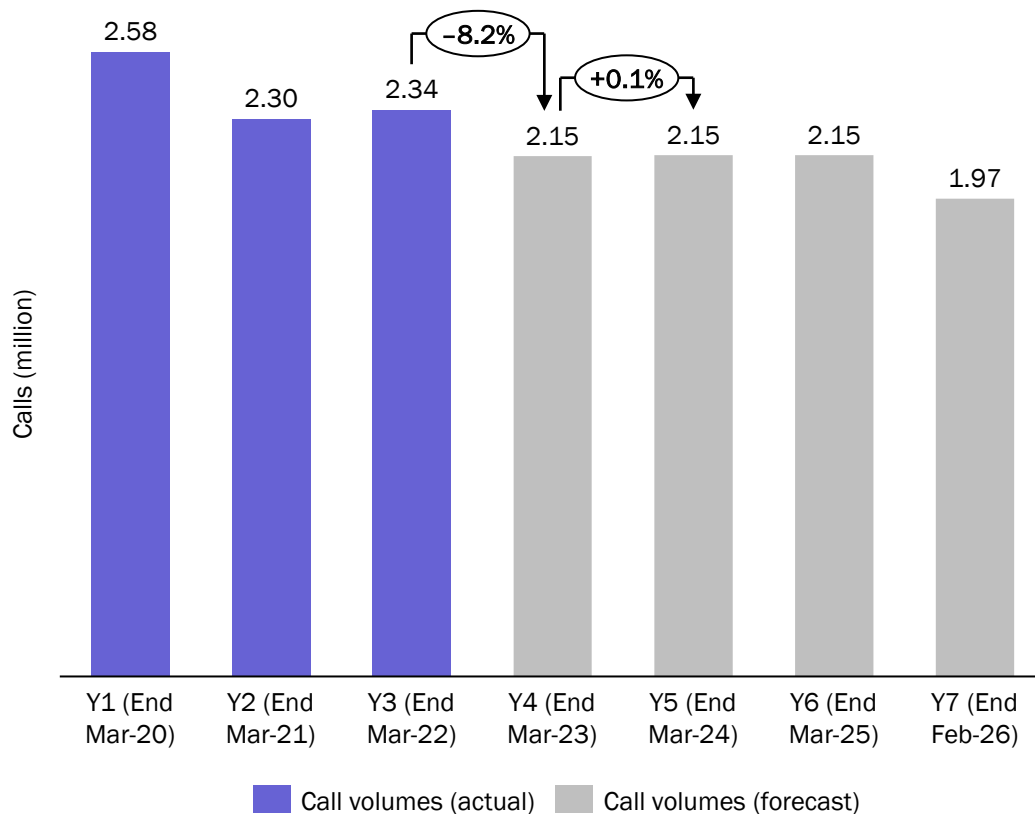
While the decline in noisy and abandoned calls was expected in the previous CHF review, it has materialised more quickly than anticipated. Assuming the decline is largely driven by network upgrades, it is likely to be persistent and this has informed the call volume forecast for the remaining period.

Another reason to expect that the number of noisy calls in particular will remain low is the declining usage of voice services on fixed-line networks (which are the source of noisy calls). In the five years to 2020, the total number of outgoing minutes on fixed voice networks declined at a compound annual growth rate (CAGR) of approximately  $-9.6\%$ . Analysys Mason forecasts this trend to continue declining in the period to 2026, at a CAGR of around  $-11.4\%$ .

### 3.2 Call volume forecast

The call volume for the contract to date and the forecast for the remaining contract period is shown in Figure 3.2 below. Note that the period ending March 2020 (Year 1) was a 13-month period, while the period ending February 2026 (Year 7) is an 11-month period, which contributes to volumes that are respectively higher and lower than average.

Figure 3.2: Call volume forecast per financial year [Source: BT, Analysys Mason, 2022]



While the previous CHF review forecast that total call volumes for the 12-month period ending March 2022 (Y3) would be  $\sim 2\,463\,000$ , the actual outcome was  $2\,339\,000$ , or  $5\%$  fewer calls than forecast.

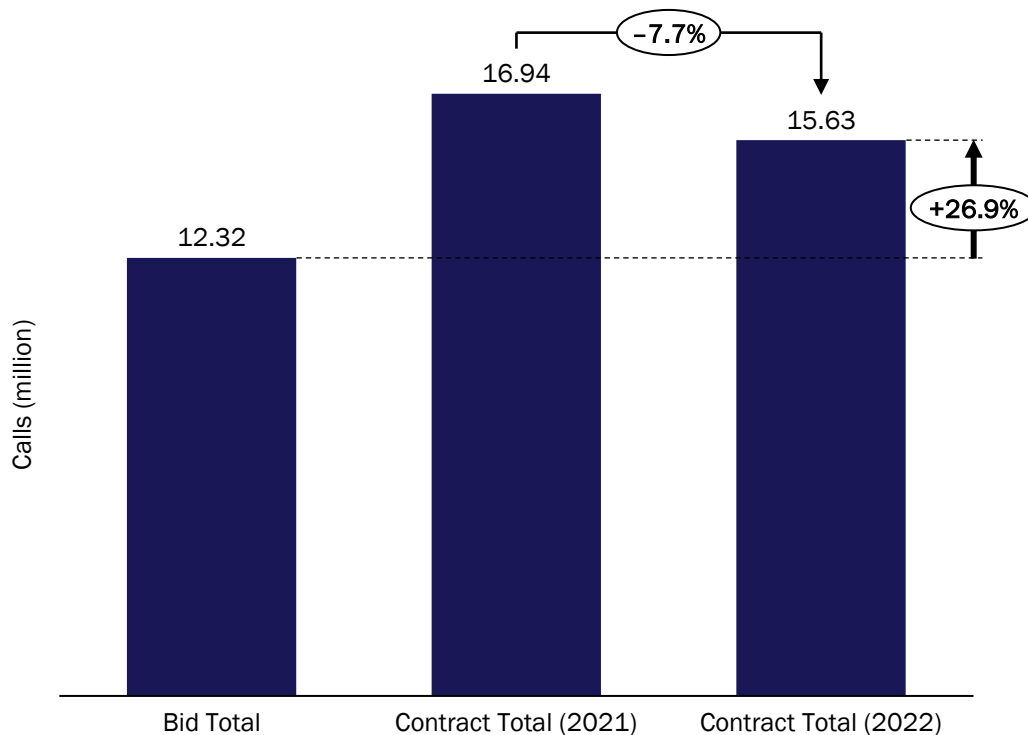
Looking ahead, while the total call volume for the 12-month period ending March 2023 (Y4) remains to be seen, the continuing trend of declining noisy and abandoned calls observed in 2022 suggests that the total may be 2 147 000, or ~12% lower than the 2 450 000 forecast in the previous CHF review. Following consultation with ComReg, BT has forecast call volumes to then remain flat over the remainder of the contract period, with a decline in the final year due to the shorter financial year.

This approach 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 3.3 below.

Figure 3.3: Call volumes [Source: BT, Analysys Mason, 2022]



As of October 2022, the total projected call volumes for the full ECAS contract period are estimated at 15.63 million, a reduction of -7.7% 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 26.9% compared to the Bid Total.

## 4 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 rate of 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 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 EUR3.78 for the period commencing 12 February 2023.

### *Explanation and quantification of the main changes in the CHF*

In summary, the primary contributors to the change in CHF as discussed in Section 0 of this report are:

- partial allowance by ComReg for network costs associated with the previous ECAS while the current ECAS was being brought into operation (also known as dual running costs)
- allowance by ComReg for previously deferred costs associated with BT's Remedy helpdesk
- allowance by ComReg for previously deferred costs associated with the ECAS Systems Architect
- a significant decrease in actual and forecast call volumes.

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

*Figure 4.1: Contribution of changes to the new CHF [Source: Analysys Mason, 2022]*

Item	EUR	Inputs
CHF 2022/23 (EUR)	[X]	
<i>1. Dual running: cost partially allowed</i>		[X]
Corresponding volumes (12 Feb 2023 to contract end)		6 558 780
Impact on CHF	[X]	
<i>2. Remedy helpdesk: cost allowed</i>		[X]
Corresponding volumes (12 Feb 2023 to contract end)		6 558 780
Impact on CHF (EUR)	[X]	
<i>3. ECAS System Architect: cost allowed</i>		[X]
Corresponding volumes (12 Feb 2023 to contract end)		6 558 780
Impact on CHF	[X]	

Item	EUR	Inputs
4. <i>Remaining fixed operating costs</i>		[X]
Impact on CHF	[X]	
5. <i>Impact due to call volume decline</i>	[X]	
CHF 2022/23 (EUR)	[X]	

## 5 Summary

Overall compared to the previous CHF review, total costs over the contract period are slightly higher and there are significantly fewer calls. The main impact on the CHF is due to this reduction in call volumes expected over FY23 and FY24. Based on the reasonable cost review and updated CHF model, the CHF is calculated at EUR3.78 for the period commencing 12 February 2023, an increase from the current CHF of EUR2.98.

The migration from copper to fibre is unlikely to have a significant impact on the ECAS, but should continue to be monitored.