Emergency Call Answering Services

Call Handling Fee review 2015-2016

Consultation and Draft Determination

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Additional Information

All responses to this consultation should be clearly marked :- "Submissions to ComReg 14/109", and sent by post, facsimile or email, or submitted on-line at www.comreg.ie (current consultations), to arrive on or before 21 November 2014, to:

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1 Introduction

1 Requesting assistance from the emergency services is one of the most important telephone calls that a citizen will make and expert treatment of such calls is fundamental to a functioning and stable society. In Ireland, calling the emergency services is done by dialling 999 or 112, and these calls are initially received by the Emergency Call Answering Service ("ECAS").

2 There are three ECAS centres or Public Safety Answering Points ("PSAP") in Ireland; one each in Navan, County Meath, Ballyshannon, County Donegal, and Eastpoint, Dublin 3. Authorised Undertakings forward all emergency calls to the ECAS and these are routed, as appropriate, to one of these three PSAPs. The PSAPs forward received calls, where appropriate, to the required emergency service. Two data centres underpin necessary system resilience for the PSAPs.

3 In accordance with relevant Irish legislation, emergency calls are currently free of charge to the caller[1] on all networks.

4 In 2009, the Minister for Communications, Energy and Natural Resources ("the Minister") awarded a contract to BT Communications Ireland Ltd ("BT") to design, build, and implement the ECAS. This contract, known as the Concession Agreement ("CA"), is between these two parties alone. The ECAS is funded entirely through the Call Handling Fee ("CHF"). This is a fee payable by the presenting telephone network operator and/or the telephone call service provider whenever a caller calls the ECAS.

5 By law[2], ComReg is required to annually review the maximum CHF that may be charged by the ECAS provider.

6 In February 2014, having concluded its annual review, ComReg set the maximum permitted CHF at €3.08 for the year 12 February 2014 to 11 February 2015. To determine this figure, ComReg analysed the reasonable costs incurred by the ECAS provider and was further informed by third party consultants with relevant expertise in this area, and by the views of respondents provided in detailed responses to ComReg's consultation document on the matter.[3]

[1] Regulation 5 of the European Communities (Electronic Networks and Services) (Universal Service and Users' Rights) Regulations 2011
[2] Section 58(D)(i) of the Communications Regulation Act, 2002, as amended ("the Act of 2002")
[3] ComReg Document No. 13/96

7 Having carried out a consultation each year since 2011, ComReg is once again seeking to specify the maximum chargeable CHF, in this case for the year February 2015 to February 2016 and seeks the views of Authorised Undertakings on relevant matters through this consultation.

8 At a high level the CHF charged for calls to the ECAS pays for the sunk capital investment and ECAS annual running costs. These costs are relatively stable year on year and hence the CHF is very strongly influenced by call volumes. Consumers do not pay for 112/999 calls and operators' overall costs are essentially a product of the volume of calls by the price (CHF). Therefore assuming a common cause for reducing call volumes (22% this year), operator costs ought to remain relatively stable as volumes reduce.

9 Call volumes per operator are as follows:

Figure 1: Operator share of call volumes

✂

Source BT

10 The cost base (excluding prior period under-recoveries) of the ECAS has remained relatively stable for the last four years (c. €✂m per annum[4]).

11 The DCENR has granted a one year extension to the CA. With a relatively stable cost base and if the forecast call volume decline of 3% had remained unchanged a CHF of c. €2.72 would have applied to the end of the CA.

12 However, the number of calls being made to it has declined appreciably. A key issue for ComReg and its consultants in preparing this consultation has been to determine the reason for this fall in call volumes and to provide an empirical forecast for call volumes in the coming year. ComReg looks forward to input from stakeholders on the analysis carried out thus far and would welcome views on the causes and likely future trends in call volumes.

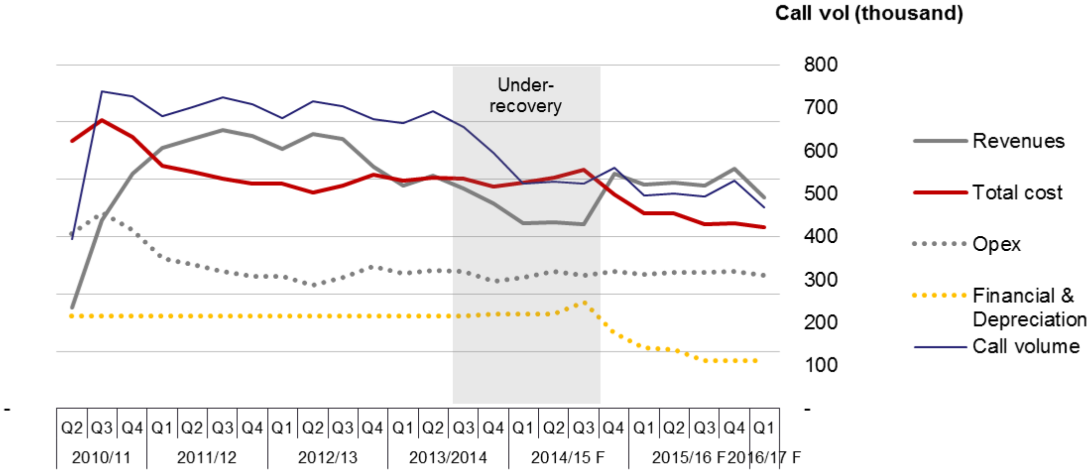
13 As a result of the 2014/2015 CHF review and consultation, ComReg specified the CHF based on a predicted fall in call volumes of 3.0%. This would have resulted in approximately 80,000 less calls being handled by the ECAS[5].

[4] Before adjustment to depreciation due to possible extensions to the CA
[5] C. 2.7m calls were handled in 2013

14 The actual rate of decline has transpired to be closer to 19% for the nine months since January 2014 and at c. 22% from March to September 2014. This has resulted in c. 325,000 less calls beyond those forecast being handled for the first nine months of 2014 and if this trend continues c. ✂less calls for the year to December 2014. The resultant under-recovery by the ECAS provider is in the region of €✂m. In accordance with the terms of the CA, this under-recovery must be made good.

15 The relationship between costs and volumes since 2010 can be represented as follows:

Figure 2: Movement in costs and volumes since 2010



Source: TERA Consultants

16 Because of the structure of the ECAS solution, as required under the terms of the CA, it is not possible to reduce the cost base of the ECAS in direct proportion to the decrease in call volumes. Many of the costs associated with the operation of the ECAS can be considered to be fixed. At a high level these are:

- The requirement to have a minimum number of CSR present across the ECAS to handle varying volumes of calls as they are presented during the course of any day;
- Various BT support staff. These include those dedicated to the ECAS and those who are required to provide support on a regular basis;

- Costs associated with running the ECAS. These include fixed support contracts with suppliers (I.T. and backhaul), rental agreements for premises and the general day-to-day costs of running a service;
- Depreciation and amortisation of the capital investment;
- The Guaranteed Rate of Return and the Sinking Fund as required under the CA.

17 ComReg proposes that the CHF to be applied from 12 February 2015 to 11 February 2016 should be €4.63 and this would result in an increase of approximately 50%. It should be noted that there is little change in the total cost of the ECAS over the life of the CA, but that the cost itself is being allocated over an ever-decreasing call volume.

18 The increase in the CHF is explained as follows:

2014/2015 CHF	**€3.08**
One year extension to the CA	<€0.36>
Lower than estimated call volumes/Under-recovery (2014/2015)	€✂
Impact of reduced volumes over remaining period of the CA (Feb 2015 to July 2016)	€✂
Capital expenditure	€✂
Pay and non-pay costs	<✂>
2015/2016 proposed CHF	**€4.63**

<u>One year extension to the CA: <€0.36></u>

19 With the extension to the CA by one year, the remaining net book value of the capital investment which was to be depreciated to July 2015 is now depreciated over 17 months to July 2016.

- Total capital investment to be depreciated over 5 years — €11.0m
- Annual depreciation (5-year CA) — €2.2m
- 5-month depreciation (5/12 of above) — <u>€0.9m</u>
- Difference in depreciation — €1.3m
- Number of calls forecast to the end of the CA — 3.6m
- Impact of difference in depreciation — <€0.36>

20 All other things remaining equal (call volume decline is 3% throughout the CA, no under-recovery, no change in capital or operating costs), the CHF would be c. €2.72 (€3.08-€0.36), commencing from February 2015.

Lower than estimated call volumes until Feb 2015/Past under-recovery (2014/2015)

21 The lower than expected call volumes has resulted in an under-recovery of costs in 2014-2015 of c. €✂m (✂calls @ €3.08). This is in addition to the under-recovery of costs from the 2013-2014 CHF of €✂. Therefore the total under recovery to be recovered through the remainder of the CA is c. €✂m. The forecast calls to the end of the CA are estimated at 2.5m. Altogether, the impact of the under-recoveries is calculated as below:

- Under-recovery to February 2014 € m
- Under-recovery between February 2014 and February 2015 €✂m
- Total under-recovery €✂m
- Number of calls forecast to the end of the CA 2.5m
- Impact of lower than estimated call volumes €✂

Impact of reduced volumes over remaining period of the CA (Feb 2015 to July 2016)

22 Annually, the CHF is set for a 12 month period but it is also set at a level that should remain unchanged to the end of the CA, if the underlying assumptions remain unchanged. However, variances from the input assumptions will require consequential adjustments to the CHF in subsequent annual reviews.

23 When the CHF was set for 2014/2015 volumes were expected to decline at 3% per annum to the end of the CA. This was based on a forecast call volume of c. 2.6m calls. Due to the recent significant decline in call volumes, it is forecast that volumes for 2015/2016 will now decline by 15.2% per annum and not 3% to the end of the CA. This is based on the actual (and projected) call volumes for 2014/2015 of c. 2.2m calls for the year, i.e 0.4m less than the forecast.

24 With the granting of a one year extension to the CA the total costs to be recovered by the ECAS provider to the end of the CA are c. €✂m. This is made up as follows:

- 5 months to July 2015 €✂m
- 12 months to July 2016 €✂
- Total €✂m

25 Under the 2014/2015 assumption of a 3% annual decline in calls €✂m would have been recovered over c. ✂m calls resulting in a CHF of c. €2.72. Instead €✂m must now be recovered over c. ✂m calls to the end of the CA and therefore the CHF should be c. €✂. As a result and all other things being equal the ECAS provider will under-recover costs of c. €✂m due to a difference of c. 1.1m calls in a 17 month period. This is a similar situation to the under-recovery of €✂m that arose during 2014/2015. This potential under-recovery is greater than the value of the Sinking Fund.

26 In order to ensure the ECAS provider recovers its costs this potential under-recovery of c. €✂m must be allocated over the new forecast call base of c. 2.5m calls to the end of the CA. This requires the CHF to be increased by c. €✂per call.

27 The impact of the decline in call volumes is further increased as any potential under-recovery must now be recovered over a shorter period due to there being only 17 months left to the end of the CA.

Capital expenditure: €✂

28 There is additional capital expenditure of c. €✂ primarily for the upgrade of software. This divided by the number of calls forecast to the end of the CA (2.5m) results in an increase of c. €✂ per call

• Software upgrade	€ k
• Number of calls forecast to the end of the CA	2.5m
• Impact of lower than estimated call volumes	€✂

Pay and non-pay costs: €✂

29 The actual expenditure on certain pay and non-pay costs is slightly less than that previously budgeted. This trend is expected to continue to the end of the CA.

• Previously forecast costs	€✂ m
• Actual costs	€✂ m
• Difference	€✂ m
• Number of calls forecast to the end of the CA	2.5m
• Impact of lower pay and non-pay costs	<€✂m>

30 This CHF of €4.63 reflects the fact that:

- Due to the significant decline in call volumes there has been a significant under-recovery by the ECAS provider of its costs during 2014/2015;
- ComReg considers that call volumes will continue to be uncertain but that the most appropriate estimated decline is at a rate of 15.2%;
- The same level of annual operational costs of c €✂m must be recovered but the ECAS provider has not recovered its reasonable costs in 2014/2015;
- The accumulated prior period under recovery of c. €✂m must now be recovered through future CHFs;
- The level of under-recovery must not exceed the balance in the Sinking Fund at the end of the CA.
- Some additional CAPEX is required to support the extension of the CA.

31 If the current rate of call volume decline had been predicted in the prior CHF review this would have likely resulted in a greater increase in the CHF in 2014/2015 and a lower increase in 2015/2016.

32 Although the CHF to be levied per call is projected to increase, individual operator liability should remain broadly similar liabilities over the period of the CA. . Furthermore, if a call volume decline of 15.2% had been applied during the 2014/2015 CHF review, this would have resulted in a higher CHF than the current €3.08.

33 ComReg is required to make its determination by 12 December 2014. If, by 12 December 2014, it appears that the rate of call volume decline will exceed 15.2% ComReg may adjust the CHF accordingly. This is to reduce the risk of there being insufficient funds in the Sinking Fund to meet an under-recovery at the end of the CA.

34 ComReg encourages stakeholders to respond to this consultation and thus to contribute to the continuing effective functioning of this key service. Should a respondent's submission contain confidential information, an additional document labelled "non-confidential" should be provided. Only this "non-confidential" version will be published by ComReg.

35 ComReg has commissioned an expert report from TERA Consultants to inform its review of the CHF. A non-confidential version of this report is appended to this consultation.

36 This Consultation is structured as follows:

Section 2: Background provides a brief history of the ECAS and its establishment, the responsibilities of the ECAS provider and the role of ComReg; as well as a high-level explanation of how the CHF is determined.

Section 3: Reasonable Costs outlines the practical meaning of the term "reasonable cost" and its use in this review. Such "reasonable costs" are the only ones allowable in determining the CHF.

Section 4: Volumes is a fundamental factor affecting the value of the CHF, that is, call volumes to the ECAS. The section outlines the trend in emergency call volumes in Ireland during recent years and also contains a forward-looking assessment for the coming year.

Section 5: Draft Determination contains ComReg's Draft Determination in relation to the CHF

Section 6: Regulatory Impact Assessment

Section 7: Submitting Questions

Section 8: Statutory Basis

Section 9: Questions

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2 Background

Function and responsibility of ECAS

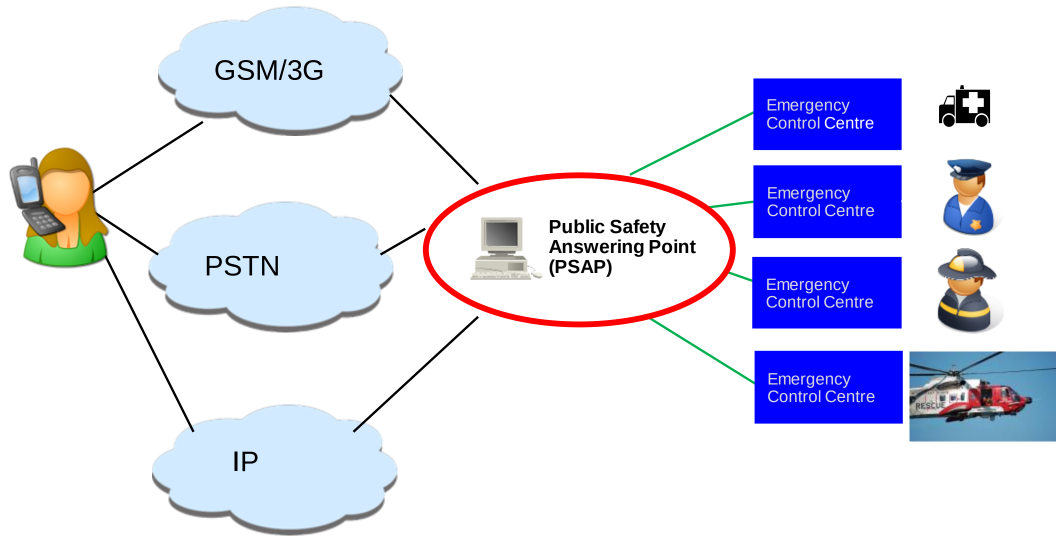
37 As noted earlier, the ECAS has three PSAPs and two data centres and has been designed and built to meet certain specifications in the CA[6]. These specifications are intended to provide end-users with a reliable, resilient and effective network for the purpose of contacting the emergency services. This configuration has not changed since the ECAS provider commenced operations. The Short Messaging Service ("SMS") service, which facilitates citizens with a disability, is now fully operational within the ECAS operation and the operating costs for this SMS service are reflected in the In-Life costs and the CSR hours. Volumes associated with contacting the ECAS via SMS remain relatively low and these are included in the total reported call volumes for the ECAS.

38 When an end-user dials 999 or 112 from their telephone (using a fixed, mobile or VoIP service) ECAS takes the call, undertakes a triage to establish the precise nature of the emergency[7] and forwards the call to the relevant emergency service based on the nature and location of the incident. The call-flow from the end-user to the emergency services, incorporating the ECAS function can be represented as follows:

[6] Annex 1 contains a list of the main specifications contained in the CA

[7] Not all calls to the ECAS are genuine calls. However, every call to the ECAS must be answered promptly and effectively to establish the nature of the call.

Figure 3 Call Flow



Note: this call flow diagram is for illustrative purposes only.

39 ECAS must be available 24 hours a day, seven days a week and 52 weeks a year. It must be capable of dealing with operational demands at peak times and also to cater for the loss of capacity of any PSAP in exceptional circumstances.

40 ECAS must perform to an exacting standard. The performance of the ECAS is monitored by ComReg, in accordance with quantitative and qualitative performance metrics set in the CA.[8]

Determining the CHF

41 The following is an approximation of the principal cost categories:

- "In Life" costs – broken down as "Pay" and "Non Pay" Costs;
- Annual depreciation/amortisation charge;
- The guaranteed rate of return and applicable rebate(s) ;
- Transfers to the applicable sinking fund ; and
- Any over or under-recovery of costs in a prior period.

42 "In Life" costs are subject to reasonable cost review as set out in Section 3.

[8] See Annex 1 – ECAS Quality of Service Parameters

43 The under-recovery of costs is mainly due to the actual rate of call volume decline being significantly different to that forecast.

44 The CHF formula is derived by

- Calculating the total costs found to be reasonable and estimated to the end of the CA; and
- Dividing the reasonable cost by the estimated number of calls also to the end of the CA.

45 Call volumes are estimated by actual previous trends, external influences such as remediation programmes, and changes in the use of technology *vis a vis* the use of particular types of handsets, particularly for mobile phones.

3 Reasonable Costs

Overview

46 Under the CA a "reasonable cost" is defined as *"… all necessary costs incurred by the Contractor in the normal course of business, such as capital outlay, depreciation, heating and lighting, labour, the annual Monitoring Costs and the Final Monitoring Costs of ComReg, adjustment for any over or under-recovery of the Guaranteed Return for any previous Call Handling Fee Periods and costs that may be incurred as a result of having to comply with any law"*

47 This section discusses the various actual costs incurred by the ECAS provider in running the ECAS operation during 2013-2014 and which impact upon the CHF review of 2015-2016. Within each category, ComReg provides an overview of how the cost is derived and whether or not ComReg considers it to be reasonable. Due to the commercial sensitivity and confidential nature of much of the data, many of the specific details analysed by ComReg and its specialist consultants cannot be published in this consultation.

48 While there has been some variation in the level of costs incurred (both upwards and downwards) there has not been any major change in the nature or classification of the costs incurred since the last review or with previous reviews.

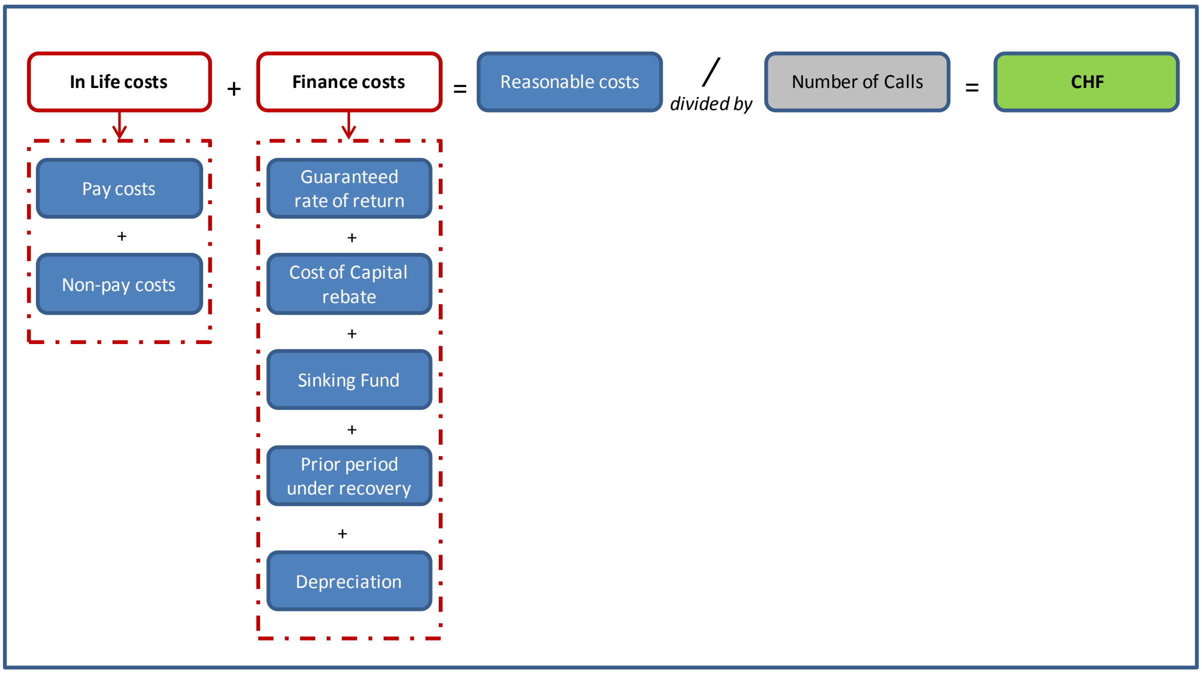
49 ComReg's preliminary view is that the costs incurred by the ECAS provider are reasonable and therefore no costs are being disallowed as being "unreasonable" as part of this review. This preliminary finding is supported by the following:

- An extensive review of "In Life" costs has been carried out annually as part of the CHF reviews. Earlier reviews found certain costs to be unreasonable at those times. As a result, the ECAS provider has either implemented tighter procedures, applied new principles, or provided further justification to ComReg for how it accounts for certain costs. Because of these remediations, the likelihood that these costs would be found to be unreasonable again as part of the 2015-2016 is greatly reduced.

- The ECAS operation consists of a high level of fixed costs and therefore costs incurred are unlikely to vary significantly from year to year.

50 The figures below provide an overview of the various cost categories which are recovered as part of the CHF. Each of these is discussed in greater detail below.

Figure 4 – cost categories relating to the CHF



51 In-life costs are the day-to-day costs of running the ECAS operation and represent ComReg's assessment of the "steady state" of reasonable costs to the end of the CA for inclusion in the CHF. Finance costs are the costs associated with financing the project over the term of the CA.

52 As part of the annual CHF review ComReg assesses, in detail, the underlying costs of the ECAS. These costs are considered to be relatively stable from year to year. Some slight variation in annual costs will take place depending on circumstances.

53 The relative percentage allocations of reasonable costs for the purposes of the 2014 – 2015 CHF review are as follows:

Figure 5 (a) – Percentages of reasonable costs for 2015 – 2016 CHF review

✂

Figure 5 (b) – Percentages of reasonable costs for 2014 – 2015 CHF review

✂

Figure 6 Total reasonable costs split (cost stack)

✂

Cost category	2015/2016	2014/2015
	€	€
Pay costs[9]	✂	✂
Non-pay costs[10]	✂	✂
Depreciation/amortisation[11]	2,200,000	2,200,000
Guaranteed return[12]	750,000	750,000
Cost of capital rebate[13]	✂[14]	✂
Sinking Fund[15]	250,000	250,000
Prior Period[16]	✂	✂
Total Costs	✂	✂

Q. 1 Figure 6 represents the basis of the cost stack for the determination of the CHF for 2014-2015. Please provide any comments on whether the cost categories should remain the same for the determination of the CHF for 2015-2016, including detailed reasoning for your answer.

Analysis of Cost Categories

Pay Costs

54 Pay costs comprise CSR costs and the ECAS provider's payroll costs associated with the provision of the ECAS. Both of these are discussed in more detail below. However, the estimated annualised pay costs are approximately €✂m and their relative percentages are represented as follows:

Figure 7 (a) – Pay cost split for 2015 – 2016 CHF review

✂

Figure 7 (b) – Pay cost split for 2014 – 2015 CHF review

✂

[9] See Section 54
[10] See Section 126
[11] See Section 135
[12] See Section 145
[13] See Section 151
[14] ✂
[15] See Section 154
[16] See Section 163

55 ComReg considers that, while there may be slight fluctuations due to operational requirements, pay costs have reached a relatively steady state.

CSR costs

56 CSR costs relate to the staffing of the three PSAPs. There are approximately ✂ CSRs comprising part-time and full-time staff. This cost forms a substantial part of the in-life costs of the ECAS operation.

57 The ECAS provider uses an industry standard “Erlang” resourcing model to determine the number of CSRs it requires across each of its PSAPs. In doing so, it estimates the number of calls for a six week period and to this it applies a number of operational parameters, as set out in the CA. By applying each of the performance metrics to the estimated call volumes, a minimum number of CSR hours are forecasted. The ECAS provider also has a health and safety policy of having a minimum of two CSRs present on each site at any one time. This facilitates appropriate breaks, ensures that the work environment is safe, (particularly late at night) and allows CSRs time to recover if they have taken especially stressful calls. In ComReg’s preliminary view this appears to be a reasonable approach to resource management.

58 Once the ECAS provider has determined the number of CSR hours it requires, the individual CSRs are rostered by a specialist call-centre company. All CSRs are employed directly by the specialist call-centre company. None are employed directly by the ECAS provider.

59 As the call arrival pattern at any given point during the day or week, can vary, the number of CSRs rostered can also vary. Foreseen and unforeseen factors that influence this include:

- Time of day (certain call patterns are more prevalent depending on the time of the day);
- Time of week (there can be a higher rate of calls at certain times of the week e.g. weekend nights);
- Public holidays (St. Patrick’s Day, Halloween, New Year’s Eve); and
- Other incidents which are outside the control of the ECAS provider, but still require an effective response, are traffic related accidents and weather related incidents.

60 During site visits conducted as part of the 2015-2016 CHF review ComReg observed the ECAS provider’s response to incidents causing a “service alert”. Due to the nature of such incidents, a higher than predicted number of calls is routed through to the ECAS. This necessitates all CSRs to be available to handle the increased call volumes. First Line Managers (“FLMs”) may also begin to directly handle calls. In certain circumstances consideration may be given to bringing in additional CSRs who are held on a standby roster. Increased activity required to address such incidents, observed by ComReg, was addressed without additional resources being summoned and in most cases was short in duration.

61 No refinements or recommendations on how CSRs are rostered are being made as part of the 2015-2016 CHF review. Recommendations made by ComReg during previous reviews have been implemented by the ECAS.

62 The specialist call-centre company charges the ECAS provider an hourly rate for each of the CSRs it rosters. Included in the hourly rate are the following main cost components:

- Basic pay, including bonus and employers PRSI;
- An allowance for “unavailable hours”;
- Overheads associated with providing the ECAS service; and
- General overheads.

63 ComReg’s preliminary view of the hourly rate is represented by the following Figure 8. Much of the information used to determine the hourly rate is commercially sensitive. However, basic pay, including bonus and employers PRSI constitutes approximately ✂% of the hourly rate. A further ✂% of the hourly rate relates to the hours when CSRs are unavailable. This includes the cost of holidays, sick leave, and ongoing training. Therefore approximately ✂% of the hourly rate payable to the specialist call-centre company relates directly and indirectly to the salary of CSRs.

64 Approximately ✂% of the hourly rate payable to the specialist call-centre company relates to its own internal costs of providing CSRs. This includes recurring recruitment and training programmes as well as the provision of Call-centre coordinators at each of the three PSAPs. Also included is an element of general overhead as well as the specialist call-centre company own rate of return.

Figure 8– specialist call-centre company hourly rate cost categories

Cost component	Hourly rate

Basic salary – c. €✂	€✂
Bonus – c. ✂	€✂
Employers PRSI – 10.75%	€✂
	€✂
Unavailable hours	
(Training, absences, holidays, churn)	✂
Specific overheads *(rosters , call-centre coordinators)*	✂
Cost before general overhead	✂
General overhead[17]	✂
Sub total	✂
Rate of return	✂
ComReg's preliminary view of a reasonable hourly rate	**€29.34**

65 In the 2012-2013 CHF review ComReg determined that an hourly rate of €28.07 should be applied from June 2011 to the maximum permitted CHF for the period 2012-2013. This was reassessed as part of the 2013-2014 and 2014-2015 CHF reviews and in both cases ComReg considered that an hourly rate of €28.07 continued to be reasonable and that no amendment was necessary.

Basic pay, including bonus and employers PRSI

66 CSRs are paid a basic salary, dependent on length of service and additional skills, and are further incentivised by bonus payments which are payable upon achieving and maintaining quality of service. From discussions with the ECAS provider, it is understood that most CSRs achieve their bonus targets. This is objectively supported by the fact that the ECAS operation itself consistently adheres to the overall performance metrics as set out in the CA.

[17] See also paragraph 127

67 During the 2015-2016 CHF review ComReg received a request from the ECAS provider to increase the hourly rate payable to the specialist call-centre company. Information on CSR churn, provided to ComReg, suggests that in recent months several CSRs have taken up alternative employment in other non-BT call-centres where recruitment drives have been taking place. A number of factors have been cited for recent departures, one being the fact that the salary levels of CSRs has not been revised in four years. While a level of CSR churn is inevitable, and associated costs such as training and recruitment are included in the costs of the specialist call-centre company, ComReg considers that CSR churn should be kept within acceptable limits. Where churn is too high, recruitment and training costs escalate and the quality of the service may be endangered as experienced staff cannot be retained.

68 ComReg notes that a recent publication by the Contact Centre Management Associated (“CCMA”) indicates salaries in the range of c. €✂ to c. €✂ depending on length of service and additional skills. It should be noted that while full-time staff work approximately 220 days per annum, the ECAS operation must be staffed 24 hours a day for 365 days per annum and the hourly rate reflects this requirement.

69 Therefore as part of this review, and on foot of the request from BT, ComReg has compared, where appropriate, salaries payable in other call-centre environments with those paid to CSRs in the PSAPs. Many of these other call-centres operate within a commercial environment where there is a significant uplift to basic salaries as a result of commission/bonus related payments. As a result of its analysis, ComReg is of the preliminary view that the hourly rate payable to the specialist call-centre company should increase from €28.07 to €29.34 per hour, representing a 4.5% increase. While the salary related elements of the hourly rate would thus increase, those elements relating to the specialist call-centre company’s specific and general overheads have remained relatively unchanged.

70 ComReg has considered each of the components applied to determine the hourly rate and is of the preliminary view that they are both still relevant and their cost is reasonable.

71 While ComReg accepts that a CSR salary increase is reasonable, if in its next review, ComReg determines that the increase in the hourly rate has not been passed on directly to the CSRs it will consider ways and means to recoup this increase from the ECAS.

An allowance for "unavailable hours"

72 In order to ensure that an adequate number of CSRs are present at all times, an allowance is made for unavailable hours. Unavailable hours arise due to:

- Training;
- Annual leave; and
- Breaks and absences.

73 While no significant changes have been noted in these from the 2014-2015 CHF review each of these unavailable categories is discussed further below.

Training

74 Three types of training are provided to CSRs:

- Approximately three weeks of induction training for new CSRs by the specialist call centre-company. This is primarily due to the unique nature of the role and the need for strict adherence to the required procedures - which is not typical of retail type call-centres;
- More formal training whereby CSRs are allocated training days away from the PSAP (usually done by the specialist call-centre company); and
- Continuous on-the-job training, such as one-to-one coaching, feedback on monitored calls and implementation of new procedures (usually done by the ECAS provider).

75 During the review ComReg observed some of the continuous on-the-job training. It appeared to be focused, clearly defined and rigorous.

76 Previous recommendations by ComReg for the recording of "Not-ready" time have been implemented by the ECAS provider.

Annual leave

77 CSRs are entitled to standard annual leave.

Breaks and absence

78 Breaks can be considered as standard and non-standard. Standard breaks generally relate to meal times. Non-standard breaks tend to relate to the need for CSRs to take time away from phones following a stressful call.

79 A recent CCMA[18] report reported that absences in call-centres are running at approximately 6%. Sick leave within the ECAS operation for the first six months of 2014 was c. 2%.

Churn

80 Churn relates to the staff replacement costs generated when CSRs resign their positions and take up alternative employment. During the review it was noted that the level of churn had increased when compared to previous years. However, ComReg considers that, for the period reviewed, the impact of this increase has been offset by the significant experience of the ECAS provider and in particular the FLMs in managing the operations. This has kept the level of disruption to a minimum.

Specific Overheads associated with providing ECAS service

81 There are certain overheads included in the allowable costs of the ECAS service. Many of these are pay related. The nature of these overheads has not changed since the 2013-2014 CHF review.

82 In each of the PSAPs, a “call-centre coordinator” is employed by the specialist call-centre company to manage the day-to-day rostering and HR related activities of the CSRs; and are distinct from management provided by the ECAS provider. Having reviewed the roles of the call-centre coordinators ComReg is of the preliminary view that it is appropriate to include their cost in the hourly rate payable to the specialist call-centre company.

General overheads of the specialist call-centre company

83 ComReg is of the preliminary view that the general overheads of the specialist call-centre company which are included in the suggested hourly rate remain at the same level as allowed in previous CHF reviews. These general overheads include:

- senior management time;
- specialist risk insurance;
- in-house IT;
- the provision of payroll services;
- property related costs; and
- an allocation to the annual audit fee.

[18] Contact Centre Management Association

Rate of return

84 The hourly rate payable to the specialist call-centre company includes a rate of return. ComReg is of the preliminary view that it is appropriate to include a reasonable rate of return in the hourly rate payable to the specialist call-centre company. If the ECAS provider had not outsourced the requirement for CSRs, it would have had to develop its own internal CSR expertise which would have generated additional costs to develop the necessary skills for the training and management of CSRs. These costs would have been reflected in the CHF. More generally, a rate of return exists on the hourly rate payable to the specialist call-centre company in the same way as for any pricing structure of a supplier of goods and services. This associated cost is allowable, so long as it is reasonable — and ComReg is satisfied that it is.

Change in CSR numbers

85 Since the ECAS went live there have been changes to the ECAS staffing arrangements, principally those required in the 2012-2013 CHF review.

86 As the number of calls has fallen, there has been a further decrease in the number of CSRs required to deliver the service. In addition, the ECAS provider has been optimising the application of its various performance metrics in the Erlang model. This has also resulted in a fall in the projected number of hours required by the ECAS provider. However, there is not a direct one-to-one relationship between the fall in call volumes and the fall in chargeable hours, as ECAS is required to maintain certain minimum levels of staffing in order to adhere to performance metrics under the CA.

87 No further changes were proposed to CSR numbers as part of this review.

Suggested hourly rate per CSR

88 ComReg is of the preliminary view that a reasonable hourly rate chargeable per PSAP CSR should be no more than €29.34 for inclusion in the CHF for 2015-2016. As mentioned previously, this hourly rate includes the wage costs of each CSR such as the basic salary, a performance-related bonus and employers PRSI. The hourly rate also includes other specific cost components such as training, holidays, CSR churn, absence and an allocation for general overheads. It is based on a 37.5 hour week. Overtime rates are not applied as CSRs can generally choose which shift they wish to work.

Q. 2	Do you agree or disagree with ComReg's preliminary view that €29.34 is a reasonable hourly rate payable to the specialist call centre company, based on what costs have been allowed and what costs have been disallowed? Please provide detailed reasoning and calculations for your views.

Adherence to standards

89 ComReg has reviewed how the ECAS provider has determined the number of CSRs it requires to maintain the service and how the performance metrics have been applied.

90 In accordance with ComReg's statutory obligation to monitor the ECAS provider quality of service[19] ComReg has noted that the ECAS provider is consistently achieving (and at times surpassing) the minimum set of standards set out in the CA.

91 ComReg reviews these metrics regularly throughout the year:

- It receives a monthly report from the ECAS provider. If and when a performance metric has not been achieved ComReg discusses this with the ECAS provider and also with the DCENR;
- The performance metrics are presented by the ECAS provider at the quarterly forum where they are open to discussion by all present;
- As part of the annual review ComReg assesses how the performance metrics are applied in the resourcing model;
- There is continuous contact between ComReg and the ECAS provider throughout the year on the performance of the ECAS.

92 As part of this year's review ComReg assessed how the information contained within the performance metrics was produced by the ECAS provider. Each of the performance metrics was assessed and discussed in turn with the ECAS provider. No issues were identified in the compilation and reporting of the performance metrics.

93 ComReg is of the preliminary view that further reductions to the number of CSRs being rostered could have a negative impact on the ECAS provider's adherence to standards and would have only a slight impact on the cost of the CHF. Any negligible benefit deriving from a reduction in the number of CSR hours required would be negatively offset by an increased risk arising from increased call-answering times.

[19] Section 58(G) of the Act of 2002

94 Because of its critical nature, an ECAS operation cannot be run like a fully commercialised call-centre operation. All calls must be answered with the required urgency and resource planning must ensure that the performance metrics as set out in the CA are met. ComReg has, in each of its CHF reviews, reviewed the adherence to the performance metrics and, where it considered these could be achieved more effectively, without endangering the service levels, it requested the ECAS provider to make these changes and these were implemented. ComReg currently does not foresee any further changes of significance in this area.

95 It should also be noted that, because of the bursty nature of emergency call volumes, utilisation rates tend to be lower in emergency services than many other sectors:[20]

- Public sector healthcare providers - 55% to 65%
- Financial services - 70% to 80%

96 Currently the utilisation rate in the ECAS is c. ✂%.

97 ComReg does not set the performance metrics as these are contained within the CA. In its previous reviews, ComReg assessed the methodology whereby these metrics were implemented in the Erlang model and recommended some changes to be implemented in a controlled fashion. The changes were implemented by the ECAS provider without any dis-improvement in the quality of the service. ComReg currently does not foresee any further changes of significance in this area.

98 ComReg has assessed the requirement for CSRs against the ongoing decline in call volumes. Where call volumes are declining, ComReg considered that two factors are particularly relevant and contribute to a lower minimum threshold CSR requirement:

- The requirement to have two CSRs present on all three sites at any one time for health and safety reasons;
- The requirement of the ECAS to adhere to the performance metrics as contained in the CA.

99 Given the foregoing observations, ComReg is of the preliminary view that a reasonable cost review relating to CSR costs will consist of two principal components:

- Hourly rate paid to specialist call-centre company; and

[20] Source: Orbita Consultants

- Number of CSR hours required to maintain service.

BT Payroll Costs

100 The ECAS provider's own pay costs are approximately €✂m per annum. The costs incurred are marginally lower than those forecast as part of the 2014-2015 CHF review which in turn were marginally lower than the previous years.

101 The ECAS provider's own pay costs (i.e. other than the CSRs) can be categorised broadly as follows:

- Dedicated to ECAS;
- Engineering and technical support charged as required to ECAS; and
- Other support services charged as required to ECAS.

Dedicated to ECAS

102 The staffing of the ECAS operation (all BT staff) is currently as follows:

- One Head of Operations (80% allocation to the ECAS);
- One Centre Manager (100% allocation to the ECAS);
- Five first line managers ("FLMs") (100% allocation to the ECAS);
- Three support engineers (100% allocation to the ECAS);
- Two support/administration staff (100% allocation to the ECAS); and
- One Service Manager (100% allocation to the ECAS).

Head of Operations

103 The Head of Operations has overall responsibility for the successful operation of ECAS and is responsible for developing the forecast volumes used in the resourcing model to determine the number of CSR hours required from the specialist call-centre company. The Head of Operations also liaises with all relevant external stakeholders and suppliers such as the emergency services and the third-party suppliers. This is a key strategic role within the ECAS.

104 In April 2014 a decision was taken by BT Ireland to involve the Head of Operations in other non-ECAS work. It was decided by BT that the Head of Operations spend 80% of time with the ECAS and the remaining 20% with the non-ECAS work. The payroll costs of the Head of Operations allocated to the ECAS have been reduced by 20%.

105 A flexible approach is taken but some tasks no longer performed by the Head of Operations are carried out by the Centre Manager. All critical functions remain with the Head of Operations at all times.

106 Having discussed this change with the ECAS provider and the DCENR, ComReg is of the preliminary view that there is no loss of expertise or leadership to the ECAS.

Centre Manager

107 This is a new role within the ECAS operations. The primary function of the Centre Manager is to carry out certain tasks that are no longer performed by the Head of Operations. The Centre Manager continues to undertake all functions associated with being an FLM and is 100% dedicated to the ECAS.

108 The Centre Manager was recruited through an internal BT recruitment process and was promoted from the rank of FLM having been in that role since the commencement of the ECAS. Because of relative resource costs, this small restructuring resulted in a small net saving to the ECAS cost centre.

FLMs

109 The ECAS provider employs five FLMs to manage the three PSAPs. Previously there were six FLMs, but as noted above, one was promoted to Centre Manager. FLMs manage the day-to-day operational activities of the CSRs and their roles include monitoring call quality, on the job training, and handling calls when required.

110 While the FLMs do not cover the PSAPs 24 hours per day, their shifts are organised so that there is either a presence in all PSAPS or to a provision of cover across all three centres between approximately 6am and 12am. As call volumes tend to be lower between 12am and 6am, the ECAS provider considers that it is not necessary to have an FLM present in this interval. However, within each site a CSR is designated a “lead operator” and is trained to handle certain contingencies if required. This lead operator also covers for the FLMs when they are not present.

111 The role of the FLMs is distinct from that of the call-centre coordinators supplied by the specialist call-centre company and not suitable for amalgamation given the structure of the current resource model. FLMs monitor call quality and the service level quality while call-centre coordinators are responsible for maintaining local rosters and dealing with human resource issues as they arise. ComReg has reviewed the current number of FLMs and is of the preliminary view that the ratio of FLMs[21] to CSRs appears reasonable (c1:12). ComReg will continue to monitor this ratio to ensure that it is in line with best practice.

Support engineers

112 Three support engineers are involved in the day-to-day maintenance of the ECAS IT and telecommunications infrastructure across the three PSAPs and two data centres.

113 Where more specialist engineering requirements are needed, these are sourced from the wider BT organisation. This is discussed further in paragraph 116. Support engineers are vital to the continuing delivery of the ECAS and, especially given the geographical spread of the PSAPs, the number of engineers appears reasonable. However, ComReg continues to monitor the requirement in its annual reviews of the CHF.

Administration/Support staff

114 The support staff is principally concerned with the preparation of reports and general administration of the ECAS operation but are also trained to handle calls if there is a need to do so. Support staff also monitor call quality, although to a lesser extent than the FLMs. This provides an additional layer of quality checking and further assures overall service quality.

115 ComReg is of the preliminary view that the current organisational structure relating to the staff who are dedicated to ECAS is appropriate for the delivery of the ECAS and the associated costs are reasonable.

Engineering and technical support charged as required to ECAS

116 As part of the ongoing operation and maintenance of the ECAS, the ECAS provider has made a number of changes to or has been planning changes to the ECAS network.

[21] Including the Centre Manager

117 Some of these changes have required specialist engineering skills from within the wider engineering team of the ECAS provider. Others have been completed by its dedicated engineering team. Where specialist engineers are required they charge their time to ECAS on a case-by-case basis. While all changes are pre-approved by the ECAS management, some changes can be considered reactive and others proactive. ComReg has observed that the level of engineering and technical support required has reduced over time. Indeed, as the ECAS has become more established, this is to be expected. ComReg will continue to monitor this activity and ensure that the necessary processes are maintained to track the time spent on the required tasks.

118 Annually, as part of the CHF review ComReg assesses the time allocated to the ECAS operation as well as the processes around the recording and monitoring of this time. As part of this review ComReg assessed in greater detail the processes around the recording and monitoring of time to the ECAS operation. ComReg remains of the view that the processes are adequate. ComReg also understands that these processes were also reviewed as part of the annual audit of the ECAS operation by an independent auditor and that no adverse findings or recommendations were made.

119 The technical integrity of the ECAS infrastructure is monitored within the wider BT group. If a technical issue arises it is initially prioritised above all other BT technical issues. After an initial assessment technical resources are allocated as appropriate, varying from immediate remediation to planned maintenance.

120 ComReg, as part of its review, analysed the manner in which specialist engineers and technicians provide services to the ECAS operation and is of the preliminary view that the associated costs are reasonable for the 2015-2016 CHF review.

Other support functions charged as required to ECAS

121 The ECAS provider also records the costs of other support functions including but not limited to:

- Executive management (overall ownership of the ECAS operation drawing expertise from across the entire BT organisation);
- Finance (preparation of quarterly and annual financial statements and supplying financial data and reports to ComReg);
- Legal (reviewing contracts, updating LIRO’s and correspondence);

- Regulatory (liaising with ComReg and other stakeholders); and
- Procurement (maintenance of existing and procurement of any new third party contracts).

122 ComReg has reviewed the nature of this support and its associated cost and considers them to be reasonable. ComReg notes that these costs have been reducing over time.

123 Almost all pay costs are allocated to the ECAS either directly (CSR / dedicated to ECAS) or indirectly using a cost driver (engineering support / other support).

124 Annually, as part of the CHF review ComReg assesses the time allocated to the ECAS operation as well as the processes around the recording and monitoring of this time. As part of this review ComReg assessed in greater detail the processes around the recording and monitoring of time to the ECAS operation. ComReg remains of the view that the processes remain adequate. ComReg also understands that these processes were also reviewed as part of the annual audit of the ECAS operation by an independent auditor and that no adverse findings or recommendations were made.

125 However, there remain a few pay costs for which a cost driver is not applied (c. ✂%). The principal pay cost associated with this is the monitoring of the ECAS network. These pay costs are charged to the ECAS using a percentage mark-up based on the cost of staff directly or indirectly charged to the ECAS. ComReg continues to monitor the nature and level of the costs incurred and ComReg's preliminary view, for the 2015-2016 CHF review, is that these costs are reasonable.

Non-pay costs

126 The ECAS provider's non-pay costs are approximately €✂m per annum. Its non-pay costs primarily consist of:

- Premises;
- Backhaul;
- Network maintenance;
- Other non-pay costs.

Premises

127 The ECAS provider leases premises housing two of its PSAPs. It utilises space within the specialist call-centre company's own premises for its third PSAP. The associated costs of this third PSAP are contained within the hourly rate it pays the specialist call-centre company (included in General Overhead within Figure 8).

128 In addition to the leasing of the premises, the ECAS provider also pays the associated local authority rates and electricity charges. One PSAP also hosts a data centre thereby requiring higher electricity charges for the running of servers and air-conditioning units.

129 There are also facilities management charges for the two PSAPs leased by the ECAS. Having reviewed the costs as part of the 2015-2016 CHF review, ComReg is of the preliminary view that the costs are reasonable.

Backhaul

130 Due to the need to adhere to the performance metrics as set out in the CA the ECAS backhaul is supplied by both BT and third-party suppliers (in order to maintain resilience). BT has also provided space for a second ECAS data centre (in its main facility). The costs of backhaul and the data centre have been found to be reasonable when compared to prevailing market rates. BT has continued to negotiate improved rates for some of its third-party backhaul. ComReg's preliminary view is that it considers these costs to be reasonable.

131 As part of this review, ComReg compared the rates calculated by the ECAS provider for its own internal transfers compared to broadly equivalent rates calculated from Eircom Wholesale's reference offer for a similar service. The rates calculated for internal transfer purposes were less than those based on the reference offer.

Network maintenance

132 The ECAS provider has a number of support contracts in place, primarily of an IT/technical nature. The principal support contract is with the supplier of the platform underpinning the ECAS network which is a critical component to the successful delivery of the ECAS. The ECAS provider has further support contracts in place with ancillary IT companies, which it considers are necessary for the successful running of the ECAS operation. Many of the support contracts which were being put in place at the set-up stage were also reviewed by ComReg in 2009-2010 and found to be reasonable.

133 As the ECAS operation approaches the end of its five year term a number of contracts require renewal. ComReg has discussed the cost of renewing the more material contracts with the ECAS provider. It is ComReg's understanding that the terms and conditions of these contracts remain unchanged and in many cases the annual cost also remains largely unchanged, despite the fact that the equipment they relate to is five years old. ComReg's preliminary view is that these costs are reasonable.

Other non-pay costs

134 Other non-pay costs include an allocation of accommodation, computing and telecommunications for "engineer support" and "other support" associated with the ECAS and the cost of the annual audit. These costs are allocated on the basis of cost drivers or are directly attributable. ComReg has reviewed the nature of these costs and considers them to be reasonable.

Depreciation / Amortisation

135 Another significant cost is the annual depreciation and amortisation charge. The estimated annual cost of the depreciation and amortisation charge is €2.2m. This is based on an initial investment of approximately €11m, which is being written-off over the term of the CA (i.e. five years) together with additional depreciation on capital expenditure incurred in the intervening period.

136 During the set-up phase the ECAS provider invested in fixed assets in deploying its ECAS network. This fixed asset investment consisted of both time spent by the ECAS provider's personnel (i.e. technical, management, procurement) in designing and building the new operation and in its purchase of the required fixed assets. These included the IT and telecommunications infrastructure required to operate the ECAS and the costs of fitting out the three PSAPs. As discussed in paragraph 127, the ECAS provider does not own the premises from which it runs the ECAS PSAPs which are leased from third parties.

137 The set-up costs were incurred once by the ECAS provider and accordingly, they need only be reviewed once. The set-up costs were comprehensively examined by ComReg, during the course of its 2011-2012 CHF review, which determined the amount of capital expenditure and the associated depreciation/amortisation charges to be included in calculating the maximum CHF (based on a five year asset life as set out in the CA). ComReg does not believe that it would be logical or efficient to review this issue again. There have not been any material changes made to the capitalised costs of the ECAS during this review period. Accordingly, ComReg is satisfied that there is no reasonable basis for reviewing the set-up costs of the ECAS again in this review

138 Some of the fixed assets may have asset lives greater than five years. In previous reviews these assets were written off on a straight line basis over the term of the CA. In light of the one-year extension to the CA, these assets are now being written off over six years

139 As the assets purchased for ECAS are inherently linked to its operation it is likely that the residual value of any assets would be nil. At the end of the CA, should an alternative ECAS provider be awarded a new CA, it is unlikely that many of the assets could be used in any new ECAS operation unless the alternative provider was to be located at the same sites as the existing PSAPs. It is also unlikely that the assets could be successfully reused in the wider BT telecommunications network. Only the Minister can hold a public tender process to award any subsequent ECAS contracts. Therefore decisions on how to treat such assets can only be made by the parties to the CA. A decision to alter the depreciation policy as governed by the CA is not a matter for ComReg to decide.

140 During 2014 the ECAS provider, in accordance with the terms of the CA, and supported by DCENR, requested permission from ComReg to incur capital expenditure of *circa* €✂ for certain systems upgrades. These requested upgrades arise because of the expiration of technical support for specific aspects of the solution. Replacement of these elements is essential given the contract extension. This capital expenditure included:

- Professional fees from its external suppliers for integrating and testing the upgrades;
- Purchase of associated licences;
- Purchase of associated hardware; and
- The ECAS provider’s own engineering time for planning and implementing the requested changes.

141 In its submission the ECAS provider has indicated that it has assessed the likelihood of issues arising through the expiration of support for specific software aspects of the ECAS solution. The ECAS provider considers the likelihood of an issue arising to be quite low but the risk associated with such an event to be extremely high to the point that were it to happen connectivity to the ECAS could be lost. Both the DCENR and ComReg considers that despite the likelihood of this being low the level of risk is unacceptably high. The ECAS provider has also provided a detailed budget of the costs of the upgrade and has indicated that it sought and obtained optimum pricing from its suppliers for many elements of the upgrade.

142 Based on its review, as well as at the request of the DCENR, ComReg and its consultants carried out an appraisal of the upgrade proposal and subsequently approved the additional capital expenditure.

143 ComReg also approved expenditure of c. €✂ for improvements to the SMS aspect of the ECAS. This involved increasing character lengths in text messaging to ensure that all relevant and important details are available to CSRs. ComReg considers that this is necessary, particularly for vulnerable users that the service must also serve.

144 No other requests for capital expenditure have been received. If further requests are received in line with the service requirements of the DCENR on behalf of the Irish Government, (e.g. changes required to facilitate the reception and onward transmission of enhanced Caller Location Information or similar) these will be assessed by ComReg. Under the terms of the CA, the ECAS provider would be entitled to recover any such additional capital expenditure through the CHF.

Guaranteed rate of return

145 Under the CA, the ECAS provider is allowed a guaranteed rate of return on its investment (fixed assets and set-up costs). This has been set at 6.63% on the gross book value of its investment (fixed assets and set-up costs) for the term of the CA. As the guaranteed rate of return is part of the CA, the setting of the guaranteed rate of return is not within the scope of the review that ComReg must conduct under the Act of 2002.

146 The guaranteed rate of return also covers any interest costs associated with finance agreements that the ECAS provider may have entered into in relation to its ECAS operation.

147 Based on an investment of approximately €11m the guaranteed rate of return is approximately €750k per annum to the end of the CA. As it is based on the gross book value of assets the return earned annually by the ECAS provider does not vary other than for the impact of capital additions. If it were based on the net book value of the assets by the end of the CA the ECAS provider would not earn a return as the assets would be valued at close to zero as it does not engage in an annual re-investment programme.

148 As the DCENR has extended the CA by an additional year the guaranteed rate of return continues to apply to both the initial capital investment as well as any subsequent investment.

Cost of capital rebate

149 When the ECAS provider won the tender to manage the ECAS operation, it based its proposal on there being approximately 4.8m emergency calls per annum. The maximum permitted CHF of €2.23 was set by the Minister in order to allow the ECAS provider to recover the cost of operating the ECAS at this volume of calls.

150 However, there was a significant fall in call volumes from the date when the CA was signed to the Go Live date. Therefore, the per-unit cost of running ECAS was greater than the initial CHF of €2.23. As a result the ECAS provider significantly under-recovered its costs during the initial period of the CA. This under-recovery was primarily offset by an increase in the maximum permitted CHF to €3.35 during the 2011-2012 CHF review.

151 However, as the ECAS provider under-recovered its costs in 2010-2011 — as a result of the initial CHF being set too low – the ECAS provider had to self-finance this under-recovery. The cost of capital rebate is the estimated cost of the interest of this self-financing and is spread over the remaining period of the CA.

152 The cost of capital rebate was assessed in 2009-2010 by ComReg and considered to be reasonable and is to be spread over the life-time of the CA. It is approximately €✂ per annum when the CA commenced but on a reducing scale over the life of the CA[22].

153 A cost of capital rebate has not been applied for any under recoveries incurred by the ECAS provider since the Go Live date. Previous under recoveries are included as part of the overall cost recovery of the ECAS provider.

Sinking fund

154 Under the CA, the ECAS provider is required to transfer €250,000 per annum into an escrow account and this payment is included in the maximum permitted CHF. The escrow account is held and managed by the DCENR and is not under the control of ComReg or the ECAS provider.

155 Use of the sinking fund is the responsibility of the DCENR. Under the CA the purpose of the sinking fund is to address:

- Any exit costs which BT may incur, should it be required to provide a parallel service along the lines of that provided by Eircom when it was exiting from the provision of the ECAS service during September and October 2010;

[22] ✂

- Any under-recovery which remains outstanding at the end of the CA.

156 Currently the ECAS has paid approximately €✂ in the sinking fund.

157 The proposed CHF will reflect the greater than predicted decline in call volumes since spring 2014 and the necessity to ensure that there are sufficient funds available to meet any under-recovery. Currently there are insufficient funds to meet the under-recovery.

158 ComReg must, in any case, include the prescribed value of the sinking fund in its calculation of the CHF each year for the duration of the CA.

Prior period under-recovery

159 As previously noted, the ECAS provider developed and designed its ECAS operation to handle approximately 4.8m calls per annum. As the ECAS provider is entitled to recover the reasonable costs of running the ECAS, the CHF was set in order to allow this recovery (on the basis of 4.8m number of calls multiplied by the CHF). Current annual call volumes are c. 2.2m and continue to decline.

160 Volumes for the coming year are forecast annually. Where the actual rate of decline in volumes is greater than that forecast an under-recovery occurs. This under recovery of costs must be addressed in future periods. The greater the period between the under-recovery and the end of the CA the lower the impact on the CHF.

161 However, after the system went live, it transpired that the number of calls being handled was significantly lower than that originally envisaged and that the ECAS provider would not recover its costs based on the initial value of the CHF. While volumes are discussed in Chapter 4 the following major movements have been noted during the period since July 2010:

- From August 2010 to February 2011 call volumes declined by an average of 13%;
- From March 2011 to February 2012 call volumes declined by an average of 10% with the decline for the latter six months being c. 3%;
- From March 2012 to February 2013 call volumes declined by an average of 1%;
- From March 2013 to February 2014 call volumes declined by an average of 5%;

- From March 2014 to September 2014 call volumes have declined by an average of 22%. This is compared to a forecast decline of 3%.

162 Therefore in previous CHF reviews ComReg re-allocated the cost of the under-recoveries over the remaining life of the CA. The current under-recovery of c. 22% since March 2014 is much greater than that of previous periods and the decline forecast for 2014/2015 must be recovered over a shorter period.

163 The prior period under-recovery for 2014/2015 was c. €✂. (2013/2014 c. €✂) and cumulatively c. €✂. The cause of this can be summarised as follows:

Figure 9 – Prior period under-recovery

Forecast income & expenditure to	€[23]	€
	February 2015	**February 2014**
Est. revenues from Go Live	✂	✂
Costs		
Pay costs	✂	✂
Non pay costs	✂	✂
Depreciation / amortisation	**10,300,000**	**8,100,000**
Sinking Fund	**1,100,000**	**900,000**
Guaranteed rate of return	**3,400,000**	**2,700,000**
Cost of capital rebate	✂	✂
Total Costs	✂	✂
Prior period under-recovery	✂	✂

[23] For ease of reference values have been rounded

This under-recovery is reflected in the proposed CHF of €**4.63** for 2015-2016.

Figure 10 – projected income and expenditure to end of the CA[24]

	2015/16	2016 – five months	Total
Forecast Volumes @ €**4.63**	1.7m	500,000	
Revenue €	7,900,000	2,400,000	10,300,000
Costs €			
Pay costs	✂	✂	✂
Non pay costs	✂	✂	✂
Depreciation	1,000,000	200,000	1,200,000
Sinking Fund	300,000	-	300,000
GRR	800,000	200,000	1,000,000
Rebate	-	-	-
Total Costs	✂	✂	✂
Recovery	✂	✂	✂

164 Over the remaining life of the CA the amount of the prior period under-recovery (c. €✂) is reflected in the CHF and reduces to nil.

165 This under-recovery must be recovered between 14 February 2015 and the end of the CA (15 July 2016).

Monitoring costs

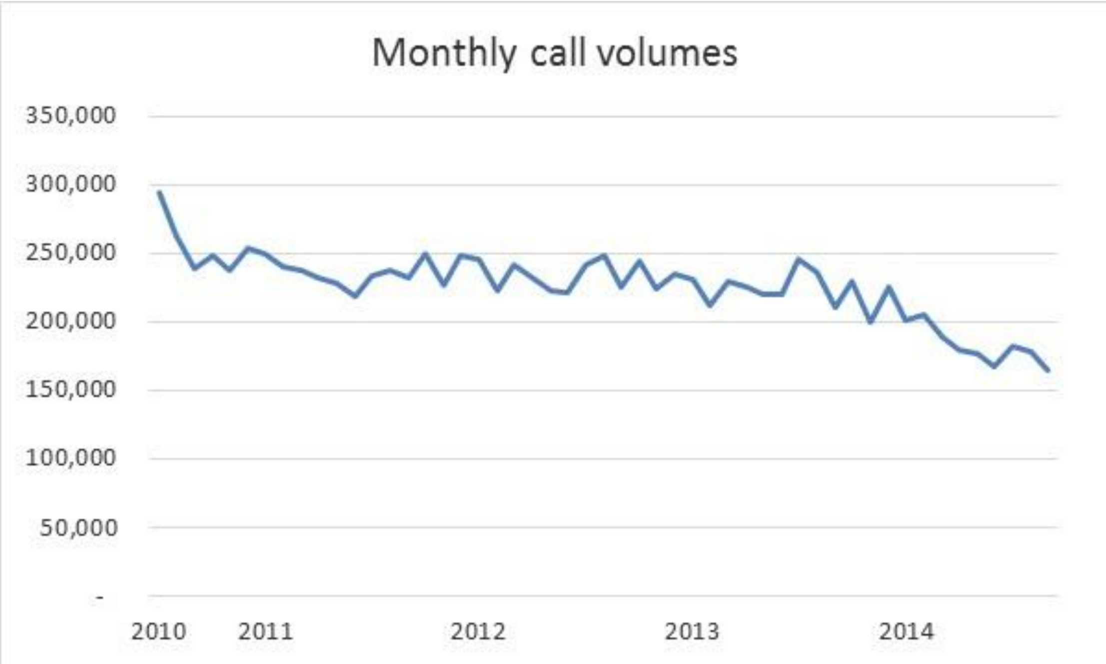
166 ComReg can confirm that its monitoring costs[25] associated with the carrying out of this review are not, at this time, being recovered through the CHF.

[24] For ease of reference values have been rounded
[25] Section 58 (E) of the Act of 2002

4 Volumes

167 When the ECAS provider entered the CA with the Minister, the annualised tendered volume of emergency calls was 4.8million. Since that time, there has been a marked and steady decline in the volume of emergency calls with a notable decrease in 2014. This is illustrated in Figure 11 below:

Figure 11: ECAS monthly call volumes July 2010 to September 2014



168 As the cost base is considered to be stable the decline in call volumes has had, and is likely to continue to have, a material impact on the CHF. Many of the costs are considered to be relatively fixed:

- A minimum number of CSRs is required to operate the service;
- The ECAS provider is required to provide various levels of management and support;
- Third party costs remain largely fixed for the term of the CA;
- The initial capital investment is depreciated over the life of the CA;
- The guaranteed rate of return and sinking fund are determined by the CA.

169 ComReg publishes regular information notices on ECAS call volumes. Figure 12 below (which is taken from ComReg Information Notice No. 14/98) shows the differences in monthly call volumes between January and June 2013 and 2014. During the 2014-2015 CHF review ComReg had predicted that calls would decline by 3.0% per annum.

Figure 12: Call volumes January – June 2014 v January to June 2013

	2013	2014	Difference	% Difference
January	230,372	200,550	-29,822	-12.9%
February	212,139	204,549	-7,590	-3.6%
March	230,024	189,158	-40,866	-17.8%
April	225,073	179,273	-45,800	-20.3%
May	219,687	177,125	-42,562	-19.4%
June	220,439	167,838	-52,601	-23.9%
January to June Total	**1,337,734**	**1,118,493**	**-219,241**	**-16.4%**

170 Call volumes for July to September 2014 compared to July to September 2013 were:

Figure 13: Call volumes July – September 2014 v July – September 2013

	2013	2014	Difference	% Difference
July	246,054	181,811	-64,243	-26.1%
August	236,147	178,575	-57,572	-24.4%
September	210,313	164,332	-45,981	-21.9%

171 For this review, ComReg has calculated its forecast call volumes based on the following:

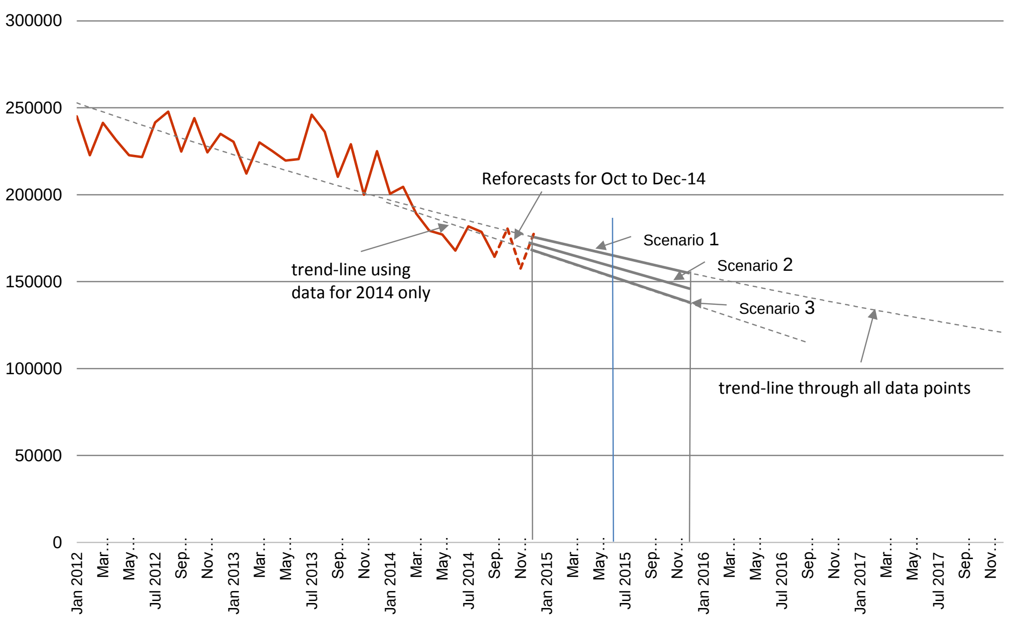
- Actual call volumes from the Go Live date to September 2014; and
- Projected call volumes for October 2014 to December 2014

172 The call volumes from the Go Live date to September 2014 are the call volumes recorded by the ECAS provider.

173 Projected call volumes for September 2014 to December 2014 are also incorporated into the calculation of call volumes to allow for call volumes up to the date when ComReg must make its determination (i.e. 12 December 2014).

174 ComReg, informed by work carried out by its consultants, has considered a number of possible scenarios for determining the annual rate of change in call volumes. These are discussed in detail in the accompanying consultant's report. The determination of the rate of change in call volumes has a direct, inversely proportional, impact upon the proposed CHF.

175 Analysis carried out for this review, based on historical and projected monthly call volumes, yields the following graph:

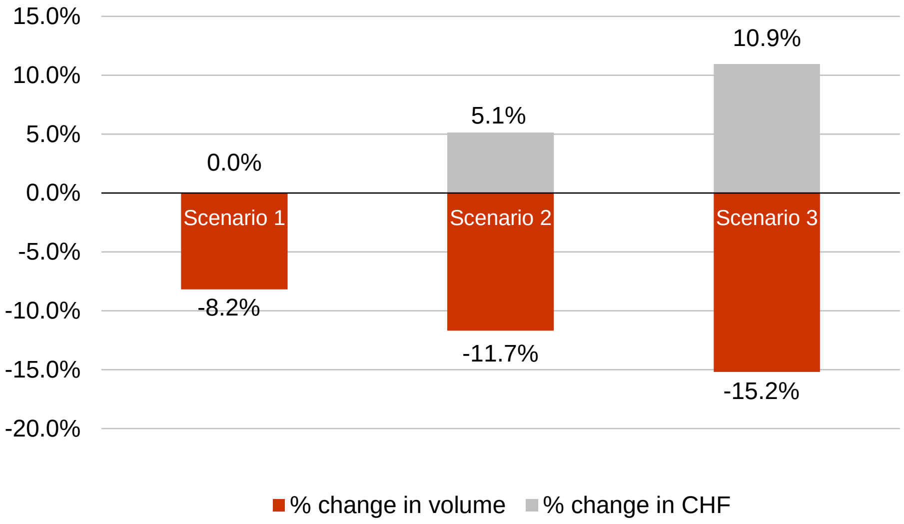


Extrapolation of call volumes through 2015 and 2016

176 Three scenarios are discussed in the report. These range from a modest reduction of 8.2% up to a continuing rapid decline of 15.2%.

177 The impact of these call volume projections on the value of the CHF in the case of a one year extension is estimated as:

Cost volume relationship: 6 year contract



178 *Source: TERA Consultants*

- An 8.2% call volume decline is based upon an assessment of mid-year call volumes;

- A 15.2% call volume decline is built by assuming a continuation through 2015 of the latest downward trend in call volumes over January 2014 to December 2014 which is running at an average decline of 19.6% with respect to the same period in 2013. This assumes that the 'Silent' and 'Cleared without Speech' calls will continue to decline.

- An 11.7% call volume decline is the average between an 8.2% decline and a 15.2% decline.

179 ComReg considers that a forecasted rate of decline of 15.2% is appropriate based on the analysis supplied in the accompanying report. In forecasting this rate of decline ComReg considers that it allows the ECAS provider recover its reasonable costs and reduces the possibility of there being insufficient funds in the Sinking Fund should an under-recovery occur at the end of the CA.

180 However, greater reductions than those forecast will have a direct impact on the CHF. In order to forecast call volumes as accurately as possible and to take into account as much robust external information as possible, ComReg requests that all operators submit (as part of this consultation process) details of any programmes or initiatives, which they are currently undertaking, or are about to undertake, or any relevant market developments, which are likely to impact upon ECAS call volumes. Such information will be treated confidentially as appropriate.

181 A full discussion of the projected volumes is contained in the accompanying consultant's report.

Q. 3 Please outline any programme or initiatives, planned for the short to medium term (1 to 2 years), or any relevant market developments, in particular changes in the handset population profile, which may significantly affect the forecasted volume of emergency calls.

Q. 4 Do you agree or disagree with the proposed forecast of the call volume decline rate of 15.2% per annum? Please provide detailed reasoning and calculations for your views.

Q. 5 Are there any other matters which you wish to raise as part of this review? Please provide detailed reasoning and accompanying calculations (where appropriate) for your views.

5 Draft Determination

Definitions

1.1 In this determination:

- "*the Act*" means the Communications Regulation Act 2002;
- "*the Commission*" means the Commission for Communications Regulation established under section 6 of the Act;
- "*emergency call*" has the same meaning as in section 58A of the Act; and
- "*the emergency provider*" means BT Communications Ireland Limited.

2 Determination

2.1 The Commission makes this determination:

- In exercise of its powers under section 58D (2) of the Act;
- Pursuant to the review conducted by it under section 58D (1) of the Act;
- Having had due regard to section 58D (3) of the Act;
- Pursuant to Commission Document No. XX and Commission Document No. XXa;
- Having duly taken account of the responses received to Commission Document No. XX and Commission Document No. XXa; and
- Having regard to the reasoning and analysis conducted by the Commission and set out in this response to consultation and determination.

2.2 The Commission hereby determines that for the period 12 February 2015 to 11 February 2016, the maximum permitted call handling fee that the emergency provider may charge to entities who forward emergency calls to it for handling such a call shall be **€X.XX**.

2.3 This determination is effective from the date of the publication of this response to consultation and determination.

Q. 6 Do you agree or disagree with the wording of ComReg's Draft Determination? If not, please state your detailed reasoning.

6 Regulatory Impact Assessment

182 ComReg is not imposing a regulatory obligation upon any stakeholder. The obligation to pay the CHF is imposed by the Act of 2002. The Act of 2002 also obliges ComReg to conduct the review and to determine the CHF annually. ComReg has no discretion to refuse to do so.

7 Submitting Comments

183 The consultation period will run from 21 October 2014 to 21 November 2014, during which ComReg welcomes written comments. It is requested that comments be cross-referenced to the relevant question numbers from this document.

184 Having analysed and considered the comments received, ComReg will publish a response to consultation and decision in January 2015.

185 In order to promote further openness and transparency, ComReg will publish all respondents' submissions to this consultation. However, ComReg must strictly maintain the confidentiality of any information provided to it in confidence. Electronic submissions should be submitted in an unprotected format so that they can be appended into the ComReg submissions document for publishing electronically.

8 Statutory Basis

186 Section 58 (A) – 58 (H) of the Communications Regulation Act 2002 (as inserted by section 16 of the Communications Regulation (Amendment) Act 2007 provides generally for the establishment of the ECAS and associated matters. Section 58 (D) obliges and empowers ComReg to review and determine the maximum permitted CHF on an annual basis

Annex: 1 ECAS Quality of service parameters

Parameter	Definition	Threshold & measurement frequency	Definition
ECAS availability	Availability = U/(U+D) U= Uptime, the total time when the ECAS service answers Emergency Calls presented to the ECAS Switches and routes the call to the appropriate Emergency Service centres. D= Downtime, which shall include loss of service for all reasons other than Force Majeure Events	99.999% on a 12 month rolling period Monthly	Availability = U/D where: U is total time when the ECAS service answers Emergency Calls presented to the ECAS switches and routes the call to the appropriate Emergency Service. D = Downtime, which shall include loss of service for all reasons other than Force Majeure events.
Average speed of answer	The average time period between an Emergency Call being presented to the ECAS switch and the call being answered by an Operator	1.3 sec One Day Hourly & daily	The average time period between an Emergency Call being presented to the ECAS switch and the call being answered by an Operator.
PAC 5	The percentage of calls answered within 5 seconds	97.5% One Day Hourly & daily	The percentage of calls answered within 5 seconds
Accessibility Index (Hit rate)	Percentage of quarter hours where 85% of calls are answered within 5 seconds. Ignoring calls abandoned within 5 seconds	85% one day Quarter hours & daily	Percentage of quarter hours where 85% of calls are answered within 5 seconds.
Customer or Emergency Service complaints	Customer or Emergency Service Complaints for which ECAS is wholly or partially responsible	2 per month or 1 for every 200,000 calls Monthly	Customer or Emergency Service complaints for which ECAS is wholly or partially responsible.
Standards certification	a) Information security management ISO 17799 and ISO 27001 b) Business continuity BS 25999-1 and BS 25999-2 (when issued) c) Building standard d) ISO 9001:2000	Annual Certificate Inspection Annually	a) Information security management ISO 7799 and ISO 27001: b) Business continuity BS 25999-1 and BS 25999-2 (when issued) c) Buildings standard d) ISO9001:2000
Average call handling time	The average length of time taken from when a call is answered by the Operator until Monitoring ceases	36 seconds One Day Hourly & daily	The average length of time taken from when a call is answered by the Operator until monitoring ceases.
Average call routing time	The average length of time taken from when a call is answered by the Operator until	Less than 15 seconds for 90% of	The average length of time taken when a call is answered by the Operator

Parameter	Definition	Threshold & measurement frequency	Definition
	a call to the Emergency Services is initiated. Abandoned calls are omitted.	routed calls. One Day Hourly & daily	until a call to the Emergency Service is initiated.
Average call abandon rate	The percentage of total calls presented to the ECAS switch that terminate prior to answer by the Operator for whatever reason.	< 12% One Day Hourly & daily	The percentage of total calls presented to the ECAS switch that terminate prior to answer by the Operator for whatever reason.
Call handling accuracy	Percentage of calls handled correctly according to the call handling process in five areas:- • call opening • process • call closure • call control behaviours • compliance	99% Monthly Random sample of 50 calls per ECAS provider Centre per month	Percentage of calls handled correctly in line with the call handling process in five areas: Call Opening, process, call closure, call control behaviours, compliance.

Annex: 2 Reasonable Cost Review

Background

187 Section 58(D)(3)(a) of the Act of 2002 provides that:

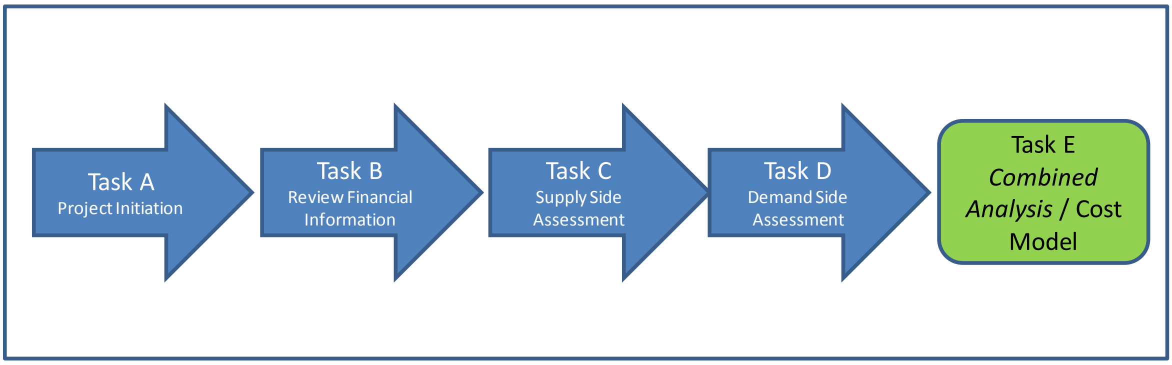
"… the Commission shall have regard to … the need for the ECAS provider to cover the reasonable costs likely to be incurred by it in operating the service and, in particular, to recover a guaranteed rate of return ….".

188 The specifications for the ECAS have been set down by the Minister through the CA. ComReg is not a party to the CA and the specifications for the ECAS in the CA are not being reviewed by ComReg. However, these specifications indirectly affect the costs incurred by the ECAS provider and are therefore part of and relevant to the reasonable costs review. The specific network architecture of the ECAS network is also outside of the scope of this review. However, in reviewing the costs ComReg has sought to ensure that the cost of the assets purchased are reasonable for the successful operation of the ECAS. As noted in the 2012-2013; 2013-2014 and 2014-2015 CHF reviews the requirement to have three PSAPs is contained within the CA. This requirement remains unchanged.

Approach

189 ComReg's approach to its review of the maximum permitted CHF is presented diagrammatically below. This follows the approach adopted by ComReg in previous CHF reviews. Although there is some overlap between the five tasks (A-E) a broadly sequential structure is followed:

Figure 14 Project approach



Task A: Project initiation

190 Under the Act of 2002, and as a consequence of when the CA was entered into, ComReg must make its determination on the CHF by 12 December of each year. In order to do this, ComReg has already engaged extensively with the ECAS provider and gathered the necessary financial data concerning incurred costs and relevant associated information. The incurred costs are then subject to review by ComReg in order to determine their reasonableness. ComReg has reviewed incurred costs annually since the ECAS operation went live on 14 July 2010 ("Go-Live") and has also monitored the evolution of call volumes. In particular ComReg has reviewed the costs incurred by the ECAS provider from April 2012 (the commencement of its financial year) to June 2014 (the most recent set of quarterly management accounts). The evolution of call volumes has been considered since the "Go-Live" date in order to determine a trend.

191 An assessment is also made of the ECAS provider's annual forecast costs of running the ECAS to the end of the contract and the likely future trend in call volumes.

Task B: Review financial information

192 ComReg has carried out a detailed review of the full set of financial information furnished by the ECAS provider. This review will be ongoing up to the final determination on the maximum permitted CHF on 12 December 2014. The financial information used by ComReg in the review includes or will include the annual audited financial statements to March 2014 and unaudited quarterly management accounts to September 2014. These unaudited quarterly management accounts are supported by detailed financial analysis and explanations. ComReg does not expect any material change in the financial information between now and 12 December 2014.

193 This review does not entail an assessment of the set-up costs of the ECAS as ComReg reviewed these in 2010. In accordance with the terms of the CA certain capital expenditure (c. €✂) was approved by ComReg during the period under review. This capital expenditure was mainly on the updating of certain software to ensure the ongoing integrity of the ECAS operation.

Task C: Supply side assessment

194 ComReg has carried out a "supply-side" assessment which entails a root-and-branch review of all aspects of the delivery of ECAS by the ECAS provider in order to determine whether its costs are reasonable. The supply-side assessment included the following:

- an operational review of the ECAS function provided by the ECAS provider;

- a review of the ECAS staff resources;
- an understanding of the engineering and technical elements of the ECAS; and
- a review of any third-party costs.

195 This part of the review required a series of site visits and inspections to each of the PSAPs, the data centres and the monitoring centre, in order to obtain a greater understanding of how the service is organised and to understand the technical and business infrastructure that is used. ComReg undertook interviews and discussions with senior representatives of the ECAS provider, reviewed the available documentation, and assessed the reasonable “in-life” costs actually incurred.

Task D: Demand side assessment

196 ComReg has conducted a “demand side” assessment as part of its review. This involves examining historic volumes of emergency calls made in the State and reviewing the economic and demographic data relevant to the number of emergency calls being made. This has been done in order to produce a reasonable estimate of likely future emergency call volumes. In overall terms, there has been a significant decline in call volumes since the CA was signed with the Minister

197 ComReg will continue to monitor call volumes closely and will continue to publish details of the trend on a periodic basis as part of its regular quality of service review of the main performance metrics applied to the ECAS.

Task E: Combined analysis / cost model

198 This task involved combining the findings from the supply and demand side assessments (tasks C and D) in order to review the reasonableness of the CHF from the cost model.

Annex: 3 Relevant Cost Standard

Overview

199 In previous CHF reviews ComReg assessed which cost standards could be used by ComReg to ensure that only the relevant and reasonable costs of the ECAS operation of the ECAS provider are recovered through the CHF.

200 Under Section 58 (D) (3) (a) of the Act of 2002 ComReg is required to have regard to:

> *(a) the need for the ECAS provider to cover the reasonable costs likely to be incurred by it in operating the service and in particular, to recover a guaranteed rate of return for providing the ECAS …"*

201 Commonly used cost standards include Historical Cost Accounting Information ("HCA"), Current Cost Accounting Information ("CCA"), and Long Run Incremental Costs ("LRIC"). When considering which cost standard is appropriate for determining reasonable costs ComReg considers the following matters to be relevant:

- The CHF is not paid directly by the consumer, but by the consumer's call origination network;
- The originating network has no control over the CHF;
- Calls to the ECAS are a social service rather than a normal product; and
- The ECAS is a standalone service provided on behalf of the State.

202 In making its final determination in the 2014-2015 CHF review ComReg concluded that:

- a hybrid costing methodology, based on HCA accounts (appropriately adjusted for reasonableness) and reflecting forward-looking cost and volume data is the most appropriate way to determine the CHF;
- avoidable cost is the appropriate cost principle to be used in assessing the CHF, combined with a hybrid cost model;
- the costs associated with the provision of the ECAS are:
  - Direct costs

- Indirect costs
- Fixed costs
- Variable costs

203 For the purposes of the 2015-2016 CHF review ComReg considers that the above methodologies (as used in previous CHF reviews) remain appropriate and has used them for the current review.

9 Questions

Q. 1 Figure 5 represents the basis of the cost stack for the determination of the CHF for 2014-2015. Please provide any comments on whether the cost categories should remain the same for the determination of the CHF for 2015-2016, including detailed reasoning for your answer.

Q. 2 Do you agree or disagree with ComReg's preliminary view that €29.34 is a reasonable hourly rate payable to the specialist call centre company, based on what costs have been allowed and what costs have been disallowed? Please provide detailed reasoning and calculations for your views.

Q. 3 Please outline any programme or initiatives, planned for the short to medium term (1 to 2 years), or any relevant market developments, in particular changes in the handset population profile, which may significantly affect the forecasted volume of emergency calls.

Q. 4 Do you agree or disagree with the proposed forecast of the call volume decline rate of 15.2% per annum? Please provide detailed reasoning and calculations for your views.

Q. 5 Are there any other matters which you wish to raise as part of this review? Please provide detailed reasoning and accompanying calculations (where appropriate) for your views.

Q. 6 Do you agree or disagree with the wording of ComReg's Draft Determination? If not, please state your detailed reasoning.