

IDS

# Assessing the efficiency of NERL's total employment costs in RP2

# A research report for the Civil Aviation Authority (CAA)

Final Report - Redacted

Date: January 2014

## **Contact details**

Name:	Adam Elston
Title:	Senior Project Manager
Telephone:	020 7422 4926
E-mail:	adam.elston@thomsonreuters.com
Address:	Incomes Data Services, Finsbury Tower, 103-105 Bunhill Row, London EC1Y 8LZ

This report was researched and written by Incomes Data Services (part of Thomson Reuters) for the CAA.

The authors of this report are:

Adam Elston Esmond Lindop Chris Priest Raymond Storry Lisa Trewhitt Lois Wiggins

## Contents

1		INTRODU	CTION
2	2.1 2.2 2.3	EXECUTIN APPROA RESULT KEY FIN 2.3.1 2.3.2 2.3.3 2.3.4 2.3.5 2.3.6 2.3.7 2.3.8 2.3.9	VE SUMMARY10ACH AND METHODOLOGY10S FROM THE 2009 BENCHMARKING EXERCISE10DINGS FROM THE 2013 REVIEW10Economic overview and context11NERL's workforce and paybill11NERL bargaining, pay and benefit practice12Pension arrangements12Pay and benefits benchmark analysis13Workforce deployment13Sickness absence and labour turnover14International labour cost comparisons16
3	3.1 3.2 3.3 3.4 3.5 3.6 3.7 3.8	METHOD ECONOR NERL'S NERL E PENSION PAY ANN WORKF SICKNES	DLOGY AND DATA SOURCES19MIC OVERVIEW AND CONTEXT19WORKFORCE AND PAYBILL19ARGAINING, PAY AND BENEFIT PRACTICE19NS20D BENEFITS BENCHMARKING20DRCE DEPLOYMENT20SS ABSENCE AND LABOUR TURNOVER20ATIONAL LABOUR COST COMPARISONS20
4	4.1 4.2 4.3 4.4 4.5 4.6 4.7	ECONOM TRENDS DEVELC THE PAT THE PAT EARNIN THE MA EARNIN	IC OVERVIEW AND CONTEXT21IN THE ECONOMY AND AIR TRAFFIC21PMENTS IN THE LABOUR MARKET23TERN OF PAY SETTLEMENTS25TERN OF EARNINGS MOVEMENTS27GS AND PAY MOVEMENTS IN AIR TRANSPORT29KE-UP OF EARNINGS IN AIR TRANSPORT30GS VARIATIONS ACROSS REGIONS31
5	5.1 5.2 5.3	NERL'S W Change Change Change	ORKFORCE AND PAYBILL 32   ES IN HEADCOUNT 32   ES IN PAYBILL 34   ES IN PAYBILL PER EMPLOYEE 35
6	6.1 6.2 6.3 6.4 6.5 6.6 6.7	NERL BAI MACHIN INDUSTI THE PAT THE PAT PAY PRO BONUS BASIC W 6.7.1 6.7.2	RGAINING, PAY AND BENEFIT PRACTICE36ERY FOR PAY DETERMINATION36RIAL ACTION37TERN OF PAY SETTLEMENTS37TERN OF EARNINGS MOVEMENTS39OGRESSION40AND INCENTIVE PAYMENTS41VEKLY HOURS41Overtime working42Shift and unsocial hours working43

6.8 6.9 6.10 6.11 6.12	ANNUAL LEAVE4COMPANY CARS4PRIVATE HEALTH INSURANCE4SICK PAY4SUMMARY OVERVIEW OF BENEFIT MARKET COMPARISONS4	3 4 5 5
7 7.1 7.2 7.3 7.4 7.5	PENSION ARRANGEMENTS 4   TRENDS IN PENSION PROVISION ACROSS THE WIDER ECONOMY 4   PATTERNS OF CONTRIBUTIONS AND BENEFITS 4   NERL PENSION ARRANGEMENTS 5   THE NERL DB SCHEME COMPARED WITH MARKET PRACTICE 5   THE NERL DC SCHEME COMPARED TO MARKET PRACTICE 5   7.5.1 Treatment of pension provision for benchmarking purposes 5	6 9 1 2 3
8 8.1 8.2 8.3 8.4	ALL STAFF PAY BENCHMARK ANALYSIS 5   CONCLUSIONS OF PREVIOUS BENCHMARKING EXERCISE 5   8.1.1 Conclusions from the 2013 benchmarking exercise 5   THE PROCESS OF JOB SIZING FOR COMPARISONS 5   OVERVIEW OF PAY BENCHMARKING 5   KEY FINDINGS BY JOB FAMILY 6   8.4.1 Basic pay market comparison 6   8.4.2 Total cash market comparison 6   8.4.3 Total reward market comparison 7	4 4 4 5 9 1 4 7 0
8.5	8.4.4Total reward analysis including employer pension contributions7ATCO BENCHMARKING VS AIRLINE PILOTS78.5.1Airline panel data78.5.2Job matching78.5.3Basic salary78.5.4Total cash78.5.5Total reward7	3 7 7 8 8
9 9.1 9.2 9.3	WORKFORCE DEPLOYMENT7KEY FINDINGS7INTRODUCTION8WORKFORCE DEMAND89.3.1Position Staffing Schedule (PSS)9.3.2Shift palette and roster patterns9.3.3Operational requirements9.3.4Published roster	9 9 0 3 3 4 5 5
9.4 9.5	WORKFORCE SUPPLY 8   9.4.1 Operational supply 8   9.4.2 Deployable FTEs 8   9.4.3 Additional requirements 8   ANALYSIS UNDERTAKEN 8   9.5.1 Overview of current workforce 8   9.5.2 Workforce demand 8   9.5.3 Workforce supply 8	6 6 6 7 8 8 0
9.6	9.5.5 Workforce supply 6   SUMMARY OF ANALYSIS 9   9.6.1 Workforce demand 9	0 0
9.7 9.8	CONCLUSIONS9SWANWICK AC ATCOS99.8.1Current workforce overview9.8.2Workforce demand9.8.3Workforce supply10	4 6 6 0

10 10.1 10.2 10.3 10.4 10.5 10.6	SICKNESS ABSENCE AND LABOUR TURNOVER102SICKNESS ABSENCE TRENDS102AVERAGE WORKING TIME LOST103ABSENCE BY WORKFORCE SIZE104COST OF EMPLOYEE ABSENCE105STAFF TURNOVER105TURNOVER BY STAFF GROUP106
11 11.1 11.2 11.3 11.4 11.5	INTERNATIONAL LABOUR COST COMPARISONS 108   CONDUCT OF THE INTERNATIONAL COMPARISON EXERCISE 108   COMPARISONS OF AVERAGE ANNUAL WORKING HOURS IN OPERATIONS 109   RESULTS FROM THE ACE REPORT 111   ATCO EMPLOYMENT COSTS COMPARED WITH THE WIDER ECONOMY 113   INTERNATIONAL COMPARISONS AS A BASIS FOR DECISIONS ON REWARD 114
12 12.1 COM 12.2 12.3 12.4 12.5	EVALUATION OF THE RESULTS AND PROSPECTS 116   EXAMINING THE NERL REMUNERATION PACKAGE AND BENCHMARKING AGAINST   PARATORS 116   WORKFORCE DEPLOYMENT 117   SICKNESS ABSENCE AND LABOUR TURNOVER 117   INTERNATIONAL EMPLOYMENT COSTS 118   HEADCOUNT, PAY AND PAYBILL PROSPECTS UNDER THE RP2 BUSINESS PLANS 118
13 13.1 13.2	APPENDICES 122   ASHE METHODOLOGY 122   NERL HEADCOUNT CHANGES 2009-13 123
14 14.1	ROSTER APPENDIX 1.125SWANWICK TC ATCOS12514.1.1Current workforce overview12514.1.2Workforce demand12514.1.3Workforce supply128
15 15.1	ROSTER APPENDIX 2131PRESTWICK DOMESTIC ATCOS13115.1.1Current workforce overview13115.1.2Workforce demand13115.1.3Workforce supply134
16 16.1	ROSTER APPENDIX 3136PRESTWICK OCEANIC ATCOS13616.1.1Current workforce overview13616.1.2Workforce demand13616.1.3Workforce supply138
17 17.1	ROSTER APPENDIX 4140SWANWICK AC AND TC ATSAS14017.1.1Current workforce overview14017.1.2Workforce demand140
17.2	ROSTER APPENDIX 514717.2.1Prestwick ATSAs14717.2.2Current workforce overview147
17.3	WORKFORCE DEMAND14717.3.1Workforce supply150
17.4 17 5	IDS JOB LEVELS   152     Data requests submitted to NERI   154

## Graphs

Graph 1: % cost variance of average NERL job family differential vs market	. 55
Graph 2: NERL average basic salary variance vs market by job family	. 62
Graph 3: NERL average total cash variance vs market by job family	. 62
Graph 4: NERL average total reward variance vs market by job family	. 63
Graph 5: NERL median basic salary vs market median	. 65
Graph 6: NERL total cash vs market median	.68
Graph 7: NERL total reward vs market median	71
Graph 8: NERL total reward vs market median including pensions	75

## Tables

Table 1 Quarterly changes in UK gross domestic product	22
Table 2 Trends in air traffic 2008-13	23
Table 3 Employment and unemployment in the UK 2008-13	24
Table 4 Unemployment rate by region 2008-13 (%)	24
Table 5 Settlement levels for three-month periods 2008-13 (whole economy) and inflation	26
Table 6 Average weekly earnings movements 2008-13	28
Table 7 Median hourly pay excluding overtime for full-time employees 2008-13	29
Table 8 Median hourly pay excluding overtime for full-time employees in air transport 200	)8-
12	29
Table 9 Median hourly pay excluding overtime for full-time employees	30
in air transport 2008-13 (projected)	30
Table 10 Make-up of median weekly earnings for full-time employees April 2012	. 31
Table 11 Median weekly pay excluding overtime for full-time employees by region 2012	. 31
Table 12 NERL manpower projections to 2020/21 FTE headcount	32
Table 13 NERL headcount at the end of CP2 2010/11 headcount	.33
Table 14 FTE Headcount	34
Table 15 Paybill costs £m (excluding pensions)	34
Table 16 Average paybill costs per FTE employee £000s (excluding pensions)	35
Table 17 Annual pay reviews	38
Table 18 Average paybill costs per FTE employee (excluding pensions) compared w	/ith
national average earnings movements	40
Table 19 Proportion of NERL employees at the top of their scale 2013	. 41
Table 20 Overtime compensation at NERL	42
Table 21 Practice on service-related leave (% of organisations)	44
Table 22 Summary overview descriptors of external market and NERL benefits' provision	45
Table 23 Private sector occupational pension schemes by status, 2008-11	.47
Table 24 Number of members in private sector occupational pension schemes	bv
membership type and benefit structure	48
Table 25 Types of pension arrangements being run by private sector employers 2011	48
Table 26 Weighted average contribution rates to private sector occupational pensi	ion
schemes by size, benefit structure and contributor	49
Table 27 Number of active members of private sector occupational pension schemes by ra	ate
of accrual, 2008-11	50
Table 28 Normal pension ages in private sector occupational pension schemes 2011	50
Table 29 Active members of private sector occupational pension schemes by uprati	ina
mechanism 2011	51
Table 30 Outline of pension arrangements covering NERL staff	53
Table 31 NERL roles vs IDS job level matching	58
Table 32 Basic salary vs market greater than $\pm 1.10\%$	64
Table 33 NERL median basic salary vs market median	66
Table 34 NERL total cash vs market greater than $\pm 1.10\%$	67
Table 35 NERL total cash vs market median	69
Table 36 NERL total reward vs market greater than $\pm 1.10\%$	70
Table 37 NERL total reward vs market median	72
Table 38 NERL total reward vs market median including pension	.7 <u>C</u> 7 <u>A</u>
Table 39 Airline nanel data	.7 -
Table 10 ATCO vs airling nilot comparisons	. / /
Table 41 Average number of working days lost for all and non-manual employees 2012/131	.,, 103
Table 42 Average number of working days lost by major staff group (FTFs)	102
Table 43 Average working time lost $(\%)$ 2012/12 – NERL and CIPD comparison 1	00
Table 11 Planned hours lost due to sickness (%)	04
Table 15 Average no. of days lost per employee per vear by workforce size - CIDD and NE	DH DI
2012/12	
	04

Table 46 Cost of absence on pay bill by staff groups at NERL, 2012/13	105
Table 47 Rate of labour turnover, 2008-2013.	105
Table 48 Median labour turnover rates by industry sector	106
Table 49 Average length of service of leavers by NERL staff groups 2012/13	106
Table 50 Average annual turnover (%) by NERL staff groups	107
Table 51 Retention difficulties by occupational category	107
Table 52 Average annual working hours for ATCOs in Operations	110
Table 53 Average annual weighted hours worked by ATCOs in Operations 2011	
Table 54 Average annual weighted hours worked by ATCOs in five largest ANSPs	
Table 55 ATCO employment costs 2011	112
Table 56 ATCO employment costs compared with all-economy labour costs 2011	113
Table 57 Future headcount changes	119
Table 58 CPI inflation and future pay reviews	120
Table 59 Estimated average paybill costs per FTE employee £000s (excluding pension	ns) .120
Table 60 Planned headcount changes and estimated future paybill changes £m (ex pensions)	cluding

## 1 Introduction

This report presents the findings of research undertaken by Incomes Data Services (IDS) for the Civil Aviation Authority (CAA). The work on the project took place in the period August to December 2013.

In August 2013, IDS was commissioned by the CAA to review the NATS (EN Route) Plc (NERL) proposed RP2 total employment costs for the period 2015-2019 and to determine their efficiency. The focus of the review was on:

- pay and benefits benchmarking;
- trends in wage and other employment costs over time;
- efficient workforce deployment to meet operational requirements;
- staff absence and turnover;
- European labour costs comparisons.

In each case the requirement was to provide an assessment of how NERL's costs compare to the market, scope for improvement in particular areas and to provide an opinion as to whether the assumptions on employments costs in NERL's business plans are both challenging and achievable.

The review also involved examining the productivity of each major staff category compared to other major European Air Navigation Service Providers (ANSPs) using existing Eurocontrol Performance Review Unit data.

The outputs of the study will be used by the CAA as one of the inputs to inform its RP2 final determinations.

To analyse the data and reach its conclusions, IDS has drawn on the expertise of its in-house researchers, particularly on their experience and lessons learned in compiling reports on employment costs in air transport and other regulated sectors, as well as the expertise of IDS associates in key areas.

## 2 Executive summary

#### 2.1 Approach and methodology

A series of data requests were submitted to NERL, with further requests submitted as additional queries arose during the course of the work (Appendix 17.5). We record our thanks to NERL staff for their efforts to provide information.

The results from the 2009 IDS benchmarking report provided a useful starting point and meant we could approach the current exercise with the benefit of considerable background knowledge. Our approach to benchmarking in this report draws on three main types of information:

- To assess broad trends in earnings, weekly hours and benefits at NERL relative to the wider economy, we drew on data from the Office for National Statistics (ONS), together with IDS data on the pattern of pay settlements over time and other survey sources;
- For the detailed benchmarking, we drew on the IDSPay database of relevant jobs;
- For pension comparisons, we used data from the ONS, Department for Work and Pensions (DWP) and Association of Consulting Actuaries (ACA).

## 2.2 Results from the 2009 benchmarking exercise

The 2009 IDS report for the CAA on NERL's employment costs concluded that at the time:

- The salary benchmarking results appeared to show little or no case for making savings through adjustments to salary levels;
- In terms of benefit provision, NERL was broadly in line with median market practice in the provision of company cars and private health cover and better than average in terms of contractual working hours, sick pay and income protection arrangements;
- Sickness absence levels and staff turnover were below average;
- NATS's approach to pension benefits (applying to NERL staff) was broadly comparable with market practice.

## 2.3 Key findings from the 2013 review

The findings from the different elements of our benchmarking exercise are outlined below.

## 2.3.1 Economic overview and context

- In common with other parts of the economy, air traffic was affected by the economic downturn. Quarterly numbers of commercial flights and terminal passengers remain below the levels of 2008 (section 4.1);
- In most of the period 2008 to 2013, the quarterly median level of pay settlements across the economy was below the level of inflation as measured by the RPI and CPI (section 4.3);
- Over the same period, average earnings across the economy rose more slowly than inflation as measured by either the RPI or CPI (section 4.4);
- The median level of basic weekly paid hours in April 2012 was 36.2 in air transport and 37.5 across the private sector as a whole (section 4.6).

## 2.3.2 NERL's workforce and paybill

- Since the start of CP1 in 2001/02, NERL has been reducing the size of its workforce. By the close of CP2 in 2010/11, total headcount was 19.8% lower than at the start of CP1 (section 5.1);
- NERL tells us that it takes 'a blended approach', striking what it sees as an appropriate balance between staff numbers and their remuneration costs to achieve its paybill targets;
- Overall headcount at NERL was reduced by 15.4% between March 2009 and March 2013, with wide variations between the different staff groups;
- The total paybill excluding pensions increased by 0.4% over the period, again with wide variations between the different staff groups (section 5.2);
- Average annual paybill costs per FTE employee rose by 18.7% between the year ending March 2009 and the year ending March 2013 (section 5.3);
- The factors driving this increase in average paybill per FTE employee were primarily shifts in the relative sizes of the various employee groups following reductions in the size of NERL's workforce.

## 2.3.3 NERL bargaining, pay and benefit practice

- Analysis of broad trends over the years since 2009 shows basic salaries at NERL have tended to rise a little faster than base pay in organisations across the economy as a whole (section 6.3);
- Annual average paybill costs per FTE employee at NERL have risen faster than average earnings across the economy as a whole and in the private sector since 2009, though the comparison is not a precise one (section 6.4);
- The extent to which pay progression for ATCO and ATSA grades is based on length of service is unusual among private sector services organisations (section 6.5);
- The form of bonus and incentive arrangements at NERL are not out of line with practice elsewhere (section 6.6);
- The 35-hour net basic working week at NERL is a little shorter than the all-economy median and the median in the air transport sector (section 6.7);
- Overtime pay practice at NERL for less senior staff is broadly in line with wider practice (section 6.7.1);
- Annual leave entitlement at NERL is higher than typical practice across the economy as a whole (section 6.8).

#### 2.3.4 Pension arrangements

- Across the economy as a whole, the number of occupational pension schemes has been in decline, with growing numbers closed to new entrants and to further accrual of benefits (section 7.1);
- There has been a trend in the private sector to move away from defined benefit (DB) provision towards defined contribution (DC) arrangements;
- Among larger employers, the trend has been to operate more than one pension scheme, often as a result of the closure of a final salary pension scheme to new entrants and the introduction of a DC scheme for new staff;
- Average regular employer and employee contributions to DB schemes are substantially higher than those to DC schemes (section 7.2);

- The most common rate of DB accrual is one sixtieth for each year of pensionable service, followed by an eightieth plus a 3/80ths lump sum at retirement;
- The normal pension age for unreduced benefits is typically 60 or 65;
- In terms of uprating of DB benefits, the most common approach is to guarantee to match RPI up to a capped level of increase;
- Like many larger employers, at NERL a legacy DB scheme applies for most current staff with severely limited scope for changing the benefit structure while a DC scheme applies for newer recruits (section 7.3);
- For eligible NERL employees in the DB scheme member contributions are above average and the scheme is more favourable than standard market practice in terms of employer contribution levels, the accrual rate, pensionable age and uprating arrangements (section 7.4);
- The DC scheme applying to newer NERL employees is broadly in line with private sector DC practice as a whole (section 7.5).

## 2.3.5 Pay and benefits benchmark analysis

- In the absence of a substantial number of organisations in the UK carrying out the same or very similar activities, benchmarking has been conducted on the basis of our understanding of the mix and level of skills required by NERL roles, allowing readacross to equivalents in the labour market;
- We have focused on UK comparators because it is difficult to draw comparisons across jurisdictions and we have received little evidence of an active labour market;
- The report includes a series of graphs and tables comparing NERL employees with the external market in terms of basic pay, total cash and total reward excluding pension (chapter 8);
- NERL basic salaries for the majority of non-ATCO/ATSA positions are within +/-10% of the market;
- NERL total cash levels are below the market for the STAR, HR, and Swanwick (Operational/Supervisory) roles but for the majority of the other non-ATCO/ATSA staff they are broadly in line with the market;
- The impact of shorter hours and better annual leave entitlement at NERL increases NERL's position against the market.

## 2.3.6 Workforce deployment

• For good reasons, there is a risk-averse approach to setting staffing levels such that they will safely cover the workload with the appropriate skill mix.

- We were not able to get accurate figures of time spent on operational duties and detachments because NERL do not record the numbers of staff who are tactically detached.
- The exposure to annual leave is high compared with many other business sectors.
- The current rostering process is risk averse in generating staffing levels so that they safely cover the workload with the appropriate skill mix. However, there might be alternative methods of rostering that will more efficiently match the workload.

## 2.3.7 Sickness absence and labour turnover

- NERL's average of 3.9 working days lost per employee in 2012/13 is below the average level of sickness absence across the economy (section 10.1);
- Average absence rates at NERL have remained at a level of just under four days a year per employee since 2008/09, with small variations between the major staff groups (section 10.2);
- The proportion of average working time lost at NERL at 2.7% in 2012/13 was lower than the comparative all-employees figure, but average working time lost for ATCOs and ATSAs was somewhat higher than the figure for non-manual staff in the private sector services<sup>1</sup> (section 10.2);
- The cost of absence across all staff groups at NERL in 2012/13 accounted for 3% of annual paybill costs, lower than our estimates for the economy as a whole (section 10.4);
- The labour turnover rate across all staff groups at NERL in 2012/13 was 5.1%. This compares favourably with the all-sector average of 11.9% (section 10.5);
- Low staff turnover rates at NERL are reflected in the long average service of its employees, with the average length of service of leavers from the ATCE, ATCO and ATSA staff groups above 17 years (section 10.6).

## 2.3.8 International labour cost comparisons

• NERL has argued that the direct benchmarking of remuneration and working arrangements should be with air traffic controllers operating in similarly complex air space elsewhere in Europe;

<sup>&</sup>lt;sup>1</sup> Though NERL point out that it should be recognised that there is a greater risk adverse approach to sickness absence for ATCOs/ATSAs given the critical nature of the role and levels of concentration required. Further, the confined nature of the operational environment and the importance of maintaining on-going service delivery means it is necessary to minimise the risk of others falling sick. This leads to operational staff having a lower threshold when assessing their fitness for work.

- International comparisons to assess NERL's employment costs and productivity against other major European Air Navigation Service Providers (ANSPs) are fraught with difficulty and should be treated with considerable caution (Chapter 11);
- We have not seen clear evidence that there is a significant active EU labour market in ATCOs and related staff in response to national differences in pay and condition s;
- Other EU ANSPs proved unwilling to help with information on pay and conditions for ATCOs so analysis was restricted to existing international data sources;
- Measured against a global pool of ANSPs engaged in Continental and Oceanic Operations, ATCOs at NATS/NERL work relatively short average annual hours in Operations, amounting to 77% of the average for all those ANSPs participating, though these figures do not take account of time spent on non-operational duties (section 11.2)
- Limiting comparisons to ANSPs in Europe, ATCOs at NATS/NERL emerge as having average weighted working hours in Operations towards the lower end of the scale, standing at 90% of the median, but again this does not take account of time on non-operational activity;
- A study using a combined measure of ATCO-hour productivity based on clusters of air control centres handling traffic of similar complexity, flight levels and numbers of sectors concluded that in 2011 London had higher levels of ATCO-hour productivity than the average for other centres in the same cluster (section 11.3);
- The same study concluded gate-to-gate ATCO-hour productivity in NATS/NERL in 2011 was some 14% down on the levels of 2008, reflecting the fall in traffic volumes;
- In the UK ATCO employment costs in 2011 averaged five times (527.4%) national average hourly labour costs, higher than the all-EU average ratio of four times (439.1%);
- Having reviewed the data, our conclusion is that international comparisons are useful for measuring productivity and organisational performance. They are, however, of more limited value as a basis for judgements about pay levels for ATCOs in current circumstances (section 11.5).

## 2.3.9 Evaluation of the results and prospects

## Benchmarking

- NERL basic salaries for PCG and specialist staff in the STAR grades are close to or below the market. ATCO, ATSAs, Engineering and graded support staff are between 12% and 22% above the market.
- NERL total cash levels show that the majority of positions are within +/- 10% of the market apart from Engineering Service Delivery.
- NERL total reward levels are within +/-10% of the market apart from Engineering and ATSA groups which are between 15% and 19% above the market.

#### Pensions

- The deficit in funding for already accrued DB benefits is clearly a cause for concern. It is our understanding that legislative and trust deed restrictions mean there is severely limited scope for further changes to contain the costs of the DB scheme;
- For eligible NERL employees the DB scheme is more favourable than standard market practice in terms of employer contribution levels, the accrual rate, pensionable age and uprating arrangements, but it has been closed to new entrants since 2009. Member contributions are above the market average;
- The DC scheme applying to newer NERL employees is broadly in line with private sector DC practice as a whole.

#### Workforce deployment

- For good reasons, there is a risk-averse approach to setting staffing levels such that they will safely cover the workload with the appropriate skill mix.
- We were not able to get accurate figures of time spent on operational duties and detachments because NERL do not record the numbers of staff who are tactically detached.
- We initially asked for "actuals" data broken down into 15 minute intervals, which some resource management systems in the aviation sector are able to provide, with the intention of seeing how cover varies through the day, from day to day, week to week and also to get some accurate figures on how much time is spent on operational duties and detachments and training. This data was not available and

we were provided with a summary of "actual" operational duty shifts along with detachments, annual leave, overtime, sickness and other absences.

- Analysis of this data showed very little seasonality, if any, for example in Swanwick AC ATCOs, although we know from the position opening times there is approximately a 10% difference between summer and winter. This is because the accepted practice is to roster to the peak on weekdays, throughout the year, and then to use tactical detachments on the day to get down to what is actually required. However, we understand, that this data is not recorded and so the figures supplied on operational shifts are maximums and on detachments, minimums.
- The exposure to annual leave is high compared with many other business sectors. The minimum annual leave for ATCOs is 36 days, including public holidays, which is 16.4% of 219 attendances per year. The basic roster is "6 on 4 off" which generates an average of 4.2 shifts per week, so 36 annual leave days equate to 8.6 weeks. Compare this with somebody working an average of 5 shifts per week on minimum holiday entitlement of 28 days, including public holidays. This equates to 10.8% of 260 attendances per year and 5.6 weeks.
- The current rostering process is risk averse in generating staffing levels so that they safely cover the workload with the appropriate skill mix. However, there might be alternative methods of rostering that will more efficiently match the workload. A rostering model that is sometimes used to cover this type of workload is based on two groups of staff one which provides flat cover 24/7 set at a night shift level which is at a lower level than the day shifts, and the other providing morning, afternoon and day shift cover 7 days a week, i.e. the remaining shifts not covered by the night shifts. Additionally both could be done within an annualised agreement which could include fully or partially rostered annual leave.
- If an evaluation of alternative rostering systems is undertaken we would recommend that the first stage should be a detailed analysis of current workload and skills required and how it may change in the future. We understand that during RP2, improvements are planned that will improve the staff mix efficiency and reduce the long lead-time training dependency.

#### Sickness absence and labour turnover

• Average levels of sickness absence among NERL staff have been broadly stable since 2009 and are relatively low by comparison with the wider economy;

• At an average of just over 5% in 2012/13, staff turnover at NERL is lower than the average among other employers. Turnover is highest among STAR and support staff and lowest among ATCOs. Low staff turnover rates are reflected in the relatively long average service of NERL employees.

## International employment costs

- Comparisons of ATCO hours worked in Operations across ANSPs suggest that NERL's hours are lower than average, but this does not take account of non-operational duties;
- International comparisons are a valuable aid to assessing organisational efficiency and performance. We see them as less appropriate as the basis for pay and benefits judgements for NERL ATCOs.

## Headcount, pay and paybill prospects under the RP2 Business Plans

- Under Plan 1 NERL staff overall would be reduced by 1.9% between 2015 and 2019, with numbers of ATCOs and ATCE staff remaining unchanged;
- Under Plan 2 there would be an overall reduction of 5.1%, with reductions ranging from a 2.4% cut in ATCE staff to a 6.8% fall in ATCOs. This follows a large voluntary redundancy programme which we understand NERL has launched in 2013 which will largely complete in 2014;
- Our analysis indicates that at the end of RP2 in 2019 total estimated annual paybill costs would be some 9.1% higher in nominal cash terms under Plan 1 and 5.0% higher under Plan 2 than at the end of RP1 in 2014;
- CPI inflation over the five-year period January 2015 to December 2019 inclusive is forecast to be 9.7%. Adjusted for this CPI inflation figure, both plans would therefore represent some reduction in the paybill in real terms (a reduction of 0.6% for Plan 1 and a reduction of 4.7% for Plan 2);
- According to the Executive Summary<sup>2</sup> in the consultative RP2 Business Plan, Plan 1 would deliver an 8% cut in overall manpower including 8% fewer front-line controllers and other cuts in staffing costs by the end of RP2, while Plan 2 would deliver deeper cuts in operating costs, including a 14% reduction in front-line controllers by the end of RP2. On the basis of our indicative figures, changes of this order are not being delivered wholly during RP2. We understand that they also take account of action being taken during RP1.

<sup>&</sup>lt;sup>2</sup> RP2 Business Plan (2015-2019) for Customer Consultation, NERL, May 2013, page 2

Assessing employment costs at NERL

#### **3** Methodology and data sources

Following a post-tender meeting with the CAA in August 2013, we outlined IDS data requirements and submitted our initial data requests to NERL in late August 2013 (see Appendix 17.5). These data requests were followed up in meetings and a number of conference calls to talk through individual elements of the request. Broadly, these included breakdowns of pay and employment cost data for major staff groups employed at NERL, and building an understanding of work patterns and how they are reflected in earnings. Data provision was an iterative process, with additional detailed data requested as the project progressed. There were also data requests concerning staff rosters, staff absence and turnover levels, past pay settlement levels and staff costs over the last five years.

The sections below outline our methodology for each section of the report. There is further discussion of sources and methodology within each section of the report.

#### 3.1 Economic overview and context

Chapter 4 sets the scene for external comparisons by reviewing developments in the wider labour market and the pattern of pay and earnings movements over the period since 2008. As well as general trends, this section provides analysis of data on earnings movements in the air transport sector compared with the whole economy over the period. The data used in this section is derived from Office for National Statistics (ONS) sources, particularly the annual survey of hours and earnings (ASHE) as outlined in Appendix 13.1. The data on air transport activity levels is drawn from the CAA's Aviation Trends Quarter 1 2013 report. The pay settlement data is based on IDS pay monitoring.

#### 3.2 NERL's workforce and paybill

Chapter 5 sets out changes in NERL workforce headcount and paybill over recent years, based on NERL's responses to data requests.

#### 3.3 NERL bargaining, pay and benefit practice

Chapter 6 provides an overview of the machinery for pay determination at NERL, and movements in basic pay and paybill costs per employee over recent years, based on NERL responses to data requests. It also compares NERL practice in various areas of pay and benefits with practice in the wider economy, as illustrated by data from the Chartered Institute of Personnel and Development (CIPD), IDS and Croner.

#### 3.4 Pensions

Chapter 7 opens with a brief overview of recent trends in occupational pension provision, drawing on information from the ONS, the Department for Work and Pensions (DWP) and the Association of Consulting Actuaries (ACA). The information on NERL's pension arrangements was provided in response to data requests. It compares NATS/NERL pension provision with practice in the wider economy.

#### 3.5 Pay and benefits benchmarking

Chapter 8 outlines the benchmarking methodology and sets out the results of the pay and conditions benchmarking exercise (excluding pensions). The market data used in the exercise is drawn from the IDSPay database of jobs across the economy (Appendices 17.4). We also carry out a benchmarking analysis of ATCO roles vs airline pilots and first officer data.

#### 3.6 Workforce deployment

Chapter 9 provides analysis of workforce deployment. Findings here are drawn from analysis of data provided from published roster data and roster templates. Actual on-the-day figures were not provided as these are not recorded by NERL.

#### 3.7 Sickness absence and labour turnover

In Chapter 10 we review NERL's levels of sickness absence and staff turnover rates against patterns across the economy. The two main sources of comparative data on sickness absence are the annual CIPD *Absence Management Survey* 2012 and the CBI *Absence and Workplace Health* survey 2013. For labour turnover, we have drawn on the CIPD's *Resourcing and Talent Planning 2013* survey as the basis for comparison.

#### 3.8 International labour cost comparisons

Chapter 11 reviews available evidence on average hours, employment costs and productivity for ATCOs at NERL compared against other major European Air Navigation Service Providers (ANSPs). IDS endeavoured to collect data from a range of other major European ANSPs on the pay levels and benefits of air traffic controllers to help inform this project. Despite our best efforts, other ANSPs have not responded positively, so we have been unable to produce direct pay and conditions comparisons for air traffic control grades based on original research.

As an alternative approach, we have drawn on the international data contained in the ACE 2011 Benchmarking Report and the Civil Air Navigation Services Organisation (CANSO) Global

ANS Performance Report 2012 for the analysis in this section. Comparative data on hourly labour costs in the wider European economy is derived from Eurostat.

## 4 Economic overview and context

In this section we review developments in the wider labour market and the pattern of pay and earnings movements across the economy over the period 2008 to 2013 to set developments at NERL in context:

- In common with other parts of the economy, air traffic was affected by the economic downturn and quarterly numbers of commercial flights and terminal passengers remain below the levels of 2008 (section 4.1);
- In most of the period 2008 to 2013, the quarterly median level of pay settlements across the economy was below the level of inflation as measured by the RPI and CPI (section 4.3);
- Over the same period, average earnings across the economy rose more slowly than inflation as measured by either the RPI or CPI (section 4.4);
- The median level of basic paid hours in April 2012 was 36.2 in air transport and 37.5 in the private sector as a whole (section 4.6).

Data presented in this chapter is intended to paint the background for our detailed analysis of movements in NERL's total employment in subsequent chapters.

## 4.1 Trends in the economy and air traffic

Following a prolonged period of growth, the UK economy experienced a sharp and sudden downturn from early 2008 as a result of the global financial crisis and the related disruption to much of the global economy. As Table 1 shows, UK gross domestic product (GDP) declined for five consecutive quarters from Q2 of 2008. The subsequent recovery has been painfully slow and uneven. As a consequence, five years on from the start of the 2008 recession, the UK's GDP remains around 3% below its pre-recession peak. The pick-up in GDP growth during 2013, however, suggests the recovery is gradually becoming more solidly based.

#### Assessing employment costs at NERL

Year		% growth
2008	Q1	0.1
	Q2	-0.9
	Q3	-1.8
	Q4	-2.1
2009	Q1	-1.5
	Q2	-0.2
	Q3	0.4
	Q4	0.4
2010	Q1	0.6
	Q2	0.7
	Q3	0.6
	Q4	-0.4
2011	Q1	0.4
	Q2	0.1
	Q3	0.6
	Q4	-0.1
2012	Q1	0.0
	Q2	-0.5
	Q3	0.6
	Q4	-0.3
2013	Q1	0.4
	Q2	0.7

#### Table 1 Quarterly changes in UK gross domestic product

Source: ONS

In line with other parts of the economy, air traffic was affected by the downturn. NERL states that it handled just over 2.1 million flights in  $2012/13^3$ , compared to a peak of 2.5 million flights in  $2007^4$ . The level of traffic in 2012/13 was roughly the same as in 2003/04.

Numbers of terminal passengers and commercial flights in Q1 of 2013 were still well below the levels in Q1 of 2008. As Table 2 shows, the number of commercial flights in Q1 of 2013 was some 19% lower than in Q1 of 2008 while the number of terminal passengers was some 12% lower. Comparing Q3 of 2012 with Q3 of 2008, the number of commercial flights was down by 12% and the number of terminal passengers by 6%.

Taking a shorter timescale, in Q1 of 2013 UK airports handled 44.9 million terminal passengers (an increase of 0.9% on Q1 of 2012) and 432,000 commercial flights (a fall of 3.9% compared to the same quarter last year).

<sup>&</sup>lt;sup>3</sup> Annual Report and Accounts 2013, NATS Holdings Ltd, page 6

<sup>&</sup>lt;sup>4</sup> RP2 Business Plan (2015-2019) for Customer Consultation, May 2013.

Assessing employment costs at NERL

Year		Terminal passengers	Commercial flights
2008	Q1	50,848,564	532,634
2008	Q2	62,100,400	607,954
2008	Q3	71,089,918	633,597
2008	Q4	50,921,056	520,403
2009	Q1	44,488,294	481,521
2009	Q2	57,221,182	546,755
2009	Q3	67,046,369	580,590
2009	Q4	48,973,976	483,175
2010	Q1	43,422,337	449,592
2010	Q2	52,077,313	491,208
2010	Q3	66,986,079	570,817
2010	Q4	47,799,940	460,726
2011	Q1	43,684,969	456,323
2011	Q2	58,305,741	530,011
2011	Q3	67,874,858	566,147
2011	Q4	49,117,683	468,227
2012	Q1	44,585,876	449,337
2012	Q2	58,563,357	526,904
2012	Q3	67,232,624	554,864
2012	Q4	50,020,645	462,440
2013	Q1	44,905,553	432,033

Table 2 Trends in air traffic 2008-13

Source: CAA

Quality of service is always harder to judge than measures of volume, but the punctuality of arriving and departing passenger flights has been on an improving trend since 2008. In Q1 of 2008 some 75% of flights to or from regional airports and 65% of those to or from London airports arrived or departed either early or no more than 15 minutes late. By Q1 of 2013, these figures had risen to 81.2% and 79.7% respectively. NERL reports improvements in reliability, efficiency and quality of services on a variety of measures<sup>5</sup>.

## 4.2 Developments in the labour market

One of the striking features of the recent recession and the subsequent period of slow economic pick-up has been that aggregate employment levels have shown relatively little change. Across the UK as a whole, employment levels in the three months to June 2013 were 0.8% higher than in the same period of 2008 (Table 3). After an initial increase in 2009, the UK unemployment rate has remained relatively stable at around 2.5 million, equivalent to

<sup>&</sup>lt;sup>5</sup> RP2 Business Plan (2015-2019) for Customer Consultation, May 2013.

about 7.8% of the workforce in the three months to June 2013 – well below the levels anticipated at the start of the recession.

Year	Emp	loyment	Unemployment		
	Numbers (000s)	% rate*	Numbers (000s)	% rate**	
2008	29,529	72.9	1,688	5.3	
2009	28,919	70.9	2,433	7.8	
2010	29,023	70.5	2,457	7.8	
2011	29,224	70.7	2,513	7.9	
2012	29,476	71.0	2,564	8.0	
2013	29,777	71.5	2,514	7.8	

Table 3 Employment and unemployment in the UK 2008-13

Source: ONS, based on the three months to June each year

\* % of those aged 16 to 64

\*\*% of the economically active population

The overall pattern of a relatively small rise in unemployment after 2007 followed by a decline in unemployment in the past year or so has applied in most parts of the UK. As Table 4 shows, the only areas with higher unemployment in the second quarter of 2013 than a year earlier were the West Midlands, with a rise from an unemployment rate of 8.8% to 9.9%, London ( with a marginal rise from 8.7% to 8.8%) and the South West ( up from 5.8% to 6.0%). Unemployment in the South East was down from 6.3% in Q2 of 2012 to 6.0% in Q2 2013.

	2008	2009	2010	2011	2012	2013
North East	7.3	9.8	9.4	10.0	10.4	10.3
North West	6.3	8.5	8.1	8.8	9.1	8.2
Yorks & Humber	6.1	8.8	9.1	8.5	9.8	8.9
East Midlands	5.6	7.3	7.4	8.0	8.3	7.9
West Midlands	6.3	10.6	8.3	8.5	8.8	9.9
East of England	4.5	6.5	6.8	6.5	6.6	6.5
London	6.9	8.9	9.3	9.5	8.7	8.8
South East	4.1	5.9	6.21	5.8	6.3	6.0
South West	3.8	6.4	6.1	6.6	5.8	6.0
All England	5.5	7.9	7.7	7.9	8.0	7.8
Wales	4.9	7.6	9.0	8.4	8.6	8.2
Scotland	4.2	7.0	8.4	7.7	7.9	7.2

Table 4 Unemployment rate by region 2008-13 (%)

Source: ONS. Figures relate to second quarter of each year

#### 4.3 The pattern of pay settlements

One of the factors seen as contributing to the stability of employment numbers at the level of the whole economy has been the relatively low level of pay settlements in recent years. Over the period Q1 of 2008 to Q2 of 2013, the median level of pay settlements and awards monitored by IDS never rose above 3.8% despite two spikes in inflation as measured by the All-items Retail Prices Index (RPI) – see Table 5.

The table shows the lower quartile, median and upper quartile figures for pay settlements and pay reviews in each three-month period since 2008. The percentage figures measure the increase in basic pay levels, excluding bonuses or lump sum payments. For settlements where the percentage rise varies for different employees, the figure used is the average increase where this is known or, alternatively, the increase received by the largest group of employees or the paybill increase.

In 18 of the 22 quarters monitored to Q2 of 2013, the median level of pay settlements was below the annual increase in the RPI (based on the last month of each quarter). Using the alternative inflation measure of the Consumer Price Index (CPI), the median level of pay settlements lagged behind the year-on-year CPI increase in 16 of the 22 quarters.

#### Assessing employment costs at NERL

Year		LQ	Median	UQ		RPI	CPI
		%	%	%		Year on year %	Year on year %
2008	Q1	3.0	3.5	4.0	Mar	3.8	2.5
	Q2	3.0	3.5	4.2	Jun	4.6	3.8
	Q3	3.0	3.7	4.0	Sep	5.0	5.2
	Q4	3.0	3.8	4.5	Dec	0.9	3.1
2009	Q1	1.0	3.0	3.8	Mar	-0.4	2.9
	Q2	0.0	1.5	2.5	Jun	-0.6	1.8
	Q3	0.0	1.8	2.5	Sep	-1.4	1.1
	Q4	0.6	1.5	2.0	Dec	2.4	2.9
2010	Q1	0.0	1.9	2.3	Mar	4.4	3.4
	Q2	1.0	2.0	2.5	Jun	5.0	3.2
	Q3	0.3	2.0	2.4	Sep	4.6	3.1
	Q4	1.9	2.2	3.0	Dec	4.8	3.7
2011	Q1	2.0	2.7	3.3	Mar	5.3	4.0
	Q2	2.0	2.5	3.0	Jun	5.0	4.2
	Q3	0.3	2.5	3.0	Sep	5.6	5.2
	Q4	2.0	2.5	3.0	Dec	4.8	4.2
2012	Q1	2.5	3.0	3.5	Mar	3.6	3.5
	Q2	2.0	2.5	3.0	Jun	2.8	2.4
	Q3	1.0	2.5	3.0	Sep	2.6	2.2
	Q4	1.1	2.0	2.8	Dec	3.1	2.7
2013	Q1	2.0	2.5	3.0	Mar	3.3	2.8
	Q2	2.0	2.5	3.0	Jun	3.3	2.9

#### Table 5 Settlement levels for three-month periods 2008-13 (whole economy) and inflation

Source: IDS and ONS

Assessing employment costs at NERL

#### 4.4 The pattern of earnings movements

Pay settlements are a key factor contributing to movements in the ONS average weekly earnings (AWE) index, but the index is also affected by a range of other influences such as levels of paid overtime. Between April 2008 and April 2013 the index for total pay including bonuses for the whole economy rose by 10.5% (Table 6). The regular pay series excluding bonuses showed a slower increase of 8.8% over the same period. These figures compare with a 16.6% rise in the RPI between April 2008 and April 2013 and a 17.0% rise in the CPI, showing that average earnings overall rose markedly more slowly than price inflation.

Narrowing analysis to the private sector and to private sector services (including all transport) shows a broadly similar pattern. Average weekly earnings on the total pay measure rose by 11.2% between April 2008 and April 2013 across the private sector as a whole (8.0% on the regular pay series). Earnings rose a little slower in the private services sector over the period, up by 10.2% on the total pay series and by 9.0% on the regular pay index excluding bonuses.

	A	NE total pay in	ndex	AWE regular pay index			
	Whole econ	All private sector	Private services	Whole econ	All private sector	Private services	
Apr 2008	138.2	138.3	140.1	136.2	135.5	138.2	
Oct 2008	139.8	139.5	141.9	137.7	136.9	139.8	
Apr 2009	140.2	140.0	142.2	138.7	137.5	141.0	
Oct 2009	140.0	138.3	142.0	139.2	137.1	141.3	
Apr 2010	140.8	139.3	142.2	140.7	138.4	142.7	
Oct 2010	143.1	141.3	145.2	142.3	140.0	144.7	
Apr 2011	144.0	142.8	146.0	143.7	141.3	146.5	
Oct 2011	146.1	144.5	148.7	145.1	142.9	147.9	
Apr 2012	147.0	146.4	150.8	146.2	144.1	148.9	
Oct 2012	148.2	146.5	150.9	147.1	144.9	149.9	
Apr 2013	152.7	153.8	154.4	148.2	146.3	150.6	
% rise over Apr '08 to Apr '13	10.5%	11.2%	10.2%	8.8%	8.0%	9.0%	
% rise over Apr ′09 to Apr ′13	8.9%	9.6%	8.6%	6,8%	6.4%	6.8%	

Ishla 6 Avarsaa waaki	Vernings	movements	2008-13
Table O Average week	.y carmiys	movements	2000 15

Source: ONS

Note: Seasonally adjusted average weekly earnings index, base on year 2000 = 100. Total pay includes bonuses but excludes arrears of pay.

Further insight into earnings changes is provided by the annual survey of hours and earnings (ASHE) conducted by the ONS each April. The survey gathers information about the levels, distribution and make-up of earnings and hours worked by employees in all industries and occupations across Britain. The ASHE sample is based on 1% of all employee National Insurance records and the results give a snapshot of earnings in April each year. The April 2013 results are not yet available.

Looking at the results for the period April 2008 to April 2012 shows that median hourly earnings excluding overtime for all full-time employees across the economy increased by 7.4% (Table 7). For comparative purposes, we have estimated an April 2013 figure by uprating the April 2012 results in line with the AWE regular pay index. On this basis, the rise in median hourly earnings excluding overtime over the period April 2008 to 2013 was 8.9%, closely in line with the 8.8% rise in the AWE regular pay series.

Taking the private sector alone, the rise in median hourly pay excluding overtime was 7.2% over the period 2008 to 2013, according to the ASHE data plus our projected figure for April 2013. This figure is rather lower than the 11.2% rise in the AWE index for the private sector and the 8.0% rise in the regular pay series. Median hourly earnings across all service industries show a rise of 8.5% over the period April 2008 to April 2013. Over the same time period, the RPI rose by 16.6% and the CPI by 17.0%.

	All economy		All	All private sector		All service industries	
£		% inc on previous year	£	% inc on previous year	£	% inc on previous year	
2008	11.88	4.5	11.01	4.5	11.99	4.4	
2009	12.33	3.8	11.34	2.9	12.46	3.9	
2010	12.50	1.4	11.36	0.2	12.66	1.6	
2011	12.56	1.0	11.50	1.2	12.70	0.3	
2012	12.76	1.6	11.63	1.9	12.87	1.3	
2013 projection*	12.94	1.4	11.80	1.5	13.01	1.1	
% rise over 2008-12	7.4		5.6		7.3		
% rise over 2008-13	8.9		7.2		8.5		

Table 7 Median hourly pay excluding overtime for full-time employees 2008-13

Source: ONS ASHE

\*Based on AWE regular pay index movement April 2012 to April 2013

## 4.5 Earnings and pay movements in air transport

The ASHE survey includes equivalent earnings data for full-time employees in the air transport sector based on SIC code (Table 8). The results should be treated with a degree of caution as they span a variety of air transport jobs and the sample sizes tend to be relatively small in most of the years. According to the ONS, however, the results are "reasonably precise"<sup>6</sup>.

Year	Lower quartile £	Median £	Upper quartile £
2008	12.49	17.65	26.83
2009	11.29	16.57	24.17
2010	11.79	17.25	24.41
2011	11.73	17.24	25.87
2012	11.81	17.46	25.31
% change over period	-5.4	-1.1	-5.7

Table 8 Median hourly pay excluding overtime for full-time employees in air transport 2008-12

Source: ASHE (ONS)

Note: Because of restricted sample size in some years, these results should be treated with a degree of caution.

The survey results point to a decline in earnings levels within the air transport sector over the period to 2012. Earnings excluding overtime of full-time employees fell between 2008 and 2009 at the lower quartile, median and upper quartile levels. Earnings have risen in the years since then, but by April 2012 had still not returned to 2008 levels.

<sup>&</sup>lt;sup>6</sup> This applies, according to the ONS, where the coefficient of variation (CV) is greater than 5 per cent but under 10 per cent.

Table 9 adds projected figures for April 2013. These have been calculated by increasing the 2012 results in line with the 1.4% increase in the whole economy regular pay series of the ONS AWE index. This combination of actual and projected figures shows median hourly earnings excluding overtime for full-time employees in air transport as increasing by 0.3% over the period April 2008 to April 2013.

Year	Lower quartile £	Median £	Upper quartile £
2008	12.49	17.65	26.83
2009	11.29	16.57	24.17
2010	11.79	17.25	24.41
2011	11.73	17.24	25.87
2012	11.81	17.46	25.31
2013 projection	11.98	17.70	25.66
% change over period	-4.1	+0.3	-4.4

Table 9 Median hourly pay excluding overtime for full-time employees in air transport 2008-13 (projected)

Source: ASHE (ONS) for 2006 to 2011

Note: Because of restricted sample size in some years, these results should be treated with a degree of caution

#### 4.6 The make-up of earnings in air transport

A range of factors lie behind this changing pattern of earnings movements in air transport. The ASHE survey provides some data on the make-up of earnings and patterns of working hours. The results (Table 10) show median basic paid hours of 36.2 a week for full-time employees in air transport in April 2012, compared with a median of 37.5 hours elsewhere in the private sector. Basic pay excluding all bonuses and extras makes up by far the largest single element of earnings, accounting for 87.9% of the total.

The sample was insufficiently robust for a figure for median hours of paid overtime in air transport to be calculated, but the mean stood at 0.8 hours, generating average weekly overtime earnings of  $\pounds$ 14.7. These levels of overtime working and overtime earnings are very low by comparison with other parts of the economy.

	Gross weekly pay £pw	Basic pay £pw	Overtime pay £pw	Median basic paid hours (number)	Median paid overtime hours (number)
Whole economy	505.9	470.9	54.6	37.5	4.0
All private sector	479.1	440.0	56.1	37.5	4.1
Services	501.5	472.3	45.8	37.5	3.4
Air transport	664.4	584.2	N/A	36.2	N/A

Table 10 Make-up of median weekly earnings for full-time employees April 2012

Source: ONS ASHE

#### 4.7 Earnings variations across regions

The key variation in earnings by workplace location is between London and the South East on the one hand and the remaining regions on the other. With the great majority of NERL employees based in the South East, it is important to take this regional factor into account in making comparisons. Taking all full-time employees, the ASHE data shows that median weekly earnings, excluding overtime, were some 32.6% higher in London in 2012 than across the UK as a whole (Table 11). In the South East, median earnings were 6.9% above the all-UK figure. Median earnings in Scotland were just below the all-UK median at 97.4%.

	All e	employees	Private sector		
	£	% of UK median	£	% of UK median	
North East	417.8	88.7	388.8	88.4	
North West	435.5	92.5	400.5	91.0	
Yorks & Humber	426.4	90.6	398.8	90.6	
East Mids	423.5	89.9	393.1	89.3	
West Mids	433.7	92.1	406.9	92.5	
East	459.7	97.6	431.2	98.0	
London	624.6	132.6	608.4	138.3	
South East	503.2	106.9	488.5	111.1	
South West	438.4	93.1	406.8	92.5	
Wales	416.7	88.5	377.5	85.8	
Scotland	458.5	97.4	415.8	94.5	
UK	470.9	100.0	440.0	100.0	

Table 11 Median weekly pay excluding overtime for full-time employees by region 2012

Source: ASHE (ONS)

## 5 NERL's workforce and paybill

In this section we outline changes in the make-up of the NERL workforce over recent years and the changes in overall paybill costs. In subsequent chapters we look at the elements of pay and benefit costs that go towards the overall paybill. The main points are:

- Since the start of CP1 in 2001/02, NERL has been reducing the size of its workforce. By the close of CP2 in 2010/11, total headcount was 19.8% lower than at the start of CP1 (section 5.1);
- NERL tells us that it takes 'a blended approach', striking what it sees as an appropriate balance between staff numbers and their remuneration costs to achieve its paybill targets;
- Overall headcount at NERL was reduced by 15.4% between March 2009 and March 2013, with wide variations between the different staff groups;
- The total paybill excluding pensions increased by 0.4% over the period, again with wide variations between the different staff groups (section 5.2);
- Average annual paybill costs per FTE employee rose by 18.7% between the year ending March 2009 and the year ending March 2013 (section 5.3);
- The factors driving this increase in average paybill per FTE employee were primarily shifts in the relative sizes of the various employee groups.

## 5.1 Changes in headcount

Since the start of CP1 in 2001/02, NERL has been reducing the size of its workforce. In its ten-year business plan published in March 2010 covering the period 2011 to 2020, NERL set out its planned profile of manpower as shown in Table 12.<sup>7</sup> The business plan commented that the projections "should be viewed in the context of a projected 50% increase in traffic handled over the CP1-CP4 period but with 30% fewer total staff."

	Start CP1 2001/02	End CP2 2010/11	Planned % decline over 2001/02 to 2010/11	End CP3 2015/16	End CP4 2020/21	Planned % decline over 2001/02 to 2020/21
Controllers*	1,430	1,380	3.5	1,370	1,350	5.6
Operational support staff	930	550	40.9	500	450	51.6
Engineers**	1,180	860	27.1	780	750	36.4
Support & manageme nt	900	600	33.3	580	530	41.1
Total	4,440	3,390	23.6	3,230	3,080	30.6

Table 12 NEDI	mannowor	projections	+~ 2020	/21 ETE	hoodcount
TADLE IZ NERE	manpower	projections	10 2020		neaucount

Source: NERL 10-year business plan

<sup>7</sup> 10 Year Business Plan 2011-2020, March 2010, NERL, page 30

#### \*Including trainees \*\*Including contractor report

In practice, headcount at the end of CP2 looked rather different from the projections in the 2010 business plan. Table 13 sets out the detail of actual headcount changes between the start of CP1 and the end of CP2<sup>8</sup> and compares them with the projections in the 2010 business plan. By the end of CP2 total staff numbers were 19.8% lower than at the start of CP1 in 2001/02, but they were above the level projected in the 2010 business plan.

	Start CP1 2001/02	Actual end CP2 2010/11	Projected end CP2	Actual decline over 2001/02 to 2010/11	Difference between actual and projected		
	No.	No.	No.	%	No.		
Controllers*	1,430	1,360	1,380	4.9	-20		
Operational support staff	930	630	550	32.3	+80		
Engineers**	1,180	910	860	22.9	+50		
Support & management	900	660	600	26.6	+60		
Total	4,440	3,560	3,390	19.8	+170		

Tahlo 13 NERI	headcount at the	and of CP2	2010/11	naadcount
	. הכמעכטעות מדנות			ICAUCOUIIL

Source: NERL 10-year business plan of 2010 and RP2 consultative business plan

NERL therefore entered the current RP1 period in 2011/12 with a total full-time equivalent headcount of 170 staff above the projected level. We understand from NERL, however, that the organisation takes what it describes as 'a blended approach' to managing paybill costs, striking what it see as an appropriate balance between staff numbers and their remuneration costs to achieve its overall paybill targets. On this basis, it sees the headcount numbers in its plans as only part of the mix.

Table 14 rolls the analysis of headcount changes forward, measuring headcount at the end of March each year. Over the period end March 2009 to end March 2013 the total NERL workforce measured in full-time equivalents (FTEs) was reduced by 15.4% from 3,963 to 3,351.1, as shows (year-by-year data is set out in Appendix 13.2). The biggest reduction has been in the ATSA grades, down by more than a quarter (28%) over the period 2009 to 2013.

<sup>&</sup>lt;sup>8</sup> RP2 Business Plan (2015-2019) for Customer Consultation, May 2013, NERL, page 26

	2009	2010	2011	2012	2013	% decline over period
ATCO	1,402.2	1,360.3	1,360.9	1,297.8	1,271.6	9.3
ATSA	776.4	698.2	645.5	596.5	559.1	28.0
ATCE	951.5	878.9	832.5	832.9	861.6	9.4
Other*	833.0	711.4	703.9	672.5	658.9	20.9
Total	3,963.0	3,648.9	3,542.8	3,399.8	3,351.1	15.4

#### Table 14 FTE Headcount

Source: NERL

Note: figures as at end of March each year

\*Includes MSGs, PCGs, STARs

#### 5.2 Changes in paybill

Table 15 shows how annual paybill costs have moved for the major staff groups over the period from the year ending March 2009 to the year ending March 2013. The figures represent the amounts actually paid out via payroll in each year, including all salaries and allowances and employer's NI contributions. It is important to note that the figures do not include employer pension contributions (see chapter 7 for details of NERL pension contribution levels).

	2009	2010	2011	2012	2013	Change over period
	£m	£m	£m	£m	£m	%
ATCO	112	113	113	123	123	+9.8
ATSA	37	36	35	35	31	-16.2
ATCE	60	57	54	55	57	-0.5
Other*	44	45	42	45	44	0
Total	254	252	244	258	255	0.4

#### Table 15 Paybill costs £m (excluding pensions)

Source: NERL

Note: figures as at end on March each year \*Includes MSGs, PCGs, STARs

Behind the overall decline in annual paybill of £1m between 2009 and 2013 lie big variations in the paybill movements for particular groups which may have been influenced by the various restructuring programmes during the period. While the annual paybill for ATCO grades has risen by 9.8% over the period, the paybill for ATSA staff has declined by 16.2%. The changes in paybills have been driven primarily by the changes in group headcounts outlined above, but there has also been a small contribution from differences in pay rises over the period, as shown in the next chapter of this report.

## 5.3 Changes in paybill per employee

Drawing on the data in the two previous tables, Table 16 shows the average paybill cost per FTE employee in each major staff group. Across NERL staff as a whole, average annual paybill costs per employee have risen by 18.7% between the year ending March 2009 and the year ending March 2013. For the ATCO group average paybill costs per employee rose by 21.0% over the period, while the lowest average increase was recorded for the ATCE group, with paybill costs per employee up by 4.9%.

	2009	2010	2011	2012	2013	% change over period
ATCO	79.9	83.1	83.0	94.8	96.7	21.0
ATSA	47.7	51.6	54.2	58.7	55.4	16.1
ATCE	63.1	64.9	64.9	66.0	66.2	4.9
Other*	52.8	63.2	59.7	66.9	66.7	26.3
Total	64.1	69.1	68.9	75.9	76.1	18.7

Table 16 Average paybill costs per FTE employee £000s (excluding pensions)

Source: IDS calculations based on NERL data \*Includes MSGs, PCGs, STARs

## 6 NERL bargaining, pay and benefit practice

In this section we outline NATS/NERL's machinery for determining pay and conditions and briefly compare the pattern of pay reviews concluded through this machinery in recent years with trends in the wider economy. The analysis in this section of broad trends over the years since 2009 provides context and background for the results from the benchmarking exercise reported in chapter 8. We also review how practice at NERL on various aspects of pay and benefits compares with practice elsewhere. We look at pension provision separately in the chapter 7. Main conclusions are:

- Analysis of broad trends over the years since 2009 shows basic salaries at NERL have tended to rise a little faster than base pay in organisations across the economy as a whole (section 6.3);
- Annual average paybill costs per FTE employee at NERL have risen faster than average earnings across the economy as a whole and in the private sector since 2009 (section 6.4);
- The extent to which pay progression for ATCO and ATSA grades is based on length of service is unusual among private sector services organisations (section 6.5);
- The form of bonus and incentive arrangements at NERL is not out of line with practice elsewhere (section 6.6);
- The 35-hour net basic working week at NERL is a little shorter than the all-economy median and the median in the air transport sector (section 6.7);
- Overtime pay practice at NERL for less senior staff is broadly in line with wider practice (section 6.7.1);
- Annual leave entitlement at NERL is higher than typical practice across the economy as a whole (section 6.8).

## 6.1 Machinery for pay determination

NATS, the parent company of NERL, has well-established collective bargaining arrangements to determine pay and conditions for most employees and the agreements apply to relevant NERL staff. The NATS trade union side is made up of three groups:

- Prospect ATCO branch representing Air Traffic Controllers (ATCO grades);
- Prospect ATSS branch representing engineering and scientist staff (ATCE and STAR grades);
- PCS representing Air Traffic Assistants and managerial and support staff (ATSA and (MSG grades).

In previous years the groups have negotiated separately on their pay reviews, but for the 2013 review a single three-year agreement was concluded covering all negotiated grades. In
addition, there is a Personal Contract Group (PCG staff), made up mainly of some 180 senior managers not covered by the collective negotiations.

There have been no significant changes to grading structures at NERL over the past five years. The distribution of staff across the various employee groups in 2013 is as follows<sup>9</sup>:

- 56% are ATCOs or ATSAs;
- 26% are in the ATCE and STAR grades;
- 11% are in the MSG grades;
- 7% are in the PCG group.

## 6.2 Industrial action

There have been no days lost to industrial action since 1982.

NERL has highlighted the potential cost impact of the closure of UK airspace as a result of industrial action (or from other causes), putting a value of at least £50m per day on closure<sup>10</sup>.

## 6.3 The pattern of pay settlements

Basic pay excluding all bonuses and extras makes up the largest single element of earnings for NERL staff. Pay increases for the NATS negotiated grades (making up some 93% of the NERL workforce) take effect from 1 January each year. The most recent settlement is a three-year agreement spanning the period 1 January 2013 to 31 December 2015. Salary increases for PCG staff take effect in April, based on individual performance ratings.

Table 17 provides a summary of basic pay increases in January annual reviews over the period 2009 to 2013 at NERL for its negotiated grades and the average April pay awards for the PCG group. It shows how they compare with the median level of pay settlements and awards monitored by IDS in the relevant quarters and with the annual RPI and CPI increases to the month preceding each review.

Comparing annual basic pay rises at NERL with the median level of annual basic pay settlements and awards across the economy as a whole between 2009 and 2013 shows:

<sup>&</sup>lt;sup>9</sup> Workforce distribution figures are derived from the data supplied by NERL to IDS during the course of this exercise.

<sup>&</sup>lt;sup>10</sup> NERL customer consultation workshop 2: opex, June 2013, based on a conservative assessment of IATA estimates.

- For the negotiated grades, the increases have been above the all-economy median in three of the five annual reviews, equal to the median in one (January 2009) and below it in one (January 2010);
- For PCG staff the average increase has been above the all-economy median in four of the five annual reviews and below it in one (April 2010).

Comparing annual basic pay rises at NERL against inflation as measured by the RPI in the month before the review:

- For the ATCO grades, the increases have been above the level of the relevant annual RPI inflation rate in three of the five annual reviews and lower in two (January 2010 and 2013);
- For the ATSA and MSG staff, basic increases have been above the level of the relevant annual RPI inflation rate in one review, below in three and equal to it in one;
- For the ATCE and STAR grades, basic increases have been above the level of the relevant annual RPI inflation rate in one and lower in four;
- For PCG staff, average basic increases have been above the level of the relevant annual RPI inflation rate in two reviews and lower in three.

	ATCO grades	ATSA & MSG grades	ATCE & STAR grades	PCG staff*	RPI annual rise**	CPI Annual rise**	IDS settlement median
	%	%	%	%	%	%	%
Jan 2009	3.0	3.0	3.0	-	0.9	3.1	3.0
Apr 2009	-	-	-	3.06	-0.4	2.9	1.5
Jan 2010	0.0	0.0	0.0	-	2.4	2.9	1.9
Apr 2010	-	-	-	0.0	4.4	3.4	2.0
Jan 2011	5.2	4.2	4.2	-	4.8	3.7	2.7
Apr 2011	-	-	-	3.97	5.3	4.0	2.5
Jan 2012	5.0	4.8	4.5	-	4.8	4.2	3.0
Apr 2012	-	-	-	3.83	3.6	3.5	2.5
Jan 2013	2.75	2.75	2.75	-	3.1	2.7	2.5
Apr 2013	-	-	-	2.73	3.3	2.8	2.5
Total % rise	16.9	15.6	15.2	14.3	15.9***	14.2***	13.8****

#### Table 17 Annual pay reviews

Source: NERL, ONS and IDS

\*Average pay awards for PCG staff at NERL

\*\*Annual rise to preceding month, ie December and March

\*\*\*Cumulative rise December 2008 to December 2012

\*\*\*\*Cumulative rise January 2009 to January 2013

In summary, analysis of annual movements in basic pay would suggest that basic salaries for negotiated grades at NERL have been rising somewhat faster than basic pay across the economy as a whole over the period 2009 to 2013<sup>11</sup>.

Taken over the period January 2009 to 2013, the basic salary increases from successive reviews amounted to a cumulative 16.9% rise for ATCOs, 15.6% for ATSA and MSG staff, and 15.2% for ATCE and STAR grades. Over the same period the cumulative basic pay rise provided by median reviews across the economy as a whole was 13.8%. As these results indicate, within NERL the basic salaries of ATCOs have been rising a little faster than those of other NERL negotiated employees over the period. We understand from NERL that the higher increases for ATCO grades were linked to changes in working practices to improve productivity. For PCG staff, the cumulative average pay award over the period April 2009 to 2013 was 14.3%, a little lower than the cumulative figures for the negotiated groups.

#### 6.4 The pattern of earnings movements

It should be noted that the comparisons in Table 17 focus on headline figures from annual pay reviews. In contrast the estimates of changes in average annual paybill costs per FTE employees shown in the previous chapter in Table 16 reflect movements in all elements of earnings, including pay increases linked to progression, shift and overtime working and bonuses. The figures are also affected by changes in the make-up of the workforce as a whole and within the different staff groups. There is therefore a basis for comparison with the ONS seasonally adjusted AWE index of total pay, including bonuses but excluding arrears of pay, to give a broad indication of trends.

Table 18 shows the results of this comparison. Drawing on the data from Table 16, it shows average annual paybill costs per FTE employee at NERL have risen faster than seasonally adjusted average weekly earnings across the economy as a whole and in the private sector.

<sup>&</sup>lt;sup>11</sup> NERL point out that pay rises between 2011 and 2012 reflect significant changes to working practices and T&Cs negotiated as part of the pay deal to facilitate headcount reductions and productivity improvements.

Table 18 Average paybill costs per FTE employee (excluding pensions) compared with national average earnings movements<sup>12</sup>

	% change over period yr to March 2009 to yr to March 2013
ATCO	21.0
ATSA	16.1
ATCE	4.9
Other*	26.3
NERL Total	18.7
Whole economy AWE	10.8
Private sector AWE	9.8

Sources: IDS calculations based on NERL data, ONS

\*Includes MSGs, PCGs STARs

## 6.5 Pay progression

In addition to the January reviews of the pay structure, staff in the negotiated grades receive progression increases each April if they are not at the top of their pay scale or range. These pay progression arrangements can be summarised as follows:

- For ATCO and ATSA grades, fixed-value increments are paid annually. Our understanding is that it takes 20 years for an ATCO to progress from the bottom to the top of the ATCO pay scale on the basis of fixed-value increments (though staff can enter the ATCO scale at higher points);
- MSG, ATCE and STAR grades have flexible progression, with only the band minima and maxima fixed. Movement through the bands is based on individual performance, with managers able to vary 'standard progression' within budget constraints;
- Standard annual progression for MSG grades varies by level from 4% to 4.5% of band maximum, with movement from minimum to the maximum typically taking between four and six years;
- For ATCE and STAR grades standard progression is 3.75%, with movement from minimum to the maximum typically taking between five and seven years;
- For PCG staff, salaries are market-based with a single annual April increase based on individual performance ratings, subject to an overall budget (normally similar to the level of salary increases for negotiated grades).

As ATCO and ATSA graded staff make up more than half of the workforce, a majority of NERL staff receive pay progression on the basis of length of service (up to grade maxima). This is unusual in private sector services: according to the CIPD's latest survey of reward

<sup>&</sup>lt;sup>12</sup> Some of the variation shown can be accounted for by changes in grade mix and the introducing of an executive bonus scheme in 2009.

practice<sup>13</sup>, only 17.3% of private sector services organisations use length of service as a criterion for base pay progression (compared to 60% of public service organisations). A further issue that should be noted is that lengthy service-based scales have increasingly been challenged on grounds of their potential discriminatory impact<sup>14</sup>.

In practice, well over half of NERL staff are at the top of their pay scale or band, as Table 19 shows. The key exception is the STAR group, with only a quarter (26.2%) at the maximum.

	%
ATCO	51.6
ATSA	65.2
ATCE	70.1
MSG	54.5
STAR	26.2
Whole Workforce	58.4
Source: NEDL data	

Table 19 Proportion of NERL employees at the top of their scale 2013

Source: NERL data

#### 6.6 **Bonus and incentive payments**

Senior ATCE and STAR staff are covered by group bonus arrangements linked to achievement of particular 'milestone' targets. Management and PCG staff are covered by incentive schemes linked to a combination of personal targets and company performance. While across the private sector group-based performance-related reward schemes are less common than individual-based schemes, such arrangements are by no means uncommon, according to the CIPD's latest reward survey.

#### 6.7 **Basic weekly hours**

The contractual basic working week for full-time employees at NERL is 40 gross hours (ie including meal breaks), giving a net week of 35 hours. There are some local variations in hours based on working practices at specific sites.

As Table 10 in the previous chapter showed, the median level of basic working hours across the economy as a whole and also across the private sector is 37.5 hours. The latest IDS research on working hours arrives at a similar figure, with 374-3734 emerging as the most common level of basic hours for non-manual employees<sup>15</sup>. At 35 hours, the NERL net basic

<sup>&</sup>lt;sup>13</sup> Reward Management Annual Survey Report 2013, CIPD, May 2013

http://www.equalityhumanrights.com/advice-and-guidance/tools-equal-pay/checklists-equalpay-in-practice/6-pay-progression/

<sup>&</sup>lt;sup>15</sup> Hours and Holidays 2012, IDS, September 2012

working week is therefore some 6.7% shorter than the all-economy median level. It is also a little shorter (by 3.3%) than the 36.2-hour median basic week in the air transport sector as a whole.

## 6.7.1 Overtime working

Details of overtime compensation rates for negotiated grades at NERL are set out in Table 20.

#### Table 20 Overtime compensation at NERL

Group	Monday t Friday	0	Saturdays		Sundays	Public Holidays (see note 1 below)
1	Hourly payme time and half time off equa hours worked	ent at or I to d	Hourly payment at double time or half plain time plus time off equal to hours time worked		Hourly payment at double time or plain time plus time off equal to hours worked	Hourly payment at treble time or double time plus time off equal to hours worked
2	Hourly payme plain time or off to hours v	ent at time vorked	t at Hourly payment at ne time and a half or rked half plain time plus time off equal to hours worked		Hourly payment at double time or plain time plus time off equal to hours worked	Hourly payment at treble time or double time plus time off equal to hours worked
3	Time off equiv to hours worl where possib	valent ked ble	Hourly payment at half plain time plus time off equal to hours worked where possible		Hourly payment at plain time plus time off equal to hours worked, where possible	Hourly payment at treble time or double time plus time off equal to hours worked
4			Time off equal to hours worked, where possible		Time off equal to hours worked, where possible	Time off equal to hours worked, where possible
Group	1	Grou	Group 2		oup 3	Group 4
MSG 9 - 5	MSG 9 - 5 MSG 4,		MSG 3 ATCO		0 1, ATCO 1+,	MSG 2, MSG 1
ATSA 3, ATSA 2, ATSA 1 ATCO 3		, ATCO 2			ATCE2, ATCE 1	
ATCE 6, ATCE 5 ATCE 4		, ATCE 3			ATCT&SA, ATCT&SB	
STAR 6, S	TAR 6, STAR 5 ATSA 4, DSS/ATC Planner, ATC T&SC				STAR 2, STAR 1	

Source: NERL

Among other organisations, the most common pattern is for weekday overtime hours to be paid at time-and-a-half, with the weekday rate also generally applying to Saturday

STAR 4, STAR 3

overtime<sup>16</sup>. For overtime worked on Sunday, the most common rate is double time. Pay practice at NERL in relation to overtime working for Group 1 and 2 grades is therefore broadly in line with practice elsewhere in the economy. In general, however, managers and other more senior staff do not qualify for overtime pay. The exact level of the cut off varies between organisations, but it tends to apply to staff earning in the higher £20,000s.

# 6.7.2 Shift and unsocial hours working

Enhanced rates ranging from 25% to 110% apply for ATCOs working shift and unsocial hours according to their pattern:

- 110% for permanent nights without any option to work days;
- 100% for those on shift rosters including nights and weekends, with a minimum of 203 annual attendances;
- 75% for those on shift rosters requiring less than 203 attendances including either nights or weekend working (but not both);
- 25% for those on shift rosters containing morning and afternoon shifts.

For ATSA grades, unsocial hours enhancements range from 25% to 100%, depending on work pattern.

# 6.8 Annual leave

Annual leave entitlement in addition to public holidays at NERL ranges from 26 days to 33 days according to length of service and – for some employee groups – date of appointment. For all full-time employees except those MSG and ATSA and related employees appointed after 15 September 2011:

- 28 days for those with less than eight years' service;
- 30 days after eight years;
- Rising to 33 days after 10 years of service.

For MSG and ATSA and related employees appointed after 15 September 2011, leave entitlement is a little lower at the outset:

- 26 days during the first year of service;
- 28 days after the first year;
- 30 days after eight years;
- Rising to 33 days after 10 years of service.

<sup>&</sup>lt;sup>16</sup> Overtime 2012, IDS HR Study, October 2012

Taking organisations across the economy, median basic annual leave entitlement in 2012 was 25 days excluding public holidays, with an average (mean) of 24.7 days<sup>17</sup>. As Table 21 shows, after 10 years of service annual leave entitlement is less than 30 days in the great majority (86.7%) of organisations. Annual leave entitlement for NERL staff is therefore higher than across the economy as a whole.

Annual leave	On entry %	10 Years %
20 days	7.1	2.0
21-24 days	23.6	10.3
25 days	46.1	29.1
25½-29 days	20.2	44.8
30 days or more	2.2	13.3

Table 21 Practice on service-related leave (% of organisations)

Source: IDS

#### 6.9 Company cars

Company cars are provided by NERL to managers employed on personal contracts, including HR business partners, and to air traffic control managers employed on the SATCO grade, but not to engineering managers employed on the ATCE grades. We understand there have been no significant changes in provision since 2009 beyond some changes in the value of car allowances to reflect market practice.

Across the private sector, the great majority of senior managers, heads of function and board-level directors are entitled to a company car (or a car allowance)<sup>18</sup>. The 2009 report by IDS concluded that that the pattern of provision at NERL was broadly in line with market practice, subject to some variations from market practice in relation to senior ATCE and MSG grades. There have been no major shifts in the external market since then to alter that assessment.

#### 6.10 Private health insurance

Private health insurance is provided by NERL to managers employed on personal contracts, all air traffic control staff and senior engineers.

The 2009 report considered this was broadly line with the market practice of providing the benefit to managerial and senior specialist staff. The 2009 report, however, also pointed out that NERL does not provide this benefit to senior finance specialists, for example financial accountants employed on the MSG 3 grade, as would be the case in the external

<sup>&</sup>lt;sup>17</sup> Hours and Holidays 2012, IDS HR Study 974, September 2012

<sup>&</sup>lt;sup>18</sup> Company Car Policies 2013/14, IDS, July 2013

market. There seem no grounds to revise this assessment in 2013. According to recent research by Croner<sup>19</sup>, a majority of private sector employees in roles upwards from heads of smaller departments and specialists, such as senior engineers and senior systems analysts, are entitled to receive private medical insurance cover.

## 6.11 Sick pay

NERL's provision of sick pay of six months at full and six months at half pay is broadly similar to public sector practice, but is better than that typically found in the private sector. According to CIPD research, in private sector services the average (mean) maximum duration of sick pay is 13.6 weeks at full rate and 11.4 weeks at reduced rate<sup>20</sup>. Details of private sector provision on sick pay vary widely<sup>21</sup>, but it is reasonable to use an entitlement of three months at full pay and three months at half pay as a proxy for good practice in the private sector.

#### 6.12 Summary overview of benefit market comparisons

A summary overview of how the main non-cash benefits (excluding pensions) for NERL staff compare with the private sector as a whole is set out in Table 22.

Benefit	Summary of market provision	Summary comparison of NATS/NERL provision
Basic weekly hours	Around 37.5 hours with small variations across major sectors	35 hours, which is better than average
Annual leave – basic excluding public holidays	25 days at the median. Public sector slightly ahead, but transport sector behind	28 days, which is better than average. 26 days for MSG and ATSA staff appointed after 2011 is close to the market median
Company car/car allowance	Generally not available to staff but provided to managers and some senior specialists	Available to SATCOs and PCG management staff only. Not given to engineering managers or senior specialists in finance
Private health insurance	Generally available to managers and senior specialists e.g. engineers, accountants	Available to all ATCOs, and managerial staff, though family membership not available for ATCE post-holders
Sick pay	3 months' full pay and 3 months' reduced pay is a fair proxy for good practice in the private sector	6 months' full and 6 months' half pay is better than the private sector norm

Table 22 Summary overview descriptors of external market and NERL benefits' provision

<sup>&</sup>lt;sup>19</sup> *Employee Benefits Report 2011-12*, Croner, November 2011

<sup>&</sup>lt;sup>20</sup> Absence Management 2012, CIPD, October 2012

<sup>&</sup>lt;sup>21</sup> Sick Pay, IDS Study 939, 2011

# 7 Pension arrangements

As part of this study to assess the efficiency of NERL's total employment costs, it is important to consider pension arrangements and how pension costs and benefits at NERL compare with those of other organisations in the wider economy. To set the scene, we begin with a brief overview of occupational pension developments in recent years. The key points are:

- Across the economy as a whole, the number of occupational pension schemes has been in decline, with growing numbers closed to new entrants and to further accrual of benefits (section 7.1);
- There has been a trend in the private sector to move away from defined benefit (DB) provision towards defined contribution (DC) arrangements;
- Among larger employers, the trend has been to operate more than one pension scheme, often as a result of closure of a final salary pension scheme to new entrants and introduction of a DC scheme for new staff;
- Average regular employer and employee contributions to DB schemes are substantially higher than those to DC schemes (section 7.2);
- The most common rate of DB accrual is one sixtieth for each year of pensionable service, followed by an eightieth plus a 3/80ths lump sum at retirement;
- The normal pension age for unreduced benefits is typically 60 or 65;
- In terms of uprating of DB benefits, the most common approach is to guarantee to match RPI up to a capped level of increase;
- Like many larger employers, at NERL a legacy DB scheme applies for most current staff with severely limited scope for changing the benefit structure while a DC scheme applies for newer recruits (section 7.3);
- For eligible NERL employees in the DB scheme member contributions are above average and the scheme is more favourable than standard market practice in terms of employer contribution levels, the accrual rate, pensionable age and uprating arrangements (section 7.4);
- The DC scheme applying to newer NERL employees is broadly in line with private sector DC practice as a whole (section 7.5).

## 7.1 Trends in pension provision across the wider economy

The total number of occupational pension schemes has been in decline. In its latest survey the ONS reported an estimated total of 44,190 occupational pension schemes of all types in

the private sector<sup>22</sup>. This marked a slight fall from 2010 (44,370) and a decline of nearly a fifth from the 2008 estimate of 54,110.

In 2011, almost 23,000 schemes were open to new joiners, while 12,520 were closed to new members but allowed existing members to continue accruing benefits, 6,940 were frozen (ie nor permitting any further accrual of benefits) and 2,040 schemes were in the process of winding up. Table 23 summarises the main trends in private sector occupational pension provision by scheme status since 2008.

	No. of schemes					
	2008	2009	2010	2011		
Open	34,030	24,930	21,730	22,690		
Closed	10,080	16,480	12,990	12,520		
Frozen	6,870	4,050	8,400	6,940		
Winding up	3,130	3,110	1,250	2,040		
Total	54,110	48,570	44,370	44,190		

Table 23 Private sector occupational pension schemes by status, 2008-11

Source: ONS, OPSS annual report for 2011, 2012

Notes:

1. Respondents to OPSS survey: 1,278 private sector schemes with 'live' status on the Pension Scheme Register and 198 public sector schemes.

2. Hybrid schemes were treated as DB schemes for the purpose of the survey

3. All public sector schemes in the survey are DB.

As far as the form of pension benefits is concerned, the general trend in the private sector has been away from defined benefit (DB) provision towards defined contribution (DC) arrangements. In the private sector there were approximately 1.9 million active members in DB schemes in 2011 – a decline of more than a quarter since 2008 – and 0.9 million in membership of DC schemes (Table 24).

<sup>&</sup>lt;sup>22</sup> Occupational Pension Schemes Survey (OPSS) Annual Report 2011, ONS, 2012

	Millions (no.)				
	2008	2009	2010	2011	
Active members – total	3.6	3 3	3.0	29	
Of which:	5.0	5.5	5.0	L.5	
<ul> <li>Defined benefit</li> </ul>	2.6	2.4	2.1	1.9	
<ul> <li>Defined contribution</li> </ul>	1.0	1.0	1.0	0.9	
Pensions in payment – total	5.0	51	5.0	5.0	
Of which:	5.0	5.1	5.0	5.0	
<ul> <li>Defined benefit</li> </ul>	4.9	5.0	5.0	4.9	
<ul> <li>Defined contribution</li> </ul>	0.0	0.1	0.1	0.1	
Preserved pension entitlements – total	6.7	6.6	6.6	6.3	
Of which:	0.7	0.0	0.0	0.5	
<ul> <li>Defined benefit</li> </ul>	5.6	5.5	5.4	5.2	
<ul> <li>Defined contribution</li> </ul>	1.1	1.1	1.2	1.1	
Total	15.3	15.0	14.7	14,2	
Of which:	13.5	10.0	,	1.1.2	
<ul> <li>Defined benefit</li> </ul>	13.1	12.9	12.5	12.1	
<ul> <li>Defined contribution</li> </ul>	2.2	2.1	2.2	2.1	

Table 24 Number of members in private sector occupational pension schemes by membership type and benefit structure

Source: ONS, OPSS annual report for 2011, 2012

Among larger employers, the trend has been towards operating more than one pension scheme, as Table 25 shows. Often this is a result of the closure of a final salary pension scheme to new entrants while allowing existing members to continue accruing benefits and the introduction of a DC scheme for new staff. According to the Association of Consulting Actuaries 2011 survey<sup>23</sup>, over half (58%) of UK private sector employers with 250 to 4,999 employees were running both DB and DC pension schemes, rising to two thirds (67%) among organisations with over 5,000 employees.

Table 25 Types of pension arrangements being run by private sector employers 2011					
Pension provision	250-4,999 employees %	5,000+ employees %	All employers %		
Defined benefit only	4	14	5		
DB and DC	58	67	41		
Defined contribution only	38	19	54		

Source: ACA, 2012

<sup>&</sup>lt;sup>23</sup>Workplace Pensions: 2011 ACA Pension Trends Survey Statistical Supplement, Association of Consulting Actuaries, January 2012

## 7.2 Patterns of contributions and benefits

There is a notable gap between average contributions to DB schemes and those to DC schemes, leaving aside any special employer contributions to tackle historic deficits in DB funding. Table 26 provides an overview of average regular contribution rates by employers and members to private sector occupational pension schemes by workforce size and benefit structure. The results are drawn from the latest OPSS survey from the ONS. They show that across all private DB schemes, the average contribution was 4.9% for members and 14.2% for employers. Across DC schemes, member and employer contribution rates were 2.8% and 6.6% respectively. Employer contributions to DC schemes tend to rise with workforce size, averaging 6.5% or above for organisations employing more than 1,000 people.

benefit structure and contributor						
	Defined benefit			Defined contribution		
No. of employees	Member %	Employer %	Total %	Member %	Employer %	Total
10,000+	4.7	13.7	18.5	2.5	6.8	9.3
5,000-9,999	5.8	16.8	22.5	2.7	6.9	9.6
1,000-4,999	5.4	14.4	19.8	3.3	6.5	9.8
100 to 999	5.0	15.3	20.3	3.5	5.9	9.4
12 to 99	3.9	19.0	22.9	2.2	5.2	7.4
Total	4.9	14.2	19.2	2.8	6.6	9.4

Table 26 Weighted average contribution rates to private sector occupational pension schemes by size, benefit structure and contributor

Source: ONS, OPSS annual report for 2011, 2012.

Despite some moves towards career-average schemes, the great majority of private sector employees in DB pension schemes are members of schemes that base pensions at retirement on final pensionable earnings. Table 27 shows results from the latest OPSS survey from the ONS on the pattern of accrual rates in recent years. The most common rate of accrual is one sixtieth for each year of pensionable service (36.8% of members in 2011), followed by an eightieth plus a 3/80ths lump sum at retirement (26.3% of members).

	No. of members (millions)					
	2008	2009	2010	2011		
Better than 60ths	0.3	0.5	0.3	0.2		
60ths	1.4	1.1	0.9	0.7		
80ths plus 3/80ths lump sum	0.3	0.4	0.3	0.5		
Between 60ths and 80ths	0.2	0.2	0.2	0.3		
80ths	0.2	0.1	0.2	0.1		
Less generous than 80ths	0.0	0.1	0.0	0.0		
Non response	0.0	0.1	0.1	0.1		
Total	2.6	2.4	2.1	1.9		

Table 27 Number of active members of private sector occupational pension schemes by rate of accrual, 2008-11

Source: ONS, OPSS annual report for 2011, 2012.

The normal age at which members could draw an unreduced pension in DB schemes in 2011 was typically either at age 60 or 65 (Table 29)<sup>24</sup>. In DC schemes, in contrast, age 65 was by far the most common identified age for normal retirement.

Age	Defined benefit %	Defined contribution %
55	5	7
60	44	9
61-64	1	0
65	39	46
66	0	0
67	1	0
Unknown	9	38

Table 28 Normal pension ages in private sector occupational pension schemes 2011

Source: DWP, Employers Pension Provision Survey 2011, 2012

<sup>&</sup>lt;sup>24</sup> Employers' Pension Provision Survey 2011, Research Report 802, Department for Work and Pensions, 2012

In terms of uprating DB benefits, the most common approach in 2011 was a guarantee of uprating in line with RPI subject to a ceiling on levels of increase, but with the cap set higher than 2.5% a year (applying to 36.8% of members). Only 15.8% of private sector Table 29 sets out the detail of mechanisms for increases to pensions payable from benefits currently being accrued.

LOII		
Mechanism	No. of members (millions)	% of members
Statutory minimum CPI capped at 2.5%	0.3	15.8
Full uncapped CPI	0.3	15.8
CPI with a cap above 2.5%	0.1	5.3
RPI with a cap above 2.5%	0.7	36.8
Fixed rate of 2.5% or higher	0.0	0
Statutory minimum with scope for discretionary increases	0.1	5.3
Other	0.4	21.1

Table 29 Active members of private sector occupational pension schemes by uprating mechanism 2011

Source: DWP, Employers Pension Provision Survey 2011, 2012

#### 7.3 NERL pension arrangements

Two different pension arrangements operate for NERL staff, both forming part of NATS schemes (Table 30). NERL is typical of larger employers in contributing to a legacy DB scheme and an open DC scheme (Table 25). Total cash pension costs of employer contributions by NERL to the pension schemes stood at £97m in 2012/13<sup>25</sup>. In summary:

- The largest scheme in terms of membership and total pensionable salaries is the NATS Section of the CAA Pension Scheme, a DB scheme covering those NERL employees who became members before 31 March 2009 and whose contracts of employment state they are eligible;
- Employees who joined on or after 1 April 2009 are eligible for membership of the NATS Defined Contribution Pension Scheme.

The DB scheme has been subject to a number of changes in recent years to contain its costs, including introduction of a cap on increases to pensionable earnings, excluding promotion and progression increases, and a move from RPI to CPI as the measure for uprating pensions in payment. We understand from NERL that legislative and trust deed restrictions mean there is severely limited scope for further changes to contain the costs of the DB scheme.

<sup>&</sup>lt;sup>25</sup> RP2 Business Plan, Appendix H, page 58

## 7.4 The NERL DB scheme compared with market practice

Key features of the DB scheme include:

- An employee contribution rate for most members of 6%;
- An accrual rate of 1/58<sup>th</sup> per year of pensionable service;
- A pensionable age of 60;
- Uprating of benefits in payment in line with the RPI on those benefits accrued prior to November 2013 (except for the GMP element for which separate arrangements apply);
- For the portion of pension based on service from November 2013, uprating of benefits in payment will be in line with CPI rather than the RPI;
- From April 2013, a cap on increases to pensionable earnings of CPI + 0.25% each year, excluding promotion and progression increases, replacing the former cap of RPI + 0.5%;
- The DB fund has a substantial deficit.

Based on comparison with the results in Table 26, the NERL employee contribution rate of 6% is higher than the average member contribution of 4.9% to DB schemes overall. The employer contribution rate is some three times higher than the average in DB schemes as a whole.

The accrual rate of 1/58<sup>th</sup> places relevant NERL employees in the top 10%, according to the data shown in Table 27. The pensionable age of 60 is in line with the upper half of private sector DB pension schemes (Table 28). Only a small minority of schemes operate full uprating of benefits in payment in line with an official inflation index (Table 29), as the DB scheme applying at NERL does at present. The benefits of the DB scheme for relevant NERL employees therefore compare very favourably with those provided by the average private sector DB scheme.

## 7.5 The NERL DC scheme compared to market practice

Key features of the DC scheme applying to eligible NERL staff include:

- A member contribution rate of between 4% and 9% with an employer contribution of twice the employee;
- In practice, over 90% of members make the default contribution of 6%, generating an employer contribution of 12%;
- A normal retirement age of 65.

Based on the results in Table 26, the average ratio of employer to member contributions is 2.4:1 across DC schemes as a whole, compared to 2:1 for relevant NERL employees. The retirement age of 65 is the same as the most common normal pension age elsewhere in the economy (Table 28). The DC scheme is therefore broadly in line with DC practice more generally.

Table 50 Outline of pension analigements covering NERE stan					
Scheme	Normal pensionabl e age	Accrual rate	Employee contribution	Comments	
DB scheme: NATS Section of the CAA Pension Scheme	60	1/58th	6% for most	Closed to new entrants since 2009	
DC scheme: NATS Defined Contribution Pension Scheme	65	-	4% to 9% with default of 6%	The costs of administration and insured benefits are met by the employer in addition	

Table 30 Outline of pension arrangements covering NERL staff

The blended employer contribution rate across the two schemes and including any deficit reduction is 43.7 per cent.

## 7.5.1 Treatment of pension provision for benchmarking purposes

Employer pension contributions have been excluded from the total reward benchmarking exercise presented in chapter 8. The data and comparisons in this section provide a basis for assessing how pension provisions at NERL compare with the wider market.

## 8 All staff pay benchmark analysis

This chapter begins with a brief summary of the conclusions from previous benchmarking exercises for NERL staff, followed by presentation of the results from this current review of employment costs. The chapter also includes a discussion of our methodology, specifically how we have mapped the various roles in NERL to other benchmark jobs. This is followed by an overview of the key findings by job family at the levels of basic salary, total cash and total reward. Definitions of these various reward elements are included later in the chapter.

## 8.1 Conclusions of previous benchmarking exercise

The 2009 report by IDS prepared for the CAA concluded that:

- The lack of jobs in the UK directly comparable with air traffic controllers who account for a large part of the NERL workforce make the process of benchmarking difficult, particularly for some categories of staff;
- There had been an above-average trend in settlements and earnings applying to NERL staff over the period 2004 to 2009, but at that time this trend had not yet led to significant overpayment in salaries, once more precise comparisons of jobs by skill and responsibility were made.

## 8.1.1 Conclusions from the 2013 benchmarking exercise

The benchmarking element of the work involves a comparison of the rate for the job versus market data. The difference, expressed as a percentage and shown in Table 32 to Table 37 below, shows how a NERL job sits relative to market data.

• Analysis by job family (a weighted average of all differentials in each job family for total reward, excluding pensions) is shown in Graph 1: below.



#### Graph 1: % cost variance of average NERL job family differential vs market

## 8.2 The process of job sizing for comparisons

A benchmarking exercise depends on the use of a fair method of comparison between jobs. This is particularly critical where the same or very similar activities are not being carried out in a substantial number of organisations, as in the case of air traffic control of the type handled by NERL. In the absence of a large sample of organisations carrying out similar operations and employing very similarly skilled staff, it is more difficult to establish a clear market rate for a job. Nevertheless, while a particular post may be unique, the job holder will still require a mix and level of skills for which equivalents exist in the wider labour market.

NERL has expressed a strong view that, because its air traffic controllers operate in a complex three-dimensional space, it is not possible to make direct job-for-job comparisons with ATCOs in other UK organisations. Instead, direct comparisons should be with air traffic controllers operating in similarly complex air space elsewhere in Europe. However, we have reservations about this approach and these are outlined in Chapter 11.

The reality is that, no matter how specialist a job or function, those who acquire the skills to perform the role are recruited initially in the general labour market and have scope for moving to different types of work with other employers. The remuneration levels for all jobs are, therefore, subject to the continual informal benchmark labour market tests of the employer's ability to attract candidates of the right calibre, to recruit them in sufficient numbers, and to retain trained and motivated staff in adequate numbers.

In addition, virtually all organisations have 'job contours' – jobs that are seen to be at broadly equivalent levels as expressed internally in the organisation through similarity of grading and/or salary level. On this basis, it is feasible to benchmark even the most specialist roles by reading across from external benchmark results to other jobs in the same job contour (or level) of an organisation.

The present benchmarking exercise is based on matching NERL roles to IDS job levels (more detail about the IDS levels is given in Appendix 17.4). To assist with the process NERL provided Hay points ranges (minimums and maximums), and in some cases job descriptions, for a number of the job families including ATCE, STAR, MSG and HR. Based on our understanding of job matching, and experience of mapping many roles that have been evaluated using other schemes, including Hay, we were able to establish the most appropriate IDS job level in each case.

One clear omission was the provision of Hay points for ATCO and ATSA roles. NERL informed us that roles within these job families have not been evaluated and in addition, role profiles are not available for air traffic controllers. Therefore, we needed to establish how best to assign the most appropriate IDS job level as the basis for subsequent role mapping, taking account of the specialist nature of the ATCO and ATSA jobs as well as specific sectoral considerations.

Our approach, therefore, was two-fold:

1. In order to establish the most appropriate IDS job level we began by looking at the military sector with which we are very familiar, and in particular the work of military air traffic controllers. Our typical methodology for benchmarking more specialist roles, or roles where there are few direct comparators, is to establish a reference point which we can then build on to identify a suitable job weight.

For this exercise, and in discussions with our contacts for the military sector, we were able to confirm the benchmark floor for a military ATCO – which is at the level of Warrant Officer (OF1)<sup>26</sup>. Based on our understanding of military roles at and above the level of Warrant Officer, and their civilian comparators, we were then able to identify the most appropriate IDS job levels for Senior and Operational ATCOs in NERL.

<sup>&</sup>lt;sup>26</sup> The role of Warrant Office (OF1) equates to an IDS job level 6.

#### Assessing employment costs at NERL

2. Secondly, to take account of the most appropriate sector(s) against which to benchmark we looked at power control engineering roles which are found in the energy and transport sectors. It is our view that these jobs are involved in controlling the movement of an object in relation to the movement of many other similar objects in highly regulated environments, requiring high levels of precision and safety. Job-holders also need to demonstrate the ability to deal with unplanned events, which we believe provides a level of comparability with the environment in which ATCOs work.

Taking the two points in turn, it is important to stress that in our benchmarking methodology we have not attempted to treat either military ATCOs or power control engineers as direct comparators to ATCOs at NERL. Military ATCOs, for example, work in less complex airspace compared with NERL ATCOs and may, arguably, be compared more directly with ATCOs employed in tower control operations at regional airports. Similarly, power control engineers operate in two dimensional space whereas air traffic control occurs in three dimensions, thereby making the latter perhaps unique to the UK labour market.

The results of our mapping exercise are shown in Table 31 overleaf. It should be noted that for some roles – for example, Systems Engineer, Head of Section and Section Manager – the mapping cuts across two IDS job levels. In such cases, we have applied the average of salary data at two different job levels. Similarly, where we have established that a role sits either towards the lower or higher end of an IDS job level, we have made the appropriate lower or upper quartile adjustments to the salary data.

Job	Role	Job family	Grade/ band	IDS job level
ID				
1	Senior ATCO	SATCO	Band 5	8
2	Senior ATCO	SATCO	Band 4	8
3	Operational ATCO 2	SATCO	Band 5	8
4	Operational ATCO 2	SATCO	Band 4	7
5	Air Traffic Assistant	ATSA	Grade 1	4
6	Air Traffic Assistant	ATSA	Grade 2	5
7	Air Traffic Assistant	ATSA	Grade 3	6
8	Air Traffic Assistant	ATSA	Grade 4	7
9	Engineering Manager	ATCE	Grade 1	8
10	Senior Systems Engineer	ATCE	Grade 2	8
11	Senior Systems Engineer/Project Manager	ATCE	Grade 3	7
12	Systems Engineer	ATCE	Grade 4	6/7
13	Maintenance Engineer	ATCE	Grade 5	5
14	Junior Engineer	ATCE	Grade 6	4/5
15	Head of Section	STAR	Grade 1	8/9
16	Principal Specialist	STAR	Grade 2	8
17	Senior Research Analyst	STAR	Grade 3	7
18	Senior Research Analyst	STAR	Grade 4	6/7
19	Research Analyst	STAR	Grade 5	5
20	Section Manager	MSG	Grade 1	8/9
21	Business Analyst	MSG	Grade 2	8
22	Senior Project Planner	MSG	Grade 3	7/8
23	Project Planner	MSG	Grade 4	6/7
24	Resource Specialist	MSG	Grade 5	5
25	Management Support Coordinator	MSG	Grade 6	4/5
26	РА	MSG	Grade 7	4
27	HR Business Partner	HR	Level 15	8
28	HR Head of Section	HR	Level 30	9
29	Manager Safety Assurance	Swanwick (Operational Supervisory ATCOs)	Level 15	8
30	General Manager	Swanwick (Operational Supervisory ATCOs)	Level 30	9
31	Programme Manager	Engineering Service Delivery	Level 15	8
32	General Manager – Engineering	Engineering Service Delivery	Level 30	9
33	Head of Investment Finance	Finance	Level 15	9
34	Group Treasurer	Finance	Level 30	9

Table 31 NERL roles ve	s IDS job level matching

## 8.3 Overview of pay benchmarking

In the remainder of this chapter we present the main findings from the pay benchmarking exercise.

Benchmark data was drawn from *IDS Pay* and specific adjustments were made as required. For jobs in the ATCO and ATSA job families, we applied sector (energy and transport) and location (South East adjustments). For roles outside of the ATCO and ATSA jobs families we applied a private services South East adjustment.

Please note that at a relatively late stage in the project, NERL requested that we benchmark ATCO grades against airline pilots. The results of this element of the exercise are shown in section 0.

Our analysis is also based on the following conventions and assumptions.

- Basic pay is annual salary and excludes all variable payments and fixed allowances.
- Total cash, following our standard IDS definition, comprises basic salary, bonus and shift payments. A figure for shift payments, ranging between 9% and 22% and based on level of seniority, was applied to the relevant benchmark data. A bonus percentage was also applied to the benchmark data using figures based on current data contained within two IDS publications the *Managers' Benchmark Pay Report* and *Pay and Conditions in Engineering.* The bonuses applied ranged between 5% and 19%.
- Total reward includes all the elements of Total cash as well as the cost of private medical insurance (PMI), company car provision and the value of holidays. The PMI adjustment to the benchmark data is based on the latest data from employers responding to IDS HR In Practice, *Review of PMI Provision 2013*. The figure for company car provision is based on employers' data for equivalent job levels from *IDS Company Car Policies 2013/14*. The value of holiday entitlement is calculated by multiplying any entitlement over the statutory 28 days by the value of basic salary and dividing by 232 (working days in the year). NERL net full-time hours are 35 hours, or 34 hours, depending on the role. Benchmark data is based on a 37.5 hours week. The value of the difference in hours has been calculated by dividing basic salaries by actual annual hours and multiplying by a 37.5 hour per week equivalent.
- Pensions please note that the pensions element of reward is not dealt with in the benchmarking section below. Given the extent of pension payments as a proportion of total reward at NERL they would render any comparison with the market as meaningless. For this reason pensions are dealt with separately in chapter 7.

# 8.4 Key findings by job family

The graphs below highlight the key findings of our benchmark analysis by job family for basic salary, total cash and total reward<sup>27</sup>.

- Graph 2: shows that the average basic salary variance between NERL and the wider market and 21.9% for the ATSA job family and around 15% for ATCO2, MSG and ATCE.
- Conversely, within the HR and Swanwick (Operational/Supervisory) grades, our analysis found that the average basic salary at NERL was 10% and 5.5% below the market respectively.
- The picture changes slightly when we look at variance against the market by total cash (Graph 3:). Engineering Service Delivery is 15% ahead of the market, while the ATSA job family is now 11% ahead of the market. With the addition of bonus payments to the total cash analysis, the picture changes for STAR grades who now fall to more than 7% below the market.
- The inclusion of benefits including PMI, company car provision and the value of holidays (Graph 4:) sees the picture change for the Finance and SATCO job families, which shift from being behind the market in total cash terms to moving slightly ahead of the market. Jobs in the STAR group remain behind the market – by around 1% – although the picture has improved from the basic salary and total cash analysis.

<sup>&</sup>lt;sup>27</sup> Please note that to ensure compliance with data protection, roles with less than five postholders have been excluded from the tables and graphs.



Graph 2: NERL average basic salary variance vs market by job family







Graph 4: NERL average total reward variance vs market by job family

#### 8.4.1 Basic pay market comparison

Graph 5: presents NERL average basic salaries compared with the market data. It is our approach in benchmarking to highlight those jobs with variances greater than 10% either side of the market median as warranting further investigation. These jobs are presented in table 31 below.

Of particular note, our analysis shows that:

- Operational ATCOs and ATSAs are between 10% and 20% above the market. •
- The STAR group are between 1% and 11% below the market.
- The majority of MSG jobs are between 3% and 10% above the market. •

Table 32 Basic salary vs market greater than +/-10%				
ID	Job/grade	NERL average median salary vs market % variation		
2	Senior ATCO (Band 4)	14.7		
3	Operational ATCO 2 (Band 5)	14.3		
4	Operational ATCO 2 (Band 4)	16.8		
6	Air Traffic Assistant (ATSA/2)	30.6		
7	Air Traffic Assistant (ATSA/3)	30.0		
8	Air Traffic Assistant (ATSA/4)	20.6		
9	Engineering Manager (ATCE/1)	12.6		
10	Senior Systems Engineer (ATCE/2)	20.4		
11	Senior Systems Engineer/Project Manager (ATCE/3)	20.5		
12	Systems Engineer (ATCE/4)	24.6		
13	Maintenance Engineer (ATCE/5)	15.3		
21	Business Analyst (MSG/2)	11.3		
22	Senior Project Planner (MSG/3)	12.3		
23	Project Planner (MSG/4)	16.5		
24	Resource Specialist (MSG/5)	30.9		
25	Management Support Coordinator (MSG/6)	18.7		
26	PA (MSG/7)	21.9		

 $\sim$ 



Graph 5: NERL median basic salary vs market median

ID	Job/grade	NERL median basic salary vs market median % variation
1	Senior ATCO (Band 5)	9.8
2	Senior ATCO (Band 4)	14.7
3	Operational ATCO 2 (Band 5)	14.3
4	Operational ATCO 2 (Band 4)	16.8
5	Air Traffic Assistant (ATSA/1)	6.6
6	Air Traffic Assistant (ATSA/2)	30.6
7	Air Traffic Assistant (ATSA/3)	30.0
8	Air Traffic Assistant (ATSA/4)	20.6
9	Engineering Manager (ATCE/1)	12.6
10	Senior Systems Engineer (ATCE/2)	20.4
11	Senior Systems Engineer/Project Manager (ATCE/3)	20.5
12	Systems Engineer (ATCE/4)	24.6
13	Maintenance Engineer (ATCE/5)	15.3
14	Junior Engineer (ATCE/6)	-4.9
15	Head of Section (STAR/1)	-5.4
16	Principal Specialist (STAR/2)	7.8
17	Senior Research Analyst (STAR/3)	-0.5
18	Senior Research Analyst (STAR/4)	-3.2
19	Research Analyst (STAR/5)	-8.3
20	Section Manager (MSG/1)	-6.2
21	Business Analyst (MSG/2)	11.3
22	Senior Project Planner (MSG/3)	12.3
23	Project Planner (MSG/4)	16.5
24	Resource Specialist (MSG/5)	30.9
25	Management Support Coordinator (MSG/6)	18.7
26	PA (MSG/7)	21.9

Table 33 NERL median basic salary vs market median

## 8.4.2 Total cash market comparison

Table 34 below and Graph 6: overleaf show how NERL total cash compares against the market. As with the basic salary analysis, variances greater than +/-10% are shown in the table below. Total cash variances for all of the jobs are presented in table 34.

ID	Job	NERL total cash vs market % variation
	Air Traffic Assistant	
e	All Hallic Assistant $(ATCA/2)$	15.0
0	(ATSAVZ)	15.0
_	Air Traffic Assistant	
7	(ATSA/3)	14.5
	Air Traffic Assistant	
8	(ATSA/4)	17.2
	Senior Systems Engineer	
10	(ATCE/2)	15.9
	Senior Systems	
	Engineer/Project Manager	
11	(ATCE/3)	13.2
40		10.0
12	Systems Engineer (ATCE/4)	16.8
19	Research Analyst (STAR/5)	-13.0
20	Section Manager (MSG/1)	-15.9
24	Resource Specialist (MSG/5)	20.1
	Management Support	
25	Coordinator (MSG/6)	10.5
26	PA (MSG/7)	15.4

Table 34 NERL total cash vs market greater than +/-10%

	1	_		
	15.4	4	PA (MSG/7)	26
	10.5		Management Support Coordinator (MSG/6)	25
		20.1	Resource Specialist (MSG/5)	24
	4.9	_	Project Planner (MSG/4)	23
-1.4		_	Senior Project Planner (MSG/3)	22
-1.7		_	Business Analyst (MSG/2)	21
-15.9		_	Section Manager (MSG/1)	20
-13.0		_	Research Analyst (STAR/5)	19
-9.2		_	Senior Research Analyst (STAR/4)	18
-6.8		_	Senior Research Analyst (STAR/3)	17
	2.7	_	Principal Specialist (STAR/2)	16
-9.3		_	Head of Section (STAR/1)	15
-9.8		_	Junior Engineer (ATCE/6)	14
	9.5	_	Maintenance Engineer (ATCE/5)	13
	16	- 5.8	Systems Engineer (ATCE/4)	12
	13.2	_	Senior Systems Engineer/Project Manager	11
	15.	.9	Senior Systems Engineer (ATCE/2)	10
	8.5	_	Engineering Manager (ATCE/1)	6
	1	7.2	Air Traffic Assistant (ATSA/4)	∞
	14.5	-	Air Traffic Assistant (ATSA/3)	2
	15.0	- C	Air Traffic Assistant (ATSA/2)	9
-3.8		_	Air Traffic Assistant (ATSA/1)	ы
	2.2	_	Operational ATCO 2 (Band 4)	4
-0.4		_	Operational ATCO 2 (Band 5)	ŝ
-0.5		_	Senior ATCO (Band 4)	7
-3.2		_	Senior ATCO (Band 5)	1
	1	_		

Graph 6: NERL total cash vs market median

ID	Job/Grade	NERL total cash vs market total cash % variation
1	Senior ATCO (Band 5)	-3
2	Senior ATCO (Band 4)	-1
3	Operational ATCO 2 (Band 5)	0
4	Operational ATCO 2 (Band 4)	2
5	Air Traffic Assistant (ATSA/1)	-4
6	Air Traffic Assistant (ATSA/2)	15
7	Air Traffic Assistant (ATSA/3)	14
8	Air Traffic Assistant (ATSA/4)	17
9	Engineering Manager (ATCE/1)	9
10	Senior Systems Engineer (ATCE/2)	16
11	Senior Systems Engineer/Project Manager (ATCE/3)	13
12	Systems Engineer (ATCE/4)	17
13	Maintenance Engineer (ATCE/5)	9
14	Junior Engineer (ATCE/6)	-10
15	Head of Section (STAR/1)	-9
16	Principal Specialist (STAR/2)	3
17	Senior Research Analyst (STAR/3)	-7
18	Senior Research Analyst (STAR/4)	-9
19	Research Analyst (STAR/5)	-13
20	Section Manager (MSG/1)	-16
21	Business Analyst (MSG/2)	-2
22	Senior Project Planner (MSG/3)	-1
23	Project Planner (MSG/4)	5
24	Resource Specialist (MSG/5)	20
25	Management Support Coordinator (MSG/6)	10
26	PA (MSG/7)	15

Table 35 NERL total cash vs market median

## 8.4.3 Total reward market comparison

Table 36, below, and Graph 7:, overleaf, show how the situation changes with the total reward analysis. With the addition of total reward elements, NERL roles which were previously below the market in total cash terms are now more closely aligned with the market data.

ID	Job	NERL total cash vs market total cash % variation
6	Air Traffic Assistant (ATSA/2)	23.1
7	Air Traffic Assistant (ATSA/3)	22.7
8	Air Traffic Assistant (ATSA/4)	25.3
9	Engineering Manager (ATCE/1)	13.5
10	Senior Systems Engineer (ATCE/2)	21.0
11	Senior Systems Engineer/Project Manager (ATCE/3)	19.0
12	Systems Engineer (ATCE/4)	22.2
13	Maintenance Engineer (ATCE/5)	15.3
20	Section Manager (MSG/1)	-10.5
24	Resource Specialist (MSG/5)	26.2
25	Management Support Coordinator (MSG/6)	15.9
26	PA (MSG/7)	20.5

Table 36 NERL total reward vs market greater than +/-10%



Graph 7: NERL total reward vs market median

ID	Job/grade	NERL total reward vs market % variation
1	Senior ATCO (Band 5)	4.7
2	Senior ATCO (Band 4)	7.5
3	Operational ATCO 2 (Band 5)	7.6
4	Operational ATCO 2 (Band 4)	9.8
5	Air Traffic Assistant (ATSA/1)	3.1
6	Air Traffic Assistant (ATSA/2)	23.1
7	Air Traffic Assistant (ATSA/3)	22.7
8	Air Traffic Assistant (ATSA/4)	25.3
9	Engineering Manager (ATCE/1)	13.5
10	Senior Systems Engineer (ATCE/2)	21.0
11	Senior Systems Engineer/Project Manager (ATCE/3)	19.0
12	Systems Engineer (ATCE/4)	22.2
13	Maintenance Engineer (ATCE/5)	15.3
14	Junior Engineer (ATCE/6)	-3.9
15	Head of Section (STAR/1)	-3.5
16	Principal Specialist (STAR/2)	8.6
17	Senior Research Analyst (STAR/3)	0.0
18	Senior Research Analyst (STAR/4)	-2.6
19	Research Analyst (STAR/5)	-6.7
20	Section Manager (MSG/1)	-10.5
21	Business Analyst (MSG/2)	3.6
22	Senior Project Planner (MSG/3)	3.6
23	Project Planner (MSG/4)	10.0
24	Resource Specialist (MSG/5)	26.2
25	Management Support Coordinator (MSG/6)	15.9
26	PA (MSG/7)	20.5

Table 37 NERL total reward vs market median
### 8.4.4 Total reward analysis including employer pension contributions

The table and graph on the following page shows the effect of including NERL pension contributions across both DB and DC schemes. The previous total reward analyses, above, does not include employer pension contributions. The NERL pension contribution figure is based on the blended rate of the DC and DB schemes excluding deficit reductions. The resultant figure is 34.9%. The market pension figure is derived from ONS data as shown in Table 24 and Table 26 and based on a weighted average by active membership across all schemes.

ID	Job/grade	NERL total reward vs
		market % variation
1	Senior ATCO (Band 5)	22
2	Senior ATCO (Band 4)	26
3	Operational ATCO 2 (Band 5)	27
4	Operational ATCO 2 (Band 4)	30
5	Air Traffic Assistant (ATSA/1)	20
6	Air Traffic Assistant (ATSA/2)	45
7	Air Traffic Assistant (ATSA/3)	44
8	Air Traffic Assistant (ATSA/4)	46
9	Engineering Manager (ATCE/1)	34
10	Senior Systems Engineer (ATCE/2)	43
11	Senior Systems Engineer/Project Manager (ATCE/3)	41
12	Systems Engineer (ATCE/4)	45
13	Maintenance Engineer (ATCE/5)	37
14	Junior Engineer (ATCE/6)	14
15	Head of Section (STAR/1)	14
16	Principal Specialist (STAR/2)	29
17	Senior Research Analyst (STAR/3)	19
18	Senior Research Analyst (STAR/4)	15
19	Research Analyst (STAR/5)	10
20	Section Manager (MSG/1)	5
21	Business Analyst (MSG/2)	24
22	Senior Project Planner (MSG/3)	24
23	Project Planner (MSG/4)	32
24	Resource Specialist (MSG/5)	51
25	Management Support Coordinator (MSG/6)	38
26	PA (MSG/7)	43
27	HR Business Partner (Human Resources/PCG Level 15)	1
28	Head of HR Section (Human Resources/PCG Level 30)	18
29	Manager Safety Assurance (Swanwick (Operational/ Supervisory)/PCG Level 15)	7
30	General Manager (Swanwick (Operational/ Supervisory)/PCG Level 30)	19
31	Programme Manager (Engineering Service Delivery/PCG Level 15)	42
32	GM Engineering (Engineering Service Delivery/PCG Level 30)	25
33	Head of Investment Finance (Finance/PCG Level 15)	17
34	Group Treasurer (Finance/PCG Level 30)	17

|--|

43.4	PA (MSG/7)	26
38.1	Management Support Coordinator (MSG/6)	25
50.6	Resource Specialist (MSG/5)	24
31.5	Project Planner (MSG/4)	23
24.1	Senior Project Planner (MSG/3)	22
23.9	Business Analyst (MSG/2)	21
5.2	Section Manager (MSG/1)	20
10.4	Research Analyst (STAR/5)	19
15.5	Senior Research Analyst (STAR/4)	18
18.6	Senior Research Analyst (STAR/3)	17
28.6	Principal Specialist (STAR/2)	16
13.9	Head of Section (STAR/1)	15
13.6	Junior Engineer (ATCE/6)	14
36.7	Maintenance Engineer (ATCE/5)	13
45.4	Systems Engineer (ATCE/4)	12
41.3	Senior Systems Engineer/Project Manager	11
42.9	Senior Systems Engineer (ATCE/2)	10
34.0	Engineering Manager (ATCE/1)	6
46.1	Air Traffic Assistant (ATSA/4)	∞
44.1	Air Traffic Assistant (ATSA/3)	2
44.6	Air Traffic Assistant (ATSA/2)	9
20.4	Air Traffic Assistant (ATSA/1)	ы
29.5	Operational ATCO 2 (Band 4)	4
26.9	Operational ATCO 2 (Band 5)	ŝ
26.0	Senior ATCO (Band 4)	2
22.4	Senior ATCO (Band 5)	Ч

# Graph 8: NERL total reward vs market median including pensions

### 8.5 ATCO benchmarking vs Airline Pilots

At a late stage in the project and arising from discussions concerning the most suitable benchmarking comparison for the role of ATCO, NERL requested that we consider airline pilots as a benchmark comparator. To meet this objective we required a panel of airline data to provide as a comparison. We therefore made approaches to airlines and received a total of 8 responses. We supplemented this data with pay data available on the website: www.pilotjobsnetwork.com. Data on this website is input by voluntary contributors and relies on the honesty and integrity of its contributors for accurate data.

Data used is from the following airlines:

- British Airways
- Aer Lingus UK Contract
- Easyjet
- Flybe (jet)
- Jet2.com
- Logan Air
- Monarch
- Ryanair
- Thomas Cook Airlines
- Thomson
- Virgin Atlantic

# 8.5.1 Airline panel data

The data we utilised for benchmarking purposes is shown in the table below.

Source	Effect ive dates	Captain base	Captain calculated mid	Captain top	First Officer base	First Officer calculate d mid	First Officer top
Airline provided	2013	134,500	134,500	134,500	50,803	82,182	113,561
Airline provided Website*	2013	85,685 81,824	101,853 92,848	115,384 103.873	51,469 42,845	56,473 48,749	61,477 54,654
Airline provided	2013	63,475	70,426	77,376	39,264	44,663	50,062
Website Website	2013 2013	77,281 70,398	77,281 95,542	77,281 120,686	46,538 50,701	50,470 65,718	54,402 80,734
Airline provided	2013	97,791	116,555	121,246	59,729	71,106	73,951
Airline provided	2013	94,689	99,198	103,707	59,323	62,148	64,973
Airline provided	2013	91,021	100,496	110,957	55,435	60,765	66,095
Airline provided	2013	49,225	55,819	62,412			
Airline provided	2013	95,786	98,096	100,405	52,911	54,836	56,760
Median £		85,685	98,096	103,873	51,136	58,619	63,225

Table 39 Airline panel data

\*Uprated by 4.5% to account for timelag

# 8.5.2 Job matching

Using an aggregated panel of this data we are able compare to ATCO earnings. The comparisons made are as follows.

Table 40 ATCO	vs airline	pilot cor	nparisons
---------------	------------	-----------	-----------

NERL ATCO role	Benchmark comparison	
Senior ATCO (Band 5)	Captain (top of range)	
Senior ATCO (Band 4)	Captain (midpoint of range)	
Operational ATCO 2 (Band 5)	First Officer (top of range)	
Operational ATCO 2 (Band 4)	First Officer (top of range)	

A number of conventions have been applied to the raw salary data to determine total cash and total reward levels including adjustment for bonus payments, holiday entitlements, PMI and weekly hours. Please note that the market comparison with airline pilots does not include payments for working shifts and unsocial hours. The reason for this is that given the disparity between working practices, in particular that pilots work away from home, it is difficult to normalise the data to provide robust comparisons. That said, we are confident that the results of the data provide an indicative comparison of respective levels of remuneration across jobs of comparable weight and indeed, the outcomes of the pilot benchmarking accord with the main market data comparison.

# 8.5.3 Basic salary

ID	Job	Median basic salary £pa	Market salary median £pa	NERL basic salary vs market %
1	Senior ATCO (Band 5)	104,035	103,873	0.2
2	Senior ATCO (Band 4)	93,170	98,096	-5.0
3	Operational ATCO 2 (Band 5)	77,362	63,225	22.4
4	Operational ATCO 2 (Band 4)	76,260	63,225	20.6

### 8.5.4 Total cash

ID	Job	NERL total cash £pa	Market total cash median £pa	NERL total cash vs market %
1	Senior ATCO (Band 5)	106,753	109,067	-2.1
2	Senior ATCO (Band 4)	93,170	103,000	-9.5
3	Operational ATCO 2 (Band 5)	77,392	66,386	16.6
4	Operational ATCO 2 (Band 4)	76,260	66,386	14.9

### 8.5.5 Total reward

ID	Job	NERL total reward £pa	Market total reward £pa	NERL total reward vs market %
1	Senior ATCO (Band 5)	128,049	114,692	11.6
2	Senior ATCO (Band 4)	112,733	108,351	4.0
3	Operational ATCO 2 (Band 5)	88,917	70,084	26.9
4	Operational ATCO 2 (Band 4)	87,181	70,084	24.4

# 9 Workforce deployment

### 9.1 Key findings

- For good reasons, there is a risk-averse approach to setting staffing levels such that they will safely cover the workload with the appropriate skill mix.
- We were not able to get accurate figures of time spent on operational duties and detachments because NERL do not record the numbers of staff who are tactically detached.
- We initially asked for "actuals" data broken down into 15 minute intervals, which some resource management systems in the aviation sector are able to provide, with the intention of seeing how cover varies through the day, from day to day, week to week and also to get some accurate figures on how much time is spent on operational duties and detachments and training. This data was not available and we were provided with a summary of "actual" operational duty shifts along with detachments, annual leave, overtime, sickness and other absences.
- Analysis of this data showed very little seasonality, if any, for example in Swanwick AC ATCOs, although we know from the position opening times there is approximately a 10% difference between summer and winter. This is because the accepted practice is to roster to the peak on weekdays, throughout the year, and then to use tactical detachments on the day to get down to what is actually required. However, we understand, that this *data is not recorded* and so the figures supplied on operational shifts are maximums and on detachments, minimums.
- The exposure to annual leave is high compared with many other business sectors. The minimum annual leave for ATCOs is 36 days, including public holidays, which is 16.4% of 219 attendances per year. The basic roster is "6 on 4 off" which generates an average of 4.2 shifts per week, so 36 annual leave days equate to 8.6 weeks. Compare this with somebody working an average of 5 shifts per week on minimum holiday entitlement of 28 days, including public holidays. This equates to 10.8% of 260 attendances per year and 5.6 weeks.

- The current rostering process is risk averse in generating staffing levels so that they safely cover the workload with the appropriate skill mix. However, there might be alternative methods of rostering that will more efficiently match the workload. A rostering model that is sometimes used to cover this type of workload is based on two groups of staff one which provides flat cover 24/7 set at a night shift level which is at a lower level than the day shifts, and the other providing morning, afternoon and day shift cover 7 days a week, i.e. the remaining shifts not covered by the night shifts. Additionally both could be done within an annualised agreement which could include fully or partially rostered annual leave.
- If an evaluation of alternative rostering systems is undertaken we would recommend that the first stage should be a detailed analysis of current workload and skills required and how it may change in the future. We understand that during RP2, improvements are planned that will improve the staff mix efficiency and reduce the long lead-time training dependency.

### 9.2 Introduction

A review of the rostering process was undertaken for the staff groups in the following areas:

### ATCOs

- Swanwick AC
- Swanwick TC Approach
- Swanwick TC Area
- Prestwick Non Ocean
- Prestwick Ocean

### ATSAs

- Swanwick AC
- Swanwick TC
- Prestwick

ATCOs are covered by the CAA SRATCOH (CAP670) regulations and the NATS working practice agreement, NAG56. ATSAs are not covered by SRATCOH but by the NATS working agreement, NAG62.

The current agreements for ATCOS and ATSAs are attendance-based within an average weekly hours contract.

ATCOs (source: NAG56, ATCOs working practice agreement):

- i. The ATCO agreement for 24 hour operations is based on 222 attendances per year gross of annual leave and an average weekly limit of 34 hours net.
- ii. The 34 hours include an average of 0.875 hours for handover and takeover of watch (HOW/TOW).
- iii. The 222 attendances include 3 attendances which, by local agreement, should be used locally over agreed 12 month periods, without carry over. They can be used for keeping hours within the weekly maximum, or, for example, TRUCE, TRM, sector development, safety days and training courses.
- iv. There are three annual leave bands according to length of service with entitlements of 33, 30 and 28 days. In addition, there are 8 public holiday lieu days. These equate to 18.7%, 17.4% and 16.4% of 219 attendances per year (222 net of the additional 3 attendances).
- v. The number of attendances, net of annual leave and the 3 additional attendances, for the three leave bands are 178, 181 and 183.
- vi. There are different leave years across NATS based on employees surnames.
- vii. Leave allocation processes are agreed at a unit level. They are based on a principle of equitable distribution across the year, allocated pro-rata to individuals leave entitlement.
- viii. A minimum of 18 days is available to be taken during an agreed period of up to 160 days incorporating the summer for those on maximum leave entitlement (33 days). The minimum amount is 16 days for staff with 30 day leave entitlement and 15 days for those with 28 day leave entitlement.
- ix. Where an individual elects to sell leave, it will remain deducted from their allocation for that seasonal leave period.
- x. Variations in leave allocation may be agreed to cover specific circumstances e.g. simulations.
- xi. Annual leave will be debited in days on the principle of 1 day's leave for 1 rostered shift.
- xii. Full cycles of leave should be preceded and followed by a minimum of a pair of rest days.

ATSAs (source: NAG62, ATSAs working practice agreement):

i. Average weekly limit of 34.5 hours net.

- There are three annual leave bands according to length of service with entitlements of 33, 30 and 28 days. In addition, there are 8 public holiday lieu days. These equate to 18.3%, 17.0% and 16.1% of total.
- iii. In 24 hour net operations, the maximum number of attendances for the three leave bands are 183, 186 and 188.

Please note that detailed tables and charts are provided in the appendix.

### 9.3 Workforce demand

### 9.3.1 Position Staffing Schedule (PSS)

- i. The PSS is the opening times of operational positions.
- ii. The operational requirement is produced from the PSS together with shift and roster options.
- iii. The PSS is determined from an assessment of both service demand and effective capacity to meet that demand taking into account the service commitments made by NATS to its customers.
- iv. The assessment of service demand is done using a variety of inputs, including:
  - Historic information total workload, sector opening times e.g. OPM.
  - Variations in traffic patterns hourly, daily, weekly and monthly.
  - Predicted traffic customer demand and requirements.
  - Business requirements meeting regulatory regime, delay targets, contractual commitments, income needs.
- v. The assessment of effective capacity is done using a variety of inputs, including:
- The predicted number of validated staff.
- The roster patterns and rostering constraints.
- vi. The PSS forms a template of the positions that are expected to be occupied on a regular basis. Where staffing may be required in excess of the published PSS it will be managed tactically within agreed rostering limitations.
- vii. The PSS is reviewed regularly against any changes to traffic demand and patterns so that timely action can be taken in revisions to the PSS and associated rosters.

ATCOs relief and fatigue breaks: (source: NAG56, ATCOs working practice agreement)

- i. A position accrues relief at 25% or 33% following a local joint assessment of the busyness and complexity of the position.
- ii. Certain positions, e.g. supervisory may have no specific relief applied when it is agreed that the position does not have to be staffed continuously.
- iii. As standard, an individual is entitled to a minimum of 30 minutes break in any 2.5 hour period. If an individual is working on a position assessed as requiring 33% relief they are entitled to a minimum of 30 minutes break in any 2 hour period. Where a Safety Regulation Group (SRG) dispensation allows periods of more than 2 hours to be worked before a break, the same pro-rata relief entitlement remains. For example, with a dispensation to work 4 hours before relief, the individual would be entitled to 60 minutes break in a 5 hour period.

- iv. Night duty relief are constructed wherever possible to allow breaks to be taken cumulatively i.e. producing longer break periods to assist with the additional fatigue element from night duties.
- v. During a fatigue break a staff member may only leave the unit with the agreement of management.

ATSAs standard relief rate is 14.3% and enhanced is 23.1%

### 9.3.2 Shift palette and roster patterns

Rosters for full-time staff (ATCOs and ATSAs):

- i. 5 watch system.
- ii. 24 hour operation.
- iii. The basic pattern is "6 on 4 off". The typical working block is "2 mornings, 2 afternoons, 2 nights, 4 off". With 5 watches this puts 1 watch on mornings, 1 on afternoons, 1 on nights and 2 off providing 24 hour cover for each day.
- iv. There are a number of pattern variations for each staff group based on a range of different shift start and finish times (the "shift palette"). These have been designed to help cover a very variable operational workload and one that can change at short notice.
- v. One example is "2 mornings, 2 afternoons, 2 days, 4 off". This puts some of the night watch onto days since a full watch is not required on nights.
- vi. Another example is "2 mornings, 2 afternoons, 1 off, 2 days, 3 off". This puts some of night watch onto rest days which is useful for quieter days, such as the weekend.

Rosters for part-time staff (ATCOs and ATSAs):

- i. There are some individual rosters but most are subsets of the full-time rosters
- ii. Examples at Swanwick:
  - "2 mornings, 2 afternoons, 6 off" (0.67 FTE).
  - "2 mornings, 2 afternoons, 6 off, 2 mornings, 2 afternoons, 6 off, 2 mornings, 2 afternoons, 2 nights, 4 off" (0.78 FTE).
  - "2 mornings, 2 afternoons, 1 off, 1 morning. 4 off" (0.83 FTE).
- iii. Examples at Prestwick:
  - "2 mornings, 2 afternoons, 6 off" (0.67 FTE).
  - "2 mornings, 2 afternoons, 2 nights, 14 off" (0.5 FTE).
  - "2 afternoons, 2 nights, 6 off, 2 afternoons, 2 days, 6 off" (0.67 FTE).

#### Assessing employment costs at NERL

The rules constraining the rostering process:

### CAA SRATCOH regulations:

- Maximum of 2 hours in position.
- Enhanced relief positions limited to 90 minutes.
- Maximum duty length 10 hours.
- Limited to 6 days consecutive duty period.
- Minimum of 54 hours off duty between shift cycles.

# NAG56, ATCOs working practice agreement:

- Nights rostered in pairs or singly.
- Maximum duty length is 9 hours.
- Shifts starting from 0530 to 0629 cannot be rostered consecutively except by agreement of the individual.
- The earliest start time for a morning shift is 0530.
- A 0530 start will be a maximum 5 and half-hours with one and a half hour enhancement (i.e. a total of 7 hours for calculating average working hours). No more than 2 may be rostered in 8 days.
- The maximum number of compulsory 0530 starts is 10 per person p.a. This number is subject to annual review. Any increase above 10 per person p.a. will only result from local agreement.
- ATCOs may do more than the maximum number of compulsory 0530 starts on a voluntary basis.
- An 0600 start will be a maximum six and half-hours with a half-hour enhancement (i.e. a total of 7 hours is used for calculating average working hours). No more than 2 may be rostered in 8 days.
- An 0630 start will be a maximum seven hours and a maximum seven and a half hours for Band 1 and Band 2 Units.

# 9.3.3 Operational requirements

The number of FTEs required to cover demand assuming the correct mix of sector skills. This is a function of the PSS, the agreed shift palette, the agreed roster patterns and constrained by the SRATCOH regulations and the NAG56 working agreement.

### 9.3.4 Published roster

A monthly roster is published on the 20<sup>th</sup> of the previous month. It is created from the deployable FTE supply and the operational requirements and takes account of annual leave.

### 9.4 Workforce supply

### 9.4.1 Operational supply

The operational supply is the number of staff who can be used operationally. The total headcount for each staff group is greater than the operational supply. The difference mainly relates to trainees, who are included on the roster because they are linked to their trainers.

### 9.4.2 **Deployable FTEs**

Deployable FTEs are the number of FTEs available to roster after maternity leave, part time restrictions, long term sickness and detachments have been taken into account. In order to model the operational demand effectively an assumption is made that ATCOs will hold a certain mix of sector skills. Sometimes the actual mix available to deploy is different to this assumption and as a result there is a need to overbear on staff to ensure all open sectors can be covered. Due to ATCO training lead-times of up to 3 years from "street to seat", there is a risk averse approach to managing deployable supply too tightly to requirement. If any of the planning assumptions or airline schedules are changed significantly, or traffic increased rapidly, it would be very challenging to react quickly. The sum of these constraints amounts to an approximate 6.5% overbearing against requirement.

#### 9.4.3 Additional requirements

Source: NAG56, ATCOs working practice agreement

There are a number of requirements in addition to the PSS that need to be assessed, including their amount, priority and method of resourcing. The scope of such activities and the method of resourcing vary depending on the size of the operation.

Routine requirements may include but are not limited to:

- TRUCE
- TRM
- LCE
- Medicals
- Fire training
- Extension training
- TU/IR activity (local and national, including H&S and technical committees).
- WMs/ WTOs regular meetings

• Watch Briefings.

Occasional requirements (which may require significant additional requirements for development, consultation, simulations and training) may include but are not limited to:

- Large-scale operational developments such as re-sectorisations.
- New Ops room or Tower.
- New equipment.
- Activities such as Air shows, large scale sporting or civic events require additional planning and may involve additional resourcing for the event itself.

The various methods of resourcing additional requirements are as follows:

- Any of the remaining three additional duties.
- Spare hours and spare shifts.
- Other capacity from the roster e.g. forecast variation from the PSS.
- Use of qualified staff whose normal place of work is outside the operations room.
- Temporary overbearing of staff.
- Specific overbearing of staff as identified in the Unit manpower plans.
- AAVAs.
- Overtime.
- Specific Unit Contingency arrangements.
- Limiting Service provision.

# 9.5 Analysis undertaken

An analysis was undertaken for each of the staff groups on the data supplied. The following data was supplied:

- i. Position opening times for summer 2013 and winter 2012 weekdays. Also, % relief applied to each position.
- ii. Roster templates for summer 2013 and winter 2012.
- iii. Actuals for each staff group for the period 1/4/12 to 31/7/13 (16 months) consisting of:
  - Mornings (start between 0530 and 0730).
  - Afternoons (fall within 1100 and 2200).
  - Nights (fall within 2200 and 0730).
  - Days (can start as early as 0700 and finish as late as 0100. They are usually day 5 and/or 6 of a working block of 6 when an ATCO is "spinning" off a night shift).
  - Overtime (for each of mornings, afternoons, nights and days).

- Training (for each of mornings, afternoons, nights and days).
- Detachments (do not include tactical detachments).
- Annual leave.
- Sickness (includes long and short term).
- Maternity leave.
- Paternity leave.
- Special leave paid.
- Unpaid leave.

Limitations of data:

- The operational duty shifts (i.e. mornings, afternoons, nights and days) do not include tactical or on-the-day detachments. So the "actuals" for the duty shifts are overestimates and for detachments are under estimates of what actually happened on the day
- TOIL was not included in the actuals (apart from Swanwick AC ATCOs)

The approach was broadly the same for each staff group.

# 9.5.1 Overview of current workforce

The key numbers are the operational supply, deployable FTEs and operational requirements and the % deployable FTEs/operational requirements.

# 9.5.2 Workforce demand

The following analysis was done:

- i. Comparison of positions open by time of day, for summer 2013 and winter 2012 if different.
- For ATCOs, a % for relief, either 25% or 33%, has been applied to each position. It has been assumed that one relief shift can cover 4 posts, each requiring 25% relief, and 3 posts, each requiring 33%.
- For ATSAs, a % relief of either 14.3% or 23.1%
- ii. Shift levels generated by summer 2013 and winter 2012 roster templates.
- iii. Comparison of shift levels generated by roster templates against position opening times for summer 2013 and winter 2012.

# 9.5.3 Workforce supply

The actuals data was broken down into three periods:

- 1/4/12-30/9/12 (summer 2012)
- 1/10/12-31/3/13 (winter 2012/13)
- 1/4/13-31/7/13 (part summer 2013).

The following analysis was done:

- i. Average number of operational duty shifts for each day of the week for each of the three periods.
- ii. Average number of actuals for weekdays and weekends for each of the three periods broken down into the following categories:
  - Total operational duty shifts (mornings, afternoons, nights and days)
  - Overtime
  - Training and detachments
  - Annual leave
  - TOIL (when supplied)
  - Sickness (long and short term)
  - Other absence (includes maternity and paternity leave, special leave paid and unpaid leave)

### 9.6 Summary of analysis

#### 9.6.1 Workforce demand

The position opening hours required per day, including estimates of relief, as a percentage of

the average hours available.

ATCOs	SwanwickAC	SwanwickAC		
	Sum 2013	Win 2012	% Sum/Win	Sum & Win
Position opening hours required per day	802.5	730.5	10%	640.5
Estimate of relief	243.8	221.5		213.5
Total hours required per day	1046.3	952	10%	854
% relief / total	23%	23%		25%
FTEs over one year period 1/4/12-31/3/13	385			322
Average hours available per day	1870			1564
% requirements / average available hours	56%	51%		55%

ATCOs	Prestwick Do	Prestwick Domestic		
	Sum 2013	Win 2012	% Win/Sum	Sum & Win
Position opening hours required per day	594	657	11%	116
Estimate of relief	162.7	153.3		30.3
Total hours required per day	756.7	810.3	7%	146.3
% relief / total	22%	19%		21%
FTEs over one year period 1/4/12-31/3/13	280.3			51.5
Average hours available per day	1361.5			250.1
% requirements / average available hours	56%	60%		58%

ATSAs	Prestwick		
	Sum 2013	Win 2012	% Win/Sum
Position opening hours required per day	190.5	208.5	9%
Estimate of relief	26.4	31.4	
Total hours required per day	216.9	239.9	11%
% relief / total	12.2%	13.1%	
FTEs over one year period 1/4/12-31/3/13	97.3		
Average hours available per day	479.6		
% requirements / average available hours	45%	50%	

- "FTEs over one year period 1/4/12 to 31/3/13" includes everyone on the roster, essentially the "operational supply" plus those who are not considered operationally useful such as trainees
- For ATCOs, "Average hours available per day" = total FTEs x 34 hours per ATCO per week / 7 days of the week
- iii. For ATSAs, "Average hours available per day" = total FTEs x 34.5 hours per ATSA per week / 7 days of the week
- iv. There are summer and winter differences of about 10% for SwanwickAC, with summer being bigger than winter, and Prestwick Domestic ATCOs and Prestwick ATSAs, both with winter bigger than summer. NERL note that PC ATCO and ATSA

summer demand was greater in winter due to EFD (technology) deployment into the PC Ops room during the winter period<sup>29</sup>.

v. The average proportion of gross time required for positions and relief is between 51 and 58% depending on season and day of the week. For Prestwick ATSAs it is between 45 to 50%.

# 9.6.2 Workforce supply

For ATCOs and ATSAs:

- i. Operational supply, deployable FTEs and operational requirements
- ii. MAXIMUM duty shifts (includes tactical detachments), overtime, MINIMUM training and detachments (do not include tactical detachments), annual leave, TOIL, sickness and other absence.
- iii. Number of FTEs on which actuals are based and the proportion of staff who are not operationally useful, mainly trainees

ATCOs	Swanwick AC	Swanwick TC	Prestwick	Prestwick	
		Area +	Domestic	Ocean	
		Approach			
Operational supply (heads)	375	312	260	47	
Operational supply FTEs	363.27	304.43	255.28	47	
Deployable FTEs	354.27	295.43	252.58	47	
Operational requirements FTEs	340	265	230	45	
% Deployable FTEs /Operational	4.2%	11.5%	9.8%	4.4%	
requirements					

% Proportion of totals (based on one year 1/4/12-31/3/13)

<u>, , , , , , , , , , , , , , , , , , , </u>				
MAXIMUM duty shifts	65.7	60.7	62.7	60.8
Overtime	0.5	0.9	1.7	2.7
MINIMUM training and	10.0	16.1	16.4	17.2
detachments				
Annual leave	17.7	18.5	18.3	17.7
TOIL	2.7	0	0	0
Sickness	2.5	2.4	1.8	3.9
Other absence	1.4	2.2	0.8	0.5
Total (excluding overtime)	100	100	100	100

Number of FTEs on which actuals are based for year 1/4/12-31/3/13	385	322	280.3	51.5
FTEs who are not operationally useful (eg. Trainees)	21.73	17.57	25.02	4.5
% trainees etc / total	5.6%	5.6%	8.9%	8.7%

 $<sup>^{29}</sup>$  NERL note that the consequence of this was that they deliberately opened more sectors that they could transition to new technology – so summer demand was lower, and will remain lower into this winter.

ATSAs	Swanwick AC	Swanwick TC	Swanwick AC + TC	Prestwick
Operational supply (heads)	73	42	133 Incl. 18 heads flexibly deployed across AC and TC	82
Deployable FTEs	65.33	37.4	120.73	80.86
Operational requirements FTEs	80	50	130	79
% Deployable FTEs /Operational requirements	N/a	N/a	-9.3%	2.4%

#### % Proportion of totals (based on one year 1/4/12-31/3/13)

MAXIMUM duty shifts	DATA NOT SUPPLIED	69.4
Overtime		4.5
MINIMUM training and		8.6
detachments		
Annual leave		18.5
TOIL		0
Sickness		2.3
Other absence		1.2
Total (excluding overtime)		100

Number of FTEs on which actuals are based for year 1/4/12-31/3/13	DATA NOT SUPPLIED	97.3
FTEs who are not operationally useful (eg. Trainees)		15.3
% trainees etc / total		15.7%

- The number of FTEs used over the year 1/4/12-31/3/13 is the sum of gross "attendances", excluding overtime, divided by 219 for ATCOs, the gross number of attendances per year for 1 FTE, and 224 for ATSAs
- ii. "FTEs who are not operationally useful (mainly trainees)" = number of FTEs on which actuals are based" – operational supply FTEs. This ranges between 5.6 to 8.9% for ATCOs
- iii. Deployable FTEs are between 4.2 to 11.5% higher than operational requirements. This is because the operational requirements assume a certain mix of sector skills. However, sometimes the mix available to deploy is different to the assumptions and as a result there is a need to overbear on staff to ensure all open sectors can be covered. Due to ATCO training lead-times of up to 3 years from "street to seat", there is a risk-averse approach to managing deployable supply too tightly to requirement. If any of the planning assumptions or airline schedules are changed significantly, or traffic increased rapidly, it would be very challenging to react quickly.
- iv. For Swanwick ATSAs, AC and TC combined, the deployable FTEs falls short of requirements by 9.3% which is not expected. However NERL inform us that work is underway to review and reduce this requirement.
- v. The maximum proportion of gross attendances spent on duty shifts for ATCOs ranges from 60.7 to 65.7%. Note that these figures could include tactical detachments which aren't recorded. For example, in Swanwick AC, the accepted practice is to roster the same duty shift levels through the year at the summer levels and then to tactically deploy on the day to get

down to the required level. Based on the roster templates supplied, the number of duty shifts in summer is 8.3% higher than winter so there could be a significant number of tactical detachments.

- vi. The actuals data supplied for Swanwick ATSAs did not cover the full year for either AC, TC or AC and TC combined so was omitted from the analysis
- vii. The minimum proportion of gross attendances spent on training and detachments ranges between 10.0 and 17.2%. Note that these figures do not include tactical detachments.
- viii. The average annual leave for ATCOs, which include those who are not operationally useful such as trainees, ranges from 17.7 to 18.5% which falls within the two top leave bands of 17.4 and 18.7%
- ix. Annual leave for Prestwick ATSAs is 18.5% which exceeds the highest annual leave band of 18.3%. We can only assume this means that not all the gross attendances have been captured by the actuals data.
- x. Overtime is low and ranges between 0.5 and 2.7%
- xi. Sickness, including long and short term, ranges between 1.8 and 3.9% which equates to between 3.9 and 8.5 shifts per ATCO per year based on annual attendances of 219. These are broadly in line with the CBI Absence and Workplace Health survey 2013 reports an average of 5.3 days lost to sickness and 4.2 days for non manual employees in the private sector.
- xii. Other absences range between 0.5 and 2.2%. of total,. These include maternity leave, paternity leave, special paid leave and unpaid leave.

### 9.7 Conclusions

- The operational workload fluctuates through the day and from day to day and week to week and is subject to short notice changes such as airline schedule changes. Apart from operational duties there are other requirements that have to be covered. The rostering process is constrained by the CAA SRATCOH regulations and the NATS working practice agreements, NAG56 for ATCOs and NAG62 for ATSAs, which are far more stringent than the standard European Working Time Directive. In addition, there is a long training lead time for ATCOs of up to 3 years. So, for good reasons, there is a risk-averse approach to setting staffing levels such that they will safely cover the workload with the appropriate skill mix.
- ii. We were not able to get accurate figures of time spent on operational duties and detachments because NERL do not record the numbers of staff who are tactical detached. We initially asked for "actuals" data broken down into 15 minute intervals, which some resource management systems in the aviation sector are able to provide, with the intention of seeing how cover varies through the day, from day to day, week to week and also to get some accurate figures on how much time is spent on operational duties and detachments and training. This data was not available and we were provided with a summary of "actual" operational duty shifts along with detachments, annual leave, overtime, sickness and other absences. Analysis of this data showed very little seasonality, if any, for example in Swanwick AC ATCOs, although we know from the position opening times there is approximately a 10% difference between summer and winter. This is because the accepted practice is to roster to the peak on weekdays, throughout the year, and then to use tactical detachments on the day to get down to what is actually required. However, we understand, that this *data* is not recorded and so the figures supplied on operational shifts are maximums and on detachments, minimums.
- iii. The exposure to annual leave is high compared with many other business sectors. The minimum annual leave for ATCOs is 36 days, including public holidays, which is 16.4% of 219 attendances per year. The basic roster is "6 on 4 off" which generates an average of 4.2 shifts per week, so 36 annual leave days equate to 8.6 weeks. Compare this with somebody working an average of 5 shifts per week on minimum holiday entitlement of 28 days, including public holidays. This equates to 10.8% of 260 attendances per year and 5.6 weeks.
- iv. The average proportion of gross time required to open positions and cover relief ranges between 51% to 60% for ATCOs depending on time of year and day of week.
  This can be viewed as the absolute minimum since it would be impossible to perfectly match this type of fluctuating workload with shifts and besides there are

94

other duties to consider as well as annual leave, sickness and other absence. The average maximum number of gross attendances used for operational duties ranges between 60.7 and 65.7. These are maximums because they include tactical detachments.

For reasons described in (i), the current rostering process is risk averse in generating ٧. staffing levels so that they safely cover the workload with the appropriate skill mix. However, there might be alternative methods of rostering that will more efficiently match the workload. A rostering model that is sometimes used to cover this type of workload is based on two groups of staff - one which provides flat cover 24/7 set at a night shift level which is at a lower level than the day shifts, and the other providing morning, afternoon and day shift cover 7 days a week, i.e. the remaining shifts not covered by the night shifts. Additionally both could be done within an annualised agreement which could include fully or partially rostered annual leave. The advantage of rostering annual leave is that it takes account of a large proportion of gross attendances, average out at 18% for ATCOs, and so makes the task of getting the correct skill mix on the day more efficient. Another advantage would be that the non-24 hour operational staff generate about 10% more shifts per year than the 24 hour operational staff (244 gross per year, based on a "6 on 3 off" pattern, compared with 222 – source: NAG56, ATCOs working practice agreement). Our understanding is that all staff in this study are 24 hour staff. If an evaluation of alternative rostering systems is undertaken we would recommend that the first stage should be a detailed analysis of current workload and skills required and how it may change in the future. We understand that during RP2, improvements are planned that will improve the staff mix efficiency and reduce the long lead-time training dependency.

### 9.8 Swanwick AC ATCOS

This section contains the results of an analysis for Swanwick AC ATCOs. A similar approach has been applied to the other staff groups, the results of which can be found in the appendices.

#### 9.8.1 Current workforce overview

Description	Number of staff
ATCOs on published roster	405 headcount
21/6/13	
Operational supply	375 headcount
	363.27 FTEs
Long term absence	Maternity leave: 7 FTEs
-	Long term sick: 2 FTEs
Full-time staff	321 FTEs
Part-time staff	45 headcount (33.27 FTEs)
Deployable FTE	354.27 FTE
Operational requirement	340 FTE
% Deployable FTEs / Op	4.2%
requirements	

# 9.8.2 Workforce demand

Chart (a): Comparison of positions open by time of day for weekdays in summer 2013 and winter



2012 including an estimate of relief

- i. This chart shows the positions open by time of day for weekdays in summer 2013 and winter 2012.
- ii. Weekend opening times were not provided but, as can be seen in the analysis of the actuals, are at a lower level than weekdays.
- iii. Summer is on a higher level than winter.

Chart (b): Operational duty shift levels generated by roster templates for summer 2013 and winter 2012

				Summer	Winter
Shift	Start	Finish	Hrs	2013	2012
М	6.5	13.5	7	52	48
Α	13.5	22	8.5	49	48
AS	13.5	19	5.5	0	0
A15	15	23	8	1	0
A14U	14	22.5	8.5	2	0
N	22	6.5	8.5	23	23
D6	6	12.5	6.5	8	6
D7	7	13.5	6.5	6	8
D10	10	18	8	6	3
D12.5	12.5	20.5	8	9	8
Total				156	144

- i. Summer and winter templates based on 65 and 70 roster lines respectively.
- ii. The rosters generate the same shift levels for each day of the week for both summer and winter.
- iii. 260 ATCOs on the summer roster lines provide 156 duty shifts and 240 on winter roster lines provide 144 duty shifts.
- iv. Total number of duty shifts in summer is 8.3% higher than winter.

Charts (c): Comparison of operational duty shift levels generated by roster templates against position opening times for weekdays in summer 2013 and winter 2012

- i. The charts below compare the shift levels generated by the roster templates against the position opening times for weekdays in summer 2013 and winter 2012.
- ii. The roster templates generate the same shifts for each day of the week although, from the analysis of actuals, the weekend requirement is lower than weekdays. In 2012 and 2013 the spare capacity at the weekends has been used for TOIL accrued during the implementation phase of IFACTS and delivery of Olympic Service Levels.

The plan for 2014 is to reduce the supply at weekends by introducing additional leave lines and weekday sub rosters.

- iii. The positions have been broken down into Supervisors and areas East, North, Central, West and South.
- iv. The positions also include an overall estimate for relief.

### Weekday summer 2013



#### Weekday winter 2012



- i. The gap between rostered and workload represents "spare" shifts and hours which are used for routine or occasional additional requirements and include activities such as medicals, TRUCE etc.
- ii. The excess at nights (2200-0600) is deliberate for safety reasons, and for service consistency, since providing for sickness is difficult and being unable to do so would result in sectors being closed. The approach to night time staffing is being reviewed as part of the RP2 improvements.

# 9.8.3 Workforce supply

<u>Chart (a): Average total number of operational duty shifts for each day of the week for the periods 1/4/12- 30/9/12 (summer months), 1/10/12-31/3/13 (winter months) and 1/4/13-31/7/13 (part summer)</u>



- i. The duty shift figures above include ATCOs who have been rostered to the Ops room even when they are not needed to staff positions and then tactically detached to projects, training and other activities. During RP2, new processes are being investigated for rostering staff, who are not required for positions, more directly to activities and not just tactically detaching them.
- ii. There are only small differences between the three periods and so no obvious seasonal differences. See notes (vii) and (viii) below.
- iii. The levels for Mon, Tue, Wed and Thu are similar with Fri being slightly lower
- iv. The levels for Sat and Sun are similar but lower than the weekdays
- v. The difference between weekday and weekend levels are achieved through the application of sub rosters that provide more cover on weekdays than weekends, an increase in leave allocation at weekends and the provision of TOIL for those who have accrued TOIL
- vi. The level for weekdays is in line with the roster template for summer 2013 which has a total number of shifts rostered of 156
- vii. The level for weekends is in line with the roster template for winter 2012 which has a total number of shifts rostered of 144

viii. The winter figures above for weekdays are broadly 8% higher than those generated by the winter roster template. However, the winter figures are likely to include tactical detachments which are not recorded.

<u>Chart (b): Average number of actual operational duty shifts, overtime, training and detachment, annual leave, TOIL, sickness and other absence over the periods 1/4/12- 30/9/12 (summer months), 1/10/12-31/3/13 (winter months) and 1/4/13-31/7/13 (part summer)</u>

		Duty Shi	fts	Overtim	e	Tr'g and I	Detach	Annual I	eave	TOIL		Sickness		Other ab	sence	TOTAL
Period		Avg/day	% tot	Avg/day	% tot	Avg/day	% tot	Avg/day	% tot	Avg/day	% tot	Avg/day	% tot	Avg/day	% tot	Avg/day
1/4/12 - 30/9/12	Summer 2012	151.3	65.4	2.1	0.9	21.4	9.2	44.5	19.2	4.2	1.8	5.8	2.5	4.2	1.8	231.3
1/10/12 - 31/3/13	Winter 12/13	152.2	66.0	0.2	0.1	25.0	10.8	37.2	16.1	8.2	3.5	5.9	2.5	2.3	1.0	230.8
1/4/13 - 31/7/13	Part summer 2013	152.3	66.9	0.3	0.1	22.2	9.8	41.2	18.1	4.8	2.1	3.8	1.7	3.4	1.5	227.7
1/4/12 - 31/3/13	Full year	151.7	65.7	1.2	0.5	23.2	10.0	40.9	17.7	6.2	2.7	5.8	2.5	3.3	1.4	231.1
1/4/12 - 31/7/13	16 months	151.9	66.0	0.9	0.4	22.9	10.0	41.0	17.8	5.8	2.5	5.3	2.3	3.3	1.4	230.2

- The duty shift figures are an overestimate of the actual number on the day since they do not include tactical detachments. So, for the full year period 1/4/12 to 31/3/13, operational duties make up at most 65.7% of the total attendances
- The training and detachment figures are an underestimate of the actual on the day since they do not include tactical detachments. So, for the full year period 1/4/12 to 31/3/13, training and detachments make up at least an average of 10% of total attendances
- iii. There is very little difference for rostered duty shifts between the summer and winter months since the figures do not include tactical detachments. The winter roster template generates 144 shifts per day compared with the average actual figure of 156.8 for the period 1/10/12 to 31/3/13. This implies that something like 12.8 ATCOs could have been tactically detached each weekday during that period which would significantly increase percentage detachment and decrease percentage duty shifts
- iv. The overall average staff total each day for period 1<sup>st</sup> April 2012 to 31<sup>st</sup> Mar2013 = 231.1, which, assuming gross annual attendances of 219 per ATCO per year, equates to 385 FTEs (compare with 354.27 deployable FTEs)
- v. The average annual leave over the one year period 1/4/12 to 31/3/13 was 17.7%. of attendances which is in line with expectations based on leave entitlements for 344 full-time staff on 7/11/13 (Note: on 7/11/13 there was a total of 344 full-time ATCOs of which 269 were on 33 days leave (18.7%), 27 on 30 days (17.4%) and 48 on 28 days (16.4%). The weighted average is 18.3% )

### 10 Sickness absence and labour turnover

In this section we compare levels of sickness absence at NERL against levels across the economy. We also consider how staff turnover at NERL compares with turnover among other employers. The conclusions from our analysis are:

- NERL's average loss of 3.9 working days per employee in 2012/13 to sickness absence was below the average figures reported by both the CIPD and CBI surveys (section 10.1);
- Average absence rates at NERL have remained at a level of just under four days a year per employee since 2008/09, with small variations between the major staff groups;
- The proportion of average working time lost at NERL at 2.7% in 2012/13 was lower than the comparative all-economy figure recorded by the CIPD, but average working time lost for ATCOs and ATSAs was somewhat higher than the figure for non-manual staff in private sector services (section 10.2);
- The cost of absence across all staff groups at NERL in 2012/13 accounted for 3% of annual paybill costs (section10.4);
- The labour turnover rate across all staff groups at NERL in 2012-13 was 5.1%. This compares favourably with the all-sector average of 11.9% (section 10.5);
- Low staff turnover rates at NERL are reflected in the long average service of its employees, with the average length of service of leavers from the ATCE, ATCO and ATSA staff groups above 17 years (section 10.5).

#### 10.1 Sickness absence trends

The reported sickness absence rate at NERL stood at 3.9 days for full-time equivalent employees in 2012/13, equivalent to 2.7% of planned hours. The two main sources of comparative data on sickness absence are the annual CIPD *Absence Management Survey* 2012<sup>30</sup> and the CBI *Absence and Workplace Health* survey 2013.<sup>31</sup> The CIPD survey records average employee absence at 6.8 days (5.1 days for non-manual employees working in private sector services) and the CBI reports that the average number of days lost to sickness is 5.3 days (4.2 days for non-manual employees working in the private sector). NERL's

<sup>&</sup>lt;sup>30</sup> The latest CIPD *Absence Management* survey, conducted in June 2012, draws on a sample of 667 organisations covering 1.7 million employees across four main sectors – private services, public services, manufacturing and production and not-for-profit. This was the latest survey data available. The results of the next CIPD survey on *Absence Management* are due to be published in the autumn of 2013.

<sup>&</sup>lt;sup>31</sup> Absence and workplace health survey 2013. The CBI survey was conducted during January and February 2013. The survey results are based on 153 useable responses across the public and private sectors.

average number of working days lost of 3.9 days per employee is therefore below the average figures reported by both the CIPD and CBI surveys (Table 41).

	5 /
	Average number of days lost per employee per year (FTE)
АТСО	3.74
ATSA	4.19
ATCE	3.78
Other groups	3.74
NERL (overall average)	3.86
CIPD – all employees*	6.8
CIPD – non-manual, private sector services*	5.1
CBI – all employees	5.3
CBI – non-manual employees, private sector	4.2

Table 41 Average number of working days lost for all and non-manual employees 2012/13

Source: NERL 2012/13; CIPD, 2012; CBI, 2013

\* The latest CIPD survey uses the 5 per cent trimmed mean, which is the arithmetic mean calculated when the largest and smallest 5 per cent of cases have been eliminated. Eliminating extreme cases from the computation of the mean results in a better estimate of central tendency when extreme outliers exist.

Average absence rates at NERL have remained at a level of just under four days a year per employee consistently since 2008/09, with small variations between average levels between the major staff groups (Table 42). In view of this broad stability, NERL reports that no new initiatives have been introduced to address sickness absence since 2009.

	2008/2009	2009/2010	2010/2011	2011/2012	2012/2013
ATCE	3.36	3.39	3.7	3.7	3.78
ATCO	3.52	3.4	3.58	3.95	3.74
ATSA	3.46	4.6	4.61	4.3	4.19
Other	4.43	3.79	3.37	3	3.74

Table 42 Average number of working days lost by major staff group (FTEs)

#### 10.2 Average working time lost

Only the CIPD survey reports on absence data in terms of the average percentage of working time lost. According to its most recent survey, the average proportion of working time lost to sickness absence in 2012 was 3% (or 2.2% for non-manual employees working in the private sector services).

Average working time lost for the major staff groups at NERL in 2012/13 was lower than the comparative all-employees figure recorded by the CIPD survey (Table 43). However, average

working time lost for ATCOs and ATSAs was higher than the CIPD-reported figure for nonmanual staff working in the private sector services.

	Planned hours for year	Hours lost due to	% working hours lost		
		sickness	due to sickness		
ATCO	2,536,171	80,835	3.2		
ATSA	37,845	1,108	2.9		
ATCE	1,228,499	24,841	2.0		
Other groups	994,155	21,428	2.2		
NERL (total)	4,796,670	128,213	2.7		
CIPD					
All employees	-	-	3.0		
Non-manual, private sector services	-	-	2.2		

Table 43 Average working time lost (%) 2012/13 – NERL and CIPD comparison

Across NERL as a whole, the proportion of planned hours lost to sickness absence has shown only minor fluctuations in recent years, varying from 2.4% to 2.9% (Table 44).

Table 44 Planned hours lost due to sickness (%)

	2008-09	2009-10	2010-11	2011-12	2012-13
NERL	28	29	25	24	27
average	2.0	2.5	2.5	2.7	L./

#### 10.3 Absence by workforce size

The CIPD survey reports that larger organisations tend to have higher levels of absence than smaller ones (Table 45). The survey shows that average absence levels are highest in organisations with over 1,000 employees at 8.1 days, and lowest in the smallest organisations employing between 1 and 49 people at 5.5 days. The overall average level of absence at NERL of 3.9 days in 2012/13 is therefore well below the reported absence in equivalently sized organisations of those employing between 1,000 and 4,999 employees.

NERL 2012/13	
Workforce size (no. of UK	Average days lost per
employees)	year (n)
1-49	5.5
50-249	5.7
250-999	7.0
1,000-4,999	8.1
5,000+	8.1
NERL (FTE average)	3.86

Table 45 Average no. of days lost per employee per year by workforce size – CIPD and NERL 2012/13

### 10.4 Cost of employee absence

According to the results of the CIPD Absence Management survey, the average annual cost of sickness absence per employee was  $\pounds$ 1,187 in 2012 (equivalent to 4.8% of median annual earnings excluding overtime based on ASHE April 2012 data). In private services the average cost per employee was of  $\pounds$ 861 (equivalent to 3.8% of median annual earnings in the private sector excluding overtime based on ASHE April 2012 data).

The cost of absence across all staff groups at NERL in 2012/13 accounted for 3% of annual paybill costs (Table 46), rather lower than the figures calculated from the CIPD survey data.

Staff group	Annual paybill costs £m	Annual cost of	Cost of absence as
<u> </u>		absence £m	proportion of paybill %)
ATCO	£123m	£4m	3%
ATSA	£31m	£1m	3%
ATCE	£57m	£1m	2%
Other groups	£44m	£1m	2%
Total	£255m	£7m	3%

Table 46 Cost of absence on pay bill by staff groups at NERL, 2012/13

#### 10.5 Staff turnover

The labour turnover rate across all staff groups at NERL in 2012-13 was 5.1%. This compares favourably with the all-sector average of 11.9% reported by the CIPD in its *Resourcing and Talent Planning 2013* survey, as Table 47 shows. The survey reported an average turnover rate of 16.3% for the private sector services, highlighting an even wider gap with NERL's staff turnover rate. The CIPD survey, based on responses from 462 organisations, was conducted during March and April 2013.

The CIPD survey found that the median turnover rate was down on the previous year (falling from 12.7% in 2012 to 11.9% in 2013). As in previous CIPD surveys, turnover in the private services sector was mostly attributed to employees leaving voluntarily, followed by dismissals and leaving involuntarily and then by fixed and short-term contracts coming to an end (Table 48).

Table 47 Rate of labour turnover, 2008-2013							
	2008	2009	2010	2011	2012	2013	
CIPD median rate	17.3	15.7	13.5	12.5	12.7	11.9	
	2008-09		2009-10	2010-11	2011-12	2012-13	
NERL average	7.55		11.01	6.46	6.22	5.08	

Table 47 Rate of labour turnover, 2008-2013

Source: CIPD, 2013, NERL

	All leavers %				Voluntary leavers %					
	2009	2010	2011	2012	2013	2009	2010	2011	2012	2013
Manufacturing and production	15.3	12.4	9.3	9.5	8.0	7.7	2.7	3.7	4.5	3.1
Private services	16.8	14.6	13.8	16.1	16.3	10.4	7.4	8.7	8.9	11.8
Public sector	12.6	8.6	8.5	10.1	9.4	7.6	5.8	3.4	1.9	4.2
Voluntary, community, not-for-profit	16.4	15.9	13.1	13.0	15.2	11.0	10.2	7.0	7.6	6.6

Table 48 I	Median	labour	turnover	rates	by	industry	sector
------------	--------	--------	----------	-------	----	----------	--------

Source: CIPD, 2013

NERL's reported turnover figures that have declined in step with the findings of the CIPD survey, from 6.22% in 2011/12 to 5.08% in 2012/13. All staff groups at NERL except ATCEs have seen falls in average annual turnover since last year. Over a longer period, average annual turnover has fallen across all staff groups at NERL overall over the last three years since 2010/11. Relatively low turnover can bring benefits through reduced recruitment, selection and training costs, particularly for ATCOs and can contribute to efficiency through the retention of skills and experience.

Low staff turnover rates at NERL are reflected in the long average service of its employees. The average length of service of leavers from staff groups ATCE, ATCO and ATSA is above 17 years (Table 49). Average length of service for other staff leavers (including STAR groups and managerial and support) is much shorter by comparison at 7.06 years.

	Average length of service
	of leavers (years)
ATCE	17.38
ATCO	22.25
ATSA	17.86
Other groups	7.06
NERL (total)	16.14

Table 49 Average length of service of leavers by NERL staff groups 2012/13Average length of service

#### 10.6 Turnover by staff group

Average turnover rates for the different staff groups at NERL are considerably lower than the 2013 median turnover rate across the wider economy of 11.9%, as reported by the CIPD survey. Even the NERL grouping with the highest rate of average annual staff turnover in 2012-13 – 'other groups' including employees in science and technology roles and managerial and support – at 8.3% was well below the CIPD median figure (Table 50).

Assessing employment costs at NERL

	2008-09	2009-10	2010-11	2011-12	2012-13
ATCE	8.53	9.17	5.30	1.59	4.91
ATCO	7.11	10.07	5.42	4.67	3.82
ATSA	5.04	13.10	8.05	10.22	4.35
Other groups	9.63	13.12	8.69	11.35	8.30
NERL (total)	7.55	11.01	6.46	6.22	5.08

Table FO Average	annual	turnovor	10/16		staff around
Table JU Average	annuat	luniover	(70) L	JYINLAL	stan groups

The CIPD survey found that retention difficulties in the 2013 survey were focused on higherskilled categories of staff, for example managers and professionals/specialists (Table 51). These results appear to tally with turnover rates at NERL, where average turnover in the past three years has been highest for 'other groups' of staff including managerial and science and technology roles.

Table 51 Relention difficulties by occupational category					
Occupational category	% of respondents				
Managers and professionals/specialists	37				
Technical	17				
Senior managers/directors	15				
Services (customer, personal, protective and sales)	9				
Administrative, secretarial	7				
Manual/craft workers	6				
Source: CIPD, 2013					

Table 51 Retention difficulties by occupational category

### 11 International labour cost comparisons

As part of this project, we were asked to examine NERL's employment costs and productivity against other major European Air Navigation Service Providers (ANSPs). International comparisons are almost always fraught with difficulty and the results should be treated with a considerable degree of caution. The main conclusions of our review are:

- Measured against a global pool of ANSPs engaged in Continental and Oceanic Operations, ATCOs at NATS/NERL work relatively short average annual hours in Operations, amounting to 77% of the average for all those ANSPs participating, though these figures do not take account of time spent on non-operational duties (section 11.2)
- Limiting comparisons to ANSPs in the Europe, ATCOs at NATS/NERL emerge as having average weighted working hours in Operations towards the lower end of the scale, standing at 90% of the median, but again this does not take account of time on non-operational activity;
- A study using a combined measure of ATCO-hour productivity based on clusters of air control centres handling traffic of similar complexity, flight levels and numbers of sectors concluded that in 2011 London had higher levels of ATCO-hour productivity than the average for other centres in the same cluster (section 11.3);
- The same study concluded gate-to-gate ATCO-hour productivity in NATS/NERL in 2011 was some 14% down on the levels of 2008, reflecting the fall in traffic volumes;
- In the UK ATCO employment costs in 2011 averaged five times (527.4%) national average hourly labour costs, higher than the all-EU average ratio of four times (439.1%);
- Having reviewed the data, our conclusion is that international comparisons are useful for measuring productivity and organisational performance. They are, however, of more limited value as a basis for judgements about pay levels for ATCOs in current circumstances (section 11.5).

#### 11.1 Conduct of the international comparison exercise

As noted in Chapter 8, NERL has expressed a strong view that, because its air traffic controllers operate in a complex three-dimensional space, it is not possible to make direct job-for-job with other UK organisations. NERL argued that the direct comparisons should be with air traffic controllers operating in similarly complex air space elsewhere in Europe. For example, the grouping of air traffic control organisations in Europe – FABEC – has
highlighted the air space over the English Channel as a 'hot spot' bordering its own air space along with other 'hot spots' in the Amsterdam/Maastricht/Ruhr and Frankfurt sectors.<sup>32</sup>

We have reservations about this approach. While there is potential for movement between ANSPs, we have not received evidence of a currently active international labour market in ATCOs and related staff, involving substantial numbers switching from country to country across Europe in response to national differences in pay and conditions (though we understand that a limited number of ATCOs have moved from NERL to posts in the Middle East). It should also be noted that differences in pay and benefits between countries for particular jobs on their own are not a strong indicator – factors including the scale of differences in national labour markets, differences in the customary make-up of remuneration between countries and variations in the social charges payable by employers leave international comparisons of reward packages and costs open to question.

Despite our reservations, IDS endeavoured to collect data from a range of other major European ANSPs on the pay levels and benefits of air traffic controllers to help inform this project. We also compiled a short pay and benefits survey for distribution to European ANSPs but this did not elicit any responses<sup>33</sup>. As a result we have been unable to produce direct pay and conditions comparisons for air traffic control grades based on original research.

As an alternative approach, we have drawn on the international data contained in the ACE *2011 Benchmarking Report*<sup>34</sup> and the Civil Air Navigation Services Organisation (CANSO) *Global ANS Performance Report 2012*<sup>35</sup> for the analysis in this section.

#### 11.2 Comparisons of average annual working hours in Operations

The length of hours actually worked by employees can be compared between countries without being subject to the distortions that beset comparisons of pay levels. Table 52 shows average annual duty hours for ATCOs in Continental and Oceanic Operations in a range of ANSPs as collected by CANSO. It sets out the average number of hours ATCOs in Operations spend on duty in operations, including breaks and overtime.

The results show ATCOs at NATS/NERL working the shortest average annual hours in Operations of any of the ANSPs covered. Their average hours amounted to 77% of the

<sup>&</sup>lt;sup>32</sup> Assessment of NERL Employment Costs: Report for the CAA, IDS, 2009

<sup>&</sup>lt;sup>33</sup> We contacted 13 other ANSPs, including: Germany; France; Belguim; Portual; Netherlands; Maastricht Upper Area Control; Italy; Finland; Switzerland; Denmark; Poland; Spain and Canada.

<sup>&</sup>lt;sup>34</sup> ATM Cost-Effectiveness (ACE) 2011 Benchmarking Report , Eurocontrol, April 2013

<sup>&</sup>lt;sup>35</sup> Global Air Navigation Services Performance Report 2012, CANSO, 2013

average for all those ANSPs participating in the CANSO performance monitoring exercise. These figures, however, by definition exclude hours worked on non-operational duties.

Country	ANSP	Average annual hours for ATCOs
Cyprus	DCAC	2457
Portugal	Nav Portugal	1789
USA	FAA ATO	1783
Curacao	DC-ANSP	1752
Estonia	EANS	1666
Sweden	LFV	1660
All participant average	2*	1603
Canada	NAV CANADA	1597
Ireland	IAA	1568
Hungary	HungarControl	1550
Czech Republic	ANS CR	1534
Denmark	NAVIAIR	1507
Slovak Republic	LPS	1463
Latvia	LGS	1444
New Zealand	Airways NZ	1384
South Africa	ATNS SA	1378
Finland	Finavia	1315
Spain	AENA	1263
UK	NATS	1234

Table 52 Average annual working hours for ATCOs in Operations

Source: Selected ANSPs from Figure 8-12 of the CANSO report \*Including ANSPs not included in the table

Data comparisons restricted to Europe are compiled on a standardised basis as part of the ACE analysis. As Table 53 shows, once again ATCOs at NATS/NERL emerge as having average weighted working hours in Operations towards the lower end of the scale, standing at the lower quartile point of the range. Weighted average hours in the UK are 90% of the median for all participant countries in the ACE research. Again, this measure does not take account of time spent on non-operational duties.

Country	ANSP	Average annual hours for ATCOs
Portugal	Nav Portugal	1788
Norway	Avinor (Continental)	1632
Sweden	LFV	1627
Netherlands	LVNL	1592
Ireland	IAA	1596
Finland	Finavia	1496
Austria	Austro Control	1486
Belgium	Belgocontrol	1386
All participo	ant median	1386
Italy	ENAV	1358
France	DSNA	1304
Spain	AENA	1263
UK	NATS Continental	1246
Switzerland	Skyguide	1245
Maastricht	MUAC	1205
Germany	DFS	1143

Table 53 Average annual weighted hours worked by ATCOs in Operations 2011

Source: ACE

We understand that the EU splits ANSPs into various groupings for regulatory purposes<sup>36</sup>. For ease of reference, Table 54 brings together the ACE data on ATCO average weighted working hours in Operations in 2011 for the five largest ANSPs in the EU. Measured on the basis of this restricted group, ATCOs at NATS/NERL have working hours in Operations equivalent to 99% of the average.

Country	ANSP	ACE Average annual hours for ATCOs
Italy	ENAV	1358
France	DSNA	1304
Spain	AENA	1263
UK	NATS Continental	1246
Germany	DFS	1143
Average		1263

Table 54 Average annual weighted hours worked by ATCOs in five largest ANSPs

## 11.3 Results from the ACE report

The ACE report includes a wide range of other data and detailed analysis. Below, we briefly outline key points that are relevant to the present project.

<sup>&</sup>lt;sup>36</sup> PRB Advice to the Commission in the Setting of Union-wide Performance Targets for RP2, Performance Review Body, September 2013

According to the report's analysis of employment costs per ATCO-hour (gate-to-gate), NATS Continental's average costs of 106 euros an hour were some 5% above the all-Europe average of 101 euros (Table 55). Compared to the other four largest ANSPs in the EU, employment costs at NATS Continental were the same as those of ENAV (Italy) and below those of AENA (Spain) and DFS (Germany) but higher than employment costs at DSNA (France).

Country	ANSP	ATCO costs per duty hour (Euros)
Spain	AENA	164
Portugal	Nav Portugal	160
Maastricht	MUAC	157
Austria	Austro Control	156
Germany	DFS	154
Switzerland	Skyguide	148
Netherlands	LVNL	136
Belgium	Belgocontrol	130
Norway	Avinor (Continental)	116
Sweden	LFV	110
Italy	ENAV	106
UK	NATS Continental	106
Ireland	IAA	95
France	DSNA	92
Finland	Finavia	70
All participant average*		101

Table 55 ATCO employment costs 2011

Source: ACE report, selected data from Figure 4.12 \*Includes ANSPs not featured in the table

The ACE report sets out comparisons of a combined measure of ATCO-hour productivity based on clusters of air control centres handling traffic of similar complexity, flight levels and numbers of sectors. On this measure London emerged in 2011 as having levels of ATCO-hour productivity above the average for all ANSPs in the cluster and broadly equivalent with other centres in the same cluster, such as Amsterdam, Bremen and Brussels<sup>37</sup>.

Looking at the results for gate-to-gate ATCO-hour productivity in NATS/NERL over time shows productivity in 2011 was some 14% below the levels of 2008. This would seem

<sup>&</sup>lt;sup>37</sup> ACE 2011 Benchmarking Report, Figure 4.11

consistent with the decline in the volume of air traffic after 2008 noted in Table 2 in chapter 4.

When employment costs are viewed in association with data on ATCO-hour productivity, however, the report concludes that ATCO employment costs per unit of output (composite flight hours) in 2011 at NATS were 106 euros, compared with a European average of 127 euros. On this basis, NATs composite flight-hour costs were some 20% below the European average.

#### 11.4 ATCO employment costs compared with the wider economy

Using the ACE results and data from Eurostat, it is possible to set ATCO hourly employment costs in their national context, as shown in the table below.

Country	ANSP	ATCO	costs per o	duty hour	Whole economy hourly labour costs			
1	2	3	4	5	6	7	8	
		Euros	As % of UK ATCO costs	As % of average national labour costs	Euros	As % of UK	Non- wage %*	
Spain	AENA	164	154.7	773.6	21.2	105.5	26.3	
Portugal	Nav Portugal	160	150.9	1,290.3	12.4	61.7	N/A	
Maastricht	MUAC	157	148.1	-	N/A	-	N/A	
Austria	Austro Control	156	147.2	537.9	29.0	144.3	26.4	
Germany	DFS	154	145.3	520.3	29.6	147.3	21.9	
Switzerland	Skyguide	148	139.6	-	N/A	-	N/A	
Netherlands	LVNL	136	128.3	429.0	31.7	157.7	23.9	
Belgium	Belgocontrol	130	122.6	358.1	36.3	180.6	27.4	
Norway	Avinor (Continental)	116	109.4	261.9	44.3	220.4	19.0	
Sweden	LFV	110	103.8	302.2	36.4	181.1	33.3	
Italy	ENAV	106	100.0	391.1	27.1	134.8	27.1	
UK	NATS Continental	106	100.0	527.4	20.1	100.0	15.1	
Ireland	IAA	95	89.6	331.0	28.7	142.7	14.1	
France	DSNA	92	86.8	273.8	33.6	167.2	33.6	
Finland	Finavia	70	66.0	237.2	29.5	146.8	22.3	
All participant average		101	95.2	439.1	23.0**	114.4	23.7**	

Table 56 ATCO employment costs compared with all-economy labour costs 2011

Source: ACE, Eurostat

\*Non-wage costs such as employer social charges as a percentage of hourly labour costs in 2012 \*\*Average across all EU27 member states including those not featured in the table

The first three columns replicate the ACE data used above in Table 55. In column 4 we express ATCO hourly employment costs for each ANSP as a percentage of ATCO

employment in the UK. Across the ANSPs featured in the table, ATCO employment costs range from 66% of UK levels in Finland to 154.7% in Spain.

In column 6 of the table, we show average hourly labour costs in each country for the whole economy in 2011, excluding agriculture and public administration, expressed in euros<sup>38</sup>. Hourly labour costs are made up of wages, salaries, bonuses, allowances and the value of benefits such as paid holidays, food, drink, fuel and company cars plus non-wage costs such as employers' social contributions and employment taxes.

It should be noted that employer social charges and other government levies make up a substantial proportion of average hourly labour costs in many European countries (shown in column 8). For example, in France and Sweden these charges account for a third of labour costs. The UK has relatively low non-wage costs across the economy as a whole (15.1% of hourly labour costs). Partly as a result of this, the UK has comparatively low average hourly labour costs when viewed against Europe's other major economies. This is illustrated in column 7, which expresses all-economy average labour costs in each country as a percentage of the average in the UK. Among the countries featured in the table, only Portugal (at 61.7%) has average labour costs below those of the UK.

Column 5 brings these two sets of data together to express ATCO average employment costs per duty hour in each ANSP as a percentage of average hourly labour costs within the relevant country. The results show ATCO employment costs ranging from 2.4 times (237.2%) average labour costs in Finland to nearly 13 times (1290.3%) in Portugal. Across the EU27 member states as a whole, ATCO employment costs averaged just over four times (439.1%) national average hourly labour costs. In the UK ATCO employment costs averaged over five times (527.4%) average hourly labour costs, higher than the all-EU average ratio.

#### 11.5 International comparisons as a basis for decisions on reward

Having reviewed the data lying behind the figures in the ACE report, our conclusion is that international comparisons are useful for measuring and assessing productivity and organisational performance across ANSPs. They are, however, of more limited value as a basis for judgements about pay levels for ATCOs in current circumstances. The extent of variation in Table 56, for example, in ATCO employment costs in Operations per ATCO duty hour (from 70 euros in Finland to 164 euros in Spain) is wide and does not seem clearly related to variations in the content of the job between different ANSPs.

<sup>&</sup>lt;sup>38</sup> Labour costs in the EU27, News release 54/2013, Eurostat, April 2013

#### Assessing employment costs at NERL

A host of factors contribute to variations in levels of remuneration for ATCOs between ANSPs and to variations within individual countries in the remuneration of ATCOs relative to other employees. Social and cultural factors, differences in industrial structure, variations in labour markets, differences in educational levels of attainment and many more considerations play a part in shaping the variations, making it hard to detect a pattern.

## 12 Evaluation of the results and prospects

The scope of this project is to examine current pay and other elements of the remuneration package (including pensions) for NERL's major groups of employees and to benchmark them against relevant comparators, with a focus on five areas:

- pay and benefits benchmarking;
- labour market trends;
- efficient workforce deployment to meet operational requirements;
- staff absence and turnover;
- European labour costs comparisons.

The requirement is to provide an assessment of how NERL's costs compare to the market, scope for improvement in particular areas and to provide an opinion as to whether the assumptions on employments costs in NERL's business plans are both challenging and achievable.

Below we briefly outline our conclusions.

# 12.1 Examining the NERL remuneration package and benchmarking against comparators

- NERL basic salaries for PCG and specialist staff in the STAR grades are close to or below the market. ATCO, ATSAs, Engineering and graded support staff are between 12% and 22% above the market.
- NERL total cash levels show that the majority of positions are within +/- 10% of the market apart from Engineering Service Delivery.
- NERL total reward levels are within +/-10% of the market apart from Engineering and ATSA groups which are between 15% and 19% above the market.

On pensions, as the analysis in chapter 7 shows:

- Like many larger employers, at NERL a legacy DB scheme applies for most current staff with severely limited scope for changing the benefit structure while a DC scheme applies for newer recruits (section 7.3);
- For eligible NERL employees in the DB scheme member contributions are above average and the scheme is more favourable than standard market practice in terms

of employer contribution levels, the accrual rate, pensionable age and uprating arrangements (section 7.4);

• The DC scheme applying to newer NERL employees is broadly in line with private sector DC practice as a whole (section 7.5).

The deficit in funding for already accrued DB benefits is clearly a cause for concern. It is our understanding, however, that legislative and trust deed restrictions mean there is severely limited scope for further changes to contain the costs of the DB scheme. Given the evidence that the DC scheme to which NERL contributes for newer employees is in line with current practice, there does not seem a strong case for examining changes in pension provision as a major source of cost reductions.

#### 12.2 Workforce deployment

The operational workload fluctuates through the day and from day to day and week to week and is subject to short notice changes such as airline schedule changes. The rostering process is constrained by the CAA SRATCOH regulations and the NATS working practice agreements, NAG56 for ATCOs and NAG62 for ATSAs, which are far more stringent than the standard European Working Time Directive. In addition, there is a long training lead time for ATCOs of up to 3 years. So, for very good reasons, there is a risk-averse approach to setting staffing levels such that they will safely cover the workload with the appropriate skill mix.

To assess the efficiency of the levels set would need a detailed analysis of workload and skills required and skills available which was beyond the scope of this study. Note that, during RP2, improvements are planned that will improve the skill mix efficiency, and reduce the long lead-time training dependency.

The actuals data supplied does not include tactical detachments. This means that the average proportions of time spent on duty shifts are maximums, since they include tactical detachments that have not been recorded. Similarly, the proportions of time spent on training and detachments are minimums since they do not include tactical detachments.

#### 12.3 Sickness absence and labour turnover

Average levels of sickness absence among NERL staff have been broadly stable since 2009 and are relatively low by comparison with the wider economy.

At an average of just over 5% in 2012-13, staff turnover at NERL is lower than the average among other employers. Turnover is highest among STAR and support staff and lowest among ATCOs. Low staff turnover rates are reflected in the relatively long average service of

NERL employees. Low turnover rates can help contain the costs arising from recruitment and training and experienced staff typically have higher productivity, though at the same time organisations benefit from a degree of inflow of new blood.

#### 12.4 International employment costs

International comparisons are useful for measuring productivity and organisational performance. Our view is that they are of more limited value as a basis for taking decisions about the appropriate pay levels for ATCOs. Until there is clear evidence of an active European labour market in ATCOs developing, we consider their relevance as limited.

Turning to work patterns, comparisons of ATCO hours worked in Operations across ANSPs suggest that NERL's hours are lower than average. As noted in our analysis, these comparisons do not take account of non-operational hours of duty. The deployment of staff is considered in section 12.2 above.

#### 12.5 Headcount, pay and paybill prospects under the RP2 Business Plans

As the RP 2 Business Plan (2015-2019) put out for consultation notes, NERL's predominant controllable operating cost is manpower. NERL has been reducing headcount over recent years, as outlined in chapter 5. FTE employee headcount by the end of March 2013 is 15.4% lower than in March 2009 (Table 14) and 24.5% lower than at the start of CP1.

Table 57 sets out future headcount changes based on the two alternative NERL business plans. The table takes as the baseline employee numbers in January 2013 (these are slightly different from the end of March 2013 figures used in Table 14, but only by small margins). It shows the scale of reductions in ATCO staff and other groups of staff (except for ATCE staff) in the period ahead of commencement of RP2 in January 2015. In that period, NERL staff will be reduced in total from 3,350 to 3,130 (a drop of 6.6%). NERL tell us they are well advanced with the voluntary redundancy programme to achieve the reduction, which is designed to reduce the cost base as quickly as possible to expected RP2 target levels. This is 100 less than the projected figure than 3,230 shown in the ten year business plan of 2010 and is 1 year ahead of that schedule as the CP3 period has been cut short from 5 to 4 years. The reduction has been achieved by changes to working practices and process efficiencies and a fall in traffic levels which have allowed the company to reduce the number of trainee ATCOS.

Under Plan 1, the number of ATCO and ATCE staff would be unchanged in the period 2015 to 2019 covered by RP2, while there would be a reduction of just over 5% in other grades. Overall, under the plan NERL staff would be reduced by 1.9% during RP2 to a total of 3,070

in 2019/20. This total is very close to the projected workforce of 3,080 for 2020/21 (end of CP4) given in the ten-year business plan of 2010 (Table 12). The make-up of the end-period total under Plan 1, however, is rather different from the projected end numbers in the 2010 business plan, with fewer ATCOs but larger numbers in the other staff groups (it should be noted that the 2010 plans assumed a 50% increase in traffic handled over the period 2001/02 to 2020/21).

Under Plan 2, there would be an overall reduction of 5.1% in staff in the period January 2015 to December 2019. As the table shows, the reductions would range from a 2.4% cut in ATCE graded staff to a 6.8% fall in ATCOs. This would take total staff numbers in 2019/20 to 110 below the projected total of 3080 in 2020/21 in the 2010 business plan. By the end of Plan 2, the number of ATCOs would be 260 lower than in the end year of the 2010 business plan, but the numbers in other staff groups would be higher.

	2013*	End of RP1		End RP2 Plan 1 End RP2 Plan 2				an 2
	No.	No.	No.	% decline 2013-19	% decline 2015-19	No.	% decline 2013-2019	% decline 2015-19
ATCO	1,275	1,170	1,170	8.2	-	1,090	14.5	6.8
ATSA	565	490	465	17.7	5.1	465	17.7	5.1
ATCE	850	850	850	-	-	830	2.3	2.4
Other*	660	620	585	11.4	5.6	585	11.4	5.6
Total	3,350	3,130	3,070	8.4	1.9	2,970	11.3	5.1

Table 57 Future headcount changes

Source: NERL RP2 Business Plan, page 26 \*January 2013

The other major factor in shaping future employment costs (excluding pensions) is the level of annual pay reviews. The three-year deal taking effect from January 2013 covers the period to December 2015. For annual reviews thereafter, NERL operates a planning assumption of CPI plus 0.25%<sup>39</sup>. Drawing on the inflation assumptions used by NERL<sup>40</sup>, anticipated average levels of future pay reviews are set out in Table 58. The average pay rise in January each year is based on the average level of CPI increase in the preceding calendar year.

The inflation assumptions used by NERL are sourced from the IMF forecast published in January 2013. For the period beyond 2017 (for which IMF data is not available) data has been derived by NERL from Oxford Economics. It should be noted that the IMF forecasts are towards the lower end of the range. For comparison, the table includes the figures from the

<sup>&</sup>lt;sup>39</sup> Data provided on slide 14, NERL RP2 Staff Opex Review: Kick-off Meeting, 3 September 2013

<sup>&</sup>lt;sup>40</sup> RP2 Business Plan, Appendix J

summer 2013 forecast by the well-regarded EY ITEM Club for CPI inflation for the calendar years to 2017. It also includes the ITEM forecast for private sector average earnings increases for the calendar years to 2017. The ITEM club does not forecast for 2018 onwards, but a reasonable working assumption (not included in the table) is that the economy will be in full recovery mode by then and the pattern of 2017 is likely to be broadly replicated in 2018 and 2019.

While caution must be exercised in comparing basic pay increases at NERL with the different measure of average earnings from the ITEM forecast, the results in Table 58 suggest that from 2014 onwards basic pay at NERL is likely to be rising more slowly than average earnings across the private sector.

	2013	2014	2015	2016	2017	2018	2019
CPI % rise*	1.8	1.7	1.7	1.8	1.9	1.9	2.0
Basis for NERL increase	Agreement	CPI+0.25%	CPI	CPI+0.25%	CPI+0.25%	CPI+0.25%	CPI+0.25%
Av pay rise**	2.75	2.05	1.7	1.95	2.05	2.15	2.15
ITEM forecast of CPI % rise*	2.8	2.2	2.2	2.4	2.5	N/A	N/A
ITEM forecast of private sector av. earnings*	1.3	2.6	3.4	3.8	3.9	N/A	N/A

Table 58	<b>CPI</b> inflation	and future	nav reviews
Tuble JU	CETIMULATION	and future	pay reviews

\*Average for calendar year

\*\*Estimated average using forecast CPI increase in previous calendar year

In Table 16 in chapter 5 we set out average paybill costs per FTE employee in the major staff groups in the period 2009 to 2013. Applying the estimated average pay increases for future years indicated in Table 58 to these paybill costs produces the figures shown in Table 59. These figures – expressed in nominal terms and not adjusted for inflation – should be treated with caution, given that future pay reviews may not affect all elements of paybill. They should be regarded as broadly indicative only.

Table FO Fatter at a dia		ETE I	/		)
Lanie 59 Estimated a	verade navnili costs i	ner ETE emplove		excluding	nensionsi
	verage payon costs		20000	chetaanig	ocholong

	2013	2014	2015	2016	2017	2018	2019	% increase over period
Av pay rise	2.75	2.05	1.7	1.95	2.05	2.15	2.15	
ATCO	96.7	98.7	100.4	102.4	104.5	106.7	109.0	12.7
ATSA	55.4	56.5	57.5	58.6	59.8	61.1	62.4	12.6
ATCE	66.2	67.6	68.7	70.0	71.4	72.9	74.5	12.5
Other*	66.7	68.1	69.3	70.7	72.1	73.7	75.3	12.8

Source: IDS calculations

On the basis of the estimated average paybill costs per FTE employee shown in Table 59 above, it is possible to build estimates of the total paybill changes over the RP2 period for the two outline NERL business plans. The figures for staff numbers in the table are derived from Table 57. The 2014 average paybill costs per employee have been used to calculate the total estimated paybill for the end of RP1, as this ends in December 2014. The 2019 average paybill costs per employee have been used paybills. The results shown in Table 60 should be seen as indicative only.

	2	2013	End	of RP1	Eı	nd RP2 Pla	n 1	Er	nd RP2 Pla	an 2
	No.	Paybill £m	No.	Paybill £m	No.	Paybill £m	% rise over RP2	No.	Paybill £m	% rise over RP2
ATCO	1,275	123	1,170	115	1,170	128	11.3	1,090	119	3.5
ATSA	565	31	490	28	465	29	3.6	465	29	3.6
ATCE	850	56	850	57	850	63	10.5	830	62	8.8
Other*	660	44	620	42	585	44	4.8	585	44	4.8
Total	3,350	254	3,130	242	3,070	264	9.1	2,970	254	5.0

Table 60 Planned headcount changes and estimated future paybill changes £m (excluding pensions)

Source: IDS

The results indicate that at the end of RP2 total estimated annual paybill costs in cash terms would be some 9.1% higher under Plan 1 and 5.0% higher under Plan 2 than at the end of RP1 in 2014. These increases are in nominal cash terms. CPI inflation over the five-year period January 2015 to December 2019 inclusive is forecast – on the basis of the IMF/Oxford Economics figures in Table 58 – to be 9.7%. Adjusted for this CPI inflation figure, both plans would therefore represent a reduction in the paybill in real terms (a reduction of 0.6% for Plan 1 and 4.7% for Plan 2).

According to the Executive Summary<sup>41</sup> in the consultative RP2 Business Plan, Plan 1 would deliver an 8% cut in overall manpower including 8% fewer front-line controllers and other cuts in staffing costs by the end of RP2. Plan 2 would deliver deeper cuts in operating costs, including a 14% reduction in front-line controllers by the end of RP2. We note that on the basis of the figures outlined above, changes of this order are not being delivered wholly during RP2. We understand that they take also account of action being taken during RP1.

<sup>&</sup>lt;sup>41</sup> RP2 Business Plan (2015-2019) for Customer Consultation, NERL, May 2013, page 2

## **13 Appendices**

## 13.1 ASHE methodology

The Annual Survey of Hours and Earnings is produced each year by the ONS and provides information about the levels, distribution and make-up of earnings and hours worked by employees in all industries and occupations across the UK.

The ASHE sample is around 165,000, drawing from a 1% sample of National Insurance (NI) records, and includes individuals whose NI number ends with two specific digits. Data is obtained from the Inland Revenue and represents a 1 in 100 random sample of all jobs registered in a PAYE scheme. To calculate the weights, responses from the Labour Force Survey (LFS)<sup>42</sup> are divided into 'calibration groups', as defined by a cross-classification of occupation, sex, age, and workplace region, whereby:

- Occupation is the Standard Occupational Classification (SOC) 2000 one-digit (or major group) code, of which there are nine
- Age is divided into three age bands (16-21, 22-49 and 50 plus)
- Workplace region is based upon 'Government Office Region (GOR)', but aggregated into two areas comprising (i) London and the South East and (ii) elsewhere in the UK.

Breakdowns are given for each of the following variables: gross weekly pay; gross hourly pay; gross annual pay; weekly pay excluding overtime; hourly pay excluding overtime; overtime pay; shift pay; gross hours worked; and overtime hours worked.

Since the main sample file includes only those jobs registered in a PAYE scheme, there remains an issue of 'under-coverage' of the labour market, especially among lower earners; this is because many of those not registered in a PAYE scheme can be expected to earn below the tax threshold.

To address the issue, supplementary surveys are conducted to augment data inputs to the ASHE.

<sup>&</sup>lt;sup>42</sup> The Labour Force Survey is a quarterly sample survey of households living at private addresses in Great Britain. Its purpose is to provide information on the UK labour market that can then be used to develop, manage, evaluate and report on labour market policies. The questionnaire design, sample selection, and interviewing are carried out by the Social and Vital Statistics Division of the Office for National Statistics on behalf of the Statistical Outputs Group of the ONS.

## 13.2 NERL headcount changes 2009-13

As at 31st March								
2009		Hea	adcount			F	TEs	
	FT	PT	Contrs	Total	FT	PT	Contrs	Total
ATCO	1,345	83	0	1,428	1,344.7	57.5	0.0	1,402.2
ATSA	742	55	0	797	742.0	34.4	0.0	776.4
ATCE	916	22	21	959	916.0	14.5	21.0	951.5
Other	662	48	138	848	662.0	33.0	138.0	833.0
Total	3,665	208	159	4,032	3,664.7	139.4	159.0	3,963.0
As at 31st March 2010		Hea	adcount			F	ΓEs	
	FT	PT	Contrs	Total	FT	PT	Contrs	Total
ATCO	1,294	94	1	1,389	1,294.0	65.3	1.0	1,360.3
ATSA	655	46	12	713	655.0	31.2	12.0	698.2
ATCE	851	17	17	885	851.0	10.9	17.0	878.9
Other	601	52	74	727	601.0	36.4	74.0	711.4
Total	3,401	209	104	3,714	3,401.0	143.9	104.0	3,648.9
As at 31st March 2011		Но	adcount			F	TFe	
2011	FT	PT	Contrs	Total	FT	РТ	Contrs	Total
ATCO	1.285	108	0	1.393	1.285.0	75.9	0.0	1.360.9
ATSA	592	47	22	661	592.0	31.5	22.0	645.5
ATCE	801	20	18	839	801.0	13.5	18.0	832.5
Other	605	56	60	721	605.0	38.9	60.0	703.9
Total	3,283	231	100	3,614	3,283.0	159.8	100.0	3,542.8
As at 31st March								
2012		Hea	adcount			F	ΓEs	
	FT	PT	Contrs	Total	FT	PT	Contrs	Total
ATCO	1,222	104	3	1,329	1,221.3	73.5	3.0	1,297.8
ATSA	534	42	33	609	534.0	29.5	33.0	596.5
ATCE	816	21	4	841	815.0	13.9	4.0	832.9
Other	617	64	12	693	616.4	44.1	12.0	672.5
Total	3,189	231	52	3,472	3,186.7	161.1	52.0	3,399.8
As at 31st March 2013		Не	adcount			F	ſFs	
2013	FT	PT	Contre	Total	FT	рт	Contre	Total
ATCO	1,193	108	1	1.302	1,193.0	77.6	1.0	1.271.6
ATSA	528	44	0	572	528.0	31.1	0.0	559.1
ATCE	841	26	3	870	840.8	17.8	3.0	861.6
Other	598	67	13	678	598.0	47.9	13.0	658.9
Total	3,160	<u>24</u> 5	17	3,422	<u>3,15</u> 9.8	<u>174</u> .3	17.0	3 <u>,35</u> 1.1
			-					

Notes

The numbers presented above cover the last five years and are actuals as at year end

The data is from the NERL HR data base

The numbers may be slightly different from those presented in the Management Accounts (not material) The major staff groups are as follows

ATCO Includes ATCOs, PCG ATCOs, Trainees ATSA ATCE Includes ATCE, Graduates

Other Includes MSGs, PCGs STARs

## 14 Roster appendix 1.

## 14.1 Swanwick TC ATCOs

## 14.1.1 Current workforce overview

Description	Number of staff	Number of staff	Number of staff
_	AREA	APPROACH	Total
Operational supply	202 heads	110 heads	312 heads
Maternity leave	2	3	5
Long term sick	2	2	4
Deployable FTEs	193.16	102.27	295.43
	181 full-time	95 full-time	276 full-time
	17 part-time	11 part-time (7.27	28 part-time
	(12.16 FTEs)	FTEs)	(19.43 FTEs)
Operational requirement	150	115	265
% Deployable FTEs / Ops	N/a	N/a	11.5
requirements			

NOTE: Supervisor positions for Swanwick TC Area and Approach are shared and for planning purposes this is all provided from the TC Area supply. This makes the supply in TC Area artificially high and the supply in TC Approach artificially low.

## 14.1.2 Workforce demand

				AREA	APPROACH	Total
Shift	Start	Finish	Hrs	Sum and Win	Sum and Win	Sum and Win
D6.5	6.5	13.5	7	5	3	8
Μ	7	14	7	18	14	32
D6	6	12.5	6.5	3	1	4
SEA	12.5	20.5	8	2	0	2
EA	11.5	19.5	8	2	3	5
А	14	22	8.5	18	14	32
LA	14	23	9	2	1	3
N	22	7	9	11	9	20
D7.5	7.5	14.5	7	4	3	7
D12	12	20	8	0	0	0
D13.5	13.5	21	7.5	4	3	7
D16	16	23.5	7.5	3	0	3
D7	7	14	7	0	1	1
D17	17	24	7	0	2	2
Total				72	54	126

Chart (a): Operational duty shift levels generated by roster templates

- i. Roster templates for Area and Approach were based on 35 and 40 roster lines respectively.
- ii. For each of Area and Approach the summer 2013 and winter 2012 rosters are the same
- iii. The rosters generate the same shift levels for each day of the weeks
- iv. 120 ATCOs on Area and 90 on Approach rosters generate 72 and 54 operational duty shifts respectively, a total of 126 duty shifts

*Chart (b): Comparison of operational duty shift levels generated by roster templates against position opening times for each day of the week* 

- i. The charts below compare the operational duty shift levels generated by the roster templates against the position opening and closing times for each day of the week during winter 2012 and summer 2013
- ii. The black line represents the shift levels generated in Area, the red line the combined shift levels for Area and Approach.
- iii. The positions have been broken down into Supervisors, Midlands, North, South, East, Capital, Gatwick, Stanstead, Luton, Heathrow, Thames Radar
- iv. The workload include an overall estimate for relief
- v. There is a gap between the overall rostered shifts and the workload apart from the evening when it cuts into some of the relief. The gap represents spare shifts or hours than can be used for routine or occasional additional requirements



## 14.1.3 Workforce supply

Actual on-the-day numbers of staff on morning, day, afternoon and night shifts were provided for the period 1st April 2012 to 31st July 2013 as well as those on overtime, training and detachments, annual leave, sickness and other absence.

Chart (a): Average total number of operational duty shifts for each day of the week for the periods 1/4/12- 30/9/12 (summer months), 1/10/12-31/3/13 (winter months) and 1/4/13-31/7/13 (part summer)



- i. The above averages are all lower than the 126 total duty shifts generated by the roster templates for each day of the week and each season
- ii. The average for the winter months, Oct 2012 to Mar 2013, are similar to the summer months, Apr to Jul 2013, but both are lower than summer 2012.
- iii. The levels for Sat and Sun are similar but lower than the weekdays
- iv. Please note that the April September line is unusually high due to the increase in traffic during the Olympics.

	Morns	+ Afts +	Overt	ime	Traini	ng +	Annual		Sickn	ess	Other		TOTAL	
	Days +	Nights			Detac	hments	Leave				Absen	œ	(not in	cl. OT)
Period	Avg	%tot	Avg	%tot	Avg	%tot	Avg	%tot	Avg	%tot	Avg	%tot	Avg	%tot
1/4/12-30/9/12														
Weekdays	121.2	60.9	3.0	1.5	34.0	17.1	35.3	17.8	4.1	2.0	4.3	2.2	198.9	100
Weekends	118.4	60.4	3.4	1.7	28.7	14.7	40.5	20.7	4.2	2.1	4.2	2.1	196.0	100
1/10/12-31/3/13														
Weekdays	117.0	60.8	0.6	0.3	32.5	16.9	33.2	17.3	5.4	2.8	4.4	2.3	192.5	100
Weekends	113.9	60.2	0.3	0.2	25.3	13.4	40.8	21.6	5.1	2.7	4.1	2.2	189.2	100
1/4/13-31/7/13														
Weekdays	117.5	61.7	0.3	0.2	31.5	16.5	34.1	17.9	3.4	1.8	3.8	2.0	190.4	100
Weekends	115.0	62.1	0.5	0.3	24.4	13.2	38.8	20.9	2.7	1.5	4.2	2.3	185.2	100

*Chart (b): Weekday and weekend average number of operational duty shifts, overtime, training and detachment, annual leave, sickness and other absence over each season* 

Overall average staff total each day for period 1<sup>st</sup> April 2012 to 31<sup>st</sup> Jul 2013 is 193.3 which, assuming 219 attendances per ATCO per year, equates to 322 FTES (compare with 295.43 deployable FTEs)

Chart (c) Operational duty shifts, overtime, training and detachments, annual leave, sickness and other absence as a proportion of total for one year period 1<sup>st</sup> April 2012 to 31st March 2013

Category	% of total staff
	rostered
Duty shifts	60.7
Overtime	0.9
Training and Detachments	16.1
Annual leave	18.5
Sickness	2.4
Other absence	2.2

Annual leave at 18.5% is very close to the longest serving annual leave band of 18.7%

## 15 Roster appendix 2

## 15.1 Prestwick Domestic ATCOs

#### **15.1.1 Current workforce overview**

Description	Number of staff
Operational supply	260 heads
Maternity leave	0
Long term sick	3
Deployable FTEs	252.58 FTE
	243 full-time
	14 part-time (9.58 FTE)
Operational requirement	230 FTE
% Deployable FTEs / Op	9.8
requirements	

#### 15.1.2 Workforce demand

Chart (a): Comparison of positions open by time of day for weekdays in summer 2013 and winter 2012



- i. The above profiles apply to weekdays. The levels at weekends are lower as can be seen in the analysis of the actuals
- ii. Relief is included
- iii. Winter levels higher than summer (due to EFD deployment as mentioned in section 9.6.1)

				Summer 2013		Winter 2012			
Shift	Start	Finish		M-F	Sat	Sun	M-F	Sat	Sun
М	7	14	7	28	29	26	34	27	27
M5	6.5	13.5	7	5	3	2	5	5	5
MP	7	14	7	2	0	0	4	4	4
MSR	7	14	7	4	0	0	0	0	0
MS	7	12.5	5.5	2	2	2	0	0	0
Α	14	22	8	25	17	26	29	24	29
A14	14	23	9	2	2	2	2	4	2
ASR	14	21	7	4	0	0	4	0	0
АР	12	20	8	1	0	0	4	4	4
AB	13.25	22	8.75	0	0	0	0	0	0
ASB	13.25	21	7.75	0	0	0	0	0	0
Ν	22	7	9	14	14	14	14	14	14
D11	11	19	8	2	2	2	0	0	0
DS	12	19.5	7.5	0	0	2	0	0	0
M0	6	12	6	2	2	2	2	2	2
M1	6.5	13	6.5	5	5	5	7	7	7
A1	13	20	7	4	4	4	5	2	5
A3	15	23	8	1	1	1	1	1	1
A0	12	19.5	7.5	2	2	2	2	2	2
Р	2	7.5	5.5	2	2	2	2	2	2
D1	8	16	8	3	5	3	3	6	3
D2	10	19	9	3	3	3	6	6	6
D0	7.5	15	7.5	2	2	2	2	2	2
A15	15	24	9	0	0	0	2	0	2
A12	12	19	7	0	0	0	0	2	0
Total shifts				113	95	100	128	114	117
Annual Leave					10	5		6	3
Total				113	105	105	128	120	120

## Chart (b): Operational duty shift levels generated by roster templates

- i. Roster templates were provided for summer 2013 and winter 2012 based on 90 and 95 roster lines respectively.
- ii. The rosters generate higher shift levels for weekdays than weekends (7.6% higher in summer and 6.7% in winter).
- iii. The rosters generate higher levels in winter than summer (9.8% higher on weekdays and 14.3% weekends).
- iv. Some annual leave was rostered in both the summer and winter rosters.

*Chart (b): Comparison of operational duty shift levels generated by roster templates, for weekdays, Saturday and Sunday against position opening times* 

## Summer 2013



Winter 2012



- i. Winter workload a little higher than summer.
- ii. Weekday levels higher than weekend.
- iii. Saturday higher than Sunday in the morning but lower in the afternoon.

iv. Weekday levels cover the workload. Any gap between rostered levels and workload is used as "spare" shifts or hours for routine or occasional additional requirements.

#### 15.1.3 Workforce supply

Chart (a): Average total number of operational duty shifts for each day of the week for the periods 1/4/12- 30/9/12 (summer months), 1/10/12-31/3/13 (winter months) and 1/4/13-31/7/13 (part summer)



- i. The above profiles show very little difference between the seasons although the roster templates and positions data suggest there is a significant difference between summer and winter.
- ii. The weekday levels are very similar and higher than Saturday and Sunday.
- iii. The average figures of about 110 on weekdays and 96 at the weekends are lower than the levels generated by the roster templates for both summer and winter.

Assessing employment costs at NERL

Chart (b): Weekday and weekend average number of duty shifts, overtime, training and detachment, annual leave, sickness and other absence over each of the periods 1/4/12-30/9/12, 1/10/12-31/3/13 and 1/4/13-31/7/13

	Morns	+ Afts +	Overt	ime	Traini	ng +	Annual		Sickn	ess	Other		TOTAL	
	Days +	Nights			Detac	hments	Leave				Absen	ce	(not in	cl. OT)
Period	Avg	%tot	Avg	%tot	Avg	%tot	Avg	%tot	Avg	%tot	Avg	%tot	Avg	%tot
1/4/12-30/9/12														
Weekdays	107.8	62.3	5.7	3.3	30.7	17.8	30.0	17.4	2.6	1.5	1.8	1.0	172.9	100
Weekends	94.0	63.1	3.2	2.2	15.5	10.4	35.8	24.0	2.2	1.5	1.5	1.0	149.0	100
1/10/12-31/3/13														
Weekdays	110.3	61.8	0.7	0.4	35.8	20.1	27.6	15.5	3.8	2.1	0.9	0.5	178.4	100
Weekends	96.6	65.7	0.3	0.2	11.5	7.8	35.1	23.9	2.9	2.0	0.9	0.6	146.9	100
1/4/13-31/7/13														
Weekdays	109.5	61.7	1.2	0.7	32.6	18.3	31.2	17.6	2.8	1.5	1.5	0.9	177.5	100
Weekends	96.0	63.9	1.2	0.8	14.9	9.9	36.2	24.1	1.9	1.2	1.3	0.8	150.3	100

Overall average staff total each day for period 1<sup>st</sup> April 2012 to 31<sup>st</sup> Jul 2013 is 168.2 which, assuming 219 attendances per ATCO per year, equates to 280.3 FTEs (compare with 252.58 deployable FTEs).

Summary for one year period 1<sup>st</sup> April 2012 to 31st March 2013 % of total staff

Category	% of total staff
	rostered
Duty shifts	62.7
Overtime	1.7
Training and Detachments	16.4
Annual leave	18.3
Sickness	1.8
Other absence	0.8

Annual leave at 18.3% is very close to the longest serving annual leave band of 18.7%.

## 16 Roster appendix 3

## 16.1 **Prestwick Oceanic ATCOs**

#### 16.1.1 Current workforce overview

Description	Number of staff
Operational supply	47 heads
Maternity leave	0
Long term sick	0
Deployable FTEs	47 FTE
	47 full-time
	0 part-time
Operational requirement	45 FTE
% Deployable FTE / Op	4.4
requirements	

#### 16.1.2 Workforce demand

Chart (a): Operational duty shifts generated by roster templates each day summer and winter

Shift	Start	Finish	Hrs	Nr
м	7.5	14.5	7	4
M1	7	14.5	7.5	1
M2	7.5	15	7.5	1
M3	7.5	16	8.5	1
Α	14.5	22.5	8	3
N	22.5	7.5	8.5	3
N1	2	7.5	5.5	2
N2	1	7.5	6.5	1
N3	22.5	7	8.5	1
D10	10	18.5	8.5	2
D11	11	19.5	8.5	1
AE	13	21.5	8.5	1
Total				21

35 staff on 30 roster lines generate 21 duty shifts each day

*Chart (b): Comparison of operational duty shift levels generated by roster templates against position opening times each day for summer 2013 and winter 2012* 



The gap between rostered and workload represents spare shifts or hours which is used for routine or occasional additional requirements.

#### 16.1.3 Workforce supply

Chart (a): Average total number of operational duty shifts for each day of the week for the periods 1/4/12- 30/9/12 (summer months), 1/10/12-31/3/13 (winter months) and 1/4/13-31/7/13 (part summer)



- i. For the period Apr-Sep 2012 the weekends, on average, are at a lower level than weekdays.
- ii. For the period Oct 2012 Mar 2103 the weekends, on average, are at a higher level than weekdays.
- iii. The overall average number of duty shifts of 18.7 per day for the whole period 1/4/12 to 31/7/13 is lower than the 21 generated by the roster templates.

Chart (b): Weekday and weekend average number of duty shifts, overtime, training and detachment, annual leave, sickness and other absence over each of the periods 1/4/12-30/9/12, 1/10/12-31/3/13 and 1/4/13-31/7/13

	Morn	s + Afts +	Overt	ime	Traini	ng +	Annual		Sickne	255	Other		TOTAL	
	Days -	+Nights			Detac	hments	Leave				Absen	ce	(not in	cl. OT)
Period	Avg	%tot	Avg	%tot	Avg	%tot	Avg	%tot	Avg	%tot	Avg	%tot	Avg	%tot
1/4/12-30/9/12														
Weekdays	18.9	61.6	0.8	2.5	4.2	13.7	5.7	18.7	1.7	5.4	0.2	0.7	30.6	100
Weekends	18.4	66.2	0.9	3.3	2.0	7.1	5.6	20.2	1.7	6.1	0.1	0.3	27.7	100
1/10/12-31/3/13														
Weekdays	18.4	56.0	0.9	2.6	8.5	26.0	5.1	15.5	0.7	2.2	0.1	0.4	32.8	100
Weekends	18.7	67.3	0.7	2.6	3.0	10.9	5.2	18.7	0.7	2.6	0.2	0.6	27.8	100
1/4/13-31/7/13														
Weekdays	18.9	57.6	1.0	3.0	7.9	24.3	5.2	15.9	0.4	1.3	0.3	0.9	32.7	100
Weekends	19.0	65.6	0.6	2.2	4.0	13.9	5.5	18.9	0.3	1.0	0.2	0.6	29.0	100

Overall average staff total each day for period  $1^{st}$  April 2012 to  $31^{st}$  Jul 2013 = 30.9 which, assuming 219 attendances per ATCO per year, equates to 51.5 FTEs (compare with 47 deployable FTEs).

## Chart (c): Summary for one year period 1<sup>st</sup> April 2012 to 31st March 2013

<u>% of total staff</u>

Category	% of total staff rostered
Duty shifts	60.8
Overtime	2.7
Training and Detachments	17.2
Annual leave	17.7
Sickness	3.9
Other absence	0.5

## 17 Roster appendix 4

## 17.1 Swanwick AC and TC ATSAs

## 17.1.1 Current workforce overview

Description	AC staff	TC staff
Operational supply	73 heads	42 heads
Maternity leave	0	1
Long term sick	4	3
Deployable FTEs	65.33 FTE	37.4 FTE
	56 full-time	40 full-time
	17 ATCO part-	2 part-time
	time (9.33	
	FTE)	
Operational requirement	80	50

Supply is supplemented by 18 heads flexibly deployed across both AC and TC giving a total of 133 heads. This compares with a total requirement of 130 heads.

## 17.1.2 Workforce demand

#### Charts (a): Comparison of positions open by time of day for summer 2013 and winter 2012

## SWANWICK AC



i. Includes relief.

ii. Summer levels lower than winter between 0600 and 1030, higher between 1630 and 2000 and lower between 2030 and 2200.

## SWANWICK TC



- i. Includes relief.
- ii. Summer levels higher than winter.

*Charts (b): Operational duty shift levels generated by roster templates for summer 2013 and winter 2012* 

## SWANWICK AC

Shift	Start	Finish	Hours	Sum	Win
M63A	6.5	13.5	7	13	13
M6A	6	12.5	<b>6.5</b>	3	3
M53A	5.5	11	5.5	0	0
A133A	13.5	22	<b>8.5</b>	9	9
A143A	14.5	22	7.5	1	1
NA	22	6.5	8.5	6	6
S63A	6.5	14	7.5	0	0
S10A	10	18.5	8.5	0	2
S123A	12.5	21	8.5	3	1
S133A	13.5	22	8.5	3	3
X63A	6.5	14	7.5	0	0
X123A	12.5	20	7.5	0	0
58A	8	16	8	1	1
Total				39	39

- i. Summer and winter templates based on 20 and 30 lines respectively.
- ii. 65 staff on the roster templates provide 39 duty shifts for each day through the year.

## SWANWICK TC

Shift	Start	Finish	Hrs	Nr
M7T	7	14	7	6
M6T	6	12.5	6.5	2
A14T	14	22	8	5
A123T	12.5	21	8.5	2
LAT	14	23	9	1
NT	22	7	8.5	3
S6T	6	12.5	6.5	3
S123T	12.5	21	8.5	2
Total				24

- i. Same template used for summer 2013 and winter 2012 based on 20 roster lines.
- ii. 40 staff on the roster templates provide 24 duty shifts for each day through the year.

Chart (b): Comparison of operational duty shift levels generated by roster templates against position opening times each day for summer 2013 and winter 2012

SWANWICK AC: Summer 2013



## SWANWICK AC: Winter 2012


# SWANWICK TC: Summer 2013



## SWANWICK TC: Winter 2012



- i. Workload includes relief.
- ii. The gap between rostered and workload represents spare shifts and hours which are used for routine or occasional additional requirements.

#### 17.2 Roster appendix 5

#### 17.2.1 Prestwick ATSAs

#### 17.2.2 Current workforce overview

Description	Number of staff
Operational supply	82
Maternity leave	0
Long term sick	0
Deployable FTEs	80.86 FTE
	78 full-time
	4 part-time (2.86 FTE)
Operational requirement	79 FTE
% Deployable FTE / Op	2.4
requirements	

#### 17.3 Workforce demand

Chart (a): Comparison of positions open by time of day summer 2013 and winter 2012



- i. Includes relief.
- Summer lower than winter between 1900-0530, higher between 0630-0930, lower between 0930-1700 and higher between 1700-1900.

				Summe	er	Winter	
Shift	Start	Finish	Hrs	W'day	W'end	Sun-Fri	Sat
M55	5.5	11	5.5	1	0	0	0
м	6.5	14	7.5	10	10	10	10
MP	6.5	10	3.5	0	0	0	0
Α	14	22	8	9	8	10	9
N	22	6.5	8.5	7	7	8	8
N225	22.5	7	8.5	1	1	1	1
D10	10	19	9	0	1	0	0
D7	7	15.5	8.5	1	1	1	1
D75	7.5	16	8.5	1	1	1	1
D11	11	20	9	1	1	0	0
D105	10.5	19.5	9	1	1	1	1
M7	7	15	8	0	0	1	1
Shifts				32	31	33	32
AL				1	2	0	1
Total				33	33	33	33

*Chart (b): Operational duty shift levels generated by roster templates for weekdays and weekends summer2013 and winter 2012* 

i. Summer and winter templates based on 55 and 95 roster lines respectively.

ii. 55 staff on the roster templates provide 33 shifts each day through the year.

iii. There are some small differences between weekdays and weekends.

iv. Some annual leave has been rostered.

Charts (c): Comparison of operational duty shift levels generated by roster templates against position opening times for weekdays and weekends in summer 2013 and winter 2012 Summer 2013



Between 0530 to 0630 the weekend rostered level cuts into the positions workload while the weekday rostered level cuts into the relief.

Winter 2012



#### 17.3.1 Workforce supply

Chart (a): Average total number of operational duty shifts for each day of the week for the periods 1/4/12- 30/9/12 (summer months), 1/10/12-31/3/13 (winter months) and 1/4/13-31/7/13 (part summer)



- i. Weekends slightly lower than weekdays.
- ii. Profiles for periods Oct 2012-Mar 2013 and Apr-Jul 2013 are very similar but lower than the profile for Apr-Sep 2012 by about 5 staff.

Chart (b): Weekday and weekend average number of duty shifts, overtime, training and detachment, annual leave, sickness and other absence over each of the periods 1/4/12-30/9/12, 1/10/12-31/3/13 and 1/4/13-31/7/13

	Morns	+ Afts +	Over	time	Traini	ng +	Annua		Sickn	ess	Othe	r	TOTA	L
	Days +	Nights			Detac	hments	Leave				Abse	nce	(not i	ncl. OT)
Period	Avg	%tot	Avg	%tot	Avg	%tot	Avg	%tot	Avg	%tot	Avg	%tot	Avg	%tot
1/4/12-30/9/12														
Weekdays	45.0	69.2	3.9	6.1	6.3	9.8	11.4	17.6	1.1	1.8	1.1	1.7	65.0	100
Weekends	42.9	71.8	3.3	5.5	3.4	5.7	11.8	19.7	1.0	1.7	0.7	1.1	59.8	100
1/10/12-31/3/13														
Weekdays	38.8	67.4	1.6	2.7	6.0	10.5	10.7	18.5	1.6	2.8	0.5	0.9	57.6	100
Weekends	37.5	73.1	1.6	3.1	1.5	2.9	10.4	20.2	1.7	3.2	0.3	0.5	51.3	100
1/4/13-31/7/13														
Weekdays	37.7	66.7	1.5	2.7	5.7	10.1	11.8	20.9	1.1	2.0	0.2	0.3	56.5	100
Weekends	36.3	70.6	1.1	2.2	3.1	6.0	11.4	22.1	0.6	1.3	0.0	0.1	51.4	100

- i. The average number of duty shifts, both for weekdays and weekends, exceed the 33 shifts generated by the roster templates. For example, an average of 45 rostered on weekdays during the period 1/4/12-30/9/12.
- ii. Overall average staff total each day for period  $1^{st}$  April 2012 to  $31^{st}$  Jul 2013 = 59.7 which, assuming 224 attendances per year, equates to 97.3 FTEs (compare with deployable FTEs of 80.86).

Chart (c ): Summary for one year period 1<sup>st</sup> April 2012 to 31st March 2013 % of total staff

Category	% of total staff rostered
Duty shifts	69.4
Overtime	4.5
Training and Detachments	8.6
Annual leave	18.5
Sickness	2.3
Other absence	1.2

The proportion of annual leave at 18.5% is above the longest-serving leave band of 18.3%.

## 17.4 IDS job levels

The levels outlined below have formed the basis on which we have matched NERL's jobs to comparable market data.

Category	Level	Description	Evaluation scores	Job examples
Administrativ	e, man	ual and support		
	1	Work requires basic literacy and numeracy skills and the ability to perform a few straightforward and short-term tasks to instructions under immediate supervision. Previous experience is not necessary.	Up to 310	Cleaner, refuse loader
	2	Work requires developed literacy and numeracy skills and the ability to perform some routine tasks within procedures that may include keyboard and practical skills and initial contact with customers. Some previous experience is required.	311-400	Finance assistant, membership administrator, call centre operator
Secretarial/c	raft			
	3	Work requires specific administrative, practical, craft or technical skills gained by previous experience and qualifications to carry out a range of less routine work and to provide specialist support, and could include closer contact with the public/customers.	401-510	Painter/ decorator, customer care adviser, residential care assistant
	4	Work requires broad and deep administrative, technical or craft skills and experience to carry out a wider range of activities including staff supervision, undertaking specialist routines and procedures and providing some advice.	511-620	Customer service technician, cook, finance officer
Vocational/s	uperviso	ory		
	5	Work requires detailed experience and possibly some level of vocational qualification to be able to oversee the operation of an important procedure or to provide specialist advice and services, involving applied knowledge of internal systems and procedures.	621-720	Call centre supervisor, local authority advice officer, technician
	6	Work requires a vocational qualification and sufficient relevant specialist experience to be able to manage a section or operate with self- contained expertise in a specialist discipline or activity.	721-800	Nurse, quality control chemist, sales executive

Category	Level	Description	Evaluation scores	Job examples
Professional/	manag	erial		
	7	Work is concerned with the provision of professional services and requires an experienced and qualified professional to provide expertise and advice and operate independently. Also includes operational managers responsible for service delivery.	801-1,000	Home care manager, mechanical manager, installation engineer
	8	Work requires deep professional experience and qualifications in a specific discipline to be able to carry out a range of specialist technical or scientific activities, which may include the management of a team or services. May also include specialist management roles responsible for delivery of a major service.	1,001-1,250	Global IT service desk manager, education manager, personal injury lawyer
Senior manag	gement			
	9	Senior managerial roles involved in managing an important activity or providing authoritative expertise, also contributing to the organisation as a whole through significant experience.	1,251-1,500	HR head of service, business manager, head of health and safety
Director				
	10A	Very senior executive roles in private and public sector organisations with substantial experience in, and leadership of, a specialist function, including some input to the organisation's overall strategy. Not usually a member of the company board.	1,501-1,800	Local government service director, technical director
	10B	Member of a company board or an executive/senior management team in public sector organisations with overall functional responsibility and regular input to the strategy of the wider organisation through deep and broad business expertise. This level may also include chief executives of smaller private, not-for-profit and public sector organisations.	1,801-2,100	Director of policy, deputy general secretary
Senior directo	or			
	11	The most senior posts in larger private, not-for- profit and public sector organisations responsible for setting the overall direction, strategy, and financial success and performance achievement requiring substantial business pre- eminence.	2,101-2,550	Chief executive, general secretary

### 17.5 Data requests submitted to NERL

Please note that the table shown overleaf excludes all data requests relating to rostering, which are being dealt with separately.

Request ID	Data requested	Coverage period	Status
1.00	Contacts		
1.01	Nominated point of contact for future NERL employment cost data requests	On-going	
2.00	Staffing structure		
2.01	A brief narrative outline of the NERL workforce structure, explaining the main staff groups, numbers of staff in each group and grade structures. Explanation of any significant changes since 2009. Planned major changes over the coming regulatory period.	2009 to date	Closed
2.02	Total staff number of full-time, part-time and FTE for each major staff group and across the whole company for the last five years	Last five years	Closed
2.03	Total paybill costs for each major staff group for the last five years	Last five years	Closed
2.04	Have any groups of engineering staff been moved into the PCG grades between 2009 and 2013? If so, please provide details.	Last four years	Closed
2.05	We have noted that Hay point allocations for some groups are different in 2013 from those that NERL gave us in 2009. Details attached separately in Excel spreadsheet. Please can you explain?		Closed
2.06	Do Hay points provided in the pay and benefits spreadsheet relate to the overall grade in each case or to the particular role? For example, in some cases the Hay range is narrow and in others it is very wide.	Current	Closed
3.00	Pay settlements details		
3.01	Brief outline of arrangements for setting pay for each staff group and explanation of any significant changes since 2009	Period since January 2009	Closed
3.01a	We note that increments are paid annually for ATCOs. Please explain varying rates of progression to the top of the ATCO pay scale (10-20 years).		We have been provided with additional explanation, but a practical illustration would still be helpful.
3.02	Details of all increases to pay grades for each year, broken down by major staff group if different. This includes average pay awards for Personal Contract Group.	Last five years	Closed
3.03	Planned future increases to pay grades.	Next five years	Closed

Request ID	Data requested	Coverage period	Status
4.00	Pay and benefits		
4.01	Brief narrative providing details of any changes to grading structures and/or benefits for any of the major staff groups, including PCGs.	Period since January 2009	Closed
4.01a	Can you provide further information on the incentive scheme (row 17 - 'section 3 4 5'). E.g. when was the scheme introduced? Do incentive scheme payments relate to column L (grade average bonus) of the Excel spreadsheet in section 4.09 below?		Closed
4.01b	Can you provide a specific narrative regarding any changes since 2009 to the following: company/car allowance; private health insurance; and sick pay? If there have been no changes please advise us that this is the case.	Period since January 2009	Closed
4.02	Details of grading structures for employed staff	Current	Closed
4.02a	In your 30-09-13 data response you provided additional information for section 4.02. In the worksheet called '4.02M', there is no data provided. Please clarify.		Closed
4.03	Details of shift premiums for each work pattern for each major staff group, including PCGs, if relevant e.g. supervisory ATCOs on PC	Current	Closed
4.03a	Rows 10, 11 and 12 in Appendix C - 'section 4 pay scales and allowances'. Can we have clarification on what these allowances are?		Closed
4.03b	Can you provide clarification on the frequency of call-out payments that are made?	Current	Closed
4.03c	What are AVA rates? (Appendix C)		Closed
4.03d	What is the cut-off(s) for shift allowances and overtime payments e.g. PCG on salary above £XX?	Current	Closed
4.04	Details of sickness benefits e.g. number of weeks paid at full rate and number paid at reduced rate for each major staff group, including PCG	Current	Closed
4.05	Details of medical insurance benefits provided by major staff group, including PCG	Current	Closed

Request ID	Data requested	Coverage period	Status
4.06	Details of overtime eligibility and premiums by major staff group, including PCGs	Current	Closed
4.07	Details of company car benefits provided by major staff group, including PCG	Current	Closed
4.08	Brief outline of any other taxable benefits or allowances for any of the major staff groups, including PCGs	Current	Closed
4.08a	Row 18 (section 4.01-4.08) - can we have an explanation of what is meant by 'reduced employee pension contributions'.		Closed
4.09	Grade median of postholders' basic salaries	Current	Closed
4.09a	Clarification on Column Z - grade average other allowances - would be helpful. We note that some of the allowances are significant and information on allowances over £2,000 would be especially useful. Can you provide a narrative as to what the additional allowances are?		Closed
4.09b	Rows 2 to 9 for columns F and G - we note that jobs have not been evaluated. However, do you have any Hay points on record for these roles?	Current	Closed
4.09c	The entries in the FTE column of the spreadsheet appear to be the sum of FT and PT staff, rather than FTEs. Please check.	Current	Closed
4.09d	We note that the grade average basic salary for SATCO band 4 is higher than the grade maximum. Please explain.		Closed
4.09e	Can we please have job descriptions for the following:		
4.09e(i)	Engineering Manager - ATCE 1	Current	Closed
4.09e(ii)	Systems Engineer - ATCE 4	Current	Closed
4.09e(iii)	Maintenance Engineer - ATCE 5	Current	Closed
4.09e(iv)	Junior Engineer - ATCE 6	Current	Closed
4.09e(v)	Head of Section - STAR 1	Current	Open

Request ID	Data requested	Coverage period	Status
4.09e(vi)	Senior Research Analyst - STAR 3	Current	Closed
4.09e(vii)	Research Analyst - STAR 5	Current	Closed
4.09e(viii)	Resource Specialist - MSG 5	Current	Closed
4.09e(ix)	Management Support Coordinator - MSG 6	Current	Closed
4.09e (x)	HR Business Partner - Level 15	Current	Closed
4.09e(xi)	Programme Manager - Level 15	Current	Closed
4.09e(xii)	General Manager - Level 30	Current	Closed
5.00	Pensions		
5.01	Outline of occupational pension arrangements and explanation of any significant changes since 2009	Since 2009	Closed
5.02	Is the 43.7% employer contribution to the DB scheme the regular contribution rate, or does it include a defined proportion of deficit reduction payments? If so, please specify the regular contribution rate.		Closed
6.00	Work patterns and staff rostering		Tbc
7.00	Recruitment, retention, turnover and absence		
7.01	Outline of how recruitment, retention, turnover and absence factors have changed since 2009.	2009 to date	Closed
7.02	Can you provide breakdowns of ATCOs' length of service, excluding trainees, in 2009, 2011 and 2013?	2009, 2011 and 2013	Closed
8.00	Absence		
8.01	Average no. of working days lost per full-time, part-time and FTE employee by major staff group and for the whole company	Last five years	Closed
8.02	Average no. of working days lost per full-time, part-time and FTE employee by major staff group and for the whole company – by short-term absence	Last five years	Closed

Request ID	Data requested	Coverage period	Status
8.03	Average no. of working days lost per full-time, part-time and FTE employee by major staff group and for the whole company– by long-term absence	Last five years	Closed
8.04	Total days lost by major staff group and for the whole company in FTE	Last five years	Closed
8.05	The cost of absence – plus methodology on how it is calculated	Last five years	Closed
8.06	Brief outline of any initiatives relating to absence	Since 2009	Closed
9.00	Staff turnover		
9.01	Average annual turnover by major staff group and for the whole company	Last five years	Closed
9.02	Average length of service of leavers by staff group and for whole company	Last five years	Closed
9.03	Methodology used to calculate labour turnover	Current	Closed
9.04	Brief outline of any initiatives relating to staff turnover	Since 2009	Closed
10.00	Additional queries		
10.01	Can you verify that the job examples included in the pay and benefits spreadsheet are the most populous for that particular grade? If the examples shown make up less than 50% of jobs for that grade, can you provide details of the second most populous job for the grade, where applicable?	Current	Closed
10.02	We note that some of the grade Hay ranges are quite wide. Can you clarify the distribution of staff within these Hay ranges i.e. are a majority positioned towards the lower/higher end of the Hay range etc?	Current	Closed
10.02a	Can you provide details of the % of staff at the grade maximum of each grade?	Current	Closed
10.03	Can you provide information on the number of days lost due to industrial action by staff group for each year from 2009? Has there been a ballot for industrial action in any of these years?	2009 to date	Closed
10.04	Can you please advise of the sectors of airspace covered by the military in terms of civilian aircraft?		Closed

Request ID	Data requested	Coverage period	Status
10.05	Were the Hay points assigned to roles in 2009 translated across from another job evaluation scheme?	2009 to date	Closed
10.06	How many ATCE roles have moved to PCG grades since 2009?	2010 to date	Closed
10.07	Do the roles Engineering Manager, Surveillance Data Processing and Assurance and Head of Section, NATS Wide Services still exist and if so, where do they sit in the grading structure?		Closed
10.08	Are there currently any Management Support Coordinators at MSG7? Data provided by NERL for the pay and benefits spreadsheet (section 4.09) relates to a Management Support Coordinator at MSG6.		Closed
10.09	If a military ATCO was in one of the NATS bands based on job size, in which band would the role be located?		Closed
10.10	European ANSP benchmarking information: can NERL supply this data for the main benchmark group? Can NERL also provide guidance on additional information for the ATCO benchmarking?	Current	Closed
10.11	Can NATS provide a copy of the 2013 pay and grading structure?	Current	Closed