

No 1778 – Service Order 08: NERL Non-Staff OPEX Review

Consultancy Services for CAA's Regulatory Protection Group

6th December 2013



Quality Management

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Glossary

Term	Definition
ANSP	Air Navigation Service Provider
ATCO	Air Traffic Controller
CAA	The Civil Aviation Authority
CAPEX	Capital Expenditure
CP4	Control Period 4: 2015-2019
CTC	Corporate and Technical Centre in Whiteley, Fareham
FM	Facilities Management
FTE	Full Time Equivalent
HR	Human Resources
ICT	Information & Communications Technology
IS	Information Systems
IT	Information Technology
LACC	Swanwick Air Traffic Control Centre
M2/m2	Square Metre
MoD	Ministry of Defence
NERL	NATS (En Route) Limited
NERL Business Plan	NERL Draft Business Plan for CP4 2015-2019 dated xxxx 2013
NERL Services	Collectively Oceanic, London Approach, Eurocontrol, MOD contract, North Sea Helicopters and Other External
NIA	Nett Internal Area
NSL	NATS (Services) Ltd
OPEX	Operational (Revenue) Expenditure
PDS	Post Development Services
SCOACC	Scottish and Oceanic Control Centres at Prestwick
RP2	Reporting Reference Period 2 2015-2019
RPI	Retail Price Index

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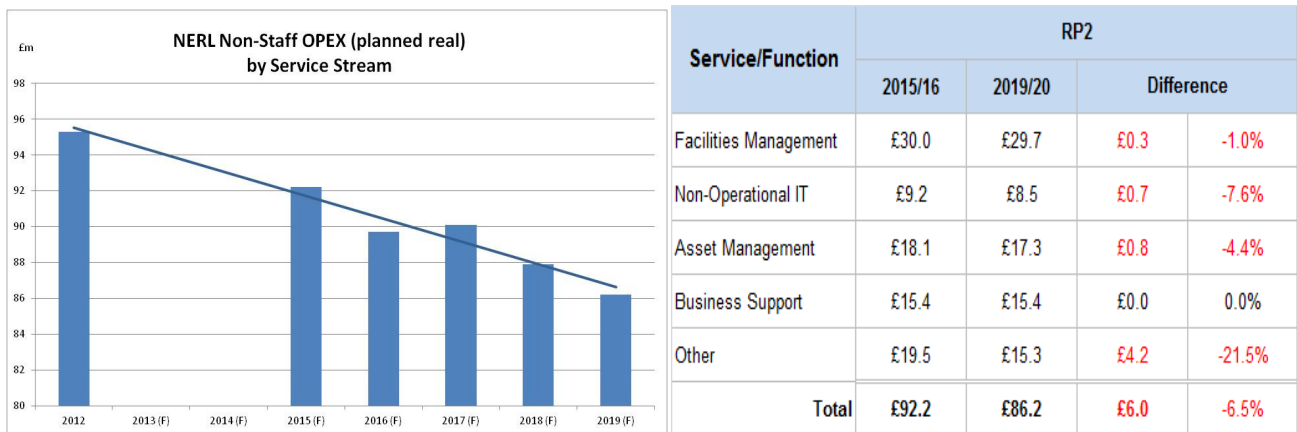
Executive Summary

Capita Symonds has been appointed by the CAA to review the Non-Staff OPEX within the NERL RP2 Draft Business Plan covering the period 2015 – 2019. This follows customer consultation between NERL and users. It will provide further evidence, along with other consultant’s reports, for a Performance Plan, which CAA will draft and consult upon in early 2014, to propose cost efficiency and other targets for the period 2015-2019.

This review considers the proposed non-staff operating expenditures at an aggregate, and in certain cases a detailed, level to determine if they are challenging and achievable.

The NERL business may be summarised as managing the regulated provision of en route inbound and descent, climb and en route outbound traffic as well as over flying traffic.

The overall non-staff expenditure for the period RP2 2015 to 2019 is £454.6m in real terms and forecasts expenditures reducing from £92.2m to £86.2m per annum over the period (all quoted as 2012 real costs). It is understood that NERL has driven savings in its non-staff OPEX from 2001, (i.e. since PPP), to date of circa 35%. RP2 targets a further overall reduction in cost of 6.5% over the 5 year period. This target together with forecast savings in the intervening period will result in an overall cost reduction from the current cost base to that in 2019 of 10%.



In the context of diminishing returns over time the 6½% reduction target is considered challenging but realistic and achievable.

The planned non-staff outturn expenditure over the RP2 period represents a reasonable cost base for this aspect of the NERL business. The overall benchmarking sits favourably within the respective cost ranges for a business of this nature with its heavy emphasis on high-tech processes, safety and reliability.

Of particular interest is the reliance on two principal suppliers, Lockheed Martin and BT (where there is limited cost efficiency leverage), projected expenditure in energy and treatment of cost contingency and ‘unallocated savings’.

Similarly the distribution of ‘unallocated savings’ into the potentially higher than expected expenditure area of Business Support has addressed the otherwise proposed static cost base where efficiencies would be expected in the staff travel, temporary staffing and support services.

Notwithstanding this we believe the RP2 Non-staff OPEX by 2019 projected at £86.2m has the potential for further modest efficiency with a possible outturn expenditure of £85.0m. This will however be subject to realisation of the ‘unallocated savings’ and suppression of supplier ‘cost creep’, in what may prove to be and improving economic environment.

1. Introduction

1.1 Terms of Reference

The CAA commissioned Capita in August 2013 to review NATS En Route Limited's (NERL) projections of non-staff operating expenditure required to deliver its future services. The review considers the potential achievement of delivery with such projected expenditures, the benchmarking and the scope to reduce these costs through further potential efficiency savings. The overall cost objectives in terms of the service and the prices to be applied are stated in NERL's RP2 Draft Business Plan, Single European Sky (SES) Reference Period 1st Jan 2015 – 31st Dec 2019.

The CAA is currently considering the regulation of charges for NERL Services for this period. NERL is the monopoly provider of civil en-route air navigation services in UK airspace and as such is regulated by the CAA, as the economic regulator. The CAA administers a licence which includes conditions that effectively put a price cap on certain monopoly services under the Transport Act 2000. The CAA is obliged by EU legislation to draft a periodic Performance Plan for air navigation services that includes targets for key performance indicators (KPIs), including cost efficiency. Other KPIs relate to safety, capacity and environment. The targets set for NERL under these KPIs are required to make an adequate contribution to EU wide targets. The UK component of the UK-Ireland Performance Plan will be adopted by the relevant National Governments and the European Commission and the CAA will then modify the NERL licence to implement the relevant targets into a price control.

NERL has provided a Draft Business Plan RP2 for Customer Consultation, in May 2013. The NERL Business Plan contains two variants: "Plan 1" puts more emphasis on improvement in service and "Plan 2" holds service at reasonable levels and puts greater emphasis on cost efficiency and staff reductions.

This review considers the proposed non-staff operating expenditures at an aggregate, and in certain cases a detailed, level to determine if they are challenging and achievable. The review involves consideration to the allocation of expenditure to NERL services namely, En Route air traffic services, London Approach provided from Swanwick and Oceanic Services provided from Prestwick as opposed to across the various other NATS businesses as well as intercompany trading between NERL and NSL, NERL licensed helicopter services in the North Sea), Ministry of Defence contract OD (FMARS) and other revenue (including SESAR Joint-Undertaking funding).

More specifically, on the basis of evidence derived from considering the specific issues the review is to:

- Form an opinion on the extent to which the assumptions on non-staff operating expenditure costs set out in RP2 are both challenging and achievable. These costs amount to circa £100 million per annum for each year of the 5 year plan.
- Review each of the five areas of major expenditure, namely
 - Facilities Management (mainly rent, rates, utilities, maintenance),
 - Non Operating IT (mainly ICT support contracts),
 - Asset Management (mainly Post Delivery Services and connectivity)
 - Business Support (temporary staffing, travel costs and specialist back-office support)
 - General items (mainly software builds, CAA fees, business development)
- Review the above in relation to previous years' plans.
- Where possible to benchmark against comparable organisations
- Where relevant, have interdependencies with other types of expenditure been planned considered and coordinated? There is a co-ordination exercise with the Staff OPEX and CAPEX review projects.
- A view on the appropriate allowance for input price inflation.

- As some of the contracts are due for renewal during the period, a review of the contract strategy and procurement process to be undertaken.
- To examine trends in previous OPEX costs

Certain aspects of the RP2 plan are outside the scope of this report. These include company structure and cross charging (which includes insurances), staff issues, pensions, customer offerings as well as CAPEX.

1.2 Approach and Methodology

In undertaking this review the approach adopted may be briefly summarised as follows:

- A review of the current and historical documentation and published plans including comparison with previous NERL OPEX Plans and OPEX reports.
- Meetings with NERL and the CAA to understand the overall context
- Additional meetings with NERL to address RP2 and the specific characteristics and estimates to support expenditure. Given the range and complexity of services together with the programme available, the information provided by NERL was expected to be full, complete and readily available. In reality, information was made available for all services under review as discussions evolved during the course of the study. Consequently data has been appropriately analysed for many services and, in cases where detail was more limited, reasonable assumptions have been made.
- Interim reviews with the CAA.
- Co-ordination meetings with other RP2 working groups, including CAPEX and Staff OPEX RP2 working groups. In consultation with the CAA this activity was limited to an initial meeting to exchange data. Subsequently, the co-ordination activity has been undertaken within the CAA.
- Benchmarking of data and project comparison reviews.
- Consideration to inflation and risk allowances as well as OPEX efficiency, i.e., cost reduction due to volume of work, CAPEX expenditure and continuous improvement.

1.3 Source Documentation and Meetings

This report draws on the following existing and on-going studies and reports:

- 2004, Overview of NERL's Operating Expenditure 2004/05 – 2010/11, NATS
- 2010 – Maastricht Upper Area Control Centre Annual report 2010, Eurocontrol
- 2010 – NATS (En Route) plc Price Control: CAA formal proposals for control period 3 (2011 – 2014), CAA
- 2009, Assessment of NERL's Back Office Costs, LECG
- 2009, NERL Revenue and Cost Allocation, LECG
- 2010, NATS (En Route) PLC , Regulatory Accounts 2009/10
- 2011 – ATM Cost – Effectiveness (ACE), Benchmarking Report with 2012 -2016 outlook, Performance Review Unit Eurocontrol
- 2012, NATS (En Route) PLC , Regulatory Accounts 2011/12
- 2013, Annual Report and Accounts 2013, NATS Holdings Limited
- 2013, NATS (En Route) PLC , Regulatory Accounts 2012/13
- 2013, IPD Facilities Benchmarking Report
- 2013, RP2 Business Plan (2015 – 2019) for Customer Consultation including Appendices A - K, NATS

NERL's RP2 plan followed the requirements set out by the CAA, which were designed to make it accessible, clear and understandable to the airline customers and economic regulators. The non-staff OPEX is defined in pages 58 and 66 of RP2. During the course of this study, NERL was able to provide a range of documents and data in support of its OPEX plan in RP2, although not in the form of a comprehensive and integrated summary document. The documents provided, collectively sought to define the OPEX expenditure over the period, the range of services provided by this spend, the service levels that define the OPEX expenditure as well as extracts from contracts documents. Collectively, these documents sought to define and justify an OPEX of £455m, RP2¹ for the period. These documents are summarised as follows:

- NATS Group Structure and RP2 overview presentation
- Overview of OPEX spreadsheet
- Brief facilities services description and geographic map of locations
- Initial supply chain data of in-house versus outsourced services for various suppliers
- Amended OPEX spreadsheet, including description of main cost driver and principal providers
- OPEX spreadsheet and RP2 reconciliation and further descriptions of services
- Presentation to Capita of supply chain management within NATS, 5th September 2013:
- Facilities management summary
 - Team organisation and structure
 - Presentations of 5th September
 - Space schedule for CTC
 - Real estate presentation
 - Rent and rates schedule for each site
 - Utilities consumption
 - Key office report April 2013
 - Extract from EMCOR framework agreement
 - EMCOR quarterly KPI July 2013
 - EMCOR catering
 - EMCOR shuttle service
 - KPI data
- Supply Chain presentation
- AMOR service level data
- Cap Gemini service level agreement
- Telecom data
- Lockheed Martin – service data (redacted)
- Lockheed Martin KPI data
- Agency Staff
- Cleaning service levels
- Travel and related expenses policy
- Extended cash flow analysis and commentary

¹ 2013, RP2 Business Plan, Appendix H, Page 57

In addition to the various client briefing meetings with the CAA, there have been the following meetings with NERL:

- 15th August 2013
- 30th August 2013
- 05th September 2013
- 24th September 2013
- 25th November 2013 – review of draft report

Minutes and file notes of these meetings are attached in Appendix A.

Should a further review of the Non-Staff OPEX of this nature be required in future, especially given the context of a five year £454.6m non-staff OPEX spend within a regulated environment, consideration should be given by NERL to the preparation of a suitable summary document accompanying its plan in future.

2. Context and Overview of RP2

2.1 General Context

NATS Limited has two wholly owned operating subsidiaries namely NERL and NSL. The NERL business may be briefly summarised as managing the regulated provision of en route inbound, descent and overflying traffic as well as the en route outbound and shared airport and regulated provision of the final approach and climb for air traffic.



Figure 1: NERL within the NATS Group

In 2012, overall traffic was 2.167m flights. The airspace is divided into 3 areas namely the Scottish FIR based at Prestwick (approx north of 55°N), the London FIR based at Swanwick (approx. south of 55° North) and the Shanwick Oceanic Control Area. Eurocontrol considers NATS as having airspace with the 3rd highest complexity after Skyguide (Switzerland) and DFS (Germany) but the most complex approach activities in the London system.

Europe’s Flight Information Regions

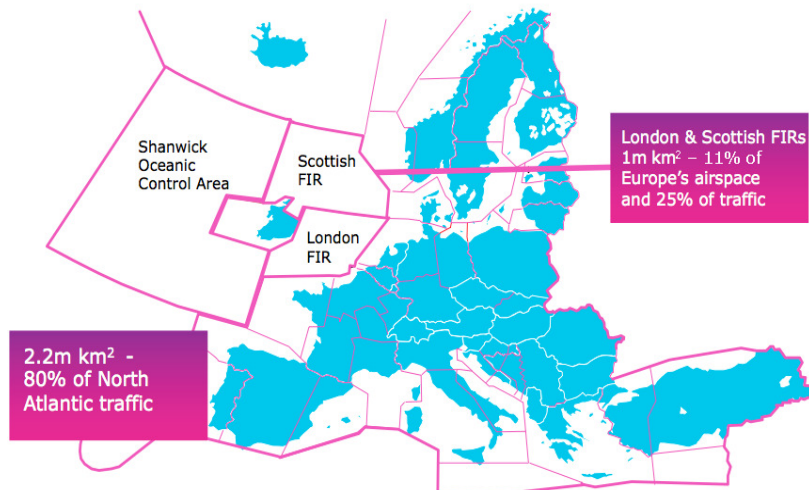


Figure 2: Flight Information Regions (source NERL)

The divide between the three regulated service components cover:

- En-route ATC services – in controlled airspace within the London and Scottish Flight Information Regions, together with services outside controlled airspace where required to support commercial operations to regional airfields. The operations are consolidated at just two main locations (previously 4 centres):

- Swanwick – handling en-route air traffic flying over Southern England and Wales (London Area Control) and traffic over London and the south-east below 24,000 feet (London Terminal Control);
- Prestwick – handling air traffic in Scotland and in the North/Midlands of England (Scottish Control), and in the North Atlantic (Shanwick Oceanic Control).

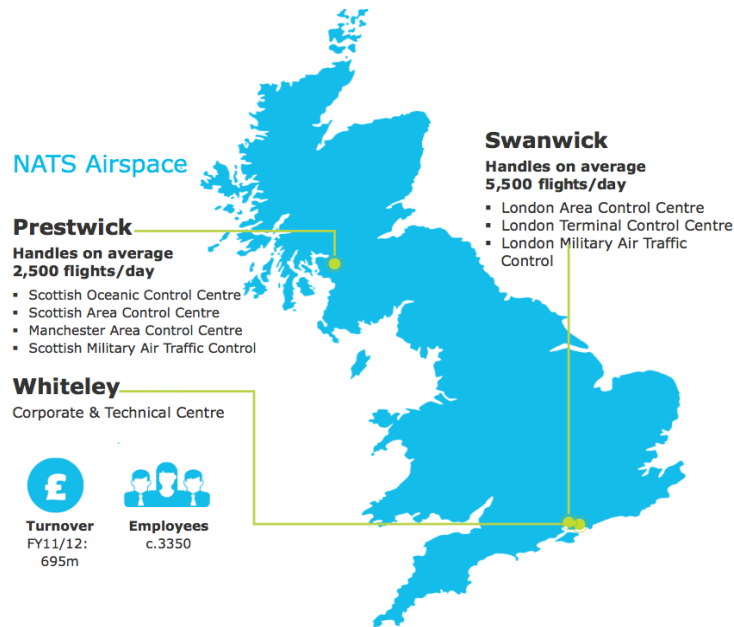


Figure 3: UK Airspace (source NERL)

- London Approach services – for Heathrow, Gatwick, Stansted, Luton and London City airports, provided from Swanwick Terminal Control ensuring these airports’ runways and surrounding airspace are managed in an integrated way. It also deals with some of the adjacent airports with the London Approach.
- Oceanic services – control of flights in the Shanwick Oceanic Control Area in partnership with the Irish Aviation Authority (IAA) which in turn provides the communications service. This service is delegated to the UK and Irish Governments by ICAO.

The Centres also accommodate military controllers handling military aircraft operating outside controlled airspace, using systems and facilities provided by NERL under contractual arrangements with the UK Ministry of Defence.

In terms of overall staff, NERL employs some 3,350 people who operate, maintain and develop the en-route ATC system, comprising circa 1,275 controllers, 565 ATC support staff, 850 engineers with the remainder a mix of other disciplines².

In terms of facilities, NERL has three main sites namely Swanwick (66,300m²), Prestwick (20,500m²) and the CTC at Whiteley (26,200m²). In addition, there are 21 Radar Sites, 51 Communication Sites, 53 Navigation Aids and 20 other facilities together with the shared use of 2 NATS offices, (Brettenham House and Osbourne House). In total NERL occupies approximately 120,000m² of space. While Swanwick and Prestwick are freehold and bespoke buildings for NERL operations, all others are leasehold. The lease at the CTC expires in 2023 and there are plans to extend the lease to 2031, i.e. the end date of the current NATS license.

Overall NATS performance in 2011 at €385/composite flight hour is below the European average of €423:

² RP2 Business Plan, Page 5

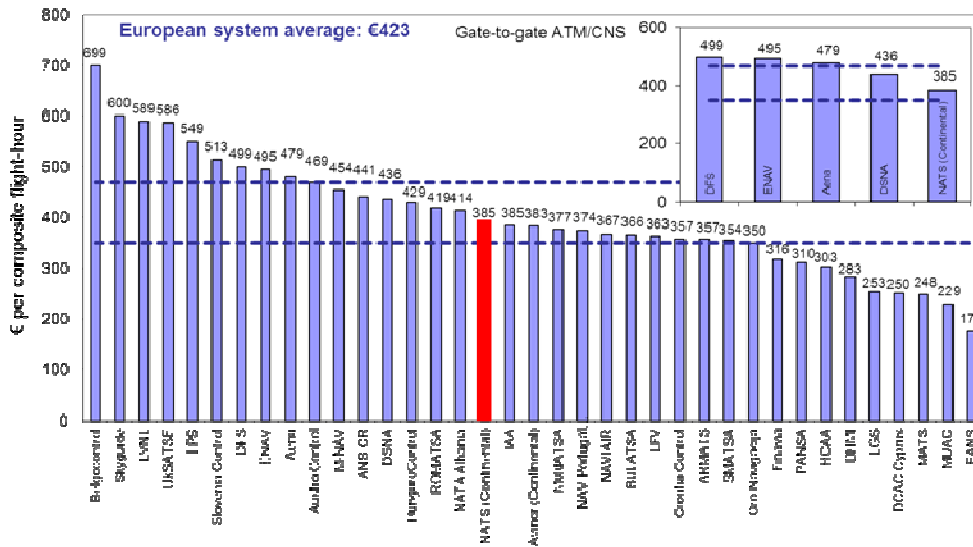


Figure 4: Composite Flight Hour Cost Comparison (Eurocontrol 2011 benchmarking report)

With Non-Staff OPEX of circa €70, NATS sits low in the €60 - €85 'breed' range of ANSPs, although there are exceptions i.e. ENAV in Italy. Based on data available, NATS Non-staff OPEX would appear to be 12% lower per composite flight hour, than G9 (Spain, Germany, France, Italy etc.) average.

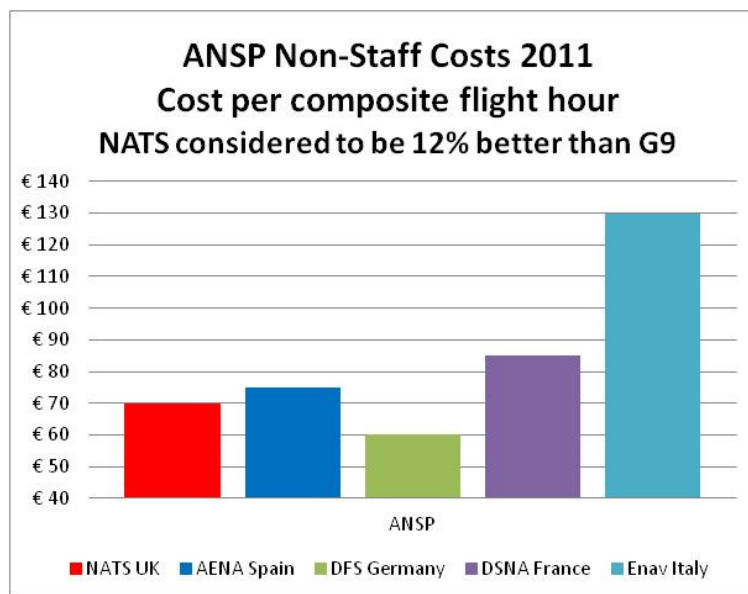


Figure 5: ANSP Non Staff Costs 2011 Comparison (derived from Eurocontrol 2011 benchmarking report)

2.2 Overview of RP2 (2015 – 2019)

RP2 outlines two scenarios for the period which are briefly summarised below:

Plan 1: This plan will deliver the current service level, but reduces the price at the end of RP2 by 17% in real terms compared to the corresponding price at the end of RP1, through significant cuts in operating costs – including an 8% cut in overall manpower with 8% fewer front-line controllers, as well as changes to pay, pensions, working practices and asset management and some assumed cost efficiency savings realised from the UK/Ireland FAB³.

Plan 1 - Total NERL Staff & Direct Underlying Costs											
Calendar Year											
2012 CPI Prices	2011	2012	2013	2014	2015	2016	2017	2018	2019	CP3	RP2
£m	Actual	Forecast	Plan	Plan	Plan	Plan	Plan	Plan	Plan	Total	Total
Staff Costs	(261)	(261)	(262)	(259)	(254)	(254)	(257)	(261)	(262)	(1,044)	(1,287)
Capitalised Internal Labour	37	35	36	38	36	35	36	34	34	145	175
Non Staff Costs	(101)	(93)	(97)	(96)	(94)	(92)	(91)	(90)	(88)	(387)	(455)
Intercompany Costs	(29)	(30)	(30)	(30)	(29)	(29)	(29)	(29)	(29)	(118)	(145)
Less Cost of Services to NSL	15	16	18	18	18	18	18	18	18	67	90
TOTAL	(339)	(332)	(336)	(329)	(323)	(321)	(324)	(327)	(327)	(1,337)	(1,622)

Figure 6: Business Plan 1 Forecast OPEX (NERL Draft Business Plan 2013)

Plan 1 - Total NERL												
By Staff Type	Start CP1 2001/02	Current Jan-13	2011 Average	2012 Average	2013 Average	2014 Average	2015 Average	2016 Average	2017 Average	2018 Average	2019 Average	Current v 2019
	FTE	FTE	FTE	FTE	FTE	FTE	FTE	FTE	FTE	FTE	FTE	FTE
Controllers	1,430	1,278	1,318	1,282	1,248	1,208	1,179	1,167	1,170	1,180	1,173	(105)
Operational Support Staff	930	562	592	562	551	520	466	465	465	465	465	(98)
Engineers	1,180	849	810	843	850	833	835	834	839	844	844	(5)
Other Staff	900	661	724	669	651	631	615	606	603	598	592	(68)
Total	4,440	3,349	3,444	3,356	3,299	3,192	3,095	3,071	3,076	3,087	3,073	(276)

Figure 7: Business Plan 1 Forecast Staff Numbers (NERL Draft Business Plan 2013)

Plan 2: This plan has a greater price reduction than Plan 1, but with fewer guarantees around service quality, since the plan's effect on capacity or resilience of NERL's ATC system will be felt in increased delays, not in a degradation of safety standards. The reduction in price is 19% lower in real terms by the end of RP2 than at the end of RP1 – with an even deeper cut in operating costs, including a 14% reduction in front-line controllers, together with an 8% cut in planned infrastructure investment⁴.

Plan 2 - Total NERL Staff & Direct Underlying Costs											
Calendar Year											
2012 CPI Prices	2011	2012	2013	2014	2015	2016	2017	2018	2019	CP3	RP2
£m	Actual	Forecast	Plan	Plan	Plan	Plan	Plan	Plan	Plan	Total	Total
Staff Costs	(261)	(261)	(261)	(257)	(249)	(247)	(249)	(251)	(252)	(1,041)	(1,248)
Capitalised Internal Labour	37	35	36	38	36	35	36	34	34	145	175
Non Staff Costs	(101)	(93)	(97)	(96)	(94)	(92)	(91)	(90)	(88)	(387)	(455)
Intercompany Costs	(29)	(30)	(30)	(30)	(29)	(29)	(29)	(29)	(29)	(118)	(145)
Less Cost of Services to NSL	15	16	18	18	18	18	18	18	18	67	90
TOTAL	(339)	(332)	(335)	(327)	(318)	(315)	(316)	(317)	(317)	(1,334)	(1,583)

Figure 8: Business Plan 2 Forecast OPEX (NERL Draft Business Plan 2013)

Plan 2 - Total NERL												
By Staff Type	Start CP1 2001/02	Current Jan-13	2011 Average	2012 Average	2013 Average	2014 Average	2015 Average	2016 Average	2017 Average	2018 Average	2019 Average	Current v 2019
	FTE	FTE	FTE	FTE	FTE	FTE	FTE	FTE	FTE	FTE	FTE	FTE
Controllers	1,430	1,278	1,318	1,282	1,243	1,188	1,134	1,112	1,105	1,100	1,093	(185)
Operational Support Staff	930	562	592	562	551	520	466	465	465	465	465	(98)
Engineers	1,180	849	810	843	845	828	825	824	824	824	824	(25)
Other Staff	900	661	724	669	651	631	615	606	603	598	592	(68)
Total	4,440	3,349	3,444	3,356	3,289	3,167	3,040	3,006	2,996	2,987	2,973	(376)

Figure 9: Business Plan 2 Forecast Staff Numbers (NERL Draft Business Plan 2013)

The overall non-staff expenditure for the period RP2 2015 to 2019 is £454.6m. It should be noted that all costs in the RP2 Plans are quoted using 2012 as the calendar year basis for real costs.

³ RP2 – Executive Summary Page 2

⁴ RP2 – Executive Summary Page 2

In relation to the above plans, Capita is aware that in addition to it addressing the non-staff OPEX in this report, Cambridge Economic Policy Associates (CEPA) is addressing cost allocation, IDS is addressing staff OPEX and Arup is addressing the CAPEX for the same review period. Intercompany costs, as well as Services to NSL, are excluded from this report and assumed to be dealt with at a corporate level.

It should be noted that the non staff costs are the same in both RP2 Plans. NERL stated that they believe that the non staff cost savings declared for Plan 1 are as great as can be achieved in the period and therefore there is no further scope for additional cost reductions in Plan 2.

In terms of definition of the expenditure the RP2 plan states:

Non-staff expenditure is relatively fixed in real terms, growing with inflationary pressures. However, savings are planned in a number of areas including unallocated savings that have not yet been identified and not yet secured savings as a result of closer collaboration with the Irish as part of the UK / IRE FAB⁵.

Figure 10: RP2 extract – expenditure definition

The declared saving over the period from 2014 (£96.0m) to 2019 (£88.0m) is some 8% i.e., in line with the projected savings of Plan 1 (all prices being expressed in real 2012 terms with no inflation allowance).

Irrespective of the Plan considered, the Non-staff OPEX remains consistent although the metric/driver is marginally adjusted with 3,073 FTE in post by the end of RP2 in Plan 1 and 3% less at 2,973 in Plan 2. The tolerances in benchmarking are such that the variance is not material and as such benchmarking herein utilises the Plan 1 FTE as the metric.

2.3 Re-baselined RP2

Capita requested a copy of the build-up of the RP2 plan projections. In response, NERL provided the following bridge between the values stated in the RP2 plan document and those provided for benchmarking. This bridge re-baselines the numbers to:

- express the values on a financial year basis (consistent with NERL’s detailed planning system’),
- express the values in 2012/13 real prices,
- reflect actual costs in 2012 (the RP2 plan document was produced before these were known with a forecast used instead)

Planning Period	CP3			RP2				
CALANDER YEAR	2012	2013	2014	2015	2016	2017	2018	2019
NON Staff Opex	Actual	Plan	Plan	Plan	Plan	Plan	Plan	Plan
RP2 - 2012 prices, Calender Year basis	£93	£97	£96	£94	£92	£91	£90	£88
2012 Price Calender Year Deflators	1.0000	1.0180	1.0353	1.0535	1.0724	1.0928	1.1137	1.1358
Outturn Prices, Calender Year basis	£93.4	£99.1	£99.5	£98.9	£98.5	£99.8	£99.9	£99.9
FINANCIAL YEAR	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20
2012/13 Prices, Financial Year basis	£95.3	£98.8	£94.0	£92.2	£89.7	£90.1	£87.9	£86.2

Figure 11: Re-baselined RP2 (source NERL)

More specifically the costs in RP2 may be broken down by service stream category of OPEX as follows:

⁵ RP2 Business Plan Page 58 and 66

Service/Function	CP3			RP2				
	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20
Facilities Management	£32.6	incl.	incl.	£30.0	£29.6	£29.6	£29.7	£29.7
Non-Operational IT	£9.6	incl.	incl.	£9.2	£9.1	£9.0	£8.6	£8.5
Asset Management	£18.6	incl.	incl.	£18.1	£18.2	£18.5	£18.3	£17.3
Business Support	£15.3	incl.	incl.	£15.4	£14.8	£15.8	£15.3	£15.4
Other	£19.2	incl.	incl.	£19.5	£18.0	£17.2	£16.0	£15.3
Total	£95.3	£98.8	£94.0	£92.2	£89.7	£90.1	£87.9	£86.2

Figure 12: RP2 OPEX by service stream category

2.4 Historic Trends

In understanding the context of RP2, Capita has reviewed the trends in the previous periods. The regulatory period CP2 (2005 – 2010) shows a consistent trend of downward pressure on the operating costs during the period. In the CP2 period, and in terms of the non-staff OPEX, this was achieved by several elements namely:

- The reduction in running costs enabled by a two centre strategy and the closure of West Drayton in 2007/08
- Consolidation of engineering and support functions in CTC
- Lower costs of maintenance and support of systems as replacement was delivered via Long Term Investment Plan (LTIP)
- More efficient contractor support arrangements
- The move to leased telecommunications’ networks under the Da Vinci project.
- In terms of CP2, the non-staff OPEX as published in November 2004, was as shown⁶:

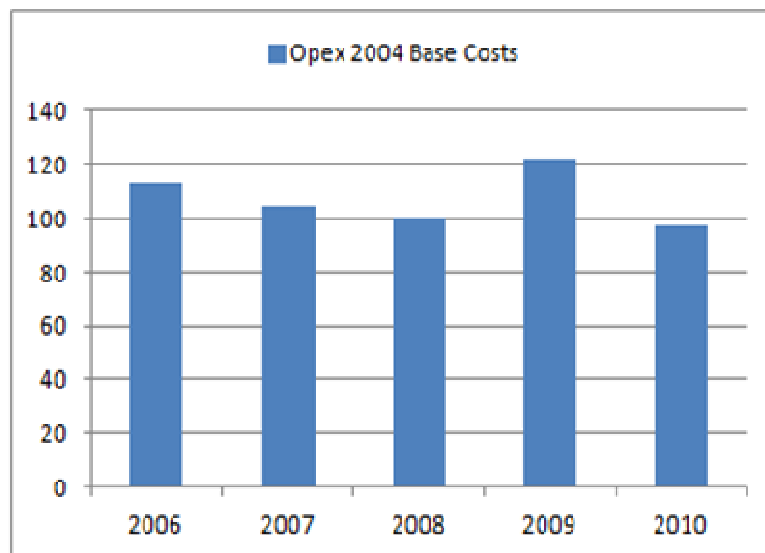


Figure 13: Projected OPEX 2006-2010 (£m) (source NATS 2004)

While the price base is different to RP2, the key issue is that the overall trend was generally downwards and on average represented a decrease on overall OPEX of a rolling 7% per annum over the period.

⁶ Overview of NERL’s Operating Expenditure 2005 – 2011, NATS 2004

A review of NERL's back office costs in 2009, when benchmarked, showed that costs outperformed the medium benchmark. However, it did note that efficiencies could be delivered in terms of space utilisation⁷. This was further recognised in the NERL Price Control Document which stated that its underlying operating costs have been on a downward path during CP2 and are projected to decline further in CP3⁸.

In the CP3 period, the trend has remained consistent. This covers the four year period from 2011 to 2014. The actual costs in 2012 for the non-staff OPEX was £95.3m and is planned to decrease slightly by the end of the period.

Therefore the overall pressure has been, and continues to be, to drive down OPEX costs. It is appreciated that as time progresses, that delivering OPEX savings will become progressively more challenging as reductions in real terms make further savings more difficult. These areas of savings will include suppliers where leverage is currently limited, being in limited competition, or being responsible for elements of safety critical systems.

2.5 Supply Chain Management (SCM) Strategy

NERL's Supply Chain Processes have been reviewed as part of the study, the aim of which is a high level review of the strategy and methodology to deliver the OPEX saving through RP2 and achieve increasing value. NERL's SCM is a strategic business function and is represented at executive level by the Managing Director of Operations. It is accredited to BS11000 with Certification for Collaborative Business Relationship Management.

In overall terms the CAPEX and OPEX expenditure exceeds £250.0m per annum. Some 40 suppliers account for 80% of overall expenditure both in terms of CAPEX and OPEX. There are 14 'key – partner' suppliers, all of which are under the 'structured relationship and performance management programme' including;

- formal evaluation of the relationship (past, present and future) via SCM operational meetings and an 'Executive / Business Review' programme
- structured improvement plans designed to drive continuous improvement, innovation and value for money over time
- performance measurement of suppliers using a standardised toolkit to drive performance to supplier specific KPIs

In terms of the non-staff OPEX, these suppliers are EMCOR, Lockheed Martin, BT and Cap Gemini.

There are four key relationship types, namely supplier, key relationship, preferred partner and strategic partner. Each is appropriately managed to develop the relationship and the value proposition to suit the specific circumstances. A wide range of techniques are used to deliver value for money, including open book, competition, consumption management, and expert reviews. All supplier performance is regularly reviewed and assessed to deliver improvement and business savings.

For all significant pieces of sourcing activity (typically >£1.0m, but recently lowered to £250k for the majority of work) a sourcing strategy is signed off at the start of the project. Also variations are updated and communicated as well as approved through the process.

⁷ LECG Assessment of NERL's back office costs

⁸ NATS En Route Price Control: CAA October 2010

3. Overview of RP2

3.1 RP2 Summary

As stated previously, the RP2 period covers 2015 – 2019 and forecasts non-staff expenditures reducing from £92.2m to £86.2m per annum. This represents the re-baselined RP2 as described in section 2.3 as is expressed in 2012 real prices. The expenditure is divided into five categories and is summarised below:

- Facilities Management, £30.0m to £29.7m and includes rent, rates, utilities, maintenance for all locations, minor other expenditure and one-off items. Approximately 85% of the service is outsourced with the management function and some delivery activities undertaken by self-provision. The key driver in relation to the property elements, are ownership of asset, building size & location and type of facility. The driver in relation to utilities is overall consumption. The minor items include stationery, security vetting, carbon credits, etc. Insurances are sourced at a parent company level and any costs from NERL are recovered by company cross-charging, which is not considered in this review.
- Non-Operational IT, £9.2m to £8.5m and includes, support contracts, SIF security identification procedures, hardware, mobiles, printers as well as minor other items. In this instance some 75% is outsourced with the main element of which being supply and support contracts across the whole of the IT service catalogue, desktop, corporate information, security information and compliance. The key driver is staff numbers and staff mobility.
- Asset Management, £18.1m to £17.3m and includes Post Development Services (PDS), connectivity, materials and minor other items. Some 35% is outsourced with the main in-house elements being new systems and software that need support, and requirements for contingency plans. The driver is safety risk and the number & type of systems in operation.
- Business Support, £15.4m to £14.8m and includes corporate communication, finance, HR, temporary staff, college, engineering, legal, travel and minor other items. In business support some 60% of the total is outsourced. This is a mix of function normally associated with operating a business of this size and complexity. The business drivers are staff, travel, regulation, etc.
- General items, £19.5m to £15.3m and includes Long Term Investment Plan OPEX (LTIP), CAA fees, MoD navigation facilities, employee share plan, and business development. In addition there is a line item for unallocated savings. The unallocated savings vary from £0.9m in 2015 to £5.7m in 2019. It should be noted that there may be scope to capitalise some aspects of the LTIP. Also, the unallocated savings are discussed in detail and assigned in section 4.6 of this report.

This is in accordance with the RP2 plan aims and aspirations. With the exception of LTIP, the other aspects are mainly financial charges and fees.

There are a small number of key functions and corresponding suppliers in place to deliver the OPEX plan. These functions and suppliers include rent and business rates, EMCOR for facilities management, Npower and BGB as utilities suppliers, Lockheed Martin (which has roles in Non Operational IT, Asset Management and LTIP), BT, staff travel and temporary staffing, as well as CAA and MOD fees.

It should be noted that Capita has not reviewed the specific business cases that sought approval to support these contracts. While costs have been benchmarked, the review of specific business cases is outside of the scope of this study. We understand from NERL that all major expenditure is supported by a business case and managed through a formal approval process. We would expect this informed client to adhere to these formal procurement processes in the delivery of RP2.

It should be noted that some of these key contracts are due for renewal during RP2 and as such the projected expenditure in such cases is not supported with the benefit of a current contractual commitment. NERL relies upon its procurement processes to deliver the corresponding value for money. Some of these savings are

included in the plan at risk, until contractual agreements can be completed during RP2 period. This situation should be reviewed, as appropriate, at the RP2 mid-point.

The following is a breakdown of the costs and main suppliers for the non-staff OPEX:

NERL NON_STAFF OPEX							
	Services Provided	2012/13	2015/16	2016/17	2017/18	2018/19	2019/20
	Text	£m	£m	£m	£m	£m	£m
Facilities Management	Rent	5.1	4.6	4.5	4.5	4.5	4.5
	Rates	5.9	5.8	5.8	5.8	5.9	5.9
	Utilities	7.2	7.3	7.8	7.8	7.8	7.8
	Catering	1.4	1.1	1.1	1.1	1.1	1.1
	Maintenance	7.8	6.9	6.4	6.4	6.4	6.4
	Maintenance	2.0	1.5	1.4	1.4	1.4	1.4
	Maintenance	0.9	0.9	0.9	0.9	0.9	0.9
	Other	1.7	1.9	1.7	1.7	1.7	1.7
	Significant one-offs	0.6	0.0	0.0	0.0	0.0	0.0
	Sub - Total		32.6	30.0	29.6	29.6	29.7
Non-Operational IT	Support Contracts	8.2	7.6	7.3	7.1	7	6.8
	SIF	0.0	0.4	0.6	0.7	0.4	0.5
	Hardware	0.2	0.2	0.2	0.2	0.2	0.2
	Mobiles	0.3	0.3	0.3	0.3	0.3	0.3
	Printers	0.7	0.5	0.5	0.5	0.5	0.5
	Other	0.2	0.2	0.2	0.2	0.2	0.2
	Sub - Total		9.6	9.2	9.1	9.0	8.6
Asset Management	PDS	9.7	10.8	11.1	11.7	11.7	11.0
	Connectivity	6.3	5.8	5.6	5.3	5.1	4.9
	Materials	1.1	0.8	0.8	0.8	0.8	0.8
	Other	1.5	0.7	0.7	0.7	0.7	0.6
	Sub - Total		18.6	18.1	18.2	18.5	18.3
Business Support	Corporate Comms	1.1	1.3	1.2	1.3	1.2	1.3
	Finance	0.8	0.9	1.0	1.4	1.2	1.4
	HR	2.7	2.4	2.3	2.3	2.3	2.0
	College	0.2	0.2	0.2	0.2	0.2	0.2
	Engineering	0.5	0.6	0.6	0.6	0.6	0.6
	Legal	0.2	0.3	0.3	0.3	0.3	0.3
	Other - Directorate of International Strategy	0.2	0.3	0.3	0.3	0.3	0.3
	Other - T&RE (All areas)	4.0	3.9	3.7	3.5	3.4	3.4
	Other - NERL Defence (MoD)	0.2	0.2	0.2	0.2	0.2	0.2
	Other - Safety	0.0	0.0	0.0	0.0	0.0	0.0
	Other - Prestwick Centre	0.8	0.7	0.7	0.7	0.7	0.7
	Other - CEO & Board	0.5	0.5	0.5	0.5	0.4	0.4
	Other - Other	4.1	4.1	3.8	4.5	4.5	4.6
Sub - Total		15.3	15.4	14.8	15.8	15.3	15.4
Other	LTIP Opex	6.6	6.4	6.2	6.3	6.5	6.4
	CAA ERG Fees	1.0	1.2	1.1	1.1	1.3	1.3
	CAA SRG Fees	4.2	3.9	3.8	3.8	3.7	3.6
	MoD Nav facilities	4.3	3.9	4.0	4.2	4.4	4.5
	Employee Share Plan	0.9	2.8	2.9	2.8	2.5	3.1
	Unallocated Savings	0.0	-0.9	-2.2	-3.2	-4.5	-5.7
	Business Development	2.2	2.2	2.2	2.2	2.1	2.1
	Sub - Total		19.2	19.5	18	17.2	16
Annual Totals		95.3	92.2	89.7	90.1	87.9	86.2

Figure 14: NERL Non-Staff OPEX projections by service stream (NERL supplied data)

3.2 General Comments on RP2

In undertaking the review of individual projects the following should be noted:

- A summary document supporting the non-staff OPEX component of NERL's RP2 Plan was not available and hence much of this review is as a result of questions and the corresponding answers and data received from NERL together with Capita knowledge of similar expenditures and benchmarking. In some instances the information is incomplete and hence reasonable assumptions have been made to augment the information. Where appropriate the information has been extrapolated to indicate Capita's understanding as well as including the outcome of meetings and general clarifications.
- It is recommended that, should further studies on this subject be required, it would be beneficial if NERL prepare a summary supporting document.
- NERL has stated:
 - “The extent NERL can outsource is primarily determined by both the need for clear operational accountabilities as well as compliance with our statutory obligations. Where we do outsource NATS will still assume the intelligent client role, setting standards, ensuring compliance with the contracts and be the primary interface with the general business.”*
 - “The asset management team in NERL has to comply with the regulatory requirements placed on NERL under the Operating License and Companies Act and uses internal processes that are accredited to the British Standard for Asset Management (PAS55). The processes look to optimise the range of service, cost performance and benefit delivery of the asset portfolio. In association with other NATS stakeholders (i.e. Supply Chain Management, Engineering, and Programmes) the Asset Management Team ensures that NERL maintains its assets in the most appropriate way, including the choice of in-house and external support. They also conduct regular Asset Health Reviews (AHR's), which evaluate the maintenance regime, and on-going support arrangements and leads to changes, if necessary, to ensure that Asset Management delivers value for money”*
- The analysis and conclusions are based upon the information, where available, from NERL
- A review of individual business cases was not undertaken and was not required as part of this study.
- The savings are evidently weighted towards the end of the RP2 period and hence there is a risk that these savings will not be delivered. NERL stated that this is its risk as RP2 will effectively be reflected in a fixed price contract to airlines. Capita believe that yearly savings should be tracked against the projections to provide certainty that later savings are still achievable.
- NERL's overall approach has been to deliver value, rather than just savings, in the OPEX plan. This has been incorporated in the facilities management and business support areas. However, the high risk areas for OPEX 'cost creep' are in the utilities, IT support and BT contracts together with the possible under delivery of savings in the 'Other' classification. These represent a consequent financial risk for NERL given its fixed price service delivery.
- There is also a risk that as staff numbers reduce, space standards will creep and increase to backfill the voids. As a result there is a possibility that the full value in OPEX terms of the reduced staff numbers will not be realised, reflecting a further NERL financial risk. There may well be potential to temporarily sub-let part of the accommodation and hence further drive OPEX savings. However, this must be within the context of preserving future growth requirements and security of operations.
- Within the documents there does not appear to be a clear and concise approach to risk. Risk management allowances do not appear to have been determined or disclosed at appropriate levels on a case by case basis, albeit it is assumed that some allowance has been included in each case. Risk allowances should potentially be held at a portfolio level, which would require clear and robust procedures, a training process, and a rigorous control of the estimating process to ensure that risk or

contingency allowances are not retained within OPEX allowances. We understand, for example, that there is a small allowance of £0.2m in Asset Management.

- Within RP2 there is an Operating Cost Contingency of £7.0m shown separately and not considered within the scope of this review. NERL stated that this is allocated to address a number of risks, namely:
 - Increased cost of redundancy which are highly material, difficult to forecast and binary in nature
 - Delays to highly complex and heavily integrated technology programme that deliver Opex savings
 - Delays to working practice changes that are key to delivering cost efficiency plans
 - Provision for increased overtime costs in the event that cost saving programmes have a larger than assumed adverse effect on customer services and on mitigation action need to be taken
 - General allowance for risks that cannot be identified and uncertainties that exist as part of creating a fixed price plan of long duration.
- Insurance costs are held at a NATS Group level and then re-charged to the group companies through intercompany charges, and thus are not included in Non-Staff costs
- NATS facilities including Brettenham House, Osbourne House, Tudor House, Dalsetter Wood, Cardiff ANS etc. are excluded from the rent, rates and other OPEX costs.
- In relation to change control NERL has stated:

“New services (including the OPEX requirements as a result of additional capital purchases) are dealt with under a “Change Control Proposal” or “Agreement Variation procedures” – these are generally set out in all CAPEX agreements to capture the OPEX impact of any purchase or subsequent variation thereto, and in any OPEX contract that may be required to take on this requirement. The majority of substantial agreements make use of a standardised Agreement Variation template, the management of which is dealt with via Change Advisory Boards (CAB) for authorisation and to properly consider impact analysis.”
- There are several major contract renewals in the period. NERL has stated that:

“Contracts renewals are monitored against a master contracts list. Specific contracts are assigned to a Category Manager to be dealt with in the context of supplier performance / development, market alternatives, NATS strategy and challenges etc., and leveraging other common spend areas as appropriate. Contracts are reviewed in advance of renewal but also occasionally mid-term where the market dynamics have changed or some other variable that suggests better value for money might be realised. NATS SCM have formalised processes to address contracts fully - for renewals and new requirements in excess of £250k this includes detailed sourcing strategies which are reviewed and approved in advance of implementation.”

3.3 Asset Life

The goal of a good and well thought out OPEX plan is to maintain the asset. This includes protection of the long term business interest and facilities. It must also deliver value to the business.

Whilst no detail has been requested in support of asset life expectancy, we would expect this issue to be addressed as part of their overall OPEX/CAPEX strategy and procurement processes. Asset residual values and useful life should be adjusted and reviewed where appropriate to reflect actual use and condition. In the absence of a detailed review of the condition survey report it is difficult to determine the appropriateness of the OPEX plan to maintain the assets other than in general terms.

In Capita’s view typical asset life expectancy is as shown below:

Facility	Fixed asset lives
<i>Terminal complexes</i>	
ATC building, CTC and other structures	30 - 60 years
General fixtures and fittings	10 - 20 years
<i>Plant and equipment</i>	
General systems	15 years
IT equipment	7 years
Lifts, escalators, etc.	20 years
Other plant and equipment	5 - 20 years
Tunnels, bridges and subways	50 - 100 years
<i>Navaid Systems</i>	
Radar	10 - 15 years
Communications equipment	5 – 8 years
Other airfield equipment	10 - 15 years
<i>Plant and equipment</i>	
Motor vehicles	4 - 8 years
Office equipment	5 - 10 years
Computer equipment	4 - 5 years
Computer software	3 - 7 years

Figure 15: Typical asset life expectancy (Capita data)

3.4 Inflation

Annual cost fluctuation (inflation or deflation) has a limited bearing on this review given that all expenditure herein is expressed in real 2012 terms.

The expenditure in this report is shown in 2012/2013 prices and as such there is no allowance by either NERL or Capita for fluctuations.

Future cost adjustments to NERL’s current supply contracts are likely to be linked, where required, to CPI, RPI or specialist maintenance and energy indices, e.g. NERL FM applies RPI -2% to its principal FM contract with EMCOR.

By way of background, since 2008, there has been low economic activity and confidence. Supply prices in many areas, with the notable exception of utilities costs and, to a certain extent, employment costs have dropped and wages have generally remained unchanged. The consensus is that this situation, whilst now showing signs of a potential progressive improvement, will continue and any recovery will be fragile and uncertain in the short term.

The table below provides a range of forecasts from different sources:

Financial year	CPI - OBR (Office of Budget Responsibility)	RPI (HM Treasury)	COPI (Construction Output Price Index)
2013 - 14	2.6	3.0	-0.3
2015	2.5	3.2	-0.2
2016	2.2	3.3	1.6
2017	2.0	3.5	3.1
2018	2.0	Not available	4.1
2019	2.1	Not available	4.3

Figure 16: Forecast inflation allowances as at mid 2013 (annual % adjustments)

✂

Figure 17: ✂

4. Review of Services

4.1 Overview

The scale of non-staff expenditure as a total business cost is very dependent upon the nature of the core business and the sourcing approach taken by management. As a generality most large employers outsource a proportion of non-core services. Typically accommodation is leased and serviced by facilities companies and utility suppliers, as well as a range of support services ranging from telecommunications to financial auditing.

Businesses, such as NERL, also source a range of engineering services in maintaining their operational equipment. This sourcing is often a mix of self-provision and outsourcing. The self-provision is a necessary requirement to maintain a continuity and development expertise within the business. NERL has a mature, well developed and tested approach to sourcing of both operational and support services.

In addition to benchmarking to other Air Navigation Service Providers (ANSP’s) certain outsourced functions can potentially be benchmarked to other high technology businesses of a similar size and staffing which operate or deliver safety critical and resilient services.

NERL’s Non-Staff OPEX is conventionally arranged around the principal support functions of Business, Facilities and Technical Operations. However the nature of its business is such that its information and communications technology support is better with functions split separately. Consequently its ‘Non-Operational IT’ (IT Desktop) is reviewed separately from its operational systems requirement within ‘Asset Management Services’.

Additionally a separate function of ‘Other Support’ (specialist CAA and MOD) has been identified to address these particular activities. Consequently this review considers the services within five service streams.

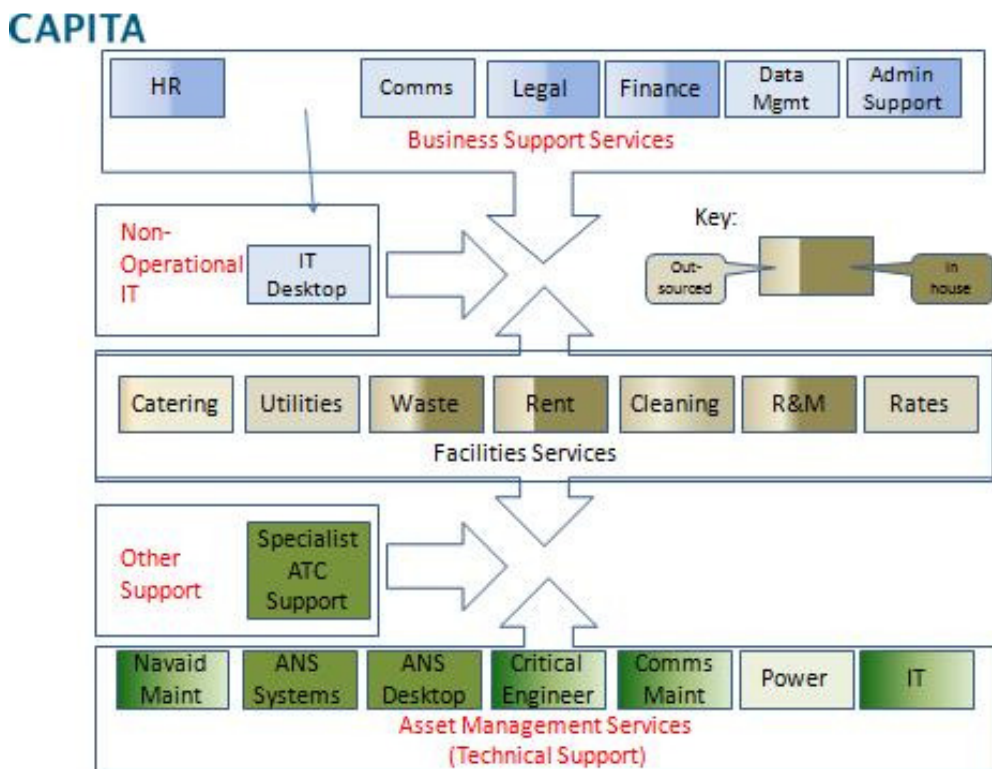


Figure 18: Support Service Streams considered

It is understood that current annual OPEX (2012/13) in respect of these five functions totals £95.3m. The corresponding RP2 targets a reduction in real terms to £86.2m by 2019.

All cost quoted are in 2012 prices unless otherwise stated.

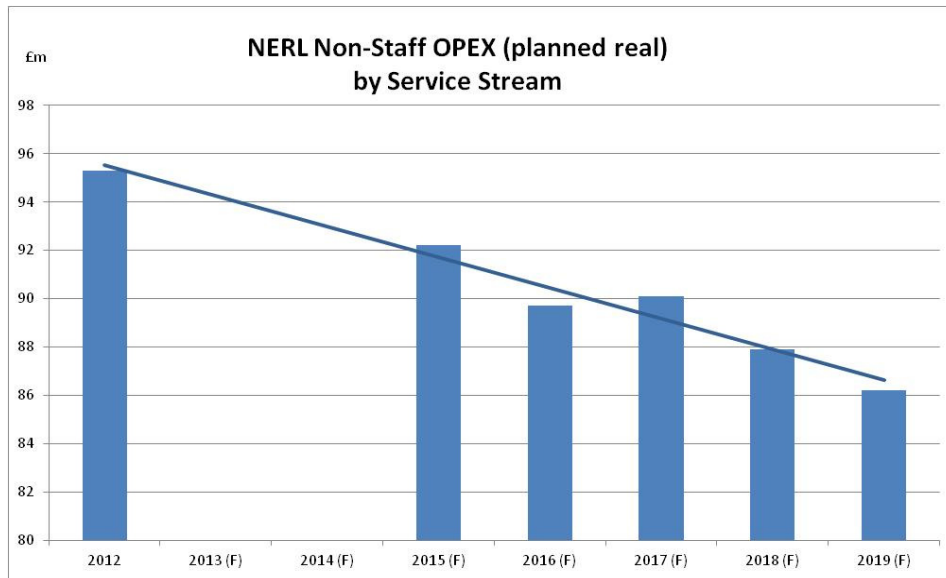


Figure 19: Projected Non-Staff OPEX (NERL Draft Business Plan 2013)

It is understood that NERL has driven savings in its Non-Staff OPEX from 2001 to date of circa 35%. This cost reduction programme is currently on-going and continues in its forecast within RP2.

RP2 targets a further overall reduction in cost of 6.5% over the 5 year period. This target together with forecast savings in the intervening period will result in an overall cost reduction from the cost base of 2012/2013 to that in 2019 of 10%.

All five service streams used for the review, with the exception of Business Support, indicate savings over the period.

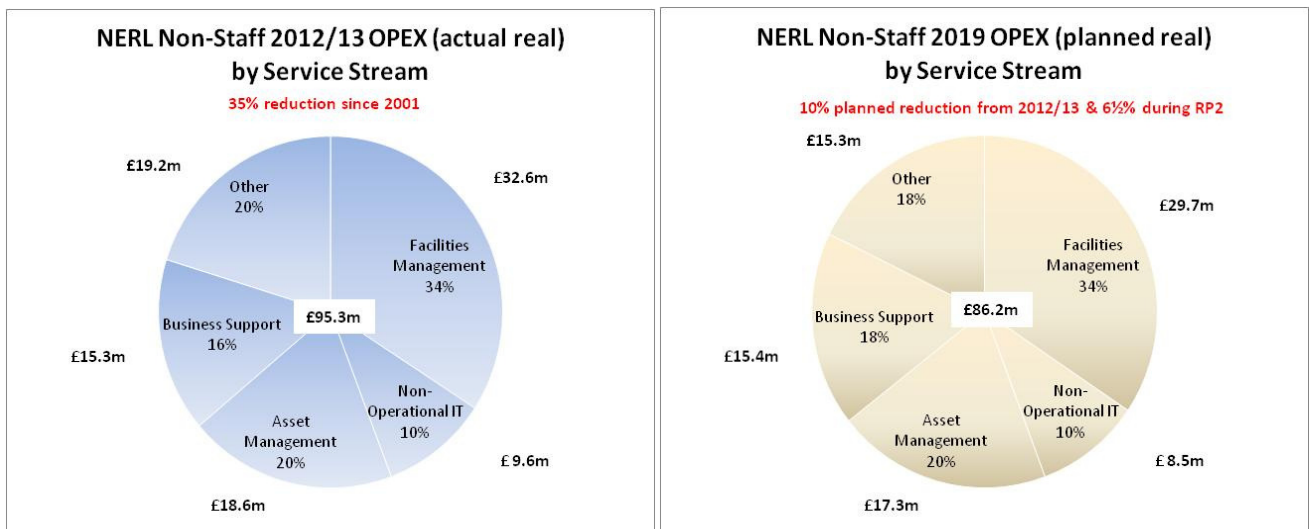


Figure 20: Proportionate OPEX by Service Stream: Current v 2019 (NERL supplied data)

NERL follows convention in utilising an integrated supplier arrangement which favours larger framework contracts. These contracts are typically let for a five year period with the potential for extension pending satisfactory delivery.

In excess of 60% (£59m) of the Non staff OPEX is covered by 10 suppliers. A further 10% of OPEX (£9.5m) is covered by the CAA and MOD fees and charges which are components within the 'Other' service stream.

A large proportion of the remaining expenditure is sourced through a relatively small number of providers including, for example, the various utility companies.

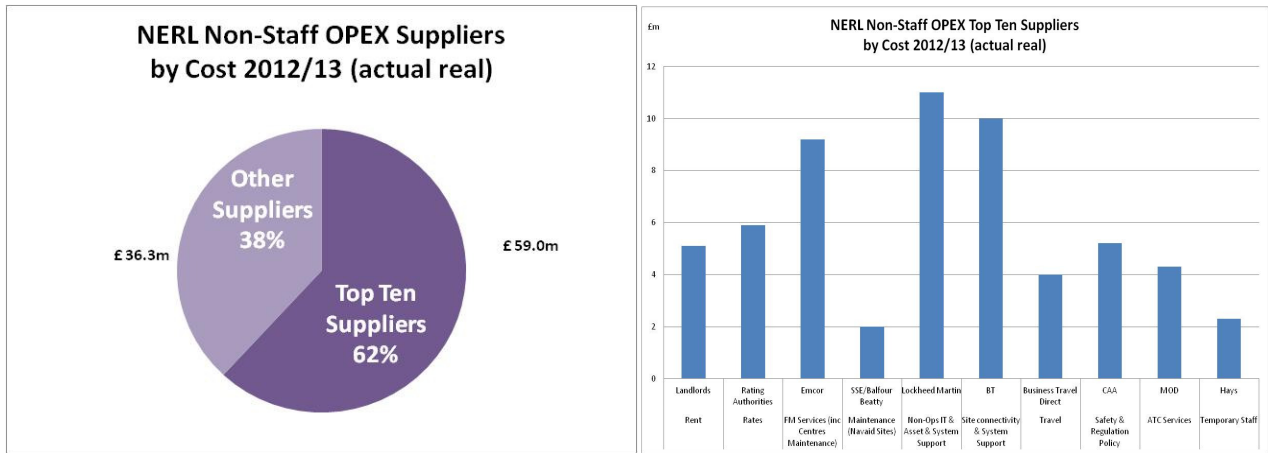


Figure 21: Current Top 10 Service Providers by value (NERL supplied data)

4.2 Review of Facilities Management

4.2.1 Overview

The facilities management function in NERL accounts for 34% of its non-staff OPEX. It is characterized by a number of 'fixed costs' including rent, business rates and to a degree utilities costs together with support services commonly designated as non-core. These typically include building and associated equipment maintenance, cleaning and waste management, catering, security, reception services, mailroom, etc. In common with larger businesses NERL generally separates its ICT services separately from FM.

RP2 maintains FM as 34% of its non-staff costs albeit on a reduced expenditure forecast. Currently its engineering and fabric maintenance across its major buildings together with its Navais sites accounts for the largest portion of expenditure being a third of the FM total. This flexible cost is forecast to reduce both in cost and proportionately over the RP2 plan.

Current FM costs of £32.6m pa are expected to reduce to £29.7m by 2019. External sourcing accounts for 85% of the total service cost with NERL retaining an in-house management and control function reflecting the need to be an 'expert client' capable of determining strategy, policy and standards of operation within a safety and resilient critical business.

NERL adopts an Integrated FM approach with EMCOR as its current strategic business partner in delivering the FM service.

✂

Figure 22: ✂

As part of its continuing improvement programme NERL has planned reductions in expenditure from now to the commencement of RP2 of 3.5%. Over the 5 year RP2 period NERL forecasts a further reduction in OPEX of 6.5%. This follows a current reduction since 2001 of 35%.

NERL has a good proportion of staff either working on a shift basis or flexibly such that its desk space ratio and hence its costs expressed by square metre and FTE are generally favourable.

Without significant reductions in occupied space and sites, it will be increasingly challenging to deliver efficiency savings in service. This is as the major part of efficiency savings has already been delivered.

The OPEX reduction and evident diminishing improvements profile in respect of FM services is indicated on the following graphic:

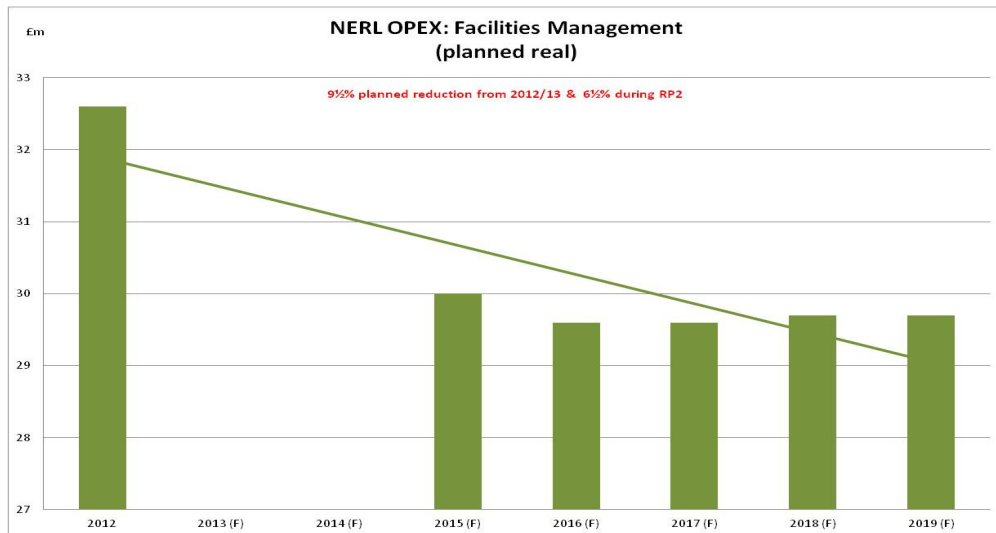


Figure 23: Projected Facilities Management OPEX (NERL Draft Business Plan 2013)

NERL’s FM costs are highly influenced by its real estate costs. The costs at its three main facilities (CTC, LACC & SCOACC) are readily benchmarked around the EMCOR service although it should be noted that only CTC is held as a leasehold facility. Both control centres are held freehold with no rental charge in the non-staff OPEX. Irrespective of this the overall FM costs at the three sites are favourable being at the lower end of benchmark ranges when compared to businesses utilising a mix of good quality offices, trading floors and datacentres (see Appendix B for CTC space by function).

However the high provision of space at the Prestwick Centre reflects poorly in the cost per FTE where even with its low utilisation and cost base it still sits in the upper end of the benchmark range. This is due to the Prestwick Centre being designed to handle future increases in traffic growth, which were forecast to be much higher at time of construction than have occurred.

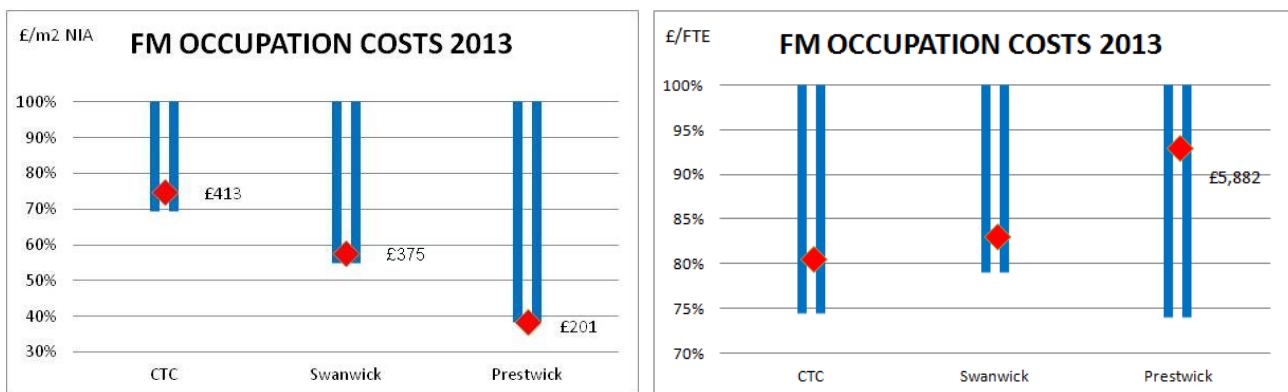


Figure 24: Current Occupation Costs expressed by m² and by FTE

In the above charts 100% represent the high end of the average benchmarks for Facility Management costs.

The ‘non-occupied’ sites (Navais etc) in turn have a comparatively high cost driven by ‘fixed’ rent and rates. The non staff cost of rent and rates include a degree of offsetting income from site sharing with other companies. The majority of the income, between £1.0m and £1.5m per annum is usually from mobile communication providers, e.g., Vodafone, O2 etc. Whilst in some cases these sites are shared the costs remain relatively inflexible by their nature.

NERL periodically benchmarks its principal Facility Management expenditure and its most recent review in April 2013 was positive indicated that its overall occupancy cost per FTE was in excess of 10% better than benchmark. However whilst the majority of its services performed well, its space allocation per FTE and its business rates were more than 10% worse than benchmark. The summary performance tree from the study undertaken by IPD is contained in Appendix B.

4.2.2 Rent & Rates

4.2.2.1 Summary Description

NERL’s real estate portfolio is characterized by the large relatively inexpensive leasehold CTC HQ building, two Control Centres (which are held freehold with no rent costs accruing in this review) and the high rateable value of its numerous equipment sites (25 radar, 51 comms sites, 53 Navaid sites & 20 others).

NERL continues its current portfolio rationalisation programme through RP2 with the planned disinvestment of its Training Centre at Hurn, demolition of its Operations block at SCOACC and the closure of its storage facility at Keynsham.

Initiatives also include the re-gearing of its CTC lease, business rates appeals, energy efficiency, improved utilisation of SCOACC facilities and general adjustment of space standards.

4.2.2.2 Analysis

The majority of NERL’s rent costs result from its occupation of CTC. Relatively small rental costs are also included for small offices in London and Edinburgh together with ground rents etc for Navaid sites.

Business rates are levied on all facilities with current annual costs ranging from £1,000 at the smallest sites to £2.5m at LACC. An extract of the business rates schedule is contained in Appendix C.

With its rental costs dominated by CTC, freehold property at Swanwick and Preswick and rent re-gearing opportunity arising post RP2, NERL has focussed its efficiencies in RP2 on disposal of other rateable value sites and rates appeals. This results in a forecast improvement in the business rates cost of 12%.

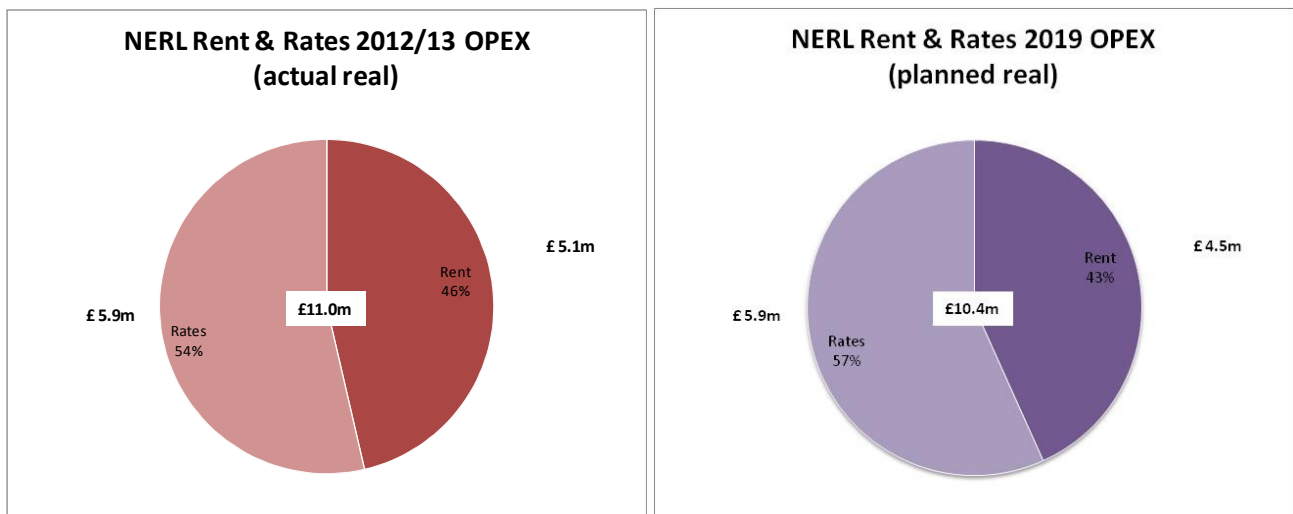


Figure 25: Proportionate Rent & Rates OPEX: Current v 2019 (NERL supplied data)

4.2.2.3 Benchmarking of Costs

NERL’s decision to locate its operations in low cost ‘out of town’ sites provides for a favourable benchmark comparison. Its CTC annual rent at circa £20 per ft² is favourable and typical of Southampton area, given current Thames Valley rents of £26 per ft² and city rents often easily exceeding £30 per ft². Typically rents in or around Heathrow are in or around £32.50 per ft².

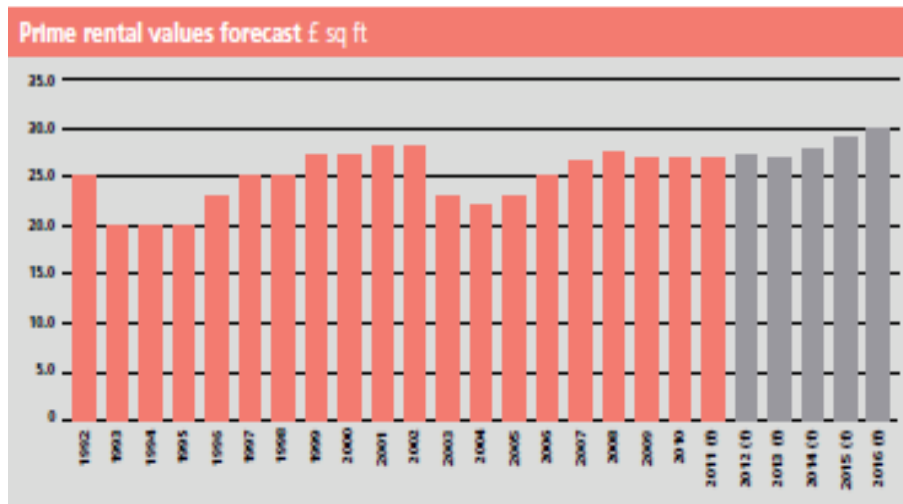


Figure 26: Applicable Forecast Office Rents (Thames Valley Office Report 2012 – Lambert Smith Hampton)

Whilst the CTC rent is below current benchmarks and similarly the business rates are generally below benchmark given the dispersed rural location of many sites, it is the absence of rental costs at the two control centres which are most influential in the benchmarking exercise. It is apparent that costs have reduced significantly since 2009/10. Whilst these will still reduce in real terms, in line with broader RP2 reductions, they will remain well below benchmark but relatively static when expressed per square metre or FTE given both are also planned to reduce during RP2.

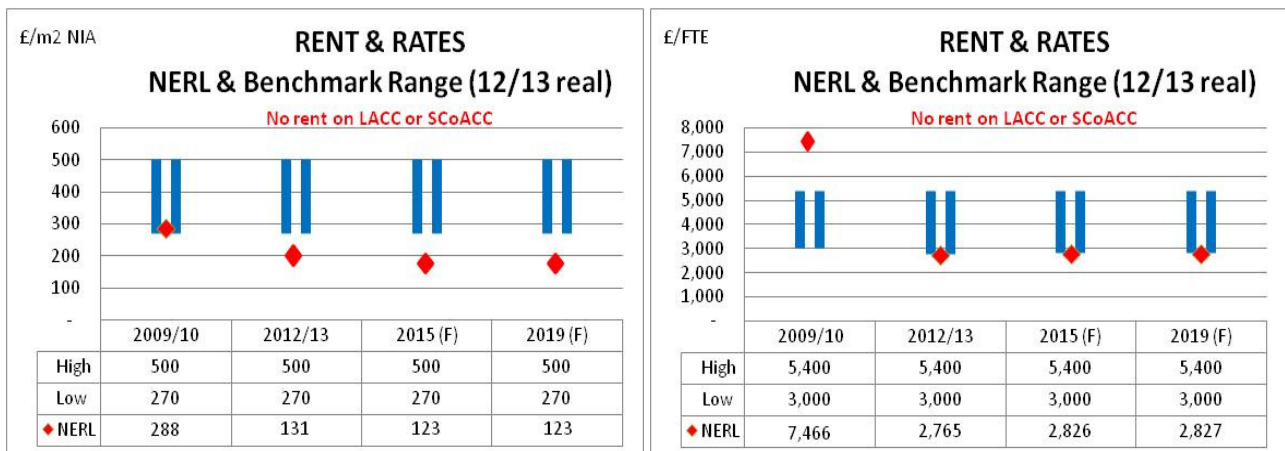


Figure 27: Current Rent & Rates Costs expressed by m² for all NERL estate and by FTE

4.2.2.4 Conclusion

NERL’s management of its rent and rates costs to date and in its forecasts result in likely performance is well below benchmark. If an equivalent rental costs was introduced to the calculation to account for the freehold properties, a mid benchmark position is achieved.

Irrespective of the approach costs are projected to be no higher than the mid benchmark level.

4.2.3 Repair & Maintenance

4.2.3.1 Summary Description

The FM repair and maintenance function delivered to the facilities and operational assets (constructions, electricity, cooling and drainage systems) is viewed separately from the parallel service maintaining the operational ATC systems and specialist Navaid equipment which is generally undertaken by the manufacturer or installer.

The service includes repair and planned maintenance of the building fabric, building mechanical and electrical systems, minor project works, accommodation moves and changes etc.

The resilient operation of the buildings and systems is dependent upon optimum sourcing of assets and regular planned preventative maintenance. NERL seeks to achieve the optimum balance in both in relation to its reactive repair costs and asset availability.

The utilisation of facilities (occupancy and operational hours) as well as the regular CAPEX reinvestment in assets also has an impact on repair and maintenance costs. The greater the utilisation and the lower the capital investment, then the greater the maintenance requirement.

NERL continues in RP2 to seek an optimum balance in its OPEX and CAPEX. The maintenance costs and OPEX are decreasing as the CAPEX asset replacement is delivered and brought on line.

4.2.3.2 Analysis

NERL’s current annual repair and maintenance costs at circa £60 per square metre, at its main facilities, is around the mid range cost for hi-tech occupiers with a portfolio of good quality offices, training facilities, control/dealing desks and datacentres. The cost per FTE also currently sits favourably within the range at circa £1,275 per annum.

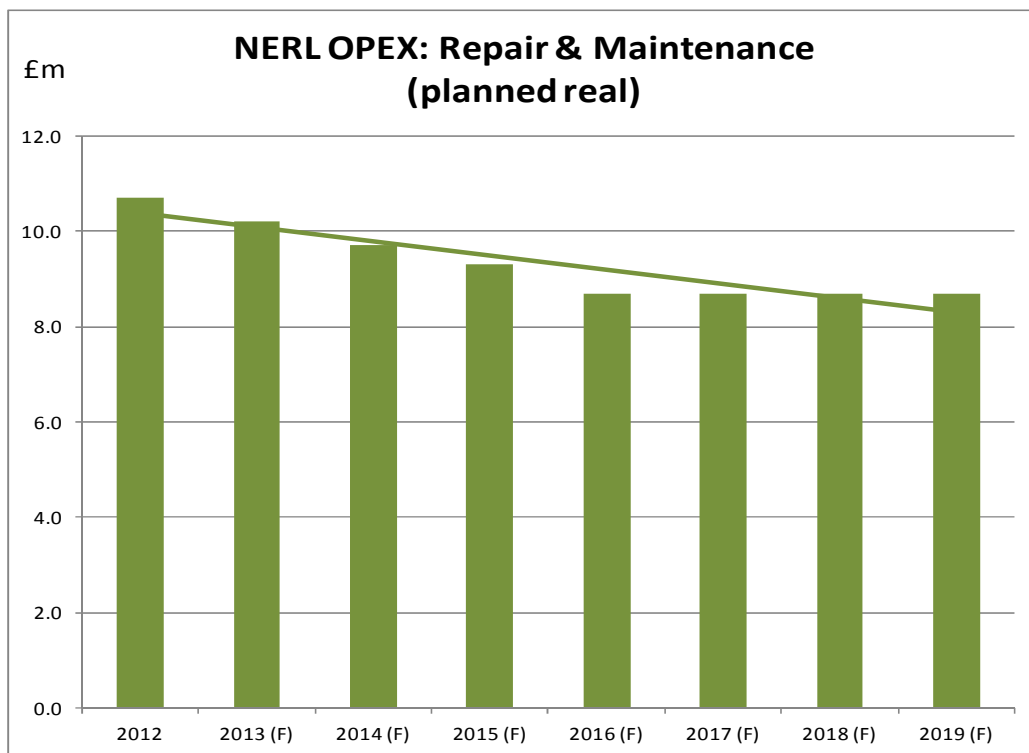


Figure 28: NERL Projected FM Repair & Maintenance OPEX (NERL supplied data)

There are significant savings expected in the next two years with some disposals of properties and CAPEX investment. This continues in RP2 with the plan targeting further reductions to £49 per square metre being a 20% saving between now and the end of 2019. ✂

The external sourcing of maintenance from two principal suppliers (Emcor and SSE) on long term frameworks follows a conventional approach in comparable businesses and assists in targeting such reductions.

4.2.3.3 Benchmarking of Costs

The majority of repair and maintenance cost is expended in the three main facilities. They have been continually reducing to date and are projected to continue progressively through to the end of the RP2 period.

Whether expressed as a cost per square metre of accommodation or per FTE the costs are projected to move further to the lower end of the benchmark range. This aspiration is sensitive to the eventual capital re-investment in assets and the achievement of the planned disinvestments.

The benchmark charts are shown below.

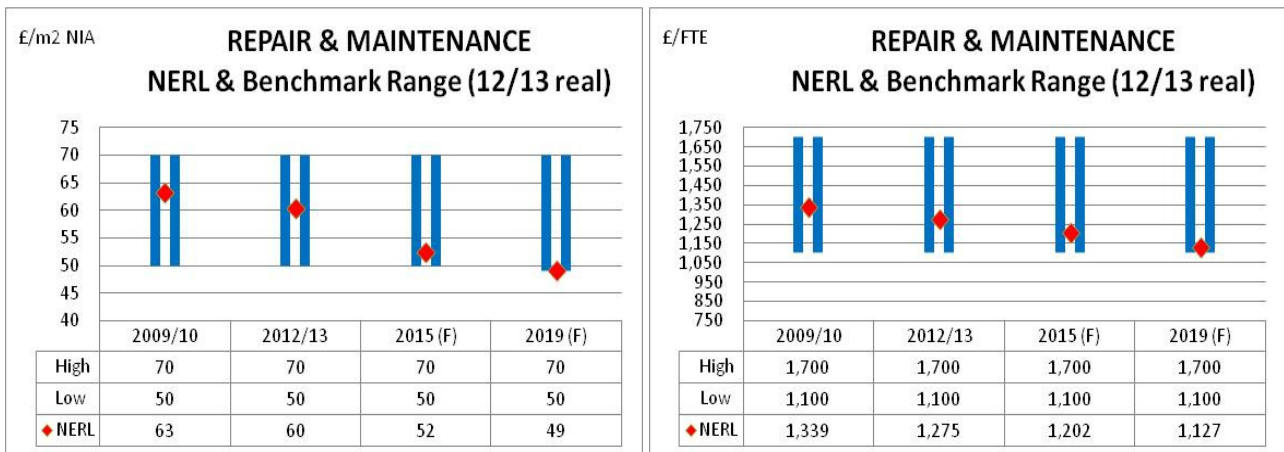


Figure 29: Current Repair & Maintenance Costs expressed by m² and by FTE

4.2.3.4 Conclusion

NERL’s management of its FM repair and maintenance costs to date and in its forecasts result in likely performance in the lower half of the benchmark range.

4.2.4 Security & Cleaning

4.2.4.1 Summary Description

NERL’s active security and cleaning costs are mainly centred on the CTC and two Control Centres. Broadly these services include the guarding, cleaning and waste management at the main facilities. To a varying but lesser degree the services are also provided at a small number of its other facilities.

Guarding includes a 24 hour 365 day service at the three main facilities with cleaning undertaken by site based cleaners during working hours.

The specifications for cleaning are at predefined intervals, as opposed to service level performance specification to deliver cost efficiencies. In practice cleaning frequencies are as follows:

- Toilets – High use areas are cleaned twice during office hours, checked frequently and spot cleaned as required.
- Toilets – lower use areas are checked daily and cleaned as required.
- Windows – cleaned 6 monthly and spot cleaned as required
- High use and prestige and reception areas – Cleaned Daily (early evening)
- Other areas – cleaned as required, 2- 3 times per week
- Deep desk clean – 6 monthly

These service levels reflect the optimised cleaning regimes and 24 hr security requirement found in the hi-tech benchmark range. The services are co-ordinated and delivered through the EMCOR FM contract providing a degree of cross-service flexibility.

4.2.4.2 Analysis

✂ Security costs have generally remained stable over the past five years and are projected to reduce by circa 7% by the end of RP2. Cleaning costs have gradually increased in the past five years but are projected to reduce by circa 5% by the end of RP2.

4.2.4.3 Benchmarking of Costs

The costs per square metre at the three main facilities are currently mid range within the peer group but are targeted to reduce to the lower quartile at ca. £35/m2 by the end of RP2. The 24 hour operation and relatively low occupancy of the Control Centres results in a less favourable benchmark comparison. NERL will still be in the upper half of the range by the end of RP2 when expressed per FTE. The lower comparative occupancy at Prestwick is a major element of this challenge for RP2 rather than a reflection on service levels.

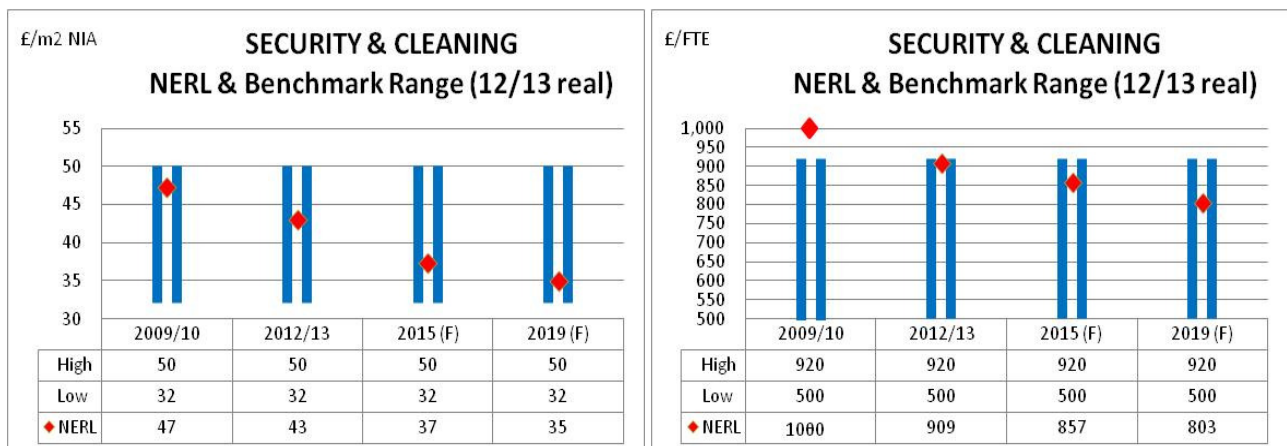


Figure 30: Current Security & Cleaning Costs expressed by m2 and by FTE

4.2.4.4 Conclusion

NERL's management of its security and cleaning costs in recent years has delivered minimal combined savings and consequently costs are currently in the upper end of the benchmark range. Its RP2 planned savings will in part address this performance with planned costs per square metre in the lower half of the range but costs per FTE remaining high in the benchmark range.

4.2.5 Utilities

4.2.5.1 Summary Description

NERL’s utilities costs equate to 7.5% of its annual non-staff OPEX and 22% of its current annual FM costs. The NERL’s supply contracts are procured via a specialist broker on a multi-year forward purchase basis with its key suppliers Npower and British Gas Business.

Unlike many high consumption businesses (manufacturing, data processing, etc), NERL does not pay for reserve capacity.

4.2.5.2 Analysis

Utilities cost-in-use is in part dependent upon CAPEX and is particular to the ANSP environment with its high consumption and low occupancy levels. NERL intends to continue its consumption and carbon reduction programme through RP2 with capital investment in more efficient building services equipment and systems.

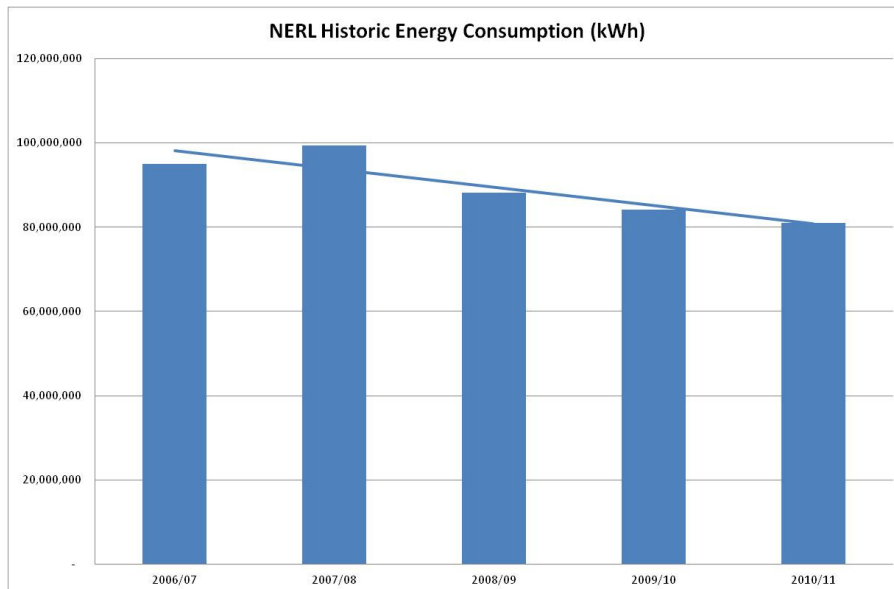


Figure 31: NERL Historic Energy Consumption (NERL supplied data)

NERL’s Utilities consumption, at a current cost of £7.2m pa, is dominated by its electricity costs and in turn by those at the CTC and Swanwick Control Centre as well as Prestwick which combined account for £4.0m p.a. or circa 80% of its electricity costs. The remainder is spread over some 140 buildings and Navaid’s sites. NERL’s current costs are projected to increase in real terms by 2019 to £7.8m representing an 8.3% increase in above general inflation costs and consumption.

The long operating hours drives significant energy consumption both in processing and cooling. These demands are generally more significant than those of the benchmark group and consequently result in poor comparative benchmark scoring against those where consumption is generally reducing with technological advances.

NERL have made significant efforts to reduce overall energy consumption. (NERL electricity consumption has decreased from 20m to 15m kWh per quarter over the past 4 years see data in Appendix C). At the same time, energy costs are increasing over and above the RPI – inflation rates.

It is noticeable that NERL anticipates a ca. 8.3% increase (i.e., well in excess of inflation) in utilities costs in real terms during RP2. Given consumption has generally been reducing then Capita would expect costs in real terms to also reduce rather than increase.

It is understood that whilst usage will reduce and costs are expressed in real terms, NERL has not surprisingly taken the view that utilities costs, and their significant impact on its business, will increase in excess of any price inflation otherwise contained in a general indices adjustment.

4.2.5.3 Benchmarking of Costs

NERL’s utilities costs per square metre have risen in recent years as the business consolidates into a smaller real estate portfolio. This continuing trend, together with an anticipated increase in cost and to a certain extent consumption, results in NERL’s performance expressed per square metre increasing into the higher end of the benchmark range which is otherwise set at 2012/13 real prices.

Similarly with a projected reduction in staffing with higher consumption the cost of utilities per FTE is likely to increase to the top end of the benchmark range by the end of 2019.

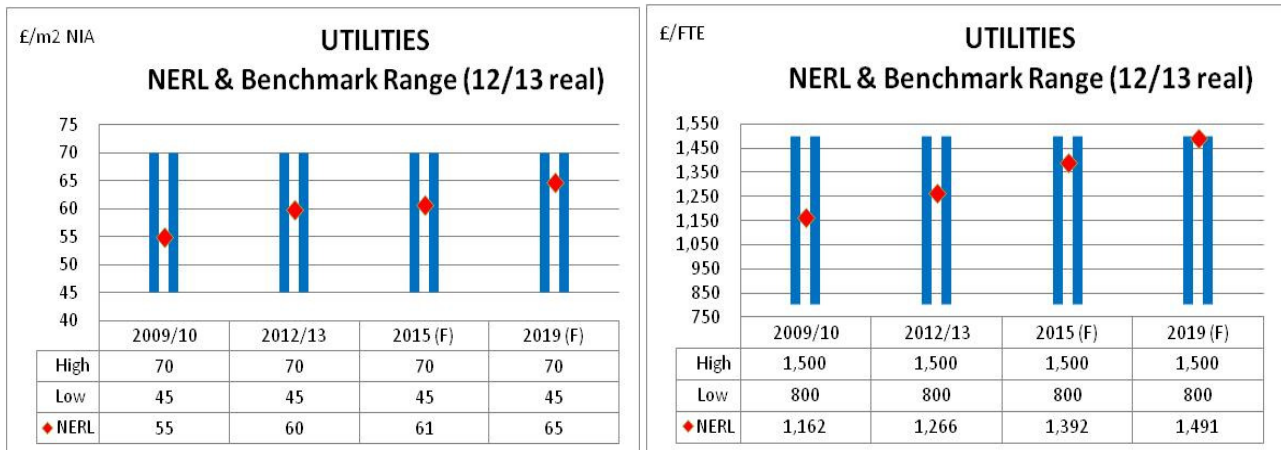


Figure 32: Current Utilities Costs expressed by m² and by FTE

4.2.5.4 Conclusion

NERL’s utilities costs are at the upper end of the 2012/13 constantly expressed benchmark range by the end of RP2.

In the context of its historic reduction in consumption and continuing investment in potentially more efficient systems it is an area in which we would otherwise expect further improvements in consumption if not cost. This is an area where we believe further cost efficiencies may be available.

4.2.6 Catering & Business Support

4.2.6.1 Summary Description

NERL’s staff catering services (predominantly staff canteens) are provided at the three main facilities via the EMCOR FM contract on a minimum subsidy basis. The service has been adjusted historically with an increasing degree of multi-skilling.

The Business Support (mailroom, station shuttle bussing, reception, archive etc) provides a range of non-core services predominantly at the CTC and to a lesser extent at the two Centres.

4.2.6.2 Analysis

These services are targeted to reduce from a current annual expenditure of £3.1m to £2.8m by the end of RP2.

The catering subsidy has and is projected to reduce year on year through to the end of RP2.

4.2.6.3 Benchmarking of Costs

The current and projected costs are favourable, especially given the shift arrangements at the Centres, when benchmarked being in the lower half of the benchmark range. Costs are projected to decrease in excess of the corresponding reductions in the metrics used.

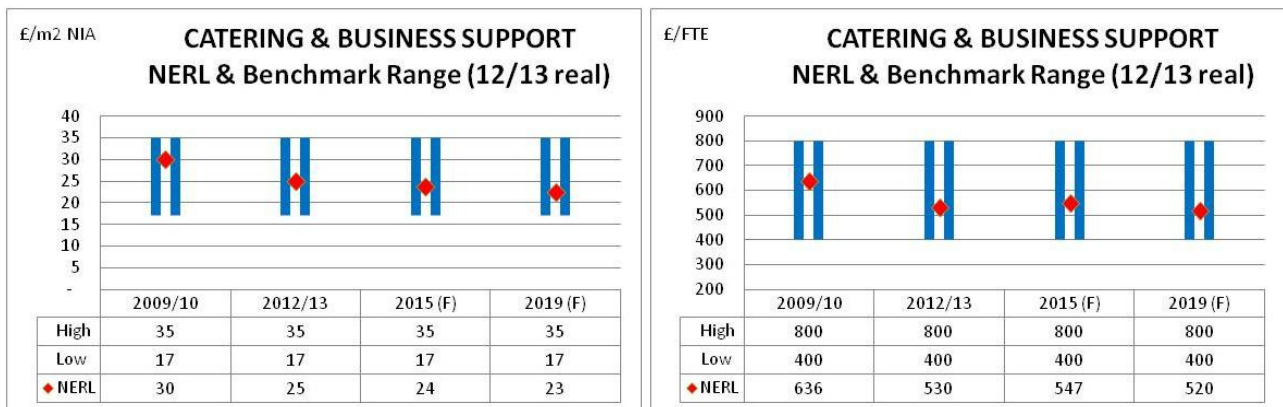


Figure 33: Current Catering & FM Business Support Costs expressed by m² and by FTE

4.2.6.4 Conclusion

NERL’s management of its catering and FM business support services in recent years has resulted in progressive cost reductions such that costs are currently moving towards the lower half of the benchmark range.

NERL’s RP2 planned savings is projected to continue this trend delivering further cost reductions resulting in a future performance against the square metre and FTE metrics moving further into the lower end of the benchmark range.

4.3 Review of Non-Operational IT

4.3.1 Overview

This conventionally covers the IT desktop and communications functions and includes suppliers such as Lockheed Martin, Cap Gemini, AMOR (now part of Lockheed Martin), Vodafone etc.

Costs are currently £9.6m p.a. and are planned to progressively reduce by 7.5% during RP2 to £8.5m.

External sourcing accounts for 75% of the total service cost.

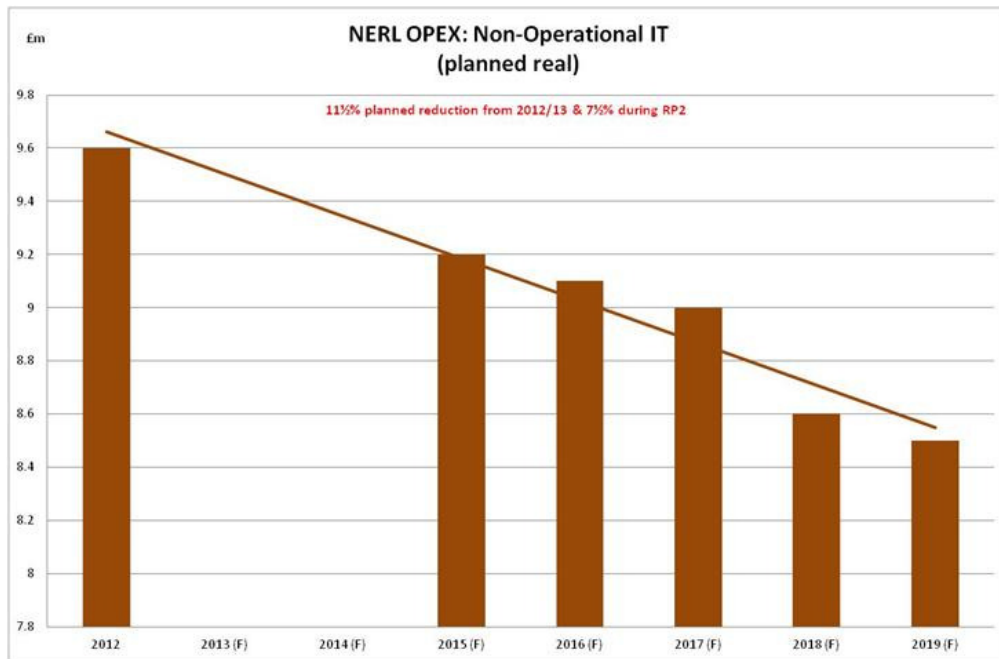


Figure 34: Projected Non-Operational IT OPEX (NERL Draft Business Plan 2013)

4.3.2 Desktop, Other IT and Communications

4.3.2.1 Summary Description

The OPEX in this service stream is dominated to the extent that 80% of the expenditure covers the support contracts for NERL’s business systems and ‘desktop’ support. There are a number of contracts in place with companies including Lockheed Martin, Cap Gemini and AMOR. Current costs total £8.2m p.a.

The range of additional smaller service provisions cover system integration and hardware revenue expenditure covering the supply of printers, phones, etc. Collectively these smaller services currently cost £1.4m p.a.

4.3.2.2 Analysis

Expenditure with the principal desktop and business systems is projected to reduce to £7.6m in the first year of RP2 and then further reduce annually to £6.8m in 2019 representing a cost reduction of 10.5% over RP2. This follows historic significant annual savings achieved since 2008/09 (£9.5m) in a sourcing environment restricted by requisite levels of security clearance.

Additionally in other IT support and communication services there is a more modest expenditure which in most instances is projected to remain stable over the RP2 period. The current £1.4m annual cost is projected to increase to £1.6m by 2014 before marginally increasing to £1.7m in 2019.

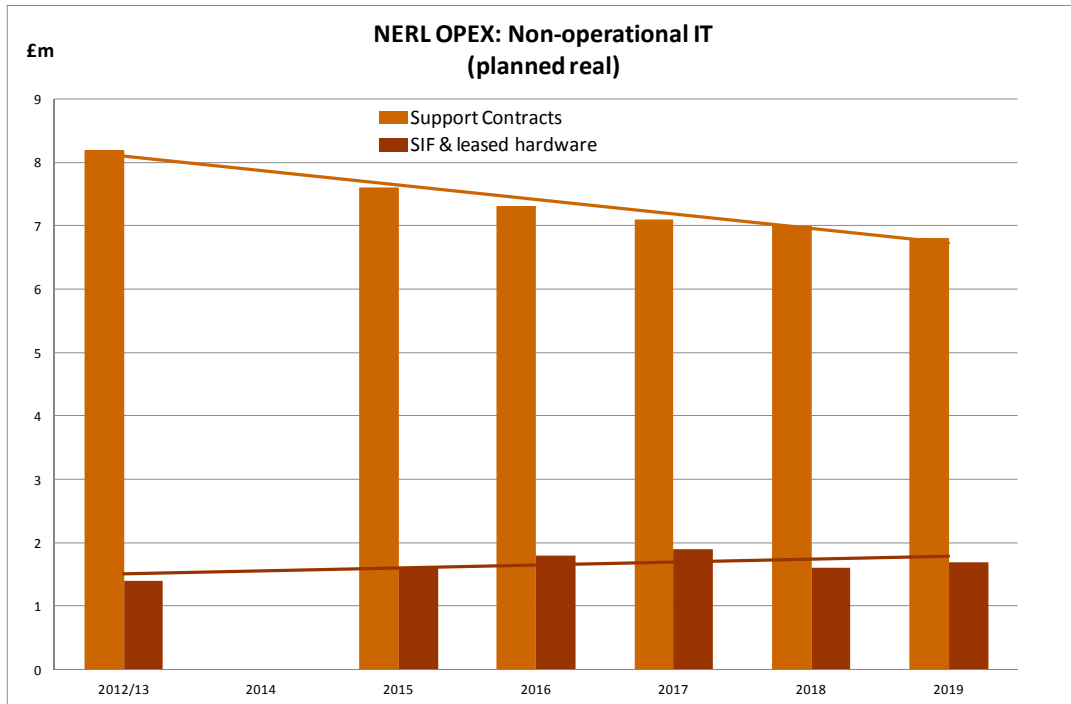


Figure 35: Projected Non-Operational IT OPEX by Service (NERL Draft Business Plan 2013)

4.3.2.3 Benchmarking of Costs

The desktop and support expenditure together with that for related equipment and mobile phones all currently fall within the benchmark range. Historically NERL’s IT cost performance has been mixed with some elements of its IT considered high⁹. NERL’s IT usage remains intensive in comparison to many companies and its IT support costs have evidently reduced

Over RP2 the benchmarked costs are set to become more economic per FTE with particular improvement in the major support contracts.

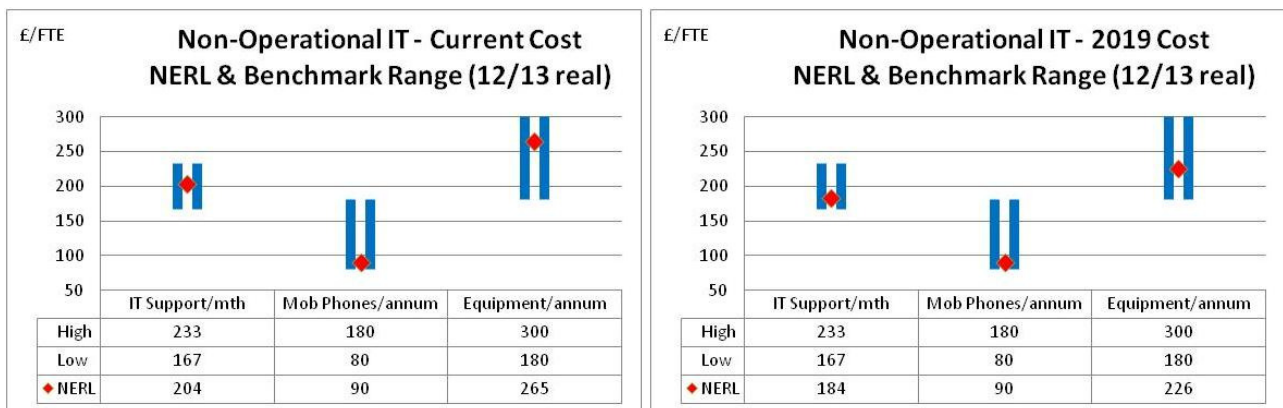


Figure 36: Current Non-Operational IT Costs expressed by m² and by FTE

4.3.2.4 Conclusion

NERL’s management of its non-operational IT expenditure in recent years has resulted in progressive cost reductions such that costs are currently moving towards the lower half of the benchmark range.

⁹ LECG CP3 Report 2009 Para 1.21

NERL’s RP2 planned savings are generally projected to continue this trend delivering further overall cost reductions resulting in a future performance against the FTE metrics moving further into the lower end of the benchmark range.

4.4 Review of Operational Asset Management

4.4.1 Overview

The Operational Asset Management service stream covers two principle service types; post development services (‘PDS’ - the ongoing maintenance of proprietary assets by the manufacturer or its agent) and communications connectivity. The services are principally centred on NERL’s dispersed Navaid equipment and intra-site communications with its main service providers being Lockheed Martin, Raytheon, BT, etc.

Costs are planned to reduce by 4.5% during RP2

External sourcing accounts for 35% of the total service cost. A core expertise is retained in house to deliver emergency repairs and maintenance of hardware and old software systems. The driver is that this expertise is unique to NERL and not readily available externally.

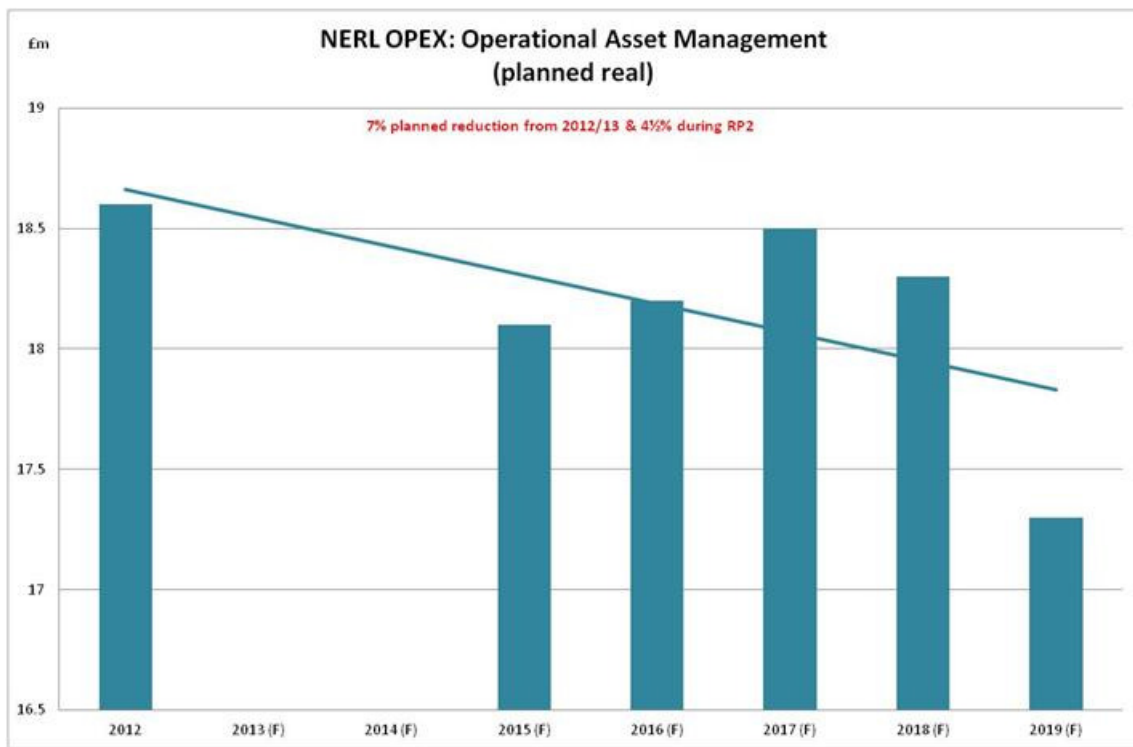


Figure 37: Projected Operational Asset Management OPEX (NERL Draft Business Plan 2013)

4.4.2 Equipment Repair & Maintenance (PDS)

4.4.2.1 Summary Description

The post delivery support services following the development or installation of systems and assets includes two of NERL’s principal service providers in Raytheon Services Ltd and Lockheed Martin. The services in the main cover the maintenance of critical Navaid including NERL’s radar infrastructure.

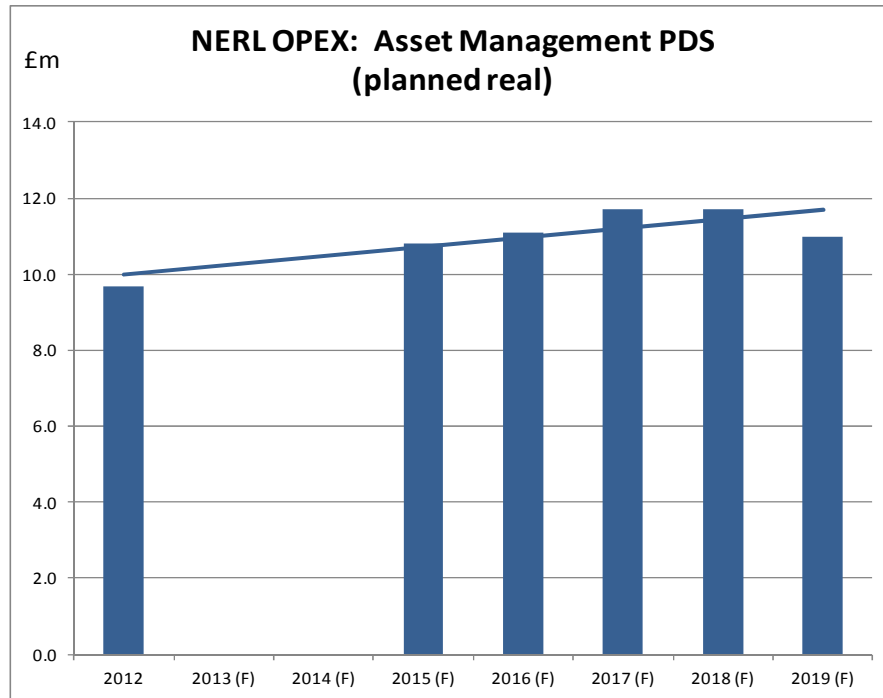


Figure 38: Projected PDS OPEX (NERL Draft Business Plan 2013)

4.4.2.2 Analysis



4.4.2.3 Benchmarking of Costs



4.4.2.4 Conclusion

The PDS forecast expenditure is heavily dependent upon lifecycle CAPEX investment as well as robust support and maintenance regimes. NERL has invested in replacement radar installations and continues with a planned capital programme. The forecast OPEX over the RP2 period is considered reasonable and in line with convention given the necessity to protect asset life and secure availability. Nevertheless it will still remain dependent upon the necessary lifecycle CAPEX given the extent and importance of the asset inventory.

4.4.3 Connectivity

BT is in a fairly unique position in terms of the supply of a solution to NATS. Technically NATS has found that no other service provider has the national coverage to remote outposts offering a cohesive solution. By virtue of its network BT will always be a majority infrastructure owner and key partner.

It is noted that NATS operate numerous technically complex systems that need interface with BT infrastructure, often requiring legacy network technologies and in depth skills i.e. the ATC related systems have not been replaced with the frequency otherwise seen in the communications business.

4.4.3.1 Summary Description

Essentially each of the NATS major sites (Prestwick, Swanwick and CTC) are connected via high bandwidth connections with independent so called ‘red/green’ connections (for separacy/operational redundancy) into the Da Vinci Cloud (BT Cellstream+).

A high level overview of connection types are set out below:

Sizes of Pipes - Centres to Cloud	Cellstream Pipes
Swanwick	8 x 34Mb
Prestwick	4 x 155Mb
CTC	4 x 34Mb
BT Connectivity	Circuit types and Quantities
DaVinci Network Services	160 Cellstream Accesses - includes the Secure+ Resilience product
Legacy Technology Services	750 Analogue & 250 Digital Circuits (>110 different product types)
Separacy Resilience Services	60 Separacy Resilience products relating to 120 Circuits an/Dig Circuits
IP Services	60 IPClear Products
International Services	50 International Services (across Europe and North Atlantic regions)
North Sea Helicopter Services	11 Cellstream Accesses
PSTN Services	Many PSTN/ISDN Products across 60+ NATS locations

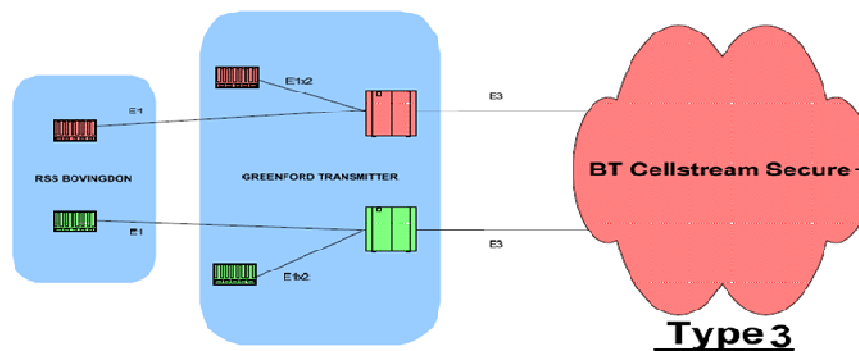
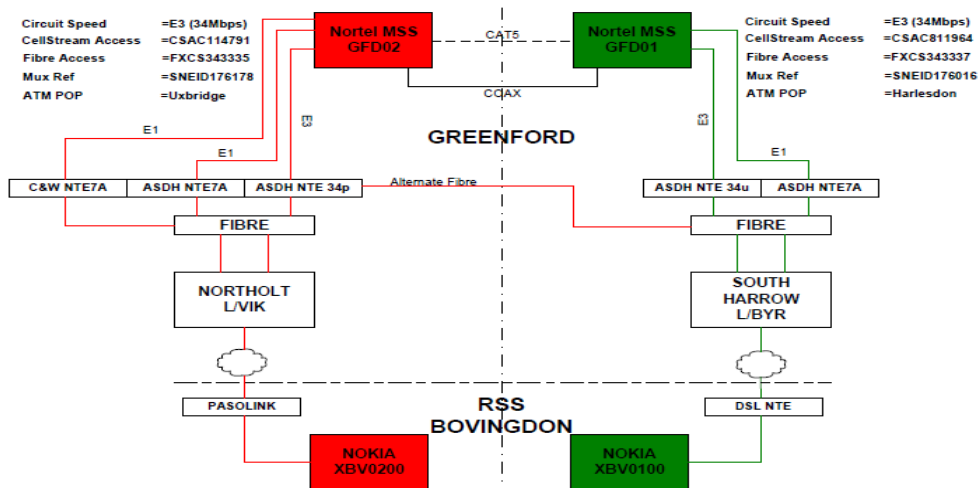


Figure 1:- Node Topology

Figure 39: Typical Communication connections (source NERL)

A typical Da Vinci node example is shown below illustrating separacy:



Example for topology of a typical Da Vinci Network node
 (RSS = radar site, Greenford Transmitter = example of Node (NATS has 44), Cellstream = BT Da Vinci platform)

Figure 40: Typical communication node (source NERL)

ATS's existing non-Da Vinci infrastructure comprises ca. 3000 circuits. Many of which are 'point to point'. In other words they are dedicated connections between two points in NATS's network. This network has evolved over 30 years. It's made up of about 100 BT product variations and broadly support the following services:

- Airfield services
- Air ground air voice
- Switch line voice and data
- Ground to ground business data communications
- Ground to ground direct access voice
- Ground to ground operational data
- Radar surveillance
- Alert and fixing
- Blue light/ security
- Contingency
- Other

4.4.3.2 Analysis

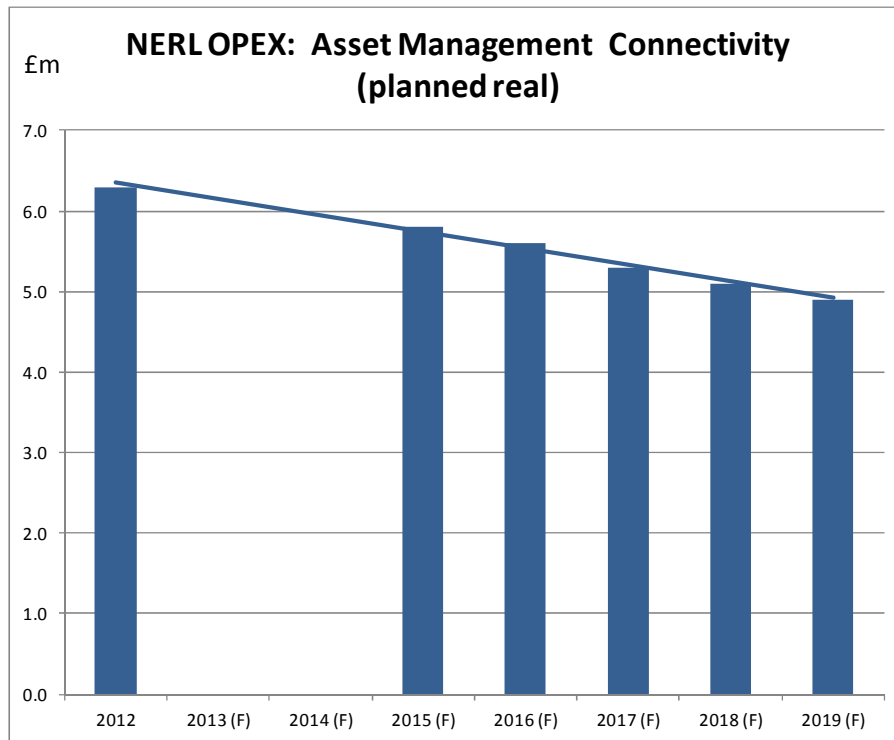


Figure 41: Projected Connectivity OPEX (NERL Draft Business Plan 2013)

✂

Figure 42: ✂

- Da Vinci Network (44%) – High resilience Cellstream Network making use of Secure+ Resilience products for operational Air/Ground Voice, Radar Data, and Flight Data
- Digital Discrete (13%) – Non-networked Megastream/Kilostream connectivity for operational Ground/Ground Voice Communications and Data services – for services using Digital technology
- Digital Separacy (3%) – The BT Separacy product is used in specific instances where greater resilience is required to support NATS services
- Analogue Discrete (15%) - Non-networked Megastream/Kilostream connectivity for operational Ground/Ground Voice Communications and Data services – normally configured as AoD and for services using analogue technology
- Analogue Separacy (1%) - The BT separacy product is used in specific instances where greater resilience is required to support NATS services,
- IP Services (11%) – mix of networked and discrete IP based products used for business data network and non-operational voice and data services
- PSTN Rental (6%) – Public service connection rentals and services

- PSTN Calls (1%) – Public services additional usage charges
- International Connections (5%) – Kilostream products at UK end, and terminating in many countries used for both operational Voice and Data services
- North Sea Comms (1%) – Cellstream variant products used for operational multi-lateration Radar data.

4.4.3.3 Benchmarking of Costs

✂

4.5 Review of Business Support

4.5.1 Overview

The arrangements within this service stream mirrors many of the support services and specialist business advice conventionally sourced by large organisations and includes suppliers providing financial audit, specialist legal advice, business travel, temporary staffing, etc.

Costs are planned to vary annually reflecting projects and initiatives from time to time by $\pm 3\%$ but are expected, over the period in aggregate, to remain stable. Increasing business support related costs and other incidental supply costs are expected to rise, offsetting savings in the other services. Notwithstanding this, NERL’s Business Support costs have historically remained relatively efficient¹⁰

These external support costs are estimated to account for 60% of the total specialist business support service costs required by the business each year. In-house specialists and contract managers account for a further 40% being the cost within staff OPEX.

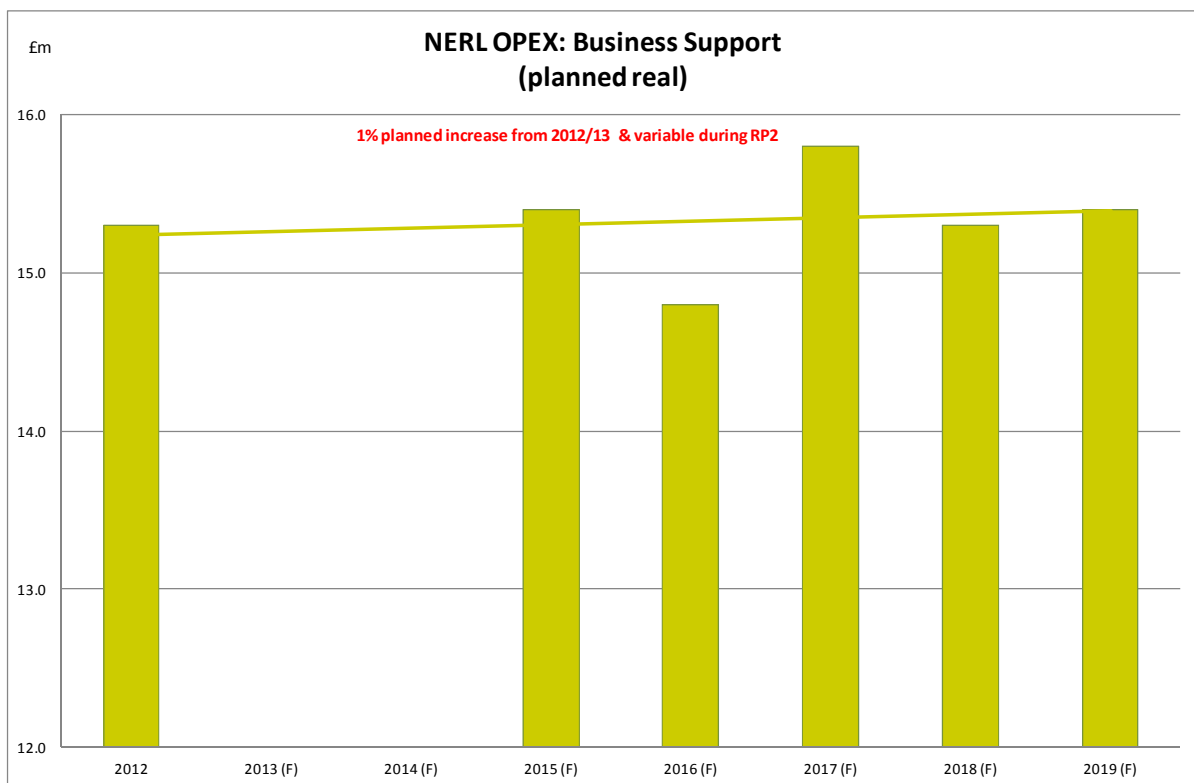


Figure 43: Projected Business Support OPEX (NERL Draft Business Plan2013)

4.5.2 Specialist Support Functions

4.5.2.1 Summary Description

There is a diverse range of conventional business specialist support services grouped in this stream. These services and their respective providers all supplement the base service activity of staff groups within the business.

The services are characterized by their specialist and independent nature and vary in cost annually reflecting the particular requirements of the business at any one time.

¹⁰ LECG CP3 Report 2009 Para 1.12

The current costs of the other small service contracts collectively total £4.1m and are projected to increase in real terms to £4.6m in 2019. This 12% increase is projected to incur within the five year RP2 period and as such is significant.

4.5.2.2 Analysis

In addition to the normal financial auditing, PR, specialist legal advice and cost of PLC and external Board services which all comparable companies incur, all of which are generally less than £1m each p.a., there are three service headings of significant cost and particular interest:

- Agency temporary staff (£2.4m in 2015/16)
- Staff travel (£3.9m in 2015/16)
- Collective others (£4.1m in 2015/16)

NERL supplements its staffing each year with a range of temporary staff currently sourced via its provider, Hays. This contract is periodically let for periods of 3 years with the agent receiving fixed % placement fee or modest mark-up on temporary staff costs in each case. Generally the secondments average circa 26 weeks each and generally comprise commercial & project management (40% of total temporary staffing), engineering & ATCO (ca.30%), and admin/business support (ca.30%). Whilst some staffing will cover sickness, maternity leave, etc the majority support projects and initiatives within the business. It is not clear to what extent these appointments return an income or whether they should to a certain extent be capitalised.

Historically the usage has been reducing as demonstrated in the following graphic with the 2012 data reflecting the expectation at the start of RP2. RP2 costs for temporary staffing and other HR/training services are projected to fall from £2.7m p.a. now to £2.0m in real terms in 2019 indicating a reduced reliance on out-sourced support.

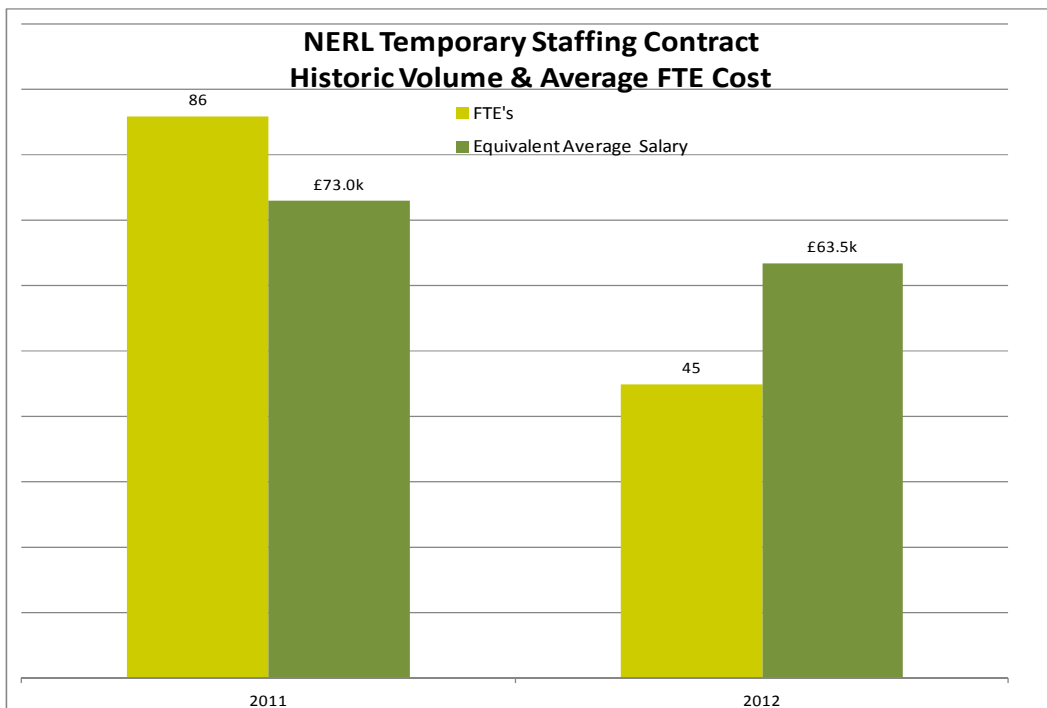


Figure 44: Historic Temporary Staffing Volume & Average FTE Cost (derived from NERL Draft Business Plan 2013)

4.5.3 Staff Travel

4.5.3.1 Summary Description

NERL’s staff travel arrangements are sourced via its agent, Business Travel Direct. Travel service costs are carried by the agent and recharged to the business with a tendered management charge. The outsourced arrangement reflects normal practice in large firms which either outsource to an independent agent or utilise a specialist subsidiary.

NERL’ travel policy may be summarised as follows:

- NERL reimburses reasonable additional expenses
- Some NATS locations are regarded by HMRC as one site and claims for travel between them will not be reimbursed.
- If a private motor vehicle is used for a business journey, a mileage allowance is paid. Car hire is approved where appropriate
- Overnight Stays: Hotel Accommodation, Meals and Incidental Expenses
- All rail travel is standard class, including all Euro Star rail services to continental Europe.
- Air travel UK, Non-flexible, Economy Class travel is the standard.
- For journeys of more than 4 hours flying time or to a destination outside of Europe, the standard will be the next grade up from economy: for example: premium economy where available.
- When on duty visits or assignments of more than one week’s duration, employees are allowed the cost of returning home at weekends

NERL’s RP2 projection anticipates current costs of £4.0m p.a. falling to £3.9m in 2015 and to £3.4m by 2019 representing a 15% reduction over the seven year period.

Business Travel						
	2012/13	2015/16	2016/17	2017/18	2018/19	2019/20
Overseas Travel	£1.3	£1.2	£1.1	£0.9	£0.9	£0.9
UK Fares (Flights, Trains etc)	£1.2	£2.0	£2.0	£2.0	£2.0	£1.9
Other	£1.5	£0.7	£0.6	£0.6	£0.5	£0.6
	£4.0	£3.9	£3.7	£3.5	£3.4	£3.4

Figure 45: Business Travel Expenditure detail (source NERL)

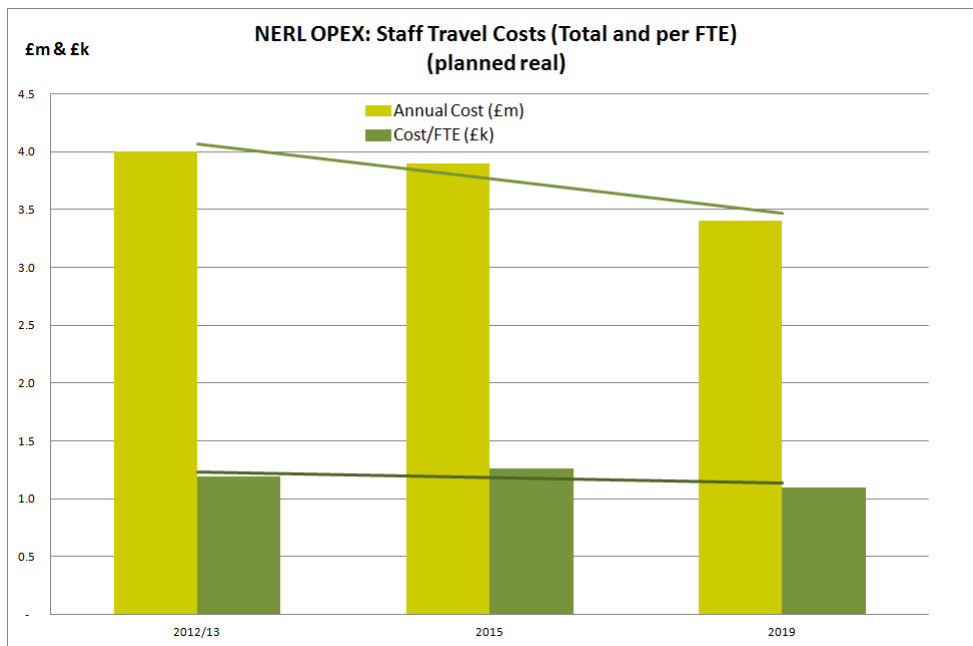


Figure 46: Projected Annual Staff Travel Costs (NERL Draft Business Plan 2013)

NERL’s travel policy provides for limited first class train and business class air travel. Hotel and accommodation costs are subject to normal industry expense caps.

Historically NERL’s travel costs have been reducing but remain heavily influenced by its costs between the two centres, to Eurocontrol/EC in Brussels and other ANSPs.

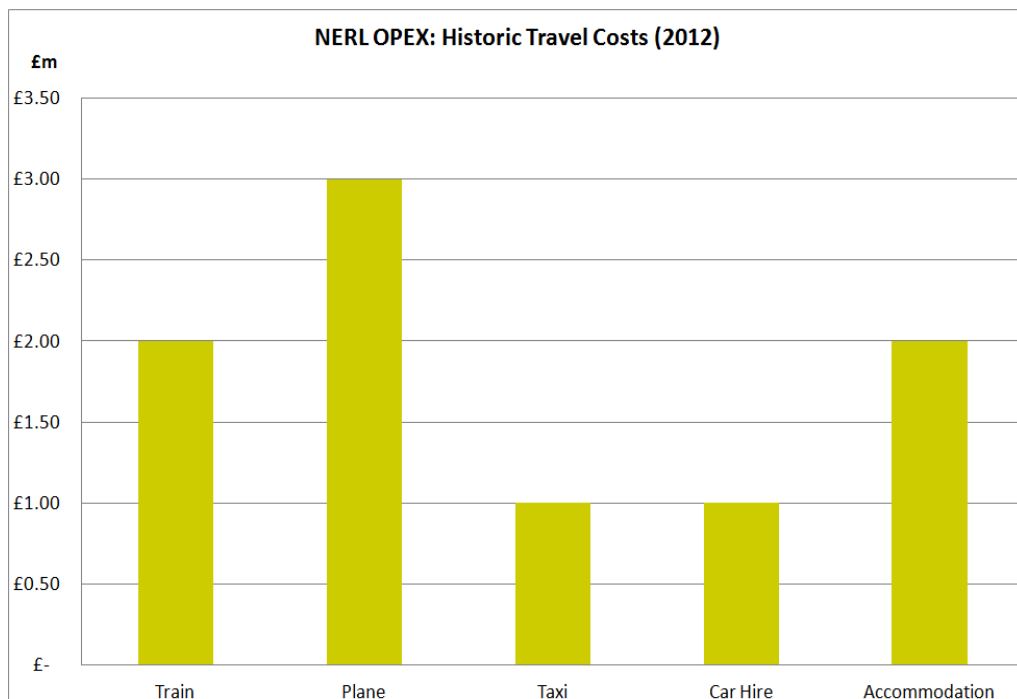


Figure 47: Breakdown of Travel Costs

4.5.3.2 Benchmarking of Costs

Whilst the overall cost of the outsourced Business Support services is not dissimilar to that of other companies of a comparable size, there are the specific services analyzed above which are either high within or above the benchmark range. In each case there is the possibility that a proportion of the cost is expended in delivering

additional income and the benchmarks are expressed without the benefit of any offset from non-core service income generated. If a non-core service benefit is achieved from the expenditure then this would improve their comparability.

The apparent high benchmark cost of staff travel in an organisation with many staff statically employed is a product of the proportionately high travel costs associated with the necessary liaison costs between CTC/Swanwick and Prestwick, and in turn with Eurocontrol/EC/ANSPs etc. Staff travel costs are nevertheless not projected to reduce perhaps as significantly as expected given the increasing reliance on video-conferencing etc.

Collectively, as shown in the following graphic, NERL’s projected costs of these externally sourced services, despite some improvement in specific streams, remains high against benchmark ranges:

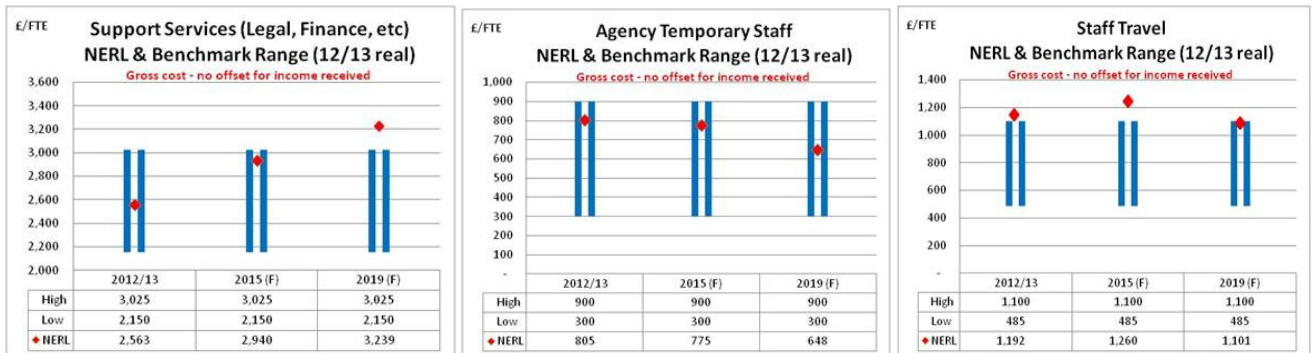


Figure 48: Current Principal Support Services Costs expressed by m² and by FTE

4.5.3.3 Conclusion

NERL’s use of specialist external business support services generally reflects the arrangements by other companies. Whilst some specific services are projected to become more economic, the overall service stream cost remains static in real terms and generally in the higher end of the specific benchmark ranges suggesting some scope for improved reduction in cost.

4.6 Review of Other Support

4.6.1 Overview

These ‘Other Support’ services cover the charges for policy and regulatory advice from the CAA as well as ATC services and data feeds sourced from the MOD for the control of civilian traffic within its air space.

Importantly it also includes services in respect of the ‘Post Transition Rectification Support’ programme (£6.6m in 2012/13) principally with Lockheed Martin in the long term programme covering the continual evolution to a more modern ATC system and arrangements. This represents on-going hardware and software repairs and upgrades to existing systems.

Overall these costs are planned to reduce from £19.5m in 2015 to £15.3m in 2019 although the principal saving is identified as a £5.7m ‘unallocated saving’ by 2019. This savings is across all items in the RP2 non staff Opex. The inclusion of such a significant saving is a concern and must be viewed as a considerable risk in the achievement of the RP2 outturn cost in this service stream.

While the costs of most items are broadly flat over the period, the share price allowances increases and the unallocated saving decrease significantly. These items are explored at length in the details analysis.

Whilst some specific service costs are projected to increase and in the interim costs are likely to remain static, the overall service stream cost is planned to reduce by 21.5% during the five year RP2 period.

The external sourcing in this service stream accounts for some 60% of the total service cost with parallel activity undertaken by staff.

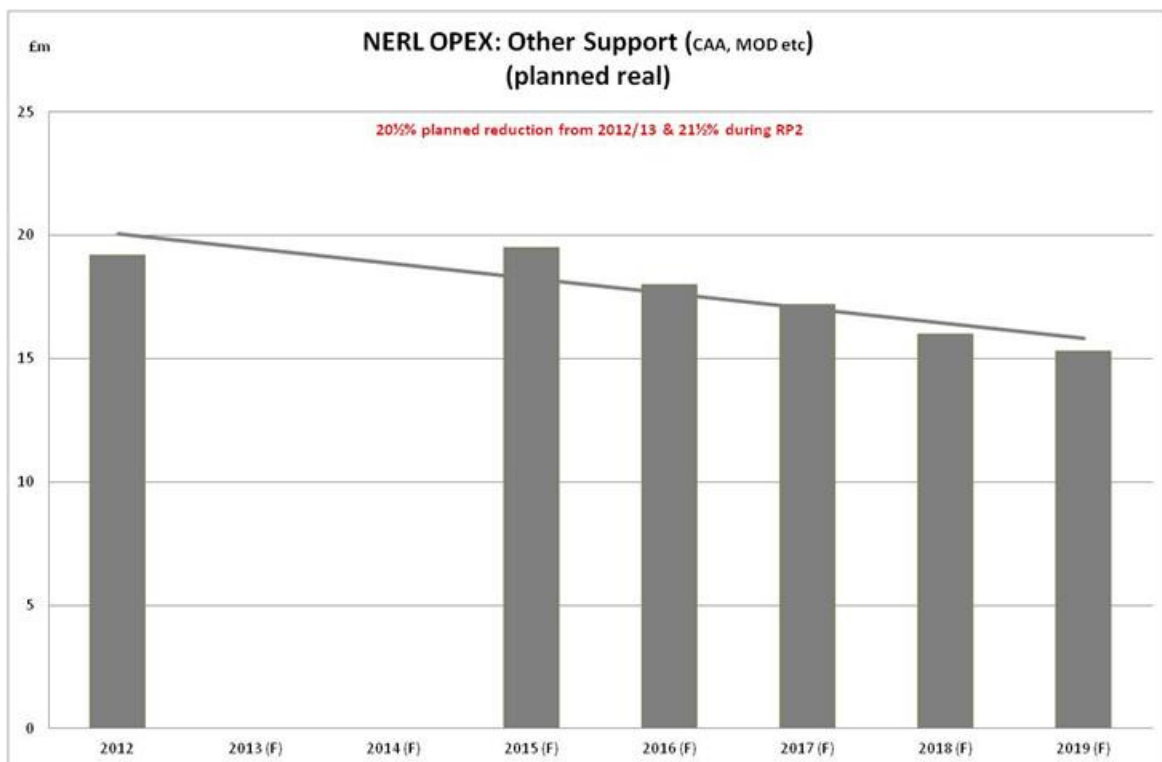


Figure 49: Projected Other Support OPEX (NERL Draft Business Plan 2013)

The diverse range of services grouped in this stream include in addition to the unallocated savings the first RP2 year cost of CAA services (£5.1m), MOD ATC services (£3.9m), post transition software rectifications (£6.4m), the employee share plan (£2.8m) and Business Development costs (£2.2m, for which an income is received).

The specific service stream costs are summarised on the following graphic indicating the mix of streams increasing and decreasing in cost together with the significant impact of the projected ‘unallocated savings’.

These particular streams are reviewed in further detail within this section below.

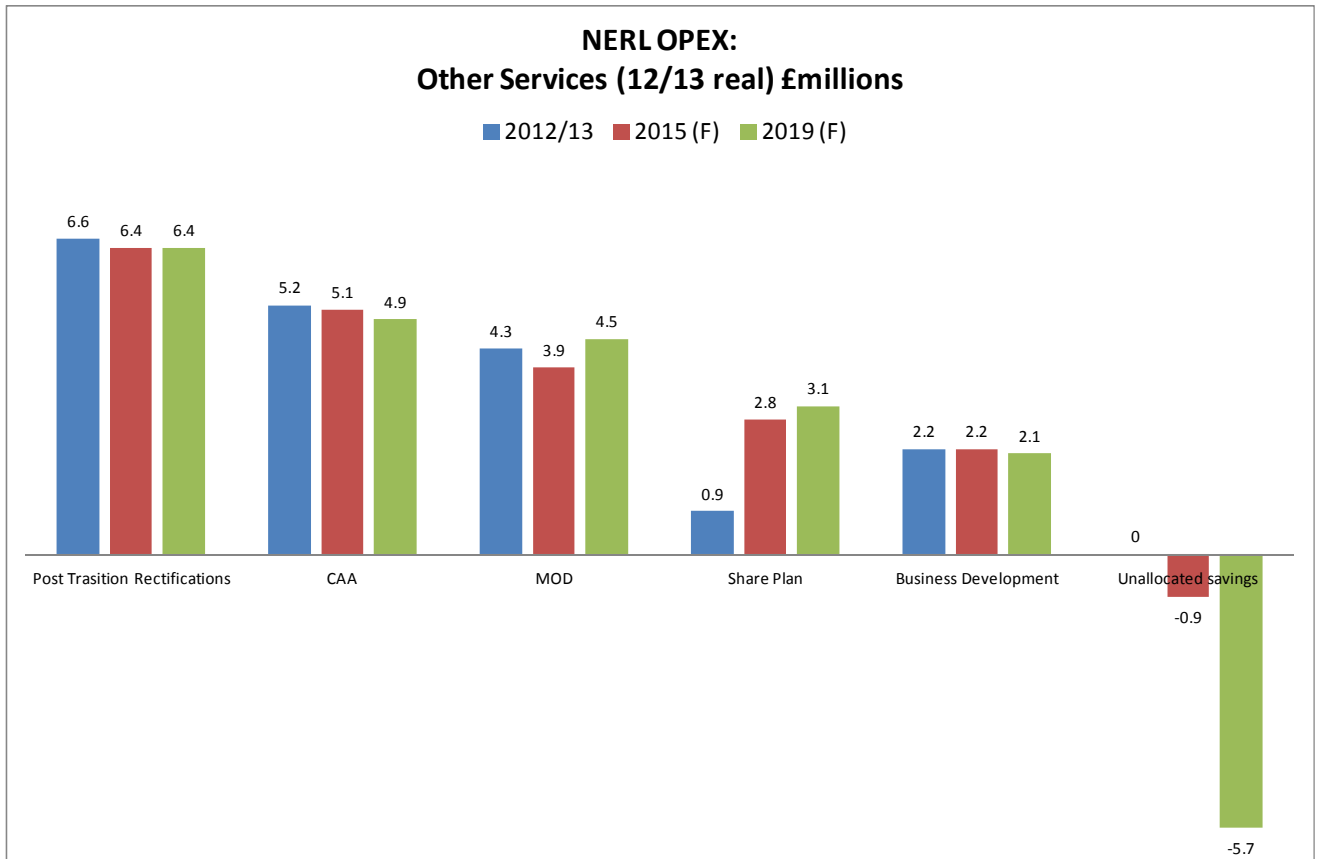


Figure 50: Projected Other Services OPEX (NERL Draft Business Plan 2013)

4.6.2 Post Transition Rectification Services

4.6.2.1 Summary Description

Lockheed Martin is providing software builds, training, decommissioning of redundant but linked systems and other support in the continuous programme of modernisation of the NERL ATC systems and procedures. It includes support to NERL’s long term systems investment plan as well as maintaining the current software and fixing legacy defects. The contract includes for the provision of Lockheed staff, licences, some overseas software development, connectivity, overheads, and training.

The expenditure is driven by the lifecycle of the control system and once the current system reaches the end of life and is replaced NERL will seek to optimise the CAPEX required as well as reduce this annual OPEX expenditure. This significant system change is currently planned for early RP3.

The contract has been in place in its current general form since 2001 and is likely to continue beyond RP2. The contract is partly driven by a series of KPI measures which monitor the effectiveness of the hardware and software support.

4.6.2.2 Analysis

✂

Figure 51: ✂

4.6.2.3 Benchmarking of Costs

Whilst costs are expected to reduce by 3% in the period up to RP2 and then stabilize, there is no practical solution to benchmarking these particular and specialist services.

4.6.2.4 Conclusion

There is a degree of long-term reliance on Lockheed Martin as a single sourced specialist for about a third of the services (relating to the support of NATS operational infrastructure based on Lockheed Martin's technology) which is a known risk to the NERL operation. The nature of the requirement is such that NERL has little opportunity to adjust this arrangement unless it chooses to create an enhanced self-provision with all the overheads and specialist skill retention and training issues this implies, or if competition could be reliably introduced given the same technological and proprietary challenges.

The situation and services are of a nature that does not provide an opportunity for specific benchmarking and consequently the service must potentially be considered as a component of the whole NERL cost base and considered at an ANSP level (see Section 2.0).

4.6.3 CAA & MOD

4.6.3.1 Summary Description

The CAA (safety regulation and regulatory [economic] policy) and MOD services are a necessary and long-term service requirement sourced from government agencies associated with NERL’s service. These obligations have a variable content, and cost, over time but remain a necessary service provision and cost with little opportunity for alternative supply.

4.6.3.2 Analysis

The cost to NERL of the supplied ATC services from the MOD, within its controlled area, are variable and are projected to vary greatly as a result of traffic during the period up to and including RP2. It should also be noted that there is a significant contract between NERL and the MoD for NERL to supply facilities and services, the cost of which is considerably greater than the Non Staff OPEX line item costs.

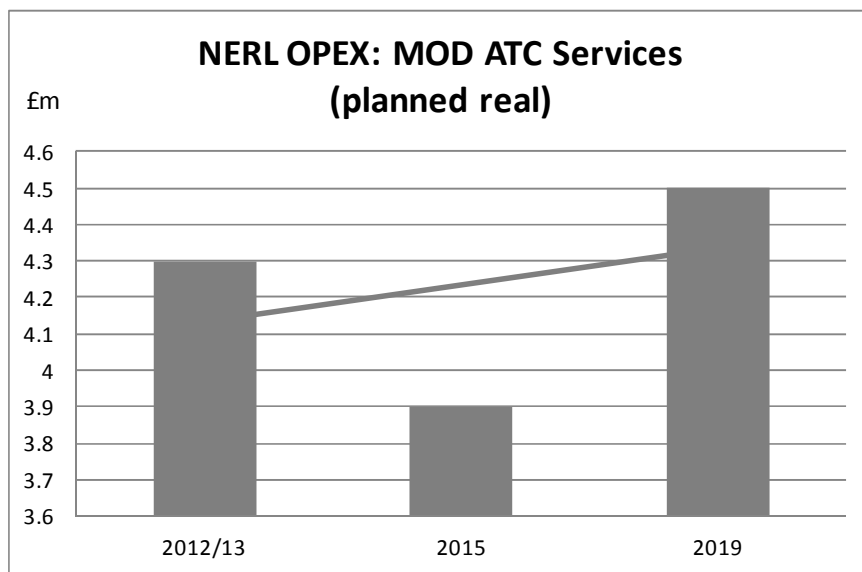


Figure 52: Projected MOD OPEX (NERL Draft Business Plan 2013)

NERL’s assumed, CAA regulatory services costs are, on the other hand, projected to progressively reduce from the current cost of £5.2m p.a. by nearly 6% over the seven year period to £4.9m in real terms in 2019.

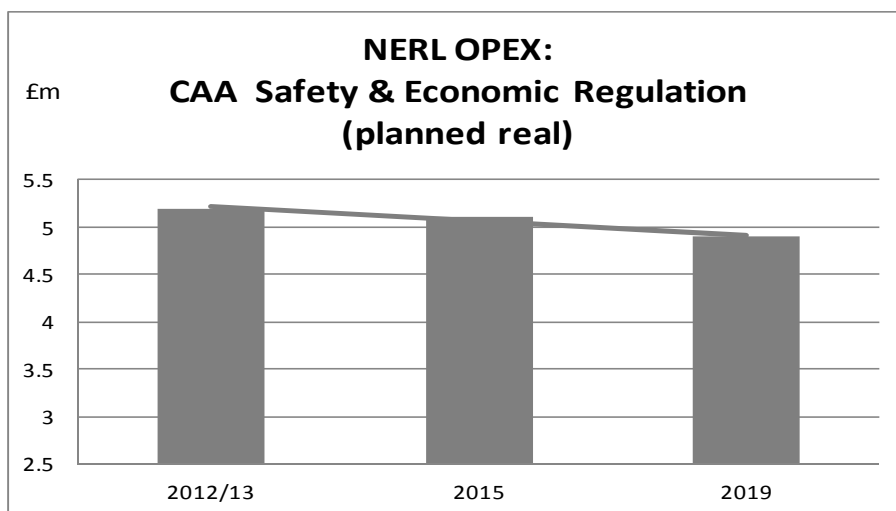


Figure 53: NERL’s OPEX Allowance for CAA charges (NERL Draft Business Plan 2013)

4.6.3.3 Benchmarking of Costs

Whilst cost are expected to reduce by nearly 6%, there is no practical solution to benchmarking these particular and specialist services and consequently the service must potentially be considered as a component of the whole NERL cost base and benchmarked as by ANSP comparison to the extent that National Supervisory Authorities charge ANSPs for such costs (see Section 2).

4.6.3.4 Conclusion

The services provided by both providers are of a nature that they are heavily influenced by the political and regulatory environment. It is possible that the NERL projections will be to a greater degree inaccurate than those on other service streams purely because of these factors.

A benchmark comparison is impractical at this level although at an ANSP level it is recognised that such services apply to all and NATS' costs are favourable within its peer group.

4.6.4 Business Development, Employee Share Plan & Unallocated Savings

4.6.4.1 Overview

These three services are individually self-contained but collectively represent the services with the greatest variation in cost over time. The total cost profile of each service is shown graphically in 4.6.1 above. Whilst costs are expected to reduce by 117% from their current level to eventually deliver a £0.5m saving, there is no practical solution to benchmarking these particular cost allowances. Many comparable companies will invest both in business development and share plans but these are particular to their business model.

4.6.4.2 Business Development – Description, Analysis and Conclusion

Business development costs are derived from the use of support, travel and resources external to the NERL business in its endeavours to secure additional income over and above its core UK business activity. Costs are shown before any offset from income derived from this activity.

Business Development costs remain relatively stable reducing from £2.2m p.a. currently, to £2.1m in 2019. There is no indication available regarding the make-up of this cost but its efficiency in delivering additional income is evidenced in NERL’s non-regulated income projection within its RP2 plan. It is also assumed that there are further costs within the staff OPEX in RP2 relating to the income.

Business Development costs remain relatively stable reducing from £2.2m p.a. currently, to £2.1m in 2019. There is no indication available regarding the make-up of this cost but its efficiency in delivering additional income is evidenced in NERL’s non-regulated income projection within its RP2 plan. It is also assumed that there are further costs within the staff OPEX in RP2 relating to the income. NERL have stated that:

External business development costs are an important contributor to the generation of non regulated income under the Single Till. This actively benefits airline customers since growth in non regulatory income and the associated net margin (after business development costs) has the effect of reducing prices. NERL consulted customers on the projected growth of its non regulatory income for RP2. This income has been built into the Revised Business Plan and customers have said that they are content with the level of ambition in this non regulated income, which is obviously related to business development costs. Further, NERL does not capitalise external business development costs as they relate to income generating contracts.

The inclusion of external business development costs in an otherwise single market business is unusual especially as no benefit has been disclosed. Additionally, where appropriate, there is also the possibility of capitalising some of the expenditure should the initiative come to beneficial fruition.

4.6.4.3 Employee Share Plan – Description, Analysis and Conclusion

The employee share plan costs are particular to NERL and are characterized in RP2 by their significant increase in line with the expectation contained in the business plan over the RP2 period. The projected increase in RP2 is to be expected given the anticipated success of the business in the RP2 Plan.

The Employee Share Plan cost is projected to increase significantly from a current abnormally low annual cost of £0.9m to a more normal annual cost of £2.8m in 2015 and ultimately to £3.1m by 2019.

Employee Share Plan costs												
2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Actual	Actual	Actual	Actual	Actual	Actual	Plan	Plan	Plan	Plan	Plan	Plan	Plan
£6.2	£1.7	£0.2	£4.6	£2.5	£0.9	£2.4	£2.6	£2.8	£2.9	£2.8	£2.5	£3.1

Figure 54: Share Plan Forecast Expenditure (source NERL)

The Employee Share plan costs are driven by

- Share price valuations as certified by PWC independent valuation and approved by HMRC
- New share issues (EOSP holds 5% total shares). As some of these are returned through employees selling them (either after vesting period, or when the employee leaves NATS), they are re-distributed

to the remaining employees. Traditionally this has been as either free shares or partnership and matching shares.

- Shares being sold back (either after the vesting period or when the employee leaves NATS)
- The lower than usual costs in 2012/13 reflect the fact that the share price stayed flat during this period, whereas in previous periods it rose by between 10% and 30%

While dividends are paid out of retained earnings, the costs of running the scheme including purchase of employee shares are paid by the users.

The employee share scheme is not unusual in benchmarking terms and its funding linked to business performance together with an assumed mix of out-sourced management costs and an inter-company cost is forecast at a higher level of expenditure in comparison to historic costs.

Whilst the increasing expenditure in the share plan is worthy of note it is impractical to benchmark these costs and consequently the services must potentially be considered as a component of the whole NERL cost base and benchmarked by ANSP comparison (see Section 2).

4.6.4.4 Unallocated Savings – Description, Analysis and Conclusion

The introduction of an unallocated savings benefit within this service stream is an unusual departure when compared with the other streams. Its inclusion has been queried and further detail provided by NERL and reviewed below but it is understood to cover a range of potential savings based on trends and experience within the business. The savings increase progressively during the RP2 programme. However, it should be stated that these are in the RP2 plan at NERL’s own risk and that the inclusion of these savings in the plan benefits customers through reduced prices.

The unallocated savings are characterized by their significant beneficial value in the latter period of RP2 where in 2019 they are projected to represent a benefit of £5.7m p.a.

NERL stated that from previous experience the unallocated savings could be targeted in the following areas

Unallocated Savings					
	2015/16	2016/17	2017/18	2018/19	2019/20
LTIP Opex	£0.2	£0.4	£0.6	£0.9	£1.1
Asset Management	£0.1	£0.2	£0.3	£0.5	£0.6
Facilities Management	£0.1	£0.2	£0.3	£0.5	£0.6
Business Support	£0.5	£1.1	£1.6	£2.3	£2.9
Non-Operational IT	£0.1	£0.2	£0.3	£0.5	£0.6
Total	£0.9	£2.2	£3.2	£4.5	£5.7

Figure 55: Unallocated Savings detail (source NERL)

The grouping of the indicative savings element in this service stream is not representative of normal practice. The disclosure of potential services within which further savings are likely to be achieved following Capita’s request results in these benefits not being included in the respective benchmarking. Nevertheless the service streams do generally reflect those areas where it has been suggested further efficiencies may be available. For example savings are indicated in facilities management where further space rationalisation and energy consumption efficiencies are thought to be possible. It has been concluded that further efficiencies may be available in Business Support and NERL appears to concur with this view. Similarly further efficiencies are thought possible in relation to Lockheed Martin’s and BT’s contracts which are also both included in NERL’s service savings.

The inclusion of a significant cost saving is unusual and must be considered as a considerable risk to NERL in the achievement of its RP2 plan in its later years. However, it should be stated that these are at NERL’s risk and not that of the end users.

5. Conclusions

5.1 Dependencies & Planning

The achievement of the Non-Staff OPEX reduction will be heavily dependent upon both CAPEX project deliveries and staff reductions which, in turn, will assist in delivering the planned service and portfolio reductions. The NERL plan is very dependent upon the realisation of the ‘unallocated savings’ given the context of minimal specific cost contingency provision.

5.2 Trends

Generally the RP2 Non-Staff OPEX targets a continuation in the cost reduction trend evident since 2001. In the context of diminishing returns over time the 6½% reduction target is considered challenging but realistic. Service consolidation and portfolio reductions will be key deliverables in the achievement of the targets. The achievement of the same will present some challenges not least for the various suppliers who are likely to experience significant employment and other inflationary pressures whilst contracted to yearly real terms cost reductions.

The opportunity to renegotiate the contracts in mid RP2 presents an opportunity to deliver OPEX savings or enhanced value. We believe this has been considered as part of NERL’s plan as evidenced by the SCM Strategy.

5.3 Benchmarking

Before the distribution of the ‘unallocated savings’ provision totalling £5.7m in 2019 all service streams with the exception of Business Support, which remains stable, are planned to deliver cost reductions. The inclusion of the significant ‘unallocated savings’ projection in the Other Support category suggested a very significant saving in that stream and also served to leave rather inflated outturn expenditure in the other streams. The disclosure of non-detailed savings targets by service stream in the unallocated savings has served to present a more balanced version of NERL’s plan as evidenced in the following tables:

Savings by Service Stream (Unallocated Savings in 'Other')						
£m	FM	Non Ops IT	Asset Mgmt	Business Support	Other	Total
2015	30.0	9.2	18.1	15.4	19.5	92.2
2019	29.7	8.5	17.3	15.4	15.3	86.2
Saving	1.00%	7.61%	4.42%	0.00%	21.54%	6.51%

Savings by Service Stream (Unallocated Savings distributed)						
£m	FM	Non Ops IT	Asset Mgmt	Business Support	Other	Total
2015	30.0	9.2	18.1	15.4	19.5	92.2
2019	29.1	7.95	16.7	12.55	19.9	86.2
Saving	3.00%	13.59%	7.73%	18.51%	-2%	6.51%

Figure 566: RP2 Non-Staff OPEX summary forecast by service stream (derived from NERL data)

The distribution of these savings targets result in significant cost efficiencies in the service streams where NERL has reliance on two of its principal suppliers in Lockheed Martin and BT. These suppliers provide services in areas where there is limited cost efficiency leverage and potentially higher than benchmark cost levels and as such the targeted reductions address these areas of concern. Similarly the distribution of unallocated savings into the potentially higher than expected expenditure area of Business Support has addressed the otherwise static cost base where efficiencies would be expected in the staff travel, temporary staffing and support services.

Whilst by distributing the unallocated savings the facilities management expenditure is forecast to reduce by 3% there remains a possibility of further efficiency in this service stream depending upon the adequacy of general inflation adjustments compared to actual energy tariffs. With continued attention on energy consumption and space costs benchmarking suggests there is a possibility that expenditure could reduce by a further percentage point. Achievement of this, and indeed the NERL projection, remains very dependent upon energy tariffs which at this point in time are difficult to predict.

There is also the possibility that the allowances in respect of the Employee Share Plan may prove higher than necessary although this cannot be benchmarked purely from a non-staff perspective. The 5 year annual average expenditure between 2009 and 2013 would suggest expenditure of little more than £2.0m p.a. against which the projection in RP2 of £2.5m to £3.1m would superficially appear generous.

Whilst there remains a possibility of these further savings this must be balanced against the benchmarking results which generally suggest NERL's cost base in many areas sits well in the expected ranges. NERL also faces significant challenges in its management of principal suppliers with limited cost leverage, the uncertainty of its energy costs so far in the future and the otherwise uncertainty of achievement with relatively limited specific non-staff OPEX cost contingencies. The planned non-staff outturn expenditure over the RP2 period and in 2019 at £86.2m represents a reasonable cost base for this aspect of the NERL business. The overall benchmarking sits favourably within the respective cost ranges for a business of this nature with its heavy emphasis on high-tech processes, safety and reliability. Whilst the likelihood is that the non-staff OPEX will not be exceeded, the corresponding opportunity for further savings is considered minimal and unlikely to result in expenditure at outturn less than £85.0m.

5.4 Recommendation

The RP2 Plan comes with risk and is very dependent upon achievement of projections in both the parallel cost heads of Staff OPEX and CAPEX. The OPEX is expressed in real terms and consequently inflationary pressures especially in energy and business rates will be very influential.

NERL has achieved significant OPEX savings to date and indeed plans a significant further reduction in RP2. Notwithstanding this we believe the RP2 Non-staff OPEX by 2019, in both Plans, projected at £86.2m has the potential for further modest efficiency with a possible outturn expenditure of £85.0m. This will however be subject to realisation of the £5.7m 'unallocated saving' and suppression of supplier 'cost creep', in what may prove to be an improving economic environment.

Appendix A Meeting Minutes



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Minutes

File Notes of Review of Facilities Management Opex Meeting

Brettonham House, Lancaster Place London WC2E 7EN
Thursday 15 August 2013 at 14.00

Present

Apologies



- | | File Notes on Meeting | Action |
|----|--|--------|
| 1. | The purpose of the meeting was to introduce the team and the NATS Team. | |
| 2. | Summary of comments and discussion. | Capita |
| | a) Thea will lead from NATS and will co-ordinate all others. All correspondence will be addressed to her. Gary has prepared Business plan content and can explain the detail. Mary has provided much of the financial data. This team is also dealing with the staff Opex and the Capex work and in all cases have knowledge of the previous reporting period and an assessment of this future period. | |
| | b) John O'Gorman is the lead for Capita. | |
| | c) The NATS policy is 95% outsourced supported by a small team in house. | |
| | d) NATS presented the company structure, approach and RP2 business case summarised in its 10 slide presentation. It is recognised that the principle Opex aim of the business plan is to further address efficiencies in staffing being the more significant area of expenditure. | |
| | e) Capita asked for a copy of the Opex plan and that will be issued in due course. Capita were referred to the business plan and ATM Cost Effectiveness benchmarking report of 2011. There are also other published documents. | |
| | f) There was considerable discussion on the nature of resilience and consequences arising from any loss of systems. The definition of the requirements would need to follow at subsequent meetings. | |

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- g) NATS emphasised that they were currently being partly sold and hence there was considerable sensitivity about release of information and detail. This was also stated previously by Mike Goodliffe of NATS who we met the previous day to commence the work.
 - h) There was also on an issue of timing with recognition by all that some staff were still on summer annual leave and may not be available.
3. Capita issued a template outlining the type and level of information required. This was also described and discussed with NATS. It asked for cost plans, SLA and contracts, Opex Drivers, as well as contract values and key metrics. This was the basis of the benchmarking exercise required and needed to complete the study.
 4. The general feeling was that the study would be difficult as the information was not normally available or reported in a form to suit the study and would need to be prepared. NATS have also to assist in this and the other studies as well as the normal daily responsibilities so requests and support will need to be managed carefully.

There will be an interface between the Capex and Opex studies.
 5. The next step was a conference call on Friday 30 August to discuss the financial plan.

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Minutes

24 September 2013

**File Notes of Review of Facilities Management
Opex Meeting**

Brettenham House, Lancaster Place London WC2E 7EN
Thursday 30 August 2013 at 11.00

Present

Apologies



- | | File Notes on Meeting | Action |
|----|---|--------|
| 1. | The purpose of the meeting was to review the information required and available together with next steps. | |
| 2. | Summary of comments and discussion. <ul style="list-style-type: none"> a) The spreadsheet with the Opex was issued by NATS on 30 August 2013 as well as some supporting documents including the presentation and some high level details on the contracts. b) The focus was on the spreadsheet of Opex. The sums quoted were in some cases different from those quoted in the business plan. The spreadsheet represents a specific set of costs for Capita and its CAA commission. NATS said that they would undertake a reconciliation and reissue. c) The planned savings were unallocated. There were large costs, some 10% of the total in minor works and hence difficult to immediately understand the scope. d) Capita had obtained most of the supporting documents and reports. However, there was little available data on non staff Opex, the focus being on staff costs and Capex. Much of the initial research on publicly available data had already been completed . | Capita |
| 3. | The information requested by Capita in its spreadsheet forms was otherwise not available at the meeting. It was promised for the visit to CTC. NATS requested more detail on the forms. The approach requested by NATS is a tracked Q and A. Full workshop face to face meetings could resolve many issues. | NATS |
| 4. | The next step was a visit to CTC and a more in depth discussion on the details previously requested. | |

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Minutes

24 September 2013

Review of Facilities Management Opex

CTC Southampton
Friday 20 September 2013 at 09.00

Present

Apologies



Agreed Minutes of Meeting

Action

1. The purpose of the meeting was to review and define the Opex elements as part of the CAA review of NERL
2. The Capita update is as follows:
 - a) Capita have a good understanding of the headline costs, and now need to drill into the detail of the costs and the cost drivers
 - b) There is an understanding of the procurement approach in key areas
 - c) The work to compile the report has commenced and the report is currently being populated
 - d) The benchmarking data is being collected and some of the early data is available. Usually, it is more difficult to collect and takes longer to collect the final data elements.
 - e) There was a meeting on 18th September to review the common elements between Capex, non staff Opex and staff Opex. Further meeting are likely
 - f) Work now continues on the details elements of the 5 year Opex plan, 2015/16 to 2019/20
3. In the rent and rates quoted, in the 5 year Opex plan is there any allowance for inter company cross charging or head office contributions or any additional income for rental allowance elsewhere. The working assumption is that the costs quoted are for NERL only. This the costs quoted to the overall NATS structure. The costs quoted for this item are the costs incurred by the NERL business. However, it does include c£0.2m of costs that are subsequently re-charged on to NSL for where NERL provides services for NSL (some security services and part of the Osborne house site). In addition, it does not include c£0.3m of costs

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NATS

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that are incurred by NATS and charged to NERL for our use of the Brettenham house site. As these two items almost net off I would suggest that the figures you have are still reasonable. On Income for rental allowance elsewhere, these figures do not include the income we get for site sharing.

- | | | |
|-----|--|------|
| 4. | A schedule of costs for the rateable value of the remote facilities (including CTC, Swanwick and Preswick). An electronic copy will be uploaded. In relation to this table NATS 2 id NERL and NATS 1 is corporate. [Supplementary question: telephone conversation to clarify the collation between the Opex plan and these costs is required.] | NATS |
| 5. | There is a proposal that the lease on CTC is being extended to 2031, this is in line with the NATS license. There is likely to a rent free period of 1 – 1½ years and this will be spread evenly over the total term. | |
| 6. | The summary space breakdown was issued previously. A schedule of the main space types and function will be issued for the 3 main facilities (CTC, Swanwick and Preswick), e.g. office space, common areas, workshops, training and classrooms, special facilities. This is to facilitate the benchmarking exercise. | NATS |
| 7. | It was stated that Swanwick is an inefficient building and history has shown that it would be very expensive to modify to accommodate additional personnel with the building. This is due to both the shape and functionality. It is recognised and addressed where appropriate within NERL. | |
| 8. | In terms of CTC, there are 1,336 desk spaces and the utilisation is 70% for 760 office based staff. There are two standard module types and 1,800 desk and more typically a 1,200 hot desk type. The 760 quoted was for CTC Phase 1 only, to illustrate that 20% cellurisation would significantly reduce available desks. The average daily attendance in CTC is around 1200 people. | |
| 9. | The IPD key office benchmarking report - April 2013 was issued by NATS | |
| 10. | Details were issued on the cost and usage of the shuttle bus service. | |
| 11. | The current Facilities Management Structure for the total portfolio was issued. NATS will reissue this chart with roles only and not staff names. This includes a maintenance response team for each site as well as draughtsmen, and engineering services of 10 people who define the URS for £37m of the Capex work. The current FM Headcount is 65.1 FTE. Through activity management the resources are deployed at circa <ul style="list-style-type: none"> • 40.2 FTE Regulated (NERL) • 12.3 FTE LTIP – to deliver £37m of FM investment + work-packages in some of the other 100+ projects that may require | NATS |

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- an FM input.
 - ↳ 7.9 FTE Corporate (Security, Property)
 - ↳ 4.7 FTE Service Lines
- Given this, NERL does not consider that there is any duplication.
- 12. Within NERLs Facility Management planning there is a RP2 Opex saving scenarios and a schedule of these savings was made available. NATS
- 13. Where appropriate the previous presentation as issued by NERL was reviewed to inform the discussion. NATS
- 14. [REDACTED] NATS
- 15. A list of the Service Level Agreements appropriate to the full Emcor contract and as stated in their contract will be issued. NATS
- 16. The catering contract is for a full preparation and presentation kitchen across each site. Weekly numbers for take up at each site were issued. The approach and costing of catering was explained. NATS
- 17. NERL will provide utilities consumption profiles and costs. Electricity is bought in 1 MW chunks with cost tolerance of +/- 5%. There is no allowance paid for a guaranteed supply from the grid. In the event of supply shortages, standby generation is used in this instance. NATS
- 18. Sites self insure up to £250k. The average cost of damage in all remote sites is some £20k per annum excluding exceptional occurrences. A statement will be issued on insurances including corporate versus local versus business policy approach. A statement will also be issued on FM and other key contract insurances. NATS
- 19. Of the 17 key partner suppliers, 5 are associated with the Opex budget. These are Emcor, LM, Gap Gemini, Amor, Raytheon and BT. The relevant SLA agreements for these contracts will be issued. NERL will. NATS

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issue a typical example of the Change control process used in these types of contract for the purpose of taking on new obligations – including scope change as a result of new capex acquisitions.

- | | | |
|-----|--|------|
| 20. | In relation to BT, there are key supply issues that are unique to their Opex and Capex contracts. Procurement will issue a statement on the competition nuances. | NATS |
| 21. | During or near the midpoint of the review, many contracts are due to for renewal. Procurement will provide a statement on their planned approach. | NATS |
| 22. | As part of the approach, Capita will draft a note on future inflation and the consequences for the Opex contracts. NERL will provide a brief statement on its approach to inflation. | |

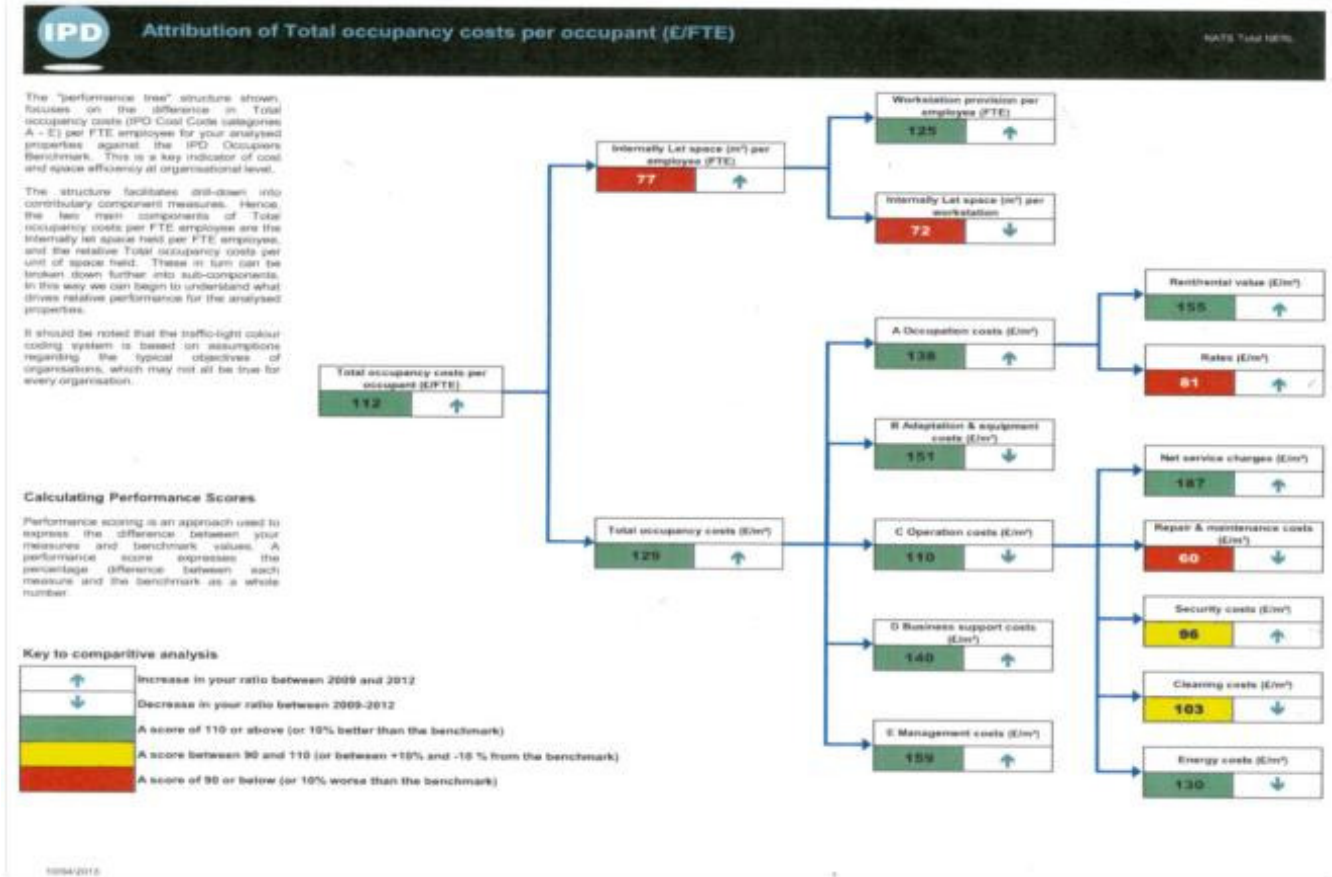
Appendix B

CTC space by function (NERL supplied data)

REPORT 27TH SEPTEMBER 2013

GIA REPORT	NET AREA	GROSS AREA
Core	1300.14	1430.29
Lift	132.87	156
Riser	111.59	130.23
Shower	74.45	80.21
Stairs	211.14	217.73
Toilets	770.09	846.12
Office	13306.37	13583.96
Ante Room	31.48	32.71
Circulation	3884.21	3985.59
Cloakroom	47.5	56.62
Filing	495.7	510.36
HotDesk	8.45	8.73
Meeting Room (Book able)	896.51	928.04
Meeting Room (Non Book able)	415.29	441.99
Office	210.29	214.67
PrivacyRoom	30	32.27
Quiet Room	143.37	159.03
Storage Units	93.83	97.44
Training Room	2122.77	2162.47
Union Room	33.68	35.13
Workbench	108.44	111.61
Workstation	4784.85	4807.3
Operations	5644.15	5696.11
Breakout_Area	12.1	13.19
Equipment Room	4184.6	4223.1
Labs	143.48	144.04
OpsRoom	1303.97	1315.78
Service	5017.41	5202.15
Breakout	636.01	649.35
Cleaners Cupboard	49.44	58.71
Coffee Lounge	89.65	91.17
Corridor	1121.5	1179
Drying Room	5.92	6.56
First Aid	7.61	8.24
Gym	80.73	82.2
IT-Server/Comms Room	546.03	568.56
Kitchen	119.79	127.2
Lobby	204.67	208.86
Locker Room	74.59	78.1
Post Room	226.53	229.24
Reception	310.29	312.83
Resource Area	338.93	352.68
Restaurant	539.76	551.13
Security Control Room	13.63	14.17
Stores	273.61	296.78
Tea Points/Vending	327.53	336
Workshop	51.19	51.37
unset	244.1	252.59
unset	244.1	252.59
Grand Total	25512.17	26165.1

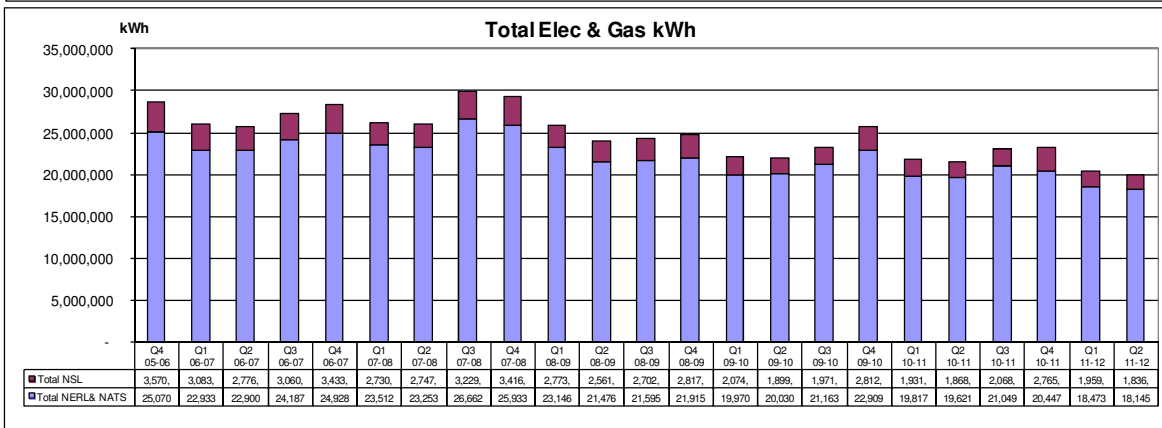
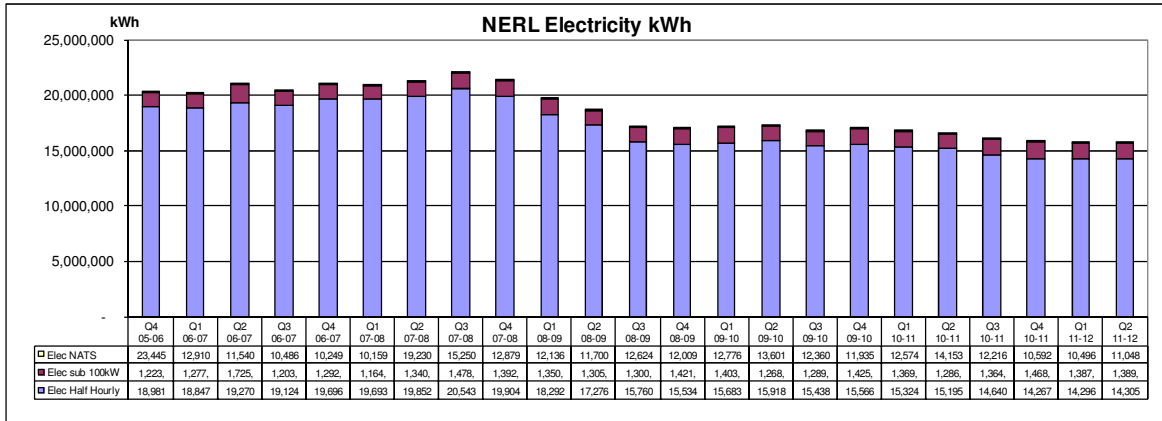
Appendix C Selected data extracts provided by NERL



NERL FM Benchmarking Review (source IPD supplied by NERL)



Forecast Business Rates by Facility (extract from NERL supplied data)



Historic utilities consumption data (NERL supplied data)

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