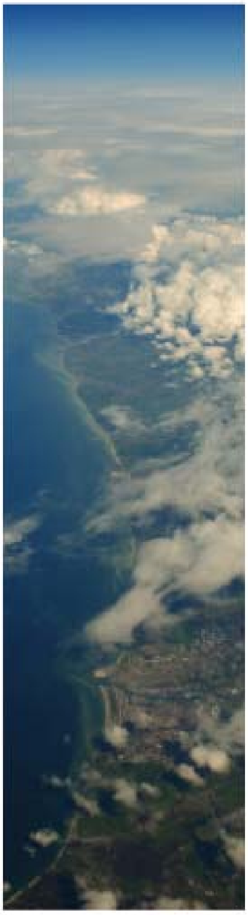
FINANCIAL STATEMENTS OF ACCOUNT 2017



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Contents

Introduction

The European Centre for Medium-Range Weather Forecasts

The European Centre for Medium-Range Weather Forecasts (ECMWF) is an independent intergovernmental organisation supported by 22 Member States and 12 Co-operating States. It was created by a Convention that came into force on 1 November 1975 and was amended on 6 June 2010. The governing bodies are the Council, the Director-General, and the Council's advisory committees, whose functions are defined in the Convention.

ECMWF is both a research institute and a 24/7 operational service, producing and disseminating numerical weather predictions to its Member States. This data is fully available to the national meteorological services in the Member States. The Centre also offers a catalogue of forecast data that can be purchased by businesses worldwide and other commercial customers. Other strategic activities include maintaining a data archive, assistance in advanced education and assistance to the World Meteorological organization (WMO) in implementing its programmes. The supercomputer facility (and associated data archive) at ECMWF is one of the largest of its type in Europe.

ECMWF was established as a major initiative in European scientific and technical co-operation in meteorology, based on a high-performance computing facility (HPCF), a scientific and technical workforce, the production of medium-range weather forecasts, and related research and development. The collaborative aspect of ECMWF remains to this date a key to its success; our staff of 358 are from over 30 countries, and developing effective partnerships with meteorological services, universities and other organisations that help ECMWF to achieve its targets is a key priority. Establishing closer and more effective collaborations with leading institutions is helping the Centre to continue to develop its models and satisfy its users' increasing requirements.

ECMWF's key duty to its Member and Co-operating States is to deliver timely, reliable and accurate global numerical weather predictions that meet each country's requirement.

The audit of ECMWF’s FSA

Opinion

We have audited the Financial Statements of ECMWF for the financial year ended 31 December 2017, consisting of the Statement of Financial Position; the Statement of Financial Performance; the Statement of Cash Flow; the Statement of Changes in Net Assets & Equity; Notes and schedules to the Financial Statements, including a summary of significant accounting policies.

In the opinion of the OAGN, the Financial Statements give a true and fair view of the financial position of ECMWF as at 31 December 2017; its financial performance as disclosed and specified in the 2017 accounts and principal notes; its cash flow for the financial year then ended, in accordance with International Public Sector Accounting Standards (IPSAS) and the Financial Regulations of ECMWF.

Basis for Opinion

We conducted our audit based on internationally accepted auditing standards. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the Financial Statements are free of material misstatement. The OAGN believes that the audit evidence it has obtained is sufficient and appropriate to provide a basis for its opinion.

Responsibilities of Management and those charged with governance

The management of ECMWF is responsible for preparing Financial Statements in accordance with introduced IPSAS standards and ECMWF Financial Regulations. Management is also responsible for establishing adequate and functioning internal control systems to ensure that the Financial Statements are free of material misstatement due to fraud or error.

Auditors responsibilities for the audit of the financial statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor’s report that includes its opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISSAI`s will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with ISSAI`s, the OAGN exercises professional judgment and maintains professional skepticism throughout the audit. It also:

- Identifies and assesses the risks of material misstatement of the financial statements, whether due to fraud or error, designs and performs audit procedures responsive to those risks, and obtains audit evidence that is sufficient and appropriate to provide a basis for its opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

- Obtains an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Organization’s internal control.

- Evaluates the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the Director-General.

- Concludes on the appropriateness of Director-General’s use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on ECMWF`s ability to continue as a going concern

- Evaluates the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

The OAGN communicates with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that it identifies during its audit.

Specific observations and recommendations are set out below in our Annual Report for 2017, which we issue in accordance with Article 2 (1.b) of the External Audit Agreement.

Signed at the Office of the Auditor General of Norway, Oslo, 23 March 2018

Tora Jarlsby
Director General

Johannes Heltne
Assistant Director General

Arild Anstensrud
Senior Audit Adviser

Director-General's Statement

The European Centre for Medium-Range Weather Forecasts (ECMWF) is an intergovernmental organisation whose primary purposes are the development of a capability for medium-range weather forecasting and the provision of medium-range weather forecasts to its Member and Co-operating States. ECMWF is supported by 34 States.

An amended Convention was entered into force on 6 June 2010, allowing new Member States to join ECMWF. Several Co-operating States have started the procedure to become a Member State, including Croatia whose conversion came into effect from 1 January 2016.

ECMWF Member States have approved the proposal by the Italian Government and the Emilia Romagna Region to host ECMWF's new data centre in Bologna. The decision was taken on 22 June by the Centre's governing body, which includes representatives of all its Member States. The building is to be delivered to ECMWF by 2019 and will host the Centre's new supercomputers, whilst the Centre's headquarters are to remain in the UK.

This document contains the financial statements of ECMWF for the year ending 31 December 2017. It details the 2017 financial results, reconciliation of results between IPSAS and cash accounting and the auditors' opinion.

Exchange rates during the year continued to have a high degree of volatility and in particular rates for Euro compared to sterling fluctuated considerable during 2017. This was managed closely by the Centre and resulted in an overall surplus in the year. This will continue to be closely monitored during future years.

In order to comply with IPSAS 39, the Statement of Financial Position includes as a liability, the present value of £285.8m (2016: £246.2m) of any future pension and post-employment medical costs as calculated by the Centre's actuaries. This liability is partly offset by the Pension Investment Accounts of £46.2m and the whole of the liability is guaranteed by the Member and Co-operating States of the Centre.

In 2017, under IPSAS, the Centre produced an operating deficit of £7.7m. However, when the net finance costs are excluded, the Centre had a net accounting surplus for the period of £3.1m.

ECMWF's budget is still set on a cash basis and the Financial Statements include a reconciliation of the results under IPSAS and in cash terms. Under cash accounting, I note that the Centre generated a surplus of £3.1m in 2017, which is available either for future investment or distribution to Member States according to a decision to be made by the Council in 2018.

Florence Rabier
Director-General

22 March 2018

Statement on Internal Financial Control

This Statement represents my assurance to Council that, as Director-General, I am satisfied that the Centre's finances are adequately controlled.

The Senior Management Team ensures an appropriate control environment is in place by clearly defining management responsibilities and powers, evaluating the systems in place to ensure compliance with those policies, plans, procedures, laws and regulations which could have significant impact on the organisation, formally monitoring progress against objectives and risk exposure relating to achievement of objectives and making informed decisions if necessary to steer performance back on track, keeping proper records, and safeguarding the assets of the organisation.

The system of internal financial control is based on a framework of regular management information, administrative procedures including segregation of duties, and a system of delegation and accountability. It includes a comprehensive zero-based, bottom-up annual budget which is reviewed and agreed by the Council, and regular reviews by the Senior Management Team of quarterly Management Information Reports and annual financial reports which indicate performance against key financial and non-financial objectives.

ECMWF has a co-sourced internal audit function, which reports directly to the Audit Committee. This committee meets on a biannual basis to review reports prepared by Internal Audit and other departments. The head of Internal Audit in turn keeps the Centre's Management Team informed of the matters that have been considered, and day-to-day operations are reported to me as the Director-General.

The internal audit function operates in accordance with the "International Standards for the Professional Practice of Internal Auditing". An Internal Audit plan is approved by the Audit Committee. The work plan takes account of areas of potential risk identified.

The Internal Auditor provides the Audit Committee with biannual reports on assignments carried out. These reports highlight deficiencies or weaknesses, if any, in the system of internal financial control and the recommended corrective measures to be taken where necessary. They also include an overview of all audit recommendations and the progress in their implementation.

The Senior Management Team's monitoring and evaluating the effectiveness of the system of internal financial control is informed by the Internal Audit function and by the work of the Audit Committee.

Florence Rabier
Director-General

22 March 2018

Statement of Financial Performance for the year ended 31 December 2017

	Notes	2017	2016
		£	£
Revenue			
Member & Co-operating States' contributions		43,454,007	43,346,573
Taxes		8,826,557	8,148,974
Externally funded revenue		42,826,793	28,967,211
Sales of forecasts and data		7,801,982	6,141,908
Other operating revenue		73,021	30,840
Total Operating revenue		**102,982,360**	**86,635,506**
Expenditure			
Personnel costs[1,3]	15	29,526,875	27,318,559
Pension and post-employment benefits	12 & 15	10,487,587	7,153,421
Buildings expenditure	15	4,014,514	3,651,898
Computer expenditure	15	19,892,285	18,965,093
Other operating expenditure	15	4,385,886	4,453,047
Externally funded expenditure[1, 2]	15	38,181,641	24,242,444
Total operating expenditure		**106,488,788**	**85,784,462**
Operating (deficit) / surplus for the year from continuing operations		**(3,506,428)**	**851,044**
Finance income	16	579,614	725,827
Finance costs	16	(4,784,692)	(3,241,333)
Net deficit for the year from continuing operations		**(7,711,506)**	**(1,664,462)**
Net deficit for the year		**(7,711,506)**	**(1,664,462)**

[1] *These items of expenditure are inclusive of tax*
[2] *Externally funded expenditure includes optional programmes*
[3] *Personnel costs exclude staff whose posts are fully or partially directly externally funded. These costs are included in externally funded expenditure*

Statement of Financial Position as at 31 December 2017

	Notes	2017	2016
		£	£
ASSETS			
Current assets			
Cash and cash equivalents	4	42,511,602	37,088,743
Receivables	5	7,439,580	6,297,120
Prepayments and accrued revenue	6	5,946,726	6,784,282
Inventory	7	714,181	419,925
Total current assets		**56,612,089**	**50,590,070**
Non current assets			
Property, plant and equipment	8	13,686,700	16,011,136
Pension investment accounts	12	46,260,917	39,809,202
Total non current assets		**59,947,617**	**55,820,338**
TOTAL ASSETS		116,559,706	106,410,408
LIABILITIES			
Current Liabilities			
Payables	9	16,421,840	12,614,141
Pre financing	10	21,895,104	21,846,567
Deferred revenue	11	1,011,247	1,315,784
Total current liabilities		**39,328,191**	**35,776,492**
Non current liabilities			
Employee benefits	12	285,802,097	246,173,540
Total non current liabilities		**285,802,097**	**246,173,540**
TOTAL LIABILITIES		325,130,288	281,950,032
NET LIABILITIES		**(208,570,582)**	**(175,539,624)**
NET ASSETS / (EQUITY)			
General Reserve	13	2,394,996	2,394,996
Retained surpluses		(12,946,795)	(11,282,333)
Net surplus/(deficit) for the year		(7,711,506)	(1,664,462)
Actuarial adjustments		(98,958,422)	(73,638,970)
IPSAS adjustment reserve	14	(91,348,855)	(91,348,855)
TOTAL NET LIABILITIES		**(208,570,582)**	**(175,539,624)**

Statement of Cash Flow for the year ended 31 December 2017

	2017	2016
	£	£
Cash flow from operating activities		
Surplus/(deficit) from ordinary activities	(7,711,506)	(1,664,462)
Depreciation	3,239,113	3,416,984
Profit/(loss) on disposal of fixed assets	26,888	26,654
Finance costs for post-employment benefit (note 12)	4,765,055	3,220,407
Post-employment benefit	3,092,335	105,573
Increase in receivables	(1,142,460)	409,691
Increase in inventories	(294,256)	(179,480)
Decrease in prepayments and accrued income	837,556	621,363
Increase in payables	3,807,699	5,138,250
Decrease in pre-financing	48,537	6,745,830
Decrease in deferred revenue	(304,537)	396,426
Net cash flow from operating activities	**6,364,424**	**18,237,236**
Cash flow from investing activities		
Purchase of fixed assets	(941,565)	(2,149,155)
Proceeds from sale of fixed assets	-	1,800
Net cash flow from investing activities	**(941,565)**	**(2,147,355)**
Net increase/(decrease) in cash and cash equivalents	**5,422,859**	**16,089,881**
Cash and cash equivalents at the beginning of the year	37,088,743	20,998,862
Cash and cash equivalents at the end of the year	**42,511,602**	**37,088,743**

Statement of Changes in Net Assets/Equity for the year ended 31 December 2017

	General reserve	Retained surplus	Actuarial adjustments	Reserves arising on IPSAS adjustments	Total
	£	£	£	£	£
Balance At 1 January 2017	**2,394,996**	**(12,946,795)**	**(73,638,970)**	**(91,348,855)**	**(175,539,624)**
Deficit arising on recognition of employee benefit obligation for 2017			(25,319,452)		(25,319,452)
Net surplus/(deficit) for the year		(7,711,506)			(7,711,506)
Balance At 31 December 2017	**2,394,996**	**(20,658,301)**	**(98,958,422)**	**(91,348,855)**	**(208,570,582)**

Notes to the financial statements for the year ended 31 December 2017

1. Statement of Compliance and Basis of Preparation

ECMWF elected to adopt International Public Sector Accounting Standards (IPSAS) from 1 January 2012. On 11th November 2014, ECMWF signed a Delegation Agreement with the European Commission for provision of Copernicus services. Consequently, ECMWF introduced segmental accounts in 2014, in line with IPSAS 18 in order to separately identify the various streams of income and expenditure relating to Copernicus Services, as this is regarded as a significant segment of activity. For consistency purposes all externally funded streams of revenue and corresponding costs have also been separated by segment.

2. Accounting judgements and estimates

In the application of ECMWF's significant accounting policies, which are described in note 3, management is required to make judgements, estimates and assumptions about the carrying amounts of assets and liabilities that are not readily apparent from other sources. The estimates and associated assumptions are based on historical experience and other factors that are considered to be relevant.

The estimates and underlying assumptions are reviewed on an on-going basis. Revisions to accounting estimates are recognised in the period in which the estimate is revised, if the estimate affects only that period, or in the period of the revision and future periods, if the revision affects both current and future periods.

The key judgements management has made in preparing these financial statements are as follows:-

a) Estimated useful lives and depreciation rates of property, plant and equipment.
b) Actuarial assumptions in respect of the defined benefit pension and post- employment medical care schemes; and
c) Assessment of contract progression at the year-end date.

Basis of Accounting

The financial statements are prepared in accordance with and comply with International Public Sector Accounting Standards (IPSAS) issued by the International Public Sector Accounting Standards Board (IPSASB), based on International Accounting Standards (IAS) and International Financial Reporting Standards (IFRS) issued by the International Accounting Standards Board (IASB).

When the IPSASB does not prescribe any specific standard, IFRS and IAS are applied.

The financial statements have been prepared on a historical-cost and going-concern basis and accounting policies have been applied consistently throughout the period. The financial statements have been prepared on an accruals basis.

Notes to the financial statements for the year ended 31 December 2017 (continued)

3. Significant Accounting Policies

The significant accounting policies are set out below:

Foreign Currencies

Assets and liabilities denominated in foreign currencies are translated into the functional currency, sterling, at the exchange rates prevailing at the date of the Statement of Financial Position. Foreign currency transactions within the Sterling ledgers are translated into the functional currency using the exchange rates prevailing at the dates of the transactions. The addition of Copernicus services has led to the implementation of a Euro ledger in order to minimise unnecessary impact of foreign currency transactions. For reporting purposes, the transactions within the Euro ledger are translated at the average foreign exchange rate per month. Exchange gains and losses resulting from settlement of such transactions and from retranslation at the reporting date of assets and liabilities denominated in foreign currencies, are recognised in the Statement of Financial Performance.

Member and Co-operating States' contributions and contributions to optional programmes are payable in sterling. Revenue from Externally Funded Projects, Third Party Activities (including Copernicus), Sales of Forecasts and Data and other operating revenue is received in a number of currencies, principally euro.

Tangible Assets

Property, plant and equipment are stated at historical cost less accumulated depreciation and any impairment losses. Historical cost includes expenditure that is directly attributable to the acquisition of the assets.

Where an asset (other than land and buildings) is acquired in a non-exchange transaction for a nil or nominal consideration the asset is initially recognised at fair value, where fair value can be reliably determined and as income in the Statement of Financial Performance.

Subsequent costs are included in the asset's carrying value or recognised as a separate asset, as appropriate, only when it is probable that future economic benefits associated with the item will flow to ECMWF and the cost of the item can be reliably measured. The carrying amount of a replaced item is derecognised. All repair and maintenance expenditure is charged to the Statement of Financial Performance during the financial period in which it is incurred.

Project costs relating to the relocation of the Data Centre have not been capitalised and have been recognised in the Statement of Financial Performance as they are incurred.

Depreciation on assets is charged so as to write off the cost of assets less their residual value, other than land, over their estimated useful economic lives, using the straight line method on the following basis:

- Building improvements 15 – 50 years
- Infrastructure, Plant & Machinery
    - Fixtures and fittings 5 – 10 years
    - Technical equipment 5 – 10 years
    - Mechanical equipment 5 – 10 years

The assets' residual values and useful lives are reviewed, and adjusted if appropriate, at the end of each reporting period.

The carrying values of tangible assets are reviewed for impairment if events or changes in circumstances indicate that they may be impaired. If any such indication exists, the recoverable amount of the asset will be estimated in order to determine the extent of the impairment loss (if any). Any provision for impairment is charged to the Statement of Financial Performance.

Following the decision to relocate the Data Centre to Bologna, a number of assets have been identified as no longer useful once the relocation has taken place. The useful lives of these assets have been reduced accordingly and the depreciation charge reflects this decreased life.

ECMWF occupies land and buildings provided by the Government of the United Kingdom (UK Government) at no cost under a Headquarters Agreement dated 11 October 1973 and amended 11 July 1997. In June 1999 the terms of the agreement were extended for a further 20 years.

The UK Government has sole title to the original land and buildings and under the terms of the agreement has responsibility for the maintenance of the exterior of the buildings with ECMWF responsible for the maintenance of the interior of the buildings. ECMWF has therefore, not recognised any value of these buildings in the Statement of Financial Position.

ECMWF have built extensions to the existing buildings, financed by Member States' and Co-operating States' contributions. The Headquarters Agreement provides for the payment of a sum equivalent to the difference between the value of the premises with any new additions and new buildings and the value of the premises without the same at the end of the term of occupation. Therefore, depreciation on building improvements is based upon residual (estimated) values when the current Headquarters Agreement expires in 2019.

Inventories

Inventories are stated at the lower of cost and net realisable value on a first in first out (FIFO) basis. Cost comprises all costs of purchase, costs of conversion and other costs incurred in bringing the inventories to their present location and condition. Net realisable value represents the estimated selling price less the estimated costs of completion and costs to be incurred in marketing, selling and distribution for those asset items that may be sold to third parties. These inventories relate to the stock of unused tapes which will form part of the Centre's data archive and which, once used, are expensed in the Statement of Financial performance.

Receivables

Receivables are stated at their nominal value as reduced by appropriate allowances for estimated irrecoverable amounts. No allowances are made for loss with regard to contributions receivable from Member and Co-operating States, except for exceptional and/or technical reasons sanctioned by the Council. For all other receivables, an allowance for irrecoverable amounts will be based on a review of outstanding amounts at the reporting date.

Cash and cash equivalents

Cash and cash equivalents comprise cash in hand and cash at bank and term deposits.

Provisions

Provisions exist when a liability arising from a past event exists, for which it is probable that an economic outflow will occur. Provisions are calculated using the management's best estimation of the expenditure required to settle the obligation at the reporting date.

Employee benefits/pension obligations

ECMWF operates two defined-benefit pension schemes and a post-employment medical care scheme. The International Service for Remunerations and Pensions (ISRP), in its capacity as the Centre's actuary, performs annual calculations of liabilities for the defined benefit and post-employment medical care schemes, which are recognised in the financial statements.

The annual actuarial valuations are carried out using the Projected Unit Credit Method, which attributes an additional unit of benefit entitlement for each period of service. Each unit is measured separately until the final obligation is constituted.

ECMWF's employee benefit obligations are partially funded by assets held separately and are distinct from all other assets of ECMWF. Historically, the cost of pensions was provided for each year on a pay-as-you-go basis, in common with many public sector bodies across Europe. However, since 2011, the Centre has set aside funds each year to cover the full cost of its pension obligations for that year as determined by its actuaries, as well as some additional funds to reduce its overall long-term liability. The remainder of benefit is supported by Member States' obligations under the ECMWF convention.

Actuarial gains and losses are accounted for in compliance with IPSAS 39 and are recognised in the period during which they occur. They are recognised as a separate item directly in the Net Assets/Equity as per IPSAS 39.

Notes to the financial statements for the year ended 31 December 2017 (continued)

Revenue recognition

ECMWF has several sources of revenue, which are accounted for as follows:

(a) Member and Co-operating States' contributions:
Member and Co-operating States' contributions are recognised in the period to which they relate.

(b) Other income from Member and Co-operating States:
Other income from Member and Co-operating States is recognised in the period to which it relates. This includes income from Optional Programmes.

(c) Income from Sales of Forecast and Data:
Income from the sales of forecasts and data is recognised in the period to which the revenues relate.

(d) Income from Externally Funded Projects (EFP) and Third Party Activities (TPA) excluding Copernicus (COP):
Income from Externally Funded Projects is recognised in line with contractual arrangements. For contracts spanning more than one accounting/reporting period, income is recognised on the basis of costs incurred in the period plus associated contracted mark-up.

(e) Income from Third Party Activities: Copernicus (COP):
Income from Copernicus Third Party Activity is recognised in line with the signed Delegation Agreement. Income related to industrial activities is recognised on the basis of associated direct costs incurred in the period, and fee income in line with that agreed in the Delegation Agreement.

Leases

Assets acquired under finance leases are included in fixed assets at the total of the lease payments due over the life of the lease discounted at the rate of interest inherent in the lease. Lease payments are apportioned between the finance element, which is charged in the Statement of Financial Performance, and the capital element, which reduces the lease creditor. ECMWF did not have any finance leases in the period.

Leases in which a significant proportion of the risks and rewards are retained by the lessor are classified as operating leases. Operating lease rentals are recognised as an expense in the Statement of Financial Performance on the basis at which value is received by the organisation.

Should ECMWF invoke a liquidated damages clause in a contract, the costs of the lease for the period are reduced by the amount receivable/received.

Financial risk management

ECMWF seeks to minimise its exposure to financial risk and has developed risk-management strategies in accordance with its Financial Regulations. ECMWF is exposed to a variety of financial risks, including foreign exchange, interest rate, liquidity and credit risks. ECMWF does not make use of financial derivatives to hedge foreign exchange risk exposures.

(a) *Foreign exchange risk*

ECMWF receives income from Externally Funded Projects, Sales of Forecast and Data and third party activities in currencies other than sterling and is, therefore, exposed to foreign exchange risks arising from fluctuations in currency rates.

Foreign exchange gains and losses resulting from settlement, or translation of year end monetary balances denominated in foreign currencies are recognised in the Statement of Financial Performance.

Foreign exchange gains and losses are presented within other finance costs in the Statement of Financial performance.

The delegation agreement signed with the European Commission for the provision of Copernicus Services is agreed in Euro. In order to minimise foreign exchange risk, all third party procurements agreed with be denoted in Euro and this will account for just over 70% of the total project income over the seven year period. Furthermore costs incurred by ECMWF are reimbursed on a regular basis to minimise large fluctuations on foreign exchange rates between the date incurred and the date reimbursed.

(b) *Interest rate risk*

Interest rate risk arises from the impact of changes in the interest rates on the value of financial assets and obligations. ECMWF's exposure to interest rate risk is limited to the interest receivable on its bank deposits, pension assets and Member and Co-operating States' contributions.

(c) *Liquidity risk*

ECMWF's Financial Regulations permit it to utilise bank credit facilities in case of liquidity requirements.

(d) *Credit risk*

Credit risk is the risk that one party to a financial instrument will fail to discharge on obligations and cause the other party to incur a financial loss. ECMWF is exposed to credit risk in its accounts receivable.

ECMWF has limited credit risk as its exposure is principally to sovereign states, the European Union and other international organisations.

Notes to the financial statements for the year ended 31 December 2017 (continued)

4. Cash and cash equivalents	2017	2016
	£	£
Cash in hand	5,967	5,984
Current accounts	840,391	4,143,283
Deposit accounts	6,975,150	2,868,662
Project bank accounts	57,097	55,338
Third Party activity bank account*	34,632,997	30,015,476
	42,511,602	37,088,743

*Cash received in advance from the European Commission for Copernicus Services

5. Receivables*	2017	2016
Member States' debtors; contributions	288,812	367,307
Co-operating States' debtors; contributions	-	18,466
Member States' debtors; other items	993,322	835,481
Co-operating States' debtors; other items	-	3,177
Sales of forecast and data debtors	490,375	905,991
VAT and other taxes	3,909,924	2,814,533
External project funding receivables	1,657,223	1,331,745
Miscellaneous receivables	99,924	20,420
	7,439,580	6,297,120

*Receivables shown are net of debt provision

6. Prepayments and accrued revenue	2017	2016
HPC prepaid expense	1,541,250	3,596,250
Other prepaid expenses	4,402,755	3,186,633
Accrued revenue; forecasts and data	2,720	1,399
	5,946,726	6,784,282

7. Inventories	2017	2016
Archive data media	714,181	419,925
	714,181	419,925

Notes to the financial statements for the year ended 31 December 2017 (continued)

8. Property Plant & Equipment	Land	Building Improvements	Infrastructure, Plant & Machinery	2017
	£	£	£	£
Cost				
At 1 January 2017	750,000	7,869,173	27,560,942	36,180,115
Additions			941,565	941,565
Disposals			(838,643)	(838,643)
At 31 December 2017	750,000	7,869,173	27,663,864	36,283,037
Accumulated Depreciation				
At 1 January 2017	-	2,031,175	18,137,804	20,168,979
Disposals			(811,755)	(811,755)
Charge for the period		235,543	3,003,570	3,239,113
At 31 December 2017	-	2,266,718	20,329,619	22,596,337
Net book value				
At 1 January 2017	750,000	5,837,998	9,423,138	16,011,136
At 31 December 2017	750,000	5,604,455	7,334,245	13,686,700

9. Payables	2017	2016
	£	£
Suppliers and accrued charges	11,856,610	8,266,015
Co-operating States' debtors	1,539	-
Members States' Fund	3,751,712	3,394,950
Provisions	537,329	664,333
12. Other payables	274,650	288,843
	16,421,840	12,614,141

10. Pre financing	2017	2016
External project funding received in advance*	3,514,844	2,861,126
Externally funded projects provisions*	338,742	45,000
Externally funded projects - coordinator account	57,097	55,337
Third Party Copernicus funding received in advance**	17,984,421	18,885,105
	21,895,104	21,846,567

* in the 2016 Financial Statements the Externally Funded Projects Provision was shown as part of the External Project Funding received in advance. This provision has now been shown separately in 2017.

**relates to pre-finance monies received from European Commission for provision of Copernicus Services, net of costs incurred

11. Deferred revenue	2017	2016
Deferred revenue; sales of forecasts and data	1,011,247	1,315,784
	1,011,247	1,315,784

12. Employee benefits

Defined-benefit schemes

At 31 December 2017, the main actuarial assumptions used to calculate the defined-benefit liability (expressed as weighted averages) were:

	Pension benefits	Post-employment medical care
	%	%
Discount rates	2.47	2.52
Future salary increases	2.12	0.00
Future pension scheme increases	2.12	0.00
Medical costs inflation	0.00	3.85

	Pension benefits	Post-employment medical care	Total
	£	£	£
Present value of obligation at 01/01/2017	227,457,935	18,715,605	246,173,540
Interest cost	6,238,085	521,859	6,759,944
Current service cost	12,623,051	783,290	13,406,341
Benefits paid	(5,458,575)	(398,605)	(5,857,180)
Actuarial (gains)/ losses on obligation	23,361,726	4,185,086	27,546,812
Actuarial Model changes	(3,410,212)	1,182,852	(2,227,360)
Net liability recognised in Statement of Financial Position	**260,812,010**	**24,990,087**	**285,802,097**

In 2017, the actuaries recommended the implementation of a new more flexible actuarial model that more accurately reflects the reality of benefit payments. The assumptions used in this new model remain unchanged but the results will not exactly match the results using the previous model. The impact of changing this model is shown separately on the table above.

Movement in Pension Investment Accounts	**2017**
Opening value of investment account at 01/01/2017	39,809,202
Return on investment during the period	1,994,887
Contributions by employer during the period	7,190,597
Contributions by staff & validation of pension rights during the period	2,724,806
Benefits paid during the period	(5,458,575)
Net asset recognised in Statement of Financial Position at 31/12/2017	**46,260,917**

12. Employee benefits (continued)

Amounts recognised in the Statement of Financial Performance are as follows:

	Pension benefits	Post-employment medical care	Total
Pension and post-employment benefits	**£**	**£**	**£**
Current service cost	12,623,051	783,290	13,406,341
Staff contributions	(2,438,656)		(2,438,656)
Validation of pension rights	(286,150)		(286,150)
Benefits paid		(398,605)	(398,605)
Insurance premium paid		204,657	204,657
	9,898,245	589,342	10,487,587
Finance costs for post-employment benefit			
Interest on obligation	6,238,085	521,859	6,759,944
Increase in value of scheme assets in the year	(1,994,889)	-	(1,994,889)
	4,243,196	521,859	4,765,055

Current service cost is the increase in the present value of the defined benefit obligation resulting from employee services in the current period.

Interest on obligation is the increase during the period in the present value of the defined-benefit obligation which arises because the benefits are one period closer to settlement.

13. General Reserve

	Opening Balance	Closing Balance
	£	**£**
General Reserve	2,394,996	2,394,996

14. IPSAS adjustment reserve

	2012
The surplus arising from IPSAS adjustments are analysed as follows:	**£**
Net book value of infrastructure, plant and machinery at 1 January 2012	9,497,464
Net book value of land and buildings at 1 January 2012	7,439,160
	16,936,624
Net book value of inventories at 1 January 2012	530,430
Provision for leave not taken at 1 January 2012	(355,612)
Net employee benefits at 1 January 2012	(108,460,297)
	(91,348,855)

Notes to the financial statements for the year ended 31 December 2017 (continued)

15. Expenditure	2017	2016
	£	£
Personnel costs		
Salaries and benefits	20,967,234	19,785,729
Other personnel costs (incl. training)	2,321,376	1,680,736
Taxes	6,238,265	5,852,094
Total personnel costs	**29,526,875**	**27,318,559**
Total pension and post-employment benefits	**10,487,587**	**7,153,421**
Buildings expenditure		
Installations and alterations	60,969	32,999
Rental and local taxes	344,983	347,333
Water, gas and electricity	3,007,951	2,761,727
Maintenance, cleaning and security	600,611	509,839
Total buildings expenditure	**4,014,514**	**3,651,898**
Computer expenditure		
Purchases	0	2,835
Hiring and leasing	13,017,870	13,006,991
Maintenance and repair	4,436,114	4,100,161
Delivery and installation	18,195	14,930
Supplies - computer and associated equipment	1,246,927	812,788
Telecommunications network	1,173,179	1,027,388
Total computer expenditure	**19,892,285**	**18,965,093**
Other operating expenditure		
Furniture and equipment	20,813	32,342
Stationery, supplies, etc.	89,497	86,963
Postal, delivery, comms, etc.	55,871	55,805
Miscellaneous insurances	168,405	167,067
Publications and training	450,459	411,968
Governing bodies	236,774	141,341
Expert fees	29,488	50,811
Depreciation	3,239,113	3,416,984
Bad debt provision	27,340	19,610
Other expenditure	68,126	70,156
Total other operating expenditure	**4,385,886**	**4,453,047**
Externally Funded Projects	4,014,713	3,347,219
Externally Funded Projects tax	1,088,211	982,931
Optional Programmes	149,432	176,584
Optional Programmes tax	72,096	71,334
Third Party Activities	684,315	732,493
Third Party Activities tax	182,756	137,402
Copernicus	30,744,889	17,689,268
Copernicus tax	1,245,229	1,105,213
Total externally funded expenditure	**38,181,641**	**24,242,444**
Total expenditure	**106,488,788**	**85,784,462**

Notes to the financial statements for the year ended 31 December 2017 (continued)

15. Expenditure (continued)

Internal tax:

Article 15 of the protocol states "…….the staff members of the Centre shall, within the limits provided for in this Protocol, be subject to a tax for the benefit of the Centre on salaries, wages and emoluments paid by the Centre". The Centre, therefore, deducts an "internal" tax from all salaries paid to staff. This "internal" tax deducted is treated as income by the Centre.

Staff salaries are quoted net of tax and grossed up prior to payment where upon Centre tax is then deducted. This grossed-up amount is shown in personnel costs (including personnel costs within Externally Funded Projects, Optional Programmes and Third Party Activities).

15. Expenditure (continued)	2017	2016
	£	£
Revenue		
Internal tax	8,826,557	8,148,974
Total tax included in revenue	8,826,557	8,148,974
Expenditure		
Tax included in personnel	6,238,265	5,852,094
Tax included in externally funded projects	1,088,211	982,931
Tax included in Optional Programmes	72,096	71,334
Tax included in Third Party Activities	182,756	137,402
Tax included in Copernicus	1,245,229	1,105,213
Total tax included in expenditure	**8,826,557**	**8,148,974**

16. Finance Costs	2017	2016
	£	£
Interest income from overdue contributions	21,304	6,962
Interest income from bank	8,682	85,193
Net foreign exchange income	549,628	633,672
Total finance income	**579,614**	**725,827**
Net foreign exchange cost		
Pension and post-employment benefit costs (note 12)	4,765,055	3,220,407
Bank charges	19,637	20,926
Total finance costs	**4,784,692**	**3,241,333**

Notes to the financial statements for the year ended 31 December 2017 (continued)

17. Segment reporting – Statement of Financial Performance

IPSAS 18 'Segment Reporting' requires entities to report on segments on a basis appropriate for assessing the entity's past performance in achieving the objectives and for making decisions about the future allocation of resources.

The Centre has a clear objective to provide the best possible forecast products to its Member States.

The following activities have been separated by segment:

- Core Activities
- Externally Funded Projects
- Optional Programme
- Third Party Activities – excluding Copernicus
- Third Party Activities – Copernicus only

Additional information is available in Notes 25 & 26.

18. Reconciliation of IPSAS financial reporting to cash results.

The following table combines IPSAS and cash financial reporting. The significant aspect of the financial reporting under IPSAS is the application of the accrual accounting principle with regard to expenses and revenues, pension benefits and other personnel costs, fixed assets and related depreciation. Cash accounting is based on recognition of transactions when there are cash movements.

In order to reconcile this to the cash results, differences between accrual and cash accounting need to be taken into account. These differences can be attributable to timing, or they can constitute permanent differences. The most significant of these differences are the following:

(a) In cash accounting, revenue is required to cover all committed expenditures. In accrual accounting, revenue and expenses include amounts accruing for the reporting period, other committed expenses or revenue are treated as deferred.

(b) In cash accounting, capital expenditures are recorded as current-year expenses. In accrual accounting, the expense is capitalised and depreciated over the useful lives of the assets. The capital expenditure and associated depreciation are recorded at their net value as assets in the Statement of Financial Position. Depreciation expense in the year is recorded in the Statement of Financial Performance.

(c) In accrual accounting, the expense for both pensions and post-employment health cover is estimated by an actuary in accordance with a methodology set out in accounting standard IPSAS 25. The pension and post-employment medical care benefits obligation is reported in the Statement of Financial Position as detailed in note 12.
In cash accounting, pension and post-employment medical care scheme expenditure is accounted for on a pay-as-you-go basis. For pension benefits, the budgetary contributions are estimated on an actuarial basis to represent the long-term cost of the benefits provided.

Notes to the financial statements for the year ended 31 December 2017 (continued)

The following table shows the reconciliation of IPSAS financial reporting to cash results:

	2017	2016
	£	£
Net deficit for the year from continuing operations as per the Statement of Financial Performance	(7,711,506)	(1,664,462)
Adjustment for assets capitalised in the year	(941,565)	(2,149,155)
Adjustment for depreciation in the year	3,239,113	3,416,984
Adjustment for spend against commitments brought forward from 2016	2,741,923	2,131,058
Adjustment for commitments carried forward to 2018	(2,878,768)	(2,741,923)
Adjustment for finance costs for post-employment benefit (note 12)	4,765,055	3,220,407
Adjustment for post-employment benefit	3,100,774	105,824
Adjustment for accruals	282,901	363,209
Adjustment for prepayments	(146,983)	(385,625)
Adjustment for HPC prepayment	1,046,000	1,046,000
Adjustment for change in inventory	(294,256)	(179,480)
Other IPSAS timing differences	(108,219)	725,360
Revenue and expenditure account surplus per cash accounts	**3,094,469**	**3,888,197**

19. Contingencies and capital commitments

ECMWF has no contingent assets and no quantifiable contingent liabilities at 31 December 2017

ECMWF has contracted capital expenditure of £535,827 in 2017 (2016: £1,352,761) but not yet incurred as at 31 December 2017.

Notes to the financial statements for the year ended 31 December 2017 (continued)

20. Operating lease commitments	2017	2016
	£	£
Within 1 year		
HPC service contract[1]	11,242,540	11,098,915
Reading Enterprise Centre[2]	324,000	324,000
Konica Minolta Business Solutions[3]	11,558	11,558
Konica Minolta Business Solutions[3]	4,805	4,805
Konica Minolta Business Solutions[5]	737	
Interoute Communications - One Video Connect[4]	6,180	6,180
Interoute Communications - SmartPoint Screen[4]	4,680	4,680
In 2 to 5 years inclusive		
HPC service contract[1]	20,039,320	31,281,860
Reading Enterprise Centre[2]	688,500	1,012,500
Konica Minolta Business Solutions[3]	7,706	19,264
Konica Minolta Business Solutions[3]	3,203	8,008
Konica Minolta Business Solutions[5]	12,534	
Interoute Communications - One Video Connect[4]	3,605	9,785
Interoute Communications - SmartPoint Single[4]	390	5,070
	32,349,758	43,786,625

1. A contract was entered into during 2013 with Cray UK Ltd and this covers the operational period of the High Performance Computer from 1 October 2014 to 30 September 2018 (initially agreed as 1 July 2014 - 30 June 2018 and subsequently moved by 3 months). In 2015, this lease was extended until 30 September 2020.
2. A rental agreement was entered into during 2015 with The University of Reading to provide accommodation at Reading Enterprise Centre for 5 years from 1 January 2016 to 30 December 2020, with break clauses after 1 and 3 years.
3. 2 lease agreements were entered into during 2016 with Konica Minolta Business Solutions Ltd for 36 months, from 5th September 2016 to 18th September 2019, one for photocopier rental and the other for cards readers and print management software.
4. 2 lease agreements were entered into during 2016 with Interoute Communications Ltd for 2 Video Conferencing Smartpoint Screens; 1 from February 2016 and 1 from July 2016.
5 .1 lease agreement for photocopier rental was entered into during 2017 with Konica Minolta Business Solutions Ltd, for 36 months from 30th October 2017 to 29th October 2020

21. Personnel

The average number of personnel employed by the Centre in 2017 was 336 (2016: 315).

22. Key management personnel

ECMWF was established by a Convention that entered into force on 1 November 1975 (amended June 2010). The organisational structure of ECMWF comprises the Council and the Director-General with six committees assisting this structure.

In accordance with IPSAS 20 'Related Party Disclosures' key management personnel have been identified as follows:

- Director-General and other directors
- Senior managers

The aggregate remuneration for those key management personnel was as follows:

	Number of individuals 2017	Aggregate 2017	Number of individuals 2016	Aggregate 2016
		£		£
The Director-General and other directors	6	1,105,265	6	995,418
Senior managers	8	1,194,967	6	1,069,776
Total key management personnel	15	**2,300,232**	12	**2,065,194**

There was no other remuneration or compensation to key management personnel or their close family members.

23. Related party transactions

There were no material transactions with related parties during the year 2017.

There were no loans to key management personnel or their close family members that were not available to other categories of staff.

Due to its status as an international organisation and the rules of its Convention, the Centre does not consider its Member States to be related parties.

24. Statement of Financial Performance by Segment

		Core Activities		Externally Funded Projects		Optional Programme		Third Party Activities (excluding Copernicus)		Third Party Activities (Copernicus only)		ECMWF Consolidated*	
	Notes	**2017 £**	**2016 £**	**2017 £**	**2016 £**	**2017 £**	**2016 £**	**2017 £**	**2016 £**	**2017 £**	**2016 £**	**2017 £**	**2016 £**
Revenue													
Member & Co-operating States' Contributions		43,454,007	43,346,573									43,454,007	43,346,573
Externally funded revenue			-	4,939,208	4,620,011	202,588	215,237	945,114	960,832	34,166,965	20,894,819	40,253,875	26,690,899
Management fee for Copernicus Services**										2,572,918	2,276,312	2,572,918	2,276,312
Sales of forecasts and data		7,801,982	6,141,908									7,801,982	6,141,908
Other operating revenue		73,021	30,840									73,021	30,840
Total operating revenue excluding taxes		**51,329,010**	**49,519,321**	**4,939,208**	**4,620,011**	**202,588**	**215,237**	**945,114**	**960,832**	**36,739,883**	**23,171,131**	**94,155,803**	**78,486,532**
Taxes												8,826,557	8,148,974
Total operating revenue including Taxes												**102,982,360**	**86,635,506**
Expenditure													
Personnel costs	15	23,288,609	21,466,465	3,891,696	3,199,444	149,432	176.584	609,680	536,218	4,585,845	3,914,294	32,525,262	29,293,005
Pension and post-employment benefits	12 & 15	10,487,587	7,153,421									10,487,587	7,153,421
Buildings expenditure	15	4,014,514	3,651,898									4,014,514	3,651,898
Computer expenditure	15	16,980,847	16,275,203	81,288	127,770			49,525	37,144	2,921,201	2,708,158	20,032,861	19,148,274
Other operating expenditure	15	4,385,887	4,453,047	41,729	20,003			25,110	159,131	6,950	28,818	4,459,676	4,660,999
Procured Industrial Activities										26,142,331	13,727,891	26,142,331	13,727,891
Total expenditure excluding taxes		**59,157,444**	**53,000,034**	**4,014,713**	**3,347,217**	**149,432**	**176,584**	**684,315**	**732,493**	**33,656,327**	**20,379,161**	**97,662,231**	**77,635,488**
Taxes												8,826,557	8,148,974
Total operating expenditure including taxes												**106,488,788**	**85,784,462**
Operating surplus for the period from continuing operations												**(3,506,428)**	**851,044**
Finance income												579,615	725,827
Finance costs	16											(4,784,692)	(3,241,333)
Net deficits for the period from continuing operations												**(7,711,506)**	**(1,664,462)**
Net deficit for the period												**(7,711,506)**	**(1,664,462)**

Notes: Costs which are directly attributable to these activities are allocated to Segments. Support costs are allocated to Core, however the revenue received is still shown in the relevant segment.
** Costs are classified according to segment and in some cases may vary in classification to that on the Statement of Financial Performance*
*** Management fee for Copernicus Services received by ECMWF, to cover support costs in line with the Copernicus Delegation Agreement.*

25. Statement of Financial Position by Segment as at 31 December 2017

		Core Activities		Externally Funded Projects		Optional Programme		Third Party Activities (excluding Copernicus)		Third Party Activities (Copernicus only)		ECMWF Consolidated	
	Notes	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016
		£	£	£	£	£	£	£	£	£	£	£	£
Assets													
Current Assets													
Cash & cash equivalents	4	7,802,652	6,999,346	57,097	55,338					34,651,853	30,034,059	42,511,602	37,088,743
Receivables	5	5,712,456	4,961,965	1,657,223	1,331,745					69,899	3,410	7,439,580	6,297,120
Prepayments and accrued revenue	6	3,293,640	5,558,914							2,653,085	1,225,368	5,946,726	6,784,282
Inventory	7	714,181	419,925									714,181	419,925
Total current assets		**17,522,928**	**17,940,150**	**1,714,320**	**1,387,083**	**-**	**-**	**-**	**-**	**37,374,837**	**31,262,837**	**56,612,089**	**50,590,070**
Non-current assets													
Property, plant and equipment	8	13,686,699	16,011,136									13,686,700	16,011,136
Pension investment accounts		46,260,918	39,809,202									46,260,917	39,809,202
Total non-current assets		**59,947,617**	**55,820,338**			**-**	**-**	**-**	**-**		**-**	**59,947,617**	**55,820,338**
TOTAL ASSETS		**77,470,545**	**73,760,488**	**1,714,320**	**1,387,083**	**-**	**-**	**-**	**-**	**37,374,837**	**31,262,836**	**116,559,706**	**106,410,408**
LIABILITIES													
Current liabilities													
Payables	9	6,219,226	6,715,799							10,202,614	5,898,342	16,421,840	12,614,141
Prefinancing	10	57,097	55,336	3,853,586	2,906,126					17,984,421	18,885,105	21,895,104	21,846,567
Deferred revenue	11	1,011,247	1,315,784									1,011,247	1,315,784
Total current liabilities		**7,287,570**	**8,086,919**	**3,853,586**	**2,906,126**	**-**	**-**	**-**	**-**	**28,187,035**	**24,783,447**	**39,328,191**	**35,776,492**
Non-current liabilities													
Employee benefits		285,802,094	246,173,540									285,802,097	246,173,540
Total non-current liabilities		**285,802,094**	**246,173,540**			**-**	**-**	**-**	**-**		**-**	**285,802,097**	**246,173,540**
TOTAL LIABILITIES		**293,089,664**	**254,260,549**	**3,853,586**	**2,906,126**					**28,187,035**	**35,919,462**	**325,130,288**	**281,950,032**
NET LIABILITIES		**(215,619,119)**	**(180,499,971)**	**(2,139,265)**	**(1,519,043)**	**-**	**-**	**-**	**-**	**9,187,802**	**6,479,220**	**(208,570,582)**	**(175,539,624)**
General reserve	13											2,394,996	2,394,996
Retained surpluses												(12,946,795)	(11,282,333)
Net surplus/(deficit) for the period												(7,711,506)	(1,664,462)
Actuarial adjustments												(98,958,422)	(73,638,970)
IPSAS adjustment reserve	14											(91,348,855)	(91,348,855)
TOTAL NET LIABILITIES												**(208,570,582)**	**(175,539,624)**