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CA/20/18

Report of the Board of Auditors of the European Patent Organisation on the 2017 accounting period

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Orig.: de, en

Munich, 27.04.2018

SUBJECT:	Board of Auditors' report on the 2017 accounting period Explanations and reasons supplied by the President of the Office
SUBMITTED BY:	1. Board of Auditors of the European Patent Organisation 2. President of the European Patent Office
ADDRESSEES:	1. Supervisory Board of the RFPSS (for opinion, Article 80 FinRegs) 2. Budget and Finance Committee (for opinion, Article 80 FinRegs) 3. Administrative Council (for approval and discharge, Article 80 FinRegs and Article 49(3) and (4) EPC)

CONTENTS

I. SUMMARY

A. OUR TASK IN BRIEF

1) We, the Board of Auditors, perform our tasks in accordance with Articles 49 and 50 EPC, our rules of procedure and professional audit principles.

2) Under Article 50 EPC in conjunction with Article 79 FinRegs, our report contains in particular:

- an audit opinion on the accounts
- the results of our audit carried out to ascertain whether the financial management of the Office is sound
- whatever observations we consider necessary as to the appropriateness of the existing budgetary and financial arrangements.

B. OPINION ON THE ACCOUNTS

3) Introduced by the EPO in 2005, IFRSs have applied in their entirety since deletion of an exception with effect from 1 January 2011 (CA/D 5/11).

4) We have been able to give an audit opinion without any reservations on the 2017 accounts.

5) The notes to the financial statements shed further light on specific aspects of the EPO's financial situation.

C. OPINION ON FINANCIAL MANAGEMENT

6) Our audit included not only the annual accounts but also management audits concerning in particular the financial situation, operations and the RFPSS. These have given rise to the following main findings.

1. FINANCIAL SITUATION

1.1. Financial reporting

7) The EPO revised its financial reporting procedure with effect from 1 January 2011 by doing away with the exception previously allowed under Article 1(3) FinRegs. As a result, its accounts as from 2011 are comparable under IFRSs. As set out in CA/84/11, the effect of discontinuing the corridor approach and of no longer netting the RFPSS assets with the defined benefit obligations is that the profit/loss for the year is subject to greater volatility.

1.2. Balance sheet figures

8) As at 31 December 2017, non-current assets were approx. EUR 11 058m. Of the EUR 1 287m increase, EUR 902m came from RFPSS net assets and EUR 310m from bonds.

9) As at 31 December 2017, non-current liabilities amounted to approx. EUR 21 862m, an increase of EUR 1 350m over the 2016 figure. They included EUR 21 088m for the defined benefit liability (pensions and similar obligations), which rose by EUR 1 371m.

10) Current assets were down by EUR 92m, while current liabilities were up by EUR 75m.

1.3. Economic situation, factoring in the present value of future national renewal fees

11) The present value of future national renewal fees cannot be shown under IFRSs because there is no legal obligation to pay them.

12) The present value of future national renewal fees has been put at EUR 4 311m (CA/60/18), resulting in an imputed shortfall of EUR 8 583m.

13) For a long-term view, see the actuarial valuation as at 31 December 2016 (CA/61/17) and the Office's comments on it (CA/62/17). See also the financial study in CA/79/16 (including Add. 1 and Add. 2).

1.4. Income statement

14) There was an operating loss of EUR 207m, which was EUR 198m greater than the loss in 2016, mainly because, although revenue rose by EUR 47m, employee benefit expenses increased by EUR 232m.

15) Net financial income was EUR 323m, which was EUR 175m more than in 2016.

16) There was a loss of EUR 347m under other comprehensive income. This figure was relatively small compared with previous years because the discount rates changed only slightly.

1.5. Statement of cash flows

17) The inflow from operating activities was EUR 521m, and the outflow from investing activities was EUR 533m. The outflow from financing activities was EUR 6m.

1.6. Budget and forecasting accuracy

18) In CA/D 1/16, the AC adopted an authorisation budget within the meaning of Article 25(1)(a) FinRegs totalling EUR 2 213m. The actual outturn was EUR 2 235m, which is only 1.0% higher than forecast.

2. OPERATIONS

2.1. Comments on the accounts and financial management

(a) Post-employment benefit and other long-term employee benefit obligations

19) Calculation of the defined benefit obligations is significantly affected by, among other factors, the discount rate, assumptions as to the development of salaries, the mortality tables, the loading factor of the tax adjustment and the probability of becoming a pensioner for health reasons. Major changes are due to the new career system. We have no objections to the accounting treatment of post-employment and other long-term benefit obligations applied by the Office, but highlight the level of estimate involved.

(b) Calculation of other employee-related liabilities

20) The basis for calculating the open leave balance is not in line with the SAP quantity structure.

(c) Repurchase value Caisse Nationale de Prévoyance ("CNP")

21) Administrative procedures for the transfer are ongoing and a draft protocol has been prepared but not yet signed.

(d) Reimbursement of VAT

22) Invoices have been reviewed for correct VAT handling. All invoices regarding the New Main building are without VAT.

(e) Revenue recognition under IFRS 15

23) All relevant disclosures were checked for consistency with relevant IAS / IFRS requirements. The EPO is well prepared for these IFRS changes.

2.2. Internal control system

(a) IT general controls regarding financial statements

24) From the perspective of accounting, the internal control systems for

- access to programs and data (general system security and password settings, administrative rights and privileged access, user management and access administration);
- program changes and development (change and release management process, authorisation to develop changes, system openings, emergency changes);
- computer operations (back-up and recovery procedures, job scheduling and processing)

generally function well. The recommendations in this report do not negatively influence the audit opinion.

(b) Treasury process

25) The relevant controls implemented within the treasury process function well.

(c) RFPSS governance

26) RFPSS assets are well managed, the procedures and controls implemented function properly and the values of the Funds and the results of the Funds Management have been calculated correctly.

The Value-at-Risk percentage has not been calculated consistently over the past years.

(d) Interaction between HR, Legal Services and Internal Audit

27) Once an investigation has been launched, there is close co-ordination between the Investigation Unit and HR, which meet to discuss the status of the investigation with a view to aligning any possible disciplinary actions. On occasion, cases will require the inclusion of the Legal Department. Currently, this is handled on a case-by-case basis.

(e) Co-operation with Internal Audit

28) PD Internal Audit and Oversight co-ordinates its annual audit programme and medium-term audit plan with us, sends us all audit reports and provides us with information on fraud audits.

2.3. Business administration

(a) Treasury process

29) The Administrative Council decided to change the investment guidelines regulating the handling of the financial assets held by the Office (CA/F 18/17).

30) It is intended to outsource their management to professional firms. As at 31 December 2017, this was work in progress.

31) We have communicated a number of points to the relevant parties in the Office to help them with establishing a new treasury function in 2018.

(b) Payroll process

32) A higher number of Office personnel have specific segregation of duties conflicts, as well as extensive rights in SAP system.

(c) Bonus system

33) We performed testing on a sample basis for all types of bonuses paid in 2017 (reward, performance and team bonuses) to verify whether the bonuses available for Office employees were defined and allocated in line with the internal regulations and guidelines.

34) No deviations from the internal regulations of the Office were identified.

35) The strategic goals and the criteria for the eligibility of staff for a performance bonus are not systematically and strictly defined and communicated.

(d) Purchase-to-pay-process

36) The analysis showed a similarly inefficient situation to that in the previous year, but we note that the Office is in the process of re-working the purchase-to-pay-process.

37) A proper four-eyes-principle is in place for the approval of payments.

(e) BFC

38) We reviewed the completeness of the contracts having to be submitted to the BFC. We did not identify any major omissions in the last three years. As it is not possible to ensure completeness in the current procurement and invoice process, we recommend that the Office implement a contract-management system to cover all contracts. In SAP, all invoices relating to contracts should be linked to the relevant contract.

2.4. IT

(a) **IT roadmap**

39) The budget for the IT roadmap (ITR) was EUR 140m as at 31 January 2018. IM is confident that they will be able to finish the majority of the ITR within the reduced AC-approved budget by the end of 2018.

40) Approximately 90% of functionalities agreed in 2011 and 2014 will have been delivered when the ITR is finished in 2019, but additional functionalities and increases in efficiency could be achieved within the scope agreed in CA/46/11 and CA/46/14.

(b) **UNIP IT project**

41) As the Agreement on a Unified Patent Court has not yet been signed and ratified by all member states it is not clear when the unitary patent (UNIP) will be implemented. As a result, the EPO decided to close the UNIP project (P0525), as all necessary developments had been completed and the systems are fully ready to support the Unitary Patent Process (UPP).

(c) **General Data Protection Regulation**

42) As of 25 May 2018, a new, uniform General Data Protection Regulation (GDPR) on data privacy will apply across the European Union (EU) to all organisations collecting and/or processing data from EU residents.

43) On July 2017, the President issued a task force with a mandate to assess the potential impact of this new EU GDPR on the EPO's current data protection guidelines

44) It is noted that the EPO's current data protection guidelines are relatively closely in line with the new GDPR. However, an action plan is in place to address the potential impact of the GDPR on the EPO.

(d) **Disaster recovery site and data centres**

45) We audited the storage, operation, processing and maintenance of data within and outside the EPO to gain an understanding of the security measures to maintain the IT infrastructure and protect it from external and internal influences and of the contingency planning.

46) We noted that:

- the EPO has a clear and detailed IT infrastructure handbook;

- access to data centres is appropriately restricted to the personnel and monitored by the responsible authorities;
- the data centres' operational functions (e.g. server status, air flow) are monitored by operators 24/7.

47) Based on the outcome of the Security Roadmap – Business Continuity (see CA/46/14) and an external study, a project mandate for new data centres was issued on 16 August 2017. The initial estimated costs for the project had been calculated by IM and approved by the President. Total budget is estimated at EUR 128.8m.

48) The proposal on new data centres was approved by the Administrative Council at its meeting in December 2017.

2.5. Buildings

49) The completion of the New Main building in The Hague is planned for the end of May 2018. In December 2017, the EPO and the contractor worked out a settlement agreement. According to this agreement the contractor is bound to complete the construction works in compliance with the requirements (except minor defects) by 31 May 2018. The fitting out of the new building and moving of staff are expected to be completed in November 2018.

50) In view of the existing contingency budget, the project costs are within the total budget. In particular, a EUR 4.3m provision has been made for asbestos removal and demolition of the existing building.

51) The Boards of Appeal have moved into a rented building in Munich which has been renovated and adapted to its new functions. Specific installations, e.g. interpreter booths, were paid for by the EPO and other construction works by the landlord. The final costs met the estimated amount of EUR 6.7m. The building was handed over in August 2017 and, after furnishing and moving of staff, daily business started in October 2017.

II. DETAILED REPORT

A. PRELIMINARY REMARKS

52) We, the Board of Auditors of the European Patent Organisation, report herein under Article 79 FinRegs on the 2017 reporting period.

53) The accounts reached us on 15 March 2018, i.e. by the deadline laid down in Article 70 FinRegs.

54) Under Article 75 FinRegs and following a public invitation to tender, we also commissioned certain tasks from the following audit firms:

- KPMG Deutsche Treuhand-Gesellschaft Aktiengesellschaft Wirtschaftsprüfungsgesellschaft, Munich (for audit of EPO accounts, business administration and IT)
- BDO AG Wirtschaftsprüfungsgesellschaft, Hamburg (for buildings and RFPSS)

55) Pursuant to Article 76(2) FinRegs the checks were intended to establish in particular whether:

- the terms of the budget and other budgetary provisions were adhered to
- the annual accounts as defined in Article 69 FinRegs were properly substantiated and all transactions properly recorded
- securities and cash on deposit and in hand accorded with the amounts in the cash accounts
- procedures were efficient and economical and whether work could be performed more efficiently with fewer staff or other resources, or in other ways.

56) On the basis of Article 7(1)(e) of the Regulations for the Reserve Funds for Pensions and Social Security (RFPSS), we recommend that the Fund Administrator be discharged in respect of the 2017 accounting period. Our comments on the RFPSS can be found in section I.C.2.2 of the summary above and in section II.D.3 of this detailed report.

57) In accordance with Article 76 FinRegs, we or the above firms carried out checks on the EPO premises. Petty cash at all sites was closed before 1 January 2017.

58) We would like to take the opportunity to thank the President and the Office staff consulted for their help and constructive co-operation.

B. AUDIT OPINION

We have audited the financial statements, comprising the statement of financial position, statement of comprehensive income, statement of changes in equity, statement of cash flows and notes (Article 69(1)(a) FinRegs), together with the bookkeeping system of the European Patent Organisation (EPO), Munich, for the accounting period 1 January to 31 December 2017, as disclosed in CA/60/18. Responsibility for keeping books and records and preparing the financial statements in accordance with Article 50(g) of the European Patent Convention (EPC) and the Financial Regulations (FinRegs), as described in note 2.1 of CA/60/18 ("Basis of preparation"), lies with the President of the European Patent Office (the Office). Under Article 1(3) FinRegs, the EPO's generally accepted accounting principles are the International Financial Reporting Standards (IFRSs) as promulgated by the International Accounting Standards Board (IASB). Our responsibility is to express an opinion on the financial statements, together with the bookkeeping system, based on our audit.

We conducted our audit of the financial statements in accordance with Article 49 EPC and the relevant FinRegs provisions – especially Article 79 FinRegs – and drawing on the German generally accepted standards for the audit of financial statements promulgated by the Institute of Public Auditors in Germany (IDW). Those standards require that we plan and perform the audit such that misstatements materially affecting presentation of the net assets, financial position and results of operations in the financial statements in accordance with the applicable accounting provisions of the FinRegs are detected with reasonable assurance. Knowledge of the business activities and the economic and legal environment of the EPO and expectations as to possible misstatements are taken into account in the determination of audit procedures. For the purposes of our audit, the effectiveness of the accounting-related internal control system and the evidence supporting the disclosures in the books and financial statements are examined primarily on the basis of sample checks within the framework of the audit. The audit includes assessing the accounting principles used and significant estimates made by the President of the Office, as well as evaluating the overall presentation of the annual financial statements. We believe that our audit provides a reasonable basis for our opinion.

Our audit has not led to any reservations.

In our opinion, based on the findings of our audit, the financial statements comply with those IFRSs, as promulgated by the IASB, that are effective and give a true and fair view of the net assets, financial position and results of operations of the EPO.

Munich, 12 April 2018

Board of Auditors

H. Schuh O. Hollum F. Angermann

C. COMMENTS ON THE ACCOUNTS

1. THE EPO'S FINANCIAL AND ECONOMIC POSITION

1.1. Introductory remarks

59) Every Board of Auditors report analyses the EPO's financial situation. Our task under Article 79 FinRegs of ascertaining whether its financial management is sound involves not only verifying compliance with economy, efficiency and effectiveness but also scrutinising its specific self-financing model. The EPO must manage its resources in such a way that it does not need to call on the member states' guarantee.

60) In CA/D 5/11 the Administrative Council did away with the Article 1(3) FinRegs exception, with retroactive effect from 1 January 2011. Since then, the EPO has had to apply the IASB accounting principles in their entirety.

61) This change in its financial reporting procedure has had two major effects:

(a) the RFPSS assets are shown as assets and the defined benefit obligations as a liability, which leads to significantly higher total assets and liabilities

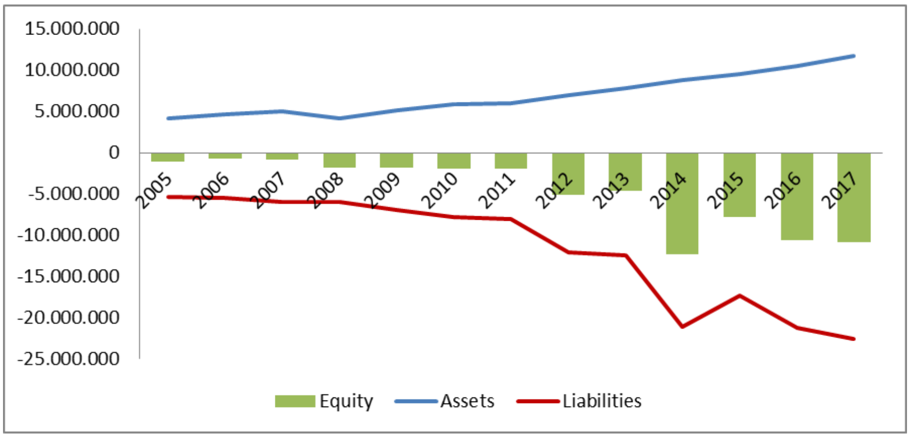
(b) the corridor approach, used when accounting for financial and actuarial fluctuations in the liabilities and assets of the social security schemes, has been discontinued, making the annual accounts much more volatile

62) The 2017 estimates and figures are based on CA/60/18 (financial statements) and CA/10/18 (budget implementation statement).

63) For the detailed balance sheet and income statement figures, see Annexes I/1 and I/2, taken from CA/60/18. Annex III compares the budget estimates as adopted for 2017 and subsequently restated ("IFRS forecast") with actual income and expenditure as per CA/10/18.

1.2. Financial statement figures in brief

(a) Balance sheet



(in EUR '000s)	2013	2014	2015	2016	2017
Non-current assets	7 024 503	8 015 868	8 688 702	9 771 005	11 057 701
Current assets	772 878	767 374	789 967	757 203	664 898
Total assets	7 797 381	8 783 242	9 478 669	10 528 208	11 722 599
Non-current liabilities	-11 814 884	-20 535 860	-16 685 700	-20 512 590	-21 862 320
Current liabilities	-567 353	-587 538	-587 918	-651 883	-727 102
Total liabilities	-12 382 237	-21 123 398	-17 273 618	-21 164 473	-22 589 422
Equity	-4 584 856	-12 340 156	-7 794 949	-10 636 265	-10 866 823

64) As at 31 December 2017, non-current assets were approx. EUR 11 058m. Of the EUR 1 287m increase, EUR 902m came from RFPSS net assets and EUR 310m from bonds.

65) As at 31 December 2017, non-current liabilities amounted to approx. EUR 21 862m, an increase of EUR 1 350m over the 2016 figure. They included EUR 21 088m for the defined benefit liability (pensions and similar obligations), which rose by EUR 1 371m.

66) Current assets were down by EUR 92m, while current liabilities were up by EUR 75m.

67) The negative equity increased by just EUR 231m from EUR -10 636m to EUR -10 867m.

68) The defined benefit liability accounted for by far the largest share of non-current liabilities.

69) The defined benefit liability broke down as follows:

(in EUR '000s)	Active staff	Staff entitled to deferred pension	Pensioners	Total
Pension liability	12 860 562	100 035	5 170 099	18 130 696
LTC insurance	592 138	1 146	306 105	899 389
Health insurance	1 396 207	0	625 492	2 021 699
Death and invalidity	35 851	0	0	35 851
Total	14 884 758	101 181	6 101 696	21 087 635

70) The pension liability (EUR 18 131m) broke down as follows:

(in EUR '000s)	2013	2014	2015	2016	2017
Pensions	7 415 948	13 344 298	11 070 268	13 912 195	14 466 473
Tax adjustment/partial compensation	1 602 267	2 851 942	2 349 661	2 926 869	3 068 196
Invalidity allowance	270 498	389 299	--	--	--
Family allowances	230 877	365 211	319 892	383 200	596 027
Total	9 519 590	16 950 750	13 739 821	17 222 264	18 130 696

71) The defined benefit liability increased mainly because of changes in the discount rates.

	2013	2014	2015	2016	2017
Pension liability	3.89%	1.61%	2.60%	1.82%	1.71%
LTC insurance	4.10%	1.75%	2.78%	2.00%	1.79%
Health insurance	3.90%	1.61%	2.69%	1.82%	1.71%
Death and invalidity	3.17%	1.32%	1.97%	1.28%	1.23%

The rates are within the general guideline values.

On the other hand, the undiscounted pension liability fell from EUR 27.9bn in 2016 to EUR 23.5bn in 2017 as a result of the new career system.

72) The calculations in CA/60/18 (note 20.1) show that a 1% increase in the discount rate would reduce the defined benefit liability by EUR 4 420m, whereas a 1% reduction would increase it by EUR 6 138m.

	Current value	1% increase	1% decrease
Pension liability	18 130 696	14 383 511	23 312 051
LTC insurance	899 389	663 800	1 246 289
Health insurance	2 021 699	1 586 712	2 627 178
Death and invalidity	35 851	32 787	39 396
Total	21 087 635	16 666 810	27 224 914
Difference		-4 420 555	6 137 549

(b) Economic situation, factoring in the present value of future national renewal fees

73) The present value of future national renewal fees cannot be shown under IFRSs because there is no legal obligation to pay them.

74) With no eligible future income to set against the EPO's non-current liabilities from its future business, its balance sheet looks rather lopsided. To counteract that, the present value of future national renewal fees needs to be borne in mind. The figures shown in the table below are taken from CA/60/18.

75) With the present value of future national renewal fees at EUR 4 311m, there is an imputed shortfall of EUR 8 583m.

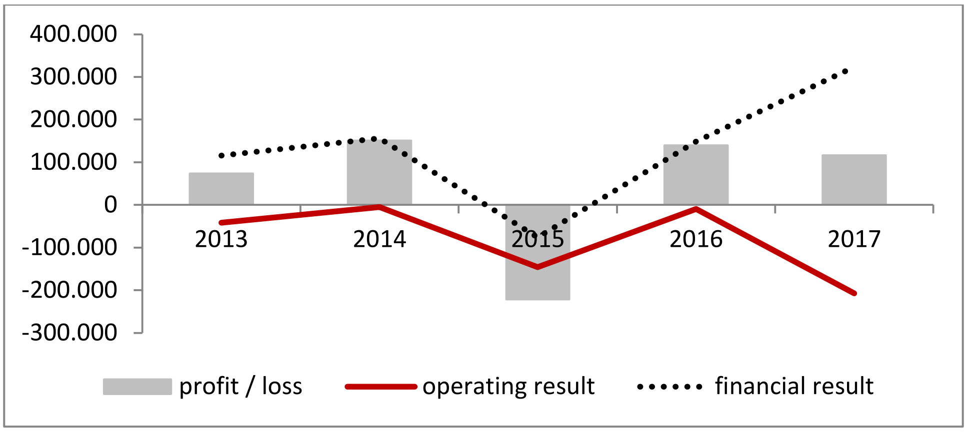
(in EUR '000s)	2013	2014	2015	2016	2017
RFPSS net assets	5 229 485	6 084 859	6 591 858	7 292 203	8 193 835
Present value of future national renewal fees	3 647 126	3 876 977	3 878 744	4 025 807	4 311 079
Net business assets	8 876 611	9 961 836	10 470 602	11 318 010	12 504 914
Defined benefit liability	-11 074 231	-19 740 956	-15 828 589	-19 716 472	-21 087 635
Balance (1)	-2 197 620	-9 779 120	-5 357 987	-8 398 462	-8 582 721

76) A similar picture emerges when the present value of future national renewal fees is compared with equity:

(in EUR '000s)	2013	2014	2015	2016	2017
Equity	-4 584 856	-12 340 156	-7 942 355	-10 636 265	-10 866 823
Present value of future national renewal fees	3 647 126	3 876 977	3 878 744	4 025 807	4 311 079
Balance (2)	-937 730	-8 463 179	-4 063 611	-6 610 458	-6 555 744

77) For a long-term view, see the actuarial valuation as at 31 December 2016 (CA/61/17) and the Office's comments on it (CA/62/17). See also the financial study in CA/79/16 (including Add. 1 and Add. 2).

(c) Income statement



(in EUR '000s)	2013	2014	2015	2016	2017
Operating result	-42 028	-5 180	-145 669	-9 441	-206 975
Financial result	115 479	156 247	-75 838	148 862	323 402
Profit/loss for the year	73 451	151 067	-221 507	139 421	116 427
Other comprehensive income	484 349	-7 906 367	4 766 714	-2 980 737	-346 985

78) There was an operating loss of EUR 207m, which was EUR 198m greater than the loss in 2016, mainly because, although revenue rose by EUR 47m, employee benefit expenses increased by EUR 232m.

79) Net financial income was EUR 323m, which was EUR 175m more than in 2016.

80) There was a loss of EUR 347m under other comprehensive income. This figure was relatively small compared with previous years because the discount rates changed only slightly.

The effect of changed discount rates broke down as follows:

(in EUR '000s)	Revised financial assumptions	Revised demographic assumptions	Total
Pension liability	472 699	-434 149	38 550
LTC insurance	41 922	5 018	46 940
Health insurance	32 501	231 924	264 425
Death and invalidity	164	-3 094	-2 930
Total	547 286	-200 301	346 985

(d) Statement of cash flows

81) The inflow from operating activities was EUR 521m, and the outflow from investing activities was EUR 533m. The outflow from financing activities was EUR 6m.

Cash flows (in EUR '000s) from	2013	2014	2015	2016	2017
Operating activities	376 721	446 953	493 288	519 642	521 037
Investing activities	-436 117	-410 439	-489 951	-565 848	-532 872
Financing activities	-3 344	-5 964	-6 156	-4 328	-5 499
Net increase/decrease in cash and cash equivalents	-62 740	30 550	-2 819	-50 534	-17 334

2. SPECIFIC ACCOUNTING REMARKS

2.1. Post-employment benefit and other long-term employee benefit obligations

82) This chapter should be read in connection with our report on the financial statements for the reporting period ending on 31 December 2016 (CA/20/17) as well as note 28 ("Contingencies and risks") to those financial statements (CA/60/18).

83) As at 31 December 2017, the Office's post-employment benefit obligations amounted to EUR 21 088m and exceeded total assets by EUR 9 365 m. They are summarised in the following table:

Post-employment benefit obligations	**2016**		**2017**	
in EURm	**Gross DBO (undiscounted)**	**As per financial statements (discounted)**	**Gross DBO (undiscounted)**	**As per financial statements (discounted)**
Pension obligation	27 921	17 222	23 469	18 131
LTC insurance	1 583	805	1 639	899
Sickness insurance	3 223	1 653	3 742	2 022
Death and invalidity	42	37	40	36
Total	**32 769**	**19 717**	**28 890**	**21 088**

Source: 2016: CA/60/17; 2017: CA/60/18, Notes 20.1

(a) **Decrease in undiscounted DBO**

As shown in the table above, the undiscounted DBO regarding the pension obligation decreased from EUR 27.9bn to EUR 23.5bn (-16%).

The decrease in the undiscounted pensions obligation of approx. EUR 4.5bn can mainly be explained by the effect of the new career system. The effect on the discounted obligation is an estimated decrease by approx. EUR 0.6bn, partially offsetting the effect of the lower discount rate

(b) **Decrease in discount rate**

84) According to IAS 19, the interest rate used for discounting the defined benefit obligations ("DBO") is determined by reference to market yields at the end of the reporting period. In the case of the Office, it is based on the "iBoXX EURO Corporates AA" index and therefore subject to general market fluctuations. The determination of the discount rate applied by the Office is in line with the requirements of IAS 19.

85) The discount rate used as at 31 December 2017 was 1.71% (previous year: 1.82%) for pension obligations. The method used to determine the rate has been applied consistently. We consider the discount rate used by the Office appropriate.

(c) **Increase in 2017 service costs**

86) Current service costs are measured using the opening DBO, i.e. the liability as at 31 December 2016. They are determined by applying an actuarial calculation. Given the higher discount rates at the end of the 2016 financial year, the opening DBO was comparatively low. Due to the mechanics of IAS 19 and as expected at the end of 2016, current service costs for pension obligations increased significantly in 2017 to EUR 793m (compared to EUR 604m in 2016), leading to a continuing (negative) operating result under IFRSs for 2017. This is partially offset by the positive impact on the financial result in 2017 of the decrease in interest costs from EUR 411m in 2016 to EUR 366m in 2017.

(d) **Impact from changes in schemes applicable since 2015**

(1) Return to tax adjustment

87) At the end of 2014, the Office proposed the replacement of the partial compensation scheme by the former tax adjustment (CA/95/14 Rev. 1), which had been in place until 31 December 2008. The proposal was accepted by the BFC and the Administrative Council at their meetings in November and December 2014 respectively. It is applicable from 1 January 2015 onwards to all pensioners who began active service before 1 January 2009. As at 31 December 2017 liabilities of EUR 3 068m were provided for in respect of the tax adjustment.

88) We concur with the accounting treatment applied by the Office and draw attention to the disclosures in note 28 to the financial statements describing the tax risks of partial compensation.

89) For the measurement of the tax adjustment, please refer to paragraph (f) below.

(2) New career scheme

90) By CA/D 10/14, the Administrative Council decided to revise the ServRegs provisions on remuneration. The new scheme has been applicable since 1 January 2015 and is relevant for financial reporting in the following respects:

- The actuarial calculation of the DBO includes an estimate of future salary increases (estimating the salary of the employee upon retirement), which include promotions and step enhancements, as these are considered "regular" at the EPO. Under the new career scheme, regular promotions and step enhancements based on seniority have been replaced by a performance-based scheme. The Office assessed the impact on the DBO as low, since under the new career scheme, salary increases might slow down but might not significantly change the salary upon retirement for the majority of the employees in service as at 31 December 2017.

- Moreover, a bonus scheme has been implemented to reward exceptional performance. The bonus element does not give rise to any pension entitlement and therefore does not increase any pension obligation. The bonus granted but not yet paid as at 31 December 2017 has been accrued for in the financial statements as the payment only took place in February 2018 (EUR 10.4m).

(3) Invalidity and sickness scheme

91) The Administrative Council approved changes to the ServRegs and PenRegs provisions on the invalidity and sickness schemes in March 2015 (CA/14/15 Rev. 1).

92) For a detailed description of the reform measures, please refer to our report issued on the financial statements for the reporting period ending on 31 December 2015 (CA/20/16).

(e) **Tax issues relating to post-employee benefits**

93) The Office faces several uncertainties in connection with the taxability of invalidity allowances and pensions for 2008 or 2009 to 2015. By reintroducing the former tax adjustment scheme in place until the end of 2008 as well as reforming the sickness and invalidity schemes, the Office has taken measures to limit its risk exposure. The reflection of the tax adjustment in the defined benefit obligation is described in section (c) above. For all other relevant elements, the accounting impacts can be summarised as follows:

(1) Taxation of invalidity allowance

94) The reform of the sickness and invalidity schemes limited the risk exposure to staff who were on non-active status between 1 January 2008 and 31 December 2015 (CA/14/15 Rev. 1).

95) As at 31 December 2017, the number of non-active staff members classed as pensioners during that period was 209.

96) A provision was recognised in 2015, as former invalids had contacted the Office in this matter claiming support in court proceedings as well as reimbursement of taxes paid. Following decisions by German and Dutch tax authorities and courts in 2016 that confirmed the exemption from national income tax, the provision was revised. Nevertheless, the Office assured the Association of EPO Pensioners that the former invalids would be entitled to a compensatory payment covering the difference resulting from tax impacts between the invalidity allowance and the pension and, therefore, a corresponding amount was recognised as an "other employee-related liability" as at 31 December 2017.

97) Its appropriateness remains to be monitored, as the response rate is one of the main estimates within the calculation. Please refer to notes 25 ("Provisions") and 22 ("Other employee-related liabilities") to the financial statements for further information.

(2) Taxation of partial compensation

98) Although the Office is not a party to the legal proceedings, it provides pensioners who have been approached by national tax authorities claiming taxes on partial compensation with legal support. The German Federal Fiscal Court ruled by final judgment of July 2015 that the partial compensation is nationally taxable. The appeal before the Dutch Supreme Court confirmed this position in February 2017.

99) The Office did not enter into any commitment towards the pensioners to bear all financial consequences of national taxation. In 2015, it decided to "phase out" the support measures provided.

100) For accounting purposes, the Office maintains its position that no reimbursement of taxes paid on partial compensation will be made to pensioners as there is no legal or constructive obligation. No provision has been recognised and the potential risk ("contingent liability" in accounting terms) is appropriately disclosed in note 28 ("Contingencies and risks") to the financial statements.

(3) Salary Savings Plan

101) All staff joining the Office from 1 January 2009 are compulsorily members of the "Salary Savings Plan", a deferred compensation model. The contributions are paid by the Office (two-thirds) and by the employees themselves (one-third) and are subject to internal tax under Article 16(1) of the EPO's PPI. Consequently, the Office takes the position that no additional national tax is payable and did not provide for any potential risk of tax reimbursement as at 31 December 2017. Given the fact that the corresponding obligation as at 31 December 2017 amounted to EUR 80m, any potential impact of the tax adjustment is considered immaterial, but may become material over time as more and more employees join the scheme.

(f) **Valuation of the tax adjustment**

102) For the purposes of valuating the tax adjustment on pensions (incl. retirement for health reasons), the Office has not undertaken a detailed assessment of pensioners' country of tax residence and tax status but instead taken a "loading factor" of 21% on the defined benefit obligation for current and future pensioners (incl. pensioners for health reasons) respectively. The actual payment for tax adjustments (or, as the case may be, former partial compensation) is based on the PenRegs and derived from theoretical national income tax according to the Inter-Organisations Section of the Co-ordinated Organisations, taking into account the beneficiaries' fiscal situation in terms of marital status and country of residence.

103) The loading factor is derived from historical information by dividing actual payments for tax adjustments by actual payments for pensions. This calculation method has remained unchanged since 2008. At year-end 2017, the loading factor was verified and revised. Historical information was used to carry out a sanity check by identifying a trend. Since 2008, a minimum of 20.4% and a maximum of 21.8% have been observed. Based on these observations, the loading factor has been set at 21%, which is the same as the one applied the previous year.

104) For accounting purposes, the Office assumes that the country of residence in the case of retirement (incl. retirement for health reasons) mirrors the country of residence as well as tax status of its current retired workforce.

(g) **Summary**

105) Calculation of the defined benefit obligations is significantly affected by, among other factors, the discount rate, the mortality tables, the loading factor of the tax adjustment and the assumption as to the last salary at career end as well as the probability of becoming a pensioner for health reasons. Major changes are due to the new career system. We have no objections to the accounting treatment of post-employment and other long-term benefit obligations applied by the Office, but highlight the level of estimate involved.

2.2. Calculation of other employee-related liabilities

106) Other employee-related liabilities are short-term employee benefits within the meaning of IAS 19 that are due to be settled within 12 months of the end of the period in which the employee renders the related service.

107) In the 2017 financial statements other employee-related liabilities amounting to EUR 155m are recognised. For calculation of employee-related provisions (annual leave, home leave, compensation hours and flexitime) the EPO uses a flat daily rate for all employees with an open leave balance. We noted that the calculation basis is not in line with the information taken from SAP.

108) <u>Recommendation:</u>

We recommend using SAP information for open leave balance instead of a flat rate.

2.3. Repurchase value Caisse Nationale de Prévoyance ("CNP")

109) In its capacity as legal successor to the Institut International des Brevets ("IIB"), the Office accounts for the repurchase value of funds of former IIB members for pension payments as well as outstanding interest thereon of EUR 60.1m (31 December 2016: EUR 58.6m). The increase is due to accrued interest for 2017. Since July 2007 no payments or reimbursements have been made by CNP to the Office. The amount is confirmed by CNP in its yearly statement provided to the EPO. Since 2000, the EPO has aimed at a transfer of these funds from CNP to the Office and a subsequent contribution to the RFPSS. The Office has terminated the contract with CNP, negotiations have been held and a conclusion had almost been reached in 2007, subject to all ex-IIB members concerned approving the transfer (condition set by CNP). Progress has been made and approval has been obtained from all relevant ex-IIB members in the meantime. An internal legal analysis performed by the Office in 2010 did not reveal any concern regarding the Office's entitlement to these assets. Administrative procedures for the transfer are ongoing and a draft protocol has been prepared but not yet signed. The Office expects that the payment might be received in the course of 2018.

2.4. Reimbursement of VAT

110) The EPO acts under the Protocol on Privileges and Immunities (PPI) and has agreements with national governments that exempt it from indirect taxes. This status is based on the European Patent Convention that every member state has to ratify. In Germany the Federal Central Tax Office is responsible for the EPO. This is processed with an informal application. In the other member states the process is an exemption procedure whereby the EPO has to send a certificate to the supplier that the invoice is without VAT. In Belgium the EPO, like every other international organisation, uses the NATO Status of Forces Agreement.

111) We audited the process "posting of an invoice", the VAT manual with the corresponding national legislation, all risk relevant VAT receivables at year end and all invoices regarding the New Main building.

112) The invoices in the sample drawn were reviewed for correct VAT handling. Since every invoice relating to the New Main building is without VAT, no VAT is capitalised.

2.5. Revenue recognition under IFRS 15

113) IFRS 15 replaces the requirements in IAS 11 Construction Contracts, and IAS 18 Revenue and related interpretations, and contains a new set of principles on when and how to recognise and measure revenue as well as new requirements related to presentation and disclosures. IFRS 15 is effective for the annual period beginning 1 January 2018. Nevertheless, its first-time application requires an understanding of the new model and how it is applied to particular transactions, which must be gained several months prior to this date.

114) The EPO drew up an impact analysis of the new IFRS standard on revenue recognition of patent procedural fees at the EPO. In this document it was concluded that IFRS 15 requires changes in the recognition of revenue at the EPO with regard to the recognition of filing fees, claims fees and grant fees.

115) During the 2017 audit we performed audit procedures on the written analysis as well as the data extractions. All relevant disclosures made in the 2017 financial statements are consistent with the relevant IAS / IFRS requirements.

3. GENERAL COMMENTS ON BUDGET IMPLEMENTATION

3.1. Forecast income statement

116) The IFRS plan figures as per CA/D 1/16 and CA/10/18 and the actual ones as per CA/60/18 are juxtaposed in Annex III/1.

117) The operating loss in 2017 of EUR 207m fell EUR 352m short of the forecast profit of EUR 145m. Income was EUR 69m (3.7%) and expenses were EUR 421m (24.4%) higher than forecast.

118) The net financial income of EUR 323m was EUR 396m higher than forecast. This was because finance revenue was EUR 267m higher and finance costs were EUR 129m lower than expected.

119) Other comprehensive income was EUR 347m below the forecast of zero.

3.2. Forecast balance sheet figures

120) The IFRS plan figures as per CA/D 1/16 and CA/10/18 and the actual ones as per CA/60/18 are juxtaposed in Annex III/2.

121) Assets deviated from plan by EUR 965m (9.0%), with non-current assets EUR 1 291m (13.2%) over and current assets EUR 326m (32.9%) under plan. Overall, RFPSS net assets were EUR 747m and securities, current and non-current, EUR 116m over plan, whereas cash and cash equivalents were EUR 244m under plan.

122) Liabilities were EUR 10 526m (87.3%) over plan. This was because the defined benefit liability was EUR 10 458m higher than forecast.

3.3. Comparison of budget as adopted and as implemented

123) The basic figures (as per CA/10/18) for comparing the budget as adopted and as implemented are given in Annex II.

124) In CA/D 1/16, the AC adopted an authorisation budget within the meaning of Article 25(1)(a) FinRegs totalling EUR 2 213m. The actual outturn was EUR 2 235m, which is only 1.0% higher than forecast.

125) Income from patents (Chapters 50 to 54) was EUR 5m (1.3%) over, and other income (Chapter 55 to 58) EUR 1.4m (0.4%) under plan.

126) There were underspends in all operating expenditure chapters. They totalled EUR 169m, including EUR 81m for staff, EUR 45m for general operating expenditure, EUR 16m for IT equipment maintenance and EUR 10m for property and equipment.

127) There was a budget surplus (Chapter 49) of EUR 327m, which was EUR 213m higher than the forecast of EUR 114m.

128) For the pension and social security schemes, income was EUR 14m (4.3%) and expenditure EUR 20m (7.3%) under plan. The transfer to the RFPSS was EUR 24m (47.1%) above plan.

3.4. Appropriation transfers

129) The appropriation transfers under Article 34 FinRegs are shown in Annex II/4. The figures are taken from CA/10/18.

130) Transfers under Article 34(1) FinRegs (within the same chapter) totalled EUR 3.2m.

131) Transfers under Article 34(2) FinRegs (between chapters and not exceeding 20% of the amounts under the chapters concerned) totalled EUR 6m.

132) Transfers under Article 34(3) FinRegs (decision by the BFC or AC) also totalled EUR 6m and concerned Chapters 32 (IT equipment maintenance) and 42 (IT tangible and intangible assets).

D. INTERNAL CONTROL SYSTEM

1. IT GENERAL CONTROLS

133) To form an audit opinion under full compliance with internationally accepted auditing standards (IAS), it was necessary to carry out IT general controls (ITGC) testing. Our audit procedures covered SAP FIPS, EPASYS (MADRAS) and the fee capturing system (FCS).

1.1. Access to programs and data

(a) **General system security and password settings**

134) For EPASYS (MADRAS) and FCS solely Single-Sign-On via Active Directory is used; for SAP FIPS a separate login via SAP GUI is also in place.

135) The EPO's internal password policy ("EPO STANDARD FOR PASSWORD MANAGEMENT") defines different password requirements depending on the type of the accounts (test, administrative, non-individual, etc.). Within the defined Active Directory as well as SAP FIPS password settings, there is no differentiation of password settings based on the account types.

136) Recommendation:

Active Directory and SAP FIPS password setting should be aligned with the password policy or else the password policy should be reasonably updated.

(b) **Administrative rights / privileged access:**

137) We reviewed users with privileged access to programs and data.

- For FCS and EPASYS (MADRAS) no critical observations were identified.
- For SAP FIPS we reviewed users in (permanent or temporary) possession of the critical standard profile SAP_ALL, users with debugging rights, as well as users with authorisation to delete change logs. During 2017, the critical standard profile SAP_ALL was temporarily assigned in 16 cases. Each assignment was appropriately documented and generally for a very limited time period. In addition, a dedicated "FireFighter" process was introduced from July 2017, specifically to handle and document SAP_ALL assignments.

138) We noted that for most of 2017, the logging functionality within SAP FIPS was not enabled and, as a result, actions performed by users with privileged access are not traceable and cannot be followed up completely. As a result, the Security Audit Log was activated on 26 March 2018.

139) Moreover, we noted that the critical authorisation object "S_DEVELOP" (i.e. "Replace in Debugging") is assigned to 27 dialog/service users in SAP FIPS and that the debugging functionality has been used.

140) In addition, we noted that the critical authorisation to delete change logs is assigned to 11 dialog/service users.

Recommendations:

141) The "FireFighter" process should be extended to include a final review of performed actions, via Security Audit Log, once the SAP_ALL profile has been revoked. This control ensures that only requested and approved tasks were performed with SAP_ALL and excludes the risk that the assignment has been "taken advantage of."

142) Debugging rights in the production system should only be assigned (if absolutely necessary) with Activity 03, but never with Activity 01 or 02. If the debugging functionality is needed, it should be handled and documented via the "FireFighter" process. Debugging activities can be traced using the "System Log" (Tcode SM21). The parameter rslg/max_diskspace/local, which specifies the maximum length of the local log, should be increased (current setting: 10 000 000) since entries did not cover 2017 in full.

143) To ensure traceability within SAP FIPS, the critical authorisation to delete change logs should not be assigned to dialog/service users. If any modifications are required, this should be handled and documented via the "FireFighter" process.

(c) **User management and access administration:**

144) We tested the process for user creations as well as profile and role assignments.

A new user account is created by using the FIPS HR information for every permanent staff member of EPO. The user account is created in FIPS and in the Windows active directory with the same user name.

A "miniform" is used for all new user access right requests and all access rights must be authorised by the department lead. The Office was able to provide this "miniform" for all new user creations in 2017.

145) For several profile assignments in MADRAS (EPASYS), the Office was unable to provide any written evidence showing the request and approval.

146) In FCS there is no longer any need for segregation of duties within the Revenue Controls team as all FCS users (working in the accounting officer function) need to perform all tasks in FCS relating to the fee-payment processes. Consequently, no process for profile assignment has been implemented. Segregation of duties is implemented by the split of tasks between the authorising officer and accounting officer functions.

<u>Recommendations</u>

147) In future, all profiles assignments should follow a predefined process that ensures appropriate segregation of duties by clearly defining roles and responsibilities within the process.

148) A process / control should be implemented for the fee capturing system to ensure that all users are reviewed to determine their appropriateness.

1.2. Change management / program development

(a) Change and release management process

149) Changes to the applications follow the Automation Governance process for demand management. The process is applicable for all demands to change existing or to set up new services. The approved demand gets implemented as part of a project or structured activity. Smaller and operational changes are documented as well via the change management tool. All changes must be created in the change management tool and follow the IT change management process. We took a sample of 40 changes for SAP FIPS and 25 for EPASYS, MADRAS and FCS. For all changes, supporting documentation was provided.

(b) Authorisation to develop changes

150) Our IT audit procedures involved querying the number of users authorised to develop changes in the development system.

151) We identified 157 dialog/service users who have authorisation to create transportable change orders in the development system. In addition, 145 dialog/service users with authorisation to release change orders in the development system were identified.

152) <u>Recommendation:</u>

The number of users authorised to create transportable change orders and release change orders in the development system should be reviewed (and possibly reduced).

(c) **System openings**

153) Generally, SAP FIPS is locked and therefore prevents modifications of client-dependent customisations. During 2017, we identified 161 system openings for client "100" which enabled direct changes to the productive system.

154) For several system openings within our sample, the Office was unable to provide appropriate supporting documentation. In addition, for most of the system openings, the parameter set results in a lack of audit trail.

155) <u>Recommendation:</u>

We recommend that all system openings follow the "FireFighter" process and that the parameter CCCORACTIV is always set to "1" to ensure a sufficient audit trail.

(d) **Emergency changes**

156) We verified direct table changes as well as changes performed using the "Repair" function.

For all relevant cases, supporting evidence was provided.

157) <u>Recommendation:</u>

Due to the potential criticality, as well as to ensure consistent and standardised documentation, direct table changes and changes using the "Repair" function should follow the "FireFighter" process.

1.3. Computer operations

158) We examined whether backup procedures are in place for all applications in scope and whether data is backed up on a regular basis, and noted no deviations.

159) In SAP, terminations of postings are logged by the system and the log files are deleted after 400 days.

In SAP, batch interfaces had been run on error and were not completely deleted. For both identified batch jobs with error status, appropriate corrective action had been taken.

2. INTERNAL CONTROLS IN TREASURY PROCESS

160) Investments of the EPO are governed by a number of regulations at various hierarchical levels. We performed control testing for relevant controls implemented within the treasury process.

161) We reached no material findings in our controls testing. The implemented controls are effective.

3. RFPSS GOVERNANCE

3.1. Proper working of the internal control system

162) The control system was audited by reviewing a sufficient sample of transactions in terms of proper functioning of the internal control system, documentation, segregation of duties and documentation of all required controls.

163) The internal control system is working properly.

3.2. Daily compliance checks and weekly/quarterly reports

164) All daily compliance checks and all weekly reports of the Compliance Officer were checked. All daily exceptions are included in the weekly report of the Compliance Officer. Moreover, for the first time, all daily exceptions were noted on the first page of the daily reports.

165) Only passive breaches took place. They were eliminated within the given time of 23 working days.

166) In one instance Neolink did not execute a specific order. This was due to the fact that Neolink does not allow the opening of more than 3 windows at the same time. That fact was unknown to the users.

The related IT problem has been resolved by Neolink and the missing transaction has been processed in the meantime. The event was included in the weekly reports as a late settlement and as a change in the NEOLINK user rights due to a technical issue. The case was open for seven weeks before the custodian IT department solved the issue.

3.3. Consistency and quality of quarterly reports

167) The quarterly reports have been checked for consistency of format, numbers and explanations. The reports have been expanded by the new Fund Administrator to include more explanations. Each report now starts with an executive summary. All charts are now verbally explained in detail.

168) The reports are consistent with the past but present more explanations.

3.4. Risk-management developments within the RFPSS/ results of internal audit

169) We reviewed the extensions of risk management within the Funds administration and the expansion of the quarterly risk reporting. The extended risk-management report gives much more insight into the risk situation and development.

170) Recommendation:

We recommend adding a chart on risk-return measures to the report, i.e. showing the development of the relative Value at Risk and the relative performance over time for each asset class.

3.5. Calculation of tracking error and continuation of rebalancing

171) Tracking error is calculated using standard software from BarraOne on the basis of common formulas which cannot be accessed and manipulated by the EPO staff. Rebalancing is performed by the Funds Administration once in a while, as appropriate under the market circumstances.

3.6. Allocation of payments by the EPO to the different funds

172) The Office dedicated its lump-sum payments to the RFPSS of EUR 90m in early 2017 and of EUR 103m at the end of 2017 explicitly to the pension funds.

173) In the past, most payments were dedicated by the Office to a part of the RFPSS liabilities. Only when there was no such a dedication was the payment split and allocated in proportion to the existing balance.

3.7. Use of tax exemptions

174) All possible tax exemptions and allowances are managed by the custodian bank BNP, which does all the necessary formalities. Significant amounts have been outstanding for a significant time from the Italian and French tax authorities only. The issues are communicated to the EPO's Legal Department. The amount is well below EUR 1m.

3.8. Cost of funds administration

The total cost of the funds administration was reported to the Supervisory Board in a report dated 19 April 2017. It stands at 0.1% of average assets under management. That is far below the cost of any outsourcing alternative.

3.9. Calculation of VaR percentage

175) Market risks are mitigated by diversification and by limitation provisions defined in the investment guidelines and code of procedure and quantified using Value at Risk (VaR), a statistically based estimate of the potential loss on the portfolio resulting from adverse market movements. This metric makes it possible to estimate the maximum expected loss with a degree of confidence, chosen to be 95%, within a one-month horizon. MSCI's BarraOne provides, amongst several other statistics, the VaR projected over the holding period as defined above. Alternatively, the statistic total risk scaled on the 95th percentile and projected over a one-month horizon (1/12 of 252 business days), using the standard square root methodology, can be used.

176) We noted that the VaR percentage has not been calculated consistently over the past years. In 2015 the calculation was based on 252 days per year (21 days per month), in 2016 on 240 days (20 days per month) per year and in 2017 on 252 days per year again. If fewer than 252 days are used in the calculation, the VaR must be projected by using a complex square root methodology.

177) Recommendation:

We recommend calculating the VaR percentage on a consistent basis, using the 95th percentile and projected over a one-month horizon (1/12 of 252 business days).

4. INTERACTION BETWEEN HR, LEGAL SERVICES AND INTERNAL AUDIT

178) Directorate Ethics and Compliance is tasked with ensuring that all staff comply with the rules and regulations in force at the EPO. Allegations or indications of fraud or other misconduct can be submitted over a whistleblower hotline or via the HR Department. Once an investigation has been launched, there is close co-ordination between the Investigation Unit and HR, which hold monthly meetings to discuss the status of the investigation with a view to aligning any possible disciplinary actions. Nevertheless, there are cases that will eventually lead to co-ordination with national authorities and have an impact on the financial statements and therefore require the involvement of the Legal Department. Currently, this is handled on a case-by-case basis.

179) Provisions for complaints filed before the Administrative Tribunal of the ILO are recognised by notification of the HR Department within year-end closure.

180) Recommendation:

We recommend formally implementing a process with a joint ad-hoc committee for serious cases. This way, the Legal Department will be involved in the process at an earlier stage and possible financial impacts of employee reimbursements or complaints can be evaluated and included in the in-house legal letter.

5. CO-OPERATION WITH INTERNAL AUDIT AND OVERSIGHT

181) Principal Directorate Internal Audit and Oversight informs us of its general annual audit programme, the one for the RFPSS and its medium-term audit plan, and co-ordinates the annual programmes with our own audit plans in order to avoid any duplication.

182) We receive all audit reports and are given information in brief on all fraud audits. We are sent further information on request.

E. OPERATIONS

1. TREASURY PROCESS

(a) Introduction

183) The Administrative Council decided to change the investment guidelines regulating the handling of the financial assets held by the Office (CA/F 17/18, BFC/119 meeting on 12 December 2017). The average balance of liquid assets has continuously increased over the past years, and an investment policy utilising a wider range of asset classes – accepting more risk – is assumed to yield a significantly higher return on the assets.

184) Under the previous investment guidelines, a large portion of the surplus cash was held as bonds and bank deposits, and as at 31 December 2017, the Office had a total volume of EUR 145m of fixed-term deposits with a latest maturity date in 2020. These funds yield a relatively low return.

185) The new investment guidelines prescribe diversification of the financial instruments offering risk/return profiles aligned with the long-term cash flow forecast of the Office. To execute the investments in the defined asset classes, the appropriate financial instruments are defined in the new investment guidelines. The maximum risk exposure, defined as Value at Risk, is limited to the 20% of the total assets' value in accordance with the new investment guidelines.

186) It is planned to outsource the management of the abovementioned investments to professional firms. As at 31 December 2017, this was work in progress.

187) As a part of the audit work, we reviewed the treasury function as it had been working in 2017. The purpose of this exercise was to identify areas where the Office might improve the process and obtain a clear picture of the risks involved when moving forward to the new investment policy. As the treasury function will be realigned with a new investment policy, our remarks on the old system have not been reproduced.

188) However, as a part of the audit, a number of points have been communicated to the relevant parties in the Office to help them with the task of implementing the treasury function in 2018. The points have been favourably received by the Office, and will be taken into consideration.

189) As the new treasury function will become operational in 2018, we will review the established procedures and internal controls in the audit report for 2018, taking into account any areas where mitigation internal controls should be implemented to meet shortcomings in the investment guidelines.

2. PAYROLL PROCESS (HR)

2.1. Review of payroll processing

190) The audit of the payroll process in the Office covered:

- a review of the responsibilities, access rights and segregation of duties within the HR and payroll departments;
- a review of payroll processing, including the approval and bank-transfer processes, as well as a review of the components of salary, including the internal tax component;
- a review of computation of salaries.

191) For payroll processing, we found that proper processes and controls are in place to ensure the payment and bank-transfer process is properly performed.

192) For the computation of salaries, our audit of a sample did not lead to any findings as to this process.

193) A higher number of Office personnel have specific segregation of duties conflicts, as well as extensive rights in SAP system. The main findings concern the following:

- Number of segregation of duties conflicts in SAP system, including rights provided to the extensive number of personnel;
- Extensive rights in SAP system in respect of read access;
- Extensive rights in SAP system in respect of maintenance and changes of one's own data.

194) Segregation of duties conflicts can lead to financial losses for the Office.

195) Extensive and unnecessary access rights may result in the dissemination of information to users who do not have a legitimate need for the information.

196) We recommend that the Office reduce the number of users with access rights they do not strictly need, both to reduce the segregation of duties conflicts and to improve the protection of personal information.

197) We recommend that the Office install detection controls in instances where segregation of duties conflicts cannot be avoided.

2.2. Bonus system

198) With respect to the Office's bonus system, it should be noted that two reward and performance cycles were covered by our audit. We performed a review of the cycle using 2016 as the base year for performance evaluation, as this year is the basis for the bonus payments in the 2017 accounts.

199) According to Communiqué 1/2017, all categories of staff working for the Office in 2016 were eligible for a performance bonus, including those who joined and left the Office during the year. In 2016 a team was introduced as a new, additional type of performance bonus whose purpose was to foster collective achievements and which was distributed equally among the members of the team in question.

200) Of the 6 839 employees eligible in total for a bonus for 2016 (100%), 5 092 (74.4%) received at least one of the bonuses in the categories described above.

201) We performed testing on a sample basis for all types of bonuses paid in 2017 (reward, performance and team bonuses) to verify whether the bonuses available for Office employees were defined and allocated in line with the internal regulations and guidelines. Additionally, we tested whether the performance evaluation of individuals resulted in bonus payments. No deviations from the internal regulations of the Office were identified.

202) The strategic goals and the criteria for the eligibility of staff for a performance bonus are not systematically and strictly defined and communicated.

3. FOLLOW-UP ON PURCHASE-TO-PAY PROCESS

203) In CA/20/17 we reported on the purchase-to-pay process (E.1. page 34), and issued a number of recommendations, both targeting inefficiency and minor financial loss due to a low level of automation, under-use of the SAP system and extensive operations outside that system.

204) The analysis carried out in 2017 shows a similar situation but the Office has started to implement the recommendations, introducing changes and initiating new projects in order to increase the level of automation throughout the purchase-to-pay process. Amongst others, we have identified three major areas:

- Introduction of an optical character recognition (OCR) process for invoices (live since 6 November 2017);
- Establishment of a vendor invoice management (VIM) system (going live in January 2018);

- Establishment of a goods receipt tool to match purchase orders, goods receipt and invoices (no go live date yet).

The Office also made other changes during 2017, both to the process steps and in its use of the SAP system.

205) Since the abovementioned changes were implemented or rolled-out out very late in or after our audit period, it was not covered in terms of our audit. A detailed reporting for the entire year 2017 would not give an accurate or robust picture of the current situation.

206) Hence, we note that the Office is in the process of re-working the purchase-to-pay process, and will report on this in the audit report for 2018.

207) As our recommendations are the same as for 2016, we will only comment on the status of implementation of the CA/20/17 recommendations.

208) Our analysis of the payment process showed that a proper four-eyes-principle is in place for the approval of payments.

4. BUDGET AND FINANCE COMMITTEE

4.1. Background

209) The Office's Financial Regulations (FinRegs) require a Budget and Finance Committee (BFC). It is composed of one representative and one deputy representative of each of the 38 contracting states.

210) Article 58 FinRegs defines the contracts having to be presented to the BFC prior to finalisation:

- Contracts and rentals for indivisible units exceeding EUR 3m have to be approved by BFC, except for contracts for acquisition, exchange or long-term lease of immovable property (i.e. real estate) and contracts and leases budgeted in Chapters 32 and 42 (IT) or Article 3103 (utilities), for which no BFC approval is needed.

- Contracts for the acquisition, exchange or long-term lease of immovable property for an indivisible unit exceeding an amount of EUR 3m are subject to comment by the BFC and then approval by the AC.

211) The documents on the basis of which BFC takes a decision must be provided at least 16 days before the actual meeting and are prepared by the Procurement department on behalf of the President of the Office. There is no fixed structure, set of criteria or list of the documents that are to be provided to the BFC. Decisions are taken by a majority of the votes.

212) All BFC meetings are documented in minutes, while the decisions taken are additionally reflected in a summary of decisions.

4.2. Audit

213) We performed an audit to

- Verify the completeness of contracts and leases presented to the BFC;
- Review the documentation supplied to the BFC.

214) All summaries of decisions and minutes of meetings regarding procurement matters for 2015, 2016 and 2017 were audited. In total we identified 13 relevant documents presented to the BFC concerning amounts above EUR 3m:

Year	Art. 58(1) FinRegs	Art. 58(2) FinRegs
2017	CA/F 7/17 CA/F 8/17 CA/F 17/17	
2016	CA/F 14/16	CA/F 82/16
2015	CA/F 17/15 CA/F 16/15 CA/F 14/15	

215) All documents were sent to the BFC 16 days in advance of the meeting date. The majority of cases considered by BFC in 2017 and 2016 concerned investments in IT services or services related to new building in Rijswijk.

4.3. Completeness

216) The Office has no structured and documented database of procurement cases; nor is any contract-management application/database available in the SAP system. Without a system to match invoices to contracts, there is no easy way to ensure that all procurements falling under Article 58 have actually been presented to the BFC.

217) Based on a sample testing of the largest suppliers, we identified only one minor contract not correctly handled in accordance with the regulations. We have no reason to believe that not all relevant contracts are presented to the BFC.

218) In order to increase transparency in relation to the BFC and procurement regulations, and to improve inter-office efficiency, we recommend that the Office implement a contract-management system to cover all contracts. In SAP, all invoices relating to contracts should be linked to the relevant contract.

4.4. Supplied documentation

219) There are no strict requirements/checklists in respect of the documents that are to be supplied to the BFC for making its decisions. The absence of a structured approach and requirements for the documents increases the risk that the BFC's decision-making process might be made based on incomplete information.

220) As there is no defined requirement as to what information should be submitted to the BFC, there is no objective basis for us to determine whether the BFC receives sufficient information to give its approval or recommendation to the AC. In our opinion, any such requirements could be included in the financial regulations.

5. IT

5.1. IT roadmap assessment

(a) Context

221) The IT roadmap 2011-2015 (CA/46/11) was presented to the Administrative Council at its June 2011 meeting. It set out the strategic directions for IT at the EPO and was updated in 2014 (CA/46/14) to include new requirements.

(b) Current budget

222) The budget for the IT roadmap (ITR) was EUR 140m as at 31 January 2018. IM is confident that they will be able to finish the majority of the ITR within the reduced AC-approved budget by the end of 2018.

(c) Current status (delivery)

223) A total of 114 projects are currently registered under the ITR. A total of 92% of the projects initiated since the start of the ITR have been closed (compared to 82% in 2016).

224) In total, 22 projects were stopped: for eight projects, the business requirements had been absorbed by one or more new projects; seven individual projects were merged into one new project; and seven other projects were stopped for other reasons (e.g. no valid business case).

225) Eight projects were closed in 2017. Two projects were started or added to the ITR in 2017.

226) Eleven remaining projects will be finalised within 2018 and four projects will be finished in 2019.

227) The total ITR automation budget amounted to EUR 139.5m as at 31 January 2018. It includes a reduction, the relocation of projects P0525 (UNIP) and P0672 (Espacenet), amounting to EUR 3.8m, to Chapter 33 International Cooperation and the funding for remaining projects.

(d) **Current status (functionality)**

228) Approximately 90% of functionalities agreed in 2011 and 2014 will be delivered by the end of 2018. We noted that several functional changes had been performed under the ITR (expanded scope and higher functionalities).

5.2. UNIP

(a) **Context**

229) As the Agreement on a Unified Patent Court has not yet been signed and ratified by all member states, it is not clear when the unitary patent (UNIP) will be implemented. As all necessary developments had been completed and systems are fully ready to support the Unitary Patent Process (UPP), the EPO (Executive Board) decided on 20 September 2017 to close the UNIP project (P0525). The UNIP end report was approved by the Programme Operational Board on 9 February 2018. As per the report, the activation phase is planned to start in March 2018 and will be completed by October 2018, although there is an additional six-month guarantee period.

230) We noted that the costs of the UNIP project at project closure were EUR 7.8m (compared to EUR 6.9m in the exception report dated 19 January 2017). The project end report provides an aggregated list of the approved changes. Even though we had been informed in January 2017 that UNIP supports all functionalities, new requirements had been raised by the business during 2017 and were implemented by IM following decision by the relevant governance bodies. This led to an increase of the budget by EUR 963 692. In the UNIP end report the automation costs are EUR 4.4m.

5.3. General Data Protection Regulation

231) On 25 May 2018, a new, uniform General Data Protection Regulation (GDPR) on data privacy will be adopted across the European Union (EU), which will apply to all organisations collecting and/or processing data from EU residents.

232) In July 2017, the President issued a DG 5-led task force with a mandate to assess the potential impact of the new EU GDPR on the EPO's current data protection guidelines.

233) This review showed the following:

- Specific guidelines on the protection of personal data are in place that describe the handling of personal data by the EPO (employees and external contractors);
- Data collection, data processing, rights of the data subjects and the roles and duties of the personnel involved are clearly and appropriately described in the guidelines;
- The EPO's data protection guidelines address the transmission of personal data of the subjects to recipients within and outside the EPO organisation (including organisations outside the EU);
- A system for managing contracts with external service providers is in place which ensures that suppliers comply with the security obligations;
- For data leakage / misuse, the EPO has a process flow in place. The comprehensive analysis report (October 2017) presented by the task force to the President took into account all the considerations necessary to address the impact of the GDPR on the EPO.

234) It is noted that the current EPO data protective guidelines are relatively closely in line with the new GDPR. An action plan is in place to address the potential impact of the GDPR within the EPO.

235) Data leakages or misuse are reported to the Data Protection Officer (DPO) immediately. The DPO informs the President, who then decides on any further action necessary.

236) <u>Recommendations:</u>

237) We recommend drawing up an action plan during data infringement, describing processes to ensure a quick and efficient response to the breach.

238) We recommend that the requests for data transmission within the EPO be approved and stored by a competent authority defined in the data protection guidelines.

239) We recommend continuing to review contracts with externals to ensure the compliance check is completed in a timely manner.

5.4. Disaster recovery site and data centres

240) The EPO has a clear and detailed IT infrastructure handbook which describes the security, regulations and duties to be followed within the premises of the data centres (The Hague, Munich, Vienna and Berlin).

241) Access to data centres is appropriately restricted to the authorised personnel and monitored by the responsible authorities.

242) The data centres' operational functions (e.g. server status, air flow) are monitored by operators 24 hours a day, 7 days a week.

243) After an external study, IM recommended that the primary campus and the disaster recovery site be outsourced to a co-location in Munich. Based on the outcome of the Security Roadmap – Business Continuity (CA/46/14) and the abovementioned study, a project mandate for new data centres was issued on 16 August 2017. The initial estimated costs for the project had been calculated by IM and approved by the President. The total budget is estimated at EUR 129m.

244) The proposal from IM on establishing new data centres was approved by the AC at its December 2017 meeting. At the same meeting, it authorised the President to negotiate a complementary agreement with Luxembourg under Article 25 PPI to include data in an electronic form held by third parties off-site in the scope of Article 2 PPI (CA/119/17).

245) We noted that a new project had been set up for transition of the current data centre to a high security Tier IV data centre. This project is classified as a "large" project.

246) Recommendation:

We recommend giving the data centre project high priority.

6. BUILDING PROJECTS

6.1. Building investments in The Hague

247) In December 2017, the EPO and the contractor worked out a settlement agreement. According to this agreement the contractor is bound to complete the construction works in compliance with the requirements (except minor defects) by 31 May 2018. The agreement also provides for settlement of most of the open claims in return for a payment of EUR 4m by the EPO.

248) The completion of the building is planned for the end of May 2018.

249) The fitting out of the new building and the moving of staff are expected to be completed in November 2018.

250) The completion of the whole project (including outside area and demolition of existing building) is planned for 2020.

251) In view of the existing contingency budget, the project costs are within the total budget. Most of the open claims have been settled under the settlement agreement. The contract without contingencies amounts to EUR 205m. The works for asbestos removal and demolition of the existing building after the end of the construction works are budgeted at EUR 4.3m. The contingency budget (in total EUR 41m) has not been completely spent.

6.2. Building for the Boards of Appeal

252) The Boards of Appeal have moved into a rented building in Munich which has been renovated and adapted to its new usage. Specific installations, e g. interpreter booths, were paid for by the EPO and other construction works were paid by the landlord. The final costs met the estimated amount of EUR 6.7m. The building was handed over in August 2017 and, after furnishing and the move of staff, the daily business started in October 2017.

III. STATUS OF PREVIOUS YEARS' FINDINGS

The first two columns in the table below give the recommendation reference and title, the third is the EPO's implementation report, and the fourth and last reflects the auditors' comment(s).

With regard to the auditors' comments:

- "No further comments" means the auditors do not expect any further explanations from the Office, although they could, in future audits, revisit the issues considered.
- "Recommendation closed" means the auditors consider the Office's response has resolved the issue raised.

A. OFFICE'S FOLLOW-UP REPORT ON CA/20/17 (STATUS 31.01.2018), AND AUDITORS' COMMENTS

Reference	Title	Status 31.01.2018	BoA's/expert's comments
II.C.2.2 114 Pri. 2	The documentation should include an assessment of how the useful life of the asset was determined and if there are specific business reasons justifying a deviation.	Closed For new internally generated intangible assets, the summary file presenting the capitalisation of intangible assets has been updated with a new field to document the assessment of the useful life; in particular if for specific reasons a deviation from the standard useful life is required. For existing internally generated intangible assets, the useful life is already reviewed on a yearly basis, and any adjustment needed is documented.	Closed

Reference	Title	Status 31.01.2018	BoA's/expert's comments
II.C.2.4 117 Pri. 1	We recommend implementing a checklist of all actuarial assumptions and stating if / how these have been changed compared to prior period as well as the expected effect on the DBO. This list should be discussed between HR Policy as well as Finance departments and the actuary.	Closed The 2017 year-end accounting of the defined obligation report has been issued by ISRP (2 March 2018). It already includes actuarial assumptions and methods (Appendix 1), detailed densitivities (Appendix 5) and actuarial gains / losses per nature (page 8). Supplementary document including comparison of parameters vs last year will be delivered by 21 March 2018	Closed
II.D.1.1 135 Pri. 2	In order to rely on the effectiveness of the controls, it is recommended that consideration be given to implementing a template for a process description and a controls matrix, both in line with the internationally applied COSO framework.	Pending	Ongoing
II.D.1.2 142 Pri. 1	We recommend that Application Management further improve access, log files and system openings.	Closed Directorate D4104 CA_BS, in co-operation with the IM department, Finance and HR Applications, has strengthened the procedures related to access, log files and system openings. Documentation has been updated accordingly.	No further comments
II.D.1.3 145 Pri. 2	For Application Management, a process considering a follow-up of batch jobs with error status, especially files older than 6 months should be implemented in order to evaluate if relevant postings are affected.	Ongoing Implementation of the recommendation is in progress and expected to be completed in Q2/2018.	Ongoing

Reference	Title	Status 31.01.2018	BoA's/expert's comments
II.D.1.4 147 Pri. 1	We recommend that the General Management Service define an archiving strategy and implement an appropriate archiving solution for storing electronical invoices.	Closed An archiving solution has been implemented successfully. The main requirement of the project was to assign a unique ID for every scanned document throughout its full life cycle. In this way, every electronic invoice sent for OCR will be tracked and referenced back to our archiving server logs.	Closed
II.D.2.2 152 Pri. 2	A rearrangement of the process (e g. using an electronic workflow) should be considered to simplify and augment the efficiency of this investment process.	Ongoing The Fund Administrator is currently reviewing the electronic workflow and expects to report further during 2018.	Ongoing
II.D.2.2 153 Pri. 3	At least every 10 years the value of the IT systems and its providers should be reviewed against fees paid and alternatives available.	Ongoing The Fund Administrator plans to carry out a market survey with the help of an external consultant within the next five years (2022).	Ongoing
II.D.2.3 156 Pri. 2	All breaches of the rules should be indicated on the front page of the daily compliance report.	Closed The compliance report has been amended accordingly.	Closed
II.E.1 175 Pri. 1	We recommend that the EPO initiate a project to implement major changes in the purchase-to-pay process, and fully utilise the possibilities of electronic procedures.	Closed The projects IRR (P0668) and PPE (P0669) were successfully closed by 31.12.2017. IGR2P (P0663) has been rolled out. Integrated contract management (P0738) and expense management (AM-1-DM 1093 and 1251) have been endorsed by the Corporate Area Board.	Ongoing
II.E.3.1 207 Pri. 3	We recommend that costs to a project should be linked strictly to a project and the finance and accounting system to ensure data integrity for all views.	Closed The recommendation has been implemented.	Closed

Reference	Title	Status 31.01.2018	BoA's/expert's comments
II.E.3.1 209 Pri. 3	All exception reports should be sequentially numbered.	Closed A new exception report template has been created and was formally released on the 1 December.	Closed
II.E.3.3 218 Pri. 3	We recommend that a decommissioning and archiving strategy should be defined to ensure that legal requirements for data retention could be met in future.	Ongoing Follow-up to define these strategies will start in Q1/2018 .	Ongoing
II.E.3.5 228a Pri. 2	We recommend that a clear risk evaluation procedure and documented risk rating should be defined to make the risk management more transparent and traceable and to ensure that fund decisions are made.	Ongoing In 2017 the CIO mandated implement a risk management process in IM. As part of defining the framework, a risk-assessment form and risk-assessment impact scale were drawn up. In October a risk management workshop on risk evaluation and risk tolerance was held with the IM *Comité de direction* (CoDir). Discussions at IM CoDir level continued to further align the views on the risk impact scale (for risk rating).	Ongoing
II.E.3.5 228b Pri. 2	We recommend using a standardised framework such as COSO or CoBIT to structure risk and controls. This would ensure that all relevant domains and risks are covered.	Closed The IM risk framework presented to the CoDir uses definitions and processes in line with COSO and CoBIT.	Closed
II.E.3.5 228c Pri. 2	We recommend that risks should be registered and managed by using one tool to avoid double work and to ensure a complete overview.	Ongoing The pilot phase of running the central IM Risk Register continues in 2018 while the implementation of the IM Risk Framework is progressing In Q4 interviews with the CoDir members took place to identify new risks and review existing risk entries in the IM risk register.	Ongoing

Reference	Title	Status 31.01.2018	BoA's/expert's comments
II.E.3.5 228d Pri. 2	We recommend that a systematic approach should be implemented by the Organisation-wide risk management to establish a direct reporting line from IM risk management and to ensure that IM is informed about business risks in a timely manner.	Pending Follow-up is pending while organisation-wide risk management is implemented. This is not within the IM/CIO remit.	Ongoing
II.E.4.1 233 Pri. 2	We recommend ensuring a timely transfer of knowledge from the current EPO project manager.	Closed Convergence of teams is ongoing at the operational and technical level; exchange of knowledge and information is ongoing. Organisational convergence will be discussed in Q4/2017 and implemented in Q1/2018.	Closed
II.E.4.2 247 Pri 2	We recommend looking for and evaluating alternatives to the currently used building in Berlin in order to reveal possibilities for an earlier improvement of the room situations for the Berlin staff. This should be done shortly and prior to the works that affect the EPO areas.	Closed In April 2014, the Office signed a contract with the German authorities (*Bundesanstalt für Immobilienaufgaben*) on the rental and renovation of Berlin building which covers current renovation works. Taking this and relations with Germany as a host country, in particular the status of the Berlin site, into consideration, a review of the building situation does not seem to be appropriate for the time being.	Closed
II.E.5.1 258 Pri. 2	A detailed analysis of the efficiency gain derived from subcontracting should be carried out, by the Organisation's controlling office, at the end of this preliminary phase.	Ongoing Due to late start, the analysis will begin only after one year of implementation (Q1/2018).	Closed
II.E.5.2 261 Pri. 1	The Supervisory Board should focus more on its strategic role and promote priorities to the Academy.	Ongoing Bilateral discussions between the chairman of the Academy's Supervisory Board (ASB) and the Academy's executive are taking place.	Closed

Reference	Title	Status 31.01.2018	BoA's/expert's comments
II.E.5.2 263 Pri. 2	The Supervisory Board meeting dedicated to evaluation activities and budget planning should be held earlier in order to better fulfil its responsibilities.	Closed	Closed
II.E.5.2 265 Pri. 1	The Academy should review and, if needed, update its overall strategic and sectorial priorities	Ongoing Bilateral discussions between the ASB chairman and the Academy's executive are taking place.	Closed
II.E.5.4 269 Pri. 3	The mechanisms for financing the Academy remain complex. As already noted in 2013, they should be streamlined and all expenditure linked to Academy programmes should be combined under Article 3340.	Closed	Closed
II.E.5.4 271 Pri. 3	The budgeting process should be based on assessment of needs and realistic programming.	Ongoing Implementation is expected in 2019.	Closed
II.E.5.4 273 Pri. 2	It should be considered to provide the Supervisory Board with annual financial reports describing all Academy income and expenditure in an exhaustive and transparent manner.	Closed The topic was discussed at the ASB meeting on 26.9, and a format has been agreed for 2019 onwards.	Closed
II.E.5.6 286 Pri. 1	The annual report should provide the SB with more detailed information on activities (nature, targets, objectives, participants) in order to assess their relevance.	Pending Implementation of this recommendation depends on the outcome of recommendations 261/265.	No further comments
II.E.5.6 293 Pri. 2	The results of user satisfaction surveys should be presented more explicitly and comprehensively in order to evaluate and activities.	Ongoing The Academy is in the process of defining an enhanced set of indicators to accommodate the distance-learning training courses and lectures at external events.	Ongoing

Reference	Title	Status 31.01.2018	BoA's/expert's comments
II.E.5.6 292 Pri. 2	The performance-measurement system should allow for an improvement in the provision and conditions of training and provide with information regarding the impact of Academy's work and evaluation. Furthermore, the Academy should consider developing a set of performance objectives and indicators that would reflect its ability to reach its strategic goals.	Pending Implementation of this recommendation depends on the outcome of recommendations 261/265.	Ongoing

B. OFFICE'S FOLLOW-UP REPORT ON CA/20/16 (STATUS 31.01.2018), AND AUDITORS' COMMENTS

Reference	Title	Status 31.01.2018	BoA's/expert's comments
II.C.2.4 139	Given the complexity of IFRS 9 (2014), it is important to ensure that all the necessary measures for the preparation of its application (mandatory 1 January 2018) are taken. It is recommended that proper and sufficient documentation be prepared to support the analysis performed and conclusions drawn.	Closed A meeting with the auditors took place in Q2/2017 and the documentation was presented to them.	Closed The meeting took place with the experts.
II.C.2.4 140	Under IFRS 9 (2014) further notes disclosures will become applicable. We recommend setting up the relevant procedures needed to fulfil additional notes disclosure requirements.	Closed The documentation and procedures are in place; the final version of the documentation and draft disclosures, including amendments resulting from the auditors comments, were presented to the auditors for review during the preliminary audit in December 2017.	Closed

Reference	Title	Status 31.01.2018	BoA's/expert's comments
II.C.2.6 147	We recommend implementing a checklist of all actuarial assumptions and stating if / how these have been changed compared to prior period, as well as the expected effect on the DBO.	Closed The 2017 year-end accounting of the defined obligation report has been issued by ISRP (2 March 2018). It already includes actuarial assumptions and methods (Appendix 1), detailed sensitivities (Appendix 5) and actuarial gains / losses per nature (page 8). Supplementary document including a comparison of parameters vs last year will be delivered by 21 March 2018.	Closed
II.D.5.6 275	We recommend compiling a comprehensive file to ensure continuous monitoring of the HR roadmap's progress.	Closed The review of the 2011 HR roadmap was presented in 2014, with CA/39/14 setting out the next steps. Following CA/3/18, all projects have been finalised (with the exception of pensions). A final review will be compiled for the June 2018 AC.	Closed
II.D.5.6 277	We recommend defining and documenting the clear timeline and scope of the Workforce Planning project.	Closed Decision was taken at the MAC meeting in January 2018 and the results are expected in June 2018.	Ongoing

Reference	Title	Status 31.01.2018	BoA's/expert's comments
II.D.5.6 279	We recommend setting up a procedure similar to examiner recruitment for non-examiners.	Closed An alignment of the general harmonised selection procedure for all recruitment activities based on Annex 2 has been acted on with the various stakeholders in the Talent@EPO project (see enclosed document approved by the steering committee). However, a certain level of flexibility will still be allowed depending on the profiles to be recruited. In the meantime, on the basis of the modernisation of the employment conditions, a review of Annex 2 is being prepared with a view to introducing more flexibility.	No further comments
II.D.5.6 281	We recommend that a longer period of notice of early retirement be established for new personnel in key positions (e g. directors upwards).	Closed Key senior positions due to become available in the next 12 to 18 months are already identified and followed up on a monthly basis. In view of this regular follow-up, as well as the greater flexibility in the recruitment procedure envisaged in the new Annex 2 in CA 3/18 and proper succession planning supported by the new Success Factors tool currently been implemented, it is believed that the period of notice of three months has less impact on business continuity than it might have had before.	Closed
II.D.8.3 316	We recommend defining a minimum standard of IT security measurements for each classification level for applications.	Closed A first set of standards per classification level will be published in 2018.	Ongoing

C. OFFICE'S FOLLOW-UP REPORT ON CA/20/15 (STATUS 31.01.2018), AND AUDITORS' COMMENTS

Reference	Title	Status 31.01.2018	BoA's/expert's comments
II.D.2.1	We recommend considering a move generally away from paper proof of control to electronic documentation only. The costs of changing to electronic documentation need to be considered.	Ongoing The Fund Administrator is currently reviewing the electronic workflow and expects to report in more detail during 2018.	Ongoing
II.D.2.2	We recommend implementing standard procedures and specific compliance checks for all notification requirements related to direct investments in shares.	Closed The Compliance Officer supervises direct investments on a monthly basis. In addition, checks on the largest holdings are implemented in the daily compliance report.	Closed
II.E.1.3	One common tool for the whole process for requests and internal appeals should be implemented.	Closed An e-tool has been introduced for the Appeals Committee (ApC) lawyers, reviewers and the Conflict Resolution Unit (CRU) to administer incoming cases, internal workflows and data entry. Further action is being taken to ensure the system is working properly before closure planned for Q1/2018. Dashboard functionality is being implemented to enhance retrieval of statistics from the e-tool. Interfaces between CRU and ApC Secretariat are in place to harmonise and accelerate handling of the backlog.	Closed

Reference	Title	Status 31.01.2018	BoA's/expert's comments
II.E.1.3	A central function (single-owner process) for the registration of requests and appeals should be implemented.	Ongoing A single process owner has been identified and work is underway to standardise definitions, harmonise workflows and process steps, whilst retaining the individual business responsibilities in the context of the coming tool.	Ongoing
II.E.1.3	A standardised approach to registering requests and adequate communication of the process should be introduced.	Closed The "MatterSphere" e-tool for registering management review requests was implemented on 1.7.2017 and has been used since as a single common platform for handling management review requests.	Closed
II.E.1.3	Direct dialogue within the Office as pre-litigation for individual cases should be reinforced in order to reduce the number of internal appeals.	Closed By the end of 2017, there had been approx. 67 personal meetings with requesters, accounting for 44% of all requests filed in 2017. The rate of appeals filed following the appeal process was 35% at the end of 2017 (estimate). The definitive figures for internal appeals following management review will be available in July 2018 Since entry into force of the 2017 reform of the internal appeal system, the number of internal appeals has dropped by 81%.	Closed

Reference	Title	Status 31.01.2018	BoA's/expert's comments
II.E.1.3	The settlement of old cases should be taken into consideration.	Closed D434 is currently delivering position papers on appeals of 2015-2016-2017. 252 cases (345 on 30.9.18) are now to be handled by D434 D434 encourages settling cases at all stages throughout the procedure, either on an appeal basis or on an appellant basis. Settlements are also part of the performance objectives of D434. Since 15 September, there have been 15 withdrawals/settlements as a result of such efforts. Final closure of oldest cases now depends on their processing by the Appeals Committee.	Closed
II.E.1.3	The Employment Law Directorate should be strengthened in terms of resources and/or organisational redesign to increase output.	Closed All lawyer positions have been filled. Now that the backlog in Employment Law has been dramatically reduced to less than one year of work, two lawyers have been transferred to the ApC to help reduce its backlog.	Closed
II.E.1.3	The work of lawyers could be more focused on specific areas and supported by training in specific areas (specialisation).	Closed Following the creation of three areas of expertise within D434 (individual – compensation and benefits – social dialogue), the work of lawyers is more focused on their specific areas. It is, however, important for them to remain versatile to maintain flexibility and agility within the team and ensure continued interest in the job.	Closed
II.E.1.3	Measures to separate the procedures for individual cases (reviews and appeals) from policy discussions should be addressed.	Closed A reform of the internal appeal mechanisms which clarifies the individual nature of the means of redress was approved by the AC in July 2017.	Closed

Reference	Title	Status 31.01.2018	BoA's/expert's comments
II.E.3.2	We recommend that procurers be given instructions on the process and training on the different award procedures.	Ongoing The training plan for 2018 will include dedicated training for buyers and invoicing officers. In particular, they will be trained in the new procedural aspects approved by the Administrative Council in December 2017.	Ongoing
II.E.3.2	We recommend making values visible in SAP or creating one central list with all sub-delegations for purchasing approvals, including the corresponding issues, in order to make the process more efficient.	Ongoing The automation of the entire purchase-to-pay process will bring further visibility and efficiency to the approval process.	Ongoing
II.E.3.2	We recommend the creation of a supplier evaluation system in order to evaluate suppliers after the order has been placed.	Ongoing The supplier monitoring system which was launched in 2017 will be further deployed in the course of 2018.	Ongoing
II.E.3.3	Design and embed a professional "floating" licences-management process in order to be compliant and maximise the value of the number of licences.	Ongoing The consultancy to oversee the embedding of the new service started in November as a result of the first procurement exercise. The second tender, for an asset (licence) management support service (including tool), is being prepared for launch. The goal is to be able to start the implementation in Q4.	Ongoing
II.E.3.3	The Central Procurement strategic roadmap should be enriched with a market and supplier analysis and in-depth procurement category plans.	Ongoing The market and supplier analysis is further deployed by Central Procurement in collaboration with the business units. The external procurement procedures are progressing well. New staff members with market knowledge and experience in category management will join in the course of 2018.	Ongoing

D. OFFICE'S FOLLOW-UP REPORT ON CA/20/14 (STATUS 31.01.2018), AND AUDITORS' COMMENTS

Reference	Title	Status 31.01.2018	BoA's/expert's comments
II.D.2	eTendering: In our view, solving the problems caused by the eTendering system is essential to improve the electronic procedure for invitations to tender.	Closed The eTendering tool is fully operational. The percentage of usage will be increased continuously.	Closed
II.D.3.1	Use the coaching skills of the Talent Department in relation to career development.	Closed The new structure of Directorate 431 reflects this new approach: a Talent Management department has been set up to bring together the HR business partners acting as coaches for line managers and driving a performance development culture in the organisation. They are supported by the newly created Employee Engagement and Leadership department., which will assist them in developing their coaching capabilities for line managers. A full review of the coaching landscape is planned	No further comments

E. OFFICE'S FOLLOW-UP REPORT ON CA/20/13 (STATUS 31.01.2018), AND AUDITORS' COMMENTS

Reference	Title	Status 31.01.2018	BoA's/expert's comments
IV.B.2.c	Justifications for making use of direct placements due to urgency should at all time be available at CP.	Closed SPE has reached a completion of almost 100% office-wide. The track record for reports, in particular the justification for direct placements, is available in the system.	Closed
V.A.2.d	All projects of the IT-Roadmap in the execution phase had the approval of the R&A and security group. In case the approval was made under a condition or the final decision was deferred to a later point, this condition should be taken to ensure that this relevant information will not be forgotten during the project.	Closed On 3 October 2017 the new version of the EPO Project Management Handbook was released and published.	Closed
V.C.2	Further research regarding trend of under consumption of training budget.	Closed Additional e-learning modules were developed last year, and the 10/20/70 approach has been implemented, with the 70% dedicated to learning on the job. Those two elements are, of course, less costly to implement for a larger population and even more effective. As confirmed by Talent@EPO, promotion of a more blended development offer (classrooms, coaching, e-learning, webinars) will continue to further optimise the return on investment in development measures, while ensuring a high quality input.	Closed

Reference	Title	Status 31.01.2018	BoA's/expert's comments
V.C.2	Improve follow-up on training; evaluation on level 2 (employee) and level 3 (manager).	Closed At Talent@EPO an approach and recommendations have been agreed for measuring the effectiveness of development activities. This approach is currently being embedded in the Newcomers' Academy. The leadership and soft skills development programmes are being comprehensievely reviewed and redefined with the aim of better alignment with the core and leadership competencies.	Closed

F. SUMMARY AND PRIORITY OF OUR RECOMMENDATIONS

253) We list below our main recommendations in this report, together with our assessment of their relative priorities on a three-point scale.

1 = top priority; immediate action required

2 = medium priority; to be resolved within three years

3 = low priority; action required in the long term

Point	Recommendation	Priority	
	Accounting		
108	We recommend using SAP information for open leave balance instead of a flat rate.	2	Agreed.
136	Active Directory and SAP FIPS password setting should be aligned with the password policy or else the password policy should be reasonably updated.	2	Agreed and in progress.
141	The FireFighter process should be extended to include a final review of performed actions, via Security Audit Log, once the SAP_ALL profile has been revoked.	2	Agreed and in progress.
142	Debugging rights in the production system should only be assigned (if absolutely necessary) with Activity 03, but never with Activity 01 or 02.	1	Agreed and in progress.

143	To ensure traceability within SAP FIPS, the critical authorisation to delete change logs should not be assigned to dialog/service users.	1	Agreed and in progress.
147	In future, all profile assignments should follow a predefined process that ensures appropriate segregation of duties, by clearly defining roles and responsibilities within the process.	1	Agreed and in progress.
148	A process / check should be implemented for the fee capturing system to ensure that all users are reviewed to determine their appropriateness.	2	Agreed and in progress.
152	The number of users authorised to create transportable change orders and release change orders in the development system should be reviewed (and possibly reduced).	3	Agreed and in progress.
155	We recommend that all system openings follow the "FireFighter" process and that the parameter CCCORACTIV is always set to "1" to ensure a sufficient audit trail.	1	Agreed and in progress.
157	Direct table changes and changes using the "Repair" function should follow the "FireFighter" process.	1	Agreed and in progress.

	RFPSS		
170	We recommend adding a chart on risk-return measures to the report, i.e. showing the development of the relative Value at Risk and the relative performance over time for each asset class.	3	Noted. An industry standard risk-return measure (information ratio) has been added to the quarterly reporting to the Supervisory Board. In addition, charts on the same measure are reported to the Supervisory Board every six months, for each asset class, by the external performance measurement service provider.
177	We recommend calculating the VaR percentage on a consistent basis, using the 95th percentile and projected over a one-month horizon (1/12 of 252 business days).	1	Agreed.
	Interaction between HR, Legal Services and Internal Audit		
180	We recommend formally implementing a process with a joint ad-hoc committee for serious cases.	3	Agreed. A formal process of co-ordination via a joint ad-hoc committee with PD Human Resources (HR) and PD Legal Services will be implemented by a regular meeting whenever a case arises and where co-ordination with national authorities may be considered. Among its new functions, the Directorate Ethics and Compliance (EC) has been entrusted with performing compliance reviews. There is co-operation between EC and HR in this context as well.

	Business administration		
196	We recommend that the Office reduce the number of users with access rights they do not strictly need.	1	Agreed. In co-operation with IM/Corporate Area Business Support, HR is looking at ways to ensure that the number of authorised dialog users and specific roles is set to that strictly necessary for the functioning of the transaction. The targeted completion date is 30 June 2018.
197	We recommend that the Office install detection controls in instances where segregation of duties conflicts cannot be avoided.	1	Agreed. The risks associated with segregation of duties are mitigated by a 4-eyes-check performed within HR. In order to enhance risk mitigation from a manual to a system-based process, an implementation of segregation of duties in FIPS is aimed at. The targeted completion date is 31 December 2018.
218	We recommend that the Office implement a contract-management system to cover all contracts. In SAP, all invoices relating to contracts should be linked to the relevant contract.	2	Agreed. The project "Integrated Contract Management" (P0738) has recently been initiated.

	IT		
237	We recommend drawing up an action plan during data infringement, describing processes to ensure a quick and efficient response to the breach.	1	Agreed. Such action plan will include the involvement of the Data Protection Officer, the controller concerned and Legal Services in co-operation with IT security.
238	We recommend that the requests for data transmission within the EPO be approved and stored by a competent authority defined in the data protection guidelines.	1	Agreed.
239	We recommend continuing the review of contracts with externals to ensure the compliance check is performed in a timely manner.	1	Agreed.

Munich, 12 April 2018

Board of Auditors

H. Schuh | O. Hollum | F. Angermann

IV. EPO PRESIDENT: ADDITIONAL EXPLANATIONS AND REASONS

254)

V. RECOMMENDATION FOR PUBLICATION

255) This report makes particular reference to

- CA/10/18 – Accounts for the 2017 accounting period – Budget implementation statement

- CA/60/18 – Accounts for the 2017 accounting period – Financial statements.

256) Unlike CA/60/18, CA/10/18 is not intended for publication.

257) We, the Board of Auditors, consider that the report can be published.

VI. ANNEXES

ANNEX I Year-on-year comparison: income statement and balance sheet (in EUR '000s)

Annex I/1 Income statement

	2017	2016	2015	2014
Revenue				
Revenue from patent and procedural fees	1 859 900	1 812 892	1 725 112	1 583 595
Other revenue	72 823	75 593	68 586	70 762
Other operating income	6 665	8 101	6 579	8 412
Work performed and capitalised	2 280	2 270	2 268	4 031
Employee benefit expenses	(1 879 485)	(1 647 830)	(1 672 037)	(1 408 359)
Depreciation and amortisation expenses	(46 353)	(47 247)	(53 917)	(51 894)
Other operating expenses	(222 805)	(213 220)	(222 260)	(211 727)
Collective reward authorised in 2012				
OPERATING RESULT	**(206 975)**	**(9 441)**	**(145 669)**	**(5 180)**
Finance revenue	695 845	563 345	245 973	588 399
Finance costs	(372 443)	(414 483)	(321 811)	(432 152)
FINANCIAL RESULT	**323 402**	**148 862**	**(75 838)**	**156 247**
PROFIT / (LOSS) FOR THE YEAR	**116 427**	**139 421**	**(221 507)**	**151 067**
Other comprehensive income:				
Items that will not be reclassified to profit or loss:				
Remeasurement defined benefit obligations	(346 985)	(2 980 737)	4 766 714	(7 906 367)
Items that may be reclassified subsequently to profit or loss				
TOTAL COMPREHENSIVE INCOME FOR THE YEAR	**(230 558)**	**(2 841 316)**	**4 545 207**	**(7 755 300)**

Annex I/2 Balance sheet

	2017	2016	2015	2014
ASSETS				
NON-CURRENT ASSETS				
Property, plant and equipment	647 241	576 780	546 940	554 105
Intangible assets	50 444	48 798	53 333	54 073
RFPSS financial instruments	7 969 841	7 028 156	6 319 492	5 856 494
RFPSS other assets	845	888	871	15 203
RFPSS restricted cash	223 246	272 510	271 660	244 590
RFPSS financial liabilities		(9 323)	(83)	(31 381)
RFPSS other liabilities	(97)	(28)	(82)	(47)
RFPSS net assets	8 193 835	7 292 203	6 591 858	6 084 859
Bonds	1 880 863	1 571 218	1 302 676	1 136 073
Home loans to staff	87 230	87 716	92 631	100 905
Other financial assets	58 000	77 000		
Other assets	140 088	117 290	101 264	85 853
	11 057 701	9 771 005	8 688 702	8 015 868
CURRENT ASSETS				
Trade and other receivables	172 122	162 200	160 521	151 593
Bonds	379 222	234 942	263 676	199 386
Home loans to staff	7 648	7 392	7 454	6 645
Other financial assets	87 000	318 000	275 200	324 372
Prepaid expenses	16 615	15 073	13 043	12 374
Cash and cash equivalents	2 291	19 596	70 073	73 004
	664 898	757 203	789 967	767 374
TOTAL ASSETS	**11 722 599**	**10 528 208**	**9 478 669**	**8 783 242**
EQUITY AND LIABILITIES				
EQUITY				
Retained earnings	(1 617 870)	(1 734 297)	(1 873 718)	(1 652 211)
Other components of equity	(9 248 953)	(8 901 968)	(5 921 231)	(10 687 945)
TOTAL EQUITY	**(10 866 823)**	**(10 636 265)**	**(7 794 949)**	**(12 340 156)**
NON-CURRENT LIABILITIES				
Defined benefit liability	21 087 635	19 716 472	15 828 589	19 740 956
Salary Savings Plan obligation	79 564	58 245	44 145	30 166
Other employee-related liabilities	38 348	21 732	12 366	11 575
Finance lease liabilities	2 437	2 369	1 505	5 670
Provisions			93	66
Prepaid fees	654 336	713 772	799 002	747 427
	21 862 320	20 512 590	16 685 700	20 535 860
CURRENT LIABILITIES				
Other employee-related liabilities	155 244	129 067	110 987	109 300
Trade and other payables	219 629	182 395	164 560	146 190
Finance lease liabilities	3 317	4 586	5 491	5 294
Provisions	6 690	7 450	30 821	5 907
Prepaid fees	342 222	328 385	276 059	320 847
	727 102	651 883	587 918	587 538
TOTAL LIABILITIES	22 589 422	21 164 473	17 273 618	21 123 398
TOTAL EQUITY AND LIABILITIES	**11 722 599**	**10 528 208**	**9 478 669**	**8 783 242**

Annex I/3 Statement of cash flows

	2017	2016	2015	2014
CASH FLOWS FROM OPERATING ACTIVITIES				
Profit/loss for the year	116 427	139 421	(221 507)	151 067
Adjustments for:				
- depreciation and amortisation	46 353	47 247	53 917	51 894
- disposal of property, plant and equipment	3 185	3 292	5 773	715
- disposal of bonds		(307)	466	--
- other gains and losses	(20 945)	(14 132)	(13 510)	(11 456)
- revaluation of RFPSS assets	(542 765)	(416 480)	(99 371)	(442 177)
- net interest	(64 495)	(69 753)	(76 834)	(83 959)
- dividend income	(83 220)	(73 975)	(65 962)	(58 189)
- changes in net defined benefit liability	1 024 178	907 147	854 344	760 359
- changes in Salary Savings Plan obligation	21 320	14 099	13 979	12 144
- change in provisions	(760)	(23 464)	24 941	1 632
- changes in prepaid fees	(45 599)	(32 903)	6 787	47 990
- changes in assets and liabilities carried out as working capital	67 358	39 450	10 265	16 933
Cash flows from operating activities	**521 037**	**519 642**	**493 288**	**446 953**
CASH FLOWS FROM INVESTING ACTIVITIES				
Proceeds from disposal/settlement of:				
- property, plant and equipment		354	1	1
- bonds / cash receipted upon maturity	234 000	286 925	264 919	220 000
Purchases of:				
- property, plant and equipment	(100 641)	(63 125)	(40 898)	(25 324)
- intangible assets	(16 963)	(9 238)	(9 169)	(13 523)
- bonds	(709 755)	(547 318)	(515 285)	(352 838)
Change in bank deposits > 3 months	250 000	(119 800)	49 172	13 528
Home loans granted to staff	(16 987)	(16 841)	(19 360)	(25 704)
Repayment of staff home loans	17 037	21 905	27 120	28 916
Cash outflow from the purchase of RFPSS assets	(3 069 857)	(2 679 627)	(2 976 029)	(2 458 217)
Cash inflow from the sale of RFPSS assets	2 667 204	2 399 805	2 597 694	2 088 551
Cash inflow (outflow) from decrease (increase) in restricted cash	49 264	(850)	(27 070)	(38 755)
Interest received	84 096	89 274	94 240	94 499
Dividends received	79 730	72 688	64 714	58 427
Cash flows from investing activities	**(532 872)**	**(565 848)**	**(489 951)**	**(410 439)**
CASH FLOWS FROM FINANCING ACTIVITIES				
Interest paid	(332)	(527)	(545)	(757)
Repayment of lease liabilities	(5 167)	(3 801)	(5 611)	(5 207)
Cash flows from financing activities	**(5 499)**	**(4 328)**	**(6 156)**	**(5 964)**
NET INCREASE/DECREASE IN CASH AND CASH EQUIVALENTS	**(17 334)**	**(50 534)**	**(2 819)**	**30 550**
Cash and cash equivalents net of bank overdrafts at the beginning of the period	19 596	70 073	73 004	42 479
Effect of exchange rate exchanges on cash and cash equivalents	29	57	(112)	(25)
Cash and cash equivalents net of bank overdrafts at the end of the period	2 291	19 596	70 073	73 004

ANNEX II Comparison of budgeted and actual income and expenditure (in EUR '000s)

Annex II/1 Income

Chapter	Title	2017 budget	2017 actual	Difference absolute	as %
Income					
Operating transactions					
50	Filing and search	391 885	396 873	4 988	1.3%
51	Examination, grant and opposition	339 645	338 270	-1 375	-0.4%
52	Appeals and protest	5 020	5 247	227	4.5%
53	Designation, renewal and extension	1 094 710	1 136 582	41 872	3.8%
54	Patent information products	7 820	7 871	51	0.7%
55	General operating income	220 550	209 584	-10 966	-5.0%
57	Third-party project funding	230	38	-192	-83.4%
58	Financial income	20 910	15 934	-4 976	-23.8%
	Operating income	**2 080 770**	**2 110 399**	**29 629**	**1.4%**
Capital transactions					
60	Net income brought forward	243 490	442 008	198 518	81.5%
61	Disposal of property and equipment	0	0	0	
62	Disposal of IT tangible and intangible assets	0	0	0	
64	Borrowings	0	0	0	
65	Repayment of loans and advances	16 800	16 916	116	0.7%
69	Authorisation budget deficit	0	0	0	
	Capital income	**260 290**	**458 924**	**198 634**	**76.3%**
	Total income	**2 341 060**	**2 569 323**	**228 263**	**9.8%**

Annex II/2 Expenditure

Article	Chapter	Title	2017 budget	2017 actual	Difference absolute	as %
Expenditure						
Operating transactions						
300		*Basic salaries and allowances*	*1 460 090*	*1 392 392*	*-67 698*	*-4.6%*
301		*Remuneration of other employees*	*17 010*	*11 498*	*-5 512*	*-32.4%*
302		*General staff costs*	*12 715*	*9 247*	*-3 468*	*-27.3%*
303		*Training*	*11 225*	*7 312*	*-3 913*	*-34.9%*
305		*Schools and day-care centres*	*22 370*	*21 946*	*-424*	*-1.9%*
	30	Staff	*1 523 410*	*1 442 394*	*-81 016*	-5.3%
310		*Land and buildings*	*45 915*	*36 770*	*-9 145*	*-19.9%*
311		*Furniture and equipment*	*3 050*	*2 555*	*-495*	*-16.2%*
	31	Property and equipment	*48 965*	*39 325*	*-9 640*	-19.7%
320		*IT maintenance - tangible assets*	*17 000*	*13 458*	*-3 542*	*-20.8%*
321		*IT maintenance - intangible assets*	*99 450*	*87 291*	*-12 159*	*-12.2%*
	32	IT equipment maintenance	*116 450*	*100 749*	*-15 701*	-13.5%
	33	Co-operation and meetings	*21 920*	*12 129*	*-9 791*	-44.7%
	34	Patent information and public meetings	*19 080*	*12 260*	*-6 820*	-35.7%
350		*Travel*	*7 975*	*6 051*	*-1 924*	*-24.1%*
351		*Supplies*	*18 960*	*3 549*	*-15 411*	*-81.3%*
352		*Services*	*62 330*	*34 021*	*-28 309*	*-45.4%*
353		*Communications*	*4 300*	*4 058*	*-242*	*-5.6%*
354		*Documentation*	*11 135*	*9 972*	*-1 163*	*-10.4%*
359		*Other operating expenditure*	*1 360*	*3 727*	*2 367*	*174.1%*
	35	General operating expenditure	*106 060*	*61 378*	*-44 682*	-42.1%
	37	Project expenditure funded by third parties	*230*	*38*	*-192*	-83.4%
	38	Financial expenditure	*1 165*	*117*	*-1 048*	-89.9%
		Total operating expenditure	***1 837 280***	***1 668 391***	***-168 889***	**-9.2%**
Capital transactions						
	41	Property and equipment (excl. IT)	*119 900*	*97 088*	*-22 812*	-19.0%
	42	IT hardware and software	*10 000*	*18 292*	*8 292*	82.9%
	44	Repayments of loans	*0*	*0*	*0*	
	45	Loans and advances to third parties	*16 800*	*16 800*	*0*	0.0%
	48	Cash injection to RFPSS	*0*	*0*	*0*	
	49	Budget surplus	*113 590*	*326 744*	*213 154*	187.7%
		Total capital expenditure	***260 290***	***458 924***	***198 634***	**76.3%**
		Total expenditure	***2 097 570***	***2 127 315***	***29 745***	**1.4%**

Annex II/3 Implementation of the budget of the pension and social-security schemes

Article	Chapter	Title	2017 budget	2017 actual	Difference absolute	as %
INCOME						
Operating transactions						
		Office contributions	*117 240*	*117 733*	*493*	*0.4%*
		Staff contributions	*58 620*	*58 867*	*247*	*0.4%*
		Payments from insurances	*130*	*136*	*6*	
		Pension rights transferred	*10 000*	*4 957*	*-5 043*	*-50.4%*
		Office contributions (recruited after 1.1.2009)	*14 730*	*14 600*	*-130*	*-0.9%*
		Staff contributions (recruited after 1.1.2009)	*7 365*	*7 300*	*-65*	*-0.9%*
		Office contributions (invalids)	*0*	*0*	*0*	
		Invalids' contributions	*0*	*0*	*0*	
5600		**Pension contributions**	***208 085***	***203 593***	***-4 492***	**-2.2%**
		Office contributions	*13 670*	*9 125*	*-4 545*	*-33.2%*
		Staff contributions	*6 835*	*4 563*	*-2 272*	*-33.2%*
5601		**Salary savings plan**	***20 505***	***13 688***	***-6 817***	**-33.2%**
		Office contributions	*52 340*	*51 284*	*-1 056*	*-2.0%*
		Staff contributions	*21 020*	*20 426*	*-594*	*-2.8%*
		Pensioner contributions	*5 150*	*4 760*	*-390*	*-7.6%*
		Deferred pensioner contributions	*0*	*22*	*22*	
		Invalids' contributions			*0*	
		Spouse contributions	*1 300*	*1 265*	*-35*	*-2.7%*
		Healthcare fund	*79 810*	*77 758*	*-2 053*	*-2.6%*
		Office contributions	*9 350*	*9 546*	*196*	*2.1%*
		Staff contributions	*3 755*	*4 073*	*318*	*8.5%*
		Pensioner contributions	*920*	*937*	*17*	*1.9%*
		Invalids' contributions	*0*	*0*	*0*	
		Long-term care insurance	*14 025*	*14 557*	*532*	*3.8%*
		Office contributions	*1 590*	*827*	*-763*	*-48.0%*
		Staff contributions	*795*	*427*	*-368*	*-46.3%*
		Death and invalidity insurance	*2 385*	*1 254*	*-1 131*	*-47.4%*
5605		**Social-security contributions**	***96 220***	***93 569***	***-2 651***	**-2.8%**
	56	**Operating income**	***324 810***	***310 851***	***-13 959***	**-4.3%**

Article	Chapter	Title	2017 budget	2017 actual	Difference absolute	as %
EXPENDITURE						
Operating transactions						
3600		Pension payments	*187 000*	*178 033*	*-8 967*	-4.8%
3601		Salary savings plan	*3 065*	*490*	*-2 575*	-84.0%
		Healthcare insurance	*75 645*	*68 021*	*-7 624*	*-10.1%*
		Long-term care insurance	*4 895*	*5 331*	*436*	*8.9%*
		Death and invalidity insurance	*2 385*	*1 254*	*-1 131*	*-47.4%*
3605		Social-security payments	*82 925*	*74 607*	*-8 318*	-10.0%
	36	**Operating expenditure**	***272 990***	***253 130***	***-19 860***	**-7.3%**
Capital transactions: income and expenditure						
		Healthcare insurance	*4 165*	*28 243*	*24 078*	578.1%
		Pension scheme	*21 085*	*25 560*	*4 475*	21.2%
		Long-term care insurance	*9 130*	*9 226*	*96*	1.0%
		Death and invalidity insurance	*0*	*0*	*0*	
		Salary savings plan	*17 440*	*13 199*	*-4 241*	*-24.3%*
660		Surplus for transfer from pension and social-security schemes to RFPSS/balance sheet	*51 820*	*76 227*	*24 407*	47.1%
	66 + 46	**Total (transfer to RFPSS/balance sheet)**	***51 820***	***76 227***	***24 407***	**47.1%**

Annex II/4 Comparison of original and amended budgets

Article	Chapter	Title	Original budget	Transfer under Art. 34 FinRegs para. 1 intra-chapter	para. 2 inter-chapter (below 20%)	para. 3 Submission to BFC / AC	Amended budget
3000		*Basic salaries*	*960 970*				*960 970*
3001		*Allowances and other benefits*	*241 855*				*241 855*
3002		*Social-security contributions*	*71 145*				*71 145*
3003		*Pension contributions*	*145 640*				*145 640*
3004		*Partial compensation*	*40 480*				*40 480*
300		Basic salaries and allowances	1 460 090	0	0	0	1 460 090
301		Remuneration of other employees	17 010				17 010
302		General staff costs	12 715				12 715
303		Training	11 225				11 225
305		Schools and day-care centres	22 370				22 235
	30	**Staff**	**1 523 410**	**0**	**0**	**0**	**1 523 275**
3100		*Rent*	*10 255*				*10 255*
3101		*Cleaning and waste disposal*	*6 785*				*6 785*
3102		*Repairs and maintenance*	*20 615*				*20 615*
3103		*Electricity, gas, heating, water*	*8 260*				*8 260*
	310	Land and buildings – operating costs	45 915				45 915
	3100	Furniture and equipment – operating costs	3 050				3 050
	31	**Property and equipment – operating costs**	**48 965**	**0**	**0**	**0**	**48 965**
320		IT maintenance – tangible assets	17 000		(1 683)	(520)	14 797
3210		*Software*	*20 000*		(100)	(800)	*19 100*
3211		*Integrated systems and services*	*79 450*		1 512	(4 680)	*76 282*
321		IT maintenance – intangible assets	99 450	0	1 412	(5 480)	95 382
	32	**IT equipment maintenance**	**116 450**	**0**	**(271)**	**(6 000)**	**110 179**
	33	**Co-operation and meetings**	**21 920**	**0**	**0**	**0**	**21 920**
	34	**Patent information and communication**	**19 080**	**0**	**0**	**0**	**19 080**
350		Travel	7 975				7 975
351		Supplies	18 960	(2 750)			16 210
3520		*Surveillance and messenger services*	*11 585*				*11 585*
3521		*External experts and studies*	*14 260*				*14 260*
3525		*External audit*	*2 210*				*2 210*
3529		*Miscellaneous contract work*	*34 275*		(4 250)		*30 025*
352		Services	62 330	0	(4 250)	0	58 080
353		Communications	4 300				4 300
354		Documentation	11 135				11 135
div.		Other operating expenditure	1 360	2 750			4 110
	35	**General operating expenditure**	**106 060**	**0**	**-4 250**	**0**	**101 810**
	37	**Project expenditure funded by third parties**	**230**	**0**	**0**	**0**	**230**
	38	**Financial expenditure**	**1 165**	**0**	**0**	**0**	**1 165**
		Operating transactions	**1 837 280**	**0**	**-4 521**	**-6 000**	**1 826 624**
		Inward transfers		**2 750**	**1 512**	**0**	
		Outward transfers		**(2 750)**	**(6 033)**	**-6 000**	

Article	Chapter	Title	Original budget	Transfer under Art. 34 FinRegs para. 1 intra-chapter	para. 2 inter-chapter (below 20%)	para. 3 Submission to BFC / AC	Amended budget
410		Land and buildings	117 655				117 655
411		Furniture and equipment	2 245				2 245
	41	**Property and equipment**	**119 900**	**0**	**0**	**0**	**119 900**
4200		Hardware	850	250	2 056	550	3 706
4210		Software	450	(415)	465	670	1 170
4211		Integrated systems and services	8 700	165	2 000	4 780	15 645
	42	**IT tangible and intangible assets**	**10 000**	**0**	**4 521**	**6 000**	**20 521**
	45	**Loans and advances**	**16 800**				**16 800**
	49	**Budget surplus**	**113 590**				**113 590**
		Capital transactions	**260 290**	**0**	**4 521**	**6 000**	**270 811**
		Inward transfers		**415**	**4 521**	**6 000**	
		Outward transfers		**(415)**		**0**	
		Total	**2 097 570**	**0**	**0**	**0**	**2 097 435**
		Inward transfers		**3 165**	**6 033**	**6 000**	
		Outward transfers		**(3 165)**	**(6 033)**	**0**	

ANNEX III Financial forecast and actual income and expenditure

Annex III/1 Statement of comprehensive income

	As per			Difference between CA/60/18 and CA/D/16	
	CA/D 1/16	CA/10/18	CA/60/18	absolute	in %
Revenue					
Revenue from patent and procedural fees	1 791 845	1 859 900	1 859 900	68 055	3.8%
Other operating income	68 645	72 823	72 823	4 178	6.1%
Other operating income	6 940	6 665	6 665	(275)	-4.0%
Work performed by the entity and capitalised	5 000	2 280	2 280	(2 720)	-54.4%
Employee-benefit expenses	(1 361 945)	(1 879 485)	(1 879 485)	(517 540)	38.0%
Depreciation and amortisation expenses	(53 835)	(46 353)	(46 353)	7 482	-13.9%
Other operating expenses	(311 630)	(222 805)	(222 805)	88 825	-28.5%
OPERATING RESULT	**145 020**	**(206 975)**	**(206 975)**	**(351 995)**	
Financial revenue	428 495	695 845	695 845	267 350	62.4%
Finance costs	(501 040)	(372 443)	(372 443)	128 597	-25.7%
FINANCIAL RESULT	**(72 545)**	**323 402**	**323 402**	**395 947**	
PROFIT/LOSS FOR THE YEAR	**72 475**	**116 427**	**116 427**	**43 952**	
Other	—	(346 985)	(346 985)	(346 985)	
TOTAL	**72 475**	**(230 558)**	**(230 558)**	**(303 033)**	

Annex III/2 Balance sheet

	As per			Difference between CA/60/18 and CA/D/16	
	CA/D 1/16	CA/10/18	CA/60/18	absolute	in %
ASSETS					
NON-CURRENT ASSETS					
Property, plant and equipment	720 657	647 241	647 241	-73 416	-10.2%
Intangible assets	50 132	50 444	50 444	312	0.6%
RFPSS net assets	7 446 410	8 193 835	8 193 835	747 425	10.0%
Marketable securities	1 302 675	1 880 863	1 880 863	578 188	44.4%
Home loans to staff	100 450	87 230	87 230	-13 220	-13.2%
Other assets	146 415	198 088	198 088	51 673	35.3%
	9 766 739	11 057 701	11 057 701	1 290 962	13.2%
CURRENT ASSETS					
Trade and other receivables	200 760	172 122	172 122	-28 638	-14.3%
Marketable securities	263 675	379 222	379 222	115 547	43.8%
Home loans to staff	5 030	7 648	7 648	2 618	52.0%
Other financial assets	275 200	87 000	87 000	-188 200	-68.4%
Prepaid expenses	0	16 615	16 615		
Cash and cash equivalents	245 928	2 291	2 291	-243 637	-99.1%
	990 593	664 898	664 898	-325 695	-32.9%
TOTAL ASSETS	**10 757 332**	**11 722 599**	**11 722 599**	**965 267**	**9.0%**
LIABILITIES					
EQUITY					
Retained earnings	(2 274 235)	(1 617 870)	(1 617 870)	656 365	-28.9%
Other reserves	968 135	(9 248 953)	(9 248 953)	(10 217 088)	-1055.3%
TOTAL EQUITY	**-1 306 100**	**-10 866 823**	**-10 866 823**	**-9 560 723**	**732.0%**
NON-CURRENT LIABILITIES					
Gross defined benefit obligations	10 630 145	21 087 635	21 087 635	10 457 490	98.4%
Salary savings plan obligations	86 322	79 564	79 564	-6 758	-7.8%
Trade and other payables	13 475	38 348	38 348	24 873	184.6%
Finance lease liabilities	3 652	2 437	2 437	-1 215	-33.3%
Provisions	115			-115	-100.0%
Prepaid fees	650 698	654 336	654 336	3 638	0.6%
	11 384 407	21 862 320	21 862 320	10 477 913	92.0%
CURRENT LIABILITIES					
Trade and other payables	312 020	374 873	374 873	62 853	20.1%
Finance lease liabilities	3 189	3 317	3 317	128	4.0%
Provisions	8 705	6 690	6 690	-2 015	-23.1%
Prepaid fees	355 110	342 222	342 222	-12 888	-3.6%
	679 024	727 102	727 102	48 078	7.1%
TOTAL LIABILITIES	**12 063 431**	**22 589 422**	**22 589 422**	**10 525 991**	**87.3%**
TOTAL EQUITY AND LIABILITIES	**10 757 331**	**11 722 599**	**11 722 599**	**965 268**	**9.0%**

ANNEX IV Audit expenditure

258) EUR 2.24m was set aside for this under Article 3525 of the 2018 budget.

259) As at 31 March 2018, a total of EUR 247 796 had been committed, and EUR 8 679 already spent. These figures break down as follows:

	Expenditure booked in 2017	2018 to date	
		Committed	Spending
Travel expenses and remuneration of auditors and assistants	118 319	114 321	8 679
KPMG AG Wirtschaftsprüfungsgesellschaft	207 457		
BDO AG Wirtschaftsprüfungsgesellschaft	57 000		
TOTAL	382 776		

ANNEX V List of abbreviations

AC	Administrative Council
ApC	Appeals Committee
BFC	Budget and Finance Committee
BoA	Board of Auditors
DBO	defined benefit obligation
DG	directorate-general
DPO	Data Protection Officer
EPO	European Patent Organisation or European Patent Office
EPASYS	European Patent Administration System
EPC	European Patent Convention
EU	European Union
EUR	euro
FCS	Fee Capturing System
FinRegs	Financial Regulations
FIPS	finance and personnel system
GDPR	EU General Data Protection Regulation
HR	Human Resources
IAS	International Accounting Standards
IASB	International Accounting Standards Board
IIB	International Patent Institute
ILO	International Labour Organization
IFRSs	International Financial Reporting Standards
IM	Information Management (the EPO's IT department)
ITR	IT roadmap
LTC	long-term care
MAC	Management Committee of the EPO

MADRAS	Mother of All Dossier-Related Application Systems
PD	principal directorate or principal director
PPI	Protocol on Privileges and Immunities
RFPSS	Reserve Funds for Pensions and Social Security
SAP	German software firm
UNIP	unitary patent
VaR	Value at Risk