

SUBJECT: New Investment Guidelines of the European Patent Office

SUBMITTED BY: President of the European Patent Office

ADDRESSEES: Budget and Finance Committee (for decision)

SUMMARY

This document proposes a revision of the Investment Guidelines of the EPO with respect to the treasury management of the Office, taking into account the situation on the financial markets as well as the recommendations of the Financial Study performed in 2016 by Deloitte (CA/79/16) and the forecasted cash flows of the Office.

The Office needs to adopt a long-term investment perspective and to adapt a more flexible asset allocation for its investments, thereby increasing the long term returns. This revised version of CA/F 18/17 integrates the feedbacks provided by the delegations after a first presentation during a BFC session on 24 October 2017.

The Committee is recommended to approve the amendments to the Investment Guidelines of the European Patent Office, in accordance with the provisions of Article 64(a) of the EPO Financial Regulations.

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I. **STRATEGIC/OPERATIONAL**

1. Operational

II. **RECOMMENDATION**

2. The Budget and Finance Committee is invited to approve the "Investment Guidelines of the European Patent Office" that will replace the previous guidelines, i.e. CA/F 11/15 "Investment Guidelines of the European Patent Office".

III. **MAJORITY NEEDED**

3. Simple majority

IV. **CONTEXT**

4. Since the 1990s the Office has been able to generate more cash income than expenditure in such a way that it puts in place a treasury management based on investment guidelines. Indeed, article 64 of the Financial Regulations of the EPO foresees that: *"In accordance with the guidelines drawn up by the Committee (BFC), the President shall be empowered to: a) invest such funds as are not needed for the immediate requirements of the Organisation. (...)"*.

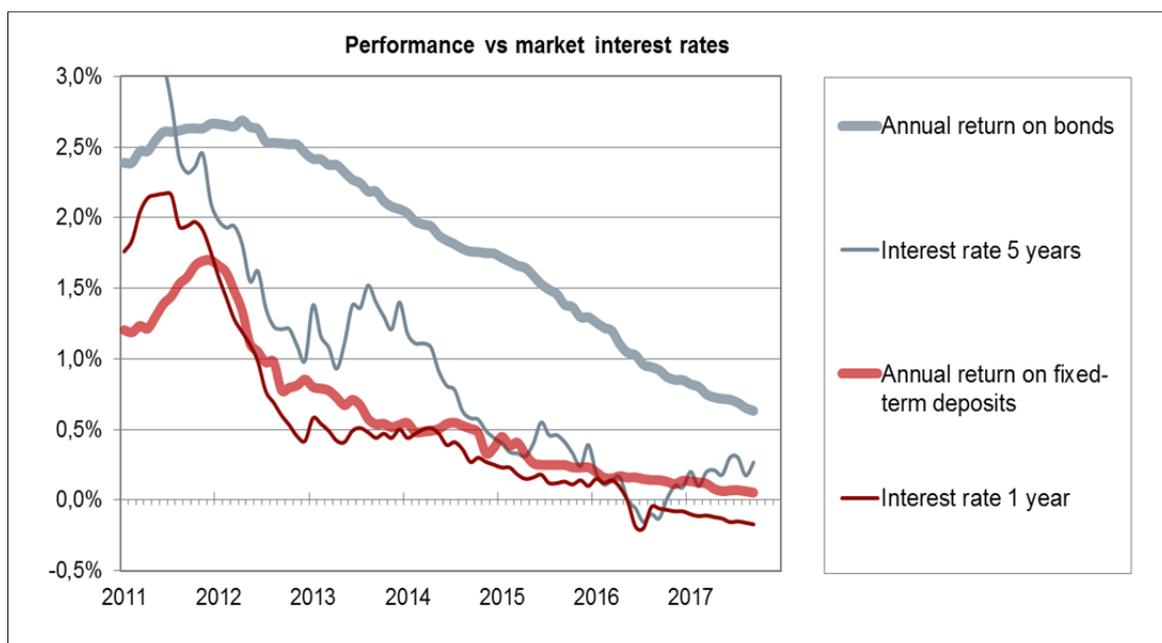
5. The treasury of the Office has grown steadily over the last two decades and particularly during recent years under the Efficiency and Quality strategy applied since 2011: 400 m€ in 2006, 1.700 m€ in 2014, 2.200 m€ in 2016. Part of the operational surplus was used to fund the RFPSS (650 m€ during the last five years) in addition to the normal contributions of the Office and the staff. The remaining part of the treasury (currently 2.300 m€) is managed under the constraints of the investments guidelines defined in the 1990s and marginally updated from time to time (1998, 2006, 2015), focussing on short/mid-term asset classes. They appear nowadays inadequate for two main reasons:

A. VERY LOW NEEDS OF CASH FOR THE OFFICE'S SHORT – AND MID TERM OPERATIONS

6. The current Investment Guidelines (CA/F 11/15) allow the Office to invest only in fixed income products, i.e. fixed-term deposits and bonds and other interest bearing securities with guaranteed capital repayment at maturity. Fixed-term deposits can be placed only with financial institutions with a minimum of a single A (S&P) or A2 (Moody's) long-term issuer rating or P-2 (Moody's) short-term debt rating and bonds and other interest bearing securities with guaranteed capital repayment at maturity must have at least a single A (S&P) or A2 (Moody's) issuer rating.
7. This investment policy is appropriate under the assumption that the usage of the funds is required on short-/ medium term basis as the investment classes are tailored to comply with short-/ medium-term investment needs accepting low returns to ensure that the liquidity is safeguarded and available on a short-/mid-term basis for the operations of the Office.
8. However, the liquidity situation as forecasted in the Financial Study 2016 (CA/79/16) shows that under the assumption included in the Base Scenario 100 (Annex II) it is very unlikely that liquidity will be necessary for the operations of the Office before the year 2036. Until then, the short-term cash needs of the Office are expected to be fully covered by the cash flows generated from operations. Indeed, according to the calculations of the Office an amount of 50 m€ at the beginning of the year will be sufficient in order to compensate for the fluctuations of the monthly incoming and outgoing payments and to ensure the smooth operations of the Office by providing sufficient liquidity for the outgoing payments as required.
9. Moreover, the main investments which can be envisaged for an institution like the EPO are IT and buildings. Both were recently addressed with two dedicated mid-term programmes (IT roadmap and Building roadmaps) which are about to be finalized while being already fully funded. It is not expected to engage in similar level of investments in the coming years.
10. Hence, the liquid funds currently available to the Office could theoretically entirely be used for long-term investments. For this purpose, the Office would need to extend the scope of available investments by instruments that historically showed higher return in the long term than the currently used fixed income products.

B. THE EVOLUTION OF THE FINANCIAL MARKETS

11. For years the financial markets have been characterised by a general decrease of the ratings of financial institutions and other issuers of financial instruments as well as low yields on the investments as allowed by the current investment guideline. Both aspects have required in the past several adjustments of the Investment guidelines (CA/F 7/06, CA/F 11/15) lowering the rating requirements in order to enable the Office to invest its liquidity and to achieve higher returns at a marginally increased risk. Since 2015 the yields on fixed income securities have further deteriorated.
12. Indeed, the Office has been confronted since the 2008 financial crisis with persistently decreasing yields (even negative yields) on low-risk investments like fixed-term deposits and corporate and governmental bonds of issuers with a high quality rating. In addition, the interventions by the European Central Bank (ECB), in particular the expanded asset purchase programmes since March 2015, have led to low liquidity in the financial markets as regards bond offers, which have had a negative impact on the timely and immediate investments of large amounts by the Office and led to a further decrease of bond yields.
13. Furthermore, the introduction of negative interest rates on the balances of current bank accounts by the ECB required the Office to lower its cash levels in order to avoid costs, though, on the other hand, hardly any short-term fixed-term deposits below one year duration with positive interest rates were available. It is noted that at the same time equity markets reached new all-time high.
14. For the last 12 months the return on the Office's investments in bonds and bank deposits was 0.72% and 0.06% respectively. The average yield on new investments made by the Office in 2017 was 0.33% for 5 year bonds and 0.03% for 1 year deposits:



15. It can be concluded that the investment strategy of the Office might be appropriate for short-term investments in order to avoid market volatility but it prevents the Office from more flexible investments in asset classes that historically offer higher returns, albeit at the cost of higher volatility. Furthermore, the concentration of all Office's funds in fixed income products creates significant exposure to the interest rate risk. This is why it is proposed to adopt a more dynamic investment policy in accordance with the real needs of the Office.

V. ARGUMENTS

16. Following an analysis of the limitation of the current investment guidelines (only AA-bonds, 1-year bank deposits, EUR-denominated investments only) in its 2016 Financial Study, Deloitte recommended that the EPO should reconsider the investment mandate, policies and guidelines applicable to the management of its treasury department to be able to implement a more flexible asset allocation/risk-return trade-off.
17. This orientation was already expressed by the Internal Audit of the Office in 2006, recommending the creation of a long term investment fund reserve to allow the Office to purchase more risky and longer-term securities. The developments and evolution of the financial markets over a ten year period (2007-2016) have led to the need for a deeper analysis.

18. Following the comparison of the results between two EPO financial asset managements (Office treasury and RFPSS) having different perspectives (A), the Office proposes to review the investments guidelines (B).

A. COMPARISON TREASURY / RFPSS RESULTS

19. More diversified asset classes are expected to generate higher returns, while increasing the volatility of the portfolio. However, a longer duration of the investments mitigate the risks associated with more volatile investment classes as demonstrated by the performance of the RFPSS using much more diversified asset classes.

20. The following table shows the results of the RFPSS compared to the results of Treasury Management of the Office over the last ten years:

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	Compound return p.a.
Nominal return											
RFPSS	3,9%	-31,2%	26,7%	10,2%	-3,7%	13,9%	10,1%	10,5%	3,5%	8,1%	4,1%
Office	3,2%	3,3%	2,6%	2,4%	2,7%	2,5%	2,1%	1,8%	1,3%	0,9%	2,3%
Inflation*	2,8%	1,0%	0,4%	1,7%	2,1%	2,1%	1,4%	0,2%	0,3%	1,7%	
Real return											
RFPSS	1,1%	-31,9%	26,2%	8,4%	-5,7%	11,6%	8,6%	10,3%	3,2%	6,3%	2,7%
Office	0,4%	2,3%	2,2%	0,7%	0,5%	0,4%	0,7%	1,5%	1,0%	-0,8%	0,9%

*German consumer price index

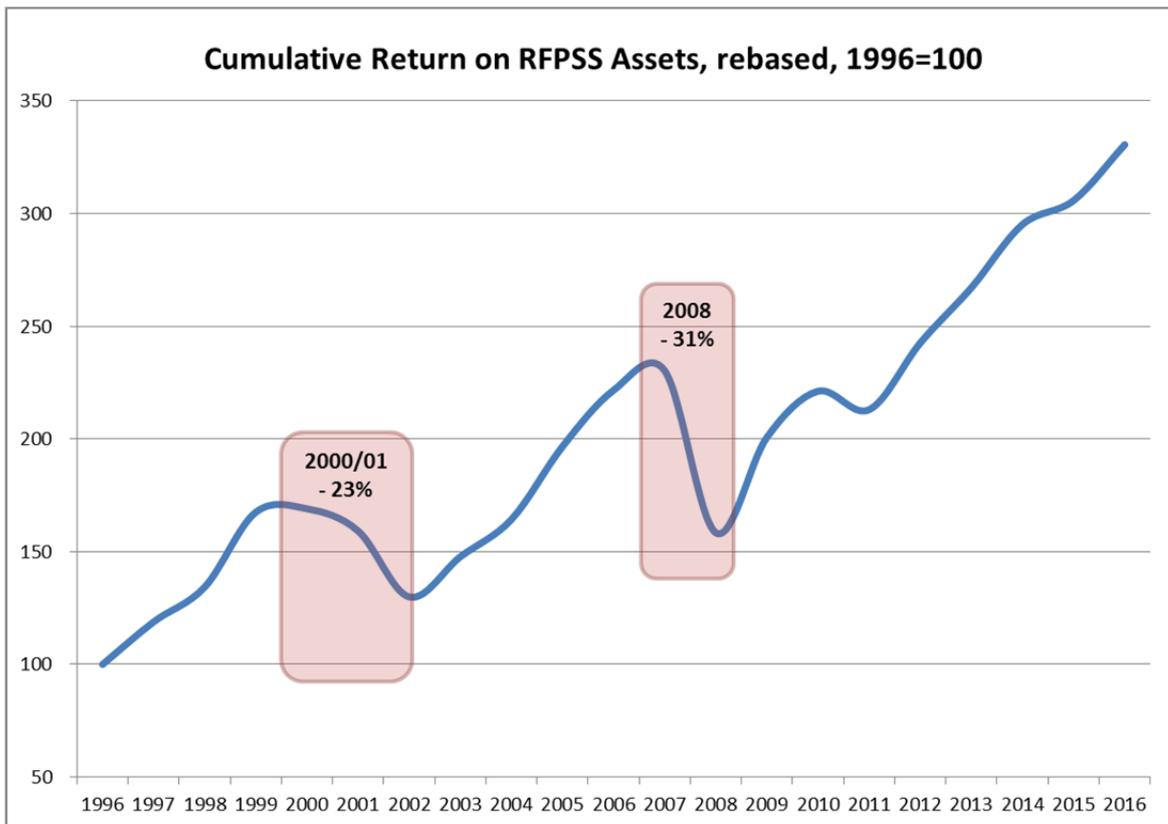
21. The results of the RFPSS are on average 1.8 percentage points higher than those of the Treasury Management over the period 2007-2016. Moreover if the exceptional negative impact of the financial crisis in 2008 is taken out the calculation, the differential moved to +5.4 percentage points in favour of the RFPSS for the period 2010-2016. If the Treasury Management of the Office would have obtained the same performances as the RFPSS, it would have resulted in an increase of 527 m € for the period 2007-2016 and 585 m € for the period 2010-2016 in financial gains.
22. Finally it has to be pointed out that the inflation adjusted result of the 2.2 bn € treasury management in 2016 was -0.8%, under the constraints of the current investment rules.
23. Leveraging its strong financial position, the Office has reconsidered its investment policy with the aim of implementing a more flexible and long-term asset allocation (see Annex I).

B. NEXT STEPS – REVISION OF THE INVESTMENT GUIDELINES

24. Investing into a more diversified class of assets requests a very specific expertise for the management of the assets and the monitoring of the implementation of the investment policy. For the moment, both functions are assumed respectively by the Finance department of the Office and an internal committee of the Office (TREMA) reporting regularly to the President of the Office. This situation needs obviously to be reviewed.
25. For the monitoring function, the Office has already engaged the first step with the setting-up of Financial Advisory Committee (FAC) which replaces the former TREMA committee as from 1 September 2017. This new committee also reports to the President of the Office and is composed inter alia of three external high level experts in fund and trustees activities and the RFPSS Administrator. The FAC met for the first time on 20 September 2017 in Munich in EPO premises and provided some substantial and important inputs which resulted in the Office submitting the current proposal. This internal committee will be complemented by more specific external risk management functions, according to the most updated practice in this area.
26. For the asset management function, three solutions could be envisaged in theory:
 - a) recruiting specific profiles in the Finance department of the Office to constitute a team of experts in funds management;
 - b) allocating the management of part of the treasury to the RFPSS Administrator which would certainly mean to increase his workforce internally;
 - c) outsourcing the management of its liquidity to external expert fund managers, as it is already done for the management of the Salary Savings Plan benefitting to its employees hired since 1 January 2009.
27. These different options were specifically considered during the first FAC meeting which came to the clear conclusion that option c) appears as the most suitable one. Indeed diversified asset management requires very specific skills and an access to multiple financial tools and products. To build such an in-house capacity could represent very substantial investments and costs.

28. These specific skills are certainly more present among the RFPSS principal directorate led by the fund administrator. However a basic recommendation of the FAC concerning risk management, which is followed by most institutions active on financial markets, is to ensure a good diversification in the management of assets, meaning that all operations of one entity should not be conducted only by a single in-house service. The RFPSS being already responsible for the management of a 7.8 bn € fund, the management of the more than 2 bn € treasury should be outsourced.
29. Moreover, if the management of the RFPSS can be taken as a useful example in terms of results, its investment strategy and asset allocation are very particular to its structure and horizon. Indeed the RFPSS has a precise objective and according to the most recent actuarial report (see CA/61/17 page 21-22), it could become active in two to three years for the financing the payment of pensions at the Office.
30. In the near future, there are no foreseeable major projects – like the New Main building in The Hague – which could necessitate specific liquidity needs. The Treasury of the Office is then not to be dedicated to immediate needs and can be allocated to the financing of any type of needs over a long duration. It means that most of the treasury can be managed with a long term investment horizon, balancing any potential short-term liquidity needs with a diversified portfolio managed by external professional experts, which will sharply improve its expected return.
31. The improvement of the treasury management of the Office, as recommended by the Financial Study, should not lead to exposure to unnecessary risks in terms of investments. This is why reinforced governance and reporting, in accordance with the most established practices, will be put in place (see articles 4 and 5 of the new guidelines). Moreover, following the recommendations of the experts, part of the treasury will still be invested in very liquid assets, allowing the Office to activate extremely quickly the necessary financial reserve for unexpected events. Further elements can be developed in this regard:

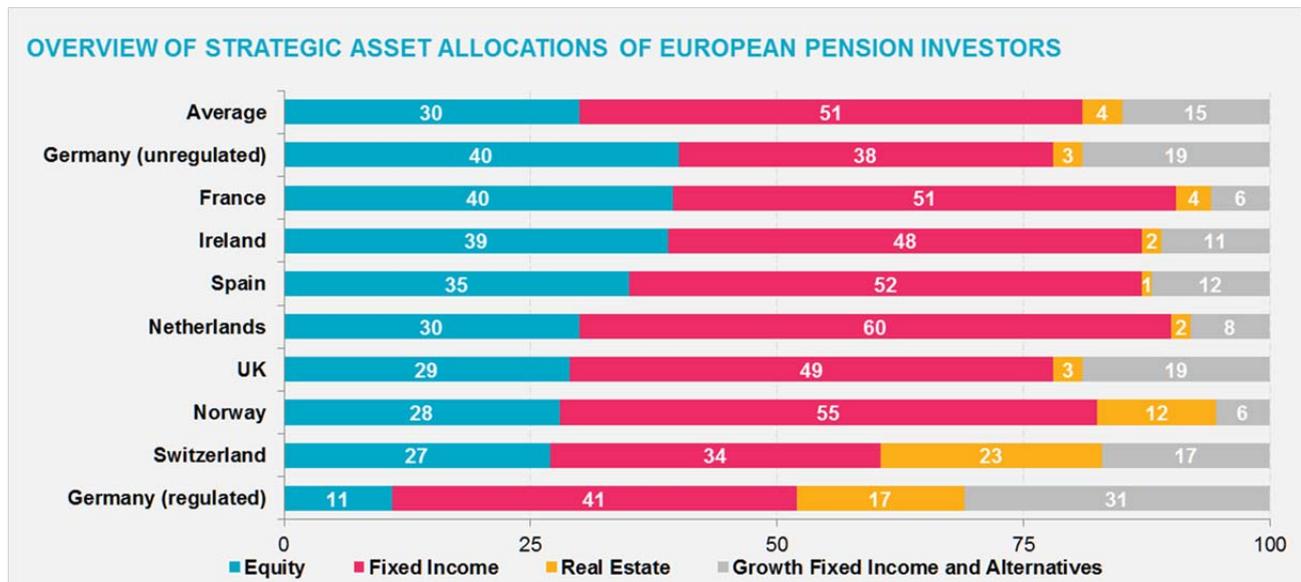
32. **Volatility:** The cornerstone of the proposed investment strategy is the long term investment horizon, which means that the EPO expects a positive development in the assets value over 20 years period. The Office is aware that in these 20 years there will be periods of substantial volatility in the financial markets which may result in significant drawdowns in the assets value. However, since historically the markets have always recovered after financial crises, the EPO intends to maintain its asset allocation in volatile markets, thereby profiting from the asset development in the long term. This approach is best illustrated by the historical development of RFPSS assets value over the last 20 years, which include two financial crises - of 2000/2001 and 2008. In both cases the investments value has been recovered in subsequent years providing for a positive development over the 20 years:



33. To mitigate the impact of potential drawdowns, the EPO intends to adopt the asset allocation with a clearly defined risk limit. Initially, it is proposed to impose a limit on the expected loss that would be equal to the annual budget surplus of the EPO (at a 95% confidence level). The annual operating budget surplus, which currently is at the level of ca. € 400m would represent approximately 20% of the total investments value (€ 2bn).

34. In subsequent years, the EPO would maintain the risk exposure, expressed as 20% of the portfolio with 95% confidence level, as referred to in point 4 of Investment Guidelines (Annex I). In this way, the total risk exposure would be maintained on the same level in future and would allow maintaining the same strategic asset allocation as the total asset base would continue to grow.
35. It needs also to be kept in mind that this risk is strongly mitigated by the overall financial situation of the EPO and the absence of important cash need in the near future which would oblige the Office to sell important part of the portfolio during a negative market period.
36. Asset classes: to outsource the treasury management, the Office needs to be able to contract multi-asset managers. If the list of potential asset classes is too limited ab initio, it will strongly restrict the capacity of the Office to find suitable solutions on the market. This is why Annex I lists the most commonly used classes of asset.
37. Asset allocation: there is a mechanic link between the asset allocation and the expected return. In order to achieve higher returns, the asset allocation will need a higher share of volatile assets, for example equities.
38. The definition ex-ante of the Strategic Asset Allocation, or benchmarking approach, facilitates ex-post the management of the risk exposure and the asset managers' performance by the EPO. Actually, for each asset category, the definition of ex-ante relative Value at Risk (VaR) and ex-post tracking error indicators will be used to assess and monitor the risks of the investments relative to the benchmark. To prevent any material deviation from the initial Strategic Asset Allocation, an acceptable range of variation within each asset class would be defined.
39. To further reinforce the capital preservation as a top priority, the EPO could additionally decide to gradually move towards that new investment strategy and/or mandate a funds management firm to implement transition management and/or a risk overlay strategy for the entire portfolio (i.e. through the purchase of put options), beyond a given level of drawdown. It should be noted that this option would bear an additional annual cost of approximately 0,5-0,6% of the assets value.

40. The most common structures for the asset allocation of prominent European pension investors are the following:

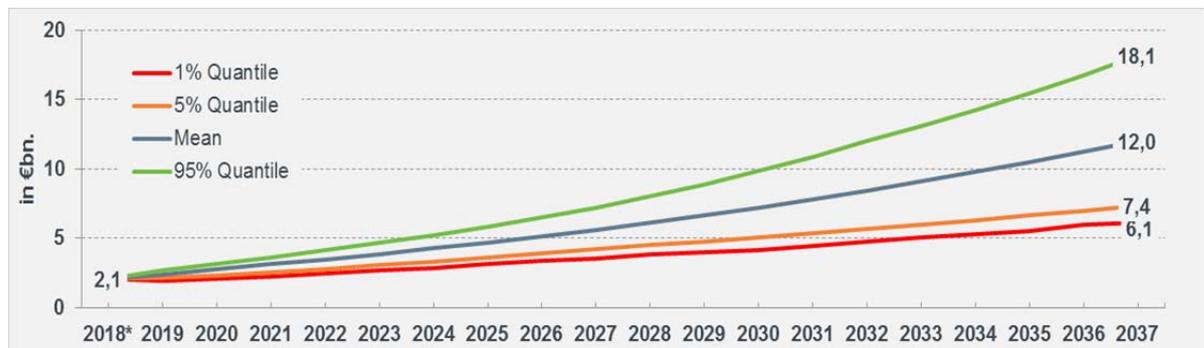


41. From the above, European Pension Investors typically hold 30 to 40% of assets in Equities, 35 to 60% in fixed income, and 5 to 20% in real estate and alternatives. Therefore it is proposed to adopt similar corridors for EPO asset allocation, with the following ceilings:

- 40% maximal in equity;
- 60% maximal in fixed income;
- 15% maximal in real estate;
- 15% maximal in alternatives.

42. This asset allocation is more conservative than the RFPSS investment guidelines (see RFPSS/SB 35/17 p.4), which authorize for example a 58% maximal exposure to equity (NB: RFPSS position end of September 2017 was 50.1% in equity). Consequently the expected return for the treasury management will stay below the RFPSS one but will represent a substantial improvement compared to current situation.

43. According to the calculations provided by a renowned financial consultant, if the Office adopts a rather conservative asset structure (e.g. 35% equity / 55% fixed income / 10% alternative; maximal of 400 m € accounting loss; minimal of 95% confidence level) and continues to inject yearly around 250 m €, it could expect a 4% return per annum, representing a total treasury of 12 bn € after a period of 20 years:



44. It shows that the Office would be in a position to generate sufficient resources to fully cover the potential financial gap of 10.6 bn € identified in the Deloitte study (Base case Scenario 100 as at 2036), concerning uncovered future liabilities, especially the tax adjustments / family allowances for pensioners.
45. The EPO intends to implement for its investments the same level of control and reporting mechanisms as set for the RFPSS, including, but not limited to: a supervision function, a quarterly performance and risk reporting, a compliance function and regular audits. Detailed list of proposed control measures is included in point 5 of Investment Guidelines (Annex I).
46. The resulting revised Investment Guidelines are presented to the BFC for approval. The Office will regularly report to the BFC about the implementation of the new guidelines and also about any deviation and its reasons.

VI. FINANCIAL IMPLICATIONS

47. Due to the wider spectrum of available investment options, the Office expects that the proposed amendments to the Investment Guidelines would allow it to increase the returns on its investment portfolio.

VII. LEGAL BASIS

48. Financial Regulations of the European Patent Organisation and in particular Article 64(a) thereof.

VIII. DOCUMENTS CITED

49. CA/F 11/15, CA/79/16

IX. RECOMMENDATION FOR PUBLICATION

50. Yes

Annex I:

Proposed Investment Guidelines of the European Patent Office (2017)

Annex II:

Projected Liquidity of the EPO, CA/79/16 Financial Study, Base Scenario 100

ANNEX 1 PROPOSED INVESTMENT GUIDELINES OF THE EUROPEAN PATENT OFFICE (2017)

The purpose of these new Investment Guidelines of the European Patent Office is to foster the EPO's financial long-term sustainability through an enhanced treasury management while mitigating balance sheet risks.

For this purpose these new Guidelines shall diversify the instruments offering risk/return profiles aligned to the long term cash flow forecast of the Office, in line with Article 64 (a) of the EPO Financial Regulations. This document replaces the CA/F 11/15 "*Investment Guidelines of the EPO*".

1. Investments shall be made according to defined implementation rules specifying:
 - a. asset classes,
 - b. investment instruments, and
 - c. asset management activities.

2. The EPO shall determine ex-ante the investment strategy of the funds by means of a Strategic Asset Allocation (SAA), and by setting benchmarks. In that framework, the asset classes listed here below shall be available, both for long and short positions, within the maximal ceiling specified for each of them as follows:
 - a. Equities – Up to 40% of the total portfolio
 - b. Fixed Income – Up to 60% of the total portfolio
 - c. Cash – Up to 10 % of the total portfolio
 - d. Commodities – Up to 5% of the total portfolio
 - e. Real Estate – Up to 15% of the total portfolio
 - f. Alternatives / Multi-Asset Investments – Up to 15% of the total portfolio

To execute the investments in the above asset classes the EPO is allowed to use all appropriate financial instruments such as:

- The usual financial instruments: listed or non-listed shares (Private Equity), bonds, loans including high yield loans;
- Currencies;
- Derivative instruments like options, forward, futures, swaps, debts, convertible bonds;
- Structured and custom finance products including securitized and collateralized debt instruments (i.e. Asset Backed Securities ABS, Mortgage Backed Securities MBS, Credit Default Swaps CDS) and other hybrid instruments combining elements of other asset classes or underlyings such as inflation;
- Collective Investments as UCITS Funds or Alternative Investment Funds AIF (hedge funds).

3. The management of the above mentioned investments is intended to be outsourced to an exclusive panel of worldwide leading funds management firms, with a long-standing proven track record in these investment fields. While complying with the EPO's Strategic Asset Allocation defined ex-ante, each selected funds management firm would be entitled to define their own Tactical Asset Allocation, meaning being granted the flexibility to allocate funds by asset class within predetermined thresholds to be reviewed periodically.
4. The Implementation Rules shall include mitigation measures as regards the market risk, the liquidity risk and the counterparty risk in order to make sure that at any time the actual risk of the investment portfolio remains within the predefined risk limits and is consistent with its long term expected returns.

In particular, the maximum risk exposure, defined as Value at Risk (1 year VaR at 95% level of confidence), shall be limited to 20% of the total assets' value.

5. The EPO shall implement a governance framework to ensure the risk management and transparency of its funds management. Within this framework the EPO shall:
 - a. select and approve the financial institution(s) to be entrusted with the custody of transferable assets owned by the European Patent Office,
 - b. select and appoint a well-established external consultancy firm to perform and provide the EPO with a monthly/quarterly consolidation including reporting on performance, risk, holdings and transactions on the global portfolio level, as well as encompassing all legal, compliance, custodian and reporting functions,
 - c. establish a quarterly reporting system on the implementation and associated performance of the European Patent Office's Investment Guidelines, encompassing the coordination of all elements of the Governance Framework,
 - d. ensure that the monthly/quarterly reporting on the European Patent Office's investment is fully compliant with International Financial Reporting Standards (IFRS),
 - e. set up a permanent and independent compliance function,

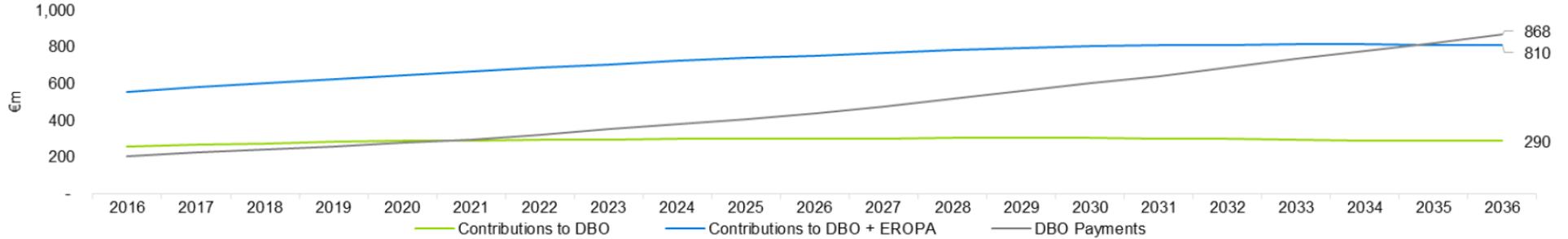
- f. define rules for the set-up and regular review of risk limits, to ensure proper budget implementation and size of portfolio of the EPO in regards to any change in the financial markets,
- g. set-up an independent risk management function with the authority to access all relevant information on fund's holdings, transactions and risk exposure, so that to be able to advise the President on the risk status and potentially suggest corrective actions if necessary,
- h. monitor, manage and prevent conflicts of interest, in particular in relation to the holding of investments in the fund's or manager's own account(s),
- i. commission an external audit/accounting firm to perform an audit of the funds accounts and policies on an annual basis,
- j. ensure a regular review of governance policies and processes.

The above functions may ultimately be performed internally and/or by third parties, independently from the funds management.

- 6. These new Investment Guidelines shall enter into force on 15.12.2017.

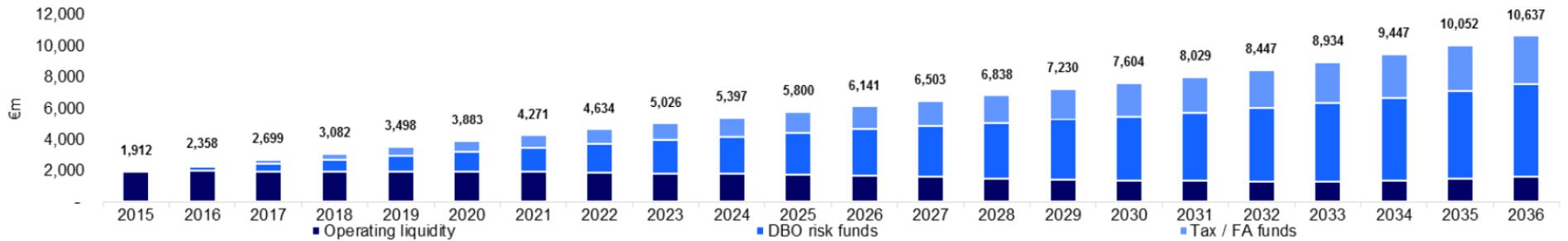
ANNEX 2 PROJECTED LIQUIDITY OF THE EPO, CA/79/16 FINANCIAL STUDY, BASE SCENARIO 100

RFPSS in- and outflow



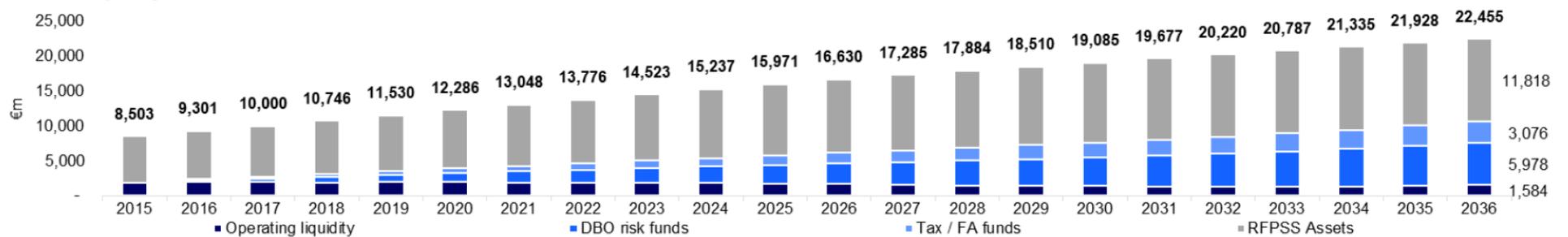
Source: Management information

Office liquidity



Source: Management information

Overall liquidity



Source: Management information