



Distr.: General

12 October 2020

ENGLISH

Original: English

Nineteenth session New York, 7-17 December 2020

Report of the Court on updated and detailed plans and a multi-year financing mechanism for capital replacements

Executive Summary

This report responds to requests by the Committee on Budget and Finance to submit updated and detailed medium- and long-term plans and estimates for capital replacements and a proposal for a multi-year financing mechanism including a financial reserve to cope with unforeseen and emergent needs.

The five-year rolling forecast for building components that have reached the end of their useful lives has been updated in cooperation with the main contractor, Heijmans. It is attached as Annex 1. The long-term capital replacement plan covering a period of 20 years is attached as Annex 2.

An overview of potential financing mechanisms is also part of this report. Annex 3 provides several scenarios for calculation of the contributions from States Parties to provide sufficient and timely funding in accordance with the needs outlined in the long-term plan. The Court maintains that a special fund provides the most appropriate and stable funding mechanism for capital replacements.

The current contract with Heijmans already includes several incentives. The contractor is obliged to use economies of scale where similar components are used in other buildings for which the contractor is responsible.

I. Introduction

1. At its thirty-third session, the Committee on Budget and Finance ("the Committee") recommended that capital replacement should commence in 2020, based on the technical analysis provided by the International Criminal Court ("the Court") and the contractor, and in the light of experiences shared by other international organizations. The Committee emphasized that delays in the commencement of capital replacement would not only raise overall maintenance and replacement costs in the long turn and reduce the asset value of the premises, but would raise security and operational risks for the Court.¹

2. The Committee requested the Court to submit a comprehensive report containing updated and detailed medium- and long-term capital replacement plans and estimates, a proposal for a multi-year financing mechanism including a financial reserve to cope with unforeseen and emergent needs, and a possible mechanism to provide incentives to the

^{*}Previously issued as CBF/34/10.

¹ Report of the Committee on Budget and Finance on the work of its thirty-third session, ICC-ASP/18/15, para. 111.

contractor to lower costs through identifying more economical procurement taking advantage of technological progress and market conditions for review at its thirty-forth session.²

3. The Committee recommended to the Assembly of States Parties ("the Assembly") that a total amount of \notin 975 thousand be approved for 2020, requesting the Court to operate within this envelope and further decided that it would consider allocating the same amount for 2021, after having reviewed the medium- and long-term plans and cost estimates.³

4. The Assembly, at its eighteenth session, noted the recommendations of the Committee regarding maintenance and capital replacement for the premises of the Court, and approved the commencement of capital replacement at the level of \notin 425 thousand in 2020, while underlining the need to see maintenance and capital replacement in conjunction.⁴

5. Furthermore, the Assembly emphasized the need for the capital replacement to be fully justified and limited only to those elements which are absolutely necessary; requested the Court to ensure that all measures are taken to achieve savings and efficiencies, including using alternatives to capital replacement whenever possible, and invited the Court to submit a long-term plan and estimates for capital replacement in line with these principles. The Assembly further noted that any capital replacement needs arising in the foreseeable future should be financed within the scope of the regular budget process.⁵

6. This report should be read as a continuation of reports CBF/32/10, CBF/31/2 and CBF/30/3, which are related to the funding and development of medium- and long-term cost projections for capital replacements.

II. Medium-term and long-term cost projections and funding plans for capital replacements

Medium-Term Plan

7. As part of the aforementioned reports to the Committee, the Court has submitted several mid-term funding plans to project the costs of capital replacements at the permanent premises over the next five years on the basis of a rolling forecast.

8. In its report to the Committee entitled "Report of the Court on the development of medium-term and long-term cost projections for capital replacements and the inclusion of performance indicators in the new maintenance contract",⁶ the Court provided an updated list and cost estimate of the building components that would require replacement between 2020 and 2024. In its earlier reports, the projection included the years 2018-2022 and 2019-2023 respectively, on the basis of the proposal of the Court, as endorsed by the Committee, that the Court periodically present a five-year expenditure estimate along with an outlook on long-term plans.⁷

9. The new main contractor, Heijmans, in its role as a long-term partner of the Court under the close supervision of the Court's Facilities Management Unit (FMU) as contract manager, prepared its own estimates and updated the rolling forecast and capital replacement plan accordingly. The forecast covers the capital replacement of building components which will have reached the end of their useful lives and which are necessary to preserve the building's value and reliable operability. It also included some of the audio-visual technology for courtrooms and the conference cluster. As already reported, these capital replacement costs for building-related hardware and audio-visual technology for courtrooms and the conference cluster are completely separate from the costs related to the five-year IT/IM strategy.

10. In cooperation with Heijmans, the Court has developed its new rolling five-year plan covering the building components that require replacement between the years 2021 and 2025,

² Ibid., para. 114.

³ *Ibid.*, para. 115.

⁴ ICC-ASP/18/Res.1, section G. para 1.

⁵ ICC-ASP/18/ Res.1, section G. paras 2 and 3.

⁶ ICC-CBF/32/10.

⁷ Report of the Committee on Budget and Finance on the work of its thirty-second session, ICC-ASP/18/5, para 77.

bearing in mind the need to keep the costs as low as possible and the level of resources approved for the first year of the capital replacement plan.

11. In order to establish the new five-year plan, a complete review of the building elements and their breakdown into their various sub-elements and components has been undertaken by FMU and the main contractor. The outlook of the new five-year plan has therefore been restructured following the now largely applicable Dutch standard for classification of building elements (NL/SfB Code). The new structure covers all building elements whereas the former submissions focused only on the areas where capital replacements in the respective years have been proposed. Both the five-year and the long-term plan therefore follow the same structure.

12. Furthermore, updated and recent information from the assessment of the various building elements undertaken by Heijmans has been used for the new five-year plan. As outlined in the terms of reference of the maintenance contract, shared with the Committee,⁸ the main contractor is contractually obliged to undertake a yearly survey of changes in the condition of the building components. The process is coordinated by FMU in its capacity as the Court's contract managing entity.

13. The new five-year rolling forecast includes the replacement of building components that had been due for replacement in 2020 but not covered with the limited funds of \notin 425 thousand as approved by the Assembly.

14. The guiding principle of the reprioritization has been that business disruptions at the Court are to be avoided. Therefore, the risks associated with the delay of the replacements have been considered. The Flexposure servers of the security management system responsible for the access system architecture, and key components of the external tourniquets and Uninterrupted Power Supply (UPS) components as part of the emergency power installation have been identified as priorities for replacement during 2020. Both the Court and Heijmans strongly recommend continuing with the replacement of the security system servers every six years.

Long-Term Plan

15. Heijmans has submitted a long-term plan with a horizon of 20 years which was proposed and envisaged as a realistic timescale.⁹

16. The priorities were set by the contractor in cooperation with and under the scrutiny of FMU, based on industry standards, information on the expected technical lifespans of the building components, the actual condition of the components and recommendations provided by the manufacturers of critical installations.

17. The contractor has recalled that any capital replacement plan is a dynamic document requiring permanent and consistent updates.

18. It can be observed that basically, higher costs for replacements ("spikes") can be expected every five years. In 2025, large parts of the lighting installations will require replacement. Furthermore, in 2025, parts of the safety installation, such as the smoke detection system and parts of the building management system will require replacement. In 2030, the air-handling units that are part of the air conditioning and ventilation system; the circulation pumps of the cooling system; the re-heaters of the heating circulation; large parts of the distribution boards of the electrical infrastructure; the fire alarm system module of the security and safety installations; and the electric air valves that are part of the building management facilities will require replacement. A larger spike is expected in 2035 when, after 20 years of use, the green roof including its substructure; part of the Court's emergency power infrastructure; relevant parts of the lighting infrastructure; and the sprinkler system will have reached the ends of their useful lives. By then, the server infrastructure of the building management system will need to be replaced again. At that point, it is expected that large parts of the Court's built-in furniture will be worn out and require replacement. Another spike will be expected in 2039/2040 when the floor and wall tiles will require replacement inside (ground floor and sanitary rooms) and outside (walkway next to the mirror pond) the building.

⁸ ICC-CBF/32/10.

⁹ Idem.

III. Multi-year financing mechanism

19. Depending on the contractual arrangements between the Court and the main contractor, different funding mechanisms are available.

Current contractual arrangements

20. The current contract between the Court and Heijmans covers preventive maintenance¹⁰ in accordance with a contractually agreed and defined schedule of preventive activities (annual maintenance plan) against a fixed periodic fee, and corrective maintenance¹¹ with defined response and repair times depending on the criticality of the element concerned for the operations of the Court. The Court's Facilities Management Unit manages and controls the current contract with Heijmans and monitors its performance.

21. The contractor is also responsible for the development and yearly update of multiannual capital replacement plans indicating the expected duration of the useful lives of the various building components and the estimated costs for their replacement. These plans take the outcome of the annual condition assessment into account and the contractor's proposals are compiled in medium- and long-term plans, submitted to the Court. The implementation of the proposal is to be determined by the Court.

22. Under the current contractual arrangements, several financing models to fund longterm, capital replacement have been analysed. For reliable funding, a financial reserve is needed to cope with unforeseen and emergent requirements. The fund should always have a positive balance.

23. As further key parameters, the timely availability of the funds has been identified and that funding has to be sufficient to cover the capital replacement needs to avoid business disruptions and to avoid consequential damages due to unforeseen outages of building functions.

24. Index adjustments and interest rates used in these projections are inevitably subject to fluctuation and, therefore, should be taken as indicative parameters in this report.

25. The following funding models have been examined:

26. Scenario 1: Funding of capital replacements as part of the regular Programme Budget

27. A 2.6 per cent index adjustment that is constant during the 20 years of the duration of the long-term plan has been calculated under the assumptions of the calculation model. The average increase¹² of the construction cost of new residential buildings in the Netherlands since 2016 was used to calculate the index adjustment. Reference was also made to changes in the BDB index for maintenance of the technical installations for office buildings, which showed an average annual increase of 2.7 per cent. The total cost of capital replacements to be funded would be €83.3 million over 20 years. The contributions would largely fluctuate between €86 thousand and €27.5 million. There would appear, therefore, to be a high risk that the required amounts will not be made available.

28. Scenario 2: Regular annual contribution (annuity)

29. This scenario assumed the creation of a fund to which States contribute a fixed annual instalment to cover capital replacement costs, with instalments being as uniform as possible throughout the entire funding period.

30. An interest rate of 0.4 per cent was used to calculate the return on investment from the fund deposits. The selected rate is based on the 10-year average of the 12-month Euribor rate. The scenario assumed that the rate would remain stable over the entire period of 20 years.

¹⁰ Preventive maintenance services are all services and measures aiming to ensure that elements of the building continue to function well, so that the building continues to fulfil its technical function and/or operational condition. These services include all maintenance, inspections and tests required by law, applicable regulations or by certifying organs.

¹¹ Corrective maintenance services are all the maintenance and repair services organized and conducted after a defect, a disorder or a fault has manifested, as a result of which the element no longer fulfils the agreed functionality or quality. This can relate to technical, functional or aesthetic matters.

¹² EUROSTAT, 23.04.2020.

31. Assuming an interest rate of 0.4 per cent on fund deposits and an index adjustment of the capital replacement costs of 2.6 per cent as in scenario 1, the entire capital replacement cost could be funded with flat contributions of \notin 4.2 million per year. Under these circumstances, the fund would always have a positive balance.

32. Scenario 3: Regular annual contribution (annuity, see above) plus additional one-time contributions every five years

33. This scenario assumed the creation of a fund in the same way as in scenario 2 but every five years, States would make an additional contribution so as to lower annuities during the regular years.

34. Assuming the same interest rate on fund deposits as in scenario 2 and an index adjustment of the capital replacement costs as in the above scenarios, the entire capital replacement cost could be funded with flat contributions of ϵ 3.0 million per year and additional contributions every 5 years of ϵ 6.0 million. Under these circumstances, the fund would always have a positive balance.

35. Scenario 4: Staged annual contributions (annuity stable for 5 years)

36. This scenario also assumed the creation of a fund in the same way as in scenario 2 but annual instalments would be fixed for only five years to cover capital replacement costs up to the next spike. They would then be increased or decreased in accordance with funding needs to cover capital replacement costs.

37. Assuming the same interest rate on fund deposits and an index adjustment of the capital replacement costs as in the above scenarios, the regular annuity should be set at $\notin 2.3$ million for the years 2021 - 2025, $\notin 3.35$ million for the years 2026 - 2030, $\notin 7.0$ million for the years 2031 - 2035 and $\notin 3.95$ million for the years 2036 - 2040 to ensure that the fund retains a positive balance.

38. According to a survey of member organizations of the Inter-Agency Network of Facilities Managers (INFM) undertaken in advance of the last annual INFM conference in Brussels to determine best practices regarding capital replacement funding, 80 per cent of the organizations participating in the survey fund capital replacements separately from their regular budgets. One third of these organizations have established a special capital replacement fund.¹³

39. Based on current market practices and trends in solutions adopted by international public sector organizations, the Court continues to advocate the establishment of a capital replacement fund as a mechanism to cope with the funding requirements for the replacement of aging building components. This solution represents the most cost-efficient approach but also entails a degree of complexity, such as the establishment of a new framework to ensure effective funds management and the acceptance of some investment risks.

Alternative contract and cooperation models

40. The Court could explore alternative contractual arrangements to further integrate maintenance and capital replacement programmes into one contract. This approach may potentially carry some benefits compared to the current business model: (a) increased predictability of the annual costs (fixed costs with adjustments reflecting price indexation or, alternatively, fluctuating cost based on a contractually agreed schedule); (b) avoidance of any fund management issues and risks for the Court through the integration of financing elements; and (c) allocation of operational and performance risks between the Court and the main contractor as part of a performance-based contract structure that stipulates an increased risk transfer from the Court to the service supplier. In turn, it is expected that the Court will have to compensate for a premium to transfer defined financial and operational risks of both programmes to the main contractor. As is always the case, the Court will ensure that best value for money is achieved through a competitive process.

41. Should this approach be of interest to the Committee, the Court will endeavour to further develop this alternative solution.

¹³ ICC-CBF/33/8.

IV. Incentives to the contractor to identify more economical procurement

42. The maintenance contract in place with Heijmans includes several Key Performance Indicators (KPIs) to measure its performance and to incentivize its efforts.

43. The KPIs and the terms of reference have been shared with the Committee as an annex to report CBF/32/10.

44. The contract does not include bonuses but does include penalties in the event that the performance goals are not reached. The contract model instructs the contractor to act promptly and with foresight. Penalties apply if the contractor does not carry out repairs of certain critical installations in good time or if parts or the entirety of the facilities are not functional. These control elements offer the contractor the incentive to build up organization and responsiveness according to the requirements of the contract, and ultimately ensure that the core goals of the organization simultaneously reflect the core goals of the contractor.

45. The contractor procures services based on an open book approach whereby all offers from subcontractors and materials are fully available for scrutiny by the Court. That said, for some services, single-source subcontractors will have to be used due to the unavailability of alternatives.

46. The contractor is obliged to use economies of scale where similar components are used in other buildings for which it is responsible.

Annex 1

Five-Year Plan (2021-2025)

This five-year plan shows the projected costs for capital replacements at the permanent premises based on the estimates of the new main contractor. It is underpinned by technical expertise and up-to-date information on the actual performance of the materials that make up the various building components.

a) A complete review of the building elements and their breakdown into their various sub-elements and components has been undertaken prior to the establishment of the new five-year plan. Its structure follows, to a large extent, the Dutch standards applicable to the classification of building elements (NL/SfB Code).

The new structure deviates from the former submissions that focused mainly on the areas where capital replacements in the respective years have been proposed. This new structure has the advantage of aligning both the five-year and the long-term plans, ensuring consistent presentation.

The new five-year plan incorporates further changes that were necessary based on the outcome of the annual condition survey undertaken by Heijmans.

Furthermore, recent feedback and information from subcontractors in charge of the maintenance of critical installation groups and manufacturers of several building components has been incorporated.

b) As a result of the Assembly's reduction in the proposed budget for capital replacements in 2020 to ϵ 425 thousand, a prioritization exercise was undertaken to identify those essential elements that will be replaced in 2020 within the scope of the limited allotment. Any risks identified arising out of the Court's inability to complete the 2020 capital replacements will be entered into the Court's risk-register.

c) The current review of building components has led to the following reprioritized recommendations for capital replacements between 2020 and 2025.

d) As a precondition to the prioritization, it was necessary to once again review the proposed capital replacements for 2020. Therefore, contrary to previous submissions, the following table still includes the year 2020 but is based on the new structure and contains updated information. It therefore represents, initially, a six-year plan.

e) After reprioritizing the replacements for 2020 in line with the allotment of \notin 425 thousand for this year, and with the aim of limiting operational risks for the Court to the extent possible, the following components are proposed for replacement during the years 2021 to 2025.

f) The risks associated with delay in replacement have been considered and the Flexposure servers of the security management system responsible for the access system architecture have been identified as being the top priority for replacement during 2020, together with key components of the external tourniquets and the Uninterrupted Power Supplies (UPS) that are part of the Court's emergency power infrastructure. The contractor has clarified that the manufacturers strongly recommend continuing with replacement of the security system servers at least every six years.

Table 1: Updated Five-Year Plan Capital Replacement 2021 – 2025 (incl. allotment for 2020)

Five-Year Plan Capital Replacement 2021 – 2025 (incl. allotment for 2020)	Cash flow 2020 prices										
Building Components for Replacement	2020	2021	2022	2023	2024	2025	Sum				
Building Envelope	€27,000	€191,364	€-	€87,360	€38,280	€97,020	€441,024				
Building Structure	€-	€19,536	€-	€-	€3,276	€2,400	€25,212				
Finishes and Surfaces	€- €102,932 €68,886 €75,654 €68,886 €245,586 €561,943										

Mechanical and Plumbing	€-	€129,720	€8,400	€156,000	€-	€240,000	€534,120
Electrical and Security Installations	€398,000	€688,002	€522,708	€1,088,136	€1,416	€5,737,176	€8,435,438
Fixtures and Fittings	€-	€87,120	€5,040	€2,520	€12,600	€105,960	€213,240
Landscape	€-	€103,380	€-	€-	€38,400	€320,640	€462,420
ICT Hardware and AV Technology	€-	€153,800	€-	€-	€-	€-	€153,800
TOTAL	€425,000	€1,475,854	€605,034	€1,409,670	€162,858	€6,748,782	€10,827,19

The components shown in the above tables are:

A. Building Envelope

Facade and External Walls

While the lifespan of the entire facade will far exceed the current five-year plan, the contractor strongly recommends preserving the condition of the facade by replacing damaged seals immediately in conjunction with a special cleaning exercise during which all dirt between seals and structure will be removed. The proposal refers to the request of the Assembly¹⁴ to use alternatives to capital replacement whenever possible. By investing in these limited replacement efforts, the useful life of the facade can be extended and its structural integrity and function maintained.

External Doors and Windows

This section includes the replacement of components of the speed gates providing vehicular access to the premises, and of the tourniquet doors providing pedestrian access to the secure areas of the Court's premises. Sensors, brakes and motors require timely replacement.

Roofs

Roof hatches manufactured from coated metal require timely replacement to maintain the integrity of the installation.

B. Building Structure

Internal Walls, Stairs, Balustrades and Railings and Internal Doors

It was observed that several internal wall plinths require replacement to maintain the function and structural integrity of the respective walls. Joints connecting prefabricated stairs to the main building structure require replacement. Sliding doors and folding partitions have been installed at several locations in the premises, such as in the conference cluster. They are held and supported by a railing system. The holders require timely replacement.

C. Finishes and Surfaces

Ceilings

Parts of the lamella ceilings that are widely used throughout the premises require replacement in 2025.

The Court's major internal traffic routes are equipped with smoke curtains to create smoke compartments in the event of a fire. The batteries that are used to power the motors of the curtains require replacement.

Floors

Carpet tiles are used as floor finishing on all office floors. Provision has been made to replace 10 per cent of the carpet tiles every year starting in 2022, focusing firstly on high-traffic areas, such as corridors, meeting and conference rooms, and on heavily used offices.

Furthermore, in 2021, floor tile joints in several locations on the ground floor and in

¹⁴ ICC-ASP/18/ Res.1, section G. para 2.

the basement require replacement to prevent surface damage and higher consequential costs.

Internal Wall Finishes

The same applies to wall tiles at several locations, in particular in the sanitary rooms.

D. Mechanical and Plumbing

Air Conditioning and Ventilation

The bearings of the air handling unit fans installed on several floors of the building require replacement after 10 years of use.

Cooling Distribution

Several circulation pumps run 24/7 and require replacement as they will have reached the end of their lifespans in terms of operating hours.

Sensors, actuators and valves in the data cooling system in the technical control rooms for the audio-visual technology and in the main equipment rooms require replacement to maintain full operability.

Monitoring HVAC

The room temperature sensors that are installed in all rooms of the building require replacement after 10 years of use. The same applies to the Dwyer CO2 transmitter (sensors with an electrical transmission output to indicate a difference between two pressures) in the heating and ventilation system.

Water Supply

The main components of the hydrophoric installation (air conditioners for technological rooms) require periodic replacement.

E. Electrical and Security Installations

Communication Systems

The Court's intercoms installed at all access doors require a regular software update to maintain the operational reliability of the system.

Electrical Infrastructure

Core elements of the power generator require replacement after ten years of use in order to allow the generator to reach its full lifespan of approximately 40 years.

The permanent premises are equipped with several uninterrupted power supply (UPS) systems located throughout the building. Replacement of the batteries of the UPS systems in the Main Equipment Room and Satellite Equipment Rooms after six years of uninterrupted use is necessary to maintain their functionality as, in accordance with their product specifications, they will have exceeded their performance cycle by then. Without such replacement, the secure UPS of the Court's main technical building equipment, such as security control room equipment, cameras, access control and, in particular, the technical equipment in all courtrooms, could not be guaranteed. This would have an immediate effect on the Court's operations.

The uninterrupted power supply installation has several fans to cool the installation. These fans need to be replaced every six years to prevent failure of the installation. This replacement is strongly recommended by the supplier of the uninterrupted power supply.

Lighting

Lighting and light pole fixtures require replacement after ten years of use.

Security and Safety installations

Several internal access control mechanisms exist at the permanent premises, in line with internal security requirements and limited access rights for certain user groups. Replacement of the most frequently used locks and biometric hand scanners at the external and internal access control doors is required after seven years of use, as the risk of failure will increase drastically after that time. Failure will immediately affect the Court's operations and lead to higher operational costs on top of the additional repair cost. The need for this replacement is determined on the basis of the Court's own experience with such systems. Focusing on the most frequently used components is a best practice model.

The aspiration system for smoke detection is a critical installation group at the Court's premises and is an important part of the fire safety installations. It therefore requires replacement as recommended by the manufacturer upon completion of ten years of operation.

The electroacoustic broadcasting and evacuation system is part of the fire safety and emergency installations at the Court's headquarters. To maintain building safety in accordance with the host State's regulations, the system requires replacement after eight years of use.

The burglary system that is an important part of the security installations requires replacement after ten years of use.

The batteries of the Security Management System (SMS) extender require replacement.

Fire extinguishers, fire hose reels and fire dampers require timely replacement during the five-year term.

The SMS integrates all security technologies at the permanent premises, such as access control and management, surveillance and detection systems. SMS will require replacement of several hardware components after five, latest after six years of uninterrupted, 24/7 use. Such replacement is in accordance with industry standards and strongly recommended by the system supplier in consideration of the system's expected useful life. The Flexposure servers have been identified as the most critical parts to be replaced during 2020 as they manage the access system. Replacement of the video servers will be delayed to 2021.

The replacement of the monitors and video wall in the security control room is staggered over several years.

Furthermore, the replacement cost includes core network switches of the security installations in the Main Equipment Room which will have reached their maximum operating hours, considering their uninterrupted, permanent operation.

The sprinkler system valves will require replacement towards the end of the term of the five-year plan.

The thermal PTZ Cameras (Pan-Tilt-Zoom) require replacement in 2025.

Elevators

The batteries of the emergency lighting in all elevators need to be replaced every five years. This replacement is important to achieve the lifespan and to guarantee the autonomy of the installation. Defective batteries can decrease the lifespan of the installation. This replacement is in line with industry standards.

Building Management System (BMS)

The building management system is composed of a main server and several subservers. It is used to control and monitor mechanical and electrical equipment, such as the heating and ventilation system, the lighting system and elevators. It is essential for the functioning of building technology. According to industry standards and the advice of the system supplier, the BMS requires replacement of its server infrastructure after five, maximum six years of uninterrupted operation. Upon the replacement of the server, a comprehensive system software update will be undertaken. The same applies to monitors in the technical control room which run 24/7, as they will have exceeded their lifetime operating hours according to their product specifications. Such replacement, together with comprehensive system software upgrades, is a precondition for continued operational reliability. Failure to make such replacements would result in a significant increase in the risk of disruption and in higher costs for ad hoc repairs. Failure of the BMS would affect the general operability of the Court's premises.

The identified replacements for 2025 include the BMS cabinets on the floors that contain the relevant active components of the system and the system's field devices, such as sensors.

F. Fixtures and Fittings

Facade Maintenance Installations

The cables of the facade maintenance installations are exposed to the elements and need to be replaced every six to nine years. The replacement comprises replacement of the catching device, control power, control unit, facade rollers, power cable, relays, steel cables, switch, wheel pots and the revision of cable entry lugs, driving engines, lifting engine, and obstacle bracket.

Sanitary Provisions

The usual lifespan of the sinks, toilets and the urinals is ten years. The supplier strongly recommends that the elements be replaced accordingly.

G. Landscape

Security Systems (Outdoor)

Because of constant exposure to environmental factors such as wind, rain, salt and sand, some of the external surveillance cameras will be replaced after ten years of uninterrupted use. The Court has already been operating such systems for a long period. This provision is based on that experience and is strongly supported by system suppliers.

Physical Security Perimeter (Outdoor)

The supplier advises a revision of the hydraulics and power packs of the mechanical traffic bollards that prevent unauthorized vehicular access. These are essential parts of the building's security system.

Technical Installations (Outdoor)

Sand filters and the electrolyte filters in the mirror pond will need regular replacement in order to keep the system operational.

H. ICT hardware and audio-visual (AV) technology in courtrooms and the conference cluster

Some of the ICT hardware components of courtroom AV systems will require replacement during the term of the five-year plan. In particular, it will be necessary to replace cameras, microphones and other AV equipment in the courtrooms and conference cluster, including the AV director and interpretation booths.

Annex 2

Long-Term Plan (2021-2040)

The long-term plan shows the projected costs for capital replacements at the permanent premises, based on the estimates of the main contractor, Heijmans, over a period of 20 years starting in 2021 and ending in 2040.

a) The submitted long-term plan covers a horizon of 20 years as this timescale provides a realistic picture of the likely changes in the condition of the building's components, and consequently their expected useful lifespan.

b) Any longer timescale will run the risk of being an academic exercise only, as the specific features of the building and the performance of the relevant building component at any given time thereafter cannot be taken into account.

c) The contractor has drawn on its experience with comparable buildings in the Netherlands, including buildings that are used by other international organizations. It draws in particular on its experience with the technical lifespans of technical building components and relevant industry standards. Feedback received and recommendations provided by the manufacturers of the building components have been carefully integrated, where appropriate.

d) The long-term plan is a living document that requires updates on a regular basis. In accordance with the contract in place, the contractor is obliged to update the long-term plan once per year.

e) The structure of the long-term plan, like the five-year plan, follows the Dutch standards for the classification of building elements (NL/SfB Code).

f) Large capital replacement cost "spikes" are expected every five years. While during the first four years, costs vary between €160 thousand and €1.5 million, the first "spike" rises to almost €6.75 million in the fifth year (2025). This trend continues in the next five years. While costs fluctuate between €70 thousand and €4.6 million between 2026 and 2029, they will reach a new high in 2030 of €7.3 million. There will be an absolute high point in this timescale of the long-term plan after 20 years of operation as in 2035, the expected cost for capital replacements will be €18.7 million. The next high point will be in 2039/2040, and will amount to €6.0 million and €4.7 million respectively in these two years.

g) The below tables show the cash flow over the years 2021 to 2040 at 2020 prices, meaning that no index adjustment or inflation compensation is included in the figures.

h) The total expected investment for capital investment from 2021 to 2040 will therefore be $\in 60.2$ million (at 2020 prices).

Table 2: Long-Term Plan Capital Replacement 2021 – 2030 (cash flow at 2020 prices)

Building Components for Replacement	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Sub-total
Building Envelope	191,364€	0€	87,360€	38,280€	97,020€	24,000€	417,677€	0€	24,000 €	3,000€	882,701€
Building Structure	19,536€	0€	0€	3,276€	2,400€	0€	1,270,619€	0€	0€	5,676€	1,301,507€
Finishes and Surfaces	102,932€	68,886€	75,654€	68,886€	245,586€	68,886€	1,298,847€	68,886€	68,886€	80,766€	2,148,213€
Mechanical and Plumbing	129,720€	8,400€	156,000€	0€	240,000€	900€	391,020€	0€	8,400 €	3,234,690€	4,169,130€
Electrical and Security Installations	688,002€	522,708€	1,088,136€	1,416€	5,737,176€	529,416€	934,976€	1,416€	522,708€	3,513,144€	13,539,098€
Fixtures and Fittings	87,120€	5,040€	2,520€	12,600€	105,960€	0€	99,586€	0€	7,560€	352,380€	672,766€
Landscape	103,380€	0€	0€	38,400€	320,640€	0€	182,466€	0€	0€	140,160€	785,046€
ICT Hardware and AV Technology	153,800€	0€	0€	0€	0€	153,800€	0€	0€	0€	0€	307,600€
TOTAL	1,475,854€	605,034€	1,409,670€	162,858€	6,748,782€	777,002€	4,595,191€	70,302€	631,554€	7,329,816€	23,806,061€

Building Components for Replacement	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	Grand Total
Building Envelope	63,360€	24,000€	2,060,064€	0€	4,543,920€	0€	0€	24,000€	481,037€	3,000€	8,082,082€
Building Structure	0€	0€	447,803€	0€	71,400€	3,276€	0€	0€	1,270,619€	2,400€	3,097,004 €
Finishes and Surfaces	75,654€	68,886€	318,090€	68,886€	252,354€	68,886€	68,886€	68,886€	1,433,223€	2,889,318€	7,461,281€
Mechanical and Plumbing	156,000€	0€	79,020€	0€	1,102,260€	8,400€	0€	0€	547,020€	50,700€	6,112,530€
Electrical and Security Installations	1,088,136€	529,416€	235,916€	1,416€	9,394,536€	522,708€	1,416€	529,416€	1,992,896€	607,086€	28,442,040€
Fixtures and Fittings	2,520€	0€	66,060€	0€	3,026,460€	17,640€	2,520€	0€	99,586€	1,078,217€	4,965,768€
Landscape	0€	0€	86,520€	0€	320,640€	0€	0€	0€	182,466€	60,300€	1,434,972€
ICT Hardware and AV Technology	153,800€	0€	0€	0€	0€	153,800€	0€	0€	0€	0€	615,200€
TOTAL	1,539,470€	622,302€	3,293,473€	70,302€	18,711,570€	774,710€	72,822€	622,302€	6,006,847€	4,691,021€	60,210,877€

Table 3: Long-Term Plan Capital Replacement 2031 – 2040 (cash flow at 2020 prices)





The components shown in the above tables are:

A. Building Envelope

The Building Envelope cost group consists of all elements that protect the building from weather impact. These are the **Facade and External Walls**, **External Doors and Windows**, and the **Roof**.

The useful lifetime of the facade at the Court's Headquarters is estimated to be between 35 and 40 years. However, in order to mitigate the risk of the facade completing only a part of its full useful life, and in order to possibly even extend this lifespan, it is strongly recommended that the concept of care and immediate replacement of worn parts be applied on a permanent basis. It was therefore calculated that damaged seals should be replaced during the estimated lifespan of the facade in conjunction with a thorough cleaning exercise. These replacement costs were therefore included over the entire 20-year period under review.

A similar approach was applied as regards the external doors and windows. The Court's Headquarters building is equipped with a range of tourniquets and turnstiles as access doors to the building. In principle, this is long-lasting equipment but, in order for these items to complete their full useful lives, technical components (sensors, brakes and motors) require timely replacement. The related costs have also, therefore, been included over the entire 20-year period.

It is expected that all blinds mounted on the Court's inner facade will have to be replaced by 2033 because by then, they will have already exceeded their usual 15-year lifespan by three years. The blinds are essential for the control of sunlight in the building, especially at the large, south-facing facade.

The green roof requires replacement after 20 years. This includes replacement of the roof substructure and seals.

B. Building Structure

The Building Structure cost group includes all internal civil building elements such as the Internal Walls, the so called Main Structure, referring to the structural components such as concrete and steel pillars, the Stairs, Balustrades and Railings and the Internal Doors.

In addition to the replacement of internal wall plinths as described above, and the regular checking and replacement of joints in the entire main concrete construction to maintain the capacity for dilation, the cost group also includes the regular review and reapplication of the fire safety coatings of the entire steel construction, which is the method chosen to avoid having to replace the entire component.

C. Finishes and Surfaces

The Finishes and Surfaces cost group covers Ceilings, Floors and Internal Wall Finishes.

The indicated timeframes refer to the recommended replacement of the lamella ceilings, all floor components, in particular the joints of the tiled floors and walls, so as to achieve an extended useful life of the entire construction. Replacement of 10 per cent of the carpet tiles has been included per annum as of 2022. Tiles in the most used areas of the building, such as the corridors and meeting and conference rooms, will be replaced first.

D. Mechanical and Plumbing

This cost group covers the Air Conditioning and Ventilation, Cooling Distribution, Heat Distribution and Heat Generation, Monitoring HVAC and Water Supply sub-groups, the systems that are most relevant for the working conditions in the Court's Headquarters. In order to maintain appropriate and stable working conditions in the building, replacement of the HVAC components such as air-handling units, bearings, valves and pumps is required.

E. Electrical and Security Installations

The cost group refers to the Communication Systems, Electrical Infrastructure, Lighting, Security and Safety installations, Elevators and Building Management System sub-groups.

Over the 20-year term, this cost group represents some of the highest costs. Parts of the lighting installations will require replacement, as will parts of the safety installation, such as the aspiration system, and the emergency power infrastructure.

This cost group also covers replacement of the server infrastructure for both the building management and the security management system.

F. Fixtures and Fittings

The Facade Maintenance Installations, the Sanitary Provisions and the Users Provisions are the most important sub-groups in the Fixtures and Fittings cost group.

While facade maintenance installations refer to the cleaning installations and gondolas on the outside facades which require regular replacement of the driving machines and the support cables, sanitary provisions refer to the sinks and toilets that have a limited lifespan. Users provisions represent the Court's built-in furniture that will be worn out and require replacement in 2035.

G. Landscape

The Landscape cost group covers the costs of the Security Systems (Outdoor), Physical Security Perimeter (Outdoor), Technical Installations (Outdoor) and Paved Surfaces (Outdoor) sub-groups.

The outdoor security systems consist in particular of cameras, while the physical security perimeter comprises all protection measures and also includes the barriers and hydraulic bollards that prevent unauthorized vehicular access. The most important technical installations are the pumps and filters of the mirror pond installation while paved surfaces comprise all surfaces of the internal walkways and the entire parking area.

H. ICT hardware and audio-visual (AV) technology in courtrooms and the conference cluster

This cost group covers the regular replacement of cameras, microphones and other sundry AV equipment in the courtrooms and conference cluster.

Annex 3

Multi-Year Financing Mechanism (2021 – 2040)

This annex provides four financial models to sustainably fund the capital replacement cost identified in the long-term plan.

a) The following key parameters for reliable funding of capital replacements have been identified:

Timely availability of the funds;

■ Funding to be sufficient to cover the capital replacement needs to avoid business disruptions and to avoid consequential damage due to unforeseen outages of building functions;

The financing mechanism to include a financial reserve to cope with unforeseen and emergent needs.

b) As outlined by the contractor, a reliable funding mechanism is a precondition to planning the capital replacements accordingly.¹⁵

c) Upon the initiative of the Court's representative in the Inter-Agency Network of Facilities Managers (INFM), a survey of member organizations was undertaken in advance of the last annual INFM conference in Brussels to determine best practices regarding capital replacement funding. Eighty per cent of the organizations that participated in the survey reported that capital replacements are funded separately from their regular budgets. One third of those organizations have established a special capital replacement fund.¹⁶

d) The following scenarios now examine various basic financing models that are available on the market as possible financing options for investments in buildings and their infrastructure.

e) The following basic assumptions and requirements apply to all models and scenarios:

■ The funding requirement follows the long-term plan (see Annex 2);

■ The calculation models aim to identify the necessary amount for contributions to the fund in accordance with the needs as outlined in the long-term plan;

The fund should always have a positive balance;

■ For the cash-flow of the calculation model, it is assumed that all contributions will be received in one instalment by mid-year;

The time horizon will be in line with the long-term plan, i.e. 20 years;

■ The interest rate used to calculate the return on investment from the fund deposits will not fluctuate during the observation period;

■ In order to determine an interest rate that reflects as closely as possible changes in interest rates on the capital markets, the 12-month Euribor rate is used as reference. Euribor is the average interest rate at which many European banks grant each other bonds in euros. It is the basis for numerous derived interest products and is often used as a reference value for mortgages and savings accounts in the euro area. As the seat of the Court is in the euro area, Euribor was used for the purpose of these scenarios. However, there are similar parameters for the dollar area or other currencies. The selected rate is based on the 10-year average of the 12-month Euribor as the reference rate for the development of the financial markets. The scenario assumed that the rate would

¹⁵ ICC-CBF/32/10.

¹⁶ ICC-CBF/33/8.

remain stable over the entire period of 20 years. The interest rate will be set at 0.4 per cent.

Only a nominal cash flow will be considered;

■ In order to select an appropriate rate for the index adjustment as part of the financial models, the increase in the construction cost of new residential buildings in the Netherlands since 2016 was reviewed. The average price increase was identified as 2.6 per cent per year. To confirm the accuracy of that figure, reference was also made to changes in the BDB index for the maintenance of technical installations for office buildings, which showed an average annual increase of 2.7 per cent. Therefore, an index adjustment of 2.6 per cent p.a. is assumed as part of the financial scenarios and is applied to the capital replacement cost to compensate for inflation;

■ The above assumptions are used to carry out a model calculation. These assumptions have to be adapted in line with market fluctuations and further detailed as part of future considerations. Index adjustments and interest rates are subject to fluctuation and should be taken as indicative parameters only.

The following scenarios have been examined:

A. Scenario 1: Funding of Capital Replacements as part of the regular Programme Budget

SCENARIO 1: Funding of Capital Replacements as part of the regular budget Building Components for Replacement 2021 2022 2023 2024 2026 2027 2028 2030											
2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Sub-total	
1,475,854€	605,034€	1,409,670€	162,858€	6,748,782€	777,002€	4,595,191€	70,302€	631,554€	7,329,816€	23,806,061€	
1,514,226€	636,905€	1,522,508€	180,467€	7,672,947€	906,371€	5,499,650€	86,327€	795,677€	9,474,726€	28,289,803€	
	2021 1,475,854 €	2021 2022 1,475,854 € 605,034 €	2021 2022 2023 1,475,854 € 605,034 € 1,409,670 €	2021 2022 2023 2024 1,475,854 € 605,034 € 1,409,670 € 162,858 €	2021 2022 2023 2024 2025 1,475,854 € 605,034 € 1,409,670 € 162,858 € 6,748,782 €	2021 2022 2023 2024 2025 2026 1,475,854 € 605,034 € 1,409,670 € 162,858 € 6,748,782 € 777,002 €	2021 2022 2023 2024 2025 2026 2027 1,475,854 € 605,034 € 1,409,670 € 162,858 € 6,748,782 € 777,002 € 4,595,191 €	2021 2022 2023 2024 2025 2026 2027 2028 1,475,854 € 605,034 € 1,409,670 € 162,858 € 6,748,782 € 777,002 € 4,595,191 € 70,302 €	2021 2022 2023 2024 2025 2026 2027 2028 2029 1,475,854 € 605,034 € 1,409,670 € 162,858 € 6,748,782 € 777,002 € 4,595,191 € 70,302 € 631,554 €	2021 2022 2023 2024 2025 2026 2027 2028 2029 2030 1,475,854 € 605,034 € 1,409,670 € 162,858 € 6,748,782 € 777,002 € 4,595,191 € 70,302 € 631,554 € 7,329,816 €	

SCENARIO 1: Funding of Capital Replacements as part of the regular budget											
Building Components for Replacement	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	Grand Total
TOTAL	1,539,470€	622,302€	3,293,473€	70,302€	18,711,570€	774,710€	72,822€	622,302€	6,006,847€	4,691,021€	60,210,877€
TOTAL with index adjustment (2.6%)	2,041,701€	846,778€	4,598,008€	100,700€	27,499,236€	1,168,145€	112,659€	987,765€	9,782,422€	7,838,168€	83,265,385€

The total capital replacement cost to be funded as part of the regular programme budget is $\in 60.2$ million. In the event of a 2.6 per cent index adjustment that is constant over the 20-year life of the long-term plan, the index adjusted cost to be funded as part of the regular budget would be $\in 83.3$ million.

B. Scenario 2: Regular annual contribution (annuity)

■ Fixed annual instalment to cover capital replacement costs (instalment as uniform as possible over the entire funding period);

- Interest on credit amounts in fund of 0.4 per cent;
- Index adjustment of capital replacement costs of 2.6 per cent;

The cumulative sum represents the total amount of contributions received including interest on unused funds by the end of each given year;

• Running total means the cumulative sum minus the total of index adjusted capital replacement costs funded by the end of each given year.

The annuity should be set at \notin 4.2 million to ensure that the fund retains a positive

					1						
Building Components for Replacement	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Sub-total
TOTAL	1,475,854€	605,034€	1,409,670€	162,858€	6,748,782€	777,002€	4,595,191€	70,302€	631,554€	7,329,816€	23,806,061€
TOTAL with index adjustment (2.6%)	1,514,226€	636,905€	1,522,508€	180,467€	7,672,947€	906,371€	5,499,650€	86,327€	795,677€	9,474,726€	28,289,803€
SCENARIO 2: Regular annual contribution (annuity) + inte	erest rate of 0.4	%									
SCENARIO 2: Regular annual contribution (annuity) + inte	erest rate of 0.4 2021	% 2022	2023	2024	2025	2026	2027	2028	2029	2030	
SCENARIO 2: Regular annual contribution (annuity) + inte Annual installment			2023 4,200,000	2024 4,200,000	2025 4,200,000	2026 4,200,000	2027 4,200,000	2028 4,200,000	2029 4,200,000	2030 4,200,000	
	2021	2022									
Annual installment	2021 4,200,000	2022 4,200,000	4,200,000	4,200,000	4,200,000	4,200,000	4,200,000	4,200,000	4,200,000	4,200,000	

Building Components for Replacement	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	Grand Tota
TOTAL	1,539,470€	622,302€	3,293,473€	70,302€	18,711,570€	774,710€	72,822€	622,302€	6,006,847€	4,691,021€	60,210,877
TOTAL with index adjustment (2.6%)	2,041,701€	846,778€	4,598,008€	100,700€	27,499,236€	1,168,145€	112,659€	987,765€	9,782,422€	7,838,168€	83,265,385
SCENARIO 2: Regular annual contribution (annuity) + into	erest rate of 0.4%										
SCENARIO 2: Regular annual contribution (annuity) + int	erest rate of 0.4% 2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	
SCENARIO 2: Regular annual contribution (annuity) + int Annual installment		2032 4,200,000	2033 4,200,000	2034 4,200,000	2035 4,200,000	2036 4,200,000	2037 4,200,000	2038 4,200,000	2039 4,200,000	2040 4,200,000	
ç , "	2031										
Annual installment	2031 4,200,000	4,200,000	4,200,000	4,200,000	4,200,000	4,200,000	4,200,000	4,200,000	4,200,000	4,200,000	

C. Scenario 3: Regular annual contribution (annuity, see above) plus additional one-time contributions every five years

- Fixed annual instalment to cover capital replacement costs (instalment as uniform as possible over the entire funding period);
- Every five years, higher additional contributions so as to decrease the annuities in the regular years;
- Interest on credit amounts in fund of 0.4 per cent;
- Index adjustment of capital replacement costs of 2.6 per cent.

The regular annuity should be set at $\notin 3.0$ million and the additional contribution every five years at $\notin 6.0$ million to ensure that the fund retains a positive balance.

Building Components for Replacement	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Sub-total
TOTAL	1,475,854€	605,034€	1,409,670€	162,858€	6,748,782€	777,002€	4,595,191€	70,302€	631,554€	7,329,816€	23,806,061€
TOTAL with index adjustment (2.6%)	1,514,226€	636,905€	1,522,508€	180,467€	7,672,947€	906,371€	5,499,650€	86,327€	795,677€	9,474,726€	28,289,803€
·											
SCENARIO 3: Regular annual contribution (annuity) and	5-year injections	of 5 MEUR + in	terest rate of	0.4%							
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	
Annual installment	3,000,000	3,000,000	3,000,000	3,000,000	9,000,000	3,000,000	3,000,000	3,000,000	3,000,000	9,000,000	
Accummulative sum	3,000,000	6,005,943	9,021,362	12,042,753	21,075,508	24,113,702	27,160,423	30,197,332	33,246,044	42,303,768	
Running total (based on index-adjusted CRP costs)	1,485,774	3,854,812	5,347,724	8,188,648	9,548,456	11,680,278	9,227,349	12,177,932	14,430,967	14,013,965	
Annual interest on remaining fund	5,943	15,419	21,391	32,755	38,194	46,721	36,909	48,712	57,724	56,056	
Building Components for Replacement	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	Grand Total
TOTAL	1,539,470€	622,302€	3,293,473€	70,302€	18,711,570€	774,710€	72,822€	622,302€	6,006,847€	4,691,021€	60,210,877€
TOTAL with index adjustment (2.6%)	2,041,701€	846,778€	4,598,008€	100,700€	27,499,236€	1,168,145€	112,659€	987,765€	9,782,422€	7,838,168€	83,265,385€
SCENARIO 3: Regular annual contribution (annuity) and 5	-year injections of	5 MEUR + inte	erest rate of 0.4	4%							
	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	
Annual installment	3,000,000	3,000,000	3,000,000	3,000,000	9,000,000	3,000,000	3,000,000	3,000,000	3,000,000	9,000,000	
Accummulative sum	45,359,824	48,419,937	51,488,904	54,551,754	63,626,453	66,627,454	69,635,786	72,655,701	75,683,745	84,684,771	
Description to tail (here all any finders a directed CDD sector)	17 000 000	47 344 655	15 713 614	10 (74 764	250 227	2 002 002	4 070 700	7 010 000	256 530	1 410 200	
Running total (based on index-adjusted CRP costs)	15,028,320	17,241,655	15,712,614	18,674,764	250,227	2,083,083	4,978,756	7,010,906	256,528	1,419,386	
Annual interest on remaining fund	15,028,320 60,113	17,241,655 68,967	62,850	74,699	1,001	8,332	4,978,756	28,044	1,026	5,678	

D. Scenario 4: Staged annual contributions (annuity stable for 5 years)

Annual instalments fixed for five years to cover capital replacement costs up to the next spike, then increased or decreased in accordance with funding needs to cover capital replacement costs;

- Interest on credit amounts in fund of 0.4 per cent;
- Index adjustment of capital replacement costs of 2.6 per cent.

The regular annuity should be set at $\notin 2.3$ million for the years 2021 - 2025, $\notin 3.35$ million for the years 2026 - 2030, $\notin 7.0$ million for the years 2031 - 2035 and $\notin 3.95$ million for the years 2036 - 2040 to ensure that the fund retains a positive balance.

Building Components for Replacement	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Sub-total
TOTAL	1,475,854€	605,034€	1,409,670€	162,858€	6,748,782€	777,002€	4,595,191€	70,302€	631,554€	7,329,816€	23,806,061€
TOTAL with index adjustment (2.6%)	1,514,226€	636,905€	1,522,508€	180,467€	7,672,947€	906,371€	5,499,650€	86,327€	795,677€	9,474,726€	28,289,803 €
	•				·						
SCENARIO 4: Staged annual contributions (annuity stabl	e for 5 years) + int	terest rate of C).4%								
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	
Annual installment	2,300,000	2,300,000	2,300,000	2,300,000	2,300,000	3,350,000	3,350,000	3,350,000	3,350,000	3,350,000	
Accummulative sum	2,300,000	4,603,143	6,912,951	9,225,908	11,547,396	14,897,477	18,257,333	21,608,630	24,972,987	28,347,619	
Running total (based on index-adjusted CRP costs)	785,774	2,452,012	3,239,313	5,371,803	20,343	2,464,053	324,260	3,589,230	6,157,910	57,816	
Annual interest on remaining fund	3,143	9,808	12,957	21,487	81	9,856	1,297	14,357	24,632	231	
Building Components for Replacement	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	Grand Total
TOTAL	1,539,470€	622,302€	3,293,473€	70,302€	18,711,570€	774,710€	72,822€	622,302€	6,006,847€	4,691,021€	60,210,877 €
TOTAL with index adjustment (2.6%)	2,041,701€	846,778€	4,598,008€	100,700€	27,499,236€	1,168,145€	112,659€	987,765€	9,782,422€	7,838,168€	83,265,385 €
SCENARIO 4: Staged annual contributions (annuity stable	for 5 years) + inte	rest rate of 0.4	1%								
	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	
Annual installment	7,000,000	7,000,000	7,000,000	7,000,000	7,000,000	3,950,000	3,950,000	3,950,000	3,950,000	3,950,000	
Accummulative sum	35,347,850	42,367,915	49,412,674	56,467,220	63,549,580	67,500,274	71,462,097	75,439,318	79,428,496	83,394,501	
Running total (based on index-adjusted CRP costs)	5,016,346	11,189,634	13,636,384	20,590,230	173,354	2,955,903	6,805,067	9,794,523	4,001,279	129,116	
Annual interest on remaining fund	20.065	44.759	54,546	82,361	693	11.824	27.220	39.178	16.005	516	