

**Sixty-eighth session**

Items 135 and 136 of the provisional agenda*

Programme budget for the biennium 2012-2013**Proposed programme budget for the biennium 2014-2015****Strategic heritage plan of the United Nations Office
at Geneva****Report of the Secretary-General***Summary*

The present report is submitted pursuant to General Assembly resolution [66/247](#), part VII. The report presents the detailed implementation plan and cost analysis for the renovation phase of the strategic heritage plan of the Palais des Nations based on the medium-term implementation option set out in the previous report of the Secretary-General ([A/66/279](#)).

Building on the conclusions of the conceptual engineering and architectural study completed in February 2011, the report describes the scope of the renovation work and its key objectives and outlines the recommended implementation strategy, which the Secretary-General has determined to be the most cost-effective and operationally efficient approach to the renovation. The implementation plan takes into account the lessons learned from similar projects, including the capital master plan renovation at Headquarters.

The report identifies significant deficiencies of the Palais des Nations, prioritizing health and safety issues, accessibility needs for persons with disabilities and technological requirements for modern services.

In-depth technical studies conducted since the previous report have confirmed that early adoption and diligent implementation of the strategic heritage plan is vital to urgently address health and safety risks and to ensure the long-term viability of operations and business continuity at the Palais des Nations. This is supported by the 25-year cost-benefit analysis where expected renovation, operations and maintenance

* [A/68/150](#).



expenditures envisaged under the strategic heritage plan are compared with a continued reactive maintenance approach. The analysis shows significant long-term benefits to Member States, estimated to generate average annual cost savings of CHF 20.68 million (\$22.02 million).

The projected cost of the recommended detailed implementation plan, inclusive of associated project support costs, but excluding possible financing costs, amounts to CHF 837.00 million or \$891.37 million at preliminary 2014-2015 rates. The previous, initial estimate was CHF 618.00 million. The increase of CHF 219.00 million principally reflects additional construction activities to mitigate structural deficiencies, primarily at the E building tower and the S building, which have been identified since the issuance of the previous report. The increase also reflects the allowance for lessons learned from previous construction projects, particularly the need to provide adequately for contingencies and incorporate associated and support cost requirements from the outset.

As requested by the General Assembly, the Secretary-General analysed, as a potential complement to assessed contributions by Member States, options for voluntary funding sources, public or private, in line with the rules and regulations of the United Nations. The related findings are summarized in the present report.

The Secretary-General recommends the utilization of a multi-year capital investment strategy as the principal funding mechanism, with the potential for a substantial proportion of the capital cost to be met from a possible long-term preferential loan from the host country. In addition, the Secretary-General seeks approval from the General Assembly to pursue other options to leverage the value of United Nations assets, which have the potential to reduce the assessment of contributions upon Member States.

Given the impetus to initiate the renovation, while not commencing the renovation phase of the strategic heritage plan before the capital master plan has been completed, the Secretary-General requests the approval of the General Assembly to advance necessary design work by establishing an appropriately sized dedicated project management team and securing the required consultancy services to undertake the next necessary preparatory project tasks described in the present report so as to enable actual construction work to commence no later than early 2017.

Contents

	<i>Page</i>
I. Introduction	4
II. Overview of premises utilized at Geneva	5
III. Comprehensive study of the medium-term implementation option	6
A. Key objectives of the strategic heritage plan	7
B. Major findings	7
C. Lessons learned from other major capital expenditure projects	9
D. Project scope	10
E. Space optimization	11
F. Alternative implementation strategies	13
G. Detailed implementation plan	15
H. Schedule of works	16
I. Multi-year cost plan for the project	19
J. Cost-benefit analysis	22
K. Timely project implementation	23
IV. Alternative funding options	23
A. Measures to reduce the overall project scope	23
B. Measures to leverage the value of existing United Nations assets	24
C. Loan arrangements	24
D. Public-private partnership arrangements	25
E. Viable funding mechanisms	27
V. Recommended detailed implementation strategy and multi-year funding mechanism	28
VI. Next steps	29
A. Dedicated project management team and liaison support staff	30
B. Dedicated consultancy services	31
C. Project governance structure	32
VII. Resource requirements for the biennium 2014-2015	33
VIII. Conclusions	35
IX. Proposed actions to be taken by the General Assembly	35
Annexes	
I. Proposed strategic heritage plan implementation in phases	37
II. Strategic heritage plan dedicated project team	42
III. Strategic heritage plan governance structure	43

I. Introduction

1. The United Nations Office at Geneva serves as a global centre for the Organization's sustainable development, humanitarian, human rights, disarmament and disaster risk reduction activities. The Office is the largest United Nations conference centre in Europe and hosted 10,220 meetings, across the Organization's agenda, in 2012.

2. At present, 191 permanent missions and observers are accredited to the United Nations Office at Geneva. More than 35 entities of the United Nations system have a presence in Geneva, including the headquarters of five specialized agencies. In addition, major partners such as the International Committee of the Red Cross, the International Organization for Migration, the Inter-Parliamentary Union, 400 non-governmental organizations, of which 250 are in consultative status with the Economic and Social Council, and the European Organization for Nuclear Research (CERN) are based in Geneva. Many of these make regular use of the conference facilities at the United Nations Office at Geneva on a reimbursable basis.

3. Geneva is also home to the Human Rights Council and 10 human rights treaty bodies, while the Office is a vital platform for the Organization's expanding work for the protection and promotion of human rights. The Committee for the Rights of Persons with Disabilities takes the lead on accessibility issues, requiring services such as sign language interpretation, Braille printing and webcasting with real-time captioning.

4. While a large number of United Nations entities, including the Economic Commission for Europe, the United Nations Conference on Trade and Development and the Office for the Coordination of Humanitarian Affairs, are currently accommodated at the Palais des Nations, the Office of the United Nations High Commissioner for Human Rights and a number of liaison offices of several United Nations funds, agencies and programmes are hosted in several rented premises outside, at considerable distance from the United Nations compound. In this regard, recently, the United Nations High Commissioner for Human Rights formally requested that consideration be given to locating the Office within the Palais des Nations to increase efficiency, lower costs and improve substantive coordination with the wider system.

5. The long-term vision of the Secretary-General is that Geneva will remain an important centre for the work of the Organization. In his view, the envisaged project provides a unique opportunity to reconsider how the United Nations conducts business in Geneva, particularly with regard to conference service delivery and other substantive areas. Additionally, there are fundamental operational and cost advantages to consolidating, to the extent possible, the United Nations Secretariat operations at Geneva within Ariana Park, where the Palais des Nations is located.

6. Against this background, the Secretary-General deems it a priority that the Palais des Nations not only be renovated in order to urgently redress and ameliorate its serious building deficiencies, returning the premises to a dependable, fully functional state; but also to ensure that the buildings be renovated in such a manner as to significantly increase their accommodation capacity. This could be achieved by exploiting modern space utilization concepts while, at the same time, more efficient building operations with reduced energy consumption requirements could be implemented as part of the proposed strategic heritage plan.

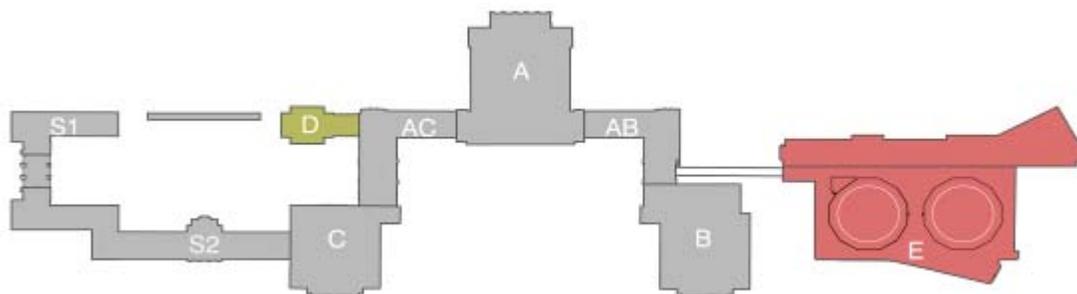
7. In his previous report (A/66/279), the Secretary-General recommended the medium-term option to implement the strategic heritage plan at the Palais des Nations. It envisaged an eight-year project schedule at an estimated cost of CHF 618 million as the lowest cost and least disruptive solution.

8. In its resolution 66/247, part VII, the General Assembly requested the Secretary-General to submit at its sixty-eighth session, in the context of the proposed programme budget for the biennium 2014-2015, a detailed implementation plan and cost analysis for the strategic heritage plan, based on the medium-term option, with fully developed explanations of the composition and calculation of the costs, as well as the basis for assumptions that underpin the estimates and relevant supporting data, and a prioritized list of tasks highlighting essential items that need renovation for health and safety reasons. The Assembly also requested the Secretary-General to include in his report, as a potential complement to assessed contributions for the realization of the strategic heritage plan, options for voluntary funding sources, public or private, in line with the regulations and rules of the United Nations.

II. Overview of premises utilized at Geneva

9. The Palais des Nations, originally built for the League of Nations, comprises a historic building complex completed in 1937, expanded in the 1950s, to which a conference facility and office tower, the E building, was added in 1973. The buildings contain 34 major conference rooms and some 2,800 workspaces, including 222 touchdown workspaces for conference participants. An overview of the complex is illustrated in figure I.

Figure I
Schematic overview of Palais des Nations building complex



10. Owing to a lack of space at the Palais des Nations, some 1,230 members of personnel of the United Nations Secretariat and staff members of liaison offices of United Nations funds, agencies and programmes are currently accommodated in several other rented properties throughout Geneva. There continues to be a strong desire among many of these entities to be accommodated within the Palais des Nations in order to improve substantive coordination and enhance operational efficiency. The Office of the United Nations High Commissioner for Human Rights,

which has its personnel split between two outside premises, Palais Wilson and a rented building on Giuseppe Motta Street, has been a strong advocate in this regard and has made a very compelling case for being consolidated in a single location, at the Palais des Nations.

11. As indicated in the previous report of the Secretary-General, a contribution of CHF 50.00 million (\$53.25 million)¹ has been generously donated by the host country for the implementation of energy saving measures to be undertaken in anticipation of the strategic heritage plan. To this end, a memorandum of understanding was signed in Geneva in the first quarter of 2012. The related works currently being implemented will be concluded by the end of 2013. They include repairs to parts of the roof and some of the windows, optimization of lighting, installation of solar panels, replacement of certain ventilation units and upgrading of the building management system. The invaluable donation from the host country has contributed to a reduction of the scope of the strategic heritage plan and therefore reduced the overall cost of the renovation project outlined in the present report.

12. The completion of the strategic heritage plan project would not only allow for the full modernization of the facilities to meet the ongoing conference-servicing demands of the United Nations at Geneva, but also for the consolidation of departments and offices located within the renovated Palais des Nations. In this context, it should, however, be noted that the strategic heritage plan focuses only on the renovation of the existing facilities of the Palais des Nations. If a significant increase in conference-servicing entitlements for the Human Rights Council or the human rights treaty body system were to be approved, and such an increase could not be accommodated in the existing conference facilities and should subsequently give rise to a mandated request to expand existing conference facilities, this would represent additional scope to the strategic heritage plan and require additional resources.

III. Comprehensive study of the medium-term implementation option

13. The Secretary-General commissioned a comprehensive study to develop a detailed implementation plan and cost analysis for the strategic heritage plan based on the medium-term option. This included defining principal project activities and the sequence for their implementation on the basis of efficiency and minimal operational disruption. The study focused on gaining an understanding of future requirements of the entities of the United Nations Secretariat at Geneva in terms of conferencing, office space and other facilities relating to their programmatic needs. It also entailed analysing the scope of the project in relation to health, safety, space utilization, swing space requirements, structural issues, mechanical and electrical systems, and proposed phasing. To this end it included the following activities:

- (a) Preliminary site assessments to review the condition of the buildings;
- (b) High-level fact-finding sessions with key stakeholders;
- (c) Review of safety and security requirements;

¹ All figures quoted in United States dollars are calculated by a conversion from Swiss francs based on 2014-2015 preliminary rate of 0.939.

- (d) Analysis of electrical and mechanical systems;
- (e) Evaluation of the future operations of the compound;
- (f) Studying lessons learned from other capital projects.

14. The key results of the study are summarized below, along with the prioritized list of tasks, as requested, highlighting essential items that need renovation for health and safety reasons.

A. Key objectives of the strategic heritage plan

15. The following key objectives for the renovation of the Palais des Nations were established at the outset of developing the strategic heritage plan:

- (a) Guarantee and ensure the business and operational continuity of the Palais des Nations by maintaining the day-to-day business;
- (b) Meet all relevant regulations related to fire protection, health and life safety, and building code compliance;
- (c) Meet all relevant regulations relating to persons with disabilities, including provisions for accessibility and technology;
- (d) Repair and update the building enclosure and the electrical, mechanical and plumbing systems to meet relevant health and safety regulations, and to reduce energy costs;
- (e) Upgrade the existing information technology networks, broadcasting facilities and congress systems in compliance with industry standards;
- (f) Optimize the use of the available interior spaces and conference facilities, providing flexible and functional conference rooms;
- (g) Preserve the heritage, prevent irreversible deterioration or damage, and restore and maintain the capital value of the Palais des Nations and its content.

16. These objectives have been reconfirmed and continue to guide the development of the renovation scope. The priority among these objectives is to provide modern functioning conference facilities that address the current and future requirements of the United Nations while providing a safe, healthy and functional environment for delegates and staff alike.

B. Major findings

17. The comprehensive study not only confirmed known major building deficiencies and associated health and safety risks, but also revealed a number of additional structural issues and other health and safety concerns, which are further elaborated upon below and summarized in a prioritized task list, setting out essential items that entail renovation for health and safety reasons:

- (a) Structural risks: a preliminary structural assessment of the buildings confirmed inadequate structural stability, following the recent evolution of seismic codes which were updated subsequent to recorded earthquake activity in the area. The shortcomings in structural stability are most prevalent in the E and S office

buildings. The study highlighted several additional essential works that need urgent attention;

(b) Fire-related risks:

(i) Fire code compliance, particularly, with regard to compartmentalization, is virtually lacking throughout the buildings, which means that in the event of a fire, smoke and flames could spread rapidly throughout the buildings. Additionally, the heavy fire brigade vehicles have only limited access to the E building as a result of the limited load-bearing capacity of the underground car park;

(ii) The existing fire escape routes cannot be fully accessed by persons with disabilities and suitable emergency egress routes must therefore be put in place as a matter of priority;

(iii) The electrical cables do not comply with current regulations and in the event of a fire they would release toxic fumes;

(iv) Severe fire hazards exist in the 10 floors of the Library, which places the preservation of the historical archives at significant risk;

(c) Asbestos risks: asbestos has been detected throughout the buildings, especially at the E building. Aside from its inherent latent risks, its presence is also a major obstacle to a cost-effective installation of sprinklers and other maintenance works;

(d) Risks related to business continuity: most of the electrical and mechanical distribution systems have reached the end of their life cycle, pose a fire hazard and generate high operating and maintenance costs. On the basis of resource availability, the United Nations Office at Geneva is replacing obsolete electrical elements. However, in order to address the safety and business continuity concerns, a comprehensive replacement must be urgently undertaken;

(e) Other significant risks:

(i) The buildings' facades reveal progressive deterioration of the cornices, resulting in an increased danger of falling material;

(ii) Overall, the buildings do not comply with current building codes including life safety and accessibility regulations, which puts the well-being of their occupants at some risk.

18. While the study reconfirmed the overall scope of the project, it brought to light previously undetected structural weaknesses of the E building tower and the S building. It was determined that significant remedial works are necessary, which need to be addressed as a matter of some urgency. In this context, additional in-depth studies such as geotechnical surveys and structural tests are necessary in order to assess the exact nature of the remedial actions required. These are proposed to be undertaken in the next phase of the project, as part of developing the schematic design.

19. The essential additional renovation works include the reinforcement of foundations and structural elements in order to meet relevant seismic codes and wind loads, building compartmentalization to mitigate the fire-related risks, and more extensive asbestos abatement works than previously anticipated. These works

are in addition to those needed in order to comply with accessibility and technology requirements for persons with disabilities, which must be fully integrated into the renovation programme.

C. Lessons learned from other major capital expenditure projects

20. The comprehensive study was also informed by the lessons learned from similar capital projects. Particular attention was paid to issues relating to the planning stage and the project cost plan preparation. The due diligence process included missions to Headquarters, organized through the Office of Central Support Services, to gain first-hand experience and knowledge of the way the capital master plan was implemented. Additionally, lessons learned from other ongoing and completed large-scale construction projects undertaken by the United Nations were communicated through the Office of Central Support Services.

21. Consultations were also held with representatives from the Office of Internal Oversight Services with a focus on assessing and evaluating the overall risks related to the project. The result of these consultations complemented the lessons learned from the consultations with the Office of the Capital Master Plan and with other international organizations executing capital projects at Geneva.

22. The lessons learned from other capital projects deemed applicable to the strategic heritage plan are summarized below:

(a) Ensure sufficient dedicated resources are allocated early enough in the process in relation to the size and magnitude of the project in order to keep workload and responsibilities manageable. This is important both in terms of an appropriately sized dedicated project management team, and in terms of dedicated liaison specialists to coordinate with the staff from the technical services;

(b) Establish, early on, the operational programme requirement documents, which must be aligned with the agreed project objectives and approved by senior management, before commencing detailed design and construction documents;

(c) Account for the risk of programme variances, which can have an impact on the schedule and cost during the project evolution, particularly in the case of projects of long duration;

(d) All construction costs must be known and validated prior to entering into any construction contract agreement;

(e) All associated and support costs must be identified at the outset of a project of such magnitude and should be included in the overall project cost plan so that they can be managed within the project;

(f) Once the project scope and cost plan are established, any potential deviation must be reassessed and reported to the General Assembly;

(g) Budget control and reporting mechanisms must be developed early in the planning process and must be applied consistently throughout the project;

(h) Ongoing dialogue between Headquarters and the United Nations Office at Geneva is an invaluable tool to provide support for a project of this magnitude;

(i) It is important to fully integrate the congress systems with broadcast, webcast, information technology and wireless communication.

D. Project scope

23. The scope of work for the renovation of the United Nations Office at Geneva compound has been established, prioritizing corrective actions to address the health and safety risks. In reconfirming the project scope, the following background information has been taken into account:

- (a) Preliminary building survey assessment completed in 2009;
- (b) Conceptual engineering and architectural study completed in 2011;
- (c) Energy savings work completed in 2012-2013, funded by a voluntary contribution from the host country;
- (d) Remedial alterations and maintenance works undertaken under the programme budget for the biennium 2012-2013 and included in the proposed programme budget for the biennium 2014-2015.

24. The envisaged project scope entails the full renovation of the historic buildings in order to comply with the relevant building regulations. Repairs and upgrades to the deteriorated elements are included to prevent irreversible damage that would have a significant impact on the operations of the United Nations Office at Geneva. The historic buildings would, therefore, be fully renovated, with priority given to ensuring health and fire safety and accessibility for persons with disabilities. Priority actions within the project scope to mitigate health and safety risks are as follows:

- (a) Correction of all major structural deficiencies, which are most prevalent in the E and S office buildings;
- (b) Implementation of all required fire compartmentalization measures;
- (c) Provision of fully accessible fire escape routes and rectification of all other fire code issues, including the replacement of electrical cabling;
- (d) Commencement of a comprehensive asbestos abatement programme, prioritizing works at the E building;
- (e) Installation of a specialized firefighting system in the 10 floors of the Library;
- (f) Launch of a comprehensive replacement programme of all obsolete mechanical distribution and electrical systems;
- (g) Implementation of all necessary technical and architectural upgrades based on current building codes, with a specific focus on safety and accessibility;
- (h) Repair of all exterior building facades.

25. In addition to the provisions for accessibility described above, the project scope includes technology for persons with disabilities and the introduction of new conference technology for wider improvements to conference-servicing, such as real-time captioning, webcasting, digital recording and electronic distribution of documentation. Upgrades would be made to mechanical systems for better comfort and compliance with building regulations, and to the electrical systems to mitigate the fire risks. Thermal insulation would be introduced for greater energy efficiency, as well as the increased efficiencies created by office space renovation.

26. The comprehensive study also revealed that a number of lessons learned from the capital master plan and other capital projects had not been sufficiently taken into account in the earlier conceptual engineering and architectural study, if at all. The overall project scope has been expanded accordingly to take full account of associated works and support activities, which are referred to as ancillary works throughout the present report. The project scope includes:

- (a) Construction of all necessary swing space;
- (b) Temporary electrical and mechanical works to ensure business continuity during transitional phases;
- (c) Procurement and installation of office furniture and office reconfiguration;
- (d) Moving, asset management and disposal;
- (e) Major cleaning following the relocation of occupants.

E. Space optimization

27. The project scope necessary to address the major building deficiencies that have been identified is of such magnitude that it would entail pervasive construction activity throughout each building being rehabilitated. This would, at the same time, offer a unique opportunity to execute interior space reconfiguration works. Accordingly, the envisaged scope includes works to significantly increase the space utilization ratio in terms of office space and, to some extent, the conference facilities.

28. As part of the comprehensive study, a detailed space optimization analysis of the available office area within the existing facilities was undertaken. The results of the study indicate that, in line with current United Nations space planning guidelines, it can be expected that up to 25 per cent additional building occupancy (approximately) can be achieved. This increased space efficiency could be realized by the reorganization of internal spatial areas of the Palais des Nations compound and by replacing the E building office tower, whose problematic renovation is explored below, with a new building of equivalent area.

29. Additionally, the strategic heritage plan envisages the construction of infrastructure that would allow for flexible and shared workplace arrangements, particularly for conference-servicing requirements to provide temporary or touchdown workspaces for delegates and conference support resources during peak conference periods. The results of the ongoing study of flexible workplace strategies being considered in the context of the study on long-term accommodation needs at Headquarters would equally be considered in the context of the future space utilization framework at the Palais des Nations.

30. At present, the Palais des Nations offers some 2,800 workspaces, including 222 touchdown workspaces for conference participants. Based on the envisaged space optimization strategy, the Palais des Nations could provide up to some 3,500 workspaces once the strategic heritage plan has been fully implemented. Thus, as a direct result of the proposed efficient space utilization, approximately 700 additional personnel could be accommodated at the Palais des Nations. An analysis of the proposed change to the office accommodation capacity is provided in table 1 below.

Table 1
Current and projected office accommodation capacity, by number of workspaces
 (based on data from the first quarter of 2013)

<i>Location</i>	<i>Current capacity</i>	<i>Projected final capacity^a</i>	<i>Change</i>
Building A	153	232	79
Building B	137	158	21
Building C	152	277	125
Building D	168	182	14
Building S	785	833	48
Building E	1 083	412	(671)
New building (E tower replacement)	–	1 413	1 413
Villas ^b	100	–	(100)
Touchdown workspaces	222	–	(222)
Total	2 800	3 507	707

^a Based on recommended implementation strategy (c).

^b 100 staff members are currently located in two villas, 60 in Villa Bocage and 40 in Dépendance La Pelouse. The villas do not provide efficient workspace, thus the staff members will be relocated into the Palais des Nations as part of the strategic heritage plan renovation. The villas will then be utilized as meeting and representation areas, in line with their original purpose.

31. It is important to note that approximately 1,230 personnel from the United Nations Secretariat and from the specialized agencies, funds and programmes are currently housed elsewhere in Geneva. The aforementioned gain in space efficiencies would enable the consolidation of other United Nations entities at the Palais des Nations.

32. Such a consolidation, particularly in respect of the Office of the United Nations High Commissioner for Human Rights, based on the current staff numbers of that Office, would allow the Secretariat to reduce its leasehold commitments and the cost of such off-site support needs as security and messenger services. As such, rental expenses and support costs could be reduced, and an opportunity for income to be generated through accommodating staff from non-Secretariat entities (funded from extrabudgetary resources) on site. The chapter on the cost-benefit analysis in the present report provides information on the magnitude of the related significant cost reductions.

33. Should it be decided, in the future, to implement broader flexible workplace strategies at the United Nations Offices in Geneva, and thus further increase its accommodation capacity, additional United Nations personnel, currently located elsewhere in Geneva, could be relocated to the Palais des Nations in order to benefit from the available office space.

F. Alternative implementation strategies

34. In order to achieve the most appropriate project plan in terms of schedule and project cost, feasible strategies were analysed as part of the comprehensive study for the implementation of the medium-term option. Three different implementation strategies were identified. While they do not differ in the approach to the renovation of the historic buildings, they vary in terms of the method by which they address the structural deficiencies of the E building and requirements for swing space, as explained below.

35. The implementation strategies considered include the following common elements:

(a) Improvements of the E building to be undertaken as a matter of priority, as the building poses the most significant health and safety concerns;

(b) E building tower to be vacated prior to commencement of the renovations, in order to mitigate the associated health and safety risks;

(c) Isolation and containment of the E building during the renovation and construction works, fully taking into consideration the presence of asbestos;

(d) Renovation of the Palais des Nations to address the identified health and safety matters (including those relating to compliance with seismic and fire safety codes, removal of asbestos and ensuring accessibility for persons with disabilities) to comply with the current relevant building regulations;

(e) Swing space to be constructed on the compound for staff relocation during the phased renovation works;

(f) Transfer of staff in phases, building by building, to allow the renovation to be undertaken in the most cost-effective and time-efficient manner.

36. As regards the approach to the renovations of E building and the provision of swing space, the differences are as follows:

Implementation strategy (a)

Full refurbishment of the office tower and conference areas, construction of a 4,015 m² permanent office building, and construction of 13,106 m² of temporary office swing space, to be used during construction only.

Implementation strategy (b)

Partial dismantling of the upper seven floors of the office tower and its reconstruction in the same location, full refurbishment of the conference space, and construction of a new 8,017 m² temporary office building to be used as swing space during renovation.

Implementation strategy (c)

Construction of a new permanent office building of 20,596 m², equal in size to the dismantled floors of the E building, to be initially used as swing space during construction; dismantling of the upper seven floors of the office tower and full refurbishment of the conference space.

37. Table 2 provides a comparative overview of the three alternative strategies, including project costs associated with each approach.

Table 2
Comparison of the implementation strategies

Strategy	A, B, C, D, S buildings	E building			Cost (thousands of Swiss francs)
		Office tower	Conference	New construction	
(a)	Full renovation	Full refurbishment	Full refurbishment	4,015 m ² permanent 13,106 m ² temporary swing space	924 000
(b)	Full renovation	Dismantling and reconstruction of upper 7 floors	Full refurbishment	8,017 m ² temporary swing space	— ^a
(c)	Full renovation	Dismantling of upper 7 floors	Full refurbishment	20,596 m ² permanent/swing space (same area as the dismantled floors)	837 000

^a The cost of strategy (b) could not be determined with reasonable certainty, but was considered most likely to be the most expensive because of the difficulties in fully identifying the anticipated structural risks.

38. The three strategies were compared in terms of schedule, overall cost, feasibility and risk. Strategy (b), demolishing the E office tower and rebuilding it above the existing basement, was discarded early on because of the substantial unpredictable risks and therefore uncertainty with regard to mitigation. The unpredictable risks of a retrofit on top of the existing foundation and structures arise because of the difficulty in assessing the load-bearing capacity and performance once the building mass is changed. These inherent uncertainties render the timing unpredictable and the costs high.

39. The remaining two options, (a) refurbishment and (c) replacement have been compared to determine which would be the most cost-effective while still meeting the project objectives. The key findings of the implementation option analysis are summarized below.

40. The necessary comprehensive refurbishment of the E building tower envisaged in implementation strategy (a) would need a great deal of heavy structural reinforcement work. It would require the excavation of the foundations and the exposure of other major structural elements in order to be able to reinforce them adequately. The associated execution risks are difficult to judge with certainty, but are considered to be very high. Additionally, once renovated, the office tower would not achieve any significant increase in space efficiency due to layout constraints and the position of structural elements.

41. In terms of capital investment, implementation strategy (c) would be approximately CHF 87.00 million (\$92.65 million) less expensive to the Organization than implementation strategy (a).

42. Owing to the complexity of renovations involving structural reinforcement of the existing E building tower, the overall timeline to implement strategy (c) would be approximately one year shorter than implementing strategy (a).

43. The evaluation of implementation strategies took account of currently available rental space in Geneva and its cost. It was determined that constructing a permanent building to be used as swing space on the compound would entail the lowest long-term cost and would be, operationally, the most effective solution for the strategic heritage plan. Most importantly, this would be the only way to have an asbestos-free, energy-efficient building that is fully compliant with seismic, fire safety and accessibility codes.

44. Taking due account of the results from current structural assessments, and without prejudice to findings of further in-depth technical assessment, the replacement of the E office tower in accordance with implementation strategy (c) is deemed, overall, to be the most beneficial implementation strategy. A detailed implementation plan and cost plan were, therefore, further developed for this strategy.

G. Detailed implementation plan

45. The detailed implementation plan provides information on how the project is to be developed in the context of the scope, strategy, objectives, quality and timeline to be met. A key lesson learned from the renovations at Headquarters highlights that it is vital to plan the implementation of the project in a manner that guarantees business continuity and minimizes disruption of the activities within the compound.

46. When developing the detailed implementation plan, due consideration was also given to the fact that the size of the swing space building and the phasing sequence has a direct impact on the number and cost of staff moves, and that project phasing determines the most effective size of swing space needed during the renovation.

47. The proposed strategic heritage plan implementation, described in phases in annex I to the present report, provides an annotated schematic representation of the currently envisaged implementation plan based on recommended implementation strategy (c) and illustrates the overall project phasing envisaged in the strategy. The key stages are described below.

48. The E building is the part of the Palais des Nations that poses the most significant health and safety risks to staff, delegates and visitors and thus requires the most urgent intervention. Accordingly, the Secretary-General proposes that the E building be dealt with as a matter of highest priority.

49. In line with implementation strategy (c), as a first step, the construction of a new low-rise office building of equal floor space to the E building tower, which it will replace, is planned. Owing to its efficient utilization of space, the new building would also provide temporary swing space. Upon its completion, the occupants of the E building tower would be relocated to the new office. The new building would be located so as to connect to the existing building complex and thus would be easily accessible. Its capacity would be approximately 1,400 workspaces, 200 of which would be flexible workspaces (hot-desking/hotelling) in order to meet peak conference demands and service meetings more effectively.

50. The E building, the conference area in the A building and the archive area in the B building (Library) would be the first facilities of the Palais des Nations to be renovated under the strategic heritage plan. To this end, the premises would be isolated from the rest of the building complex so that the asbestos abatement and the other health and safety-related works can be addressed without risks to delegates, staff and visitors. Upon occupation of the new building, the dismantling of the seven upper floors of the E building tower and the renovation of the conference rooms in the remainder of the E building would commence. Finally, the historic buildings would be renovated in phases. They are expected to offer some 1,682 workspaces at the end of the project, representing an increase of 287 seats as a result of the actions towards increased space efficiency.

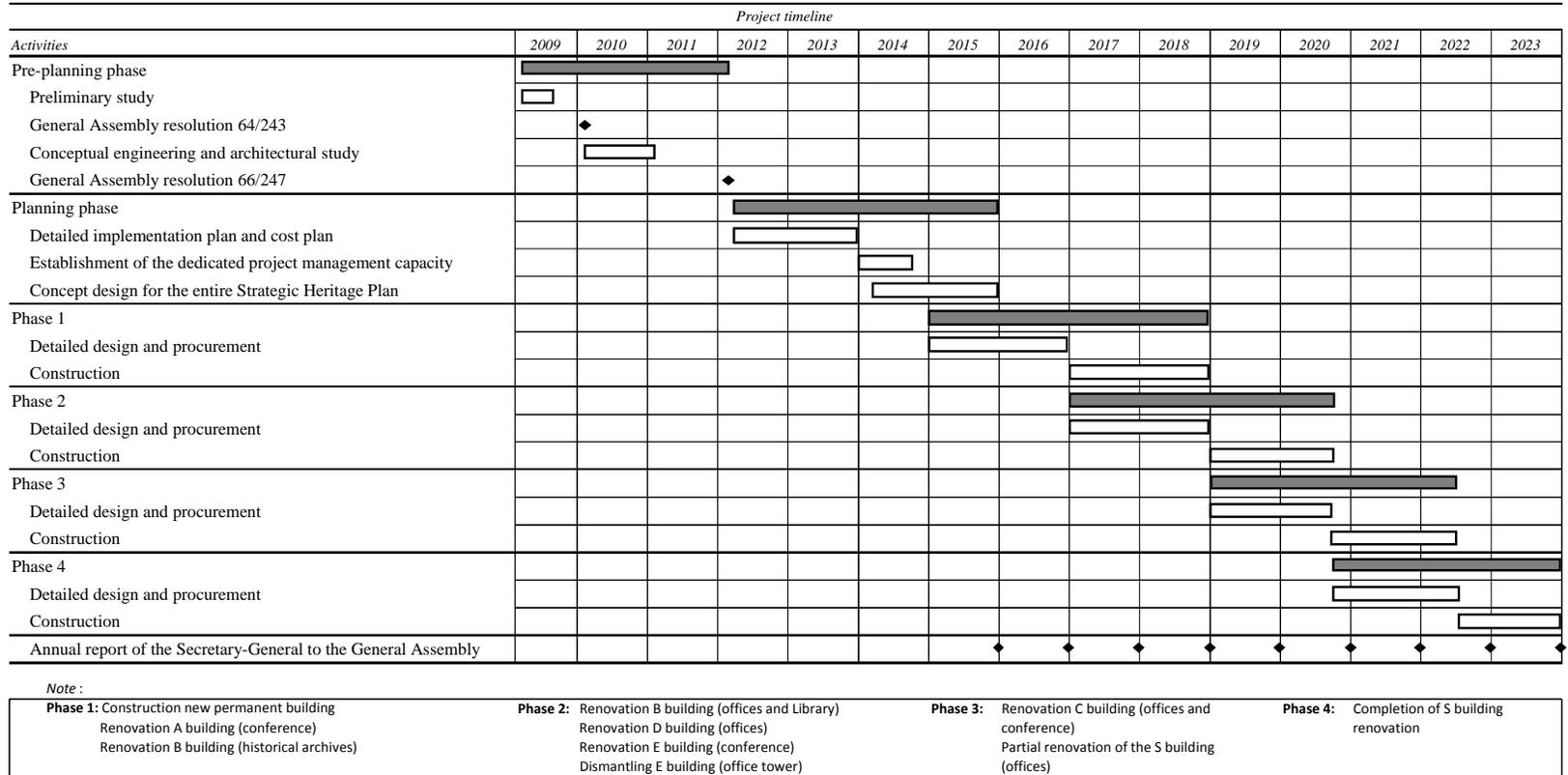
51. There is some urgency in moving decisively forward with the necessary preparatory technical work in order to avoid any delays and to address the pressing renovation works. To this end, and subject to approval by the General Assembly, a lead design consultant must be appointed as soon as possible. This would enable, as the next major project activity, the establishment of an overall design master plan, to be completed during the upcoming biennium by the lead design consultant. Thereafter, detailed design packages for the construction work must be finalized in advance of each of the construction phases. The design and procurement of construction services for each of the phases would be staggered to minimize the overall project duration and cost. The envisaged commencement date for the design of phase 1 documents is early 2014, while construction is expected to commence in early 2017 with the overall renovations programme to be completed by the end of 2023.

H. Schedule of works

52. The schedule of works has been developed in line with the requests contained in General Assembly resolution [66/247](#), including the provision that major capital expenditure projects not be implemented simultaneously in order to prevent the need to finance them at the same time, and the stipulation that the renovation phase of the strategic heritage plan should not start before the Assembly has taken a decision on the matter and the capital master plan has been completed.

53. The length of time for each phase under the proposed implementation strategy is indicated in figure II. In view of the current uncertainty related to the risk and extent of the remedial structural works, the order of priority of the construction phasing shall be confirmed once the impact of the conditions survey is established.

**Figure II
Schedule of works**



54. The design and construction implementation phases are expected to overlap, in accordance with the design master plan to be developed by the lead design firm. The design phase would include detailed physical building assessments and additional in-depth studies, such as geotechnical surveys and structural tests, to establish exactly to what extent remedial actions, particularly in terms of structural reinforcements, are necessary.

55. The actual construction works would be completed in four phases of approximately equal duration. The construction implementation of each phase would follow the completion of each design and procurement exercise for that phase. A building-by-building commissioning, handover and interior outfitting would follow the completion of each construction phase of the renovation works, prior to relocating people and moving furniture back into the buildings.

56. The schedule, developed in the previous conceptual engineering and architectural study, assumed that construction would begin upon completion of the capital master plan at the end of 2014. The updated schedule assumes the start of construction during the first quarter of 2017, subject to General Assembly approval by the end of 2013 of the required resources to contract the design work during the biennium 2014-2015.

57. The change in schedule is a consequence of a managerial decision to complete the development of a detailed implementation strategy and a detailed cost plan prior to commencing a design phase, paired with the decision to incorporate sufficient time to develop complete design documentation prior to the commencement of construction. These changes are a result of directly applying a lesson learned from the experience of the capital master plan.

58. The design and construction of the strategic heritage plan project anticipates developing the detailed design packages during a period that is just prior to the construction of each phase in order to calculate as accurately as possible the construction costs to be incurred. It is intended that, following the completion of the detailed design, a procurement action is carried out to obtain final and comprehensive construction costs, with time allowed for revision and validation by the United Nations prior to entering into contract agreement with the contractor. This should contribute, in accordance with good industry practice and with a view to controlling risks, to ensuring that updated specifications are in line with current standards, including the most up-to-date health and safety regulations. Additionally, the designers would have contractual responsibility to verify compliance of the construction work with the underlying design specifications.

59. In summary, in order to take full account of legislative guidance and related approval processes, including lead times to complete the necessary contractual arrangements, in the light of lessons learned from the capital master plan, the envisaged construction implementation start date was revised to the first quarter of 2017. It is anticipated that service for each phase could be procured separately, except for overall system-wide design services, which would probably be procured for the entire project on the basis of a lead designer's design master plan.

I. Multi-year cost plan for the project

60. A detailed cost plan has been developed through an analysis of the recommended detailed implementation strategy (c), which contains a comprehensive programme of the work to be undertaken within the scope of the strategic heritage plan. The project components have been subdivided into categories, which were divided into specific cost elements and estimated using the methodology described below.

61. The estimation methodology used is a combination of programme costing on the basis of surface areas and elemental cost planning. The surface area methodology was applied at the early stage of the detailed implementation plan development and consisted of a cost comparison per m² with comparable local and international projects. The elemental cost planning method was based on breaking down the project into a series of building elements that were studied separately.

62. The building elements were further subdivided into components, as appropriate, in order to produce more refined cost estimates. The identified building elements provided a composition of works and each element has been quantified by using relevant unit measures. The calculation of project costs has been based on unit rates, and the cost information was obtained through the analysis and the study of comparable projects that most closely resemble the strategic heritage plan project. The selection of the comparable projects was based on a range of parameters, including geographical location, type of construction, level of specification and contracting arrangements. Following this process, the data in the project cost analysis was further refined, taking into consideration location indexes, building cost indexes and comparable tender price quantities.

63. The multi-year project cost plan comprises all project costs, including (a) construction and refurbishment; (b) ancillary work; (c) consultancy fees and project management; and (d) contingencies, escalations and allowances, insurance, and quality control activities. The detailed budgetary analysis resulted in total estimated project resource requirements of CHF 837.00 million (\$891.37 million). The breakdown of cost is presented in table 3.

Table 3
Cost plan for the strategic heritage plan project

(Thousands of Swiss francs)

	<i>Biennium</i>					<i>Total</i>
	<i>2014-2015</i>	<i>2016-2017</i>	<i>2018-2019</i>	<i>2020-2021</i>	<i>2022-2023</i>	
Construction services and ancillary costs						
Construction works	–	83 000	241 000	87 000	36 000	447 000
Ancillary works ^a	–	1 000	20 000	21 000	7 000	49 000
Consultancy services						
Consultancy fees	31 000	27 000	25 000	18 000	5 000	106 000
Contingencies, escalations, allowances, insurance and quality control	4 000	35 000	71 000	58 000	20 000	188 000
Subtotal	35 000	146 000	357 000	184 000	68 000	790 000

	Biennium					Total
	2014-2015	2016-2017	2018-2019	2020-2021	2022-2023	
United Nations Office at Geneva strategic heritage plan project management team	5 000	7 000	7 000	7 000	7 000	33 000
Strategic heritage plan liaison/Coordination team	2 000	3 000	3 000	3 000	3 000	14 000
Total	42 000	156 000	367 000	194 000	78 000	837 000

^a Ancillary works (associated and support activities) include: furniture, moving expenses, equipment, cleaning after removal of swing space, and commissioning, including staff training.

64. It should be noted that, in accordance with standard construction industry practice, cost plans are being built with an allowance for “contingencies” to account for expenses which may be incurred with a high probability but are extremely difficult to estimate and measure at the beginning of a construction project. In this regard an overall 20 per cent contingency rate has been applied to all renovation project work (higher uncertainty), except for the construction of the new building (lower uncertainty) to which a 10 per cent contingency rate has been applied.

65. The present cost analysis for the strategic heritage plan has been prepared with full consideration of the lessons learned from other large-scale United Nations construction projects, particularly the capital master plan. It should also be noted that the project cost plan excludes any resource requirements for alterations, improvements and major maintenance activities for the United Nations Office at Geneva that are included under section 34 of the proposed programme budget for the biennium 2012-2013 and section 33 of the proposed programme budget for 2014-2015. It also excludes activities funded by the donation from the host country of CHF 50.00 million (\$53.25 million) for structural energy saving works, which are currently under way.

66. The estimated project cost is contingent upon maintaining the agreed scope, schedule and phasing of the strategic heritage plan for the duration of its full implementation, and on the application of an integrated risk and cost management approach. Furthermore, the estimated project cost has been calculated taking into account the existing United Nations procurement rules and regulations and associated timelines.

67. A comparative analysis between the current cost estimate and the previous indicative cost estimate of CHF 618 million derived from the conceptual engineering and architectural study completed in 2011 is provided in table 4.

Table 4
Comparison of 2011 indicative estimate with the project cost plan of 2013
 (Thousands of Swiss francs)

	<i>2011 conceptual architectural and engineering study</i>	<i>2013 detailed implementation and cost plan</i>	<i>Variance amount</i>	<i>Variance percentage</i>
Construction services and ancillary costs	425 000	496 000	71 000	16.7
Consultancy services, including United Nations Office at Geneva project management cost	79 000	153 000	74 000	93.7
Contingencies, escalations, allowances, insurance and quality control	114 000	188 000	74 000	64.9
Total	618 000	837 000	219 000	35.4

68. The project cost developed from the detailed implementation plan indicates an increase of CHF 219 million (\$233.23 million) as compared to the initial estimate calculated from the 2011 conceptual architectural and engineering study. The variance in cost has been calculated by taking into consideration the project constraints, risks, industry standards and best practice.

69. A detailed analysis revealed important elements required for the successful implementation of the strategic heritage plan, which had not previously been included or were underestimated by the earlier team of consultants. This included the remedial structural works in the context of the E building tower and the S building, as well as the estimated costs for ancillary works, contingency rates, an allowance for price escalations, insurance, quality control and project management, which had to be calculated more comprehensively and with greater precision. Specifically, the project elements that were updated from the 2011 conceptual study are as follows:

(a) Additional structural remedial works, leading to the unforeseen replacement of seven floors of the E building tower;

(b) Furniture and related moving costs, cleaning of the site following the relocation of occupants into swing space, and equipment requirements. An increase in scope occurred as a result of lessons learned from the capital master plan;

(c) Consultancy design fees have been calculated at 15 per cent of the construction works, in line with industry standards;

(d) Insurance cost: a rate of 2 per cent has been applied to the refurbishment, construction and ancillary work costs, as it was not included in the previous study;

(e) Project quality control: there was no allowance in the previous study. A rate of 0.5 per cent has been applied to the refurbishment, construction and ancillary costs;

(f) Consultancy management fees: there was no allowance for the ancillary costs. A rate of 5 per cent has been applied to the refurbishment, construction and ancillary costs. The fees comprise construction management, programme management and risk management;

(g) Contingency provisions: based on lessons learned from the capital master plan, a 20 per cent rate has been applied to the consultancy fees and ancillary costs, in addition to the construction costs;

(h) Annual escalation: the project cost plan is based on 2013 prices. In order to allow for future cost increases and inflation rates, an average annual escalation rate has been calculated, in line with industry standards. A rate of 1.8 per cent on the refurbishment, construction and ancillary costs and consultancy fees/project management/related costs has been applied, instead of a fixed amount as was included in the 2011 study.

J. Cost-benefit analysis

70. The comprehensive study also included a detailed cost-benefit analysis comparing the expected renovation, operations and maintenance expenditures envisaged under the strategic heritage plan with a continued reactive maintenance approach, where remedial works are implemented over a longer period. The total projected expenditures for each of the approaches have been estimated over a period of 25 years. The cost-benefit analysis takes into consideration the initial capital cost and the long-term cost. These include expenses associated with the required renovation works, maintenance, energy consumption, other operating charges and the leasehold obligations in respect of off-site premises located outside of the Palais des Nations. The analysis is presented in table 5.

Table 5
**Cost-benefit analysis over 25 years, recommended implementation strategy (c)
versus continuation of reactive approach**

(Thousands of Swiss francs)

	<i>Implementation of the strategic heritage plan</i>	<i>Reactive approach</i>	<i>Difference benefit/(cost)</i>
Consultancy and construction services, ancillary costs and United Nations Office at Geneva project management cost/contingencies, escalations, allowances, insurance and quality control	837 000	1 032 000	195 000
Estimated maintenance costs in accordance with industry standards	323 000	427 000	104 000
Preventive maintenance to preserve the capital value (3 per cent of asset value over 25 years)	199 000	187 000	(12 000)
Energy costs (25 years)	81 000	97 000	16 000
Motta Building and Palais Wilson rental costs ^a	83 000	297 000	214 000
Total	1 523 000	2 040 000	
Net benefit over 25 years			517 000

^a Under the proposed implementation strategy for the strategic heritage plan, the cost for rent includes 6.5 years for the Motta Building and 9.5 years for Palais Wilson. Under the reactive approach the cost for rent includes 25 years for both buildings.

71. The estimates resulting from the 25-year cost-benefit analysis represent a significant financial benefit to the Organization in the long term. It is anticipated that total cost avoidance will be approximately CHF 517.00 million (\$550.59 million) over a period of 25 years, equivalent to an annualized cost avoidance of more than CHF 20.68 million (\$22.02 million).

K. Timely project implementation

72. Based on the above-mentioned construction cost, it should be noted that an escalation rate would apply for each year of delay in the implementation of the strategic heritage plan. Applying the above-mentioned construction cost escalation rate of 1.8 per cent per year to the project's estimated construction cost implies an additional cost of CHF 27.40 million (\$29.18 million) for each year of delay. This, in combination with the estimated cost avoidance, would represent an overall opportunity cost of approximately CHF 48.08 million (\$51.20 million) per year to the Organization.

IV. Alternative funding options

73. In its resolution [66/247](#), the General Assembly requested the Secretary-General to include, as a potential complement to assessed contributions by Member States for the realization of the strategic heritage plan, options for voluntary funding sources, public or private, in line with the rules and regulations of the United Nations. Accordingly, a number of funding options have been explored, which were selected based on feasibility and evaluated in terms of their ultimate viability. The options can be categorized as follows:

- (a) Measures to reduce the overall project scope;
- (b) Measures to leverage the value of United Nations assets;
- (c) Loan arrangements;
- (d) Public-private partnership arrangements.

A. Measures to reduce the overall project scope

74. Measures to reduce the overall scope focus primarily on the solicitation of voluntary contributions from Member States, institutions, foundations, companies or individual donors, which would meet the cost of individual parts of the projects and thereby reduce the scope of renovation works that would require funding by Member States via assessed contributions.

75. In March 2013, the Director General of the United Nations Office at Geneva issued a note verbale to the permanent missions and permanent mission observer offices to the United Nations Office at Geneva soliciting additional donations and contributions to the renovation of the Palais des Nations.

76. In addition to the earlier reported donation of CHF 50.00 million (\$53.25 million) by the host country, the Secretary-General is pleased to report a number of other successes in outreach efforts. The complete renovation of

Conference Room XIV was made possible by the generous voluntary contribution by Kazakhstan. In addition, an agreement was signed with Turkmenistan in March 2013 in respect of the refurbishment of Conference Room I. Additionally, Qatar confirmed in May 2013 that it would undertake a multi-million dollar renovation of Conference Room XIX. Those voluntary contributions have already reduced the residual scope of the strategic heritage plan and the estimated project cost plan presented in this report.

B. Measures to leverage the value of existing United Nations assets

77. The Secretary-General explored a number of options to leverage the value of existing United Nations assets. Subject to the approval of the General Assembly, any resulting income generated could be used to reduce the overall level of assessed contributions upon Member States in respect of the funding requirements of the strategic heritage plan.

78. The measures presently under consideration include the sale of the construction rights of United Nations-owned property; the sale of real estate and the credit of existing rental income to meet the resource requirements of the strategic heritage plan. Relevant details are summarized below.

79. The “Tour des Feuillantines” (Feuillantines Tower) is a proposed development envisaged by the host country authorities on three plots of land, owned by the city of Geneva, close to the Palais des Nations. The project scope is defined as a planned mixed-use multipurpose high-rise development, and would require the transfer of construction rights from the adjacent United Nations-owned plots of land to the Geneva authorities. The transfer of the construction rights for “Les Feuillantines” is estimated to generate approximately CHF 13.0 million, should the project go ahead as planned. The possible one-time revenue could be used to reduce the overall project cost without requiring any direct involvement by the United Nations in managing the project.

80. The potential contractual framework to implement such an arrangement is under evaluation to determine the ultimate feasibility of this option under the current legal framework. Subject to the agreement of the General Assembly, formal negotiations could be engaged with the host country on this matter as a next step.

81. The current rental income stream of approximately \$1.2 million per year is a source of income to Member States generated by the Palais des Nations, which could be used to contribute to the funding of the renovation works. The income is generated from the rental agreements with non-Secretariat organizations and commercial entities, as well as the rental of conference rooms and related facilities in the context of meetings that are not included in the official calendar of conferences.

82. It will be recalled that this arrangement was used for the construction of new office facilities at the United Nations Office at Nairobi.

C. Loan arrangements

83. The granting of a preferential long-term loan (or several such loans) to facilitate the financing of the strategic heritage plan has been discussed with the

host country informally, on a bilateral basis, for some time. The Secretary-General raised this matter formally with the Swiss authorities in March 2013. The Director General of the United Nations Office at Geneva and senior officials at Headquarters continued to pursue the matter.

84. On 26 June 2013, the Swiss Federal Council took a decision to offer support for renovation projects of international organizations in Geneva through long-term low-interest loan(s). In this context, the host country particularly underscored the importance and priority it attaches to the urgent implementation of the strategic heritage plan. The duration of such loan(s) to be granted at favourable, below market rates are expected to be up to 30 years, up to an amount not to exceed 50 per cent of the project cost that will be approved by the General Assembly. Negotiations with the host country to define the details of such loan arrangements could commence, subject to the agreement of Member States.

85. An advantageous loan option could facilitate the approval of the project, since the Swiss loan offer could enable the start of the strategic heritage plan construction works upon completion of the capital master plan at Headquarters. Thus, its acceptance could mitigate the risks associated with further escalation of the project cost estimate, prolonging the health and safety risks and the unchecked continuing deterioration of the Palais des Nations.

D. Public-private partnership arrangements

86. Public-private partnership is an alternative financing source and method which uses private sector capacity and resources in order to deliver public sector infrastructure and services according to defined functional specifications and performance objectives. Beyond developing the infrastructure (design and build) and providing finance, private sector companies can also operate and maintain the public facility.

87. In September 2012, a memorandum of understanding was signed between the United Nations Office at Geneva and the Economic Commission for Europe (ECE) on the potential of investigating a public-private partnership model for the renovation of the Palais des Nations. The team of specialists on public-private partnerships of ECE agreed to advise the United Nations Office at Geneva on public-private partnership options that could be considered for the renovation of the Palais des Nations. Also in September 2012, ECE began working with the United Nations Office at Geneva to advise on the relevant possibilities of a public-private partnership for the strategic heritage plan project.

88. The Economic Commission for Europe organized two seminars on public-private partnerships, which benefited from the participation of some of the world's leading experts on the topic. A mission to London was also organized to see, first-hand, two fully operational public-private partnership renovation projects, the HM Treasury and Ministry of Defence buildings.

89. ECE prepared a report based on its expertise and on the work undertaken for the United Nations Office at Geneva, which was not definitive in its conclusion on the benefits of public-private partnerships. The report recommended that a further feasibility study be carried out by the United Nations. However, a further feasibility study into a public-private partnership arrangement runs the risk of further delaying

project implementation by additional years as it would require specific expertise and substantial time to solicit the expertise to perform such an in-depth study, and would invariably result in cost escalations, as described before.

90. During the study it became apparent that it is of vital importance to have an experienced public-private partnership management team. While there are many experts on such partnerships at the national level, there are very few, if any, experienced experts on public-private partnerships at the intergovernmental level. There are also no clear examples of such partnerships in the United Nations system or similar intergovernmental entities that would compare in size and scope for the project at the Palais des Nations.

91. The study also revealed that the legal consequences of a public-private partnership pose some challenges in the context of using Ariana Park for commercial purposes as a viable income-generating source. The United Nations is not the owner of the land but maintains exclusive usage rights, which means that the terms of any prospective public-private partnership arrangement would need to be negotiated extremely carefully with the host country and local authorities to ensure that the interest of all parties are respected and the terms are mutually agreeable. Negotiations could reasonably be expected to be lengthy, which might have an impact upon the scheduled start of the project. There are major legal ramifications and conflicting United Nations regulatory issues related to such a partnership model that would require exceptional procurement and contracting arrangements, which add to the risks of a timely and satisfactory implementation of such an approach.

92. One of the major conclusions reached as a result of the study is that the renovation of a historical building complex, such as the Palais des Nations, occupied by a large number of stakeholders, adds significantly to the already high level of complexity and associated risks of a large-scale public-private partnership project. Furthermore, successful project implementation is greatly complicated by the fact that business continuity is essential and needs to be guaranteed during the entire construction phase. These uncertainties deriving from site and organizational risks typically encountered in such circumstances have the potential to considerably increase the overall project cost.

93. In an effort to reach a conclusion on the benefits of public-private partnership for the present report, the United Nations Office at Geneva tasked the programme management firm with researching the potential pros and cons of undertaking a project of this type under such a model. The findings of the research study identified the following major risks:

- (a) Possible higher long-term overall cost;
- (b) Delays in the implementation of the project;
- (c) Many legal uncertainties and thus the likelihood of protracted or inconclusive legal negotiations;
- (d) Possible staff management issues due to outsourcing of the facilities maintenance to the contractor, under a public-private partnership;
- (e) The need to establish a new framework of United Nations procurement and contracting arrangements;

(f) Lack of precedent for such types of projects in the United Nations system and lack of relevant in-house expertise on such partnerships.

94. Taking into account all of the above-mentioned risks, on balance, there is not sufficient persuasive evidence to support the use of a public-private partnership project approach for a renovation project of this size and complexity within the United Nations regulatory framework. The considerable level of uncertainty surrounding the key areas described above leads to the conclusion that the project could be implemented at a lower cost through traditional procurement and contracting methods, such as those used for the capital master plan.

E. Viable funding mechanisms

95. Taking into account the reasonable prospect of loan financing arrangements, two options were analysed, which include a mix of assessed contributions and loans, as presented below.

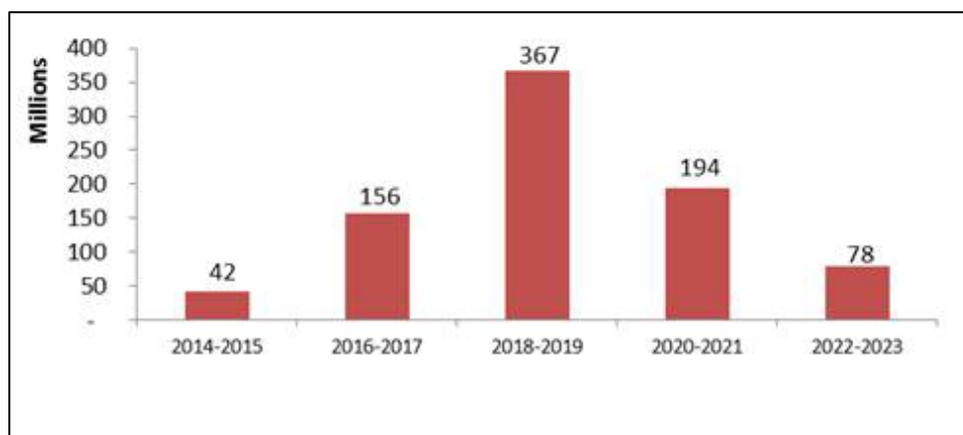
Option 1: full financing via assessed contributions upon Member States

96. The first option would be to consider financing the project solely through assessed contributions upon Member States over the projected lifetime of the construction project from 2014 to 2023, in accordance with the projected resource requirements as set out in table 3. Following the currently projected expenditure profile, assessments upon Member States, annually or biennially in advance of the period of disbursement, would broadly resemble the profile shown below in figure III.

Figure III

Profile for full financing via assessed contributions

(Millions of Swiss francs)



97. This approach has the benefit of not assessing contributions upon Member States before expenditure would be incurred. However, the profile is irregular, which may not be attractive to Member States; and from an operational perspective, it does not provide a significant working capital buffer, which could constrain the

project from adapting the sequence of programme activities, where necessary, to achieve completion of the overall project on schedule.

98. For a construction project of this magnitude and duration, the “cash payment model” employed for the capital master plan project could be more appropriate. This model would provide a stable cash flow, which is an essential precondition for uninterrupted financing of project costs. Member States could be provided with the option of a one-time, lump-sum assessment before construction begins, or the alternative option of a multi-year assessment, which would be phased to meet the expenditure needs of the project and facilitate the build-up of cash reserves in the early years of construction.

Option 2: financing via assessments coupled with a long-term loan arrangement

99. The alternative option is a combination of assessed contributions on Member States and a long-term, possibly up to a 30-year preferential loan from the host country. This has the advantage of reducing the upfront capital outlay required from Member States and providing a consistent pattern for the assessment of contributions, but over an extended period of time.

V. Recommended detailed implementation strategy and multi-year funding mechanism

100. Based on the findings of the detailed analysis of the four-phase implementation plan described above, including the evaluation of the estimated project cost, as stated in paragraph 44 above, strategy (c) is recommended as the implementation plan for phasing the renovation works of the Palais des Nations for the following reasons:

- (a) It is the most cost-effective;
- (b) It has the shortest duration;
- (c) It meets all the key objectives, especially as regards mitigating health and safety risks;
- (d) It is the least disruptive to normal operations at the Palais des Nations.

101. With regard to funding, the Secretary-General recommends as the most favourable option, for consideration by Member States, a combination of a long-term loan from the host country and for the balance of the project cost to be met via assessed contributions upon Member States. A loan at a favourable interest rate to be repaid over up to 30 years has been proposed by the host country in an amount of up to 50 per cent of the estimated project cost to be approved by the General Assembly.

102. In addition, in parallel with the strategic heritage plan, the Secretary-General requests the authority to pursue the following activities that could potentially reduce the assessed contributions from Member States:

- (a) To continue soliciting voluntary donations and contributions from Member States and other potential individual donors or foundations to renovate conference rooms identified for that purpose;

(b) To explore, without prejudice to the decision of the General Assembly, possibilities including the sale of real estate, the sale of construction rights of existing real estate and other possible methods for drawing value from those assets;

(c) To pursue opportunities to increase the range and proceeds from income-generating activities at the Palais des Nations.

VI. Next steps

103. Based on lessons learned from other major capital projects, including the capital master plan, a fundamental premise of the implementation strategy for the strategic heritage plan is to execute the whole concept design and related costs estimates, in detail, before starting any construction/renovation work. This should reduce significantly the risk of cost and schedule overruns throughout the lifetime of the project.

104. To this end, the proposed project tasks to be undertaken during the biennium 2014-2015 for the strategic heritage plan would comprise the following:

(a) Develop the design master plan of the strategic heritage plan with input from all the relevant substantive offices and stakeholders;

(b) Execute detailed building and in-depth site assessments prior to entering into concept design and detailed design documentation;

(c) Implement robust project governance arrangements;

(d) Develop the concept design for the entire strategic heritage plan;

(e) Develop the detailed design for the construction of the new permanent building;

(f) Develop the detailed design for the renovation of the A conference building;

(g) Develop the detailed design for fire protection of the historical archives;

(h) Carry out project planning and coordination of the design activities, including cost estimation, cost control and programme management;

(i) Execute project risk assessment and risk management tasks;

(j) Pursue activities with the potential to leverage the value of United Nations assets, without prejudice to the final decision of the General Assembly;

(k) Liaise with the host country to finalize the terms of a prospective loan offer for the future consideration of Member States;

(l) Develop, in consultation with Member States, potential funding arrangements for presentation to and approval by the General Assembly so that the required funding would be in place to start construction in 2017.

105. In order to enable the execution of the crucial project tasks listed above, the following next steps would need to be undertaken as a matter of priority, as elaborated below:

(a) Establish a dedicated project team and liaison support staff;

- (b) Engage dedicated consultancy services;
- (c) Establish the project governance structure.

A. Dedicated project management team and liaison support staff

106. It is essential that an appropriately sized project management team be established in 2014-2015 in order to lay the foundation for further phases. The team will need to be complemented by a commensurate technical expert staff to lead a project of such magnitude and complexity.

107. The proposed project management team to be established in the biennium 2014-2015, is set out in table 6.

Table 6

Proposed project management team to be established in the biennium 2014-2015

<i>Position</i>	<i>Level</i>
Senior management	
Project Director	D-2
Chief of Design and Construction	D-1
Chief of Programme Management Support	D-1
Project Manager, Design	P-5
Programme Manager	P-5
Project management team	
15 Professional staff at P-3/P-4 level	P-3/4
5 Support staff	General Service (Other level)

108. The Secretary-General recommends that the strategic heritage plan be led by a Project Director at the D-2 level, who would be supported by a dedicated project management team. The Project Director would be responsible for the overall direction of the project to ensure it is implemented on schedule and within budget. In addition the Project Director would be responsible for maintaining adequate communication among stakeholders.

109. The Project Director would be supported by two Services; the Design and Construction Service and the Programme Management Support Service, each led by a Chief at the D-1 level.

110. The Design and Construction Service would be responsible for the management and coordination of the project design and construction activities to ensure that the project objectives and goals are met, and ultimately would be responsible for the delivery of the project design and construction with consideration to the schedule, cost and quality targets.

111. The Programme Management Support Service would be responsible for providing support to the design and construction team by establishing and applying procedures for effective management of the project risks, schedule and costs. The Service would coordinate the procurement and cost containment activities, and ultimately would be responsible for ensuring proper control mechanisms to ensure that forecast project overruns are rapidly identified and that preventative, mitigating actions are taken in good time.

112. In addition to the two services, there is a need at an early stage to establish a Liaison Staff with individuals from Conference Management Services, Safety and Security Services and Facilities Management. The Liaison Staff will ensure that current and future operational requirements are taken into account in the development of the project plan. The Liaison Staff would provide inputs on the requirements throughout the design and construction phases of the project and facilitate coordination between the project team and offices to ensure smooth transitions that minimize disruption of activities during project implementation.

113. Dedicated staff members from procurement, finance and budget, and legal/contract administration are also integral to the project team.

114. Two project managers at the P-5 level, for design and for programme and cost management, respectively, would complete the senior staff. Additionally, 15 staff at the P-3/P-4 level (including the current architect and engineer, both at the P-4 level) and 5 General Service staff would be needed in the areas of procurement, contracting/legal, budget/finance, conference systems, space programming, electrical and mechanical systems, information and communications technology, heritage and public information.

115. An organigramme of the overall strategic heritage plan project management team is included in annex II. It shows the structure of the dedicated team proposed for the forthcoming biennium and also indicates additional staff complements that would augment the team at a later stage in the project schedule.

B. Dedicated consultancy services

116. Historical data and best practice indicate that a significant proportion of consultancy activities, and hence expenditures, are undertaken in the earliest stages of a project in the period leading up to construction. In the case of the strategic heritage plan it is anticipated that 30 per cent of the entire consultancy fees would need to be dedicated to the project during the first biennium, while the remaining would be spread over the four bienniums of the construction cycle.

117. For the biennium 2014-2015, the project management team would need to procure specialized services for lead design coordination to develop the design master plan, the concept design and the detailed design, as well as ongoing services for programme and risk management. Hence the following consultancies would be required:

- (a) Lead design firm;
- (b) Specialist design firm(s);
- (c) Programme management firm;
- (d) Risk management firm.

118. A lead design firm would develop the overall project design master plan, including the design guidelines to be implemented by all design specialists such as architects and structural, mechanical, electrical, congress system and communication engineers. The firm would establish all necessary procedures to run and coordinate the design and construction activities, such as timeline schedules, deliverables, submittals, prototypes, approval processes, document distribution, quality controls, acceptance testing and commissioning procedures necessary for the various stages of the project.

119. The lead design firm would also be responsible for developing the design of the new proposed building, inclusive of concept design, detailed design development, technical design/construction drawings and specifications and tender documentation to procure the construction services. Subsequently, the firm would produce the detailed design, including technical tender documents for the proposed new building.

120. Coordinated by the lead design firm, specialized design firm(s) would be secured to develop during the upcoming biennium the concept design, detailed design, technical/construction drawings, specifications, and tender documentation for the other components of the project, specifically the renovation of the A conference building and the fire protection of the historical archives.

121. A programme management firm would assist in the overall planning, coordination and control of the project. Specifically, the firm would assist in developing project reports and detailed project management guidelines, resource planning, value management and quality control to ensure that the project design activities are developed and controlled, thus enabling the future construction works to remain within the estimated cost plan and schedule and in accordance with the required quality parameters. Other tasks for this firm would include cost containment, schedule management and identification of potential scope creep.

122. An independent risk management firm would assess the project activities to minimize and control the risks of cost and schedule overruns. The key deliverables would comprise the following:

- (a) Risk analysis report identifying all the project risks;
- (b) Risk impact report identifying the potential impact in terms of cost, time and quality;
- (c) Risk management report, including the proposed response to risks and mitigation procedures;
- (d) Consolidated quarterly risk registers updates on the risk analysis, impact and management reports;
- (e) Contingency plans.

C. Project governance structure

123. Annex III sets out the proposed governance structure for the strategic heritage plan, which would involve all stakeholders who would be directly or indirectly affected by the proposed project.

124. The Director General of the United Nations Office at Geneva would be the overall project owner and would provide overall guidance and direction, through the Director of Administration, to the Project Director and the dedicated project management team.

125. In performing his role as Project Owner, the Director General would benefit from the advice of a strategic heritage plan steering committee, which, in turn, would receive regular expert advice from the independent risk management firm.

126. The Steering Committee would comprise Under-Secretaries-General or their deputies, and leading departments and offices operating both in Geneva and Headquarters, who would have a direct operational influence on the renovation project.

127. The Assistant Secretary-General of Central Support Services of the Department of Management at Headquarters, also a member of the Steering Committee, would provide regular support and advice through the Director of Administration of the United Nations Office at Geneva to the Project Director.

128. Technical in-house expertise within the Buildings and Engineering Section of Central Support Services of the United Nations Office at Geneva would support this team in relation to the day-to-day operations of the facilities at the Palais des Nations, to provide institutional memory and consult with the project management team with regard to commissioning and the future operation of the facilities upon completion of the strategic heritage plan.

129. Additionally, the substantive departments, offices and services at the Palais des Nations that would be directly affected or have influence on the future operations of the Palais des Nations would appoint focal points to collaborate with the project management team through an intergrade liaison coordination committee to ensure that operational issues relating to the renovation programme are duly considered and communicated.

130. Another essential element of the governance framework are the services provided by an independent risk management firm, which would report to the Director of the Division of Administration of the United Nations Office at Geneva, assisting the incumbent in the establishment and maintenance of the overall risk management strategy. Additionally, the risk management firm would work in close coordination with the programme management support service of the strategic heritage plan team and would advise the steering committee, as explained above.

VII. Resource requirements for the biennium 2014-2015

131. During the biennium 2014-2015, it is estimated that resource requirements in the amount of CHF 41,950,860, inclusive of allowances, would be needed for the project management team, the liaison staff and the consultancy services required to accomplish the next steps of the project's development, as described in section VI above. This is equivalent to \$44,676,100 at preliminary 2014-2015 rates.

132. Resources of CHF 7,000,000 (\$7,454,700) are requested to establish a dedicated project management team for the strategic heritage plan, composed of 25 staff on temporary posts led by the Project Director (at the D-2 level) as shown in table 6. The requisite consultancy to undertake the next important steps are estimated in the amount of CHF 34,950,860 (\$37,221,400).

133. On the basis of lessons learned from other major capital projects and from best industry practices, it is considered important to establish a substantially complete project management team from the beginning of the project, to continue through the entire duration of the strategic heritage plan. The exception would be the addition of a complement of three staff in 2016.

134. The necessity to have a full dedicated team for the duration of the project is also supported by risk control considerations requiring that sufficient resources and time are spent during the planning phase in order to mitigate the risk of time and cost overruns during the construction phase.

135. The resource requirements for the biennium 2014-2015 are set out in table 7.

Table 7
Requirements for the biennium 2014-2015

Swiss francs (thousands)

	2014	2015	Total
Refurbishment and construction	–	–	–
Ancillary costs	–	–	–
Subtotal, renovation	–	–	–
Design and consultancy services	12 800.0	18 150.9	30 950.9
Project management	2 500.0	4 500.0	7 000.0
Insurance	–	–	–
Quality control	–	–	–
Contingency and escalation	1 400.0	2 600.0	4 000.0
Subtotal	16 700.0	25 250.9	41 950.9
Total, cost estimate	16 700.0	25 250.9	41 950.9

United States dollars (thousands)

Refurbishment and construction	–	–	–
Ancillary costs	–	–	–
Subtotal, renovation	–	–	–
Design and consultancy services	13 631.5	19 330.0	32 961.5
Project management	2 662.4	4 792.3	7 454.7
Insurance	–	–	–
Quality control	–	–	–
Contingency and escalation	1 490.9	2 769.0	4 259.9
Subtotal	17 784.8	26 891.3	44 676.1
Total, cost estimate	17 784.8	26 891.3	44 676.1

VIII. Conclusions

136. The Secretary-General has completed the mandated thorough review of the strategic heritage plan. As such, the present report addresses the issues highlighted by the General Assembly in its resolution 66/247. Consequently, the Secretary-General is of the view that the General Assembly should be in the position to take an informed decision on the proposed implementation of the urgently required renovations of the Palais des Nations in Geneva.

137. The findings and conclusions of the comprehensive study summarized in the preceding chapters clearly demonstrate the urgency of undertaking the prioritized list of repair and rehabilitation works, commonly referred to as the strategic heritage plan, to address, as soon as possible, a number of major health and safety risks. Accordingly, the Secretary-General has concluded that the best interests of the United Nations would be served if the strategic heritage plan were to be implemented swiftly, without further delay.

IX. Proposed actions to be taken by the General Assembly

138. The Secretary-General recommends that the General Assembly:

(a) **Take note of the hazards, risks and deficiencies resulting from the current conditions of the Palais des Nations buildings in Geneva and the viable implementation alternatives proposed by the Secretary-General to ameliorate these conditions;**

(b) **Approve recommended detailed implementation strategy (c);**

(c) **Acknowledge the total estimated project resource requirements in the amount of CHF 837,000,000, or \$891,373,800 at preliminary 2014-2015 rates, based upon current information available;**

(d) **Welcome with appreciation the offer of support from the Government of Switzerland and acknowledge the host country's efforts to make the strategic heritage plan possible;**

(e) **Authorize the Secretary-General to negotiate with the host country regarding the offer of a loan, without prejudice to the final decision of the Assembly;**

(f) **Approve the next steps as described in section VI, without prejudice to its final decision; and approve the resource requirements for the biennium 2014-2015 in the total estimated amount of CHF 41,950,860, or \$44,676,100 at preliminary 2014-2015 rates;**

(g) **Approve the establishment of a multi-year, special account for the strategic heritage plan and request the Secretary-General to make the necessary arrangements in that regard;**

(h) **Decide to appropriate \$44,676,100 to the special account for the strategic heritage plan for the biennium 2014-2015, in accordance with the relevant resolution, to be adopted by the General Assembly, on the scale of assessments applicable for the biennium 2014-2015, for design and related project management and management of pre-construction services;**

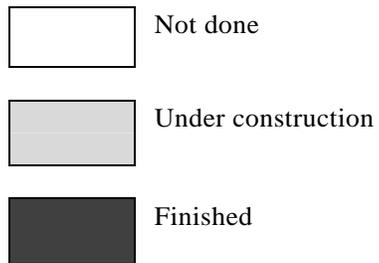
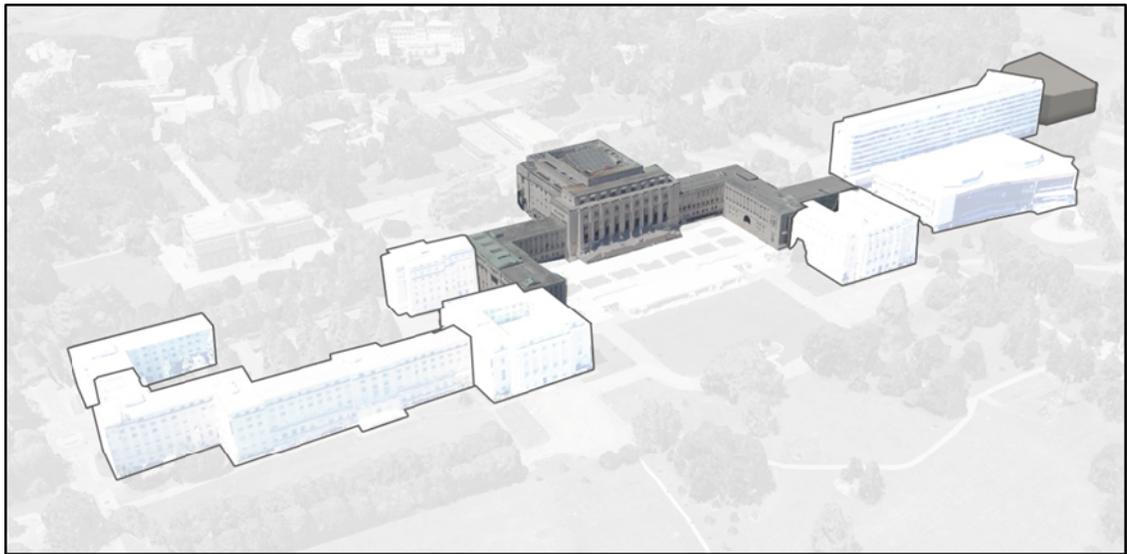
(i) **Request the Secretary-General to develop, in consultation with Member States, potential funding arrangements as rapidly as possible for presentation to and approval by the General Assembly so that the required funding would be in place to start construction in 2017.**

Annex I

Proposed strategic heritage plan implementation, in phases

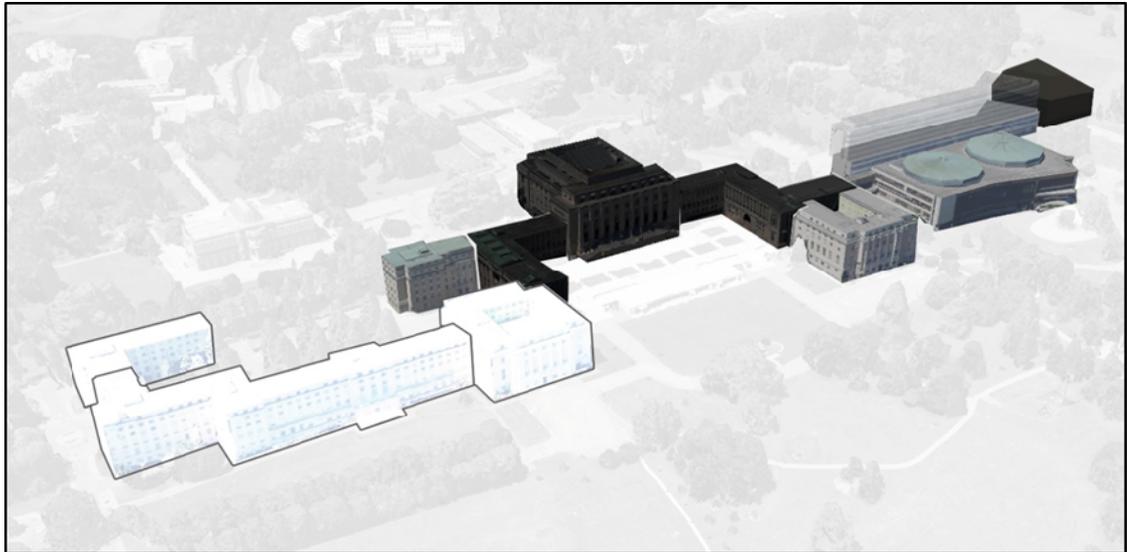
Phase 1

- Construct the new permanent building;
- Renovate the conference area in the A building;
- Install a fire protection system within the historical archives in the B building (Library).



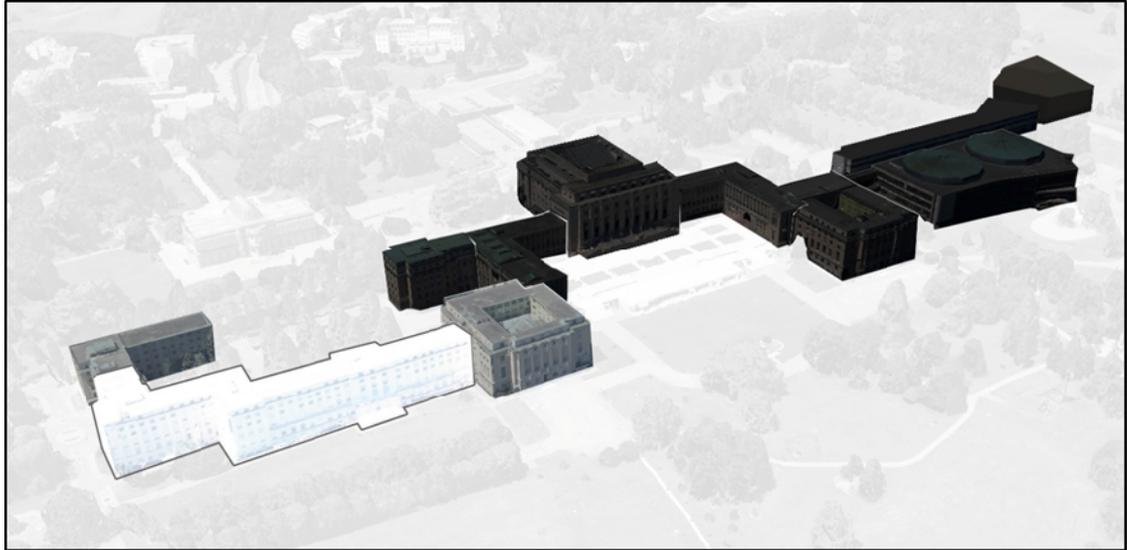
Phase 2

- Relocate staff from the E, D and B buildings to the newly constructed facility;
- Renovate the E building conference facilities;
- Renovate the B building (Library and offices);
- Renovate the D building;
- Dismantle the E building office tower.



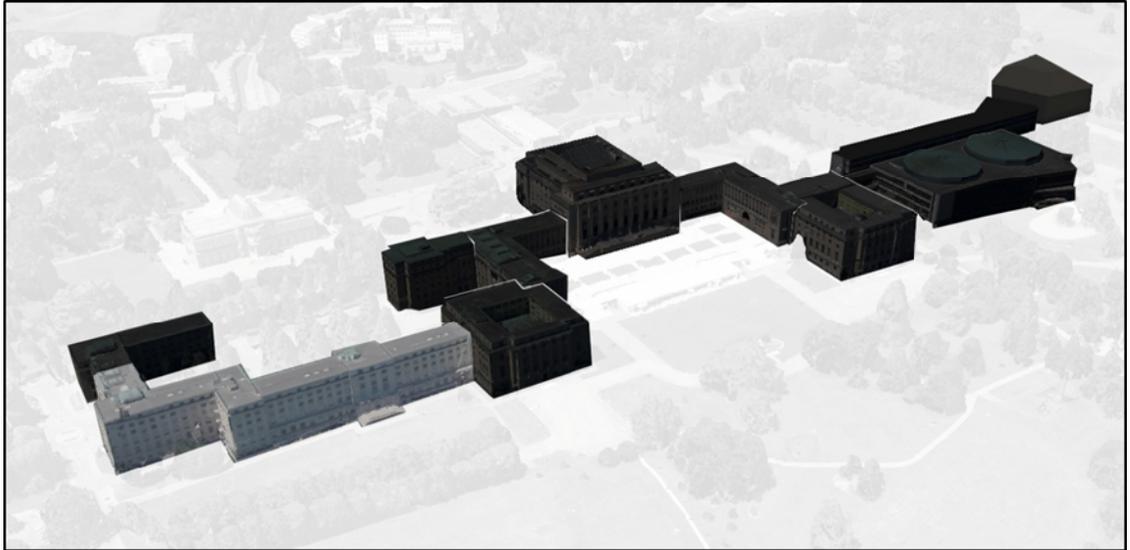
Phase 3

- Relocate staff from C and S (partial) buildings to the swing space;
- Renovate C and S (partial) offices, conference rooms and commercial areas.



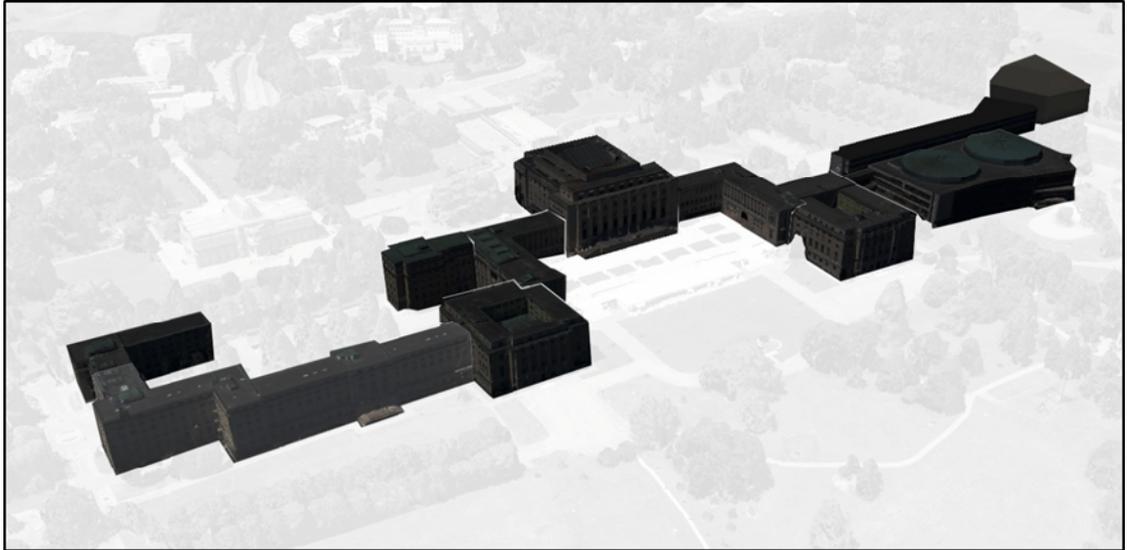
Phase 4

- Complete the renovation of the S building.



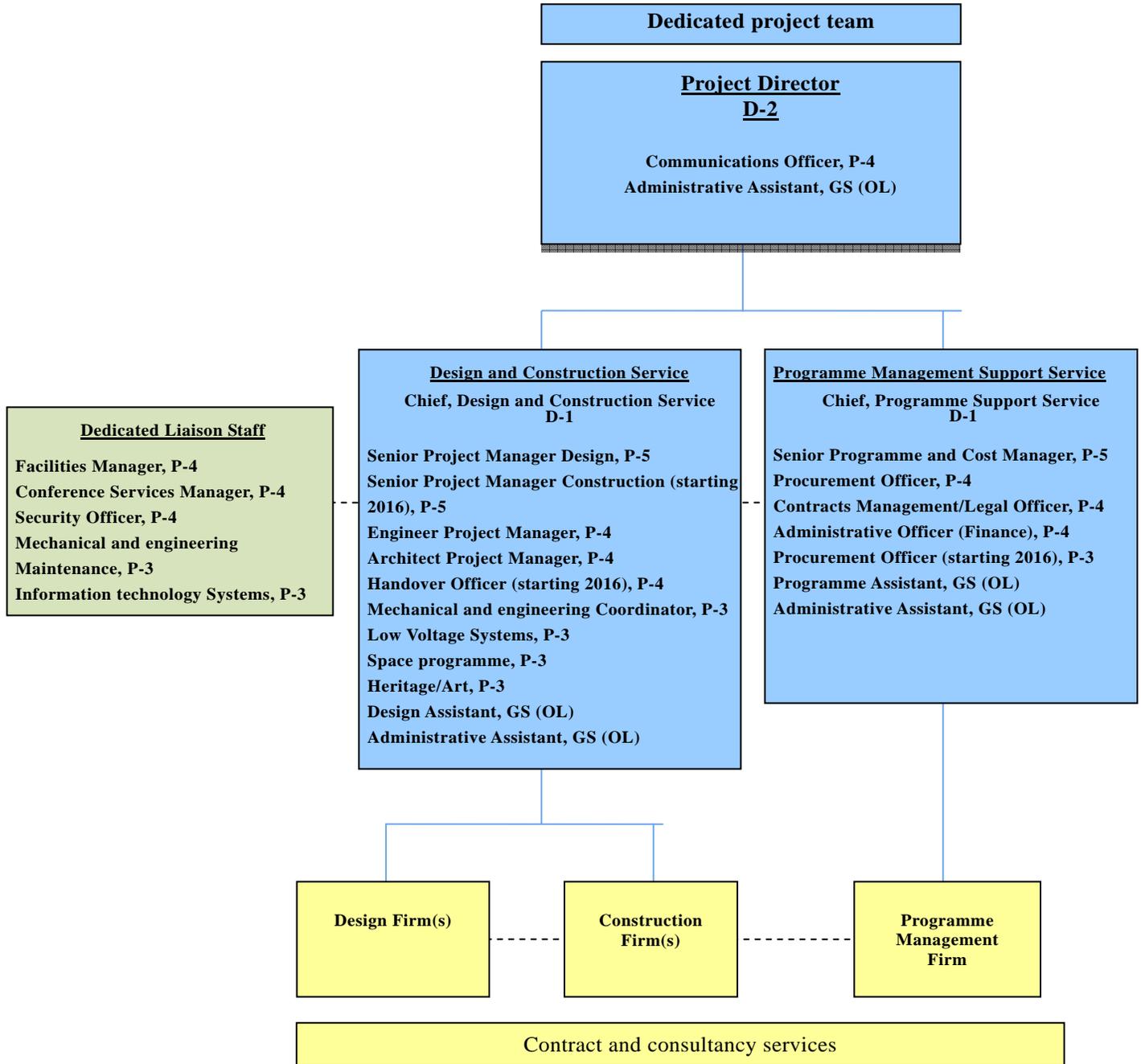
Strategic heritage plan completed

- The entire Palais des Nations is renovated.



Annex II

Strategic heritage plan dedicated project team



Abbreviations: GS, General Service; OL, Other level.

Annex III

Strategic heritage plan governance structure

