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Programme, Financial and Administrative Section
Programme, Financial and Administrative Segment

PFA

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FOURTH ITEM ON THE AGENDA

Building questions: Headquarters building renovation project

Purpose of the document

At its 309th Session (November 2010), the Governing Body approved a comprehensive plan for the renovation of the ILO headquarters building in two phases. It also approved the replacement of the 16 main elevators in the building. This paper provides information on the progress made since the 317th Session (March 2013) of the Governing Body. It also contains information on project expenditure and financial commitments and the results of the project pilot's initial assessment of cost estimates.

The Governing Body is invited to take note of the document and the revised estimates and request the Director-General to submit proposals at its 320th Session (March 2014) on any revisions to project scope and financing options.

Relevant strategic objective: Not applicable.

Policy implications: None.

Legal implications: None.

Financial implications: None.

Decision required: Paragraph 42.

Follow-up action required: Further report in March 2014.

Author unit: Headquarters building renovation project (Deputy Director-General for Management and Reform).

Related documents: GB.317/PFA/2; GB.309/PFA/BS/2(&Corr.); GB.309/PFA/11/1; GB.310/PFA/BS/1; GB.312/PFA/5(&Corr.); GB.313/PFA/INF/2; GB.313/PFA/INF/2(Add.); GB.313/PFA/3/2; GB.315/INS/6/1; GB.316/PFA/3 and GB.170/FA/BS/D1/2.

Key developments

1. Following the appointment of a new Project Manager in November 2012 and the appointment of an architectural and engineering consortium in May 2012 to act as project pilot (pilot), a project design has been under way and a thorough assessment of the project costs has been carried out. The comprehensive plan approved by the Governing Body in November 2010 (the 2010 plan) included an estimated cost of some 203 million Swiss francs (CHF). The revised cost estimates, under three different scenarios, are provided and explained in this document.
2. A revised governance structure has been implemented, introducing a Governance Committee, to provide additional oversight and ensure that all issues are dealt with promptly and in line with applicable ILO regulations, rules and procedures.
3. The new governance structure also includes a Coordination Committee which comprises representatives of the ILO and the Swiss authorities (Swiss Confederation, Canton of Geneva, Building Foundation for International Organizations (FIPOI) and, as needed, the City of Geneva). It has been established to monitor that the renovation works are as compatible as possible with relevant Swiss regulations while respecting the Organization's status as an international organization. The Deputy Director-General for Management and Reform (DDG/MR) chairs the meetings in which the Legal Adviser, Treasurer and Financial Comptroller, a representative of the Director-General's Office and the Project Manager also participate.

Completed works

4. The replacement of the 16 main elevators which started in June 2012 was completed in July 2013, within the approved budget. All 16 new elevators are fully operational. While final invoices have yet to be received, a saving of some CHF23,000 is expected.
5. The renovation of the kitchens and restaurant areas began in July 2012. The cafeteria, coffee bar and service areas, together with some of the kitchen space, have been completed. The remaining kitchen area (food preparation zone), is under renovation and is on schedule for completion by 7 October this year. Associated minor works will be completed by 18 November. The forecasted cost for the kitchen renovations has been revised and is now below that presented in November 2012.

Main building redesign progress

6. The redesign of office space in the main building is based on an office-space module consisting of multiples of three windows. This is in keeping with the building's structural constraints and provides a more efficient building, in terms both of running and maintenance costs, while minimizing the implementation costs of the project.
7. The module of multiples of three windows allows for standard offices, shared offices and open space workplaces of three, six or nine windows, to be determined by the nature and requirements of the work being performed. Meeting rooms and common areas will be distributed throughout each floor and should contribute to creating cross-functional synergies and developing a broader team culture within the building.
8. Accessible sanitary facilities will be ensured on the office floors through the redesign of the current facilities.

Review of costing

9. The cost estimates that follow are based on the project's current state of design and the pilot's best estimates following more detailed architectural and engineering studies. As the project design progresses, so does the precision of the cost estimates.
10. The costs provided by the pilot are based on the basic design process and were developed according to the Swiss building cost classification codes. These figures were then mapped to the approved budget format, for ease of comparison with the 2010 plan.
11. On receiving the cost estimates, cost reviews and value engineering exercises were carried out by the Project Manager together with the pilot and in consultation with the Governance Committee, in order to ensure that the most cost-effective options were chosen, and that only essential works were selected. These exercises resulted in a decrease of some CHF28 million from the first estimate provided by the pilot, in May 2013.
12. As part of the Office's due diligence, an independent review of cost estimates is being undertaken by a specialized cost evaluation firm. The result of this review, the completion of the detailed design and consultations with the local authorities on design aspects will be reported to the Governing Body at its 320th Session in March 2014.

Consolidated table of estimates

13. Table 1 summarizes the tables found in Appendices I to III. It shows the current status of the cost estimates for the project. The column labelled "2010 plan" contains the budget approved by the Governing Body at its 309th Session (November 2010) as part of the comprehensive plan (CHF203.4 million).
14. The second column "Updated estimates" provides current costs on a like-for-like comparison, based on the agreed scope (now some CHF205.8 million). While some elements have decreased in cost, the updated estimate shows an overall cost increase of some CHF2.4 million (1.2 per cent). Further details are provided in Appendix I.
15. The third column "Revised estimates" includes costs for works which were within the general scope, but not fully taken into account in the 2010 plan, for example: meeting upgraded regulatory standards (for safety and environment); the removal of asbestos from additional areas; and the necessary preparatory works. As can be seen in the tables, the pilot estimates a revised renovation cost of some CHF262.7 million (an increase of some CHF59.3 million), for the previously agreed scope and the upgraded regulatory and related works. More details are provided in Appendix II.
16. The column "Enhanced scope costs" relates to works which the pilot considers will bring additional benefit to the ILO headquarters, but which were not part of the originally approved scope. The inclusion of these works would result in a total estimated cost of some CHF273 million. More details are provided in Appendix III.
17. The estimates for inflation in each column in the tables have been adjusted to reflect current trends and forecasts which are significantly lower than when the 2010 plan was prepared. The cost estimates provided by the pilot indicate possible variations of plus or minus 15 per cent. In this context the provision for unforeseen expenses has been maintained at the same percentage rate (10.3 per cent) in each set of estimates.

Table 1. Headquarters building renovation project (in thousand Swiss francs)

Description	Total			
	2010 plan	Updated estimates	Revised estimates	Enhanced scope costs
Asbestos survey	336	292	292	292
Kitchens	4 144	5 250	5 250	5 250
Floors 1 to 11	85 680	94 958	124 919	125 198
Replacement of Gerber supports	1 792	1 484	1 484	1 484
Sprinkler in car parks	1 568	1 110	4 140	4 140
Treatment of exposed concrete	2 688	1 140	1 140	1 140
Electrical substations	2 240	1 835	1 835	1 835
Conference rooms	8 960	17 748	26 896	33 073
Lower floors	22 064	23 958	31 754	34 228
Double glazing colonnade	3 584	2 996	2 996	2 996
Remaining elevators	1 792	2 312	2 312	2 312
Remaining roofs	4 032	3 827	3 827	3 827
Triple glazing office windows	1 008	251	251	251
Use of "Genève-Lac-Nations" project for heating	9 184	1 500	1 500	1 500
Temporary offices	7 500	6 625	6 625	6 625
Moving costs	2 000	1 500	1 500	1 500
Project management (project staff)	9 000	12 769	12 769	12 769
Insurance and miscellaneous	900	900	900	900
Subtotal	168 472	180 456	230 390	239 320
Unforeseen	17 300	18 587	23 730	24 650
Inflation	17 600	6 805	8 558	9 104
Grand total	203 372	205 847	262 678	273 074

Reasons for variations between 2010 plan and revised estimates

General

18. The initial studies carried out in 2006 and 2010 were investigative studies, providing potential solutions to issues raised. The costs identified in those studies were not based on specific designs or in-depth evaluations of all the issues, but provided an indication of the scale of the amount of works to be carried out. As was reported to the Governing Body at its 309th Session (November 2010),¹ the estimated costs could vary by plus or minus 20 per cent as the project preparatory work advanced and once a more thorough assessment had been undertaken. The 2010 study recommended that the ILO carry out an

¹ GB.309/PFA/BS/2.

extensive asbestos study and define a fire safety concept according to Swiss AEAI² codes, in order to understand the impact it would have on the cost of the works. As these were not carried out until 2012–13, the full cost of the works has only now been identified.

19. The updated estimates described in Appendix I have resulted in increases of some CHF2.4 million for the identical scope as was presented in the 2010 plan. However, in reviewing and identifying the necessary works for the renovation, it is clear that the ILO building does not fully comply with current safety standards and that a number of the solutions initially proposed did not meet current local building codes in terms of energy conservation.

Safety (plus CHF18.2 million)

20. Although the previous estimates included the renewal of safety elements only on the basis of the pre-existing standards, there can be no justification for departing from current and local standards when taking into account the safety of ILO staff and visitors and the energy efficiency of the ILO building. Therefore, the proposed budget will need to integrate the corresponding costs.
21. The major methods by which building codes and construction industry standards ensure that the structural integrity of a building cannot be catastrophically affected by fire are by having sufficient fire-rated zones in buildings; fire-suppressant systems in place; fire dampers in ducts and shafts; and by ensuring the structural steel is protected from the effects of extreme temperatures. By employing these multiple mechanisms for fire prevention and fireproofing, the safety of the building and of its occupants is protected.
22. The revised proposal from the pilot addresses these needs and also ensures adequate safe escape routes and signage.

Additional asbestos removal (plus CHF4.2 million)

23. The 2006 and 2010 studies identified asbestos in a number of areas of the building but concluded that there was no immediate health risk.
24. In accordance with current legislation and in keeping with the Governing Body's decision in November 2010, a comprehensive, independent asbestos survey was carried out. This confirmed that there was no health risk and that no immediate measures were required, but it indicated that there were more areas with asbestos than initially identified in the 2006 and 2010 studies. The associated estimated cost of removing asbestos is double that which was originally foreseen; increasing from CHF4.3 to 8.5 million.

Insulation of the main building (plus CHF6.4 million)

25. Building insulation has an enormous impact on environmental sustainability in terms of reduced CO₂ emissions, energy loss and reduced expenses for heating and cooling. In keeping with its pre-1970s oil-crisis construction, the ILO building has only a minimal amount of insulation (3 cm).

² L'Association des établissements cantonaux d'assurance incendie (the Swiss certifying authority on fire protection and protection of buildings against natural hazards).

26. The building insulation proposal in the 2010 study, on which the 2010 plan was based, did not provide sufficient insulation to meet the current building code. The code, with respect to the facade of the ILO's main building, requires 26 cm of insulation as opposed to the 12 cm initially proposed. Furthermore, the initial proposal did not fully insulate the external walls leaving "cold bridges"³ at the end of each floor slab. The need for additional insulation has a significant impact on the cost of the works.
27. The proposed new insulated facade would meet the local "MINERGIE®"⁴ minimum requirement and is estimated to contribute to 60 per cent of the decrease in heat loss for the entire facility.

Energy requirements

28. On the basis of the proposed design (including the use of lake water, the improved insulated facades, heating and cooling distribution system), it is estimated that there will be a 55 per cent decrease in energy requirements by the end of the project, with corresponding cost savings.

Preparatory works (plus CHF21.2 million)

29. Preparatory works include preparing the construction site area to enable contractors to work effectively and safely. They relate to the demolition works, the worksite offices, the lifting equipment, the temporary roads and access routes, the temporary site installations and the temporary repair works. The associated costs were not all accounted for or estimated to their full extent in the initial study.

Inflation and unforeseen (plus CHF6.8 million)

30. As described in paragraph 17, the estimate for inflation and unforeseen has been adjusted to take into account current costing trends and provision for unforeseen expenses.

Schedule

31. The detailed project design was scheduled to be completed in mid-September, taking into account the comments and issues following completion of the basic design in May 2013. It will provide a more detailed cost estimate and a schedule of works, in addition to all the associated detailed drawings and specifications. These works will be followed by the drafting of all the necessary terms of reference for the various works required for the renovation. These terms of reference are due to be completed in February 2014.
32. The next major steps will be: submitting documents for a building permit, subject to the Organization's immunity, so as to allow the local authorities to comment on whether the renovation works are compatible with relevant Swiss regulations; and publishing a request

³ A cold bridge, also known as a thermal bridge, occurs when there is a weak spot in the insulation. The main thermal bridges in a building are found at the junctions of facings and floors, facings and cross walls; facings and roofs, facings and low floors. Heat loss due to cold bridges varies from 10 to 20 per cent. Cold bridges are also known to create structural owing to condensation.

⁴ MINERGIE® is a sustainability brand for new and refurbished buildings. It is mutually supported by the Swiss Confederation and the Swiss Cantons, along with the Swiss trade and industry.

for proposal for construction management services in order to manage and coordinate the construction works.

33. The plan is to carry out the renovation of the main building one third at a time, that is, one vertical third of the building will be emptied, to make space for the renovation works. In order to avoid excessive disturbance from the worksite to the office environment, the building's expansion joints will be used to avoid transfer of vibrations from one side to the other; and sound absorption panels will be added to the fire doors to minimize the noise transfer. Each third of the building is expected to take approximately just over one year to renovate.
34. In order to meet a 2019 completion date, renovation works for the conference centre and general services buildings will have to be carried out at the same time as those for the main building, that is, works initially foreseen in phase 2 will have to be carried out in parallel with those foreseen in phase 1. Alternatively, the original phased approach could be maintained, which would result in a completion date of 2022.
35. Most staff will remain located in the building during the works. However, the International Social Security Association, together with some 50 ILO officials, will be relocated to rented offices nearby.

Financial arrangements

36. The comprehensive plan approved at the 309th Session of the Governing Body (November 2010) included the identification of funding sources for the required CHF203 million. Funding sources included amounts set aside for the purposes of the renovation, the sale or disposition of non-strategic plots of land and a commercial loan to be financed from rental income on increased vacant office space.
37. The Permanent Mission of Switzerland to the United Nations Office and to the other international organizations in Geneva has informed the Office that a draft law modifying the zoning of ILO lands has now passed all the preliminary phases and should be adopted in September 2013. This is a significant step which should allow progress to resume on preparing options for the development for sale of ILO land. On the basis of this information, the Office has communicated to the host government its readiness to continue discussions in order to secure funding for phase 2 of the renovation project, as anticipated in the 2010 plan.
38. The Office has also been advised of a revised policy of the host government with respect to financial assistance for major renovation projects. Such assistance could include loan finance at preferential rates and grant funding for specific elements of the project, for example, environmental sustainability. This development is being actively pursued, notably to determine its impact on the overall financial plan, given the revised cost estimates provided by the project pilot. The proposed change in phasing to meet a 2019 completion date implies an earlier need for phase 2 funds. Assistance with loan financing would be critical if this proposal were to be adopted.
39. The Office will continue its engagement with the host government on all of the above elements of the financial arrangements and report back to the Governing Body in March 2014 on developments, and provide an update on the results of the detailed design and further value engineering, as referred to above.
40. To assist the Governing Body in its oversight of the project, Appendix IV contains a table reporting expenditure as at 31 August 2013, as well as existing and planned financial

commitments. The amounts indicated under expenditure and commitments reflect all contracts signed to date. For consistency purposes, the table reports against the budget from the 2010 plan pending decisions that may be made on revised scope at the next session of the Governing Body. In continuing the preparatory phases of the project, the Office will not enter into irrevocable commitments that could require amendment, should there be a modification in scope or financial arrangements determined by the Governing Body in March 2014.

Current considerations

- 41.** The Office will continue to analyse the estimates, to identify savings, simplifications, financing options and to further develop proposals based on the following scenarios for presentation to the Governing Body at its 320th Session in March 2014:
- (a) retaining the approved budget of some CHF203 million and thus reducing the scope of the work;
 - (b) including the additional work to address safety and security compliance requirements, bringing the total budget to some CHF261.6 million; and
 - (c) including the additional proposed works not included in the original scope, bringing the total budget to some CHF272 million. This option includes the complete renovation of the conference rooms; the renovation of the library; and the construction of a new entrance to the ILO building which would, inter alia, improve security.

Draft decision

- 42.** *Subject to any guidance decided in its discussion, the Governing Body takes note of the document and the revised estimates and requests the Director-General to submit proposals at its 320th Session (March 2014) on any revisions to project scope and financing options.*

Appendix I

Cost comparison between 2010 plan and updated estimate for the same scope (in thousand Swiss francs)

Description	2010 plan			Updated estimates		
	Phase 1	Phase 2	Total	Phase 1	Phase 2	Total
Asbestos survey	336	–	336	202	90	292
Kitchens	4 144	–	4 144	5 250	–	5 250
Floors 1 to 11	55 776	29 904	85 680	63 791	31 167	94 958
Replacement of Gerber supports	–	1 792	1 792	–	1 484	1 484
Sprinkler in car parks	–	1 568	1 568	–	1 110	1 110
Treatment of exposed concrete	–	2 688	2 688	–	1 140	1 140
Electrical substations	–	2 240	2 240	–	1 835	1 835
Conference rooms	–	8 960	8 960	–	17 748	17 748
Lower floors	–	22 064	22 064	–	23 958	23 958
Double glazing colonnade	–	3 584	3 584	–	2 996	2 996
Remaining elevators	–	1 792	1 792	–	2 312	2 312
Remaining roofs	–	4 032	4 032	–	3 827	3 827
Triple glazing office windows	672	336	1 008	195	56	251
Use of “Genève-Lac-Nations” project for heating	–	9 184	9 184	–	1 500	1 500
Temporary offices	7 500	–	7 500	3 563	3 062	6 625
Moving costs	1 500	500	2 000	1 000	500	1 500
Project management (project staff)	6 000	3 000	9 000	5 079	7 690	12 769
Insurance and miscellaneous	400	500	900	400	500	900
Subtotal	76 328	92 144	168 472	79 480	100 976	180 456
Unforeseen	7 100	10 200	17 300	8 186	10 400	18 587
Inflation	5 700	11 900	17 600	1 189	5 616	6 805
Grand total	89 128	114 244	203 372	88 855	116 992	205 847

Explanatory notes

- (1) **Asbestos survey** – The comprehensive asbestos survey was completed under budget. However, it is expected that a number of small studies will have to be carried out throughout the duration of the works. Some funds have therefore been foreseen to cover these costs. Nonetheless, the total cost is expected to be less than that indicated in the 2010 plan.
- (2) **Kitchens** – The forecasted costs for the kitchen renovations have been revised and are now below that presented in November 2012, but higher than the 2010 plan.
- (3) **Floors 1 to 11** – The difference in costs is largely due to the corrected allocation of CHF4.2 million for air-handling units for the main building, previously shown under the “Genève-Lac-Nations” budget line. The real increase is therefore CHF5 million. This 5.9 per cent increase can be attributed to greater estimating precision, following the more

detailed studies and the introduction of disabled facilities in the office floors, as well as additional electrical works.

- (4) **Replacement of Gerber supports** – Detailed analysis and inspection by the civil engineer on the project has identified a lower cost for the replacement of the Gerber supports.
- (5) **Sprinklers in the car parks** – The design review has confirmed that sprinklers in the car parks are a mandatory requirement, for the safety of the building. The new estimated cost is below that of the 2010 plan. Sprinklers in the car parks will provide improved safety, but will have to be complemented by additional fire compartmentalization, way-finding and exiting measures. These complementary costs are included in the revised cost columns.
- (6) **Treatment of exposed concrete** – More cost-effective solutions for the treatment of exposed concrete have been identified by the architect; these savings are reflected in the attached table for exposed concrete treatments.
- (7) **Electrical substations** – In-depth studies by our electrical engineers have provided a more detailed cost for the replacement of the outdated electrical substations, below the 2010 plan.
- (8) **Conference rooms** – The cost increase for the conference rooms is the additional requirement to change the electrical cabling for data and for power, to connect the air-handling units to a building management system, to adapt the interpreters’ booths to meet the required standards, to introduce a central display screen in the Governing Body room and to repair part of the conference rooms’ fixtures.
- (9) **Lower floors** – The difference in numbers is due to the incorrect allocation of CHF1.9 million for air-handling units for the central services previously included in the “Genève-Lac-Nations” budget line.
- (10) **Double-glazing colonnade** – Price indications by the facade consultant have enabled the provision of a more accurate figure for the cost of the colonnade’s double-glazing, below the 2010 plan.
- (11) **Remaining elevators** – Updated estimates show an increase in cost for the renovation of the remaining elevators, but the project team is still working towards alternative options, in order to find more cost-effective solutions.
- (12) **Remaining roofs** – Updated estimates have enabled a reduction in this cost.
- (13) **Triple-glazing office windows** – Triple glazing is becoming an industry standard for efficient windows, and their cost has decreased since 2010.
- (14) **Use of “Genève-Lac-Nations” project for heating** – The cost of installing the “Genève-Lac-Nations” for the heating of the building in the 2010 plan included CHF6.14 million of air-handling units. This estimate has been re-allocated to its correct budget lines, namely “Floors 1 to 11” and “Lower floors”. The updated estimate therefore shows a decrease in cost of CHF1.5 million, which stems from in-depth engineering reviews between the local energy supplier and the project’s engineers.
- (15) **Temporary offices** – Following the decision by the Governing Body not to go ahead with the building of a temporary office pavilion, the cost of temporary offices has been greatly reduced.
 - (a) The cost now indicated for the temporary offices no longer concerns new offices, but does concern the rental costs of offices in a nearby building for approximately 100 people during the renovation works. The cost has been calculated for a period of four years and includes some initial installation costs. In addition, a provision has been included for the rental and associated costs of off-site conference and meeting room space during the renovation work on the conference centre.

- (b) As two-thirds of the office floors will remain occupied, temporary installations for cabling and ventilation of the building will have to be set up for the middle third. These costs are included in the additional costs for preparatory works.
- (16) **Moving costs** – Following the decision by the Governing Body not to go ahead with the building of a temporary office pavilion, the estimate for moving costs has been adapted. The estimate is to cover the initial move out and the return of staff, plus the cost of some means of transportation to and from the “external” premises.
- (17) **Project management (project staff)** – The projected costs for the project’s management have been reviewed in light of the works to be carried out. Additional project management staff (1), administrative procurement and finance support (1), and the need for external specialized legal counsel, expert in the field of construction (0.5) have been added to the project management costs.

Appendix II

Upgraded regulatory and additional costs (in thousand Swiss francs)

Description	Total		Additional costs identified during design process								Revised estimates		
	2010 plan	Updated estimates	Safety regulatory standards		Energy-saving reg. insulation		Preparatory works		Add. asbestos removal		Revised estimates		
			Phase 1	Phase 2	Phase 1	Phase 2	Phase 1	Phase 2	Phase 1	Phase 2	Phase 1	Phase 2	Total
Asbestos survey	336	292									202	90	292
Kitchens	4 144	5 250									5 250		5 250
Floors 1 to 11	85 680	94 958	6 317	3 159	3 753	2 645	7 615	3 808	1 776	888	83 252	41 667	124 919
Replacement of Gerber supports	1 792	1 484										1 484	1 484
Sprinkler in car parks	1 568	1 110		1 130				1 109		791		4 140	4 140
Treatment of exposed concrete	2 688	1 140										1 140	1 140
Electrical substations	2 240	1 835										1 835	1 835
Conference rooms	8 960	17 748		4 539				4 443		167		26 896	26 896
Lower floors	22 064	23 958		3 040				4 215		541		31 754	31 754
Double glazing colonnade	3 584	2 996										2 996	2 996
Remaining elevators	1 792	2 312										2 312	2 312
Remaining roofs	4 032	3 827										3 827	3 827
Triple glazing office windows	1 008	251									195	56	251
Use of "Genève-Lac-Nations" project for heating	9 184	1 500										1 500	1 500
Temporary offices	7 500	6 625									3 563	3 062	6 625
Moving costs	2 000	1 500									1 000	500	1 500
Project management (project staff)	9 000	12 769									5 079	7 690	12 769
Insurance and miscellaneous	900	900									400	500	900
Subtotal	168 472	180 456		11 868	3 753	2 645	7 615	13 575	1 776	2 387	98 941	131 449	230 390
Unforeseen	17 300	18 587	651	1 222	387	273	784	1 398	183	246	10 191	13 539	23 730
Inflation	17 600	6 805	101	562	59	125	120	644	29	113	1 383	7 175	8 558
Grand total	203 372	205 847		20 721		7 242		24 136		4 734	110 515	152 163	262 678
					Total additional costs: 56 832								

Explanatory notes

- (1) **Safety regulatory standards** – Safety standards for buildings have greatly increased in past decades. The ILO headquarters building, built between 1969–74, no longer meets current safety standards. The elements to be updated to comply with local safety standards are: fire compartmentalization and associated fire doors (CHF11.4 million); fire dampers in ductwork (CHF1 million); additional fire signage and safety lights (CHF1.8 million); additional fire escapes and associated walkways (CHF1.6 million); additional fire evacuation alert systems (CHF556,000); additional smoke detection sensors (CHF1.8 million). It should be noted that discussions with the local authorities have been set up but had not yet taken place at the time this document was published.
- (2) **Energy-saving regulatory insulation** – Environmental standards for buildings have greatly increased in the past decades. The original proposed insulation for the main building falls short of the current environmental legislation. In order to insulate the building according to the current building code and to maintain its external physical appearance, the cast aluminium panels on the exterior have to be removed (CHF1.4 million), the insulation has to be placed up against the slabs and structural steel to avoid any cold bridges and then the aluminium panels can be reinstalled on a new secondary support (CHF1.2 million). During this time, the panels have to be cleaned, stored and reinstalled (CHF3.8 million).
- (3) **Asbestos removal** – The cost increase of CHF4.1 million is the result of the comprehensive survey carried out in 2012. The survey discovered more asbestos than was originally identified. Asbestos was found within the plaster behind the carpeted walls of the main building's corridors (7,000 m²) and in some window seals in the lower floors (5,000 linear metres). The amount of asbestos in the main building's facade was discovered to be far greater than thought (6,000 m²) and cement-fibre air ducts were discovered. The removal and disposal of asbestos is strictly controlled and must comply with local standards.
- (4) **Preparatory works** – The preparatory works initially foreseen in the 2010 plan were underestimated by some CHF21.2 million. There is no mention of works that should have been foreseen, such as: repair works due to site installation works (CHF1.6 million); adapting existing roads (CHF325,000); lifting equipment (CHF6.3 million) and temporary access roads. The remainder of the works were foreseen, but significantly underestimated; the deconstruction works were underestimated by CHF7.5 million, worksite offices by CHF4 million and the temporary site installations by CHF1.5 million.

Appendix III

Enhanced scope cost estimates (in thousand Swiss francs)

Description	Total			Proposed additional costs										Enhanced scope			
	2010 plan	Updated estimates	Revised estimates	Opportunities for improvement (in phase 2 only)										Phase 1	Phase 2	Total	
				Gas extinct.	Main entrance	Library	Protect archives	Grey water	Air condit.	Insulate L. facade	Efficient heating	Conf. entrance	Cinema space				
Asbestos survey	336	292	292												202	90	292
Kitchens	4 144	5 250	5 250												5 250		5 250
Floors 1 to 11	85 680	94 958	124 919	69				210							83 252	41 946	125 198
Replacement of Gerber supports	1 792	1 484	1 484													1 484	1 484
Sprinkler in car parks	1 568	1 110	4 140													4 140	4 140
Treatment of exposed concrete	2 688	1 140	1 140													1 140	1 140
Electrical substations	2 240	1 835	1 835													1 835	1 835
Conference rooms	8 960	17 748	26 896		913				2 912	276	800	169	1 107			33 073	33 073
Lower floors	22 064	23 958	31 754	883		645	620	50		276						34 228	34 228
Double glazing colonnade	3 584	2 996	2 996													2 996	2 996
Remaining elevators	1 792	2 312	2 312													2 312	2 312
Remaining roofs	4 032	3 827	3 827													3 827	3 827
Triple glazing office windows	1 008	251	251												195	56	251
Use of "Genève-Lac-Nations" project for heating	9 184	1 500	1 500													1 500	1 500
Temporary offices	7 500	6 625	6 625												3 563	3 062	6 625
Moving costs	2 000	1 500	1 500												1 000	500	1 500
Project management (project staff)	9 000	12 769	12 769												5 079	7 690	12 769
Insurance and miscellaneous	900	900	900												400	500	900
Subtotal	168 472	180 456	230 390	952	913	645	620	260	2 912	552	800	169	1 107		98 941	140 379	239 320
Unforeseen	17 300	18 587	23 730	98	94	66	64	27	299	57	82	17	114		10 191	14 459	24 650
Inflation	17 600	6 805	8 558	58	56	39	38	15	179	33	49	11	68		1 385	7 719	9 104
Grand total	203 372	205 847	262 678	1 108	1 063	750	722	302	3 390	642	931	197	1 289		110 517	162 557	273 074
				Total options: 10 395													

Explanatory notes

- (1) **Gas extinction** – A gas extinguishing system is a fire-extinguishing system that uses a gaseous extinguishing agent to put out fires, either through oxygen displacement (reduction of oxygen content) or physical effects (heat extraction). In contrast to a sprinkler system, a gas extinguishing system is designed to extinguish and not only suppress fire. Gas extinguishing systems are used when water, foam or powder extinguishing systems are not effective or if extinguishing with the abovementioned extinguishing agents could cause significant damage. In this proposed additional cost, the pilot has suggested that the electrical and IT rooms be supplied with gas extinguishing systems so as to minimize the risk of fire.
- (2) **Main entrance** – The ILO headquarters does not have a single identifiable main entrance, but a number of entrances depending on the needs and uses. The number of different access points often creates confusion for visitors and weakens security. This inefficiency is compounded during the Conference, when participants and visitors are directed to the pavilion to obtain their accreditation. The proposed main entrance would provide for a light and airy entrance hall where visitors could obtain their accreditations or wait for their ILO contact to meet them. This proposal would therefore provide a focal point for all visitors. It would also create a secure fire escape from the first floor, via the new entrance's canopy roof structure, and improve the security of the building.
- (3) **Library** – The library is an important part of the Office, but it is largely hidden from sight. The pilot has suggested that the library be linked to the *Gobelins* hall by relocating the M2 sanitary facilities and installing an internal glass facade thereby bringing daylight to the *Gobelins* and visibility to the library.
- (4) **Archive fire protection** – The archives located on level P2 contain the valuable historical records of the ILO and require improved fire safety through the provision of gas extinguishers. Smoke detectors are distributed within the room, but there are no fire extinction measures. In the event of a fire, it is likely that all the archives would burn.
- (5) **Grey water** – This denotes a water-saving system, whereby rain water is collected from roofs via traditional guttering, through down pipes to an underground tank. The water is then delivered on demand, by an in-tank submersible pump direct to toilets and other non-drinking fixtures and appliances. Depending on the various applications, more than 50 per cent of mains water can be replaced by rainwater.
- (6) **Air conditioning of conference rooms** – The air-handling units for the conference rooms suffer from old age and can no longer meet the delegates' requirements or building norms. The proposal is to replace the air-handling units, their controls and their cooling units in order to provide clean, cool, fresh air into the meeting rooms on demand.
- (7) **Insulation of lower floors** – Insulation of the lower floors would require an additional 12 cm of insulation to meet current energy-saving codes. Internal insulation would have to be used in order to maintain the external appearance of the concrete walls. Insulating the building in such a way brings complications, as it becomes difficult to avoid cold bridges. The project pilot is working with the local authorities on finding the right balance between insulation and historical preservation.
- (8) **Efficient heating of conference rooms** – The heating of the conference rooms is carried out via static heaters on the periphery of the rooms along the windows and obsolete air-handling units. The latter do not provide sufficient heating power to meet the users' needs, in addition to which, the air to the translators' booths is heated with electrical heaters, which do not meet current energy-saving standards.
- (9) **Identification of conference rooms entrances** – The entrances to the ILO's conference rooms are not clearly indicated or signposted. This proposed additional cost, would

provide a clearer identification of the location of meeting rooms, by emphasizing the entrances to the rooms.

- (10) **Transforming the cinema into an exhibition space** – The cinema space, a last-minute addition to the building when it was constructed,¹ was meant to “provide suitably designed premises for use on the ever-increasing number of occasions when films need to be shown”. (There were 33 projections in 1965, 56 in 1966 and nearly 100 in 1967.) However, the room is no longer used as a cinema and seldom used for occasional social activities. The proposal, is to revive this space and turn it into an exhibition space, where the history of the ILO can be displayed and up-to-date presentations and conferences be hosted.

¹ GB.170/FA/BS/D1/2.

Appendix IV

Project financial status for the period 1 January–31 August 2013

(in thousand Swiss francs)

Description	Budget phase 1		Expenditure		Commitments		Forecast phase 1		Budget phase 2	Budget total
	Original budget ¹	Period ²	To date ³	To date ⁴	Planned ⁵	Forecast ⁶	Variance ⁷	Original budget	Original budget	
Asbestos survey	336		141		61	202	-134		336	
Kitchens	4 144	1 274	3 678	1 668	-97	5 250	1 106		4 144	
Floors 1 to 11	55 776	2 875	5 031	6 549	52 211	63 791	8 015	29 904	85 680	
Replacement of Gerber supports								1 792	1 792	
Sprinkler in car parks								1 568	1 568	
Treatment of exposed concrete								2 688	2 688	
Electrical substations								2 240	2 240	
Conference rooms								8 960	8 960	
Lower floors								22 064	22 064	
Double glazing colonnade								3 584	3 584	
Remaining elevators								1 792	1 792	
Remaining roofs								4 032	4 032	
Triple glazing office windows	672				195	195	-477	336	1 008	
Use of "Genève-Lac-Nations" project for heating								9 184	9 184	
Temporary offices	7 500		28		3 535	3 563	-3 937		7 500	
Moving costs	1 500				1 000	1 000	-500	500	2 000	
Project management (project staff)	6 000	553	1 149	579	3 351	5 079	-921	3 000	9 000	
Insurance and miscellaneous	400				400	400		500	900	
Subtotal	76 328	4 701	10 028	8 796	60 656	79 480	3 152	92 144	168 472	
Unforeseen	7 100		276		7 910	8 186	1 086	10 200	17 300	
Inflation	5 700				1 189	1 189	-4 511	11 900	17 600	
Grand total	89 128	4 701	10 304	8 796	69 755	88 855	-273	114 244	203 372	
Elevators	4 300	1 734	3 670	607	0	4 277	-23		4 300	

¹ Budget approved by the Governing Body during the November 2010 session (GB.309). ² Expenses incurred, within the period stated in the report. ³ Total expenses incurred to date. ⁴ Commitments as at the report's status date (current commitments = commitments less expenditure). ⁵ Contracts yet to be concluded. ⁶ Estimated final cost, based on current knowledge of the project. ⁷ Difference between forecast and budget. A negative value shows a forecasted saving on budget.