

**NOTE BY THE TECHNICAL SECRETARIAT****PROGRESS IN THE PROJECT TO UPGRADE THE OPCW LABORATORY AND EQUIPMENT STORE TO A CENTRE FOR CHEMISTRY AND TECHNOLOGY****BACKGROUND**

1. On 10 July 2017, the Technical Secretariat (hereinafter “the Secretariat”) issued Note S/1512/2017 entitled “Upgrading the OPCW Chemical Laboratory to a Centre for Chemistry and Technology”, explaining the new challenges and changing requirements that made it necessary to modernise and expand the capabilities of the current OPCW Laboratory and Equipment Store in Rijswijk. In Note S/1561/2017 entitled “Request from the Director-General to States Parties for Voluntary Contributions to a New Trust Fund for Upgrading the OPCW Chemical Laboratory to a Centre for Chemistry and Technology” (dated 8 December 2017), the Secretariat informed States Parties of the establishment of a trust fund for this project and requested voluntary contributions.
2. The key objectives, project scope, and initial cost estimate and schedule were described in the Note entitled “Needs Statement for Upgrading the OPCW Chemical Laboratory to a Centre for Chemistry and Technology” (S/1564/2017, dated 22 December 2017 and Corr.1, dated 3 January 2018). Updates on the progress made in implementing the project were provided in Notes S/1769/2019 (dated 9 July 2019), S/1859/2020* (dated 9 March 2020), S/1881/2020 (dated 30 June 2020), and S/1912/2020 (dated 16 November 2020) entitled “Progress in the Project to Upgrade the OPCW Laboratory and Equipment Store to a Centre for Chemistry and Technology”. Note S/1769/2019 also provided detailed information regarding the project’s expected benefits as well as its revised scope, cost, and schedule.
3. The Secretariat has provided numerous briefings on the project to States Parties at side events during regular sessions of the Executive Council (hereinafter “the Council”) and the Conference of the States Parties. Additional briefings were provided to States Parties during the meeting of the Open-Ended Working Group on the Future Priorities of the OPCW on 2 October 2017, and during informal budget facilitations and meetings of the Friends of the Laboratory Group in 2018, 2019, and 2020. A pre-recorded briefing was provided to States Parties in April 2020 to present the preliminary design of the OPCW Centre for Chemistry and Technology (ChemTech Centre).
4. This Note is intended to update States Parties on the progress made in the implementation of the project since the issuance of the previous update in November 2020 (S/1912/2020). Normally, this Note would have been issued in advance of the Ninety-Sixth Session of the Council. However, because of the significant processes that were nearing completion



at that time and which have a decisive impact on further project implementation, such as the tendering of the main construction contract, the Secretariat decided to delay issuance of this Note until it would be possible to provide States Parties with a comprehensive update.

KEY HIGHLIGHTS

5. Several milestones have been achieved since the issuance of the previous report in November 2020. The irrevocable permit for construction of the ChemTech Centre was granted in February 2021. In March 2021, the project funding target of EUR 33.5 million was reached, and in April 2021 the main construction contract was signed, which marks the end of the project's design phase and the start of the construction phase.
6. The cost of the main construction contract is higher than anticipated but is affordable within available resources, and the project remains on budget. This outcome of the main construction tender substantially reduces the level of risk in the project. Construction is on schedule, to begin as planned in June 2021 and to be completed by the end of 2022. Further details on the progress and status of the project are provided below.

IMPLEMENTATION PROGRESS

Impact of the COVID-19 pandemic

7. The Secretariat continues to closely monitor the potential impact of the COVID-19 pandemic on the project. To date, owing to the mitigation efforts by the Secretariat, the pandemic has not had a material impact on the project. The Secretariat will continue with its efforts to assess and mitigate, to the extent possible, the existing and potential impact of the pandemic on the project, and will keep States Parties informed.

Design phase progress

8. Following the completion of the draft design in February 2020, the preliminary design in April 2020, and the final design in July 2020, the technical design was completed in November 2020. This technical design served as the basis for the main construction tender.
9. The next and concluding design stage is the detailed design, which will be developed by the design team in cooperation with the contractor that has been awarded the main construction tender. The detailed design provides the construction-ready plans that will be used to build the ChemTech Centre. The development of the detailed design is the first step in the construction phase of the project, and work on this design will continue during the construction phase as the different stages of construction are begun and completed.

Construction tenders and permit progress

10. The tendering for the construction of the ChemTech Centre has been split in the following manner:

Main construction tender

- (a) This lot provides for the construction of the building's structure and main installations, including the terrain, foundation, superstructure, interior, and mechanical, electrical, and plumbing installations. The main construction company will also be responsible for coordinating the work of the other contractors involved in construction to ensure delivery of the fully completed ChemTech Centre on time and on budget. For this tender, the Secretariat specifically sought companies with experience in building scientific and technical facilities similar to the ChemTech Centre. The request for proposal (RFP) phase for the main construction tender was completed and the contract awarded in April 2021.

Security tender

- (b) This lot contains the security-related installations for the ChemTech Centre, such as the perimeter fence, access control, and surveillance systems. For this tender, the Secretariat has sought specialist companies with dedicated expertise in the installation of security features and systems of the kind required for the ChemTech Centre. Having a specialist contractor to review and finalise the design of the security features along with the main contractor and design team will ensure that these features are optimised and, ultimately, installed in an appropriately professional and cost-effective manner. This also reduces the risk of exposure of sensitive design information by limiting the number of contractors that have access to the information. The preselection of companies for this tender was completed in December 2020 and the RFP phase began in January 2021. The tender is now in its final stages and the contract is expected to be awarded later this month.

Laboratory furnishings tender

- (c) The Secretariat was advised by its design team to also tender the installation of the laboratory furnishings separately to provide the OPCW with more flexibility and options to customise the laboratory furnishings, and also to reduce surcharges by the main contractor. Accordingly, the Secretariat is seeking specialised companies for this tender as well. As the laboratory furnishings will not need to be fully detailed and installed until later in the construction phase, the preselection of companies for this tender began in March 2021. The contract is expected to be awarded in late 2021.

11. The irrevocable permit for construction of the ChemTech Centre was granted by the permitting authorities of the municipality of Pijnacker-Nootdorp in February 2021.

REVISED BUDGET LINES

12. With the completion of the design phase and awarding of the construction tender, the Secretariat is now in a position to more accurately indicate expected costs across the various budget lines. It should be noted that while a number of the budget lines have been revised, the overall project budget is unchanged. Table 1 below provides the revised budget lines as compared to those provided to States Parties in Note S/1769/2019. The table is followed by explanations of the changes to each budget line, where applicable.

TABLE 1: COMPARISON OF COST ESTIMATES

ChemTech Centre Project Cost Estimate	<u>COLUMN A</u> S/1769/2019 Estimate (June 2019, in EUR)	<u>COLUMN B</u> Current Estimate (April 2021, in EUR)
Building costs	16,224,000	20,763,000
Land purchase and related costs	2,663,000	2,363,000
Design costs	1,685,000	1,385,000
Outside area and site infrastructure	553,000	553,000
Equipment costs	1,050,000	50,000
Furniture and workstations	924,000	924,000
Transition costs	316,000	316,000
Decommissioning of facilities	1,000,000	400,000
OPCW project management staff	1,505,501	1,505,501
Project management and advisory services	2,525,000	2,401,561
Contingency	2,809,000	1,690,000
Subtotal	31,254,501	32,351,062
Programme support costs	2,187,815	1,091,254
Total	33,442,316	33,442,316

Building costs

13. During the design phase, the Secretariat worked closely with the design team, users of the ChemTech Centre, and its cost advisor to maximise the efficiency of the building costs without compromising the quality or functionality of the building. Nevertheless, the current building cost estimate is higher than was anticipated in June 2019 and represents the most significant change in the project's budget. The increase in the estimated building costs is primarily due to four factors:

Inflation since June 2019

- (a) The building cost estimate from June 2019 did not include a provision for future price increases. Yet, a provision of approximately EUR 1.1 million for inflation in building costs was made in the contingency budget line in the June 2019 estimate. This provision has been reallocated to the building costs in Table 2. As the main construction contract has now been signed with a fixed price agreed with the contractor, the risk of further price increases due to inflation in building costs is mitigated. Similar fixed-price agreements will be sought for the security and laboratory furnishing tenders to further control this risk.

Margin in price estimation

- (b) The budget for building costs was set in early 2019 before the start of design development or the receipt of any offers from construction companies. Therefore, there was a measure of uncertainty in this building cost estimate, which is the primary reason why the Secretariat indicated in S/1769/2019 (paragraph 113) that the overall project estimate of EUR 33.5 million carried an uncertainty of $\pm 10\%$. The design team and the Secretariat independently employed their own cost advisors throughout the design process, to verify the accuracy of the building cost estimates against current market prices upon the completion of each design stage. Still, the bids received for the main construction contract exceeded the estimates of the cost advisors. The economic uncertainty related to the COVID-19 pandemic may have had some impact in this regard.

Additional insight into safety and security requirements

- (c) During the design process, additional safety and security features were identified as essential by both the Secretariat and the design team. These further requirements were derived from a combination of Dutch regulations, United Nations security guidelines, and best laboratory practices. As these new requirements were not part of the June 2019 building cost estimate, they resulted in additional building costs.

Translation of requirements into a building design

- (d) The estimates for the size of the building in June 2019 were based on the project's programme of requirements, which indicated the area needed (in m²) for each of the functional areas. During the design phase, these requirements were translated into a building design that had to be accommodated on a specific plot of land in Pijnacker-Nootdorp, in a manner consistent with the zoning and

permitting requirements of the municipality, and with the architectural fit-out. As a result of this process, certain areas of the building, such as staircases, corridors, the central service and meeting area, and some of the functional areas, had to be made larger than was initially estimated. While other areas were somewhat reduced in size to offset these increases, this, together with what is mentioned in subparagraph 13(c) above, generally contributed to the increase in floor space, from the 5,300m² in the programme of requirements that was estimated in June 2019 to 5,700m² at present. This larger footprint has contributed to the increase in building costs.

14. While inflation and costs for additional requirements could be anticipated to some extent in the building cost estimate, it was not possible to estimate the margin in price estimation that could result from the actual bids for the main construction contract, particularly given the ongoing pandemic. As the bids received were higher than expected, the following approach was taken to mitigate the cost overrun arising from this tender:

Optimisation

- (a) The Secretariat requested all bidders to submit, as a part of their RFP submission, design optimisation proposals which could reduce the construction cost without compromising the quality and functionality of the building. Through further discussions with the design team, the users of the ChemTech Centre, and the vendor deemed to have submitted the most competitive bid, it was possible to further reduce the cost of the main construction contract substantially, before it was signed without impacting the building's quality or functionality.

Negotiation

- (b) The Secretariat negotiated with the contractor that submitted the most competitive bid to reduce, to the extent possible, the requested contract price. The optimisation and negotiation efforts together resulted in savings of close to EUR 1 million in the cost of the main construction contract.

Budget review

- (c) The current requirements for other budget lines were reviewed to identify potential savings that could be reallocated to the building cost line. Given the progress of the project since June 2019 and the more detailed and accurate cost information that is currently available, the Secretariat was better placed to assess expenditure to date and to forecast future expenditure. The changes to other budget lines are explained in detail in paragraphs 16 to 22 below.

15. As a result of these measures, the increase in the building costs arising from the main construction contract has been mitigated, though not eliminated. Similar measures will be taken with regard to the security and laboratory furnishing tenders if the bids received are over budget.

Land purchase and related costs

16. Land purchase and related costs were adjusted in June 2019, reflecting the lower than expected cost of the land purchase agreement. Based on the further development of the project, it became possible to also reduce costs related to the land purchase to realise further savings of EUR 0.3 million. These savings have been transferred to the building cost budget line.

Design costs

17. As a result of the design services tender process, the Secretariat obtained these services at a cost below that of the June 2019 estimate. Though the design team still has some tasks to complete during the construction phase, these are relatively small in scale. Combined with the completion of the design phase, this has enabled the Secretariat to calculate the overall expected design cost with greater accuracy. The savings of EUR 0.3 million in these costs has been reallocated to the building cost line.

Equipment costs

18. The June 2019 estimate included costs for equipment for the expanded training laboratory. In 2020, the Secretariat conducted an assessment of market prices and had the opportunity to obtain EUR 1.0 million worth of the planned equipment for a lower price of EUR 0.6 million. At the end of 2020, the Secretariat was subsequently able to procure the equipment in the context of the capacity-building activities of the International Cooperation and Assistance Division (ICA). The equipment will be used exclusively for ICA capacity-building activities in the training laboratory at the ChemTech Centre in support of States Parties. A total of EUR 1 million, originally budgeted for this equipment, was therefore transferred to the building cost line.

Decommissioning of facilities

19. Upon vacating the current facility in Rijswijk, the OPCW will be responsible for its decommissioning. In late 2020, the scope of decommissioning work was further detailed in negotiations with the owner of the facility. Based on these negotiations, it became clear that the actual required scope of decommissioning was smaller than what had initially been planned. The decommissioning cost was therefore revised downwards, with the difference of EUR 0.6 million reallocated for building costs.

Project management and advisory services

20. Project management and advisory services costs account for the external expertise and support required to ensure effective and efficient implementation of the project. These costs include, inter alia, the services of the external legal counsel, an independent cost advisor, and independent architectural and engineering supervisors that will be needed during construction. Based on the expenditure to date and a more detailed forecast of future expenditure, savings of approximately EUR 0.1 million are anticipated, and these funds have been shifted to building costs.

Contingency

21. As reported in subparagraph 13(a) above, the scope of contingency included a provision of approximately EUR 1.1 million for potential cost increases due to inflation. This portion of the contingency has been reallocated to the building costs.

Programme support costs

22. Programme support costs (PSC) are charged at a flat rate of 7% on all voluntary contributions of EUR 10,000 or more. The June 2019 cost estimate for PSC was calculated based on this rate and the assumption that the project would be funded entirely through voluntary contributions. The project is now at a stage where the Secretariat is better able to assess the actual requirements for PSC to ensure the availability of appropriate administrative support for the project. The Secretariat has received a number of particularly large contributions to this project, which is unusual, and has determined that it does not cost an amount equivalent to 7% of those donations to administer them. Accordingly, the PSC on some of the largest contributions will be reduced from 7% to 3% to generate savings of approximately EUR 1.1 million, for allocation towards building costs.
23. The above approach is applied only to the ChemTech Centre project and on an exceptional basis, as it is uncommon for the Secretariat to receive multiple voluntary contributions of this size. Accordingly, the PSC policy remains otherwise unchanged and the Secretariat will continue to charge PSC at a rate of 7% on all voluntary contributions of EUR 10,000 or more.

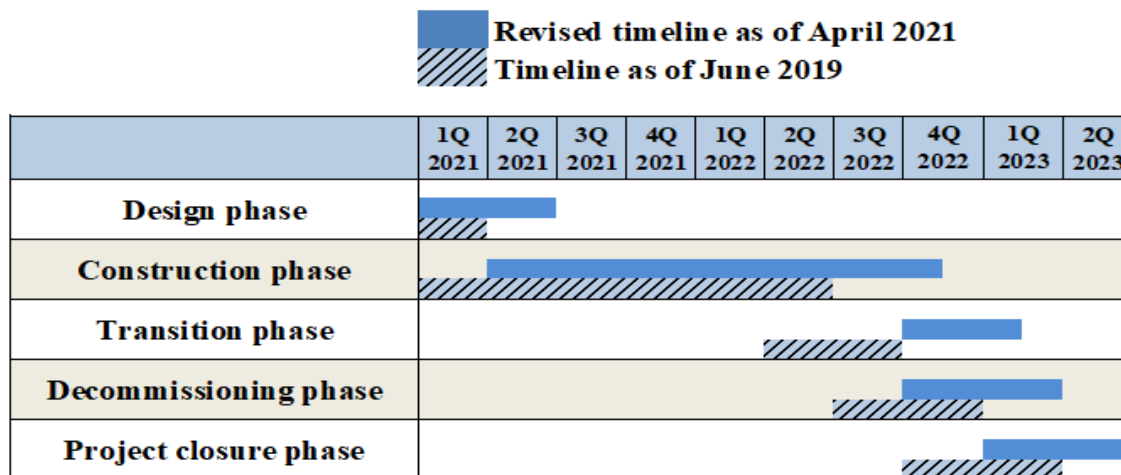
REVISED PROJECT BUDGET SUMMARY

24. The revised project budget carries a considerably higher degree of certainty than the June 2019 budget, owing to the more accurate information that is now available and the greater certainty of building costs following the awarding of the main construction contract. Still, unanticipated costs during the construction phase are possible, for example, in case changes to the design or to the building itself become necessary because of errors or late changes in requirements. Additionally, higher than expected costs for the security and laboratory furnishing tenders, and higher costs in other budget lines, such as transition, cannot yet be ruled out. Therefore, while the contingency budget will remain available to help absorb any future cost overruns, the budget will continue to retain a measure of financial risk, albeit at a level lower than applied in June 2019.

REVISED PROJECT TIMELINE

25. The figure below provides a comparison of the current timeline against the timeline as of June 2019.

FIGURE: COMPARISON OF THE CURRENT TIMELINE WITH THE PREVIOUS TIMELINE



26. The current timeline shows some adjustments in comparison to the June 2019 timeline. This has two primary causes, as outlined below.
27. First, once the most competitive bid for the main construction tender was identified, the Secretariat began an extended period of consultation and negotiation, to explore optimisations to the design and to agree with the bidder on the savings in the contract price that these would achieve. This process was necessary to ensure that the main construction contract would be affordable within existing project resources.
28. This process resulted in the contract being signed in April 2021, which falls in the second quarter of the year and is slightly later than was estimated in the June 2019 timeline. As the awarding of this contract represented the final step in the project’s design phase, the completion of the design phase was delayed until the second quarter of 2021. The start of the construction phase was similarly delayed until the second quarter of 2021.
29. The second cause for the extension of the timeline is that the construction phase is now planned to be somewhat longer than was estimated in June 2019. This minor adjustment is due to the more detailed and accurate planning information that is now available. As the construction schedule has now been contractually agreed with the contractor, the risk of further changes to the schedule is considered low. Despite these small adjustments to the project timeline, the project remains on track, with construction of the ChemTech Centre scheduled to be completed by the end of 2022.
30. As with the revised project budget, while there is substantially greater certainty regarding this revised timeline, some uncertainty remains and the timeline remains subject to further change.

FINANCIAL STATUS AND REGULAR BUDGET IMPACTS

Expenditures to date

31. As of 1 April 2021, approximately EUR 4.7 million had been spent on the project. The expenditures to date, as compared to the revised cost estimate in Table 1 above, are shown in Table 2 below.

TABLE 2: PROJECT BUDGET AND EXPENDITURE

ChemTech Centre Project Budget and Expenditure		
Budget Item	<u>COLUMN A</u> Current Estimate (April 2021, in EUR)	<u>COLUMN B</u> Expenditure to date (as of 1 April 2021, in EUR)
Building costs	20,763,000	0
Land purchase and related costs	2,363,000	2,306,564
Design costs	1,385,000	860,356
Outside area and site infrastructure	553,000	0
Equipment costs	50,000	50,000
Furniture and workstations	924,000	0
Transition costs	316,000	0
Decommissioning of facilities	400,000	0
OPCW project management staff	1,505,501	771,505
Project management and advisory services	2,401,561	743,987
Contingency	1,690,000	0
Subtotal	32,351,062	4,732,412
Programme support costs (7%)	1,091,254	310,453
Total	33,442,316	5,042,864

Fundraising progress

32. To date, approximately EUR 33.6 million in voluntary contributions has been pledged or provided to the project's Trust Fund by 47 countries, the European Union, and other donors. These contributions have been made or pledged by: Algeria, Andorra, Angola, Australia, Bangladesh, Belgium, Canada, Chile, China, Cyprus, the Czech Republic, Estonia, Finland, France, Germany, Greece, Hungary, Indonesia, Ireland, Italy, Japan, Kazakhstan, Lithuania, Luxembourg, Malaysia, Malta, Morocco, the Netherlands, New Zealand, Pakistan, Peru, the Philippines, Poland, Portugal, the Republic of Korea, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Thailand, Turkey, the United Arab Emirates, the United Kingdom of Great Britain and Northern Ireland, the United States of America, the European Union, Israel (signatory State), and other donors. Additional States Parties have indicated that they are considering making contributions.
33. The ChemTech Centre Trust Fund remains open for further contributions. Additional contributions would provide extra assurances for the successful completion of the project and for international cooperation projects to be carried out at the Centre as soon as the building is operational. This will afford further opportunities for States Parties to participate in supporting the ChemTech Centre.

Regular budget impacts

34. Once the ChemTech Centre becomes operational, which is currently scheduled to occur at the end of 2022, it will begin to incur operational, maintenance, and capital maintenance costs. It should be noted that the building is designed to be as cost-efficient as possible with regard to its future operational and maintenance costs.

TABLE 3: OPERATIONAL COSTS

Operational Costs (Yearly)	Rijswijk Facility	Current Estimate for the ChemTech Centre (2023)
Rent, utilities, insurance, gardening, cleaning	200,000	140,000
Maintenance of installations and equipment	240,000	340,000
Total	440,000	480,000

35. Table 3 above shows the current estimate of the ChemTech Centre's operational costs, based on the technical design and in comparison to the costs of the current facility in Rijswijk. This estimate was prepared by the design team and cost advisors and therefore does not represent actual prices for maintenance and other contracts, which are not yet in place. As the table shows, the estimated costs for rent, utilities, insurance, gardening, and cleaning are expected to decrease overall. This is primarily due to the elimination of the rental payment for the facility in Rijswijk. These savings are partially offset by increases in gardening and cleaning costs for the ChemTech Centre, which is a much larger facility. Building insurance costs will be a new item of expenditure, as the ChemTech Centre will be owned by the OPCW as opposed to being rented.
36. The maintenance costs for installations and equipment are expected to increase for the ChemTech Centre in the current assessment. This is also due mainly to the larger size of the ChemTech Centre, but also in part to the increased complexity of its installations. Additionally, for the first time, the Secretariat will be responsible for maintenance costs related to the facade of the ChemTech Centre, as well as for those maintenance costs that are currently covered by the lessor of the Rijswijk facility.

37. Table 3 does not include capital replacement costs related to the upkeep of the ChemTech Centre. This information will be included in the overall major capital investment plan of the OPCW once the ChemTech Centre becomes operational. However, during the first 5 to 10 years of the ChemTech Centre's operations, these costs are expected to be low as the building will be new and its structure and key installations will be under warranty during much of this period.
38. Staffing costs are also not included in Table 3. Some additional tasks will be required to operate and maintain the ChemTech Centre, for example, with regard to facility management and security, given its greater size, additional functions, and complexity as compared to the Rijswijk facility. However, the Secretariat will seek, in consultation with States Parties, to repurpose existing posts to meet these requirements to avoid additional staffing costs.

COMMUNICATION

39. The Secretariat is planning a groundbreaking ceremony in September to mark the start of construction, if conditions allow. The details will be developed considering the potential impact of the COVID-19 pandemic. The Secretariat will keep States Parties updated on the details.
40. With regard to the local community, the Secretariat is now participating in regular meetings of the business park association that oversees the Heron Business Park in Pijnacker-Nootdorp where the ChemTech Centre will be located.

NEXT STEPS

41. In the coming months, the Secretariat will work with the main construction company and other consultants to prepare for the start of construction. The Secretariat will also continue its work on the tenders for the security and laboratory furnishing contracts.
42. The Secretariat will also continue its communication and outreach activities related to the project, including the regular updating of the ChemTech Centre webpage at <https://www.opcw.org/media-centre/featured-topics/chemtech-centre>.
43. The Secretariat will continue to provide States Parties with briefings and written reports to keep them informed of the status of the project. To resume the regular schedule for issuing these reports, the next report will be submitted to the States Parties in advance of the Ninety-Seventh Session of the Council.