



# Technology Bank for the Least Developed Countries

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## Council

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Agenda item 4

### Budget and programme of work for 2024

## Technology Bank for the Least Developed Countries: budget and programme of work for 2024

### I. Mandate

1. The Technology Bank for the Least Developed Countries was established by the General Assembly in January 2017 and became operational in 2018, with headquarters in Gebze, Türkiye. The core mandates of the Technology Bank, as specified in its Charter, include the following:

(a) Strengthen the science, technology and innovation capacity of least developed countries, including the capacity to identify, absorb, develop, integrate and scale up the deployment of technologies and innovations, including Indigenous ones, as well as the capacity to address and manage intellectual property rights issues;

(b) Promote the development and implementation of national and regional science, technology and innovation strategies;

(c) Strengthen partnerships among science, technology and innovation-related public entities and with the private sector;

(d) Promote cooperation among all stakeholders involved in science, technology and innovation, including researchers, research institutions and public entities within and between least developed countries, as well as with their counterparts in other countries;

(e) Promote and facilitate the identification, utilization and access of appropriate technologies by least developed countries, as well as their transfer to the least developed countries, while respecting intellectual property rights and fostering the national and regional capacity of least developed countries, for the effective utilization of technology to bring about transformative change.

2. In addition, the Doha Programme of Action for Least Developed Countries for the decade 2021–2030, endorsed by the General Assembly in March 2022, has reinforced the mandate of the Technology Bank by reaffirming that the Technology Bank will serve as “a focal point for the least developed countries to strengthen their



science, technology and innovation capacity towards building sustainable productive capacities and promoting structural economic transformation”. This mandate places the Technology Bank at the centre of the least developed countries’ efforts to advance their science, technology and innovation capacities through technology transfer and local technological capacity-building.

## II. Implementation and consolidation of reforms

3. Included in the present section is a summary of the reform measures and restructuring that the Technology Bank has undertaken since early in 2022, the rationale behind the reforms and the implications for the current and future work of the organization. The primary objective of the reforms was to correct the unsustainable development path that the Technology Bank had been following since its establishment and to lay down a new and solid foundation on which a more effective and impactful organization could be built. The reforms were significant and will shape the immediate and long-term growth and development of the organization. Therefore, a clear understanding of the changes that have taken place and the logic behind the reforms is critical in order to comprehend the activities undertaken during 2023 and the development path that the Technology Bank intends to follow in the near future.

4. In brief, the activities performed by the Technology Bank during 2023 can be categorized into the following four areas:

(a) Implementation of the programme of work for 2023 as approved by the Council;

(b) Consolidation of the reforms that started in January 2022, including advancing the recruitment of staff to fill the new posts created by the Council;

(c) Translation of project proposals into actionable activities in the field by establishing links with beneficiary countries and partner institutions;

(d) Forging partnerships with key national and international institutions and building the capacity for resource mobilization.

5. At its fifth session, held on 20 December 2021, the Council decided to initiate a series of reform measures aimed at improving the operational modality of the Technology Bank, streamlining the structure of the organization and enhancing its impact at the country level. Although, by then, the Technology Bank had been operational for only two and half years, Council members felt that the direction taken by the Technology Bank lacked coherence and clarity. They were concerned, in particular, with the irregularities in management and operations and weak project design mechanisms, which led to the poor administration of resources. Concerns were also expressed about the lack of regular consultations with the Council and the hiring of staff without its approval or prior notification. The absence of due diligence in the recruitment of staff, including negligence in following United Nations rules and procedures, were noted as additional concerns.

6. To address those challenges, the Council requested that a functional review of the Technology Bank should be conducted by an external expert. The review was expected to focus on the assessment of the skills mix of the organization and the effectiveness of the programmes initiated. Moreover, with the future in mind, the review was expected to identify the organizational structure and the strategic direction that the Technology Bank needed to pursue to deliver its mandates efficiently while ensuring financial sustainability.

7. In addition, the Council requested an independent evaluation of the Technology Bank by the Office of Internal Oversight Services (OIOS), focusing mainly on the management and operational performance of the Technology Bank. While the request for the functional review was implemented, the evaluation by OIOS did not take place because the Office was already in the middle of conducting an audit of the Technology Bank as part of its mandatory periodic auditing of United Nations organizations. The recommendations of the functional review and the audit by OIOS, together with an internal assessment and recommendations by the acting Managing Director of the Technology Bank, formed the basis for the reforms and restructuring that the Technology Bank had implemented since July 2022.

8. The reforms that the Technology Bank has implemented since mid-2022 revolve around the following four areas:

(a) Adapting a “proof of concept” phase in the development of the organization. It was felt that, as a new organization and given the resource limitations, the Technology Bank should first learn to walk before it could run. The importance of ensuring that the Technology Bank and its activities are known widely, especially among Member States, and the need to build credibility by identifying targeted and bankable projects that can be used as models to prove the relevance of the organization and its viability was emphasized. Moreover, the project implementation process followed by the Technology Bank, in which projects were selected randomly and resources were devoted without consideration of sustainability, was considered to be unviable and in need of adjustment. Therefore, a realistic approach proposed and approved by the Council was to think of the Technology Bank as a “start-up” and to use the annual contribution by the host country as “seed funding” to help the Technology Bank to demonstrate its viability and build the credibility and capacity to mobilize the additional resources necessary to scale up its work in line with its ambitious mandates. This, in effect, meant going back to the drawing board and restarting the Technology Bank on a solid and sustainable footing;

(b) Reprofiled the skills requirements of the organization and reducing the number of staff to a sustainable level. This process involved separating 16 staff members from the organization and creating 7 new posts with skills profiles that match the organization’s need for programme implementation. Currently, the number of core staff is 9, compared with 18 staff members in January 2022. The core staff, led by the Managing Director, will be responsible for operations and management of programmes. The cost of maintaining the core staff will be covered from the \$1.7 million that the host country contributes to the Technology Bank annually. However, as explained below, the number of staff could increase, depending on the mobilization of additional resources;

(c) Introducing a prudent and strategic approach to resource utilization. A clear distinction was introduced between predictable sources of funding and extrabudgetary resources that the Technology Bank must mobilize to finance the implementation of specific projects in the field. In February 2022, the Technology Bank signed a five-year financial agreement with the Government of Türkiye, in which the latter, as a host country, pledged to provide \$1.7 million annually. This is a non-earmarked and predictable source of funding to cover the cost of maintaining the core staff and the day-to-day running of the organization, including support for the management of programmes. In addition, the financial agreement includes a supplementary earmarked funding of \$200,000 annually to be used for impact-oriented activities at the country level. The agreement specifies that the provision of the additional funds is conditional on the submission of proposals for projects and field-level activities showing potential impact;

(d) Introducing a new modality for project design and implementation. Ensuring that support programmes and technical cooperation projects initiated by the Technology Bank are demand-driven with strong ownership by the beneficiary countries is now given greater emphasis and priority. Moreover, equally important attention is given to the technology needs assessment that the Technology Bank conducts prior to launching transfer of technology projects in the least developed countries. As shown below, the technology needs assessments are critical products for the Technology Bank and the least developed countries, given that they help to identify the specific priority areas or sectors in which technological solutions are needed and the system necessary to develop science, technology and innovation capacities. In addition, the Technology Bank has been forging and strengthening partnerships with key stakeholders at the national and international levels and exploring various avenues for resource mobilization. During 2023, the Technology Bank actively campaigned to widen its network and open opportunities for mobilizing resources.

### III. Overall orientation

9. The 46 least developed countries are countries that suffer from structural impediments, low income, poor infrastructure, weak productive capacities and a low level of technological development. These are countries that require all sorts of technological input and innovations to accelerate their growth and development and to achieve the Sustainable Development Goals. However, identifying technologies and innovative solutions that are appropriate and relevant for least developed countries' needs and sustainable development is neither easy nor straightforward, in particular given the heterogeneity and multidimensional vulnerabilities of the least developed countries. Historically, the application of technology and innovative solutions has played a critical role in determining the speed and depth of countries' economic and social development. Technological capabilities are developed either through locally driven innovation processes or by acquiring technologies and skills developed elsewhere and creating the policy environment necessary for technological learning and upgrading. As latecomers to development, least developed countries have the advantage to choose, pick and utilize (of course, within the limits of their absorptive capacities) the technologies and technical know-how that they need to promote sustainable economic development.

10. However, the identification and prioritization of technologies can be challenging. In this respect, the technology needs assessment that the Technology Bank conducts is a useful tool for pinpointing the specific areas and sectors that require technological solutions and identifying the technologies appropriate for the needs of least developed countries.

11. Building on the reforms that started in 2022, during 2023 the Technology Bank reorganized its activities into three main pillars of work (see figure below).

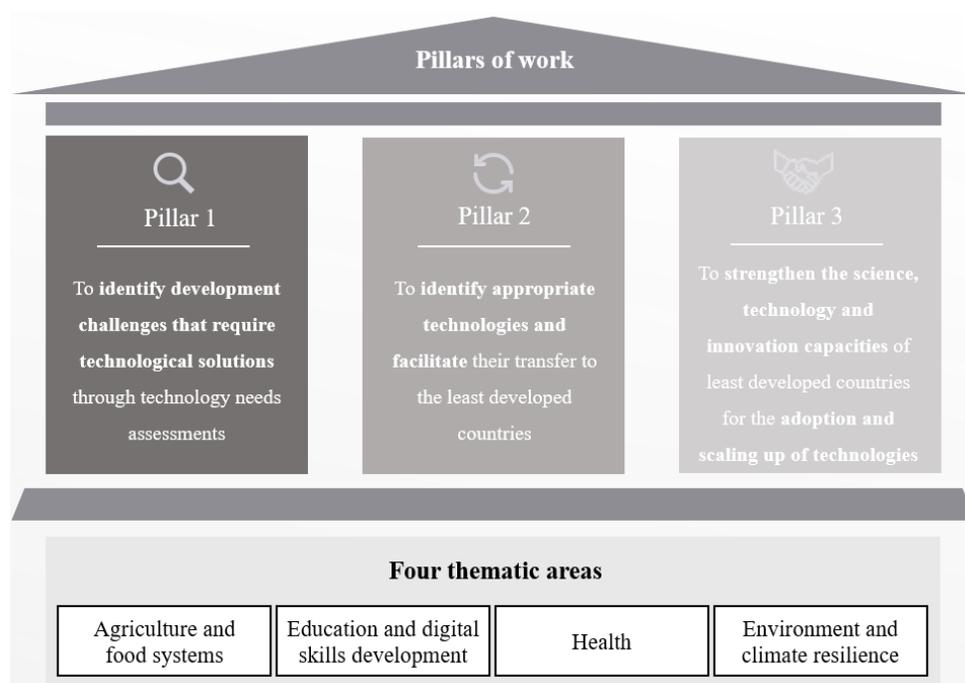
12. The first pillar involves conducting demand-driven technology needs assessments in least developed countries, while avoiding, where possible, any overlaps and duplication with science, technology and innovation policy reviews conducted by other international organizations. The strength of the technology needs assessments lies in their focus on identifying specific areas or sectors in which countries can benefit from technological input and their methodology, which emphasizes stakeholder consultation, in particular private sector actors, and the alignment of the needs assessment with national development strategies and priorities.

13. The second pillar is responsible for designing technology transfer projects and programmes on the basis of the findings and recommendations of technology needs assessments and ensuring that the support provided by the Technology Bank is

tailored to specific areas or sectors in which technological solutions will result in meaningful impact.

14. The third pillar focuses on the development of science, technology and innovation capacities in least developed countries and the sustainability of the support provided by the Technology Bank. In the long term, the impact of technology transfer is determined by the ability of recipient countries or their enterprises to learn, assimilate and upgrade the acquired technologies. Thus, built into the support provided by the Technology Bank is a capacity-building component designed to ensure local technological learning.

### Three pillars of the Technology Bank's work



15. The support that the Technology Bank provides to the least developed countries is focused in four thematic areas derived from the 14 technology needs assessments that the Technology Bank has completed to date. These include agriculture and food systems; environment, climate change and resilience; health; and education and digital skills development.

16. As mentioned above, a technology needs assessment is an important area of work for the Technology Bank because it enables it to identify the specific sectors or economic activities that require technological solutions. While there are other international organizations that conduct technology needs assessment (e.g., United Nations Environment Programme) or science, technology and innovation policy reviews (e.g., United Nations Conference on Trade and Development), none of them are focused on the least developed countries. The Technology Bank is the only United Nations organization that devotes resources to the technology needs assessment of least developed countries, with a specific objective of formulating follow-up technical cooperation programmes in support of the least developed countries. This makes it unique and exclusive to the least developed countries.

17. The Doha Programme of Action for the Least Developed Countries has singled out the need for leveraging the power of science, technology and innovation to combat multidimensional vulnerabilities as one of the six priority areas for the decade 2021–

2030. In addition, the Programme of Action has identified the Technology Bank as a focal point for least developed countries on science, technology and innovation-related issues. Given its strengthened mandate and responsibility, the Technology Bank should continue to improve and reinforce its capacity to conduct technology needs assessments. This will guarantee that the programmes that the Technology Bank initiates in least developed countries are evidence-based, demand-driven and derived from consultations with key stakeholders at the national level. A high-quality technology needs assessment will enable the least developed countries to identify and tailor appropriate technologies to sectors and economic activities that are aligned with national development objectives, including the Sustainable Development Goals.

18. Moving forward, the implementation of the programme of work for 2024 will be guided by the reforms and key principles emerging from that process, especially an emphasis on demand-driven and national ownership of the support provided by the Technology Bank; improving the quality of the technology needs assessments; building and leveraging partnerships in support of science, technology and innovation capacity-building in the least developed countries; maintaining agility and responsiveness to new challenges and opportunities; giving priority to resource mobilization; focusing on comparative strengths; and committing to inclusive technological development, paying special attention to young people and gender equality in science, technology and innovation.

19. To sustain the results-based management practice of the Technology Bank, the new approach to programme implementation will continue to include a strategic framework to enable monitoring, evaluation and learning.

20. The programme of work for 2024 will continue to implement projects that started in 2023 or before, while initiating new projects as new technology needs assessments are completed and additional resources are mobilized. It is important that the Technology Bank continue to implement the pilot projects that started in 2023 and ensure that they generate impact, given that such outcomes are necessary for building credibility and will also assist in the mobilization of resources.

21. Furthermore, during 2024 the Technology Bank will continue to strengthen partnerships with key stakeholders, including United Nations system entities and the private sector. Given the mandate of the Technology Bank as a focal point for least developed countries on science, technology and innovation-related matters, it is imperative that the Technology Bank play an active role in the activities of the Technology Facilitation Mechanism. During 2023, the Technology Bank re-engaged in that important process by actively participating in the United Nations inter-agency task team on science, technology and innovation for the Sustainable Development Goals, of which the Technology Bank was already a member, and contributing more actively to the multi-stakeholder forum on science, technology and innovation for the Sustainable Development Goals process. It is critical that the Technology Bank continue to retain its critical role in this process during 2024.

22. In addition, the Technology Bank will also foster new partnerships and collaborate with a diverse range of national, regional and international organizations and private sector foundations and international non-governmental organizations.

23. In 2024, the Technology Bank will continue to prioritize resource mobilization by building on the experiences in resource mobilization gained from the efforts made in 2023.

## IV. Overview of budget estimates and available resources

24. The status of contributions, financial resources by component, post resources and resource requirements by object of expenditure are provided in tables 1 to 4, respectively.

25. With regard to funding the programme of work for 2024, the Technology Bank will rely on the annual contribution of \$1.7 million that the host country provides in accordance with the five-year financial agreement between the Technology Bank and the Government of Türkiye signed on 3 February 2022. In addition, and as noted above, the host country has agreed to provide an additional \$200,000 annually earmarked for field-related activities, to be disbursed upon the submission of viable project proposals showing tangible impact. In line with the decision of the Council in May 2022, all projects and programmatic activities will be financed from resources that are mobilized specifically for projects. The unspent balance from the core budget allocated for 2023 is estimated at \$500,149. At its sixth session, the Council decided that the unspent funds and savings from the 2022 budget and programme of work should be kept in the trust fund as a reserve and contingency funding instead of using such funds to cover the operational and programme costs of the subsequent year, as had been the practice. The reserve and contingency funding kept in the trust fund amount to \$2,309,195. Given the reasonable size of the funds available as a reserve, however, it is proposed that the unspent funds from the 2023 budget be used to support operations and the implementation of projects in 2024. As work on pilot projects that were launched in 2023 intensifies, there is a need for additional resources to assist the new Managing Director in resource mobilization and to maintain the reforms and momentum in project design and implementation that began in 2023.

26. The host country will continue to provide in-kind support, that is to say, office space and all facility services (security, cleaning, maintenance and utilities) at no cost to the Technology Bank.

27. The overall budget requirement for 2024 is estimated at \$2,200,149, covering the costs of Council support, executive direction and management and operational support, and programme of work and programme support costs (at 13 per cent) (see table 2). The shares are Council support (3.2 per cent), executive direction and management and operational support (23.2 per cent) and programme of work (73.6 per cent). In line with the recommendations of the Council, efforts were made to ensure that the operational cost did not exceed 20 per cent of the total annual budget. The Technology Bank is pleased to inform the Council that the operational cost has been reduced from 43.4 per cent in 2023 to 23.2 per cent of the total annual budget for 2024. This has been achieved owing in part to the recent reforms that streamlined the resources allocated for executive direction and management.

28. The changes in resource requirements by object of expenditure from 2023 to 2024 are shown in table 4. The total resource requirements for 2024 are \$2,200,149, which is higher (29.4 per cent) than the total resource requirements in the budget for 2023 (\$1,699,857). As noted above, this is the result of the reprogramming of the unspent budget balance from 2023 (staff costs, travel, consultancies, general operating expenses and contractual services) and the refund from the former service provider (United Nations Office for Project Services): \$146,761.42 received and \$55,779 is expected to be received.

Table 1  
**Status of contributions**

(United States dollars)

<b>Fund balance as at 1 January 2022</b>	2 691 598
Voluntary contribution received in 2022	1 775 000
Interest income, 2022	34 378
<b>Subtotal</b>	<b>4 500 976</b>
Expenditure in 2022	(2 167 749)
<b>Subtotal</b>	<b>(2 167 749)</b>
<b>Fund balance as at 1 January 2023</b>	2 333 227
Voluntary contribution received in 2023	1 900 000
Interest income (January to September 2023)	51 538
Voluntary contribution expected	–
<b>Subtotal</b>	<b>4 284 765</b>
Expenditure, January to September 2023 <sup>a</sup>	(723 096)
Projected expenditure, September to December 2023 <sup>b</sup>	(752 325)
<b>Subtotal</b>	<b>(1 475 421)</b>
<b>Projected fund balance as at 31 December 2023</b>	<b>2 809 344</b>

<sup>a</sup> An amount of \$151,838 of \$723,096 represents the expenditure incurred through project activities funded from earmarked contributions.

<sup>b</sup> An amount of \$157,099 of \$752,325 represents the foreseen expenditure in the fourth quarter of 2023 for the project activities funded from earmarked contributions.

Table 2  
**Financial resources, by component**

(United States dollars)

<i>Component</i>	<i>2022 expenditure</i>	<i>2023 approved budget</i>	<i>2024 estimate</i>	<i>Revised 2024 estimate</i>	<i>Change</i>
Council support	34 745	50 728	61 793	81 793	20 000
Executive direction and management and operational support	754 428	652 603	452 447	492 447	40 000
Programme of work	1 163 754	800 967	1 432 796	1 432 796	–
<b>Subtotal</b>	<b>1 952 927</b>	<b>1 504 298</b>	<b>1 947 035</b>	<b>2 007 035</b>	<b>60 000</b>
Programme support costs	214 822	195 559	253 115	260 915	7 800
<b>Total</b>	<b>2 167 749</b>	<b>1 699 857</b>	<b>2 200 149</b>	<b>2 267 949</b>	<b>67 800</b>

Table 3  
Post resources

<i>Component</i>	<i>2022 approved</i>	<i>2023 approved</i>	<i>2024 estimate</i>
Professional and higher	10	4	6
General Service and related categories	8	5	5
<b>Total</b>	<b>18</b>	<b>9</b>	<b>11</b>

Table 4  
Resource requirements, by object of expenditure

(United States dollars)

<i>Object of expenditure</i>	<i>2022 expenditure</i>	<i>2023 approved budget</i>	<i>2024 estimate</i>	<i>Revised 2024 estimate</i>	<i>Change</i>
<b>Staff and other personnel costs</b>					
International staff	1 303 382	816 805	758 061	758 061	–
Local staff	146 051	179 765	413 732	413 732	–
General temporary assistance			–		
Consultants and experts	41 636	205 000	220 000	220 000	–
<b>Subtotal</b>	<b>1 491 069</b>	<b>1 201 570</b>	<b>1 391 793</b>	<b>1 391 793</b>	<b>–</b>
<b>Hospitality</b>	<b>–</b>	<b>4 200</b>	<b>–</b>	<b>–</b>	<b>–</b>
<b>Travel</b>					
Travel of Council members	30 051	45 328	58 163	78 163	20 000
Travel of staff	57 783	79 500	206 664	216 664	10 000
Travel of participants to meetings and workshops	7 438	–	20 000	20 000	–
Travel of consultants/resource persons/panellists	7 590	–	–	–	–
<b>Subtotal</b>	<b>102 862</b>	<b>124 828</b>	<b>284 827</b>	<b>314 827</b>	<b>–</b>
<b>Grants and fellowships</b>	<b>295 000</b>	<b>–</b>	<b>–</b>	<b>–</b>	<b>–</b>
<b>Contractual services</b>	<b>48 367</b>	<b>51 200</b>	<b>77 630</b>	<b>107 630</b>	<b>30 000</b>
<b>Equipment and vehicles</b>	<b>1 430</b>	<b>1 500</b>	<b>55 400</b>	<b>55 400</b>	<b>–</b>
<b>Supplies</b>	<b>413</b>	<b>2 500</b>	<b>18 500</b>	<b>18 500</b>	<b>–</b>
<b>General operating expenses</b>	<b>13 786</b>	<b>118 500</b>	<b>118 885</b>	<b>118 885</b>	<b>–</b>
<b>Subtotal</b>	<b>1 952 927</b>	<b>1 504 298</b>	<b>1 947 035</b>	<b>2 007 035</b>	<b>60 000</b>
Programme support costs	214 822	195 559	253 115	260 915	7 800
<b>Total</b>	<b>2 167 749</b>	<b>1 699 857</b>	<b>2 200 149</b>	<b>2 267 949</b>	<b>67 800</b>

## A. Council support

29. The resource requirements for Council support are outlined in table 5.

Table 5  
**Resource requirements for Council support**  
 (United States dollars)

<i>Object of expenditure</i>	<i>2022 expenditure</i>	<i>2023 approved budget</i>	<i>2024 estimate</i>	<i>Revised 2024 estimate</i>	<i>Change</i>
Travel	30 051	45 328	58 163	78 163	20 000
Hospitality	–	4 200	–	–	–
Contractual services	4 693	1 200	3 630	3 630	–
<b>Total</b>	<b>34 745</b>	<b>50 728</b>	<b>61 793</b>	<b>81 793</b>	<b>20 000</b>

30. The amount of \$61,793 at the maintenance level will provide for the travel of Council members (\$58,163), and contractual services for the arrangement of venues where Council sessions will be held (\$3,630). As a result of a revision to the daily subsistence allowance rate and terminal expenses, the travel costs of Council members are expected to increase by 28 per cent in the 2024 budget. In addition, owing to increases in the general level of prices, the total cost of contractual services is expected to increase by 203 per cent. As agreed at the sixth session, held in May 2022, the Council will meet twice a year: one annual meeting in person to review and approve the budget and programme of work for the subsequent year; and one short mid-year virtual meeting to review progress made in the implementation of the annual workplan.

## B. Executive direction and management and operational support

31. Under the guidance of the Council, the Managing Director of the Technology Bank provides overall executive direction on substantive and managerial matters and ensures the effective delivery of the annual programme of work and strategic plan approved by the Council.

32. The core responsibilities of executive direction and management and operational support are, among others:

- (a) Setting a vision and strategic direction;
- (b) Providing sound management and operational guidance;
- (c) Organizational coordination to ensure coherence, consistency and the efficient utilization of resources;
- (d) Managing external relations and representation vis-à-vis Member States, including host Governments and media;
- (e) Directing resource mobilization efforts and relations with the Council;
- (f) Overseeing the management of activities undertaken by the Technology Bank;
- (g) Formulating and implementing the substantive work programme of the Technology Bank, determining priorities and allocating resources, in consultation with the Council, for the completion of outputs and their timely delivery.

33. At the end of 2020, following consultations with the Department of Management Strategy, Policy and Compliance and the Department of Operational Support, the Technology Bank identified the United Nations Office at Geneva as a service provider. A standard memorandum of understanding was signed by the

Technology Bank and the United Nations Office at Geneva early in 2021. The memorandum of understanding contains a list of services available to all clients of the United Nations Office at Geneva and the standard price list. The costs are charged to the Technology Bank on a quarterly basis. The calculation of costs is based on the number of transactions processed for the Technology Bank multiplied by the standard prices. The United Nations Office at Geneva has been providing recruitment, payroll, accounting, budget and travel services to the Technology Bank. The costs depend on the volume of transactions, reflecting the needs of the Technology Bank. It is advisable, however, that, in the long term, the Technology Bank develop its own in-house capacity for some of the services that can be provided from within the Technology Bank instead of continuing to rely on the United Nations Office at Geneva. The Technology Bank has started to build its capacity for administrative and financial accounting, and this process will continue during 2024.

34. Within the United Nations, the head of an organization is normally supported by a dedicated front office to help with routine functions and provide support to the executive officer. However, in view of the small size of the Technology Bank, the Managing Director will be assisted by one General Service staff member.

35. The resource requirements for executive direction and management and operational support are outlined in table 6.

Table 6

**Resource requirements for executive direction and management and operational support**

(United States dollars)

<i>Object of expenditure</i>	<i>2022 expenditure</i>	<i>2023 approved budget</i>	<i>2024 estimate</i>	<i>Revised 2024 estimate</i>	<i>Change</i>
<b>Staff and other personnel costs</b>					
International staff	579 610	525 603	163 959	163 959	–
Local staff	83 760	–	189 408	189 408	–
Consultants and experts	41 636	–	–	–	–
<b>Subtotal</b>	<b>705 006</b>	<b>525 603</b>	<b>353 368</b>	<b>353 368</b>	<b>–</b>
<b>Operational costs</b>					
Travel of staff	44 554	4 500	6 664	16 664	10 000
Contractual services	610	–	–	30 000	30 000
Equipment and vehicles	1 430	1 500	10 750	10 750	–
Supplies	413	2 500	3 500	3 500	–
General operating expenses	2 415	118 500	78 165	78 165	–
<b>Subtotal</b>	<b>49 422</b>	<b>127 000</b>	<b>99 079</b>	<b>129 079</b>	<b>40 000</b>
<b>Total</b>	<b>754 428</b>	<b>652 603</b>	<b>452 447</b>	<b>492 447</b>	<b>40 000</b>

**1. Staff and other personnel costs**

36. The amount of \$353,368, reflecting a decrease of \$172,235, will provide for the funding of five posts in executive direction and management: one Managing Director (D-2) (50 per cent); one Administrative Officer (National Professional Officer, level C); one Staff Assistant (G-5); one Finance and Budget Assistant (G-5); and one Information and Communications Technology Assistant (G-5). Given the cross-functional nature of the responsibilities and duties of the Managing Director, the cost of sustaining the

post is divided evenly between executive direction and management and operational support and programme of work. Therefore, the staff budget in 2024 is 33 per cent lower compared with the 2023 approved budget. As a result of localization of the Administrative Officer post, the cost of this role is lower than in 2023. In 2024, the cost will be allocated under local staff in addition to the General Service staff cost. Given the requirement for segregation of duties as an internal control mechanism, the Administrative Officer will be supported by a Staff Assistant. However, only 50 per cent of the time of the staff assistance will be devoted to administration-related work, while the other 50 per cent will be allocated to supporting the Managing Director. The administration section will receive support from a Finance and Budget Assistant on a full-time basis. Funding for this post will be sourced from the refunds obtained from the former service provider, the United Nations Office for Project Services. The expansion of operational activities of the Technology Bank makes it essential that it develop the capacity that will allow the in-house execution of services, which are currently provided by the United Nations Office at Geneva. The Technology Bank has been encouraged by OIOS to strengthen information and communications technology capacity, recognizing the critical importance of digital technologies and data security. Furthermore, owing to a substantial demand for user support from internal clients, an Information and Communications Technology Assistant (G-5) has been included in the budget for 2024.

## **2. Operational costs**

37. The operational costs for 2024 will be in the amount of \$99,079 and involve two major components. The first component relates to expenses in travel, equipment, translation, information technology services and licences, hospitality and supplies. In 2024, the resource requirements for these items will be \$59,079, representing an increase of 26 per cent from the revised 2023 budget (\$47,000). The increased requirements for operational costs are due to planned training to improve staff capacity, replacing equipment that will become obsolete in 2024, and the upgrade of software licences. The second component involves the direct costs for covering expenses relating to the service charges of service providers. Those costs are estimated at \$40,000.

## **V. Programme of work**

### **A. Research, analysis technology needs assessment and advisory services**

#### **1. Background and rationale**

38. Science, technology and innovation are key instruments for the socioeconomic transformation of the least developed countries and their sustainable development. These countries suffer from deficits in their science, technology and innovation capacities and absorptive and adaptive capacities, and are falling substantially behind both emerging and advanced economies.

39. Developing research and analysis capacity will provide the Technology Bank with intelligence and thought leadership on prominent issues in science, technology and innovation in the least developed countries. Moreover, it will deliver a systematic process to identify the development challenges facing the least developed countries and to identify and recommend the technologies that may be best for the least developed countries' conditions.

40. As already noted above, country-based technology needs assessments will continue to form the basis for designing technology transfer and capacity-building

programmes that the Technology Bank will implement in support of the least developed countries.

41. On the basis of the lessons learned and the recommendations emerging from the technology needs assessments initiated and completed to date, in 2023 the Technology Bank initiated the implementation of a revised technology needs assessment framework and methodology to ensure that the assessments emerge as a flagship product of the Technology Bank and provide substantial insights and recommendations to least developed countries and their development partners. In contrast with past practices, the Technology Bank will also increase a reliance on local consultants to ensure that extensive stakeholder consultations are conducted to inform the technology needs assessment, while the use of international consultancies will be limited and focused on developing a sound conceptual framework, an analysis of findings and strengthened recommendations.

42. In 2024, the Technology Bank will initiate four new technology needs assessments, subject to requests by countries, and will finalize three assessments that started in 2021 and 2022 but were not completed for various reasons, including an inability to conduct adequate consultative and participatory research. Details of countries where technology needs assessments have already been initiated are discussed below.

43. The Technology Bank will continue its efforts to seek partnerships with other international organizations and development partners to solicit interest in funding the technology needs assessments. Such partners could include, for example, the United Nations Office for South-South Cooperation, the Islamic Development Bank, the Arab Bank for Economic Development in Africa and the Southern African Development Community. In addition, the Technology Bank will strengthen the existing partnerships with the Commonwealth and the International Seabed Authority, as co-sponsors of the technology needs assessments in some least developed countries.

44. To strengthen its advocacy mandate, in 2022 the Technology Bank launched the “LDC Insight” blog as a platform for sharing ideas and reflections on relevant policy issues and the most recent developments in science, technology and innovation in the 46 least developed countries. In 2024, the Technology Bank will continue to develop blog articles and solicitate external contributions from relevant experts and stakeholders.

45. As part of the reform programme, the Technology Bank has sought to establish a mechanism for monitoring and evaluating the progress made in its activities, including the implementation of the annual programme of action and the lessons learned. The plan is to create a comprehensive, transparent and evidence-based system, with a strong focus on the assessment of outputs, outcomes and impacts. It has not been possible to establish such a mechanism to date owing in part to the need to complete some essential reforms such as the restructuring of the organization and the recruitment of additional staff. However, the progress made in the recruitment of staff during 2023 will make it possible to advance the implementation of this goal in 2024. The ultimate objective is to create a dedicated monitoring, evaluation and learning unit and a comprehensive monitoring, evaluation and learning strategy.

## **2. Relationship to the revised 2022–2024 strategic plan of the Technology Bank**

46. The research, analysis and technology needs assessment programme is linked directly to outcome 1 of the Technology Bank’s strategic plan for 2022–2024, under outputs 1.1 (evidence- and policy-based science, technology and innovation analyses to inform technological development) and 1.2 (technology needs assessments).

### 3. Objectives

47. The main objective of the research, analysis and technology needs assessment programme is to support sustainable technological development in the least developed countries through evidence-based interventions and policy advocacy informed by rigorous research, analysis and the conduct of targeted and action-oriented assessments of the technological needs of the least developed countries. The programme generates knowledge products to provide critical insights into the technological situation and the priority technological needs to guide least developed countries and the Technology Bank. The specific objectives of the programme are as follows:

(a) To identify prominent and emerging issues in science, technology and innovation while analysing their implications for least developed countries, to enable the Technology Bank to carry out its advocacy role in science, technology and innovation-related issues affecting least developed countries;

(b) To identify the core areas of focus and technological solutions that each country may include as part of its national development strategy to accelerate efforts towards the implementation of national development plans and to promote the achievement of the relevant Sustainable Development Goals;

(c) To support the identification of technology transfer needs and facilitate targeted project development and design;

(d) To assist development partners, enterprises and innovators and all stakeholders in science, technology and innovation, in order to identify, develop and promote access to technologies that suit the needs of the least developed countries.

### 4. Main activities

48. The main activities under the programme are as follows:

(a) Preparing policy-oriented briefs and blog articles on science, technology and innovation covering key issues that are directly relevant to the least developed countries, and promoting the dissemination of findings;

(b) Conducting technology needs assessments through consultative processes at the national level and by benefiting from the knowledge of both local and international experts who are intimately familiar with a country's technological development process, challenges and needs;

(c) Preparing information notes for selected least developed countries summarizing the technology needs assessment findings;

(d) Designing a database and inputting technologies prioritized by least developed countries in selected sectors;

(e) Liaising with other programme areas to share findings from research, analysis and technology needs assessments, discuss identified priority areas and inform project development.

### 5. Expected accomplishments

49. The expected accomplishments in 2024 under the programme are as follows:

(a) Four technology needs assessments to be completed and validated;

(b) Four policy-oriented briefs, covering key issues in science, technology and innovation in the least developed countries, are published;

(c) Dialogue among Governments and stakeholders involved in science, technology and innovation are conducted as a follow-up to the research or technology needs assessment reports.

## 6. Indicators of achievement

50. The indicators of achievement in 2024 under the programme are as follows:

- (a) The number of technology needs assessments completed;
- (b) The number of dialogue sessions on science, technology and innovation involving policymakers and other stakeholders held;
- (c) The number of technologies prioritized for either adoption, adaptation or scaling up.

## 7. Country coverage

51. There is a growing demand for technology needs assessments from least developed countries and heightened interest from development partners. Although, over the past years, the focus has been on the quantity of technology needs assessments conducted, following the recent reform the emphasis has shifted to the quality, relevance and effectiveness of the assessments completed. Between 2019 and 2021, more than 24 technology needs assessments were launched without sufficient in-house capacity to complete them, resulting in a high number of suspended or incomplete assessments. In learning from that experience, greater emphasis will be given to preparing reports that add value and assist the least developed countries in identifying the technologies that they need to address problems in priority areas.

## B. Identification of technologies, project design and technology transfer

### 1. Background and rationale

52. Science, technology and innovation form the building blocks of sustainable development. Unfortunately, least developed countries lack these capabilities, and the technology gap between them and the rest of the world is wide. Technology is inaccessible to the least developed countries for many reasons. Most important is their limited absorptive capacities resulting from domestic resource constraints, inadequate backbone infrastructure, limited investment in human capital, insufficient incentive structures and institutional and policy weaknesses. The General Assembly, in its resolution [71/251](#), together with Charter of the Technology Bank, reaffirmed the importance of promoting and facilitating the identification and utilization of and access to appropriate technologies by the least developed countries and their transfer to the least developed countries.

53. Guided by insights produced through research and analysis, as well as through the demand-driven technology needs assessment outputs, the Technology Bank will continue to identify technologies that the least developed countries need and design bankable projects in collaboration with technology providers, funders and other stakeholders to forge partnerships, mobilize resources and implement the projects.

### 2. Relationship to the revised 2022–2024 strategic plan of the Technology Bank

54. The identification of technologies, project design and technology transfer programmatic area is linked directly to outcome 2 of the Technology Bank's strategic plan for 2022–2024, under output 2.1 (revised project design and development for technology transfer through needs-solutions matchmaking).

### **3. Objectives**

55. The main objective of the programme is to support least developed countries' access to appropriate technologies available elsewhere and deploy them by designing projects that are intended to facilitate the transfer of appropriate technology and know-how on voluntary and mutually agreed terms and conditions. The specific objectives of the programme include:

- (a) To initiate and complete the designing of project proposals in consultation with key stakeholders to ensure effective technology transfer;
- (b) To conduct technology scouting intended to identify appropriate technology providers, matching the needs of least developed countries, as identified through the technology needs assessments;
- (c) To identify potential partners and secure commitments to implementing the designed projects.

### **4. Main activities**

56. The main activities under the programme are as follows:

- (a) Identify technologies aligned with the outputs of the research, analysis and technology needs assessments that are considered relevant, appropriate and applicable for least developed countries;
- (b) Identify potential beneficiary countries on the basis of evidence from research, analysis and technology needs assessments and through consultations with prospective recipient least developed countries;
- (c) Secure expressions of interest from least developed countries and assess the capacity of potential beneficiary countries to implement transferred technologies;
- (d) Design project proposals in consultation with key stakeholders and other programme areas in the Technology Bank;
- (e) Identify providers of appropriate technologies and secure partner commitments;
- (f) Conduct due diligence assessment of potential risks and project sustainability;
- (g) Develop key performance indicators to guide the monitoring and evaluation of the impact of projects.

### **5. Expected accomplishments**

57. The expected accomplishments in 2024 under the programme are as follows:

- (a) Formulate transfer of technology projects drawing from newly completed technology needs assessments and in consultation with the beneficiary countries;
- (b) Continue to improve the methodology for designing projects and identifying technologies, learning from and building on transfer of technology projects implemented to date.

### **6. Indicators of achievement**

58. The indicators of achievement in 2024 under the programme are as follows:

- (a) The number of new project proposals prepared on the basis of completed technology needs assessments;

- (b) The number of new projects designed, which are ready for implementation;
- (c) Feedback from beneficiary countries on the relevance and appropriateness of projects and identified technologies.

## 7. Country coverage

59. All least developed countries will have access to and benefit from the services provided under this programmatic area. However, the Technology Bank will aim to prioritize the design and development of technology transfer projects in the least developed countries in which a technology needs assessment was completed and successfully launched. Additional least developed countries may be considered on the basis of government demand.

## C. Capacity-building, sustainability and scaling up

### 1. Background and rationale

60. As a result of inadequate incentive structures and institutional and policy weaknesses, technology is often inaccessible to the least developed countries. Bridging the technology and knowledge gaps is a condition necessary to accelerate convergence in terms of growth, income and productivity levels and therefore foster development.

61. Technology transfer is not, by itself, sufficient for encouraging technological development. The effective utilization and deployment of acquired technologies and their absorption and scaling up will depend on the level of development of domestic science, technology and innovation capacity and the policy and regulatory environment that supports the science, technology and innovation system. It is therefore important that the support provided by the Technology Bank not only be limited to the identification and deployment of technologies only, but also include creating – in partnership with key national and international partners – the enabling environment necessary to sustain local technological capability-building through learning, absorption, scaling up and building the capacities for innovation, including the effective utilization of Indigenous technologies.

62. One of the core mandates of the Technology Bank is to assist the least developed countries in closing these gaps by facilitating access to appropriate technologies by the least developed countries and strengthening their science, technology and innovation capacity, including the capacity to identify, absorb, develop, integrate and scale up the deployment of technologies and innovations.

63. In 2022, the Technology Bank has piloted a new model for designing technology transfer projects as recommended in the functional review, leveraging insights into technological needs identified in technology needs assessments and development challenges articulated in national development strategies. As a result, several country-specific projects were developed for pilot implementation in 2023 in the four thematic areas of focus identified above (i.e., health care, environment and resilience, agriculture and food systems, and digital skills development). In 2024, the Technology Bank will focus on advancing the implementation of the pilot projects initiated in 2023 and will consider the replication of these models in other least developed countries, upon demonstrated proof of concept and conditional on the availability of extrabudgetary funding. These projects include the technology makers lab implemented in the Niger, the post-harvest management project implemented in the Gambia and the Rammed Earth Housing project implemented in Mozambique. In addition, in 2024 the Technology Bank will continue to implement the Hear, Listen and Speak programme in Bhutan.

64. The Hear, Listen and Speak programme for all Bhutanese children, which began to be implemented in 2021, is intended to strengthen the ear-care continuum in Bhutan, from screening to rehabilitation and addressing hearing loss and ear disorders in children. The initiative is undertaken in collaboration with Medtronic LABS and MED-EL, under the public-private partnership programme with the Austrian Development Agency. Currently in phase III of its implementation, the programme has screened more than 53,000 schoolchildren and treated more than 1,000 children in nine districts.

65. Technology transfer and capacity-building are key components of this programme, in which, to date, 250 school health coordinators have been trained on conducting hearing screening in schools, along with 20 audiologists and ear, nose and throat technicians trained on the use of audiology equipment and screening devices incorporating the most recent technologies provided to Bhutan through the project. The programme has received a donation of 400 hearing aids from Hear the World Foundation, which will also provide capacity-building for local audiologists and technicians for the fittings. MED-EL, a global medical technology company, will provide rehabilitation training to families and provide audiology and diagnostic equipment to two regional hospitals under the programme.

66. In addition, MED-EL will strengthen the local surgical capacities, by which mentor surgeons will conduct practical workshops and familiarize the local participants with a broad range of surgical techniques for basic and advanced ear surgeries. In 2024, the Technology Bank and other programme partners will contribute resources to strengthen the programme and its expansion, aiming to reach a national scale by screening the entire children population (0–14 years) of Bhutan. Furthermore, the Technology Bank will provide support to the ear mould lab to ensure its smooth operation. The lab was established in August 2022. In 2024, the programme partners will also prepare for phase IV by focusing on advocacy and programme sustainability through inclusion of the screening and treatment in the national planning process of the Government of Bhutan.

67. Three important lessons have emerged from the implementation of the Hear, Listen and Speak pilot project.

68. First, it has demonstrated that, in order to generate positive impact at the country level, what matters most is not always the size of the project but rather the strategic and targeted approach to project design and implementation. The Bhutan pilot project was carefully selected to pioneer a health-care service that Bhutan lacked but needed badly, as shown by the high rate of referrals after screening. Therefore, a strategic and selective approach to technology identification and project design is critical.

69. Second, the project reaffirmed the importance of linking technology transfer with capacity-building at the country level. The training of ear, nose and throat technicians and school health coordinators and the establishment of labs for ear moulds will allow Bhutan to localize and sustain screening capacities and strengthen the ear-care continuum in the country.

70. Third, the Bhutan project has also demonstrated, convincingly, that forging partnerships with key stakeholders, including the private sector, that have the expertise and/or resources that least developed countries need can be a game-changer. In this case, the role of the Technology Bank has been as facilitator and mobilizer of the right partners to provide support, including in-kind support, which can make a big difference for the least developed countries.

71. The technology makers lab project was developed in partnership with the Turkish Cooperation and Coordination Agency, the Scientific and Technological Research Council of Türkiye and the Ministry of Industry and Technology of Türkiye, and piloted in the Niger with the National Agency for the Information Society of the

Presidency of the Niger. The project is intended to enhance digital and entrepreneurial skills among young people and prepare them for the circulation and uptake of frontier technologies. The project will target young people, providing them with exposure to digital and emerging technologies through workshops and training on robotics and coding, design and production, materials science and nanotechnology, advanced robotic, software technologies and cybersecurity. In 2022, the Technology Bank established partnerships with key stakeholders and coordinated the first phases, including advancing resource mobilization.

72. The pilot project was launched in May 2023 successfully with the training of trainers in Türkiye. In July 2023, with the support of the Government of the Niger, the project was approved for funding by the African Development Bank in the amount of \$5,190,000. Unfortunately, owing to the coup d'état in the Niger, the disbursement of funds was put on hold until the political situation stabilized. The Technology Bank will resume implementation as soon as possible. In 2023, the Technology Bank received a request from the Government of Togo to implement the technology makers lab, and the Technology Bank is actively working with the Government and key partners to mobilize resources and prepare for implementation of the lab in Togo in 2024. The Technology Bank is also planning to replicate the technology makers lab in other least developed countries that have expressed interest, specifically Cambodia and Senegal, subject, of course, to the successful mobilization of resources. The expectation is that these projects will be launched in 2024. The Technology Bank proposes that the \$200,000 annual contribution by the Government of Türkiye for 2024 be allocated as seed funding for launching the technology makers lab in two additional countries, one in Africa and one in Asia.

73. The Technology Bank has also initiated a pilot project in the Gambia, one of the countries where the Technology Bank has conducted technology needs assessments. The post-harvest loss management project will be implemented in collaboration with the Ministry of Higher Education, Research, Science and Technology of the Gambia. The central objective of the project is to transfer technologies and technical know-how that will enable the Gambia to reduce or prevent post-harvest losses of cashew nuts, which is an important export product in the country. The findings of the technology needs assessment of the Gambia show that, on average, the country loses 30 to 40 per cent of the harvested cashew nuts every year.

74. The root cause of the loss after harvesting is the lack of appropriate technologies and technical know-how for drying, conserving and processing cashew nuts. The scale of the loss is significant for a small country that relies on cashew nuts for income and foreign exchange earnings. It is expected that the technologies and technical know-how transferred through the project will help to reduce the post-harvest losses and will enable local enterprises to process and add value before exporting. The project is in the initial stages of implementation in collaboration with the Food Institute of Türkiye, which will provide the technical support in kind while the Technology Bank mobilizes resources and coordinates the implementation of the project. To kick-start the project, the Technology Bank has allocated, as seed funding, \$100,000 from the \$200,000 contribution by the Government of Türkiye for 2023. During 2024, the Technology Bank will continue to implement this project by intensifying resource mobilization and working closely with the Food Institute of Türkiye and specialized institutions in other countries that can provide the Gambia with the relevant and appropriate technologies.

75. The rammed earth dwellings pilot project was developed in partnership with Sakarya and Düzce Universities located in Türkiye and with financial support and technical assistance from the Scientific and Technological Research Council of Türkiye and the Turkish Cooperation and Coordination Agency. In 2024, the project will develop sustainable, affordable and resilient prototype housing by utilizing

locally available and stabilized earthen construction materials in the selected pilot area of Mozambique. The main objective of the project is to leverage technology transfer to improve access to sustainable, affordable and resilient housing in Mozambique. The Technology Bank is grateful to both universities for their willingness to share the technologies that they have developed for constructing low-cost and resilient housing in Türkiye. In recent years, Mozambique has suffered from hurricanes and floods, which have made finding solutions for constructing strong and resilient dwellings a priority national agenda item. To kick-start the project, the Technology Bank allocated, as seed funding, \$100,000 from the \$200,000 contribution by the Government of Türkiye for 2023.

76. In the first stage, selected Mozambican construction engineers will be trained at Sakarya and Düzce Universities while, at the same time, research is conducted on the quality of soil and other materials available in Mozambique. Once the rainy season is over in Mozambique, engineers from the two universities will conduct further training in Mozambique while building prototype houses jointly with the trained Mozambican engineers. This will allow for the direct transfer of knowledge and techniques and the development of local capacity for building low-cost and resilient houses. The project's main beneficiaries will include the public sector, especially the Ministry of Housing, the private sector, in particular those in the construction business, researchers in the country and the local community as a whole. During 2024, the Technology Bank will intensify its efforts to mobilize the resource needed to fully implement the project and advance the construction of the rammed earth houses in Mozambique.

77. In 2023, the Technology Bank and the International Centre for Genetic Engineering and Biotechnology developed a project to support scientists in four least developed countries, equipping them with the knowledge to locally isolate, characterize and apply growth-promoting bacteria for sorghum. The aim is to support local farmers in the effective application of probiotics to enhance productivity in sorghum production. The project will support the development of links with the industrial sector and the local production of low-cost biofertilizers, the transfer of relevant technology and the provision of scientific support to the scale up production. In 2024, the Technology Bank and the Centre will jointly identify opportunities for resource mobilization to implement the project.

78. The academies of sciences, with their independence and competencies, are unique institutions that provide evidence-based advice to Governments to formulate national policies in response to national, regional and global scientific challenges. To date, the Technology Bank has facilitated the establishment of academies of science in four countries and provided support to eight countries in their efforts to establish and legally register their academies. In 2024, the Technology Bank will continue to support newly established academies of science by organizing quarterly virtual meetings. This will provide a network for engagement between academies and will help to strengthen the work done by these academies in their countries.

79. Since 2020, the Technology Bank has collaborated with the World Eco-Design Conference and the International School of Design at Zhejiang University in China, to support students from the least developed countries in gaining access to opportunities to enhance their industrial design capacities. In 2023, 33 students from nine least developed countries were awarded full scholarships and joined the international design education programme to undertake a master's level degree at Zhejiang University. The total value of the scholarships is approximately \$250,000 annually. In 2024, the Technology Bank will continue to collaborate with the Conference to provide opportunities for the capacity-building of students from least developed countries. The Technology Bank will also continue to advocate enhanced support to strengthen capacities in science, technology and innovation in the least developed countries, by identifying additional institutions and international organizations willing to fund

learning opportunities targeting students from the least developed countries through, for example, fellowships and scholarships.

80. In 2023, the Technology Bank and the United Nations Development Programme Istanbul International Centre for Private Sector in Development launched a frontier tech leaders programme with the objective of bridging the digital divide and contributing to the implementation of the 2030 Agenda by strengthening local technology and entrepreneurial capacities in the least developed countries. The programme will initially tap into the least developed countries' community of young people studying in Türkiye to provide them with skills in the use of the most recent technology. The programme will expand access to young people in least developed countries to support them in becoming technology leaders and leveraging technology awareness in their communities. In 2024, the Technology Bank and the Centre will expand the programme by establishing new partnerships with the private sector, international organizations, foundations and academia.

## **2. Relationship to the revised 2022–2024 strategic plan of the Technology Bank**

81. The capacity-building, sustainability and scaling up programmatic area is directly linked to outcome 2 of the Technology Bank's strategic plan for 2022–2024, under outputs 2.2 (facilitated technology and know-how transfer), 2.3 (strengthened capacities and ecosystems for technological development) and 2.4 (strengthened science-policy interface).

## **3. Objectives**

82. The main objective of the programme is to ensure that the least developed countries develop the capacities to absorb, utilize, assimilate, apply and scale up technologies and technical know-how transferred to their countries. The sustainability of transferred technologies through local technological learning and innovation is critical if least developed countries are to close the technological gap between them and the rest of the world. This programme is aimed at supporting the ability of least developed countries to enhance their science, technology and innovation capacities and ecosystems:

(a) To ensure that the implementation of demand-driven technology and knowledge transfer projects, including the transfer of screening technologies and the fitting of hearing aids to address hearing loss in children, the technology makers lab, the rammed earth housing project and the post-harvest management project, result in local capacity-building;

(b) To build capacity in institutions and mechanisms that can facilitate technology transfer and to provide targeted training in science, technology and innovation for young people, experts and policymakers;

(c) To support the transfer or diffusion of technologies to local entrepreneurs who can use them to produce more knowledge-intensive, higher value-added goods and services;

(d) To increase awareness and enhance the science, technology and innovation-related knowledge and capacity of key stakeholders in least developed countries;

(e) To support the emergence of new entrepreneurs and attract existing entrepreneurs from inside and outside the country with a view to initiating new ventures based on technologies that are new to the country.

**4. Main activities**

83. The main activities under the programme are:

- (a) Implementing the technology makers lab project in the Niger and Togo, and replicating it in Cambodia, Senegal and possibly Bhutan;
- (b) Implementing the rammed earth housing project in Mozambique;
- (c) Implementing the post-harvest management project in the Gambia;
- (d) Implementing the Hear, Listen and Speak programme in Bhutan and replicating it in other least developed countries;
- (e) Collaborating with the Istanbul International Centre for Private Sector in Development to implement the frontier tech leaders programme;
- (f) Collaborating with the World Eco-Design Conference and identifying other partners that will award scholarships to students from least developed countries in industrial design and other science and technology-related fields;
- (g) Identifying the policy measures and actions that will assist the least developed countries in building their science, technology and innovation capacities.

**5. Expected accomplishments**

84. The expected accomplishments in 2024 under the programme are as follows:

- (a) The technology makers lab is operational in three least developed countries;
- (b) Hearing screening under the Hear, Listen and Speak programme is successfully extended to all 20 districts in Bhutan;
- (c) Capacity-building to develop sustainable housing is conducted, and the rammed earth housing prototype is constructed in Mozambique;
- (d) Capacity-building to reduce post-harvest loss in the agricultural sector is conducted in the Gambia;
- (e) Capacity-building to develop digital and entrepreneurial skills is conducted for young students from least developed countries;
- (f) Scholarships are awarded and cooperation agreements on industrial design education are put in place between tertiary institutions in China and least developed countries;
- (g) A due diligence and risk matrix for sustainable technology transfer projects is developed.

**6. Indicators of achievement**

85. The indicators of achievement in 2024 under the programme are as follows:

- (a) The number of students who have benefited from the training of the technology makers lab;
- (b) The number of technology makers lab centres established in least developed countries;
- (c) The number of children who are screened for hearing impairment as part of the Hear, Listen and Speak programme;
- (d) The number of children who are referred for targeted treatment under the Hear, Listen and Speak programme;

(e) The number of local technicians who are trained on building rammed earth structures under the rammed earth housing project;

(f) The number of cashew nut producers who have enhanced capacity to reduce product loss of cashew nuts;

(g) The number of students from least developed countries who are provided with capacity-building activities for digital and entrepreneurial skills;

(h) The number of students in least developed countries awarded scholarships from third-party institutions.

## 7. Country coverage

86. The programme will benefit all least developed countries, with a specific focus on the following countries in 2024: Bhutan, Cambodia, Djibouti, Gambia, Mozambique, Niger, Senegal and Togo.

## D. Partnership-building and resource mobilization

### 1. Background and rationale

87. As noted in the present report, the consensus reached among Member States as part of the Doha Programme of Action for the Least Developed Countries has reinforced the mandate of the Technology Bank by reaffirming that the Technology Bank will serve as a “focal point for least developed countries to strengthen their science, technology and innovation capacity towards building sustainable productive capacities and promoting structural economic transformation”. Delivering on this ambitious mandate requires adequate resources and sustained cooperation with a broad range of partners. Partnership-building and resource mobilization are thus key enablers for the sustainability of the Technology Bank’s operations and programmes.

88. The Technology Bank will intensify its efforts to strengthen partnerships with key stakeholders, including United Nations system entities and the private sector. It will participate and actively engage with Member States, including development partners, in relevant intergovernmental forums, including the high-level political forum on sustainable development and the multi-stakeholder forum on science, technology and innovation for the Sustainable Development Goals.

89. The Technology Bank will also focus on the coordination of efforts and synergies on science, technology and innovation work with other United Nations entities through the Technology Facilitation Mechanism and, in particular, the United Nations inter-agency task team on science, technology and innovation for the Sustainable Development Goals and the science, technology and innovation forum. The forum provides a venue for facilitating interaction and the establishment of networks between relevant stakeholders and multi-stakeholder partnerships in order to identify and examine technology needs and gaps and to help facilitate the development, transfer and dissemination of relevant technologies for the Sustainable Development Goals. Through the summary of its science, technology and innovation forum, the Mechanism provides formal mandated input in support of the high-level political forum’s Sustainable Development Goal review and its mandated science-policy function. The Technology Bank will continue to use these platforms to advocate for and raise awareness of the specific needs and challenges of the least developed countries in relation to science, technology and innovation, and build relevant synergies and partnerships. Through workstream 6 (United Nations capacity-building programme on technology facilitation for the Sustainable Development Goals) of the United Nations inter-agency task team on science, technology and innovation for the Sustainable Development Goals, the Technology Bank will promote

additional science, technology and innovation capacity-building opportunities for policymakers in least developed countries.

90. In 2024, the Technology Bank will sustain close coordination with the executive preparatory committees of the Türkiye-Africa Partnership Summit, co-hosted by the African Union and Türkiye, and participate in the Summit, which will take place in the last quarter of 2024. The Technology Bank will also participate in and lead the organization of a side event at the Antalya Diplomacy Forum focusing on least developed countries. In addition, it will participate and actively engage in Teknofest, to be held in Türkiye in 2024, with a view to identifying relevant innovation for the least developed countries and seeking meaningful opportunities for the young people of those countries.

91. As stipulated in its charter, the Technology Bank has a budget that relies on voluntary contributions. In the Doha Programme of Action, Member States expressed clear support for the Technology Bank, and the expectation that its resources would be replenished, by inviting “Member States, as well as international organizations, foundations and the private sector, to provide voluntary financial and in-kind resources to the Technology Bank in order to enhance its capacity and effectiveness”.

92. In 2023, the Technology Bank intensified its resource mobilization efforts, including by investing limited resources specifically dedicated to complementing in-house capacity with the external expertise required to mobilize funds for programme implementation. These initial efforts will continue in 2024 with the aim of mobilizing funds for the full implementation of extrabudgetary projects and the replication of successful pilot initiatives in other least developed countries.

93. Advocacy and strategic communication will play an instrumental role in resource mobilization. Following the downsizing of staff requested by the Council, the Technology Bank no longer has an internal dedicated capacity for public information. However, it is leveraging existing internal capacity to increase the visibility of ongoing initiatives through its website and social media channels. This includes the creation of communications plans for events in which the Technology Bank participates, the drafting of press releases for project activities, and regular website and social media updates.

## **2. Relationship to the revised 2022–2024 strategic plan of the Technology Bank**

94. The partnership-building and resource mobilization programmatic area is directly linked to outcome 3 of the Technology Bank’s strategic plan for 2022–2024, under outputs 3.1 (cross-sector partnerships to enhance science, technology and innovation development) and 3.2 (increased resources to build a solid base for self-financing).

## **3. Objectives**

95. The objectives of the programme are:

(a) To identify and mobilize key strategic partners that could work closely with the Technology Bank to enhance the impact of projects implemented in least developed countries;

(b) To nurture and develop relations with the relevant government institutions in Member States, including the host country;

(c) To secure the Technology Bank’s institutional presence at relevant international forums to enhance stakeholder engagement;

(d) To mobilize financial and in-kind contributions from stakeholders, including Member States and the private sector, for funding impactful projects;

(e) To mobilize voluntary technology transfer and related pro bono services to support science, technology and innovation capacity-building in least developed countries, in line with the Technology Bank's priority programme areas;

(f) To expand and utilize existing communications networks, including United Nations Resident Coordinator Office networks and national focal points in least developed countries and the permanent missions of least developed countries to the United Nations in New York, for further project awareness and sharing of opportunities;

(g) To establish the Technology Bank as a trusted development partner, and gain the confidence of donors through awareness, reputation and synergy-building.

#### 4. Main activities

96. The main activities covered under the programme are as follows:

(a) Identifying the profile of potential international donors and partners, reviewing and defining their priorities and tracking funding trends to identify and pursue new donor opportunities;

(b) Building a resource mobilization engagement plan for the Technology Bank's projects and engaging in proactive outreach to Member States, especially to the Group of Friends of Least Developed Countries, to mobilize resources and increase awareness;

(c) Developing timely and high-quality, strategic, customized and well-presented proposals, concept notes and donor pitches to support targeted fundraising actions;

(d) Nurturing existing partnerships and developing new ones to support the delivery and expansion of effective programmes and projects;

(e) Securing support from key stakeholders in least developed countries for the resource mobilization campaign;

(f) Establishing a repository of potential donors for the Technology Bank, including records of any previous correspondence, to enable follow-up of the partnership and donor relations;

(g) Securing the representation and facilitating the participation of the Technology Bank in international forums and summits related to science, technology and innovation development in least developed countries;

(h) Participating actively in the work and activities of the Technology Facilitation Mechanism;

(i) Continually developing the communication strategy and workplan, including regular updates of the official website and social media channels.

#### 5. Expected accomplishments

97. The expected accomplishments in 2024 under the programme are as follows:

(a) An extensive network of strategic partnerships is developed for programme development and delivery;

(b) There is increased donor awareness of and engagement with the Technology Bank's work and its impact, with 20 priority donor outreach and advocacy activities;

(c) New financial and/or in-kind resources are raised for programme implementation;

(d) Awareness of the Technology Bank as a key stakeholder and focal point for least developed countries in science, technology and innovation is raised.

## 6. Indicators of achievement

98. The indicators of achievement in 2024 under the programme are as follows:

(a) Increased participation in global networks, international initiatives and summits;

(b) Increased number of institutional partnerships and cooperation agreements with the key governmental entities of Member States, the private sector and other international stakeholders that directly contribute financially or in-kind to the Technology Bank's projects;

(c) The total amount of financial and in-kind resources mobilized.

## 7. Country coverage

99. The programme will benefit all least developed countries. Resource mobilization is aimed at targeting donors and contributors from all sectors and geographical locations to achieve a healthy balance and inclusivity for development. Strategic communication is aimed at reaching a global audience, with a focus on the least developed countries, stakeholders in the science, technology and innovation fields and programme-specific development partners. Priority will be given to countries that have ongoing projects, where visibility is required to aid in acquiring needed additional funding.

Table 7

### Resource requirements for the programme of work

(United States dollars)

<i>Object of expenditure</i>	<i>2022 expenditure</i>	<i>2023 approved budget</i>	<i>2024 estimate</i>
<b>Staff and other personnel costs</b>			
1. International staff	723 771	291 202	594 102
2. Local staff	62 291	179 765	224 324
3. General temporary assistance	–	–	–
4. Consultants and experts	–	205 000	220 000
<b>Subtotal, staff and other personnel costs</b>	<b>786 062</b>	<b>675 967</b>	<b>1 038 426</b>
<b>Travel</b>			
1. Travel of staff	28 256	75 000	200 000
2. Travel of participants to meetings and workshops	–	–	20 000
3. Travel of consultants, resource persons and panellists	–	–	–
<b>Subtotal, travel</b>	<b>28 256</b>	<b>75 000</b>	<b>220 000</b>
<b>Grants and fellowships</b>	<b>295 000</b>	–	–
<b>Contractual services</b>	<b>43 064</b>	<b>50 000</b>	<b>74 000</b>
<b>General operating expenses</b>	<b>11 373</b>	–	<b>40 720</b>
<b>Equipment and vehicles</b>	–	–	<b>44 650</b>
<b>Supplies</b>	–	–	<b>15 000</b>
<b>Total</b>	<b>1 163 754</b>	<b>800 967</b>	<b>1 432 796</b>

## 8. Staff and other personnel costs

100. In 2024, the cost of staff engaged in programme-related activities will be \$1,038,426, which is higher than \$675,967 in 2023. In particular:

(a) In 2024, the number of posts devoted to programme support will comprise one Managing Director at the D-2 level (50 per cent), one Economic Affairs Officer at the P-4 level, one Economic Affairs Officer at the P-3 level, two national officers (National Professional Officer, level B), one Research Assistant at the G-6 level and one Programme Assistant at the G-5 level. In relation to the core responsibilities and given the cross-functional nature of the role of Managing Director, the cost of that post is evenly divided between executive direction and management and operational support, and programme of work;

(b) The budget for engaging consultants and experts, including for the implementation of technology needs assessments, and targeted resource mobilization for project implementation, will be \$220,000.

## 9. Travel

101. An amount of \$220,000, reflecting an increase of \$145,000 from 2023, will provide for the travel of staff (\$200,000), their substantive and programmatic support and their participation in local consultations, workshops and training courses, as well as for supporting partnership-building and resource mobilization. Further, \$20,000 is allocated to support the increased participation and travel of senior government officials from least developed countries to capacity-building activities organized by the United Nations inter-agency task team on science, technology and innovation for the Sustainable Development Goals under its workstream 6, of which the Technology Bank is a core member.

## 10. Grants and fellowships

102. This budget line is now at zero level, as the Technology Bank does not envisage any grant and fellowship expenses in 2024.

## 11. Contractual services

103. The budget for contractual services in 2024 has increased from \$50,000 in 2023 to \$74,000 owing to an anticipated higher amount of resources required for the training, workshops, events and translation services associated with technology needs assessment documents.

## 12. General operating expenses

104. The largest portion, \$40,000, is designated for the service fee for the programme-related services rendered (recruitment, contract extension, travel request approval and payroll management of programme staff) by the United Nations Office at Geneva. The amount of \$720 represents the annual budget for the telecommunications fee for programme staff.

## 13. Equipment and vehicle

105. The lifespan of some information technology equipment used by staff will end in 2024. In addition, the Technology Bank is committed to providing information technology equipment for capacity-building, sustainability and the scaling up of the activities of the Hear, Listen, Speak project in Bhutan. The total cost for purchasing this equipment is estimated at \$44,650.

## 14. Supplies

106. An allocation of \$15,000 has been earmarked for the procurement of visibility items to display and distribute (such as banners, notebooks, posters and tote bags) and

publications (brochures, flyers and larger publications) to support and facilitate partnership-building and resource management activities.

## **VI. Key decisions adopted by the Council after consideration of the 2024 budget and programme of work at its eighth session**

107. The Council decided that, in implementing the Technology Bank's 2024 programme of work:

(a) The Technology Bank should identify the lessons learned from the four major pilot projects initiated in 2023 and replicate country-focused projects in other least developed countries. The programmes should be demand-driven and include a monitoring mechanism to ensure impact at the country level;

(b) In addition, the Technology Bank should:

(i) Strengthen the project identification, design and selection mechanism, taking into account the financial sustainability of projects from the outset;

(ii) Continue to strengthen the technology needs assessment, including by improving its quality, expanding the coverage of least developed countries and enhancing the visibility of the assessment as an effective policy tool to identify the priority areas in which least developed countries need technological solutions and develop evidence-based and country-specific technology transfer and capacity-building support programmes;

(iii) Intensify resource mobilization efforts through diverse channels, including by developing targeted project-focused resource mobilization strategies;

(iv) Enhance the visibility of the organization and build partnerships, including by engaging in the plenary sessions of the Commission on Science and Technology for Development, the science, technology and innovation Forum and the upcoming third United Nations Conference on Landlocked Developing Countries and fourth International Conference on Small Island Developing States, as well as other relevant United Nations conferences and platforms;

(c) The proposal to utilize the unspent balance of \$500,149 from the 2023 budget and programme of work as additional funding for project-related activities planned for 2024 was adopted. In addition, the Council authorized the Technology Bank to utilize \$60,000 from the reserve to prepare the report of the Secretary-General on the operations of the Technology Bank, to be submitted to the General Assembly at its seventy-ninth session and for the Council meetings to be held in 2024. The additional \$60,000 was allocated as follows: \$20,000 earmarked for Council support and \$40,000 for executive direction and management. The budget estimates have been revised in tables 2, 4, 5 and 6 accordingly;

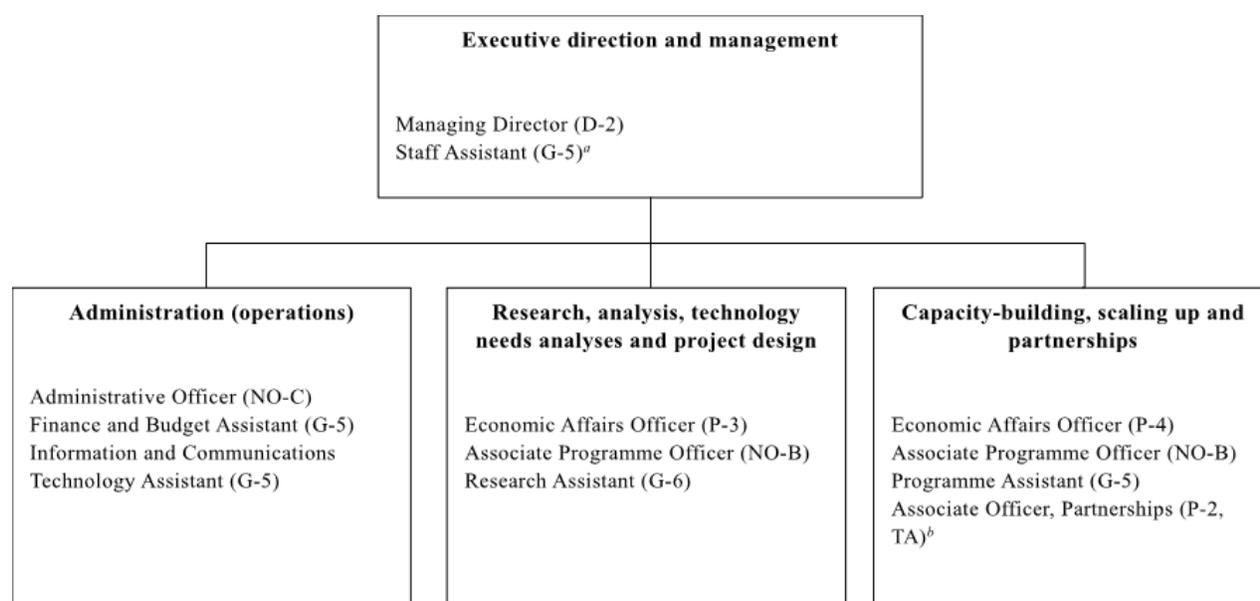
(d) In accordance with rule 14 of the rules of procedure, the Council established a subcommittee on partnership and resource mobilization. In addition, it established an additional subcommittee to define the modalities of the work of the Council, building on its duties and responsibilities as set out in its charter;

(e) The Council also requested the Technology Bank to prepare the new strategic plan for 2025–2027, to be submitted to the Council for approval at its ninth session;

(f) The Council requested the Technology Bank to prepare the report of the Secretary-General on the operations of the Technology Bank and submit it to the Secretary-General in time for submission to the General Assembly at its seventy-ninth session.

## Annex I

## Technology Bank organizational chart



*Abbreviations:* NO-B, National Professional Officer, level B; NO-C, National Professional Officer, level C; TA, temporary appointment.

<sup>a</sup> Also assists with administrative activities (50 per cent).

<sup>b</sup> Funded through extrabudgetary contributions.

## Annex II

### Summary of follow-up actions taken to implement relevant recommendations of the Advisory Committee on Administrative and Budgetary Questions

*Recommendations of the Advisory Committee*

*Status/action taken to implement the recommendation*

#### II. Budget and programme of work for 2023

The Advisory Committee acknowledges the reform measures introduced in 2022 and trusts that future project planning will be based on the availability of resources. The Committee trusts that more detailed information on the reform measures will be provided in the next report (para. 3)

The budget and programme of work for 2024 includes a section on the reform measures taken, the rationale behind the reforms and the impact on the operational modality of the organization

#### II. Budget and programme of work for 2023: proposed budget

Noting the existing experience in resource mobilization within the United Nations and its entities, the Advisory Committee trusts that the Technology Bank will incorporate lessons learned from these entities and ensure that the work of the consultants leads to the building of in-house capacity in the Bank on resource mobilization (para. 5) (see also para. 23 below)

The Technology Bank has hired a consultant with experience in mobilizing resources and extensive knowledge of technology and innovation-related issues to assist it with the mobilization of funds to finance the implementation of specific projects. The consultant was also expected to interact with Bank staff, including the Managing Director, on a regular basis to report on progress in the mobilization of resources, provide advice and share lessons and insights on the donors contacted (bilateral, multilateral, private sector and philanthropic organizations) and follow up actions for more effective resource mobilization efforts

The Advisory Committee acknowledges the new practice on unspent funds and is of the view that any financial reserves should have a policy setting out the maximum and minimum level of reserves. The Committee trusts that an update on financial reserves will be provided in the next report (para. 6)

Indeed, the Council decided to stop the practice of using unspent funds in the trust fund to cover the budget of the subsequent year without consideration of sustainability and the need to keep reserves for contingency funding, which is the normal practice in most organizations. Between June and December 2021, the Technology Bank created 11 posts, ranging from the P-5 to the G-5 level, on the basis of available funds in the trust fund and without factoring in sustainability. By the end of 2021, the Bank did not have funds left to cover the cost of even half of the 18 posts at the time. It was at that point that the Council introduced reforms and decided that the unspent funds during 2022 should be kept in reserve as contingency funding. Currently, the reserve and contingency funding kept in the trust fund amounts to \$2,309,195

The Advisory Committee trusts that the Technology Bank will make every effort to seek donor funding for the Sustainable Development Goal-related projects and the fifth United Nations Conference on the Least Developed Countries before utilizing funding reserves (para. 7)

The fifth United Nations Conference on the Least Developed Countries provided a timely opportunity for the Technology Bank to make itself widely known and to establish contacts with potential donors. Follow-up discussions are ongoing with contacts made during the Conference. In addition, the Bank hopes that some of the resources from the \$60 million offered by Qatar for implementation of the Doha Programme of Action for the Least Developed Countries will be made available to the Bank. The Bank is following progress in the allocation of the funds, which is still pending and under discussion with the United Nations entity responsible for monitoring the implementation of the programme (Office of the High Representative for the Least Developed Countries, Landlocked Developing Countries and Small Island Developing States)

The Advisory Committee is of the view that a risk assessment strategy, together with accountability mechanisms and mitigation factors, would be useful in ensuring sustainability of funding and adherence to programmatic priorities. The Committee also considers that a regular audit process would enhance fiscal discipline, and trusts that an update on these matters will be provided in the next report (para. 8)

The Technology Bank has had a discussion with the Internal Audit Division of the Office of Internal Oversight Services audit section on the “risk register plan” and the areas in which the Bank believes another audit is due or necessary. It has been agreed that the Bank will fill in the risk register template with the assistance of the audit team and periodically update the register. The Bank has expressed the view that the next audit of the Bank should give emphasis to resource mobilization and the sustainability of funding

## **II. Budget and programme of work for 2023: staffing**

The Advisory Committee reiterates that the recruitment process for the international staff of the Technology Bank should be conducted in accordance with the Staff Regulations and Rules of the United Nations. The Advisory Committee also reiterates the importance of geographical diversity in staffing, especially recruitment from the least developed countries, and trusts that an update on the recruitment of staff will be provided in the next report. The Committee also trusts that the selection process will take into account the fact that a significant number of least developed countries are francophone (para. 12)

Abiding by United Nations rules and procedures in the recruitment of staff, the procurement of services and the hiring of consultants was a large part of the reforms undertaken over the past year and a half. Currently, all staff recruitments follow established United Nations rules and procedures. Concerted efforts are also made to ensure the geographical diversity of staff, although this has been a challenge given that currently most posts are either at the G-level (two posts) or national officers (three posts), which inevitably means recruiting Turkish nationals. However, the Technology Bank has three vacant posts to fill (at the D-2, P-4 and G-5 levels) and efforts will be made to ensure diversity. Among the three non-Turkish staff, one is from the Niger (francophone), one from Pakistan and one from Italy

## II. Budget and programme of work for 2023: programme of work

The Advisory Committee notes the entry points for outreach to Member States, and trusts that the Technology Bank will continue to strengthen its efforts to raise awareness of its programmes among Member States, in particular the least developed countries (para. 17)

During 2023, the Technology Bank intensified its outreach efforts, including through active engagement with officials from Member States and participation in, among other things, the fifth United Nations Conference on the Least Developed Countries, sessions of the high-level political forum on sustainable development and the United Nations science, technology and innovation Forum

The Advisory Committee notes the new approach and trusts that due consideration will also be given to a supply-driven approach in order to ensure that the needs of least developed countries are met (para. 18)

While the Technology Bank gives importance to a demand-driven approach to ensure country ownership, it is also critical that least developed countries are aware of the support and services that the Bank can provide. Therefore, in some cases a supply-driven approach is also applied

The Advisory Committee acknowledges the progress made on establishing academies of science and trusts that an update will be included in the next report (para. 21)

The Technology Bank is currently working with the four academies of science established recently in Angola, the Congo, Lesotho and Malawi to strengthen their networking capacities. However, in the future the Bank will support the establishment of academies of science if and when additional resources are mobilized

The Advisory Committee notes the termination of the biotechnology programme, and trusts that there has been no negative impact on the work of the Bank and that an update will be provided in the next report (para. 22)

As discussed in last year's report, the programme had to be discontinued due to budget constraints and the revision of the strategic focus of the Technology Bank as a follow-up to the 2022 functional review. The Bank is currently exploring other collaboration opportunities with the International Centre for Genetic Engineering and Biotechnology to provide technology transfer and capacity-building in biotechnology. To that end, a joint project concept was developed, and the two organizations are jointly exploring funding opportunities for it

The Advisory Committee encourages the Technology Bank to develop a long-term, multi-year resource mobilization strategy, in addition to short-term project-specific resource mobilization plans, based on needs assessment, as well as lessons learned and best practices from the United Nations, in order to ensure sustainability in its funding and the implementation of its mandated programmes. The Committee also trusts that the Bank will broaden its donor base to include both public and private sector entities (para. 23) (see also para. 5 above)

As explained above, the Technology Bank is currently exploring a resource mobilization strategy based on hiring an expert to assist with the mobilization of resources for specific and targeted projects. It is expected that the lessons learned will help in the development of a long-term strategy

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*Recommendations of the Advisory Committee**Status/action taken to implement the recommendation*

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The Advisory Committee encourages the Technology Bank to increase cooperation, synergies and partnership with United Nations offices and entities, including the Office of the High Representative for the Least Developed Countries, Landlocked Developing Countries and Small Island Developing States; regional commissions; the regional coordinator system; the Office of Information and Communications Technology; the United Nations Conference on Trade and Development; and United Nations system entities such as the United Nations University and the World Food Programme, as well as those under the regular programme of technical cooperation and the Development Account, in order to leverage existing capacities and avoid duplication of resources (para. 27).

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A major achievement during 2023 was the strengthening of cooperation, partnership and synergies with other United Nations entities, in particular, the Office of the High Representative for the Least Developed Countries, Landlocked Developing Countries and Small Island Developing States and regional commissions. The Technology Bank has also established a closer working relationship with the United Nations Development Programme, which has supported the work of the Bank in the field, including by making resources available.