

## TERMS OF REFERENCE FOR CONSULTANTS

### A. Output 1 – The Investment Feasibility Study Prepared

1. The investment feasibility study (IFS) will be undertaken by the following consultants:

- Under the ongoing TA9256: a consulting firm comprised of the international technical and vocational education and training (TVET) specialist / team leader, the international labor specialist, the international project management specialist, the national TVET and labor specialist, the civil works specialists (international and national), the procurement consultants (international and national), and the gender consultant (national); and
- Under the proposed Transaction Technical Assistance (TRTA): the proposed individual consultants including equipment specialists (international and national), industrial sector specialists (national), competency-based training (CBT) specialists (international and national), teacher development specialists (international and national), education technology specialist (international), entrepreneurship development specialist (international), public-private partnership specialist (PPP, international), monitoring and evaluation specialists (international and national), financial management specialists (international and national), environmental safeguard specialists (international and national), social safeguard specialists (international and national), costing specialist (international or national), and economist (national).

2. ADB will engage the consultants following the ADB Procurement Policy (2017, as amended from time to time) and its associated project administration instructions and/or staff instructions. The terms of reference for individual consultants to be engaged under the proposed TRTA are detailed hereunder.

3. **Equipment specialists** (international, 3 person-months; national, 3 person-months): The international equipment specialist will provide standards and prototype specifications of the equipment that align with the international industrial practices. The national consultant, in cooperation with industrial sector specialists, will assess 5 representative professional training centers and 14 representative TVET colleges (TVETCs) in different regions on their equipment status (e.g., mechanics, electronics, digital, etc.). The assessment will be used to develop the plan for equipment upgradation for these centers and colleges, including the prescription of specifications and quantities for the needed equipment in each priority trade.

4. **Industrial sector specialists** (4 nationals, 2 person-months each – from the project's 4 priority sectors): The consultants will cooperate with the equipment specialists to develop the equipment upgradation plan for the representative centers and colleges. They will also support the curriculum specialists in linking with the industrial needs and requirements and support the PPP specialist in consulting with chamber of commerce and key industrial companies to develop the prototype of industrial partnership arrangement, covering the elements including inputs to curriculum, training material, students and teachers training and assessment, and job placement. They will support the TVET specialists and assessment and certification specialists in proposing the setup of sector skills councils, and in proposing the industrial cooperation in improving assessment and certification capacity.

5. **CBT specialists** (international, 4 person-months; national, 4 person-months): The CBT specialists will review the existing curricula in the priority sectors for short-term and longer-term training. The consultants will compare the relevant international practices for CBT to propose the

applicability in the country context. By cooperating with the industrial sector specialists, and in line with the critical competencies identified as per selected example occupation(s), he/she will develop the guidelines for developing modular-based training programs (at the project preparation stage, in the absence of national occupational standards, relevant international standards can be used for alignment). The consultants will review the existing assessment and certification arrangements and processes in the country on TVET and reskilling training. They will propose ways for improvement to enhance quality assurance in skills development. The options to be assessed by the consultants include: (i) different institutional arrangements for assuring the quality of the assessment and certification; (ii) different modalities of industry collaboration in guiding and supporting assessment; and (iii) different feedback mechanisms from the results of assessment to the improvement of training. As a summary, a roadmap on introduction and implementation of CBT will be developed by the consultant.

6. **Teacher development specialists** (international, 3 person-months; national, 3 person-months): The consultants will review the existing pre-service teacher education and in-service teacher training programs for TVET sector. The consultants will analyze the constraints of teacher development under the current segregations between “(academic) teachers” and “(practice) masters”. By linking with the roadmap for introducing CBT as above, the consultants will propose plans and measures for improving teacher development, including strengthening the qualification, training and assessment of teachers. Meanwhile, to improve training-of-trainers, the consultants will propose the feasible modalities of linking with industries for increasing and updating workplace experience for teachers.

7. **Education technology specialist** (international, 2 person-months): The consultant will review the market-available training e-platform, websites, or Apps for TVET, and propose the way to develop (or to customize from the market-available e-platform) the e-platform for teacher training in TVET sector. The e-platform shall include the functions such as self-assessment, assessment modules, e-training material, and peer-learning channels. The consultant will consult MOHSSE on its pilot of an e-platform for teacher training that is being developed by a German company.

8. **Entrepreneurship development specialist** (international, 2 person-months): The consultant will assess the existing business incubation and business advisory services, and individuals and micro enterprises’ financial accessibility in the country. The consultant will assess the existing entrepreneurship training programs offered as supported by certain development partner(s), especially in their curriculum and the delivery modality. The consultant will propose the entrepreneurship development programs by linking to the outsourced incubation, business advisory service, linkage to market and to supply and value chain, and access to finance (including microfinance, and innovative financing sources such as impact investors).

9. **PPP specialist** (international, 2 person-months): The consultant will review the landscape for private sector training providers in the country and propose suitable incentives and modalities to encourage PPP with private sector training providers (international and national) in the project’s priority sectors. The consultant will develop a doable prototype of PPP arrangement or memorandum.

10. **Monitoring and evaluation specialists** (international, 3 person-months; national, 3 person-months): The consultants, in alignment with the Education Sector Plan (2019–2023), will review the existing M&E system for the skills sector, including for MOELR and MOHSSE. The consultants, by detecting the gap between the existing system and the requirement by SDG (such as the enrolment rate, employment rate especially for youth, sex-disaggregated data, data for

disadvantaged people, etc.), will propose the required improvements institutionally and technically. The consultants will ensure that the project design and monitoring framework (DMF) can be monitored and reported under the improved M&E system. The consultants will review the interlink between the IAs and other government authorities in reporting (such as State Committee for Statistics), in the areas of data collection, tracking, review, and validation. For monitoring indicators where data are not available, the consultants will propose the way forward to develop the data collection during project implementation.

11. **Environmental safeguard specialists** (international, 1 person-months; national, 3 person-months): The consultants will firstly assess the capacity of the executing agency and implementing agency in planning, implementing, and monitoring environmental safeguards. The consultants will conduct field visit to PTCs and TVETCs in different regions to assess their environmental impact of civil work activities and training activities (equipment noise, wastes, work safety, etc.), although all civil works are expected as brown field. The consultants will develop the initial environmental examination (IEE), which will include the environmental management plan (EMP) for the project. The consultants will summarize the environmental risks and mitigation measures.

12. **Social safeguard specialists** (international, 0.5 person-months; national, 2 person-months): The consultants will firstly assess the capacity of the executing agency and implementing agencies in planning, implementing, and monitoring social safeguards including indigenous peoples and (involuntary) resettlement, although all civil works are expected as brown field. The consultants will conduct field visits to PTCs and TVETCs in different regions to assess their social impact of training activities (for possible impact on [involuntary] resettlement, and on indigenous peoples, etc.). The consultants will design the safeguard management framework and if needed, the resettlement plan for the project. The consultant will summarize the social safeguard risks and mitigation measures.

13. **Financial management specialists** (international, 1.5 person-months; national, 3 person-months): The consultants will firstly assess the sector public financial management system to identify gaps, if any, for the government's counterpart financing supported areas (such as employment fund). The consultants will assess the financial management (FM) capacity of the executing agency and implementing agencies at central and regional level. At PTC and TVETC level, the assessment will be conducted on the use and management of the institution-level fund. At the implementing partner level (such as the NGO to be engaged in business incubation service, and/or in providing microfinance), the consultants will assess their FM capacity and internal control in using the project-provided funding. The consultants will summarize the FM risks and mitigation measures, and develop the FM strengthening plan and actions for project implementation. The consultants will also support the design of funds flow, accounting, auditing and financial reporting arrangements. The consultants should have Chartered Accountant (CA) or Certified Public Accountant (CPA) qualification and necessary experience in multilateral development bank(s)-financed project(s).

14. **Costing specialist** (international or national, 2 person-months): The consultant will prepare detailed cost estimates and financing plan for the project, by exploring the unit costs for civil works, equipment, per student training costs, teacher payroll, operational costs, etc. The consultant will follow the ADB's cost estimates requirements, including examining customs and taxation issues related to import of equipment and consulting services, etc.

15. **Economist** (national, 2 person-months): The consultant will develop the economic and financial analyses (i.e., financial viability) for the proposed project.

**B. Output 2 – Key implementation entities’ awareness of international good practices in CBT and workforce development increased.**

16. **International study tour:** In total 5 beneficiaries are targeted from Ministry of Employment and Labor Relations, Ministry of Higher and Secondary Specialized Education (Center for Vocational Education), representatives of the TVETCs and PTCs that will be built into centers of excellence. In total a 4-working day study tour is planned to the selected internationally well-established TVET institutions and workforce development entity(ies) in Singapore.<sup>1</sup> The study tour will be organized on CBT, teacher development, industrial collaboration, entrepreneurship development, assessment and certification, labor market monitoring and public employment services, etc.

**C. Output 3 – Loan processing and implementation startup assisted.**

17. **Project implementation specialist** (national, 3 person-months): The project implementation specialist will assist with the draft, revisions, comments and finalization by the government agencies on the investment feasibility report by collaborating with and incorporating the inputs from the consultants in output 1 and in TA9256, and provide implementation startup support. These activities are to ensure that (i) the IFS is harmonized and technically consistent with the government requirements (to ensure it is ready for government’s approval before the loan negotiations); and (ii) loan disbursement is expedited. For the latter, the project implementation specialist will support the government in the early stage project setup such as establishing the PIU and inter-ministerial steering committee and facilitating the procurement bidding procedures of advanced actions, if any.

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<sup>1</sup> The proposed institutions include Nanyang Polytechnic International, Institute of Technical Education, and Workforce Singapore Agency.