Terms of reference

Call for proposals: Multi-country analysis on technology in public employment services to promote youth employment in Asia and the Pacific

1. Background

The International Labour Organization (ILO) is the United Nations agency for the world of work and brings together governments, employers and workers to drive a human-centred approach to the future of work through employment creation, rights at work, social protection and social dialogue. The ILO has a long-standing commitment to promote productive employment and decent work for youth in Asia and the Pacific, guided by the ILO follow-up action plan on youth employment 2020-2030. This includes strengthening the capacity of Member States to formulate and implement employment services and labour market programmes addressing transitions to decent work, including for young persons. In this context, the Regional Economic and Social Analysis (RESA) unit of the ILO Regional Office for Asia and the Pacific oversees and promotes multi-country, multi-disciplinary and inter-sectoral policy analysis related to key issues and themes of relevance to the Decent Work Agenda and its implementation in the region and supervises research and data collection and analysis of these issues and themes in keeping with ILO global, regional and national priorities.

Even before the COVID-19 crisis, youth aged 15-24 were in a vulnerable labour market situation in Asia and the Pacific. The massive disruption to economies and labour markets in Asia-Pacific due to the COVID-19 crisis had disproportional impacts on youth through (i) job disruptions from reduced working hours and layoffs, (ii) disruptions in education and training, and (iii) difficulties transitioning from school to work and moving between jobs. In response, governments have adopted a wide array of policy measures in the socio-economic recovery process to support youth employment. Public employment services (PES) play a key role in supporting young people to navigate the multiple labour market transitions in a rapidly changing world of work, including those young women and men who shifted into unemployment or out of the labour force, or are looking for a first or new employment opportunity. The COVID-19 crisis has accelerated the adoption of technology and the way in which PES facilitate the participation of youth in the labour market, whether in wage employment, self-employment or a combination of both. The modernization of PES through

technology has the potential to improve its effectiveness, efficiency and outreach, in particular for youth living in rural and more remote areas, provided the needs of the disadvantaged groups are taken into account and investment in necessary infrastructure is made. This ranges from web-based applications for service delivery such as on-line registration for job matching, online job fairs, to digital call centres with reduced waiting times and recruitment tools supported by algorithms and machine learning.[1]

To support policy makers and other key youth employment stakeholders in strengthening public employment services for youth through technology, an analysis covering multiple countries in Asia-Pacific is proposed, with a view to facilitate learning and knowledge sharing on effective and innovative approaches across countries.

2. Objective of the assignment and scope of work

The objective of the assignment is to conduct a multi-country analysis on the role of technology in public employment services to promote youth employment in Asia and the Pacific and to identify policy considerations and practical recommendations for PES.

The research builds on data from the ILO global survey (2020) on the use of technology-enabled service delivery by public employment services as well as further information collected by the contractor. Raw data from the ILO global survey (2020) will be made available to the contractor as a starting point for the research. The contractor coordinates further regional and country-level data collection (such as through email exchanges and interviews) and conducts desk research. It focuses on a multi-country review in Asia-Pacific analysing the use of technology (phone, online app, social media, AI) for a comprehensive range of employment services with a particular focus on young workers (e.g., general information, registration, labour market information, job matching, counselling, skills training, self-assessment). The review will generate country profiles as background for the analysis and will highlight examples, lessons learned, practical guidance, innovative and good practices of technology use for employment services available to youth. Good practices may include integrated, inclusive or gender-responsive approaches as well as examples of technology-enabled PES service design and delivery, including in collaboration with private employment services for youth. Integrated policy interventions have the potential to cut across several

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[1] ILO (2020) COVID-19: Public employment services and labour market policy responses; ILO (2021) Public Employment Services pressing ahead with digitalization should be aware of the digital divide

policy fields to ensure that young people stay connected with the labour market throughout their working life, in particular, those whose social background puts them at high risk of exclusion. Inclusive approaches need to take into account the needs and various aspects influencing young people's barriers to productive employment and decent work, from instance from age/sex, family/household situation, access to internet and other resources, employment status, geographic location, to disability, other minority groups, and migration status. Beyond the role of technology in delivering labour market services to youth, its enabling role to impact the governance and strategy; management and resources; partnerships for service delivery; and performance management of PES for youth will be taken into consideration.

The assignment includes the following tasks:

1. **Develop and validate research methodology and annotated outline** in consultation with ILO.
2. **Revise preliminary country focus** and support country selection in consultation with the ILO. The preliminary country focus includes the countries that completed the ILO global survey (2020) on the use of technology-enabled service delivery by public employment services: Australia, Cambodia, China, India, Indonesia, Japan, Republic of Korea, Myanmar, Papua New Guinea, Philippines, Singapore. Additional countries to be considered or referenced in consultation with ILO may be those with potential ILO collaboration in 2022-23 on employment services and labour market programmes: Lao People's Democratic Republic, Nepal, Pakistan, Thailand, Timor-Leste, Samoa.
3. **Conduct a desk review** of literature, PES online platforms, policy documents, government reports and available data and information related to public employment services for youth and the role of technology for selected countries in Asia and the Pacific (see countries in #2), taking into account lessons learned and good practices at global level and from other regions. ILO will provide the contractor with its available information and will facilitate contact with ILO country offices.
4. **Analyse the survey responses and data for the subset of countries from Asia and the Pacific** based on this global survey and prepare adequate tabulations and findings relevant to youth, across relevant survey sections from governance, service delivery (Availability of technology-enabled provision, Level of support, Delivery approach, Target groups), Skills of staff and clients on technology, data processing, to challenges and opportunities. The raw survey data (.dta) will be provided to the contractor. The proposed tabulations will be included in the annotated outline. Take into account

existing ILO research on the role of technology in public employment services. See section on *Key ILO resources.*

5. **Develop additional data collection approach, coordinate data collection, and collate and analyse data to create a unified dataset.** This also includes developing a content structure, template and data collection approach for up to 8 country profiles on public employment services for youth and technology and collect information for selected countries. Building on the data from the ILO global survey as a basis, collect and coordinate further country-level data and information, including through local research assistants, desk research, email exchanges as well as stakeholder interviews. This may require the contractor to identify, recruit and coordinate local research assistance for countries, in particular where information is not available publicly online, needs further validation or is mostly available in the local language only. The country profiles will form the basis for the comparative analysis in the main report and will be available as an Annex to the report (2-3 pages per country profile to be included in the Annex). The contractor will collate and analyse to create a unified dataset. Country-level information will be reflected in the main body of the report and through the condensed country profiles in the Annex.

6. **Analyse technology-enabled delivery of PES for youth in Asia Pacific across a comprehensive range of technologies currently in use by public employment services, including a comparison of the sources used for the technology-enabled services, to look at what data are put in to the tools and what the data is based on, to see and compare the effectiveness. Throughout the research, the analysis of PES should take into account delivering PES through multi-channel strategies and adaptive services according to user needs in PES where applicable**. Technology is understood in this context as an enabler of effective provision of employment services, allowing for: 24-hour access, self-services, sourcing and connecting information for assisting decision-making processes and productivity: from traditional telephone services (fixed line, mobile, SMS, toll-free numbers, help desk and call centers), to on-line/mobile applications (email, web apps, IP/GPS, VoIP), to social media (facebook, twitter, Instagram, etc.) and optimized Artificial Intelligence (Big data, conversational AI, data mining, self-learning algorithms, chat robots and smart software, face/voice recognition). However, the research will be open and further validate how selected countries are adopting technology beyond this categorization and in combination with face-to-face delivery. Provide examples, lessons learned, innovative approaches and best practices from selected countries, with particular attention to services developed or adapted in the context of the COVID-19 crisis. The

research will take a balanced approach to the role of technology in PES, taking into account its limitations, and its potential as an enabler for service delivery if properly customised to the needs of the beneficiaries.

7. **Analyse the role of technology by type of service provided by the PES to youth:** from general information, registration, labour market information, job matching, counselling and case management, to skills training and client's self-assessment tools. Integrated approaches, including in cross-service transmission of personal information, and the use of technology (e.g., blockchain) may be investigated. Provide examples, lessons learned, innovative approaches and best practices from selected countries. Particular attention will be paid to effective support services towards a (first) formal employment for youth. The analysis, country-level examples and good practices of technology-enabled employment services for youth will be a major focus of the report.

8. **Anchor the analysis in the guidance provided for PES by international labour standards**: the Employment Service Convention, 1948 (No. 88), the Private Employment Agencies Convention, 1997 (No. 181) and the Employment Policy Convention 1964 (No. 122).

9. **Provide a comparative analysis on the state of technology-enabled delivery of public employment services for the selected countries in Asia-Pacific** (see countries in #2). Attention will be paid to the variations between sub-regions, country income groups and contexts, including in the structure of the report. Particular attention will be given to challenges and opportunities for inclusive, gender-responsive services and the effectiveness of technology as an outreach tool to vulnerable youth throughout the analysis and report.

10. **Identify key considerations for an effective PES digital transformation based on analysis of selected countries taking into account aspects of service delivery and beyond**, e.g., governance, strategy, skills of staff, management and clients on technology, infrastructure, data processing.

11. **Elaborate key considerations for inclusiveness of technology-enabled public employment services, with a particular focus on services targeted to youth** to address their unique needs and barriers to integration, **the digital divide, and gender disparities.** This should also take into account challenges related to technological infrastructure. Provide further analysis where policymakers' attention may be required across relevant youth characteristics: sex, age cohorts (e.g., 15-19, 20-24, 25-29), education, income level, rural-urban, marriage and parental status, country income group, etc.

12. **Summarize trends and provide technology-related examples, lessons learned, innovative approaches and best practices from selected countries, including on (i) on the interaction and complementary role of private employment services** when properly regulated in line with international labour standards, including the prohibitions therein on charging fees and costs to workers **and (ii) on integrated support services across government between PES and skills development, other active labour market policies, and career guidance/counselling** for younger age cohorts.

13. **Draft final report and PowerPoint presentation**. Participate in knowledge sharing workshop to present findings.

The report is expected to follow the [ILO house style](#) for publications. The suggested length of the publication is up to 60 pages (excluding the list of references, Annex and country profiles).

The report is expected to address several questions, including but not limited to:

- What is the current state of technology-enabled delivery of public employment services to youth based on a comparative analysis of selected countries in Asia and the Pacific?

- What are key considerations, practical guidance, lessons, innovative approaches and good practices for PES to improve its services to youth and its support system through technology?

- What are effective approaches to ensure inclusiveness and gender equality in technology-enabled PES for youth, in particular outreach to vulnerable youth and adaptation to different needs, and how can PES facilitate integrated approaches through technology-enabled employment services to youth?

The report is expected to inform the following activities:

- The report will be publicly available online and is intended to be of immediate use for PES across Asia and the Pacific, both for stakeholders in countries analysed in the report and those interested in learning from other country experiences. The report will present key considerations and trends at regional level and tangible recommendations, practical guidance, lessons and good practices from country-level initiatives to advance the PES digital transformation with a focus on improved service delivery to youth.

- The report is also envisioned to point to areas of improvement for technology-enabled PES at country-level based on lessons and good practices identified, as the basis for potential areas of collaboration with ILO.
- The report is also expected to be the basis for an online sharing knowledge event at the end of 2022 and a capacity building initiative in 2023 on effective employment services in Asia-Pacific in collaboration with the International Training Centre of the ILO (ITCILO) for PES and other stakeholders in Asia and the Pacific to encourage mutual learning.

3. Key ILO resources

Relevant ILO resources to be considered for this assignment include, but are not limited to:

ILO resources on employment services

- Avila (2021) Public employment services that work for young people, in ILO (2021) Is the future ready for youth? Youth employment policies for evolving labour market https://www.ilo.org/employment/Whatwedo/Publications/WCMS_790109/lang--en/index.htm
- ILO (forthcoming) The state of technology-based delivery in public employment services: Preparing for the future
- Survey and dataset (internal) of the ILO survey on the use of technology-based service delivery by public employment services (2020). The global survey was conducted between May and October 2020 with the support of the WAPES Secretariat and members' network.
- ILO (2020) COVID-19: Public employment services and labour market policy responses; https://www.ilo.org/emppolicy/areas/covid/WCMS_753404/lang--en/index.htm
- ILO (2021) Public Employment Services pressing ahead with digitalization should be aware of the digital divide; https://www.ilo.org/emppolicy/pubs/WCMS_814289/lang--en/index.htm
- ILO maps out technological transformation in Public Employment Services https://www.ilo.org/emppolicy/pubs/WCMS_764104/lang--en/index.htm
- ILO maps out how Public Employment Services are using technology to improve service delivery https://www.ilo.org/emppolicy/pubs/WCMS_761924/lang--en/index.htm
- ILO (2021) Public employment services: diagnostic tool and guide https://www.ilo.org/emppolicy/pubs/WCMS_829545/lang--en/index.htm

- ILO (2017) Practitioners' guides on employment service centres (Volumes 1-4) https://www.ilo.org/asia/projects/WCMS_098077/lang--en/index.htm

Other relevant ILO resources:
- ILC (2021) Resolution: Global call to action for a human-centred recovery from the COVID-19 crisis that is inclusive, sustainable and resilient, https://www.ilo.org/ilc/ILCSessions/109/reports/texts-adopted/WCMS_806092/lang--en/index.htm
- ILO and ADB (2020) Tackling the COVID-19 youth employment crisis in Asia and the Pacific, https://www.ilo.org/asia/publications/WCMS_753369/lang--en/index.htm
- ILO (2019) ILO Centenary Declaration for the Future of Work, https://www.ilo.org/global/about-the-ilo/mission-and-objectives/centenary-declaration/lang--en/index.htm
- ILO (2022) Policy guidance note: Digitalising career guidance services https://www.ilo.org/skills/pubs/WCMS_841124/lang--en/index.htm
- ILO et al. (2021) Investing in career guidance https://www.ilo.org/wcmsp5/groups/public/---ed_emp/---ifp_skills/documents/publication/wcms_762841.pdf
- ILO (2006) Career Guidance: A resource handbook for low and middle-income countries www.ilo.org/skills/pubs/WCMS_118211/lang--en/index.htm
- ILO and ETF (2021) Developing national career development support systems https://www.etf.europa.eu/en/publications-and-resources/publications/developing-national-career-development-support-systems

4. Qualifications and required experiences

- An advanced degree in the field of labour economics, social development or related area with demonstrated expertise on employment issues.
- Relevant experience in employment services, technology and youth employment.
- Good understanding of labour markets in Asia and the Pacific.
- Knowledge of quantitative and qualitative research methods, including statistical software to analyse survey results.
- Excellent drafting and report writing skills. Ability to present information in readily understandable forms.
- Ability to communicate effectively both orally and in writing. Ability to work on own initiative as well as a member of a team. Ability to plan and organise work, and manage research teams.

- Excellent command and proficient working ability in English. Knowledge of local languages in focus countries would be an asset for the research.

5. Deliverables and indicative timeline

The assignment goes from 29 August 2022 to 25 November 2022 and deliverables should be aligned with the indicative timeline below.

- **Deliverable 1:** Workplan and timeline, annotated outline for the report, research methodology and questions, data collection approach and preliminary list of sources. Final versions based on review and consultation with ILO by 12 September 2022.
- **Deliverable 2:** Draft research report and country profiles submitted for review to ILO by 24 October 2022.
- **Deliverable 3**: Final research report, country profiles and PowerPoint presentation summarizing the findings, along with supporting documentation (e.g., data files, sources) submitted to ILO by 14 November 2022. Final versions are expected to reflect the technical inputs and comments following at least two rounds of ILO revisions. All data, figures and tables in separate excel sheets.

Deviations from these deliverables and timeline can occur according to the evolution of the assignment; however, any changes observed or anticipated should be consulted with the focal person(s) at the ILO.

6. Proposal

The ILO seeks the support of a consultant, team of consultants or institution for this assignment. Interested candidates must submit their short proposal with the following:

   i. Summary of technical proposal (max. 3 pages outlining the approach),
  ii. Financial proposal including detailed budget breakdown, and
 iii. Qualifications and relevant experience of consultant(s) and/or institution (include CV(s) as annex)

The short proposal must be submitted to the ILO via email (Subject: "Proposal – Technology in PES for youth employment") through BKK_RESA@ilo.org no later than 9:00 a.m. Bangkok time on Monday, 15 August 2022. Only shortlisted candidates will be contacted for the final selection.

7. Reporting

Throughout the course of this assignment, the contractor will report on a weekly basis on progress and the work carried out to the ILO Youth Employment Specialist in RESA.

8. Specific Clauses

All communication to other relevant stakeholders should be coordinated with the ILO. The ILO will provide guidance for design of the reports and PowerPoint presentations. Data, figures and tables need to be submitted in separate excel sheets. If it appears necessary to modify the tasks of work or exceed the time allocated, the consultant or institution must discuss the circumstances with the ILO and obtain prior written approval. ILO may disclose the draft or final documents and/or any related information to any person and for any purpose the ILO may deem appropriate.