<h1 style="text-align:center">1st Expert Meeting on</h1>

<h1 style="text-align:center">Future Skills Needs and Anticipation in Selected Sectors and Industries in the Asia and Pacific Region</h1>

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Concept Note

Background

The international community has set an ambitious sustainable development agenda, with corresponding goals (SDGs) for 2030; it includes SDG 4 'Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all' and SDG 8 'Achievement of inclusive and sustainable growth, full employment and decent work'. Focus on education and work opens the way for greater international attention to training and development of skills required for employment. Within this context, UNESCO adopted a new Strategy for technical and vocational education and training (2016-21) aiming to support the efforts of Member States to improve the relevance of their TVET systems and to equip all youth and adults with the skills required for employment, decent work, entrepreneurship and lifelong learning.

Enhancing the quality of TVET and its relevance to the changing needs of the world of work was also one of the recommended actions set out in the Kuala Lumpur Declaration, outcome statement of the Asia-Pacific Conference on Education and Training (Kuala Lumpur, 2015). The Declaration called on Member States in the Asia-Pacific region to "transform and expand TVET and pay increased attention to strengthening the links between its outcomes and changing labour market needs, particularly through labour market studies" and to "invest in establishing foresight and feedback mechanisms such as tracer studies and employer surveys to inform TVET reforms and to anticipate skill needs that are to be reflected in TVET qualifications and programmes for different users."

The Asia-Pacific region is characterized by great diversity in terms of demographic trends, socio-economic development and technological advancements. Common challenges related to technological change and the adoption of new technologies are, however, confronting all countries at various degrees across the region. New technologies are affecting jobs and employment landscape by reducing the need for people in many existing jobs while generating new job opportunities in emerging innovative activities. These changes may widen existing income inequalities potentially leading to social and economic upheaval on various scales. To respond to changing skill needs, education and training providers need to equip learners with

skills that are responsive to labour market demands and transferable to different employment settings. Up-to-date information on current and future skills demands is needed to inform policy measures to ensure a better balance between skills of the workforce and the needs of employers to address the skill shortages and imbalances and fully capitalize on the new technologies.

In this context, UNESCO Bangkok has launched a multi-country study project to assess and anticipate future skills needs for specific sectors and industries in selected Asia-Pacific countries. These countries were chosen based on their representation of high and middle-income groups. The assessment will be based on the implications of economic trends and market forces on anticipated skill demands and mismatches between demand and supply, as well as policy responses in vocational education and training. It will review how different countries assess existing and needed skills to inform policy interventions in the region.

Participating countries in this multi-country study include: India, Indonesia, Kyrgyzstan, Malaysia and the Republic of Korea. Iran, Lao PDR, Mongolia, the Philippines, Sri Lanka, Thailand and Viet Nam are also involved in preparing position papers. This sharing of opinions and positions about skills needs and anticipation is a part of the project.

To ensure the quality of studies and papers, some of the draft country studies and position papers will be shared for feedback at the first Expert Meeting on Future Skills Needs and Anticipation in Selected Sectors and Industries in the Asia and Pacific Region, which will be held from December 4th to 5th, 2017, in Bangkok, Thailand. Member States who can produce a quality position paper will have an opportunity to join the project by developing a full country study. The second Expert Meeting is planned for early 2018. Its goals will be to review the final drafts and share the main findings with Member States and partners in the field of TVET. As the main output of this project, a synthesis report, which will include policy recommendations, will be developed.

Research Methodology of the Multi-Country Study
The study aims to take both quantitative (numbers of jobs in total, numbers by occupation, and numbers of people trained or educated) and qualitative (changes in occupations, specific skill requirements and about types of education and training required) approaches. The choice of methodologies depends on the scope of the information and of the existing models already available for a particular Member State. Developed countries with well-developed statistical systems, established macroeconomic models and often an existing base of relevant sector level skills research, have more options to choose than developing countries.

To provide the realistic benchmarking cases of anticipation of skill needs for other member states, the focus will be on specific sectors or sectors of greatest policy interest in member states. For example, the automotive sector or IT industry may be chosen for the Malaysian case study. Based on the economic and growth outlook of the skilled workers demanded by the automotive sector or IT industry, the occupations most in demand and the associated skill requirements will be determined. The demand for the occupations selected in a particular industry subsector at different skill levels, as well as the level of experience of the workforce and the role of on-the-job

and upskilling training, will be assessed based on either the existing data sets or surveys conducted by the associations or sector councils of the particular industry.

In case of undertaking research at the occupational and skills level, a balance needs to be achieved between focusing on quantitative data on occupations and the qualitative information on skills. For example, in countries with relatively good data availability on occupations, such as from a labour force survey that is coded to ISCO 4 digit level, it is possible to put an emphasis on quantitative occupational analysis, and to add what is new in skills in qualitative analysis. Researchers in countries where occupational data is unavailable or available only at a highly aggregated level are more likely to decide to focus on qualitative aspects of skills to compensate for weaknesses in their data.

Research Questions for Country Study

The main questions for each country representative to answer before embarking on their own research are as follows:

1. What are the main sectors or industries to be analyzed for your country?
2. What kind of skill forecasting model is adopted? In case you are using CEDEFOP model, to what extent does CEDEFOP model for skills forecasting apply to your country setting? For example, for supply of skills, the following definitions such as stocks of people by qualifications, 3 ISCED levels and by economic status, flows and graduate numbers by ISCED category, and numbers in the population by ISCED category, numbers in the labor force by ISCED category can be used as they are or they may need some modifications. Similarly, for demand of skills, the following definitions be used as they are. These are employment levels and expansion demand by occupation, employment levels and expansion demand by qualifications, replacement demand by occupation/qualification, job openings by qualification (ISCED category), and job opening by occupation (ISCED 2 digit). Or they may also need some modifications.
3. Does Critical Occupation List (COL) profile apply to a forward projection of occupations for 3-5 years?
4. Can the level of demand be quantified for 3-5 years across occupations?
5. How many high-skilled, middle-skilled and low-skilled positions will be required? And What kind of skills are demanded?

These are some examples of research questions that national researchers need to answer but do not need to limit themselves to. They are encouraged to develop different questions based on their own research objectives and elaborate those questions depending on different policy agenda and different industrial and economic development each Member State faces.

Research Questions for Position Paper

Provide answers to some questions of the following research questions on a method to assess skills requirements. These are some examples of research questions that national researcher needs to answer but do not need to limit themselves to. Rather they need to develop different

questions based on their own research objectives and elaborate those questions depending on different policy agenda and different industrial and economic development each Member State faces.

1. How are skills defined in skill needs assessment approaches in your country?
2. Which main method is currently used for mid/long-term assessment of skill needs at macroeconomic level in your country?
3. Which methods/models are used for the input of information on macroeconomic forecasting and (sectoral) employment projections?
4. Does the skill needs assessment method only include evaluation of total demand or also expansion demand and replacement demand?
5. Does the method consider the supply side, and possibly interaction between supply and demand?
6. Does the approach also consider (exogenous) factors such as impact of technologies, work organization, socioeconomic conditions, globalization/relocation of jobs, etc?
7. Which classifications (for example, ISCED, ISCO) are in used at different stages of the skills assessment?
8. What are the critical occupations in the selected industry subsector? How are the occupations related with qualifications? How do the curriculum and training programs contribute to the skill requirements?
9. Data source and quality;
   a. time series data by industry sector: output, employment, average earnings, hours worked
   b. time series data on demography and labour force by age and gender
   c. Labour Force Survey or other data on employment structure by occupation and formal qualification
10. What is the output of the skills assessment?
11. What is the period of the skills assessment?
12. How often is the skills assessment repeated?
13. Are there procedures for the ex post evaluation of the quality of the results of the skills assessment?
14. What is the use/target group of the skills assessment?
15. Who does the skills assessment?
16. Who pays for the skills assessment work and the necessary data?
17. What are your ideas for establishing a skills assessment approach? How should this activity be organized and cooperation arranged, who should be involved, should there be a platform (e.g. at UNESCO, ILO) for cooperation?

1ˢᵗ Expert Meeting

The main findings of the country cases will be shared at the first Expert Meeting on Skills Needs and Anticipation, which will be organized by UNESCO, with support from the Malaysian Government, from December 4ᵗʰ to 5ᵗʰ, 2017, in Bangkok, Thailand. The specific objectives of the meeting will be to:

1) introduce regional trends, issues, challenges and opportunities in skills needs and anticipation;
2) share the major findings of country cases from selected Asia-Pacific countries and discuss position papers initiated by some Member States; and
3) discuss next steps, including planning of the second expert meeting

Participants
Participants will include 1) the national researchers; 2) Member States; 3) resource persons; 4) relevant UN agencies and NGOs/CSOs; and 5) UNESCO Bangkok's TVET Team.

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