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ISCED REVIEW PANEL RECOMMENDATIONS

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Contents

Executive summary

The ISCED Review Panel (RP), established in June 2023 by the UNESCO Institute for Statistics (UIS), was tasked with advising the Institute on the classification of national education programmes and related qualifications, reviewing the current version of ISCED classifications, and identifying areas for potential development. Comprised of 16 experts from various UNESCO Member States and international organizations, the RP evaluated key issues related to the 2011 revisions of ISCED-P (educational programmes), ISCED-A (educational attainment), and ISCED-F 2013 (fields of education), aiming to determine whether amendments or revisions were necessary. The issues reviewed were compiled by UIS over the last ten years of implementation of the classifications.

The RP conducted a thorough review of 16 key items (issues) and formulated recommendations for amendments to ISCED-P and ISCED-A 2011, and a comprehensive revision of ISCED-F 2013. These recommendations aimed at improving ISCED relevance - particularly definitions, concepts, and scope in ISCED-P and ISCED-A 2011, and the growing skills mismatch driven by the rapidly evolving labor market which increasingly demands new qualifications (ISCED-F 2013) - and enhancing global comparability of education data.

The RP proposed a three-year timeline for implementing these recommendations, which includes phases of planning, research, consultation with Member States, validation, approval by relevant bodies, and global implementation. Tools, workshops, and training will support Member States in transitioning to the updated classifications, ensuring smooth implementation and engagement. In addition, the RP called for a regular review cycle to ensure that ISCED remains responsive to evolving education systems and global trends.

The recommendations of the RP are expected to be submitted to UNESCO General Conference in 2025 for adoption, after which the UIS will begin the implementation process.

1. Introduction

The ISCED Review Panel (RP) was established by the UNESCO Institute for Statistics (UIS) in June 2023 with the primary objective of "advising UIS regarding the classification of national programmes and qualifications, to review the current version of ISCED and to identify potential areas for further development, although ISCED revisions are not expected to be within its remit"[1].

The RP comprises 16 experts from six Member States and seven international organizations, ensuring a balance in both technical expertise and geographic representation. The panel reflects diversity across all UNESCO regions and captures the various types of education systems worldwide. The RP is chaired by an elected member, supported by a vice-chair from the UIS, who collaboratively led the panel's activities during each session.

The scope of the RP's work encompasses the 2011 revisions of the International Standard Classification of Education (ISCED) of educational programmes (ISCED-P) and educational attainment (ISCED-A), and the 2013 revision of the fields of education and training (ISCED-F). The Panel's task was to review the issues compiled since the beginning of the implementation of ISCED 2011 and ISCED-F 2013 about 10 years ago, conduct a comprehensive evaluation of the classifications, and identify any issues related to their application. A detailed outline of the RP's Terms of Reference, including its composition, is presented in Annex 1.

The recommendations of the RP are expected to guide the UIS on the necessity of revising the classifications based on identified issues and the evolving nature of education systems globally. The RP evaluated areas requiring refinement, such as definitions, scope, and application of ISCED classifications, with the aim of determining whether a full revision, targeted amendments, or no revision at all would be the most effective solution. Where revisions were deemed necessary, the RP identified key areas for further development and provided a roadmap, along with an indicative timeframe, for implementing these changes.

In cases where immediate revisions were not recommended, the RP was tasked with reviewing existing quality assurance mechanisms, advising on the classification of problematic national education programmes, and proposing a peer review and validation process for national ISCED mappings. Additionally, the RP reviewed and suggested amendments to the ISCED 2011 operational manual and the ISCED-F 2013 descriptions of fields of education and training.

[1] See ISCED 2011 manual, paragraph 97.

This report presents the conclusions and recommendations of the ISCED Review Panel, which will form the basis for future strategic decisions concerning the evolution and relevance of ISCED in supporting international comparability in education statistics.

2. Work of the ISCED Review Panel

2.1. Review Panel sessions and examination of ISCED implementation

The working sessions of the Review Panel (RP) took place from September 2023 to September 2024, during which the panel held five formal meetings. Throughout this period, the RP undertook a comprehensive examination of several working documents, leveraged diverse expertise, and engaged in in-depth discussions to fully understand the scope and scale of issues related to the implementation of ISCED 2011 and ISCED-F 2013 over the past decade. The RP's objective was to formulate recommendations for addressing these issues, without necessarily resolving them directly.

The working documents reviewed by the RP were stored in a shared online folder managed by the ISCED RP Secretariat (UIS). Access to these documents was provided to all RP members. The documents include:

- International Standard Classification of Education: ISCED 2011 Manual.
- ISCED 2011 Operational Manual Guidelines for classifying national education programmes and related qualifications.
- ISCED Fields of Education and Training 2013 (ISCED-F 2013).
- International Standard Classification of Education Fields of Education and Training 2013 (ISCED-F 2013) –Detailed field descriptions.
- UIS questionnaire on National Education Systems (UIS_ED_ISC11)
- National education systems mapping to ISCED
- "*Ten Years Implementation of ISCED 2011 and ISCED-F 2013 by Member States: Most Common Issues Identified by UIS or Reported by Countries*" [Document to be uploaded to the (ISCED RP) micro-page (https://isced.uis.unesco.org/isced-committee/) when approved for publication to the external public]

2.2. Review Panel working methodology

The RP's working methodology was structured around the following key elements:

- Review process: this process included a thorough analysis of documents prepared by the UIS, most notably a list of issues compiled from Member States' experiences with the implementation of ISCED 2011 and ISCED-F 2013. Additionally, the RP reviewed ISCED manuals and integrated insights from the expertise of its members.

- Evaluation criteria: the RP employed a typology of decision-making that allowed for systematic assessment and prioritization of the issues identified (see Table 1). These criteria helped guide the RP's recommendations for addressing the challenges encountered during the application of ISCED 2011 and ISCED-F 2013.

The RP's recommendations are built upon this methodology, ensuring that all proposed actions are based on a detailed understanding of the challenges and opportunities presented by the current ISCED framework.

Table 1: Typology of decisions used by the ISCED Review Panel

Type	ISCED	Decision	Action	Level
1- Definition/scope	1-All	1-To be considered for amendment/revision	Change proposed	0 to 8
2- Implementation	2-ISCED-P	2-Additional information/work needed	Roadmap	
3- Methodology	3-ISCED-A	3-Not to be considered for revision	Not applicable	
4- Guidance on application	4-ISCED-F			
5- Other				

The RP reviewed and discussed a total of 16 items/issues, each evaluated using the typology of decisions framework. This structured evaluation process formed the basis for the RP's final recommendations.

3. Final recommendations of the ISCED Review Panel

The ISCED Review Panel (RP) conducted a thorough review of 16 key items and issues related to ISCED 2011 and ISCED-F 2013, ultimately formulating 14 specific recommendations aimed at addressing these issues. These recommendations were designed to inform further developments of the ISCED classifications, improving their relevance and usability. In addition to addressing the specific items, the RP also proposed recommendations to improve the implementation of ISCED in international education data production, establish a more regular review process for the classifications, and outline a timeline for implementing the revisions of the classifications based on the formulated recommendations.

Of the 16 items reviewed, 12 were specifically related to ISCED-P and ISCED-A 2011, one item addressed ISCED-F 2013, and three items were applicable to all three classifications (see Table 2). The recommendations focused on refining classification criteria, improving definitions, and ensuring greater global comparability of data, while also highlighting the need for ongoing adjustments in response to evolving educational systems and labor market demands.

The RP emphasized that these revisions and improvements are essential to maintaining the relevance and integrity of ISCED as a global framework for producing internationally comparable education statistics and for supporting Member States in accurately reporting and utilizing education data.

The RP's recommendations use two main terminologies:

Amendment to the classification, which involves making targeted updates or changes to specific aspects (e.g. definition, scope) of the classification system to improve its accuracy, relevance, or applicability.

Revision (comprehensive revision) of the classification, which involves a comprehensive review and restructuring of the classification system to address emerging trends, changes in practices, or conceptual improvements, often resulting in significant updates or reorganization.

Table 2: Overview of ISCED items reviewed by the RP according to the typology of decisions framework

Item #	Label	Type	ISCED	Level	Final recommendation
1	Classification of early childhood educational development (ECED) programmes as formal and non-formal or informal	1-Definition/scope	ISCED-P, ISCED-A	01	To be considered for amendment/revision
2	Classification of early childhood education (ECE) programmes: distinction between ISCED 01 and ISCED 02	1-Definition/scope, 2. Implementation, 4. Guidance on application	ISCED-P, ISCED-A	0	To be considered for amendment/revision
3	Classification of programmes spanning ISCED 1 and ISCED 2 (e.g., basic education)	2. Implementation, 4. Guidance on application	ISCED-P, ISCED-A	1 and 2	To be considered for amendment/revision
4	Programmes spanning ISCED 3, 4 and 5	2. Implementation, 4. Guidance on application	ISCED-P, ISCED-A	3, 4, and 5	To be considered for amendment/revision
5	ISCED 3 programmes classified as ISCED 4 (e.g. A-level programmes in some countries)	2. Implementation, 4. Guidance on application	ISCED-P, ISCED-A	3 and 4	To be considered for amendment/revision
6	ISCED 4 programmes classified as ISCED 5	2. Implementation, 4. Guidance on application	ISCED-P, ISCED-A	4 and 5	To be considered for amendment/revision
7	Long first degrees at Master's level classified as long first-degrees at Bachelor's level	2. Implementation, 4. Guidance on application	ISCED-P, ISCED-A	6 and 7	To be considered for amendment/revision
8	Second degree programme at Bachelor's level classified at Master's level.	2. Implementation, 4. Guidance on application	ISCED-P, ISCED-A	6 and 7	To be considered for amendment/revision

9	Second degree programmes at Master's level classified at Doctoral level	2. Implementation, 4. Guidance on application	ISCED-P, ISCED-A	7 and 8	To be considered for amendment/revision
10	Define professional/occupational and academic programmes for ISCED levels 6 to 8	1-Definition/scope	ISCED-P, ISCED-A	8-Jun	To be considered for amendment/revision
11	Define the categories of non-formal learning and their relationship to formal learning	1-Definition/scope	All	2 to 5	To be considered for amendment/revision
12	Incorporate in ISCED the definitions of work-based learning, particularly as a form of non-formal and informal learning	1-Definition/scope	All	2 to 5	To be considered for amendment/revision
13	Define the boundaries between work-based learning in formal and non-formal education and its relation to technical and vocational education programmes	1-Definition/scope, 4-Guidance on application	All	2 to 5	To be considered for amendment/revision
14	Review the boundaries of education levels to provide a clearer guidance and limit misclassification	1. Definition/scope, 2. Implementation, 4. Guidance on application	ISCED-P, ISCED-A	3 to 7	To be considered for amendment/revision
15	Refine guidelines/criteria to determine which duration to use for indicators' calculation (general vs vocational programmes ISCED levels 2, 3)	1. Definition/scope, 3. Methodology	ISCED-P, ISCED-A	2 and 3	NOT to be considered for amendment/revision
16	Changes to field of education in ISCED-F 2013	1-Definition/scope	ISCED-F	3 to 8	To be considered for amendment/revision

3.1. Recommendations for amendments to ISCED-P and ISCED-A 2011

3.1.1 Item 1: Classification of Early Childhood Educational Development (ECED)[2] programmes as formal, non-formal, or informal.

b. Description

The item raises the question of how to categorize certain types of educational settings - such as home schooling - and under what conditions these should be considered part of formal education.

In ISCED 2011, formal education is typically defined as structured, institutionalized, and recognized education, often provided in schools, with a set curriculum and qualified teachers. However, for ECED programmes, there is a challenge in defining and distinguishing formal from non-formal or informal learning, particularly in cases like home schooling, which may vary in structure, recognition, and regulation across different countries.

For example, the classification of home schooling as formal education would depend on specific conditions such as:

- Legal recognition by national education authorities.
- Alignment with national curricula and learning standards.
- The use of structured programmes with clearly defined learning outcomes.
- Assessment and oversight mechanisms equivalent to those in formal institutions.

In contrast, home-based education lacking such formal structures or recognition may be considered non-formal or even informal education, raising important questions for the consistent application of ISCED 2011 in capturing the diversity of ECED practices globally.

d. Recommendation 1

The ISCED Review Panel,

- **Recalling** the ISCED 2011 Manual and the ISCED Operational Manual,
- **Having examined** the item and related working documents prepared by UIS, including the report "*Ten Years Implementation of ISCED 2011 and ISCED-F 2013 by Member States: Most Common Issues Identified by UIS or Reported by Countries*",
- **Discussing** the item during its 3rd meeting held on 26 March 2024,
- **Acknowledging** that the item pertains to the scope and definitions in ISCED 2011,

[2] See ISCED 2011 Manual, paragraphs 100-119.

- **Recognizing** that the issue highlights the need for clearer guidelines in ISCED to classify ECED programmes at ISCED level 01 consistently, ensuring that education systems can appropriately reflect various models of early childhood education, including home schooling, within formal or non-formal categories,
- **Emphasizing** the importance of defining comprehensive criteria to differentiate teachers from other staff in ISCED 0,

Recommends that this item be considered for amendments to ISCED-P and ISCED-A 2011.

4.1.2. Item 2: Classification of Early Childhood Education (ECE) (ISCED 0) programmes: distinction between ISCED 01 and ISCED 02

a. Description

The challenge arises in distinguishing between ISCED 01 (Early Childhood Educational Development)[3] and ISCED 02 (Pre-primary Education)[4], as the boundaries between these two categories can sometimes be blurred, especially in countries where early childhood programmes are not clearly differentiated by age or curriculum.

ISCED 01 refers to programmes primarily focused on the holistic development of children below the age of 3, including their cognitive, emotional, physical, and social development. These programmes often take place in informal settings and do not necessarily have a structured curriculum. Programmes providing only childcare (supervision, nutrition, and health) are not covered by ISCED.

ISCED 02, on the other hand, covers pre-primary education aimed at children typically aged 3 until the age to start ISCED 1 (primary education), serving as a formal introduction to education. ISCED 02 programmes usually have structured learning outcomes and are designed to prepare children for entry into primary school (ISCED 1). ISCED 02 programmes are more likely to be aligned with national education systems, include qualified teachers, and follow a defined curriculum with the goal of fostering early cognitive skills, literacy, and numeracy.

Factors such as programme structure, age of entry, curricular focus, and educational intent must be considered to make this distinction clearer.

For example, a programme might begin with a development-focused approach (ISCED 01) but gradually introduce academic components typically seen in pre-primary education (ISCED 02), making it difficult to classify. ISCED 2011 provides some guidelines on:

- The age range each level covers.

[3] See ISCED 2011 Manual, paragraphs 100-119.
[4] Ibid.

- The educational goals and focus of the programme (developmental vs. academic).
- The curriculum structure and whether it leads to formal learning outcomes in preparation for primary education.

Yet, additional clarification on boundaries between the two categories is needed to help countries more consistently and accurately classify early childhood programmes, ensuring that each category reflects the true nature and purpose of ECE offerings.

b. Recommendation 2

The ISCED Review Panel,

- **Recalling** the ISCED 2011 Manual and the ISCED Operational Manual,
- **Having examined** the item and related working documents prepared by UIS, including the report "*Ten Years Implementation of ISCED 2011 and ISCED-F 2013 by Member States: Most Common Issues Identified by UIS or Reported by Countries*",
- **Discussing** the item during its 3rd meeting held on 26 March 2024,
- **Acknowledging** the importance of distinguishing between ISCED 01 and ISCED 02 for the effective classification of educational programmes at ISCED level 0,
- **Approving** that this item pertains to the definition, scope, and implementation of ISCED 2011, as well as the guidance provided to Member States for its proper application,
- **Emphasizing** that further information or work is required to gain a more comprehensive understanding of the issues and their resolution,

Recommends that this item be considered for amendments to ISCED-P and ISCED-A 2011.

3.1.3. Item 3: Classification of programmes spanning ISCED 1 and ISCED 2 (e.g., basic education)

a. Description

The issue involves the classification of educational programmes spanning ISCED 1 (primary education)[5] and ISCED 2 (lower secondary education)[6], particularly basic education programmes that combine these two levels into a single programme.

These education programmes start at ISCED 1 and continue through to the end of ISCED 2. Students typically enter these programmes around age 6-7 and continue until they are 14-

[5] See ISCED 2011 Manual, paragraphs 120-138.
[6] See ISCED 2011 Manual, paragraphs 139-161.

16 years old, depending on the country's specific education system. The programmes usually last between 8 to 10 years, covering the entire period of basic education.

The transition between ISCED 1 and ISCED 2 is seamless, often with no significant change in the school environment or teaching methods.

Insufficient information on the characteristics of the programmes can pose challenges for properly classifying them. For example, the cycles (or stages, phases) of the programme, which can consist of a sequence of two, three, or four years of study each. Mapping to ISCED 1 may not align with the 'standard' end of a specific cycle of the basic education programme.

Countries where this classification issues are encountered, include several sub-Saharan African countries.

b. *Recommendation 3*

The ISCED Review Panel,

- **Recalling** the ISCED 2011 Manual and the ISCED Operational Manual,
- **Having examined** the item and related working documents prepared by UIS, including the report "*Ten Years Implementation of ISCED 2011 and ISCED-F 2013 by Member States: Most Common Issues Identified by UIS or Reported by Countries*",
- **Discussing** the item during its 4th meeting held on 11 July 2024,
- **Acknowledging** the following challenges related to blurred boundaries between ISCED 1 and ISCED 2:
    - In some countries, basic education programmes cover both ISCED 1 and ISCED 2 within a single continuous programme, often without a clear distinction or transition between the two levels. This can make it difficult to distinguish between primary education (ISCED 1) and lower secondary education (ISCED 2) when reporting,
    - The lack of clear boundaries complicates efforts to track students' progression through the education system, as there may not be a formal demarcation between the two stages,
    - Some countries also use different terminologies and structures for basic education, further complicating efforts to standardize classifications across international contexts,
- **Approving** that the item relates to the implementation of ISCED 2011 and the guidance provided to Member States for its proper application,
- **Further approving** that the item applies specifically to ISCED levels 1 and 2,
- **Emphasizing** the importance of taking into account the following key issues when addressing this item:

- Researching the cycles or stages within combined programmes, focusing on characteristics such as duration, target age group, and qualifications awarded at completion, to help delineate and classify such programmes,
- Proposing guidelines to ensure consistent mapping of basic education programmes across countries,

Recommends that this item be considered for the amendments to ISCED-P and ISCED-A 2011,

3.1.4. Item 4: Classification of programmes spanning ISCED 3, 4, and 5

a. Description

The classification of programmes spanning ISCED levels 3, 4, and 5 presents challenges for ensuring consistent and comparable international education statistics. These levels cover upper secondary education (ISCED 3)[7], post-secondary non-tertiary education (ISCED 4)[8], and short-cycle tertiary education (ISCED 5)[9].

These programmes are mostly observed in Eastern Europe countries. They include integrated secondary and vocational education programmes, which start at ISCED 3 and continue through ISCED 4 into ISCED 5. Typically, students enter these programmes around age 15-16, completing ISCED 3 curriculum while simultaneously beginning vocational training. The programmes usually last between 4 to 6 years, depending on the specific vocational field and the educational institution.

There are also vocational and technical school programmes, which provide comprehensive education that blends ISCED 3 with advanced vocational training and even ISCED 5. Typically, students may start vocational education during their upper secondary education (ISCED 3) and continue with more specialized training (ISCED 4) and professional diplomas or associate degrees (ISCED 5). The programmes can range from 5 to 7 years, incorporating practical training, apprenticeships, and theoretical instruction.

Programmes spanning ISCED 3 to 5 are designed to provide continuous and combined general education and specialized vocational training without the need for students to switch institutions or programmes. This integration ensures a seamless transition from secondary education to higher levels of vocational training and tertiary education.

[7] See ISCED 2011 Manual, paragraphs 162-184.
[8] See ISCED 2011 Manual, paragraphs 185-199.
[9] See ISCED 2011 Manual, paragraphs 207-223.

b. *Recommendation 4*

The ISCED Review Panel,

- **Recalling** the ISCED 2011 Manual and the ISCED Operational Manual,
- **Having examined** the item and related working documents prepared by UIS, including the report "*Ten Years Implementation of ISCED 2011 and ISCED-F 2013 by Member States: Most Common Issues Identified by UIS or Reported by Countries*",
- **Discussing** the item during its 4th meeting held on 11 July 2024,
- **Approving** that this item pertains to the implementation of ISCED 2011 and the guidance provided to Member States for its proper application,
- **Approving** that the item specifically applies to ISCED levels 3 to 5,
- **Acknowledging** the following challenges related to blurred boundaries between ISCED levels 3, 4, and 5
    - The distinctions between upper secondary (ISCED 3), post-secondary non-tertiary (ISCED 4), and short-cycle tertiary education (ISCED 5) are often not clear-cut across countries. Some education systems may combine features of these levels into hybrid programmes, making it difficult to classify them within the ISCED framework,
    - Programmes that span ISCED 3, 4, and 5 often involve overlapping qualifications or certifications, leading to confusion about the correct level of classification. For example, vocational education programmes might extend beyond upper secondary but not meet the criteria for tertiary education, causing ambiguity in how they should be classified,
- **Emphasizing** the need to address the following issues:
    - Conduct research on the characteristics and differences of ISCED levels 3, 4, and 5 programmes that impact their consistent classification across countries,
    - Develop guidelines to ensure consistent mapping of these programmes across different national contexts,

Recommends that this item be considered for amendments to ISCED-P and ISCED-A 2011.
Advises that this item be addressed within the same workstream as the item covered by Recommendation 3.

3.1.5. Item 5: ISCED 3 programmes classified as ISCED 4 (e.g. A-level programmes)

a. *Description*

Advanced-level programmes (A-levels) are encountered in many countriesThe structure of secondary education systems can vary across these countries, where some may have a two-tier system (General Certificate of Secondary Education followed by A-levels), while other might integrate similar content into a single secondary education phase. The

curriculum content may emphasize academic rigor and content depth or prioritise breadth (broader curricula) to specialisation early on.

Generally, these programmes are offered following Ordinary-level programmes, with which they can be sequential. While United Kingdom classifies A-level programmes as ISCED 3, some countries classify them as ISCED 4.

Entry age is typically 16 to 18. The programmes aim at preparing students for tertiary education. They involve a higher level of specialization and academic rigor compared to other upper secondary programmes. Programmes duration typically range from 1 to 3 years.

Analysis[10] of a sample of 47 A-levels programmes across 25 countries show that 34% are classified as ISCED 3 and 66% as ISCED 4.

b. *Recommendation 5*

The ISCED Review Panel,

- **Recalling** the ISCED 2011 Manual and the ISCED Operational Manual,
- **Having examined** the item and related working documents prepared by UIS, including the report "*Ten Years Implementation of ISCED 2011 and ISCED-F 2013 by Member States: Most Common Issues Identified by UIS or Reported by Countries*" and the brief "*The classification of Advanced-level programmes varies across countries*",
- **Discussing** the item during its 4th meeting held on 11 July 2024,
- **Approving** that the item pertains to the implementation of ISCED 2011 and the guidance provided to Member States for its proper application,
- **Approving** that the item specifically pertains to ISCED levels 3 and 4,
- **Emphasizing** the need to consider the following:
    - Conduct research on the characteristics of A-level programmes and their differences across countries, which affect consistent international classification,
    - Propose guidelines to ensure consistent mapping of such programmes across different countries,
- **Stressing** that the item relates to a complex issue and there was an attempt to address it during the ISCED 1997 revision,
- **Advising** the engagement of a specialist to thoroughly examine the issue and provide clarity on the differentiation between ISCED 3 and ISCED 4 programmes,

[10] For more details, see "*Ten Years Implementation of ISCED 2011 and ISCED-F 2013 by Member States: Most Common Issues Identified by UIS or Reported by Countries*", "*Topic 4: The classification of advanced-level programmes varies across countries*".

Recommends that this item be considered for amendments to ISCED-P and ISCED-A 2011.

3.1.6. Item 6: ISCED 4 programmes classified as ISCED 5

a. Description

The issue of ISCED 4 programmes being classified as ISCED 5 arises when post-secondary non-tertiary education programmes (ISCED 4) are incorrectly classified as short-cycle tertiary education (ISCED 5).

ISCED 4 programmes are designed to prepare students for the labor market or for further education at the tertiary level. They usually follow ISCED 3 and aim to bridge the gap between secondary and tertiary education. These programmes typically include:

1. TVET education which provides practical and job-specific skills. Typically ranging from 6 months to 2 years, these programmes often lead to a qualification that allows direct entry into labor market or further education at ISCED level 5.
2. Preparatory programmes which prepare students for entry into tertiary education, particularly in specialized fields. They typically last 1 to 2 years, and provide a pathway to ISCED 5 or ISCED 6.
    - In some countries, advanced vocational training programmes that focus on high-level technical skills might be classified at ISCED 5 due to the depth of skill training and perceived complexity. But these programmes, despite their advanced nature, do not meet the tertiary education criteria because they often do not require the theoretical foundation expected at ISCED level 5.
    - Technical institutes offering diplomas in fields such as engineering, information technology, or business may be classified as ISCED 5. The programmes are designed to be terminal and lead directly to employment, but countries may classify them as tertiary education due to their perceived status and the level of technical skills provided.
    - Preparatory programmes courses for students aiming to enter Bachelor's programmes (pre-Bachelor's programmes) in areas like science or engineering may be classified at ISCED 5. But these programmes are essentially bridging programmes that prepare students for tertiary education and do not constitute tertiary education themselves.
    - Higher national diplomas are vocational qualifications intended to provide practical skills and knowledge. They are often classified at ISCED 5 due to their rigorous curriculum and recognition in the labor market, but in some countries they do not meet the academic requirements of tertiary education.

b. Recommendation 6

The ISCED Review Panel,

- **Recalling** the ISCED 2011 Manual and the ISCED Operational Manual,
- **Having examined** the item and related working documents prepared by UIS, including the report "*Ten Years Implementation of ISCED 2011 and ISCED-F 2013*

by Member States: Most Common Issues Identified by UIS or Reported by Countries",

- **Discussing** the item during its 4th meeting held on 11 July 2024,
- **Approving** that the item pertains to the implementation of ISCED 2011 and the guidance provided to Member States for its proper application,
- **Approving** that the item specifically concerns ISCED levels 4 and 5,
- **Acknowledging** the importance of clarifying the boundaries between ISCED 4 and 5 programmes,
- **Emphasizing** the need to consider the following:
    - Research into the characteristics and differences between ISCED 4 and 5 programmes that affect their consistent classification across countries,
    - Developing guidelines to ensure adherence to the specific criteria set by ISCED for each level. This includes recognizing ISCED 4 programmes for their role in bridging secondary and tertiary education, while ensuring ISCED 5 programmes meet the academic and theoretical standards required for short-cycle tertiary education,

Recommends that this item be considered for amendments to ISCED-P and ISCED-A 2011.

3.1.7. Item 7: Long first degrees at Master's or equivalent level classified as long first-degrees at Bachelor's or equivalent level

a. Description

Long first degrees Master's or equivalent level programmes are designed as integrated, long-cycle programmes that combine undergraduate and graduate education, leading directly to a Master's or equivalent level qualification. These programmes duration usually range from 5 to 7 years. They combine undergraduate and graduate coursework, often including advanced research components and a thesis. They lead to a Master's degree, preparing graduates for professional practice or doctoral studies.

Long first degrees at Bachelor's or equivalent level programmes are long-duration undergraduate programmes that do not include graduate-level coursework and culminate in a Bachelor's degree. With duration lasting between 4 and 6 years, these programmes focused on undergraduate coursework with some potential for specialization but no graduate-level study. They lead to a Bachelor's degree, preparing graduates for entry-level professional roles or further graduate studies.

Integrated Master's programmes such as engineering programmes in some European countries (e.g., Diplom-Ingenieur in Germany) designed as long first degrees that lead directly to a Master's or equivalent level qualification are sometimes classified as Bachelor's degrees due to historical or administrative reasons, where the initial degree awarded may still be considered at the Bachelor's or equivalent level despite the total duration and level of education provided.

Professional programmes such as Medical degrees (e.g., Bachelor of Medicine, Bachelor of Surgery - MBBS) or Law degrees (e.g., Bachelor's of Law - LLB) in various countries, which are long first degrees culminating in qualifications equivalent to a Master's or equivalent level may be classified as Bachelor's or equivalent level due to the nomenclature used (e.g., Bachelor of Medicine), even though the duration and content are equivalent to a Master's or equivalent level education.

In some countries with unique higher education structures, such as certain Eastern European or Asian countries, long first degree programmes that should be at Master's or equivalent level may be classified as Bachelor's due to local educational framework definitions, mainly misalignment between national education classification systems and ISCED.

Some countries or institutions use the term "Bachelor's" for long first degree programmes that are essentially at the Master's or equivalent level. This can be due to historical naming conventions or the legacy of previous educational systems.

Educational authorities may classify long first degrees at the Bachelor's or equivalent level for administrative simplicity or due to specific national education policies that do not align perfectly with ISCED criteria.

In some cases, the local education system's perception of what constitutes Bachelor's or equivalent and Master's or equivalent levels education might differ from international standards, leading to misclassification. Misclassification can also occur due to a lack of understanding or awareness of the detailed criteria set by ISCED for classifying educational programmes. Education authorities may not fully appreciate the distinctions between Bachelor's and Master's level qualifications as defined by ISCED.

An inventory of long first degrees at Master's or equivalent level classified as long first-degrees at Bachelor's is presented in the ISCED Review Panel working document (see "*Ten Years Implementation of ISCED 2011 and ISCED-F 2013 by Member States: Most Common Issues Identified by UIS or Reported by Countries",* thematic brief 2: *"The classification of long first degree education programmes at ISCED 6 and ISCED 7 (ISCED 666 and 766 programmes) varies across countries*").

b. Recommendation 7

The ISCED Review Panel,

- **Recalling** the ISCED 2011 Manual and the ISCED Operational Manual,
- **Having examined** the item and related working documents prepared by UIS, including the report "*Ten Years Implementation of ISCED 2011 and ISCED-F 2013 by Member States: Most Common Issues Identified by UIS or Reported by Countries*" and the brief "*The classification of long first degree education programmes at ISCED 6 and ISCED 7 (ISCED 666 and 766 programmes)*",
- **Discussing** the item during its 4th meeting held on 11 July 2024,

- **Highlighting** the differences in terminology between the ISCED 2011 Manual and national education systems (e.g., programmes labeled as Bachelor's in some countries may correspond to ISCED Master's or equivalent level), which can lead to discrepancies in the classification of programmes under ISCED,
- **Approving** that the item specifically concerns ISCED levels 6 and 7,
- **Approving** that the item pertains to the implementation of ISCED 2011 and the guidance provided to Member States for its proper application,
- **Emphasizing** the need to consider the following:
    - Conduct research on the characteristics of long first-degree education programmes at ISCED levels 6 and 7, and the variations across countries that impact their consistent classification,
    - Standardize the nomenclature used for long first-degree education programmes at ISCED 6 and ISCED 7 to reduce confusion and prevent misclassification,
    - Propose guidelines that ensure adherence to the specific criteria established by ISCED for each programme category,
- **Suggesting** the inclusion of a terminology section in ISCED, to clarify that national terminology does not automatically determine ISCED level alignment. This section should include examples to enhance understanding,

Recommends that this item be considered for amendments to ISCED-P and ISCED-A 2011.

3.1.8. Item 8: Second degree programme at bachelor's or equivalent level classified at Master's or equivalent level

a. Description

Second degree programmes at Bachelor's or equivalent level are designed for individuals who already hold a Bachelor's degree and wish to pursue another Bachelor's degree in a different field or specialization. The duration of these programmes is usually shorter than the first Bachelor's degree. It ranges from 1 to 3 years, depending on the overlap of coursework and prior learning credits. The programmes provide foundational and advanced knowledge in the new field of study, with a curriculum similar to that of a first Bachelor's degree but tailored to account for the student's prior education. Graduates are awarded a second Bachelor's degree, or qualifications for professional practice in the new field or further graduate studies.

Accelerated second Bachelor's programmes such as a Bachelor of Science in Nursing (BSN) programme for individuals who already hold a Bachelor's degree in another field, might be misclassified as Master's or equivalent level because they are often intensive, shorter in duration, and designed for degree holders, which can resemble the structure of some Master's programmes.

Post-baccalaureate programmes, such as post-baccalaureate premedical programmes in the United States of America for students who hold a Bachelor's degree in a non-science

field but wish to prepare for medical school, are sometimes perceived as graduate-level due to their advanced coursework and the prior degree requirement, leading to misclassification as Master's programmes.

Professional conversion programmes, such as Bachelor of Education (B.Ed.) programmes for individuals who already have a Bachelor's degree in another subject and want to become certified teachers, have a professional focus and requirement of a prior degree that can cause these programmes to be mistaken classified as Master's or equivalent level education.

The requirement for applicants to already hold a Bachelor's degree can lead to the assumption that these programmes are at the Master's or equivalent level, as many graduate programmes also have this prerequisite.

The professional and career-focused nature of these programmes can cause them to be misinterpreted as Master's programmes, especially when they are designed to meet specific industry standards or certifications. Also, since second degree programmes build on the knowledge and skills acquired in a first degree, they may be perceived as more advanced and thus at a higher level of education, contributing to their misclassification as Master's level programmes.

b. *Recommendation 8*

The ISCED Review Panel,

- **Recalling** the ISCED 2011 Manual and the ISCED Operational Manual,
- **Having examined** the item and related working documents prepared by UIS, including the report "*Ten Years Implementation of ISCED 2011 and ISCED-F 2013 by Member States: Most Common Issues Identified by UIS or Reported by Countries*",
- **Discussing** the item during its 4th meeting held on 11 July 2024,
- **Approving** that the item specifically concerns ISCED levels 6 and 7,
- **Approving** that the item pertains to the implementation of ISCED 2011 and the guidance provided to Member States for its proper application,
- **Emphasizing** the need to consider the following:
  - Conduct research on the characteristics of ISCED level 6 second-degree programmes and the differences that affect their consistent classification across countries,
  - Develop standardized nomenclature for second-degree programmes to minimize confusion and prevent misclassification,
  - Propose guidelines to ensure adherence to the specific criteria established by ISCED for each programme category,

Recommends that this item be considered for amendments to ISCED-P and ISCED-A 2011.

Advises that this item be addressed within the same workstream as the item covered under Recommendation 7.

3.1.9. Item 9: Second degree programmes at Master's or equivalent level classified at Doctoral or equivalent level

a. Description

These programmes usually require a thesis, or they include advanced, specialized coursework beyond the initial Master's degree but lack the depth and original research component of a Doctoral programme. The programmes may have a longer duration than a typical Master's degree (often 2 years), but shorter than a Doctoral programme. Often, they are designed for professional development and career advancement (e.g. Master of Business Administration with a specialization) rather than preparing students for academic research careers.

The admission criteria into these programmes are typically a completed Bachelor's degree or initial Master's degree, but the focus is more on coursework and professional skills rather than research.

This issue is mainly encountered in high-income countries.

b. Recommendation 9

The ISCED Review Panel,

- **Recalling** the ISCED 2011 Manual and the ISCED Operational Manual,
- **Having examined** the item and related working documents prepared by UIS, including the report "*Ten Years Implementation of ISCED 2011 and ISCED-F 2013 by Member States: Most Common Issues Identified by UIS or Reported by Countries*",
- **Discussing** the item during its 4th meeting held on 11 July 2024,
- **Approving** that the item specifically concerns ISCED levels 7 and 8,
- **Approving** that the item pertains to the implementation of ISCED 2011 and the guidance provided to Member States for its proper application,
- **Emphasizing** the need to consider the following:
    - Assess whether the use of terms such as "advanced" or "second degree" may contribute to misunderstandings and misclassification,
    - Conduct research on the characteristics of ISCED level 7 second-degree programmes and the variations that impact their consistent classification across countries,
    - Develop standardized nomenclature for ISCED level 7 second-degree programmes to minimize confusion and ensure accurate classification,
    - Propose clear guidelines to ensure alignment with the specific criteria set by ISCED for each programme level,

Recommends that this item be considered for amendments to ISCED-P and ISCED-A 2011.

Advises that this item be addressed within the same workstream as the items covered under Recommendations 7 and 8.

3.1.10: Item 10: Define professional/occupational and academic programmes for ISCED levels 6 to 8

a. Description

Professional or occupational programmes at ISCED levels 6–8 (Bachelor's or equivalent level, Master's or equivalent level, and Doctoral or equivalent level)[11] are designed to prepare students for specific careers or professions. They are often closely aligned with industry standards and may involve work-based learning, practical training, and vocationally oriented curricula. These programmes focus on imparting practical skills and competencies that are directly applicable to particular occupations. In some cases, they lead to professional certification or licensure. Examples include degrees in engineering, law, medicine, or teaching, where practical experience and professional readiness are emphasized.

Academic programmes (ISCED 6–8), by contrast, focus on theoretical knowledge, research, and intellectual development. Their primary aim is to develop students' critical thinking, analytical skills, and disciplinary knowledge, often with the expectation that graduates will pursue further education or research in the field. These programmes are less oriented toward immediate professional application and more toward advancing knowledge in a specific area of study, often serving as a pathway to doctoral research or academic careers.

b. Recommendation 10

The ISCED Review Panel,

- **Recalling** the ISCED 2011 Manual and the ISCED Operational Manual,
- **Further recalling** that the ISCED 2011 Manual lacks explicit definitions for professional/occupational and academic programmes at ISCED levels 6 to 8, though a coding digit already exists to differentiate between these programme types, which suggests that a full classification revision may not be necessary,
- **Having examined** the item and related working documents prepared by UIS, including the report "*Ten Years Implementation of ISCED 2011 and ISCED-F 2013 by Member States: Most Common Issues Identified by UIS or Reported by Countries*",
- **Discussing** the item during its 3rd meeting held on 26 March 2024,

[11] See ISCED 2011 Manual, paragraphs 224-273.

- **Approving** the need to explore the potential global criteria for defining professional / occupational and academic programmes at ISCED levels 6 to 8, given the absence of such definitions in ISCED 2011,
- **Acknowledging** that this item pertains to the scope and definitions within ISCED 2011,
- **Emphasizing** the challenges in establishing globally relevant and comparable criteria that can be used to distinguish between professional / occupational and academic programmes across diverse education systems,
- **Emphasizing** that the following considerations may be important to take into account in the criteria definition:
    - Programme objectives: professional programmes should clearly aim to prepare students for employment in specific fields, while academic programmes emphasize theoretical knowledge and research,
    - Curriculum design: the extent to which programmes include practical training, internships, or work-based learning versus research or theoretical coursework can be insightful,
    - Qualifications and outcomes: professional programmes may lead to licensure or certification needed for specific professions, whereas academic programmes typically prepare students for research, teaching, or further academic study,
    - Global standards: professional qualifications may adhere to international or national industry standards that ensure graduates are ready for the workforce,
- **Stressing** the following anticipated challenges:
    - Variability across countries: the diverse nature of education systems worldwide makes it difficult to create a one-size-fits-all approach. In some countries, professional programmes are deeply integrated with academic components, making clear distinctions harder to define. Also, some countries classify programmes based on the institution providing them, while others rely on the content of the programme,
    - Differing perceptions of "professional": what constitutes a professional programme may differ significantly between countries, sectors, and cultures. For example, a medical degree may be considered a purely professional qualification in one country but seen as a blend of academic and professional training in another,
    - Evolution of fields: as fields of study evolve, some that were previously considered purely academic may now incorporate professional elements, or vice versa, requiring flexibility in how these programmes are classified,
- **Highlighting** key considerations in addressing the item, such as: the purpose of the distinction, the need for a flexible approach that acknowledges the diversity of education systems, and the potential impact on the second digit of the ISCED 2011 code,

- **Further emphasizing** that considerable effort will be required to achieve global consensus on a definition, and that the process may take at least two years,
- **Advising** that any decision on this item should result in an amendment to ISCED, rather than a revision,

Recommends that this item be considered for amendments to ISCED-P and ISCED-A 2011.

3.1.11. Items 11 to 13: Include Work-Based Learning (WBL) in ISCED

a. Description

Work-Based Learning (WBL) refers to education and training that takes place in the workplace or in environments closely connected to the workplace. It encompasses a wide range of learning activities, including apprenticeships, internships, dual education programmes, and other forms of vocational and technical education.

In many countries, WBL is a key component of formal and non-formal education, particularly in Technical and Vocational Education and Training (TVET) programmes. However, WBL is currently not fully integrated into the ISCED framework, which is used globally to classify educational programmes and qualifications.

The challenge is that existing ISCED definitions do not provide sufficient clarity on how to classify WBL programmes, especially when they overlap with formal education and non-formal education. As WBL becomes more significant in modern education systems, there is a need to better define and incorporate it into ISCED classifications.

b. Recommendation 11

The ISCED Review Panel,

- **Recalling** the ISCED 2011 and ISCED-F 2013 Manuals, and the ISCED Operational Manual,
- **Discussing** items 11, 12, and 13 (see Table 2) during its first three meetings held on 28 September 2023, 13 December 2023, and 26 March 2024,
- **Recognizing** the insufficiency of current ISCED definitions to classify non-formal education programmes, especially work-based learning (WBL),
- **Emphasizing** that while data on participation in formal education is widely available, statistics on non-formal education and training are limited, particularly in low-income countries, and data on participation in informal learning are even more scarce,
- **Approving** that the item pertains to ISCED 2011 and ISCED-F 2013,
- **Approving** that the focus should be on ISCED levels 2 to 5, although some countries (e.g. in Europe) may have apprenticeship programmes at ISCED levels 6 to 8,
- **Emphasizing** that given WBL's significant role in non-formal education, ISCED should provide clear definitions and distinctions between:

- Formal, non-formal, and informal learning, particularly regarding WBL,
- Various types of WBL within formal and non-formal education, with clarity on "institutionalized" and "recognized" WBL,

Recommends:

- Incorporating WBL into ISCED, addressing issues related to its classification and its relationship to TVET and to broader education structures,
- Including definitions of WBL, particularly as part of non-formal and informal learning,
- Defining categories of non-formal learning and their relationship to formal learning,
- Establishing clear boundaries between WBL in formal and non-formal education and its relation to TVET programmes,
- Assessing the need for a new digit coding to split TVET programmes between WBL in formal education and non-formal education,
- Conducting additional research on WBL to inform these changes.
- That this item be considered for amendments to ISCED-P and ISCED-A 2011.

3.1.12. Item 14: Review the boundaries of education levels to provide clearer guidance and limit misclassification

a. Description

The harmonization of programmes with similar characteristics is crucial to ensure consistency and comparability across countries, particularly when classifying long first-degree programmes, advanced-level programmes, and short post-secondary programmes. Misclassification occurs due to the nuanced and sometimes overlapping characteristics of these programmes, leading to inconsistent reporting and difficulty in comparing educational systems internationally.

Key areas of concern include:

1. The classification of long first-degree programmes (ISCED 6 and ISCED 7): the distinction between ISCED 6 (Bachelor's or equivalent level) and ISCED 7 (Master's or equivalent level) is blurred in the case of long first-degree programmes, often referred to as ISCED 666 and 766 programmes. These programmes combine both undergraduate and graduate-level education, typically taking longer to complete than standard Bachelor's degrees but not clearly fitting the criteria of a Master's programme. Different countries classify these programmes inconsistently: some categorize them as ISCED 6, while others label them as ISCED 7. This inconsistency is problematic for international comparability and understanding the true nature of these qualifications.
2. The classification of advanced-level programmes, which often prepare students for specialized professional roles or further academic study, vary significantly in

their classification across countries. Some are categorized at ISCED 7 (Master's or equivalent level), while others may be classified at ISCED 6 (Bachelor's or equivalent level), depending on the specific national education system.

3. The classification of short post-secondary programmes, which typically follow secondary education but do not lead directly to a Bachelor's degree, sitting on the borderline between ISCED levels 3, 4, and 5.
    - The boundary between ISCED 3 and ISCED 4 can be difficult to define, particularly when programmes offer vocational qualifications or pre-tertiary preparation. Countries may classify such programmes differently based on whether they are seen as extensions of secondary education or preparatory for tertiary education.
    - Similarly, the distinction between ISCED 4 and ISCED 5 can be problematic. Short-cycle tertiary programmes (ISCED 5) often overlap with advanced vocational or technical training programmes classified at ISCED 4. The ambiguity surrounding programme purpose, duration, and outcomes complicates classification, resulting in inconsistent reporting.

b. Recommendation 12

The ISCED Review Panel,

- **Recalling** the ISCED 2011 Manual and the ISCED Operational Manual,
- **Having examined** the item and related working documents prepared by UIS, including the report "*Ten Years Implementation of ISCED 2011 and ISCED-F 2013 by Member States: Most Common Issues Identified by UIS or Reported by Countries*",
- **Discussing** the item during its 4th meeting held on 11 July 2024,
- **Approving** that this item pertains to the definition, scope, and implementation of ISCED 2011, as well as the guidance provided to Member States for its proper application,
- **Further approving** that this item is relevant to ISCED levels 3 to 7,
- **Acknowledging** the importance need to harmonize the classification of programmes with similar principal characteristics by establishing clearer criteria and boundaries between ISCED levels, including:
    - providing clearer guidance to countries on how to classify certain types of programmes, reducing misclassification and improving data comparability.
    - standardising classification criteria, particularly for long first-degree programmes and short post-secondary programmes, ensuring that key factors like duration, awarded qualification, and programme objectives are consistently applied,

- ensuring that programmes of a similar structure/characteristics and purpose are classified under the same ISCED level, regardless of the country in which they are offered,

- **Emphasizing** the following key considerations in addressing this item:
  - Refining the ISCED 2011 Operational Manual by including additional examples to aid in the accurate classification of programmes,
  - Proposing a mechanism to ensure consistency and alignment in the classification of education programmes across Member States,
  - Exploring the possibility of establishing a peer review and validation process for national ISCED mappings, potentially organized by region,

Recommends that this item be considered for amendments to ISCED-P and ISCED-A 2011.

Advises that this item be addressed within the same workstream as the items covered under Recommendations 4 to 9.

3.1.13. Item 15: Refine guidelines/criteria to determine which duration to use for indicators' calculation (General versus Vocational Programmes at ISCED levels 2 and 3)

a. Description

ISCED levels 2 and 3 cover lower secondary education (ISCED 2) and upper secondary education (ISCED 3), and both general and vocational programmes can differ in their duration across countries. Moreover, an increasing number of countries are experiencing higher enrolment in vocational programmes compared to general programmes. These variations create challenges in calculating education indicators such as enrolment, completion, and transition rates. The traditional approach of using the duration of general secondary education programmes, which historically enrolled more students, may need to be reconsidered for countries where vocational enrolment now dominates.

b. Recommendation 13

The ISCED Review Panel,

- **Recalling** the ISCED 2011 Manual and the ISCED Operational Manual,
- **Having examined** the item and related working documents prepared by UIS, including the report "*Ten Years Implementation of ISCED 2011 and ISCED-F 2013 by Member States: Most Common Issues Identified by UIS or Reported by Countries*",
- **Discussing** the item during its 4th meeting held on 11 July 2024,
- **Approving** that the item is related to the definition/scope, and methodology of ISCED 2011,

- **Approving** that the item specifically pertains to general versus vocational programmes at ISCED levels 2 and 3,
- **Acknowledging** the following challenges:
    - Variability in programme duration across countries: general and vocational programmes at ISCED levels 2 and 3 often have different durations depending on the country. In some countries, general programmes may last for three years, while vocational programmes extend to four or five years, or the reverse. This variability makes it difficult to establish a standard duration for calculating indicators when enrolments value in both orientations are close,
    - Impact on calculating indicators: for instance, in countries where vocational programmes are longer than general education programmes, students in vocational tracks may appear to be "overage" for their level when calculating the net enrolment rates, even if they are progressing through their programme on time. Similarly, completion rates for vocational programmes may appear artificially low due to the longer duration compared to general programmes,
- **Acknowledging** the need to consider refining criteria to determine the baseline age group for secondary education indicators calculation when the duration differs between general and vocational programmes, noting that the current method commonly uses the duration of the general programme as a reference,
- **Yet stressing** that the item is not intrinsic to ISCED classifications,

Recommends NOT to consider this item for amendments to ISCED-P and ISCED-A 2011.

3.2. Recommendations for a revision of ISCED-F 2013

3.2.1. Item 16: Changes to field of education in ISCED-F 2013

a. Description

The need to revise the fields of education in ISCED-F 2013 arises from several key factors. A primary concern is the growing skills mismatch driven by the rapidly evolving labor market, which increasingly demands new qualifications. To address this, ISCED-F must incorporate systematic reviews to remain a relevant and responsive global framework that captures emerging trends in education and training.

Additionally, fields of education are continually changing, and any revision of the classification should ensure adaptability to future developments without requiring a complete overhaul for every adjustment. Over the past years, several countries have approached UIS to propose updates to ISCED-F definitions, seeking clarity in applying the

classification across diverse contexts. Ensuring comparability of fields of study across countries and over time is essential for global education data collection and analysis.

b. *Recommendation 14*

The ISCED Review Panel,

- **Recalling** the ISCED 2011 and ISCED-F 2013 Manuals, and the ISCED Operational Manual,
- **Having examined** the item and related working documents prepared by UIS, including the report "*Ten Years Implementation of ISCED 2011 and ISCED-F 2013 by Member States: Most Common Issues Identified by UIS or Reported by Countries*",
- **Discussing** the item during its 3rd meeting held on 26 March 2024,
- **Noting** the skills mismatch driven by a rapidly evolving labor market, which demands new qualifications, and recognizing the necessity for ISCED-F to integrate systematic reviews to address this challenge,
- **Further noting** that altering the classification structure may necessitate broader revisions, and with fields of education constantly evolving, a revised classification should be adaptable to future changes without requiring a complete overhaul,
- **Emphasizing** that the current ISCED-F definitions lack precision and may be difficult to apply consistently, emphasizing the importance of ensuring comparability of fields of study across countries and over time as this is crucial for global comparisons,
- **Suggesting** the inclusion of ISCED level 3 vocational programmes and considering the addition of an "emerging fields" category to ISCED-F,
- **Suggesting** minimizing structural changes to ISCED-F to maintain labor market recognition of educational qualifications,
- **Suggesting** the following:
    - Exploring the transition from the current hierarchical structure to a flat list supported by output views and a standardized set focused on broad fields (and potentially narrow fields) of the classification. This approach allows for more dynamic, user-driven changes while maintaining the status quo through repackaging and added flexibility, something the rigid hierarchical structure cannot provide,
    - Drawing insights from recent initiatives by agencies such as the 2020 revision of the Australian and New Zealand Standard Research Classification, the Fields of Research developed by Statistics New Zealand and the Australian Bureau of Statistics, and the new Canadian Research and Development Classification (CRDC) produced by Statistics Canada,
    - While the Frascati Manual may be somewhat dated, it may provide informative guidance. Although fields of education and fields of research are

not conceptually identical, there is significant overlap between them that can be leveraged,

- Further suggesting:
  - Establishing a formal mechanism for Member States to report issues/challenges,
  - Addressing the interdisciplinarity of fields of study,
  - Clarifying what needs to be measured and what information is essential for data collection, including digit coding,
  - Assessing whether a complete overhaul of ISCED-F is necessary,

Recommends the revision of ISCED-F 2013 to address these issues and ensure its relevance for future educational and labor market demands.

3.3. Recommendations to improve ISCED implementation in international education data collections

3.3.1. Improving ISCED implementation in international education data collections

a. Description

Improving ISCED implementation involves ensuring that its manuals and implementation guidelines are up to date, validating national mappings (e.g. through peer reviews) consistently with the classification criteria, and refining guidelines for indicators calculation to ensure comparability and accuracy of resulting education statistics across countries.

b. Recommendation 15

The ISCED Review Panel,

- Recalling the ISCED 2011 and ISCED-F 2013 Manuals, and the ISCED Operational Manual,
- Having examined the item and related working documents prepared by UIS, including the report "*Ten Years Implementation of ISCED 2011 and ISCED-F 2013 by Member States: Most Common Issues Identified by UIS or Reported by Countries*",
- Discussing the item during its 5th meeting held on 19 September 2024,
- **Recognizing the importance of maintaining up-to-date ISCED manuals and implementation guidelines to ensure the classification reflects current national education systems and supports accurate international comparisons,**
- Acknowledging the need for sound validation and quality assurance mechanisms of ISCED mappings for consistent application of the classification across countries and for enhanced international comparability of national education statistics,
- **Emphasizing the need to refine guidelines for the choice of age-groups to be used for calculation of indicators for general and vocational programmes at**

ISCED levels 2 and 3, to support accuracy of education statistics and comparability across countries,

Recommends

1. To regularly update ISCED implementation guidelines to incorporate feedback from Member States and other stakeholders. These updates should include clear instructions and practical examples to promote consistent application of the classification across countries.
2. To establish a formal mechanism for the validation and peer review of ISCED mappings, either at a regional or global level. This process should involve regular checks of national education systems and programme attributes according to ISCED classification criteria by levels. It should also include expert reviews and the development of quality assurance protocols to address discrepancies and ensure alignment with international standards.
3. The peer review and quality assurance protocol for ISCED mappings could benefit from the development of tools to support ISCED implementation and meet future international reporting requirements. These tools would help countries anticipate and address unique challenges.
4. To develop clear, standardized guidelines for calculating indicators, especially for general and vocational programmes. These guidelines should define baseline criteria to enhance consistency in reporting and enable accurate cross-country comparisons of education indicators.

3.4. Recommendations for further establishing a regular review process

3.4.1. Establishing a regular review process

a. Description

A regular review process for ISCED is essential to ensure that the classification remains relevant, responsive to evolving educational systems, and effective in supporting accurate international comparisons of education statistics. As educational programmes and qualifications - especially in technical, vocational, and non-formal education - continue to develop, a systematic review cycle will allow ISCED to keep pace with global changes and mitigate the risk of misclassification. This will ensure that ISCED remains a dynamic, up-to-date framework, capable of transforming national education data into internationally recognized categories for meaningful cross-national comparisons.

b. *Recommendation 16*

The ISCED Review Panel,

- **Discussing** the item during its 5th meeting held on 19 September 2024,
- **Having reviewed** the General practices employed by the United Nations Committee of Experts on International Statistical Classifications (UNCEISC) for the revision of international statistical classifications (see Annex 2),
- **Recalling** the role of the ISCED RP, which is to "advise UIS regarding the classification of national programmes and qualifications, to review the current version of ISCED, and to identify potential areas for further development, although ISCED revisions are not expected to be within its remit",
- **Recalling** that, according to its Terms of Reference, the mandate of the current ISCED RP will conclude in December 2024,
- **Recalling** that the implementation of the recommendations made by the current ISCED RP represent a subsequent phase,
- **Considering** that:
  - The RP's recommendations are expected to be presented to UNESCO Member States for endorsement by the Education Data and Statistics Commission (EDSC), and to the UNESCO General Conference for adoption,
  - If approved by the UNESCO General Conference, the recommendations may need to be presented to the UN Committee of Experts on International Statistical Classifications (CEISC) for further endorsement, after which CEISC could submit them to the UN Statistical Commission,
  - These approval processes must be completed before any amendment to ISCED 2011 and revision of ISCED-F 2013 can commence,
- **Recalling** that the ultimate responsibility to revise ISCED classifications lies with the UIS and UNESCO Member States, particularly the National Statistical Offices, Ministries of education, and agencies engaged in this work,

Recommends:

1. To form a group that could oversees amendments to ISCED 2011 (i.e. ISCED-P and ISCED-A) and revision of ISCED-F 2013 and collaborate with the ISCED working group of the Education Data and Statistics Commission (EDSC).
2. To develop an implementation plan for the review.
3. To develop a research agenda to address ongoing complex issues.
4. To establish a more regular review mechanism.

Suggests:

- That members of the current Review Panel may participate in the future ISCED revision panel or working group, contingent on their availability and relevant expertise. Participation would also depend on the decision of their respective organisations and individual commitment.

3.5. Proposed timeline

3.5.1. Proposed timeline

a. Description

A proposed timeline for implementing amendments to ISCED 2011 (i.e. ISCED-P and ISCED-A) and revision of ISCED-F 2013, following the endorsement and approval of the ISCED Review Panel's recommendations, is crucial for ensuring a structured and phased approach. This timeline will facilitate the development of a clear implementation plan, the formation of working groups to address complex issues, and the necessary changes to the classifications. Additionally, it will allow sufficient time for global consultations, for Member States and other stakeholders to provide feedback on the proposed changes.

b. Recommendation 17

The ISCED Review Panel,

- **Discussing** the item during its 5th meeting held on 19 September 2024,
- **Recalling** the ISCED 2011 and ISCED-F 2013 Manuals, and the ISCED Operational Manual,
- **Recalling** the role of the ISCED RP, which is to "advise UIS regarding the classification of national programmes and qualifications, to review the current version of ISCED, and to identify potential areas for further development, although ISCED revisions are not expected to be within its remit",
- **Having reviewed** the General practices employed by the United Nations Committee of Experts on International Statistical Classifications (UNCEISC) for the revision of international statistical classifications (see Annex 2),
- **Emphasizing** that the Review Panel' recommendations call for amendments to ISCED 2011 (i.e. ISCED-P and ISCED-A) and revision of ISCED-F 2013,
- **Emphasizing** the need for a clear timeline for the ISCED revision process,
- **Further emphasizing** that:
    - The time required to address a recommendation may vary depending on the complexity of the issue, particularly if there is limited available knowledge or if identifying globally relevant criteria/definitions requires further research (e.g., addressing the definition of academic/professional orientation for ISCED levels 6 to 8 is anticipated to take at least two years),
    - A full classification revision, such as that recommended for ISCED-F 2013 (Recommendation 14), could take a few years to complete,

Recommends a maximum three-year timeline for implementing the ISCED RP's recommendations, encompassing the following key activities.

Planning and preparation

- Form expert groups to address knowledge gaps (e.g., academic vs. professional programmes).
- Define research priorities for complex issues (e.g., work-based learning).
- Review current practices, national ISCED mappings, and emerging educational trends.
- Engage Member States and stakeholders for input on challenges.

Research and development

- Research complex issues like evolving fields of education, interdisciplinary programmes, and work-based learning.
- Conduct peer reviews and pilot studies in select countries.
- Draft amendments to ISCED 2011 (i.e. ISCED-P and ISCED-A) and revision to ISCED-F 2013 based on findings.
- Validate through consultations with national ministries of education and statistical offices.
- Integrate peer review and quality assurance mechanisms.

Finalization and approval

- Incorporate feedback from Member States and peer reviews into the final versions of the classifications.
- Present the final versions of the classifications for adoption by relevant bodies.

Implementation

- Develop an implementation plan to support countries in transitioning to the revised classifications.
- Provide tools, training, and workshops for national ministries of education and statistical offices.
- Communication the changes globally to raise awareness.

Maintenance and future review cycle

- Establish regular review cycles to ensure ISCED remains current.
- Develop a research agenda for future issues post-implementation.

Annexes

Annex 1: ISCED Review Panel Terms of Reference

Background

The International Standard Classification of Education (ISCED) belongs to the United Nations International Family of Economic and Social Classifications, which are applied in statistics worldwide with the purpose of assembling, compiling and analysing cross-nationally comparable data. ISCED is the reference classification for organizing education programmes and related qualifications by education levels and fields. It is a product of international agreement and adopted formally by the General Conference of UNESCO Member States.

ISCED is designed to serve as a framework to classify educational activities as defined in programmes and the resulting qualifications into internationally agreed categories. The basic concepts and definitions of ISCED are therefore intended to be internationally valid and comprehensive of the full range of education systems.

The UNESCO Institute for Statistics (UIS) is the custodian of ISCED and responsible for its development and maintenance. The UIS is also responsible for providing guidance on the effective and consistent use of ISCED for data collection and analysis.

The ISCED 2011 classification was adopted by the UNESCO General Conference at its 36th session in November 2011. Initially developed by UNESCO in the 1970s, and first revised in 1997, the ISCED classification serves as an instrument to compile and present education statistics both nationally and internationally. The framework is occasionally updated in order to better capture new developments in education systems worldwide.

Following the adoption of ISCED 2011, the creation of an ISCED Committee was recommended "in order to advise UIS regarding the classification of national programmes and qualifications, to review the current version of ISCED and to identify potential areas for further development" (UNESCO Institute for Statistics, 2012, p23).[1]

Consequently, the UIS established the ISCED Review Panel in June 2023 in order to review the current version of ISCED 2011 and ISCED Fields of Education and Training 2013, their applications in the production of international education indicators and identify potential areas for further development.

Objectives

The Review Panel recommendations are expected to guide the UIS on the need for a revision of the classification. Eventually, the Review Panel shall conclude about the need for a complete revision of ISCED, of specific elements (such as definitions, scope or application of ISCED), or conclude that a revision of ISCED is not needed. Additionally, the Review Panel shall provide a roadmap and an indicative timeframe for the recommended revisions, including whether these are applicable immediately or require further work and/or consultation.

Membership

In line with paragraph 97 of ISCED 2011 endorsed by UNESCO General Conference (UNESCO Institute for Statistics, 2012), "the composition of the Committee membership should aim to be balanced both technically and geographically, and therefore would include in addition a number of educational, statistical and classification experts with knowledge of ISCED and representing different regions of the world on a non-permanent basis as well as representatives from the research and user community."

The activities of the current Review Panel will span 2023 and 2024. Membership shall be reviewed at the end of this first session (2023-2024).

For the session 2023-2024 the ISCED Review Panel is composed of 16 experts from six Member States and seven International Organisations (see Annex 1). It is balanced both technically and geographically. It represents all UNESCO regions and reflects different types of education systems. Among members of the panel, a chair is elected to lead the activities of the Review Panel over each session and is supported by a vice-chair representing the UNESCO Institute for Statistics.

Mandate

The ISCED Review Panel will:

- Review the current version of the classifications and whole strategy, the classifications questionnaires, manuals, countries mapping, and provide necessary recommendations, especially if addressing the issues identified during the review require a revision of the classifications.
- If a revision of the classifications is required, support the recommendations with the identification of potential areas for further developments of these classifications, and provide guidance and an indicative timeframe for the revision of the classifications.
- If an immediate revision of the classifications is not required:
    - Review existing quality assurance mechanisms for application of the classifications.
    - Advise the UIS for the classification of problematic national education programmes and related qualifications.
    - Propose a mechanism for peer review and validation of national ISCED mappings.
    - Review the operational manual for ISCED 2011 and propose necessary amendments.
    - Review the description of fields of education and training in ISCED-F 2013 and propose modifications, if necessary.

Scope of work

The scope of work of the Review Panel is limited to ISCED 2011, ISCED-F 2013, ISCED operational manual, ISCED mappings, ISCED questionnaires as well as implementation and methodological issues pertaining to these instruments.

Governance

A. Role of the chair and vice-chair of the Review Panel

- Lead the meetings of the Review Panel.
- Stimulate participation and guide discussions.
- Help stimulate the work of eventual working groups on specific thematic related to the classifications.
- Collaborate with the UIS to frame the work of the Review Panel regarding its assigned mandate.
- The vice-Chair is expected to act as 'back-up' in the eventual absence of the Chair.

B. Role of the UIS

- Act as the Secretariat of the ISCED Review Panel.
- Is responsible for the technical coordination, as well as overall planning and management of activities of the Review Panel.
- Will prepare, organise, and facilitate the Review Panel meetings collaboratively with the Chair and the vice-Chair, and will provide the materials necessary for the work of the Chair/vice-Chair and the Review Panel.

C. Rules of procedure

1. Processes for identifying/suggesting discussion items

- Proposal from members of the ISCED Review Panel
- External consultations with Member States

2. Decisions

The Review Panel can take decisions at each meeting. The final recommendations of the Review Panel (conceptual or content update, partial or full revision) are expected by September 2024.

A typology of decisions and illustrative examples to be taken during ISCED Review Panel meetings is presented in tables 1 and 2 below.

Decisions are made upon approval of the members of the Review Panel.

- Approval
- By consensus (ideally)
- Voting exceptionally, in case of non-consensus or strong disagreement
  - If voting: one vote per organisation[2] and per country
  - UIS for final decision as custodian in case of tie

Ways of working

- Documents, proposals from panel members
- Working groups can be constituted upon needed
- The panel will meet every 2 to 3 months at a time that accommodates to the best extent possible all members' time zone. The proposed time range is: 2-hour time slot between 12:00pm and 3:00pm EST (GMT-5) (or EDT i.e. GMT-4).
- One week prior to each meeting the Review Panel secretariat (UIS) will share a provisional agenda as well as relevant documents.
- Working language: English

Expected outcomes

The Review Panel's recommendations will be presented to UNESCO Member States for endorsement by the Education Data and Statistics Commission (EDSC) (Former Technical Cooperation Group on SDG 4) in February 2024 – and then submitted to the 43rd session of the UNESCO General Conference in 2025, for approval.

If needed, the recommendations will be presented to the UN Committee of Experts on International Statistical Classifications (CEISC) for endorsement. The CEISC could then present them to the UN Statistical Commission for approval.

To help structure decision points and inform recommendations, Table 1 presents the categories that may be used to map issues, recommendations and actions following the Review Panel's recommendations.

Composition of the ISCED Review Panel (session 2023-2024)

Member states representatives

Country name	Representative
Brazil	Ms Christyne Carvalho da Silva
	Ms Patrícia Carolina Santos Borges
Jamaica	Ms Phillipa Livingston
Norway	Mr Kjartan Steffensen
Cameroon	Ms Abanda Metogo Stéphanie
Egypt	Prof. Sayed Kaseb
	Dr. Reem Derbala
India	Mr Sh. R. Rajesh

Representatives from International Organisations	
Organisation	**Representative**
OECD	Mr Eric Charbonnier
	Ms Corinne Heckmann
UNESCO	Mr Friedrich Huebler (UNESCO-UNEVOC)
	Ms Rakhat Zholdoshalieva (UIL)
UN ECLAC	Mr Daniel Taccari
African Centre for Statistics	Mr William Muhwava
ILO	Ms. Lara Badre
	Ms. Valentina Stoevska
UNCEISC (Chair)	Mr Andrew Hancock
Education International	Mr Antoni Verger

Members of the secretariat (UNESCO Institute for Statistics)

Olivier Labé Patrick Montjourides (vice-chair) Hélène Tran Jude-Henri Jeanniton Maria-Helena Capelli Miguel Ghania Djafri

Annex 2: General practices used by the United Nations Committee of Experts on International Statistical Classifications (UNCEISC) for the revision of international statistical classifications

1. Identify the Issues that need addressing
2. Determine type of issue: Conceptual, Structural, Definitional, Guidance, Coding, Implementation, Capacity building
3. How many issues are there in each type and what are their significance or priority?
4. Based on 3, determine recommendation on scope of work required to address them
    a. Comprehensive revision to address all identified issues regardless of type
    b. Revision to address structural issues only i.e. add/delete categories
    c. Revision to address structural issues only i.e. add/delete categories and update definitions
    d. Revision to update definitions only (e.g. corrections, completely new)
    e. Revision to update guidance
    f. Is a coding issue only i.e. update a coding index
5. Recommend creation of a working group to resolve known issues, and identify any new issues and resolve, based on scope under 4
6. Recommend timeline for the revision
    - 2 years for a, b and c
    - 1 year for d and e
    - As required for f
7. Recommend implementation plan be developed
8. Recommend maintenance/revision cycle be established
9. Recommend creation of research agenda for ongoing complex issues

ISCED REVIEW PANEL RECOMMENDATIONS

Education Data and Statistics Commission (EDSC) 11

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