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## Онлайн-семинар по наращиванию потенциала по Информационной Системе Управления Образованием в Туркменистане

18-19 Октября 2021, Ашхабад / Туркменистан

## Online capacity building workshop on Education Management Information System (EMIS) in Turkmenistan

18-19 October 2021, Ashgabat / Turkmenistan

Национальная  
комиссия  
Туркменистана по  
делам ЮНЕСКО



# Online Capacity Building Workshop on EMIS in Turkmenistan

18- 19 October 2021

## Background

In 2015, the global community committed to achieving the Sustainable Development Goals (SDGs), including SDG4 on inclusive and quality education by 2030. In the Education 2030 Framework for Action, Information Communication Technology (ICT) was identified as an essential tool for achieving the ambitious targets of SDG4. As part of an initial effort 2017 Asia Pacific Regional Strategy highlighted strengthening the Education Management Information Systems (EMIS) as a high priority especially since an effective EMIS facilitates collection, organization, and analysis of data for monitoring progress towards SDG4.

EMIS is defined here as the ensemble of operational processes, supported by digital technology that enable the collection, aggregation, and analysis of educational data and information. It can be used policy making, planning, management and administration and monitoring and evaluation of the education system.

Over the years, UNESCO has been supporting member states in the development and improvement of national EMIS to facilitate progress towards EFA and SDG4.

## Objectives:

The main objectives of the workshop are:

- To reimagine the emerging needs of EMIS in light of pandemic to share some of the best national practices in the region on EMIS
- To create a forum for discussion on how EMIS can benefit Turkmenistan in its efforts towards the achievement of SDG4 particularly in the context of new normal and how UNESCO can further support national efforts in this regard

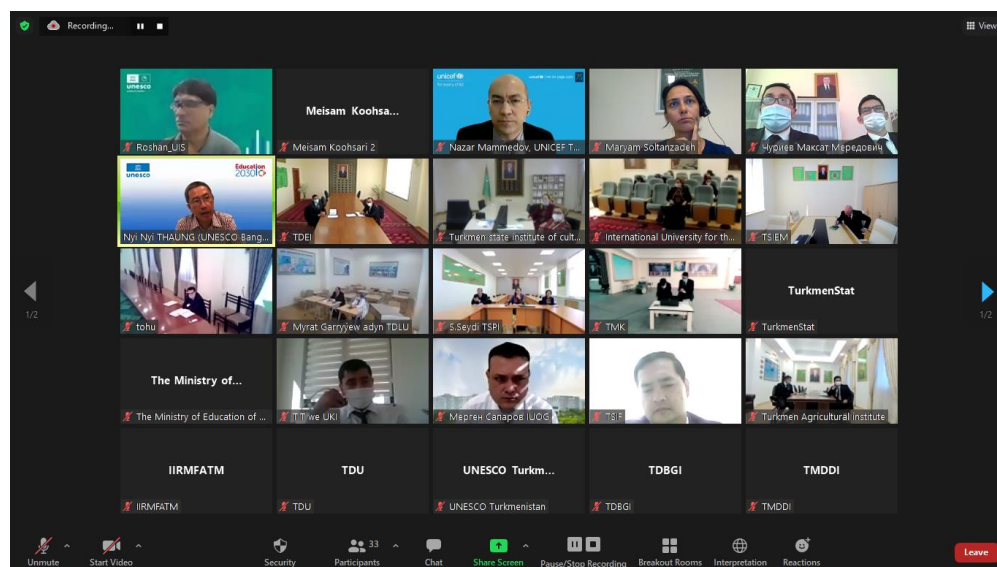
## Report of the workshop:

The Online Capacity Building Workshop on Education Management Information Systems (EMIS) in Turkmenistan was jointly organized by the UNESCO Cluster Tehran office, Secretariat of National Commission of Turkmenistan, and Bangkok Regional office on 18 and 19 October 2021.

The workshop's objective was to create a forum for discussion on how EMIS can benefit Turkmenistan in its efforts to achieve SDG4, quality education, and lifelong learning opportunities for all, particularly in the context of the new normal UNESCO can further support national efforts

in this regard. The workshop also strived to reimagine the emerging needs of EMIS considering pandemics to share some of the best national practices in the region on EMIS.

The workshop started with the opening speech of Ms. Maryam Soltanzadeh, Education officer for UNESCO, who also represented Officer in Charge Mr. Cvetan Cvetkovski. She highlighted the importance of developing and strengthening EMIS as an essential tool towards reaching the national development goals in education. Furthermore, she added that EMIS could play a crucial role in collecting, analyzing, monitoring, and managing quality data, which can pave the way for tailored policies and programs towards inclusive and equitable education for all children, including the most vulnerable and children with disabilities.



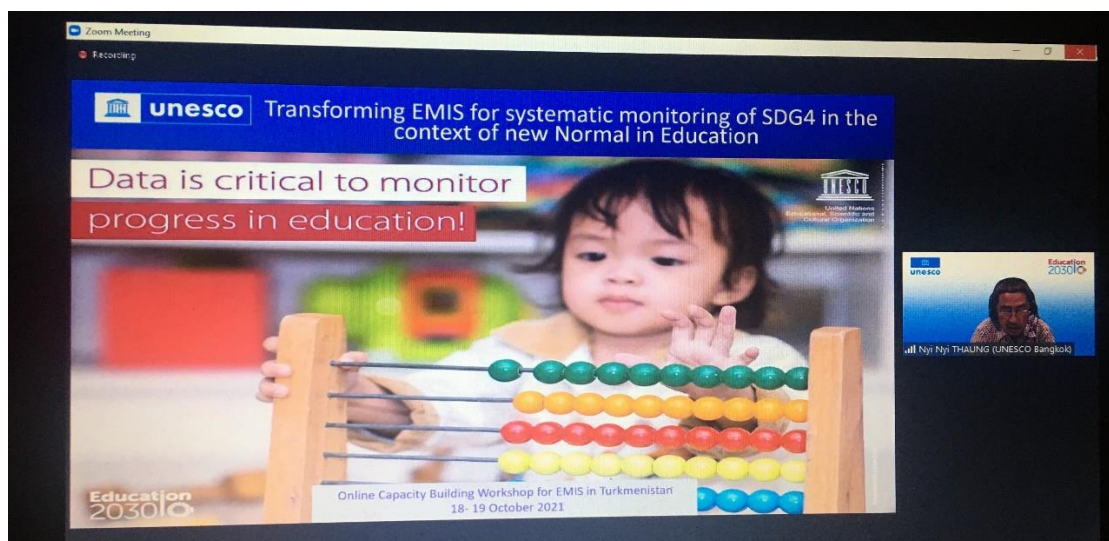
Opening speeches continued with Ms. Merjen Durdyeva, Chief Specialist of the International Cooperation Department of the Ministry of Education of Turkmenistan. She highlighted the importance of EMIS to assess the massive amount of data, establish the relationship between data, and draw a meaningful conclusion for timely and accurate government decision-making in education. She added that EMIS could also help analyze students' academic history and calculate the level of dropout risk for children, which could help anticipate immediate assistance to improve learning outcomes and reduce the dropout rates. Mrs. Gulshat Yusupova, Vice-Rector for Academic Affairs, institute of international relations of MFA Turkmenistan, was the next speaker who delivered her remarks. Mrs. Yusupova stressed the large-scale work underway in the country to modernize the national educational system, develop university science, and raise it to the level of the developed states. Mr. Aymurat Muhamedov- Vice-rector of the Engineering and Technology University of Turkmenistan, named after Oguz Khan, presented the current education and higher education system in Turkmenistan and the progress regarding digital education and information management system in the country. Mrs. Sona Muradova - Head of Social statistics Department, State Statistics Committee of Turkmenistan, was another speaker of the workshop who explained the current information management system in Turkmenistan. She described that data are collected by schools, aggregated by provinces, and transferred to the Ministry of

Education, where it is then consolidated. Following recent reforms in Turkmenistan, the department of statistics, jointly with MOE, regularly revisits the forms and statistical reporting and introduces new indicators if needed. She added the data is collected in different sections at different education levels (pre-school, primary, secondary, vocational training, and tertiary education). It includes:

- The number of schools (with details on language services, ICT services, number of computers, and level of the internet access, multimedia, and lab equipment),
- The number of facilities,
- The number of students (disaggregated by age, grade, gender, and those with special needs) and the number of teachers,

The workshop continued with different technical sessions on SDG4 indicators, benchmarking, and challenges in the contexts of post-Covid-19, and transformation of EMIS to the requirements of SDGs. Mr. Roshan Bajracharya, UIS (UNESCO Institute for statistics) Regional Advisor for Asia and the Pacific; Ms. Margarete SachsIsrael, Chief IQE; and Mr. Nyi Nyi THAUNG, Programme Specialist at UNESCO Bangkok, facilitated the technical sessions. Some of the key issues discussed in the technical session were as follows:

- SDG4 and global and thematic indicators framework,
- Establishing benchmarks using SDG4 and regional indicators by the countries, EMIS's opportunities and challenges (data unavailability, lack of data for disaggregated statistics, limited availability and use of household survey data, lack of harmonized data on learning achievements, lack of resources, lack of culture of data sharing and cooperation),
- Key factors for the sustainability of EMIS (strong policies, capacities, resources, tools, and methodologies),
- The emerging data demands and challenges in producing quality data to meet the new demand in new and emerging contexts (post-COVID-19) for quality policy and planning.



Another part of the technical presentations focused on EMIS, its evolving definition, and its different components (i.e., people, technology, models, methods, process & procedures). It was highlighted that the first step in the development or enhancement of EMIS is to decide what kind of information is needed for the country and for policy purposes of determining the type of data required. Additional levels of data disaggregation are needed as it is not enough only to get the overall numbers, but the new EMIS should be designed in a way to gather individual-level data for students and teachers. Having disaggregated data can help better analyze the situation, planning, and budgeting to ensure the needs of all children are addressed. Quality and timeliness of data should also be considered. Another critical point in EMIS development is integrating the data, so it is essential to design the database to get connected to other systems, and data should communicate with each other. Finally, the collected data should be translated to information necessary for planning and policymaking at the analytical level.

The workshop also benefited from a practical presentation from Kazakhstan as one of the best practices in EMIS in the region, delivered by Ms. Miraim Atanayeva, Vice President of the Information-Analytic Center under the Ministry of Education and Science of Kazakhstan. She explained the development process and the timeline for the new national EMIS in Kazakhstan, which was initiated in 2012 and became fully functional for all levels in 2019, to automate the system and reduce the reports and time spent by the teachers. She explained that it had been a learning and time-consuming process with lots of ups and downs. The newly established EMIS covers almost all the indicators of SDG4, so for all kinds of reports, organizations can get reports through these databases, and no other data collection is required. In addition, the system is integrated with more than 100 different systems in Kazakhstan to check the children's backgrounds and their particular needs and required services in cooperation with other organizations. There are designated people at each school responsible for filling in the relevant data to the national database. Then all the data get to the committee of statistics for validation and monitoring. These would be uploaded to MOE and the national statistics committee at a later stage. She also shared lessons learned; everything should be user-friendly and straightforward to be accessible for all the staff with any computer literacy level and school with any internet speed connection. In addition, the system should not be overloaded, and only the required data should be collected. She emphasized that there should first be a political will behind the program. The system was created in collaboration with other parties, and indicators were discussed with the ministry of education at different levels to ensure the system could gather all the required data. The presentation engaged participants from different organizations who asked questions on measures for the learning outcomes, benefits of the system during Covid-19, access to the database for the public, cyber security of the data, and future visions for EMIS in Kazakhstan.



Nazar Mammedov, program officer at UNICEF-Turkmenistan, also presented. He talked about the framework for the development of EMIS, the role of UNICEF in supporting the government of Turkmenistan in the development of EMIS, and the need to have an inclusive and well-established system for data collection and analysis at all the areas related to children's rights like healthcare and social protection. He raised his concerns about the available system, which has some level of efficiency, but there is additional space for optimization for quality, in-depth, and speedy data collection, which can help for policymaking, increase reliability, update the systems and reduce the number of the forms, and ensure there is a well-established EMIS. UNICEF proposed establishing an interagency working group on the development and enhancement of EMIS to decide on the roadmap and action plans. Participation of the broader range of stakeholders was recommended, and further discussions were needed to decide on the concept in the initial stage.

It was summarized at the end that the first step would be to collectively decide what kind of EMIS the country wants and which information they want from EMIS and other systems. There is no ready-made EMIS system to use, and a local version of EMIS should be developed to adapt to the local needs and capacities. The system could be developed based on the learning experience of other countries and the technical capabilities in the country. It is also necessary to think about how EMIS can help the monitoring of SDG 4 indicators. The need for individual-level data collection, which could give more power to have disaggregated data, was also emphasized.

This workshop was a starting point, and further cooperation is needed to mobilize the political will to enhance the EMIS in the country, and follow-up technical support and work planning for 2022 for strengthening EMIS in the region will be needed.

In this workshop there were more than 50 participants from different organizations including: Oguz Han Engineering and Technology University of Turkmenistan, S.A.Nyýazow adyndaky Türkmen oba hojalyk uniwersiteti, Dowlletmammät Azadi Turkmen National Institute of World Languages, Turkmen State Institute Of Finance, Turkmen State architecture and construction institute, Institute of International Relations of the Ministry of Foreign Affairs of Turkmenistan, Turkmen State Institute of Economics and Management, Institute of Telecommunications and informatics of Turkmenistan, Myrat Garryyev State medical university of Turkmenistan, Turkmen State Institute of Physical Culture, Turkmen State Institute of Culture, Maya Kuliýeva Turkmen National Conservatory, State academy of arts of Turkmenistan, Institute of Engineering and Transport Communications of Turkmenistan, Turkmen agricultural institute, State Energy Institute of Turkmenistan, Seyitnazar Seydi Turkmen State Pedagogical Institute and State Committee on Statistics of Turkmenistan.

## Agenda

Day 1 – October 18, 2021 – Ashgabat Time

Time	Agenda	Topic	Presenter/Discussant
9:00-9:20	Opening and Introduction to the meeting		UNESCO Tehran
			Ms. Merjen Durdyeva - Chief Specialist of the International Cooperation Department of the Ministry of Education of Turkmenistan
			Mrs. Gulshat Yusupova, Vice-Rector for Academic affairs, Institute of international relations of MFA Turkmenistan
			Mr. Aymurat Muhamedov- Vice-rector of the Engineering and Technology University of Turkmenistan named after Oguz Khan
9:20-9:50	Presentation of SDG4 and Data in EMIS and regional and national benchmarking	<ul style="list-style-type: none"> <li>• SDG4 indicators framework and data sources – focusing on benchmarking indicators</li> <li>• Role of EMIS in quality data production in education for policy making and planning- lessons from countries</li> </ul>	Roshan Bajracharya, UIS Regional Advisor for Asia and the Pacific, UIS
9:50-10:20	Emerging data demands and challenges in production of quality data to meet the new demand in the context of new and emerging context (post COVID-19) for quality policy and planning	<ul style="list-style-type: none"> <li>• Impact of COVID-19 on education systems and issues and challenges in production of quality data</li> </ul>	Margarete Sachs-Israel, Chief IQE, UNESCO Bangkok

10 min	Break		
10:30-11:00	Development of Education data production system in the country	Education data production in Turkmenistan, mechanism, process, issues, and challenges	Turkmenistan: Mrs. Sona Muradova - Head of Social statistics Department, State Statistics Committee of Turkmenistan; Rahymberdi Kerimov - member of Party of Industrialists and Entrepreneurs of Turkmenistan
11:00-11:30	Best practices in EMIS in the region		MOE Kazakhstan and Almaty Office
11:30-11:50	EMIS strengthening plans	Status and progress including issues and challenges in EMIS development in the country	UNICEF
11:50-12:30	Q&A/ Discussion		Moderated by UNESCO Teheran

## Day 2 – October 19, 2021 – Ashgabat time

Time	Agenda	Topic	Presenter/Discussant
9:00-9:10	Quick recap and introduction to the agenda for the day		UNESCO Tehran
9:10-10:00	Transforming EMIS to the requirements of SDG4 and within the new Normal in Education	Aligning EMIS with SDG4 indicators, addition of indicators related to COVID 19 and monitoring	Nyi Nyi THAUNG, Programme Specialist, IQE, UNESCO Bangkok
10:00-10:30	Discussion		
10 min	Break		
10:40-11:10	Ensuring availability of data in EMIS to monitor SDG4 in a new context of resilience Education	Developing individual student based EMIS system through developing establishing EMIS	Nyi Nyi THAUNG, Programme Specialist, IQE, UNESCO Bangkok
11:10-11:40	Discussion on follow up technical support and work planning for 2022 for strengthening EMIS in the region		UNESCO Tehran and UNICEF Turkmenistan
11:40-11:45	Closing		UNESCO Bangkok