# INTERSESSIONAL PANEL OF THE UNITED NATIONS COMMISSION ON SCIENCE AND TECHNOLOGY FOR DEVELOPMENT (CSTD)

**Lisbon, Portugal**
**6-7 November 2023**

**CSTD 2023-2024 priority themes on "Data for Development" and "Global cooperation in science, technology and innovation for development"**

Statement submitted by

Egypt

# Egypt's Commentary on the Issue Paper: Data for Development

While Egypt strongly agrees with the importance of data protection for achieving developmental goals, and upon careful review of the issue paper by the **Egyptian Embassy in Portugal** and the **Egyptian Ministry of Communications and Information Technology**, the following comments were made by the Egyptian representatives from both entities as follows:

1. It was found that the issue paper presented tackles some points such as **human rights, freedom of speech, and democracy**, which we think do not fall under the mandate of the distinguished CSTD. This is essentially valid, especially in light of the existence of other UN bodies concerned with addressing such issues. We, therefore, think that it is important to keep focused on the technical matters related to the development of science and technology.

2. On the proposal of **creating unified taxonomies for data-related topics**: We believe that this directly relates to the national considerations of each country in relation to defining the scope of data that is related to national security. This scope varies between countries and even between different time periods inside the same country. Calling for unifying taxonomies is like calling for unifying the national security goals of countries.

3. On the proposal of **creating common regulations for interoperability and a common governance framework**: We believe that this is a very controversial and questionable issue, since this is drawing a "one size fits all". Countries shall keep their sovereignty to regulate and choose their best-fit strategy. Egypt suggests that common frameworks would better work to enforce common goals and not mechanisms, following the SDGs model, for example.

4. The same goes for the **proposal for common interoperability and cybersecurity solutions/standards** and **the call for the public sector's adoption of ready solutions instead of creating new ones**: All these issues depend on governments' capabilities, adoption of technologies and assessment of different technologies pros and cons. Therefore, we believe that defining goals would work better than unifying standards and solutions.

5. On the concept of **social contract**: We think that some applications of this concept may interfere with the national security of countries. This is based on the fact that individuals are the building blocks of this model, and individuals are citizens of countries with separate jurisdictions.

6. On the point **arguing that countries may be obliged to accept economic and trade agreements at the expense of human rights**: We think this may not be essentially accurate. Both economic considerations and human rights are under the jurisdiction of sovereign countries. When making decisions related to data protection, countries are supposed to make a rational decision based on striking the required balance between different considerations such as the economic side (ex: the demand for goods and services, competitive advantage of national firms, risk of retaliation, risk of foreign businesses exiting), data access (such as the scope of data access, speed of access), severity of requirements in the law to ensure control and safety, severity of compliance mechanisms

to ensure enforcement and sanctions applied. This is in addition to any considerations that may help the country reach the most rational decision.

7. **On exploring instruments, such as establishing independent national ethics review bodies and data sandboxes to augment data governance**: We believe this is a very valid recommendation and that all the other points shall be taken to the same direction: drawing common goals and not guidelines and thereby leaving the choice of mechanism to the countries according to their level of development, their own assessment of economic conditions, security concerns of data, their level of adoption of different technologies, their own definitions of national security,..etc.

8. **On proposing ways to capture data value in the SNAs**: We believe this is a very important point that we think shall be a priority on the UNCTAD's agenda over the coming period and to conduct workshops and capacity building for the topic.

# Egypt's Contributions during the Intersessional Panel of the CSTD 2023-2024
*(November 6-7, Lisbon)*

## Theme One: Data for Development:
### Egypt's progress in the data for development area:

In Egypt, we aim at securing the welfare of citizens by empowering them to make informed decisions in the digital environment and by strengthening digital security as a foundation for digital transformation, economic growth, and social prosperity. Therefore, we were really keen on developing policy approaches that enhance trust, security, and resilience, but also on harmonizing these data security regulations with the cross-border transfer of data to facilitate the free flow/movement of data.

The protection of personal data was guaranteed/regulated in Egypt by different sectoral laws, guaranteeing confidentiality of data obligations, founded mainly on general principles of laws- including the Egyptian Constitution and Civil Law, the Cybercrimes Law, and Labor Law. The Personal Data Protection Law no. 151 was enacted in 2020 - greatly drawn upon the GDPR. The law grants fundamental rights to the Data Subject through regulating the processing and storage of personal data by service providers and avoiding disclosure and processing of such data without the consent of the respective individual.

Since, we are quite aware that the collection, storage, and processing of data is at the heart of the digital economy, and much of this information is about people, and the key to making the digital economy work, relies on regulating the collection and use of data held about them. Allowing data subjects to be informed about the use and processing of their data and where applicable obtaining consent therefrom. Hence, a need for an easy consent-based data sharing system, using, for instance, smart contracts, that dynamically reflect the individual's consent over their personal data and allow them to provide or withdraw their consent over time. Such a model would guarantee that individual consent is respected and that all participants in the data-sharing platform are accountable.

## Theme Two: Global Cooperation in Science, Technology and Innovation:
### Egypt's progress in the STI area:

Egypt is fully aware and interactive with the importance of cooperation in science, technology, and innovation on national, regional and global levels. Egypt has been putting STI central to its national plans and working programs for years and this has recently bore fruit through the progress achieved in reality and clearly reflected in relevant international indices.

One of the most recent manifestations of cooperation in STI is Egypt's cooperation with the OECD on AI program. In this context, Egypt has actively participated, in cooperation with the Organization for Economic Cooperation and Development (OECD), in drafting the AI recommendations document, which entails the principles for the responsible use of AI, including capacity building, governance, responsibility, humanity, transparency, and other important principles. Egypt is the first Arab and African country to formally join the countries accepting the OECD document on responsible AI. Egypt also translated a copy of the recommendation into Arabic to promote the regional dimension and enhance the Egyptian participation in this international forum.

In addition, Egypt is currently cooperating with OECD, within a group of experts who have been selected to study how to implement the recommendation practically in line with national policies pursued by countries, as the implementation is within a number of initiatives for achieving development.

In a related context, Egypt, as an observer, joined the Global Partnership on AI (GPAI), concerned with scientific research in the field of AI, in accordance with the aforementioned recommendation on the responsible use of this emerging technology.

Egypt is currently leading the African Working Group on AI, as well as an Arab working group on AI to unify efforts in the activities related to AI among the member states. Egypt has also been selected for the position of Vice Chair of the UNESCO international team of experts in charge of preparing a draft of the first international document related to the ethics of AI. Egypt has also organized regional consultations at the Arab level on this document, where more than 15 Arab countries have participated. Egypt is currently participating in the governmental negotiations on the document in preparation for its adoption in November 2021 at the UNESCO General Conference.

Furthermore, Egypt actively participates in the activities of international organizations related to discussing AI issues, including the United Nations Educational, Scientific and Cultural Organization (UNESCO), the United Nations (UN), the International Telecommunication Union (ITU), the World Intellectual Property Organization (WIPO), the International Labor Organization (ILO), the World Summit on the Information Society (WSIS), the Internet Governance Forum, the Forum on Science, Technology, and Innovation (STI Forum) and Paris Peace Forum, during which the Egyptian AI project entitled "optimal use of water for agriculture" was selected from among the top 100 projects.

**The following lines present the Egyptian progress through the 4 key elements of STI, as presented by the CSTD's theoretical framework.**

**On strategic planning**, Egypt views strategic planning as the starting point of effective planning, along with a clear analysis of strengths and weaknesses and technology assessment. This is evident on both national and sectoral levels. On a national level, science, technology, and innovation are clearly positioned inside the *Egypt Vision 2030*, especially in relation to SDGs. For progress assessment and national corrective actions, this is followed by *Egypt's Voluntary National Review*.

On the sectoral level, *Egypt's ICT 2030 Strategy* and its *Digital Egypt* affiliate are the basic strategic plans for the ICT sector in Egypt, in addition to sub-strategies pertaining to different areas of work in the sector. Shedding specific light on the AI area, Egypt developed a concrete strategic plan, *Egypt National Artificial Intelligence Strategy*, which has been evaluated positively in relevant international indices, such as the Oxford Government AI Readiness Index and Tortoise Global AI Index. Worth mentioning that Egypt ranks the 1st on African level and the 2nd on Arab level regarding the Government Strategy pillar (Tortoise 2023).

Emanating from the importance of strategic planning and technology assessment for frontier technologies, MCIT has recently established a national committee for assessing the metaverse technology; its prerequisites, opportunities, and threats.

STI, with its tangible and non-tangible components, is at the core of every strategic plan, due to Egypt's belief of being fundamental to the success of strategic plans.

**On STI prerequisites**, Egypt has been working actively on developing _digital infrastructure_ so as to work as an enabler of the adoption of frontier technologies.

As part of MCIT efforts and in light of the ICT 2030 strategy, Egypt provides high-quality telecommunication services through a secured digital infrastructure, several projects were carried out to develop the national and international digital infrastructure.
- *Implementing a three-phase comprehensive plan* through Telecom Egypt at 100 billion EGP to raise the efficiency of telecom networks and upgrade the telecom infrastructure nationwide using cutting-edge technology, namely fiber optics. Efforts to boost Internet speed helped improve Egypt's ranking in fixed internet speed to become the highest in Africa, up from 40th in early 2019, according to Ookla.
- *Rolling out 4G and virtual landline licenses*, offered to mobile network operators (MNOs) in Egypt. In 2016, the four MNOs signed an agreement to obtain the licenses and radio frequencies. As a result, the state treasury received about $1.1 billion and EGP 10 billion in exchange for the licenses. Egypt is also currently working hard to officially launch 5G.
- *Carrying out a project to connect all 31,500 government buildings nationwide* through a fiber optic network to ensure service stability and continuity even during internet outages. More than 18,000 government buildings have been connected, and the rest of the buildings are in progress.

- *Supplying 2,563 secondary education schools in different governorates with telecom infrastructure* to enable high-speed internet access through fiber optics. Telecom networks were developed and 4,500 km of fiber optics cables were extended from telephone exchanges to the schools.
- *Establishing the National Center for ICT Service Quality Control and Monitoring* at 50 million EGP to measure the quality of mobile voice and data services provided by MNOs in Egypt following recognized global standards in measuring the quality of telecom services.
- *Offering and assigning new frequency bands for MNOs in Egypt*. 130 MHz in the 2600 MHz frequency band was offered, with nearly $2 billion in revenues. The aim was to enhance network readiness to provide next-generation ICT services while following global quality standards, meet the growing demand for telecom services in the Egyptian market, and support digital transformation and efforts of building Digital Egypt.
- *Developing a regulatory framework for licenses to establish and lease wireless communication towers* as part of a plan to expand network coverage and improve the quality of services. More towers were erected to accommodate the growing number of users in the Egyptian market.
- *The President of the Republic inaugurated three submarine cable landing stations in Ras Ghareb, Zaafarana, and Sidi Krir*, bringing the total number to 10 landing stations. The aim was to enhance the global infrastructure and ensure the continuity and stability of the service provided to beneficiary countries of international connectivity services.
- *The President also opened the 2.8 billion EGP Regional Data Hub (RDH)* of Telecom Egypt, with a 24-megawatt total capacity.
- *Completing the Internet Corridor of Egypt (ICE) in Morshedeen Road*, a 20-year-long-cherished dream of the ICT sector. ICE is a fiber optic crossing route connecting landing stations on the Red Sea to others on the Mediterranean. The project was implemented in one year.
- *Developing a regulatory framework for providing IoT services in Egypt*. With IoT being one of the top technologies of Industry 4.0, the framework enables the operation of smart city systems and digital services, including smart homes, smart meters, and smart mobility.

Egypt has also been working actively on leveraging *human capital and knowledge* so as to work as an enabler to the adoption of frontier technologies. It is worth mentioning that Egypt has achieved international applause this year through its rankings in international indices in relation to assessing talents and human capital pertaining to frontier technologies. Most notably, Egypt has improved 17 ranks in the talent pillar in Tortoise Global AI Index 2023, sitting thereby on the first Arab and African place in talents pertaining to AI. Some of the efforts in leveraging human capital are as follows:

- *Multiplying the number of trainees and budget for technology training, with a target set to train 250,000 young people at 1.3 billion EGP in FY 2022/2023*. The training strategy of MCIT is implemented in cooperation with global tech companies following a pyramid approach. It starts with providing basic training to enhance youth employability,

followed by specialized training, and then programs for qualifying young people for tech jobs.

- *Successfully concluding training for two cohorts of the Digital Egypt Builders Initiative.* DEBI is a scholarship aimed at granting a professional master's degree in one of the following areas of specialization: data science and AI, cybersecurity, robotics and automation, digital arts, and FinTech. The initiative is carried out in collaboration with major international universities and local and global ICT companies to help learners gain hands-on experience. MCIT also cooperates with renowned firms and institutions to develop students' leadership, personal, and language skills. The first cohort was composed of 109 students and the second of 257. The students majored in data science and AI, digital arts, FinTech, robotics and automation, and cybersecurity. The training was delivered in cooperation with the University of Ottawa and Queen's University in Canada, University College Cork in Ireland, and University of Sains Malaysia (USM).
- *Launching the Digital Egypt Cubs Initiative (DECI),* a scholarship tailored to upskill younger students, from the first year of preparatory school to the second year of secondary school, nationwide. Areas of specialization include software development and digital arts, networks and cybersecurity, AI and data science, and robotics and embedded systems. DECI also involves activities for developing personal and leadership skills. The initiative is joined by nearly 8,400 students, and it includes a basic program that is attended by 3,937 students.
- *Founding EUI in Knowledge City in the New Administrative Capital.* EUI is the first specialized ICT university in Africa. It works to shape a generation of experts in informatics and future technologies. The University boasts four faculties: the Faculty of Computing and Information Sciences, the Faculty of Engineering, the Faculty of Business Informatics, and the Faculty of Digital Arts and Design. EUI partners with the world's top universities to grant students dual degrees.
- *Launching Mahara-Tech, an online learning platform by ITI.* The platform has attracted 435,000 learners.
- *Building seven WE Applied Technology Schools,* in collaboration with the Ministry of Education, in Cairo, Giza, Alexandria, Dakahlia, Suez, Minya, and New Valley. WE ATS is the first smart ICT-specialized school to produce competent technicians.
- *Establishing the Egyptian African Telecom Regulatory Training Center (EG-ATRC)* of the National Telecom Regulatory Authority (NTRA) in Smart Village. EG-ATRC is the first telecom regulation-focused training center in Africa.

Egypt has been working actively on promoting *data governance* so as to work as an enabler to the adoption of frontier technologies.

- The protection of personal data was guaranteed/regulated in Egypt by different sectoral laws, guaranteeing confidentiality of data obligations, founded mainly on general principles of laws- including the Egyptian Constitution and Civil Law, the Cybercrimes Law, and Labor Law.  The Personal Data Protection Law no. 151 was enacted in 2020 - greatly drawn upon the GDPR -.  The law grants fundamental rights to the Data Subject

by regulating the processing and storage of personal data by service providers and avoiding disclosure and processing of such data without the consent of the respective individual.

**On R&D**, Egypt's efforts and investments in R&D have been applauded by international indices in 2023. Most relevant here is the S&T Clusters ranking of the WIPO 2023, and the UNCTAD's Readiness for Technology Frontiers 2023.

With regards to the fact presented in the issue paper that the average R&D investment as a percentage of GDP is around 0.53 in low and middle-income countries, the UNCTAD's Readiness for Frontier Technologies report stated that only a few developing countries approach the 1%, such as Egypt, Brazil, Thailand, and Turkey. More importantly, the UNCTAD's report stated that even the relatively advanced developing countries have not increased that expenditure. Exceptions were Thailand, where between 2013 and 2018, the figure grew from 0.44 to 1.14 per cent, and Egypt, which grew from 0.64 to 0.96 per cent.

This progress, among others, has led to an improvement of four ranks in the assessment of readiness for frontier technologies. Egypt has also been featured in the WIPO's list as one of the countries with top S&T clusters (beyond the top 100).

**On Innovation**, Egypt's Technology Innovation and Entrepreneurship Centre, established as ITIDA's arm for promoting innovation in technology. TIEC is very active in promoting technology innovations through incubators, accelerators, different programs as well and pilot projects.

On another note, and based on the importance of setting a suitable ecosystem for innovation, Egypt has recently released its first *AI Ethical Guideline,* so as to promote innovation while guaranteeing ethical guidelines.