Explanatory Note
TO THE UNITED NATIONS ECONOMIC AND SOCIAL COMMISSION FOR ASIA AND THE PACIFIC (ESCAP) INFORMATION AND COMMUNICATIONS TECHNOLOGY AND DISASTER RISK REDUCTION DIVISION

Sponsored by: Kazakhstan

CONCEPT

UN ESCAP Asian and Pacific Digital Solutions Centre for Sustainable Development

Version: 27 January 2026

The Centre is designed to become a trusted and neutral platform under the UN umbrella, which identifies best-practice digital solutions from Asia-Pacific countries in public and government services, matching them to the needs of other member states in terms of achieving the Sustainable Development Goals, and is enabling their implementation there in a timely, cost-effective and sustainable manner.

1 Basis for project implementation:

- The United Nations Secretary-General's «Our Common Agenda» initiative highlights «Improving digital collaboration» through its seventh commitment. This commitment underscores the need to connect all people to the Internet, prevent Internet fragmentation, and protect data and the digital commons.
- Kazakhstan, through the Ministry of Artificial Intelligence and Digital Development, is Vice-Chair of Working Group 1 on Connectivity for All as Vice-Chair and Co-Chair (with the Republic of Korea) of Working Group 3 on Digital Data which leads implementation of UN ESCAP's Asia-Pacific Information Superhighway (APIS) Action Plan for 2022-2026.
- Outcome Report of Second Session of the SPECA Working Group on Innovation and Technology for Sustainable Development which proposed the establishment of a digital institutional framework and welcomed the initiative of Kazakhstan and ESCAP in setting up the Digital Solutions Centre for Sustainable Development (DSC SD), which is aimed at creating foundations for an inclusive digital economy in SPECA countries. The WG appreciated the research undertaken by Kazakhstan and ESCAP experts on the subject and requested the secretariat to facilitate the delivery of a roadmap on setting up the DSC SD with an action plan to support digital transformation in the SPECA countries for sustainable development.
- Tashkent Statement on Sustainable Transport, Trade and Connectivity in the SPECA Region for a Greener, Circular and Inclusive Post-Pandemic Recovery, 2021 SPECA Economic Forum which take note of the offer of the Republic of Kazakhstan to create a

SPECA Digital Solutions Centre for Sustainable Development (DSC SD) as an implementing tool to advance the digital transformation in the SPECA region.

- Report ESCAP/CICTSTI/2022/6 of the UN ESCAP Fourth session of the Committee on Information and Communications Technology, Science, Technology and Innovation, Matters calling for action by the Commission, Recommendation 4 which noting with appreciation the initiative of the Government of Kazakhstan establishing the Digital Solutions Centre for Sustainable Development to provide practical digital solutions in Central Asia and beyond.
- Decisions of the Third Session of the SPECA Working Group on Innovation and Technology for Sustainable Development which appreciated and supported the initiative of the Government of Kazakhstan and ESCAP in setting up the Digital Solutions Centre for Sustainable Development (DSC SD) for SPECA members States and Mongolia to promote digital integration in the subregion. This would also provide effective digital solutions in the transforming process towards an inclusive digital economy and society. In this regard, the Working Group welcomed the outcomes of the Survey and the research undertaken by Kazakhstan and ESCAP experts on options for the roadmap for setting up the Digital Solutions Center for Sustainable Development (DSC SD) for SPECA countries and the respective Action Plan.
- UN ESCAP Resolution E/ESCAP/RES/79/10, which took note with appreciation the initiative of the Government of Kazakhstan on establishing a digital solutions centre for sustainable development to provide practical digital solutions in Central Asia and beyond.
- Decisions of the Fourth Session of the SPECA Working Group on innovation and technology for Sustainable Development, which took note with appreciation the initiative of the Government of Kazakhstan through UN ESCAP Resolution E/ESCAP/RES/79/10 to establishing a «digital solutions centre for sustainable development» (DSCSD).
- Conclusions and recommendations of 2023 SPECA Economic Forum, which took note with appreciation the initiative of the Government of Kazakhstan to set up a digital solutions centre for sustainable development for SPECA and beyond to promote understanding and use of international digitalisation tools.
- UN ESCAP Resolution E/ESCAP/RES/80/1, which took note with appreciation the initiative of the Government of Kazakhstan on establishing a digital solutions centre for sustainable development to provide practical digital solutions in Central Asia and beyond.
- UN ESCAP Astana Ministerial Declaration on Digital Inclusion and Transformation in Asia and the Pacific ESCAP/MCDIT/L.2 which welcome further consideration of the proposal of the Government of Kazakhstan for the establishment of a digital solutions centre for sustainable development, under the auspices of the Commission as part of its conference structure, subject to the availability of extrabudgetary funding, while paying due consideration to the avoidance of duplication with specialized organizations and other bodies subsidiary to the Commission.
- Outcome Report of Eighth Session of the Asia-Pacific Information Superhighway Steering Committee (APIS) and Regional Review of the World Summit on the Information Society (WSIS), which recommended within the framework of the APIS Action Plan 2022-2026 and in line with paragraph 19 (d) of the Astana Ministerial Declaration on Digital Inclusion and Transformation, the Committee committed to supporting an independent feasibility study and that the ad-hoc working group for the consideration of the establishment of a Digital Solutions Center consist of regional policymakers and technical experts representing member States and multistakeholder interests to ensure diversity and robust digital technical capacity.
- UN ESCAP Resolution E/ESCAP/RES/81/4 which notes the process initiated for the

further consideration of the proposal of the Government of Kazakhstan for the establishment of an Asia-Pacific digital solutions centre for sustainable development, in Kazakhstan, as a regional institution of the Economic and Social Commission for Asia and the Pacific; Also notes in this regard that, through voluntary funding contributions, an independent feasibility study on the role, structure and financing of the proposed digital solutions centre for sustainable development has been commissioned and that an ad hoc working group open to all members and associate members has been established, with online participation available, to review in a transparent manner the outcome of the independent feasibility study and recommend a road map for strengthening the sharing of practical digital solutions for the Asia-Pacific region.

- Decisions of the Sixth Session of the SPECA WG on Innovation and Technology for Sustainable Development, which welcomed updates from Kazakhstan and ESCAP secretariat on the establishment of the Digital Solutions Center for Sustainable Development (DSC SD) in Kazakhstan, as a regional hub for digital cooperation in SPECA and beyond. The WG recommended the members and ESCAP continue multilateral consultations on finding common approaches to institutionalize digital solutions for sustainable development.

2 Practical implementations:

Type of Centre: a community of engineers, legists and policymakers. R&D Mode.

Tasks:

- Identification of critical digital technologies that can drive significant progress towards achieving the Sustainable Development Goals (SDGs).
- Establishment of a National Digitalization Framework.
- Development of clean software versions that can be adapted and implemented across different countries.
- Providing access to such technologies on a voluntary basis, especially for the least developed countries, landlocked developing countries and small island developing States.
- Knowledge sharing among specialists from participating countries on effective IT methodologies and best practices.
- Operations based on the Technology Hub Mode.

Operational architecture:

Share by codes, technical documentation, and methodology of the proposed software.

Domains:

Economic development, public administration, water, food security, healthy lifestyles, healthcare, education, gender equality, natural resources, ecology, climate, disaster risk management, energy, low carbon green growth, jobs creation, innovation, infrastructure, fighting inequality, urban development, sustainable consumption, justice, human rights, international cooperation, artificial intelligence, and sustainable development.

Personnel:

- Secondment of two IT engineers/policymakers from UN ESCAP member States and associate members at the initial stage.
- 136 working places.
- Other international institutions and organisation can contribute.
- The operation of the Centre will be administered by a head of the centre (D1) and four leading professional experts (P5, P4, P3).

Basic equipment:

- Screens (monitoring centre mode)
- Server and network equipment
- Database, data logs

Collaboration model:

States will be provided with free access to all IT products, as well as assistance in their utilisation.

International Depository of Digital Solutions.

A complementary model in cooperation with existing UN ESCAP regional institutions:

- UN ESCAP Asian and Pacific Centre for Transfer of Technology (APCTT) (*New Delhi, India. Established in Bangalore, 1977*) in the area of the digital technology transfer. Scientific cooperation.

  Development and implementation of institutional norms, legal frameworks, and standards enabling the free exchange and adoption of digital solutions among countries.

  The extensive experience of the APCTT is of great importance, as the main activities of the Digital Solutions Centre will focus on the transfer of digital solutions.

  Currently, significant and often insurmountable barriers, coupled with the lack of a comprehensive regulatory framework governing the transfer of digital technologies create significant obstacles for countries. Many of these barriers are related to the willingness or unwillingness of states to engage in bilateral cooperation.

  It is therefore crucial to establish national institutional norms and standards that would enable countries to freely adopt digital solutions - particularly through neutral platforms facilitated by UN institutions.

- UN ESCAP Asian and Pacific Training Centre for Information and Communication Technology for Development (APCICT) (*Incheon, Republic of Korea. Established in 2006*) in the field of training of representatives of the countries where the projects will be implemented. Scientific cooperation.

  Organization of capacity-building activities, including training sessions, professional development programmes, and advanced courses for specialists facilitating the exchange of experience, technologies, and knowledge in the digital sphere among countries.

  Experience has demonstrated that the successful transfer of technology from one country to another requires adequate training and capacity-building support for specialists. It is estimated that thousands

of new professionals across the region will require training to effectively support this process.

- UN ESCAP Asian and Pacific Centre for Development of Disaster Information Management (APDIM) (*Tehran, Islamic Republic of Iran. Established in 2018*) in the field of digital solutions for disaster management. Scientific cooperation.

  Collaborative work on identifying and adapting new digital solutions for disaster risk reduction.

  The consequences of global climate change know no territorial boundaries, and devastating natural disasters often affect entire regions.

  The timely sharing of new and effective digital solutions developed by any country can play a critical role in saving lives and safeguarding the well-being of millions of people.

- UN ESCAP Statistical Institute for Asia and the Pacific (SIAP) (*Chiba, Japan. Established in 1970)* in the field of work with socio-economic indicators, big data. Scientific cooperation.

  Collaborative work on identifying and adapting new solutions and mechanisms for data consolidation.

- UN ESCAP Centre for Sustainable Agricultural Mechanization (CSAM) (*Beijing, China. Established in 1977)* in the field of implementation of advanced digital practices in agricultural mechanization. Scientific cooperation.

  Collaborative work on identifying and adapting new digital solutions in the field of sustainable agricultural mechanization

Cooperation with other institutions:

ADB:	Asia Development Bank
CDPI:	Centre for Digital Public Infrastructure
DPGA:	Digital Public Goods Alliance
DIA:	Digital Impact Alliance
FAO:	Food and Agriculture Organisation (UN)
ITU:	International Telecommunications Union
MDDIAI:	Ministry of Digital Development, Innovations and Aerospace Industry (Kazakhstan)
NITEC:	National Information Technologies Joint Stock Company
KazAid:	Kazakhstan Agency for International Development
KISDI:	Korea Information Society Development Institute
SPECA:	United Nations Special Programme for the Economies of Central Asia
UNDP:	United Nations Development Programme
UNECE:	United Nations Economic Commission for Europe
UNTB:	United Nations Technology Bank for Least Developed Countries

Donation from Kazakhstan:

The Government of Kazakhstan will provide premises and financial support.

Kazakhstan will host the Centre and cover its institutional, programmatic, and operational costs for a period of five years, up to a total amount of 15 million US dollars.

Add-ons:

- Kazakhstan has already formulated its proposal for 23 digital solutions, which we are ready to provide for Asian and Pacific countries as in-kind contributions.
- These 23 solutions include public services, cloud document management, taxation, customs procedures among others.
- All these solutions have a proven track record of successful implementation over several years and are ready for replication in other countries.
- The technologies offered by Kazakhstan could play an important role in strengthening digital capacities within the UN system globally. Kazakhstan envisions contributing to the modernization of the Organisation's management tools through advanced digital technologies.

Current legal status

- Kazakhstan submitted a resolution on the establishment of the Centre at the eighty-second session of the UN ESCAP Commission in April 2026.

Next step

- Kazakhstan invites Member States to co-sponsor this resolution.
  Kazakhstan seeks to cooperate with potential partners with a view to combining efforts and resources for the effective implementation of the initiative.

3 Operational modalities

Vision:

A united world on one platform. We are creating a time for practically implementing the world's best solutions in digitalisation and innovation among ESCAP members and associate members. One needs to forget about narrowly defined interests in favour of not only exchanging ideas but also integrating solutions to start real acceleration in SDG implementation.

Mission:

Timely and cost-effective selection and support for the implementation of the best solutions/critical digital technologies in compliance with the UN Secretary-General's Our Common Agenda and the upcoming Digital Global Compact to ensure significant progress towards achieving the Sustainable Development Goals of the 2030 Agenda.

Principles:

- Ensuring cross-country integration in the processes of digital transformation
- Application of an integrated approach, selection of best practices
- Support in the implementation of technical solutions
- Promoting a digital ecosystem based on common standards and access protocols across Asia-Pacific countries.

Steps to Sharing Digital Solutions:

The core function of the DSC is to enable one country with a digital solution to successfully transfer and implement it in, another, along with the skills, expertise and support needed to maintain and ensure its sustainable development into the future.

In this exchange process, the DSC would adopt an active broker relationship between the parties.

The DSC envisages its operations as rolling out through the following steps in a proactive format:

1. Identify and secure agreement of donor countries

The DSC would identify potential donor countries and secure their agreement in principle with a detailed memorandum. It would then review the digital solutions proposed, following an agreed framework and set of criteria to ensure that they are appropriate for such an exchange.

This step is critical, and would involve a detailed set of parameters that are designed to achieve a number of things. It would begin with a comprehensive description of potential uses, and the technical requirements and infrastructure needed to implement them. Much more would be needed to enable another country to decide whether they might be appropriate, for instance: the extent to which they have been tested and used; their scalability; the availability of source code; the level of skill needed to implement and maintain them; any constraints on their future use (which would have to remain in open source); whether AI has been used in their development (a factor which affects troubleshooting); the impact of a shutdown of service; and the likely need for accompanying regulation and legislation. Developing a common set of parameters would be central role for the DSC, to be completed by member states wishing to provide digital solutions, and have them registered in the virtual DSC solutions library.

2. Identify potential beneficiary countries, and explore potential

In parallel, the DSC would identify potential beneficiary countries. The above set of parameters, available from the DSC solutions library, would be vital to enable member states to identify whether they, in a preliminary stage, are interested in becoming involved in the process. Each interested country could compile a shortlist of potential solutions and undertake an initial exploratory assessment.

A possibility here is to implement sub-regional Digital Solutions Events, combining a conference for discussion with all countries, and a set of week-long Workshops for countries expressing a preliminary interest, that would explore all the options for these countries.

3. Develop National Digital Solutions Action Plans

Based on an agreed methodology, the DSC would then support those host countries interested in proceeding further to undertake a thorough assessment as to which solutions might be most effective for them to achieve their priority SDGs, and to develop a detailed Digital Solution for SDGs Action Plan as a roadmap for implementation.

This could be completed by a dedicated multi-stakeholder working group at national level, with high-level political support. It would assess the costs, the gain for SDGs, and the requirements (including skills development) and challenges involved, including the technical skills, regulatory

changes, infrastructural needs, institutional arrangements, and future-proofing. It would also consider how the DSC solutions could be combined with those of other entities. It would identify the appropriate actions at national level, examining for instance which public institution or private-sector actors might be most appropriate for intensive skills development that would carry through with implementing, maintaining and sustaining the system into the future.

4. Host/donor/DSC country model contract agreement

The DSC would provide the model contractual agreement that details the responsibilities of the donor and host countries regarding agreed solutions, as well as of the DSC itself.

Key sections of the agreement would cover the parties (public and/or private sector) and modalities involved in skills development initially, and then later for maintenance, troubleshooting and future development; any specific rights involved in the open-source development; and sources of finance, actual and proposed. It could engage further partners to underpin such agreements into the future, for instance the ITU in relation to standards, interoperability and security.

5. Oversee and support capacity building and implementation

The Centre would, through its network of partners, focal points and experts (including those in Kazakhstan), provide a framework for the technical and skills training needed, at each stage of deployment and future development.

Donor country digital institutions, that originally developed and supported the solutions, could have the choice of delivering the training for these in the Centre in Almaty and/or at another location.

6. Assist in securing additional financing

The DSC, with the host country and partners, would seek the additional financing required to implement fully the Digital Solution Action Plan, liaising with the UN Resident Coordinators nationally, ODA from relevant countries, and financial institutions.

7. Follow up and support sustainability

The Centre would follow up on the implementation to assess ongoing needs, ensure embeddedness and sustainability of the solutions.

Thus, key elements of the overall process are the facilitation of bilateral agreement between the donor and the host countries; agreement with partners (such as the entities above) to minimise duplication; and developing relationships with entities that can enable the additional program funding required.

Institutional and scientific background:

- The Center’s work will be organized based on the increasing need to consider the process of emergence and further rapid development of digital technologies, which radically change principles and established mechanisms of work, leading to the superiority between countries, and contain the risks of even greater stratification in the level of digital development.
- The Center's work will ensure universal access to such breakthrough technologies on a

voluntary basis, especially for the least developed countries, landlocked developing countries and small island developing States.

- The Center's work will also unlock the potential of digital innovations for poverty reduction and fostering harmonious relations between governments and societies.
- An important outcome of the Center's work will be the facilitating legislative and institutional measures to incorporate digital technologies related capacity building into the Member states official development assistance systems as one of the practical ways to ensure the implementation of the leave no one behind principle, guard against redundancy and duplication of effort and ensuring cost-effectiveness in the use of resources, sharing national best practices and providing states with access to knowledges on digital technologies.
- The project will strengthen the important role of the United Nations in ensuring that the consequences of the emergence of such breakthrough technologies are considered and assessed, as well as in creating neutral platforms for digital cooperation and technologies transfer.

Focus of attention will be directed on technologies that:

- Implement at the national level proactive digital solutions that contribute automation and digitalization of public services
- Create electronic mechanisms for interaction with citizens to receive appeals, suggestions and complaints
- Ensure transparent mechanisms for public discussion and government decision-making until the legislative enshrinement
- Create the basis for targeted support for socially vulnerable families
- Promote legislative amendments to streamline, simplify, and digitize business procedures, reducing time needed for regulatory requirements;
- Allow debureaucratisation and reengineering of internal processes in public administration sphere
- Implement principles of meritocracy and transparency for the civil service.

Key performance indicators with the participation of the DSC SD:

- *Transition to a new level of maturity*. The speed of integration of digital solutions in the UN ESCAP countries is essential, which will become necessary and perhaps the main help in improving all 17 goals of sustainable development.

- *Adjustment of national law and policy.* The DSC SD will develop recommendations on improving the legislation of the UN ESCAP countries primarily to bring the legislative frameworks and policy approaches in the field of innovation and digital transformation in alignment for enhanced sharing and cooperation.

- *Industry experts, think tank.* The DSC SD will form a team with advanced industrial expertise that will gather big data on best practices and solutions in industry projects and, through applying highly effective business processes and engineering approaches, study the current business processes in the countries (as is) and lead these processes to the best digital solutions (also aiming at supporting the principles of the circular economy).

See the experience of other UN ESCAP centres at the link https://www.unescap.org/about/regional-institutions. As the regional arm of the United Nations in **Asia and the Pacific,** ESCAP has contributed to the expansion of connectivity to ICT and the application of digital technologies through the exchange of knowledge and best practices. ESCAP also contributed to addressing digital gaps by conducting in-depth analysis, implementing capacity-building programmes and projects, promoting partnerships among stakeholders, organizing intergovernmental meetings and policy dialogue within the overall framework of the Asia-Pacific Information Superhighway (APIS)

List of UN ESCAP working papers:

[1] Askar Tazhiyev (2021). Towards a Central Asia-as-a Platform Strategy and a Digital Solutions Centre for Sustainable Development. Asia-Pacific Information Superhighway Working Paper Series, No. 08/2021. United Nations ESCAP, ICT and Disaster Risk Reduction Division, Bangkok. https://www.unescap.org/kp/2021/towards-central-asia-platform-strategy-and-digital-solutions-centre-sustainable-development

[2] John Ure (2021) Digital Solutions Centre in Central Asia. Asia-Pacific Information Superhighway Working Paper Series, No. 07/2021. United Nations ESCAP, ICT and Disaster Risk Reduction Division, 2021. Bangkok. https://www.unescap.org/kp/2021/digital-solutions-centre-central-asia

[3] Zhanar Sultanbekova (2021). Establishment of the Central Asian Digital Solution Center in Kazakhstan: Concept Note for Project Development. Working Paper Series, No. 09/2021. United Nations ESCAP, ICT and Disaster Risk Reduction Division, Bangkok.

[4] Zorikto Gomboin and Aida Karazhanova (2021). E-resilience Monitoring Toolkit: Methodological Notes and Pilot Countries' Profiles. No. 26/2021. United Nations ESCAP, IDD, Bangkok. https://www.unescap.org/kp/2021/e-resilience-monitoring-toolkit-methodological-notes-and-pilot-countries-profilesJohn Ure (2021).

[5] Askar Tazhiyev (2022). Working Paper on Establishing the Digital Solutions Center for Sustainable Development: Options for Operational Modalities. ESCAP Working Paper Series, No. 39/2022. United Nations ESCAP, ICT and Disaster Risk Reduction Division, Bangkok. Available at: https://www.unescap.org/kp/2022/digital-solutions-centre-sustainable-development-options-operational-modalities.

[6] Aida Karazhanova, Zorikto Gomboin, Ekaterina Genkina (2023). Tracking e-Resilience in North and Central Asia. Tracking Number: ESCAP / 5-WP / 64. United Nations ESCAP, ICT and Disaster Risk Reduction Division, 2023. Bangkok. https://repository.unescap.org/handle/20.500.12870/6507.

[7] Seán Ó Siochrú, Independent Consultant (2025). Digital Solution Centre Feasibility Study, United Nations ESCAP, ICT and Disaster Risk Reduction Division, 2025. Bangkok. https://www.unescap.org/sites/default/d8files/event-documents/DSC%20Study%20Final%20Report_0_0.pdf