



Digital Transformation through Development of Digital Skills

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International Telecommunication Union
Regional Office for Asia and the Pacific

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New Delhi, India

Meet us

What we do



'Committed to
Connecting the World'

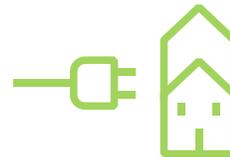
3
Sectors



ITU Radiocommunication
Coordinating radio-frequency spectrum and **assigning** orbital slots for satellites



ITU Standardization
Establishing global standards



ITU Development
Bridging the digital divide

193 MEMBER STATES

+800

MEMBERS FROM THE PRIVATE SECTOR, ACADEMIA AND INTERNATIONAL AND REGIONAL ORGANIZATIONS





Asia-Pacific: Opportunity in diversity

38 Member States
79 Sector Members,
76 Associates
48 Academia



Small Islands Developing States (12)

Least Developed Countries (12)

- AFGHANISTAN**
- Bangladesh
- BHUTAN**
- Cambodia
- LAO, PDR**
- NEPAL**
- Myanmar
- Timor Leste

- Kiribati
- Solomon Is.
- Tuvalu
- Vanuatu

- Fiji
- Maldives
- Marshall Islands
- Micronesia
- Nauru
- Tonga

Low-Income States (10)

- D.P.R. Korea
- India
- Indonesia
- MONGOLIA**
- Pakistan
- Philippines
- Sri Lanka
- Vietnam

- Australia
- Brunei Darussalam
- China/Hong Kong
- I.R. Iran
- Japan
- Malaysia
- New Zealand
- Rep. Of Korea
- Singapore
- Thailand

Middle and High Income States (10)



Land Locked Developing Countries (5)



Digital transformation is key to accelerate our progress towards SDGs..

17 Sustainable Development Goals

169 Targets



ITU-D: Global and Asia-Pacific regional priorities (2018-2021)



.. aligned to accelerate digital transformation and realize an inclusive digital society

International cooperation and agreement on telecom/ICTs

Modern and secure telecommunication/ ICT Infrastructure

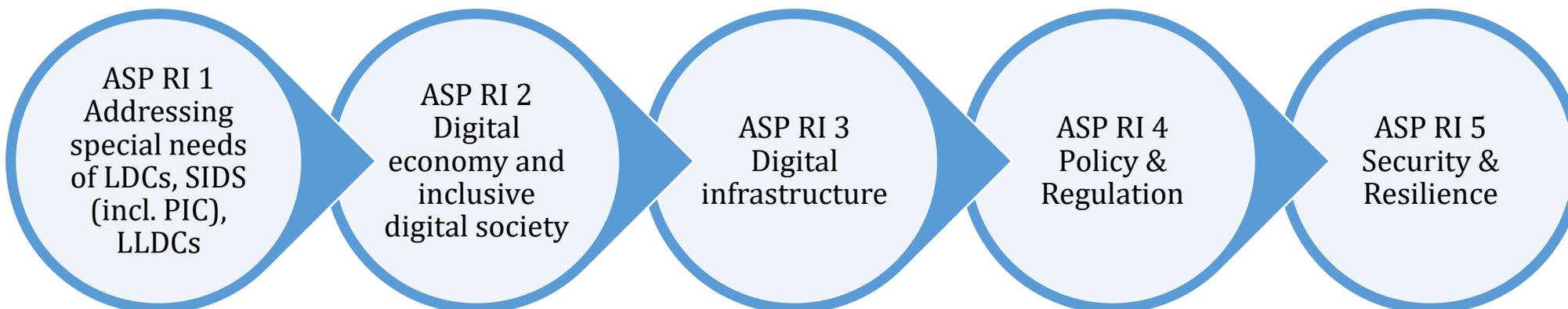
Enabling environment

Inclusive digital society

4 GLOBAL PRIORITIES



5 REGIONAL PRIORITIES





Digital Transformation & Digital Economy



IOT, DLT, AI, 5G, BIG DATA



Broadband networks,
Analytics, Platforms



IPv6, Internet

CONFORMITY
INTEROPERABILITY
PROGRAMME
Guidelines for implementation



Conformity & Interoperability



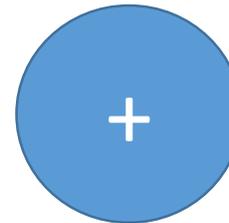
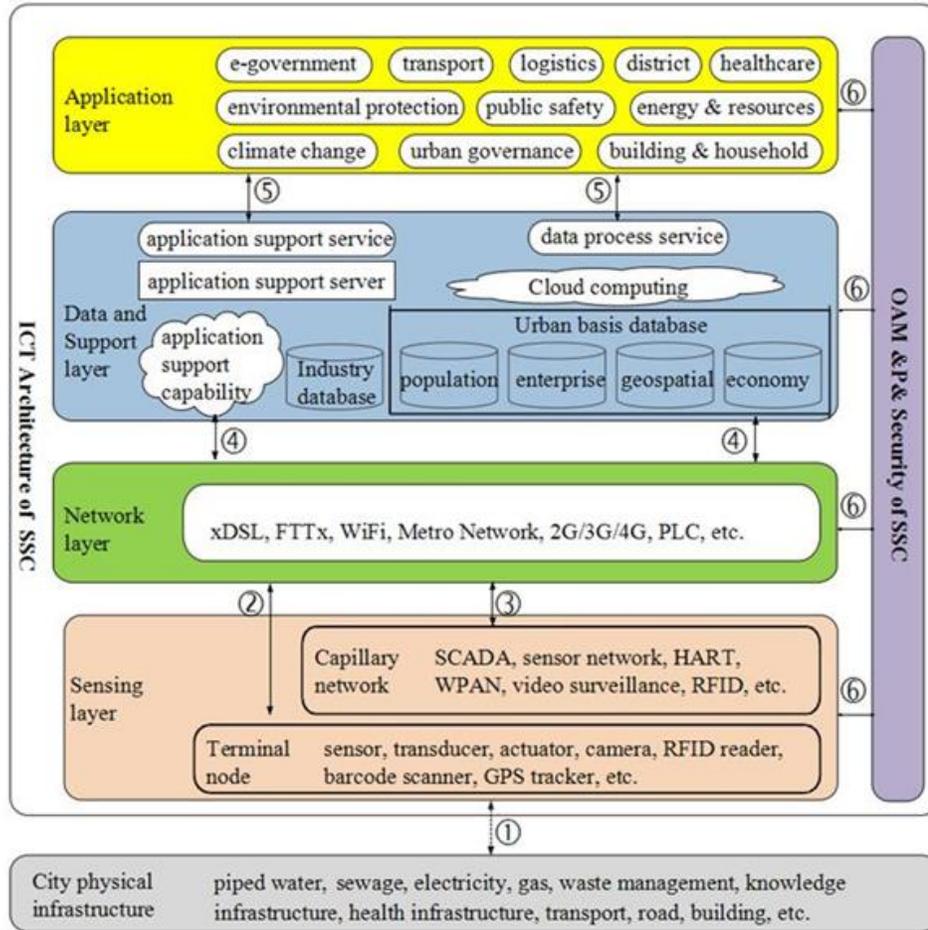
IPv6 Roadmaps
Case studies
Forums
Technical assistance
trainings
Projects and Partnerships



Bhutan, Brunei, Cambodia, China, Fiji, India,
Mongolia, Pakistan, Sri Lanka, Thailand

Digital infrastructure development

Digital transformation requires an ecosystem approach

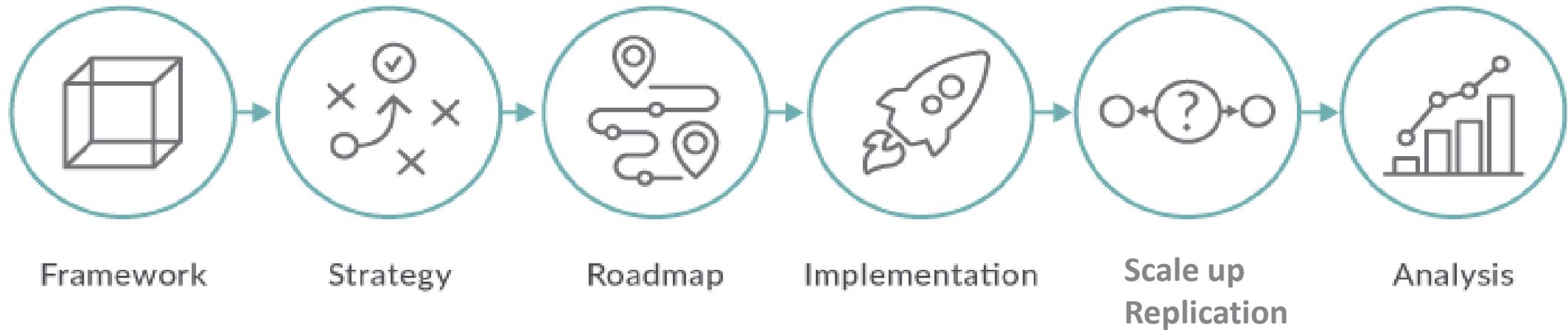


Enabling Environment, Digital Inclusion

Skills and capacity Building

Innovation

Digital Transformation Process



Chihiro knows her mother is safe
Find out how ICTs let everyone rest easier.

fast forward together #ICT4SDG

Mikhail's house is much smarter than he is
Discover how ICTs can transform your daily life.

fast forward together #ICT4SDG

Bayu is tracking land-use in near-real time
Find out how ICTs can enable you to see the bigger picture!

fast forward together #ICT4SDG

Senam discovered the power of networks
Discover how to power your project with ICTs.

fast forward together #ICT4SDG

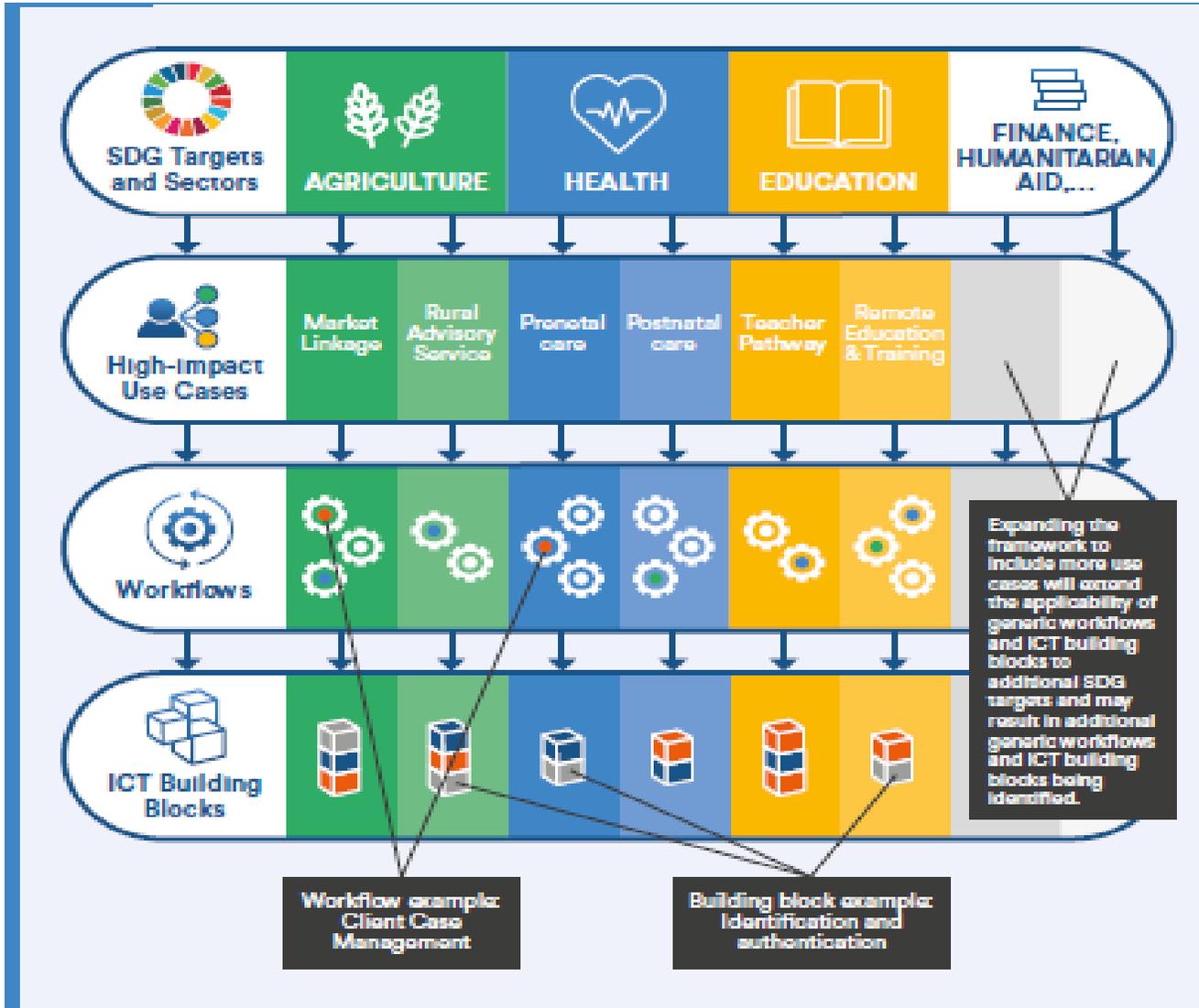


Example architectural map using the SDG Digital Investment Framework

SDG Digital Investment Framework
A Whole-of-Government Approach to Investing in Digital Technologies to Achieve the SDGs



ITU dial Digital Investment Alliance



Common ICT Building Blocks enable generic business processes, or WorkFlows, that can be combined and repurposed in multiple ways to deliver priority Use Cases that contribute to SDG Targets.

National governments can prioritize Use Cases according to citizens' needs (eg improve neonatal outcomes), map functionality across sectors, and then invest in shared infrastructure comprising ICT Building Blocks.

GSR-18 Best practice guidelines

New Regulatory Frontiers to Achieve Digital Transformation

Regulators participating in the 2018 Global Symposium for Regulators, recognize that, flexible and innovative policy and regulatory approaches can support and incentivize digital transformation. The best practices in this regard would allow us to respond to the changing landscape and address the continuing need for secure and reliable ICT infrastructure, affordable access to and delivery of digital services, as well as protect consumers and maintain trust in ICTs.

- I. Fostering the potential of emerging technologies for digital transformation**
- II. Business and investment models to support digital transformation**
- III. Policy and regulatory approaches for continued innovation and progress**

ITU GSR
GENEVA 2018

GSR18 BEST PRACTICE GUIDELINES ON NEW REGULATORY FRONTIERS TO ACHIEVE DIGITAL TRANSFORMATION

Today more than ever, policy makers and regulators need to keep pace with digital transformation, emerging from the 4th Industrial Revolution. It is our duty to consumers, business-led citizens, investors, contributors and future policy and regulatory agencies to work with innovators and regulators, business and investment models are required to create the conditions for this digital transition to achieve its full potential. At the same time, there is a continuing need to ensure secure and reliable ICT infrastructure, as well as affordable access to and delivery of digital services. I am confident that these best practice Guidelines will give regulators the necessary tools to address these challenges.



Organized on the initiative of
Mr. Anwar Hossain,
Director, Information and
Communication
Development Bureau (ICTD), UNCTAD

Today, the world seems to be preparing for a new revolution. The transformation revolution, the revolution of a new kind of intelligence.

Everything is about smart cities, Artificial Intelligence and the Internet of Things. These concepts are not about to remain in the realm of science fiction. They are already being put into use around the world. All the objects in our everyday life from personal cars to medical devices, will be connected to the Internet in a huge network of machines. In making progress to realize our dreams to provide communication, we need to make sure that we are prepared for the challenges that this technological revolution will pose. As regulators, we need to ensure that we will all fully benefit from the potential of these new technologies by setting in place a clear, stable and predictable regulatory framework, that will enable the digital transformation of our society.



Coordinated by
Mr. Samir Ghandani,
Director, WRC,
ITU

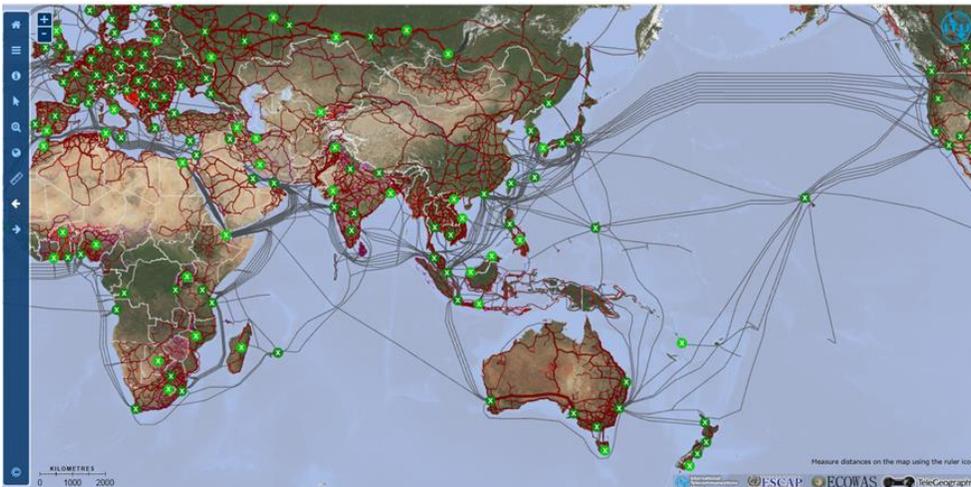


Achieve SDGs through Cross- Sectoral Collaboration



Digital infrastructure - Key to digital transformation

- Core transmission networks are the essential underpinning of broadband access networks.
- The IP connectivity required to deliver these content, services and applications is achieved at certain Tier 1 points of presence (POPs), which are physically located in buildings in certain places.
- What to make available and to whom? Policy controlled through the format in which the map and its underlying database is made available, and the level of disclosure is addressed as part of a formal validation process
- Over 3.4 million km of Transmission Networks are now represented in the map interface for all regions (increase of 29% over the last 12 months, compared to July 2017)
- Asia-Pacific region remains the largest region represented in the map in terms of data, with almost twice the number of kilometres as the next largest region (CIS)
- Asia-Pacific contains over 1 million kilometres of network data. Over 200,000km have been added in the last 12 months (= 26% increase since July 2017)
- Submarine Cables and Global Internet Exchange Points are now displayed by default when the Transmission Map loads, offering a full view of the complexities of international transmission networks when the map loads.

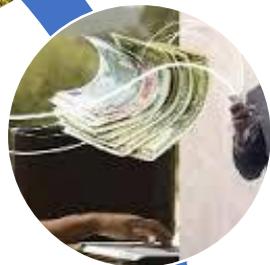


(Link : <http://www.itu.int/itu-d/tnd-map-public/>)





Food and Agriculture Organization of the United Nations
E-agriculture



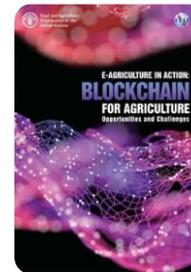
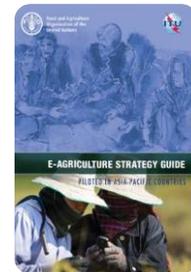
Digital finance



m-health



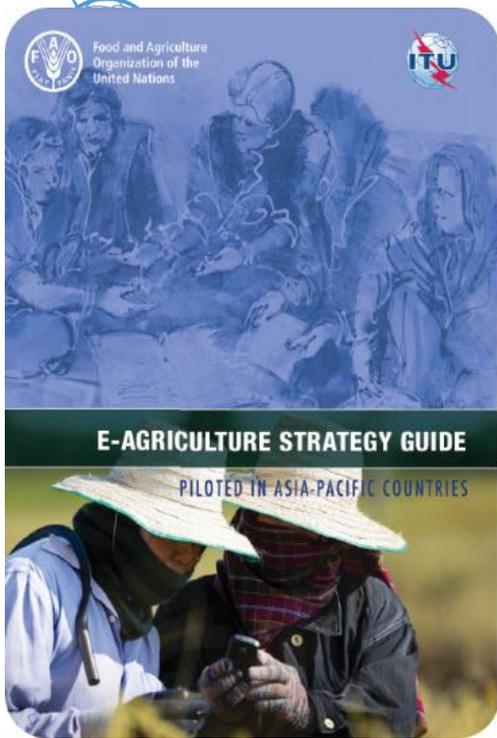
Smart sustainable cities and digital government



National strategies
Case studies
Solutions support
Forums
Trainings
Projects and Partnerships



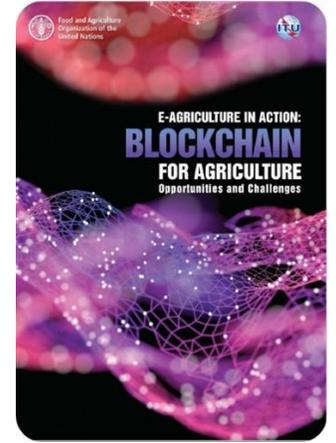
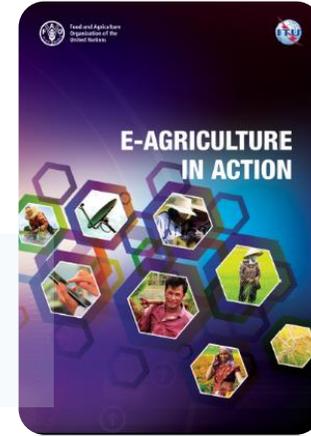
Afghanistan, Bhutan, China, Fiji, India, Mongolia, Pakistan, Papua New Guinea, Philippines, Sri Lanka,



Country Assistances

Afghanistan
Bhutan
Fiji
Mongolia
Papua New Guinea
Pakistan
Philippines
Sri Lanka

Case studies



Solutions Forum



Trainings

FAO-ITU: E-agriculture Strategy Development
FAO-ITU-GIC: Use of drones, satellite imagery and GIS from agriculture

E-agriculture – Asia-Pacific



Food and Agriculture
Organization of the
United Nations





Digital Financial Services – Asia-Pacific

ITU activities global (examples)

Mongolia (2017)

Digital Financial Services (DFS) and Digital Financial Inclusion (DFI) Ecosystem in Mongolia: A study with focus on cross-sectoral policy and regulatory collaboration

China (2018-2020)

Cooperation with World Bank, Bill & Melinda Gates Foundation and CAICT as part of FIGI project

India (2018)

Capacity building on Understanding Digital Payments with Niti Aayog and DOT

Thailand (2018)

Regional CoE training on Distributed Ledger Technologies with NBTC and MDES (Thailand)

Ongoing discussions during various regional forums, e.g. ITU Regional Development Forum 2018 (Bangkok)- Thank UNCDF to share experience in 2018

[Best Practice Guidelines on Collaborative Regulation for Digital Financial Inclusion \(2016\)](#)

[Focus Group Digital Financial Services \(FG DFS\) \(2014-2016\)](#)

[Focus Group on Digital Currency including Digital Fiat Currency \(FG DFC\)](#)

[Focus Group on Application of Distributed Ledger Technology \(FG DLT\)](#)

[FIGI Project \(ITU, World Bank, Bill & Melinda Gates Foundation\)](#)





ITU-WHO : ICTs for better health outcomes :e Health (SDG 3)



- mDiabetes
- mCessation
- mSmartlife
- mHypertension
- mCervicalCancer
- mAgeing
- mTuberculosis_Tobacco
-

NCD Deaths – **38 million** annually

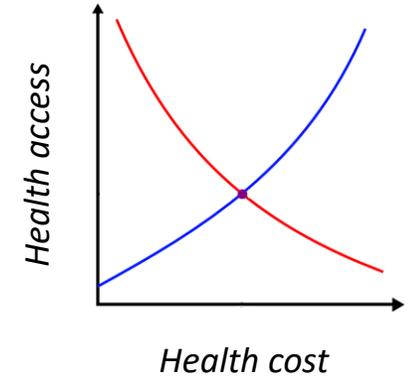
2011 UN High-level Declaration on NCDs

Country Assistancess

India : mTobacco Cessation

Philippines : mTobacco Cessation

Request from 100 countries



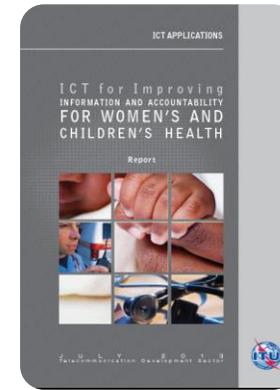
Survey on Tobacco : Compliance / Non Compliance



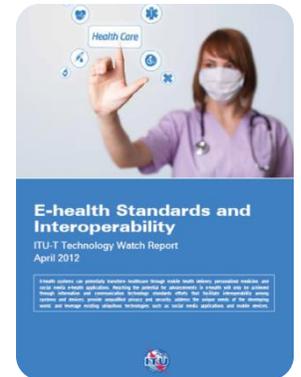
**Thailand
Pakistan
Mongolia
Chile**



National eHealth Strategy Toolkit
National Strategies : 69
eHealth Information System : 76



ICT for Women & Children's Health



Interoperable standards on e-Health



United 4 Smart Sustainable Cities (U4SSC): SDG 11



U4SSC is a United Nations Initiative coordinated by ITU and UNECE that advocates for public policy to encourage the use of ICTs to facilitate and ease the transition to smart sustainable cities.

U4SSC was launched by **ITU** and **UNECE** to respond to the Sustainable Development Goal 11: "Make cities and human settlements inclusive, safe, resilient and sustainable"



UN4SSC developed set of KPI criteria to evaluate ICT's contributions in making cities smarter and more sustainable, and to provide cities with the means for self-assessments in order to achieve the sustainable development goals (SDGs).



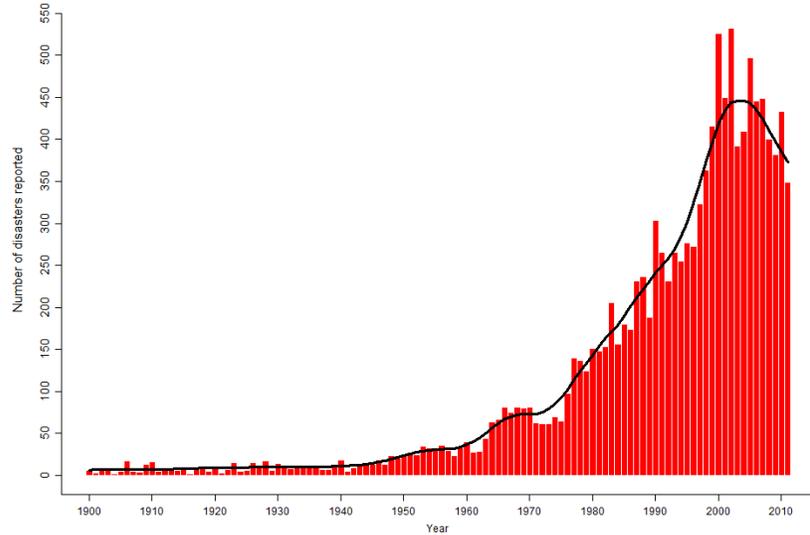
Empowered lives.
Resilient nations.





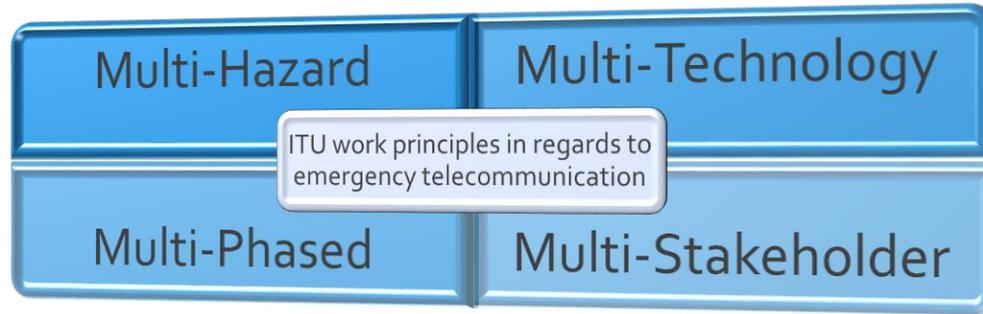
ICTs for Saving Life :Emergency Telecommunications

Natural disasters reported 1900 - 2011



EM-DAT - The OFDA/CRED International Disaster Database - www.emdat.be - Université Catholique de Louvain - Bruxelles - Belgium

Emergency telecommunications is an integral part of Telecommunications Development Bureau (BDT). Emergency Telecommunications division implements **activities** related to telecommunications/ICTs in disaster management and disaster risk reduction.



Importance of ITU's Assistance

Providing a communication equipment for the government that is critical in:

- Coordinating rescue and relief operations;
- Setting up telemedicine links between hospitals and medics in the field;
- Providing call centers where disaster victims can contact their loved ones.
- Coordinating infrastructure recovery/re-building operations.

1.7 TRILLION DAMAGES (USD)

2.9 BILLION AFFECTED

1.2 MILLION KILLED



**GET 2019
Mauritius
6-8 March**

National Emergency Telecommunication Plans

Papua New Guinea

Samoa

Solomon Islands

Vanuatu

Workshops and capacity building

Global meeting
(GET)

Regional and
national trainings



Australian Government

Department of Communications and the Arts

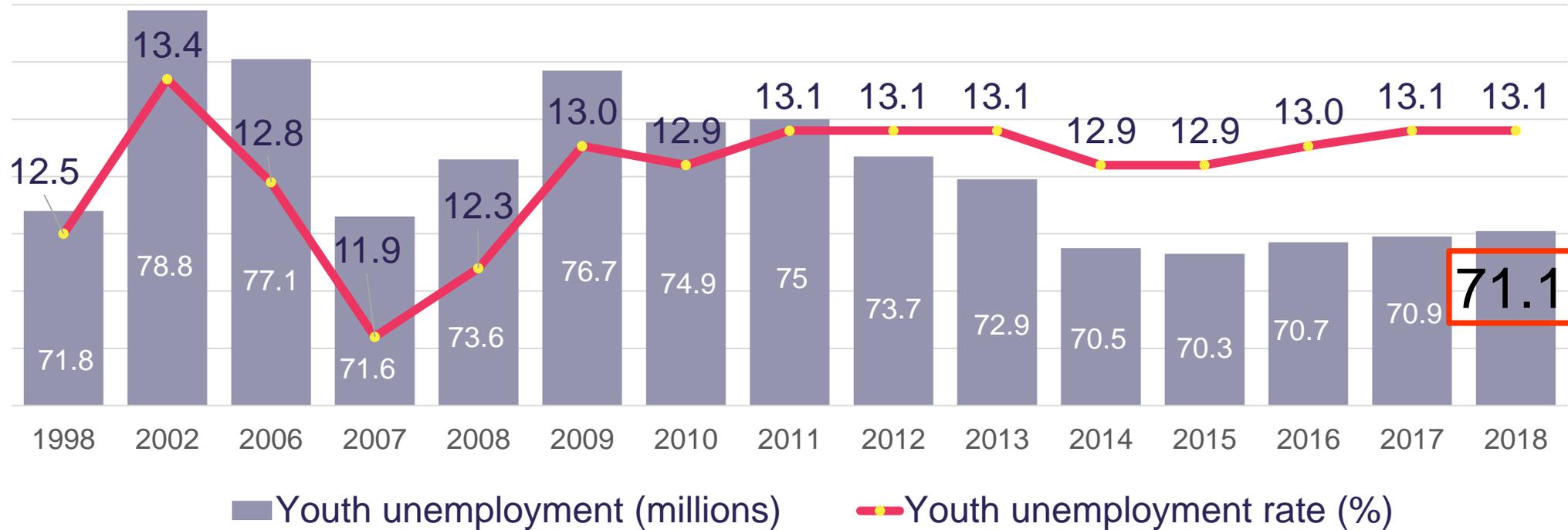
WFP



Digital Skills for the Future



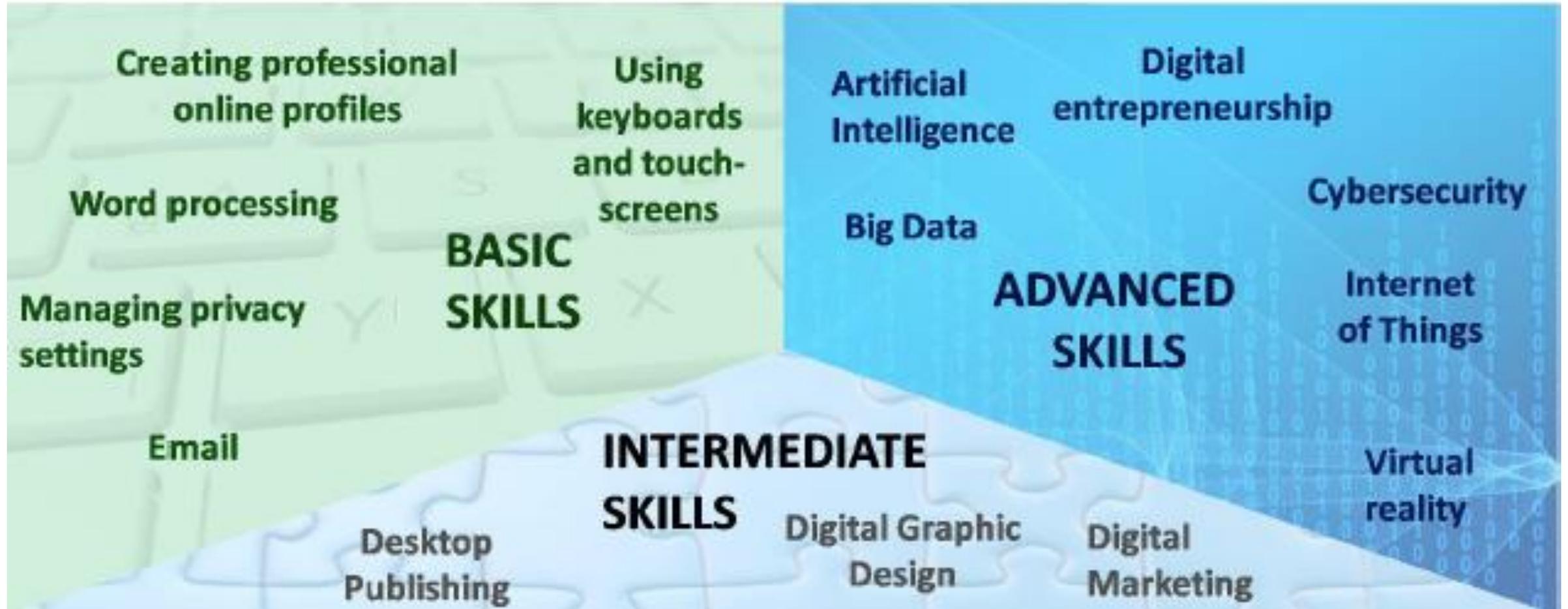
Youth employment: A challenge of both quality & quantity jobs



71 million youth are unemployed and
160.6 million are employed but live in poverty



Continuum of Digital Skills



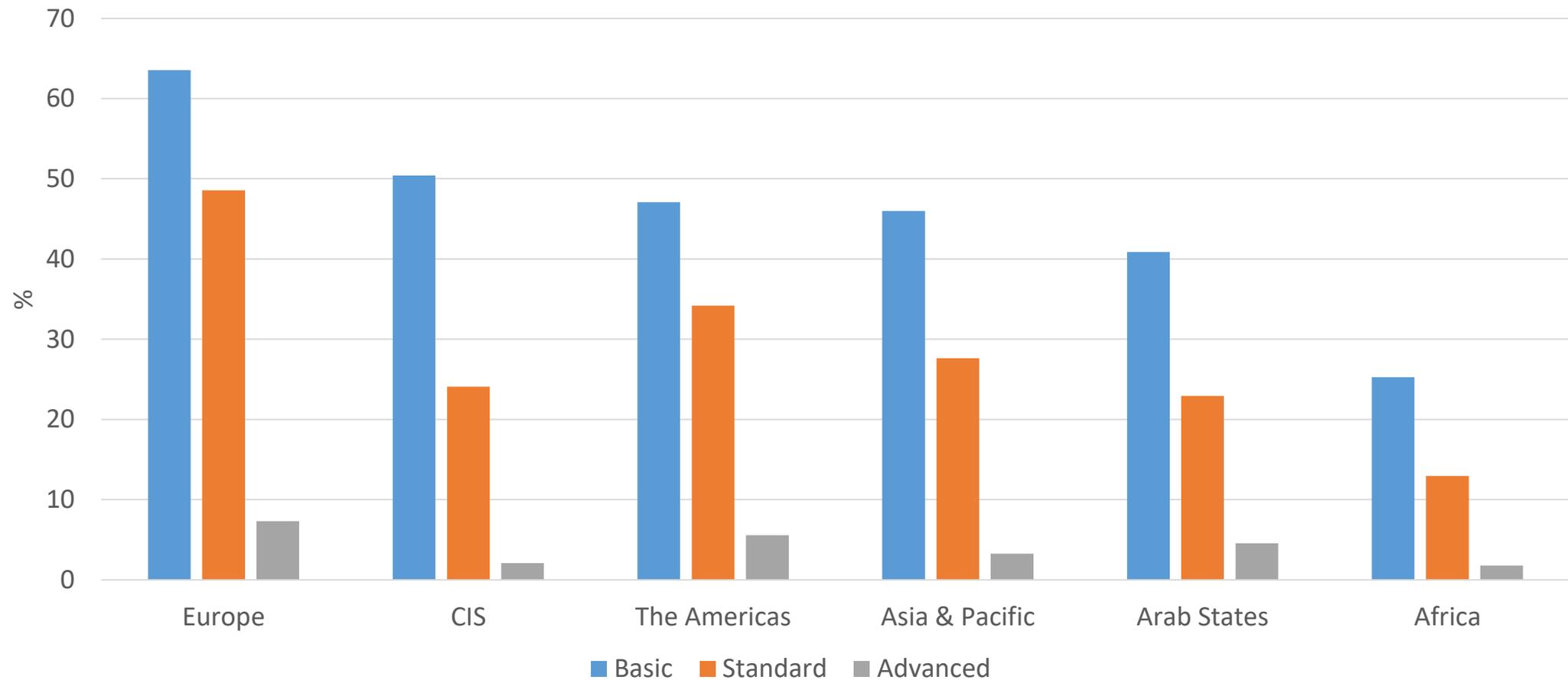
21st Century skills





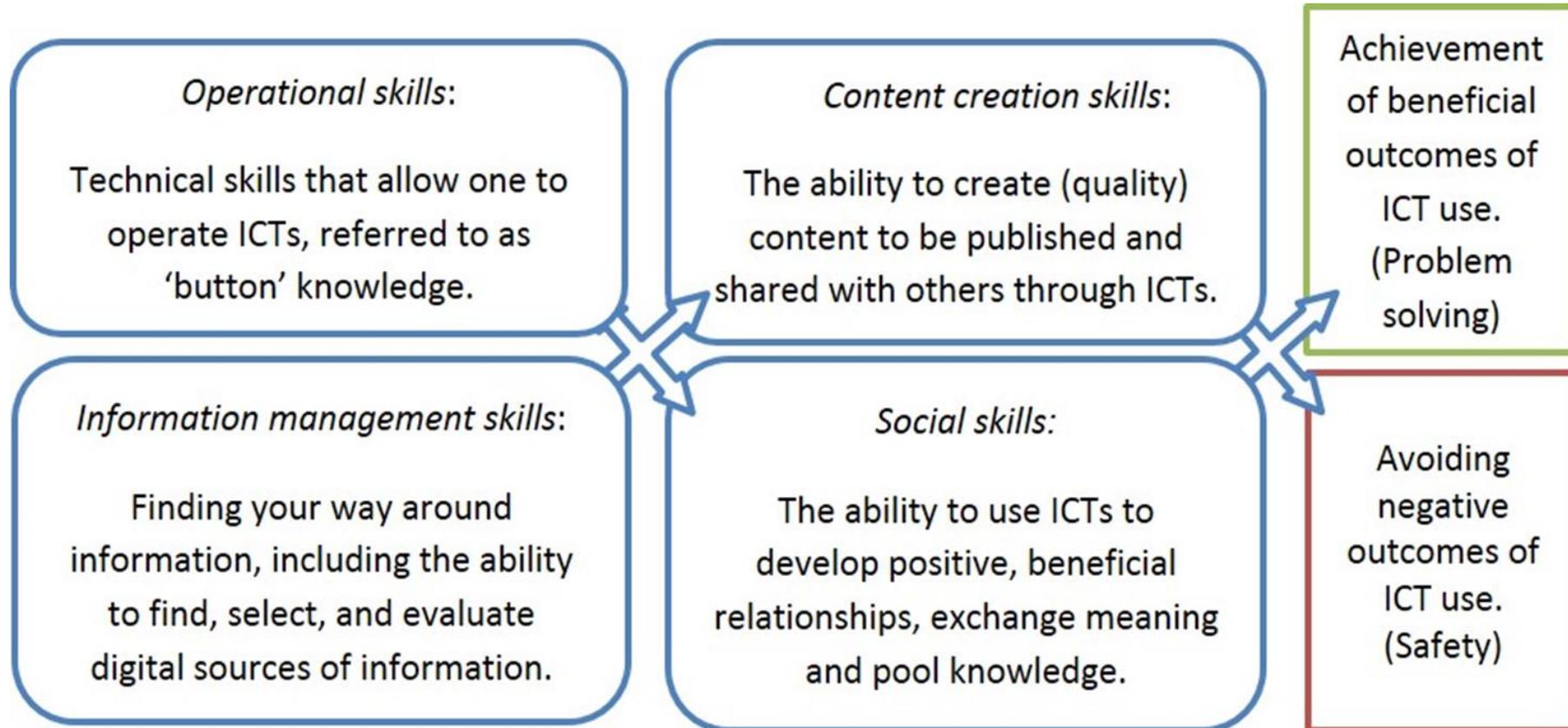
Skills differences have impact on effective use of the Internet

Percentage of individuals with ICT skills, by region, 2017



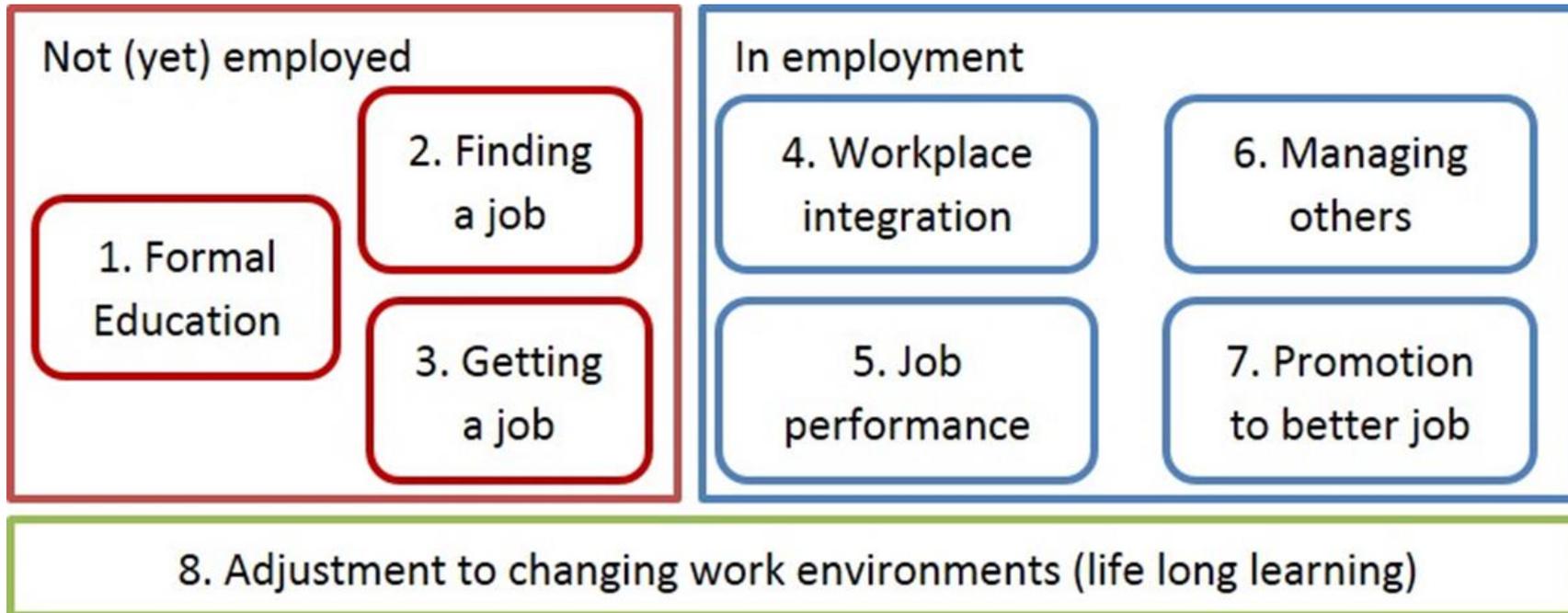


The Importance of Digital Skills in Society





Skills are important at every stage of employment





Policy agenda

Broadening scope

Moving from access to skills

Expanding digital skills training

Define transferable skills for a digital future

Targeting policies and interventions

Distinguishing contexts

Target policies to groups

Tailor policies to national context

Improving evaluation

Improving conceptualization and measurement

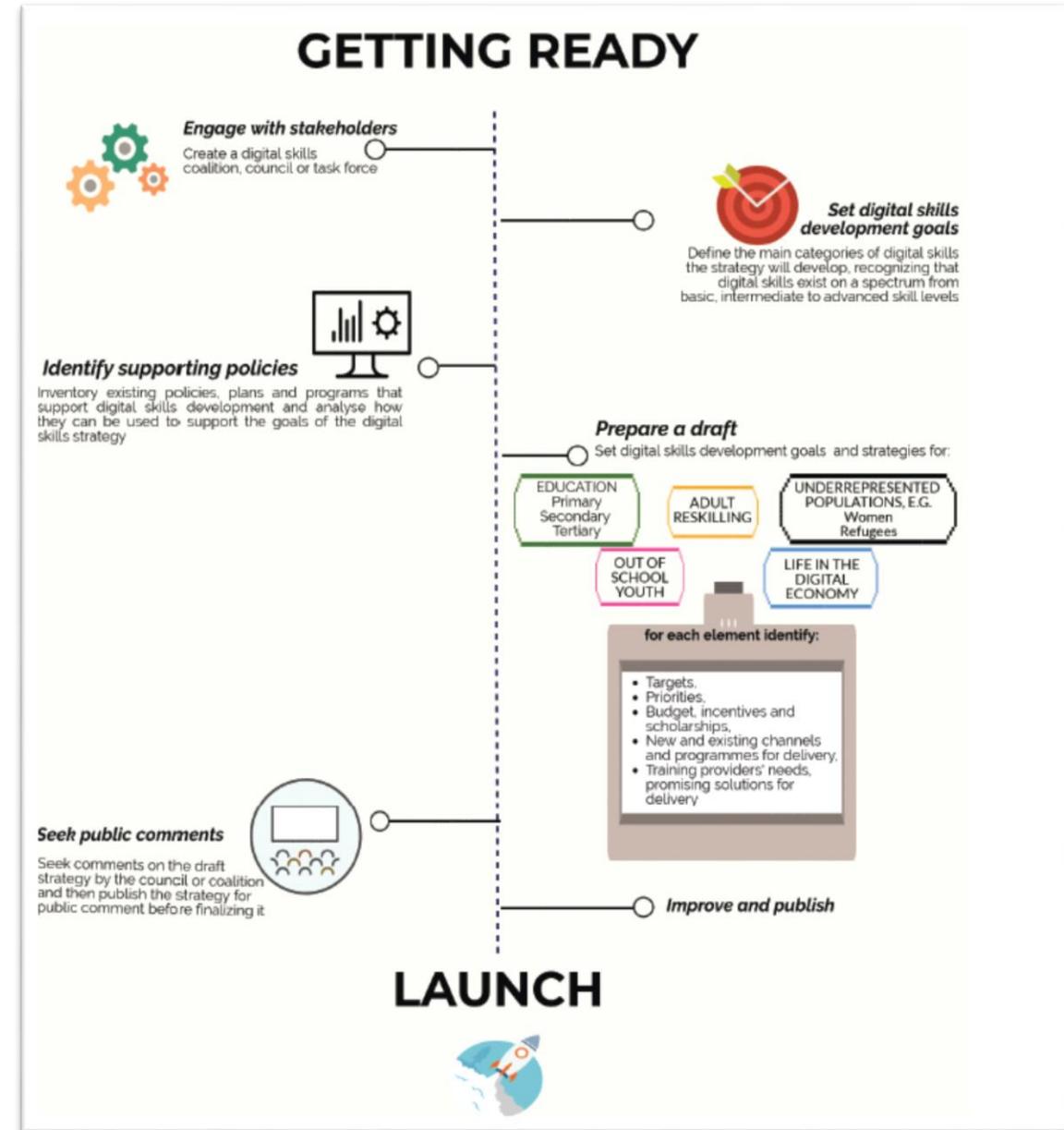
Accountability around outcomes

Sharing of best and worst practices



Roadmap to Accelerated Digital Skills Development

1. Create a digital skills coalition, council or task-force:
 - a. Use the coalition/council/task-force to engage a range of stakeholders who can contribute to developing and/or implementing the strategy, including identifying current and future digital skills needs and goals, ideally across sectors.
 - b. Analyse the strengths and weaknesses of each stakeholder, and from this, identify the role they can play in defining and implementing the strategy.
 - c. Agree on governance, working methods or charters for the council/coalition/task-force.
2. Define the main categories of digital skills that the strategy will develop, recognizing that digital skills exist on a spectrum from basic, intermediate to advanced skill levels.
 - a. Alternatively define the digital competence areas the strategy will foster; or
 - b. Consider defining digital skills' relation to 21st century skills.
 - c. For education, consider providing foundations for more advanced digital skills such as computational thinking.
3. Inventory existing policies, plans and programmes that support the development of digital skills and analyse how they can be used to support the goals of the digital skills strategy.
4. Identify current and future trends in relation to demographic trends, technological changes, business trends, trade, industrial policies, and the shift to a greener economy, etc.
5. Identify new policies and programmes that are needed and conduct advocacy both using the existing policies and to build support for new policies.
6. Draft a digital skills development strategy:





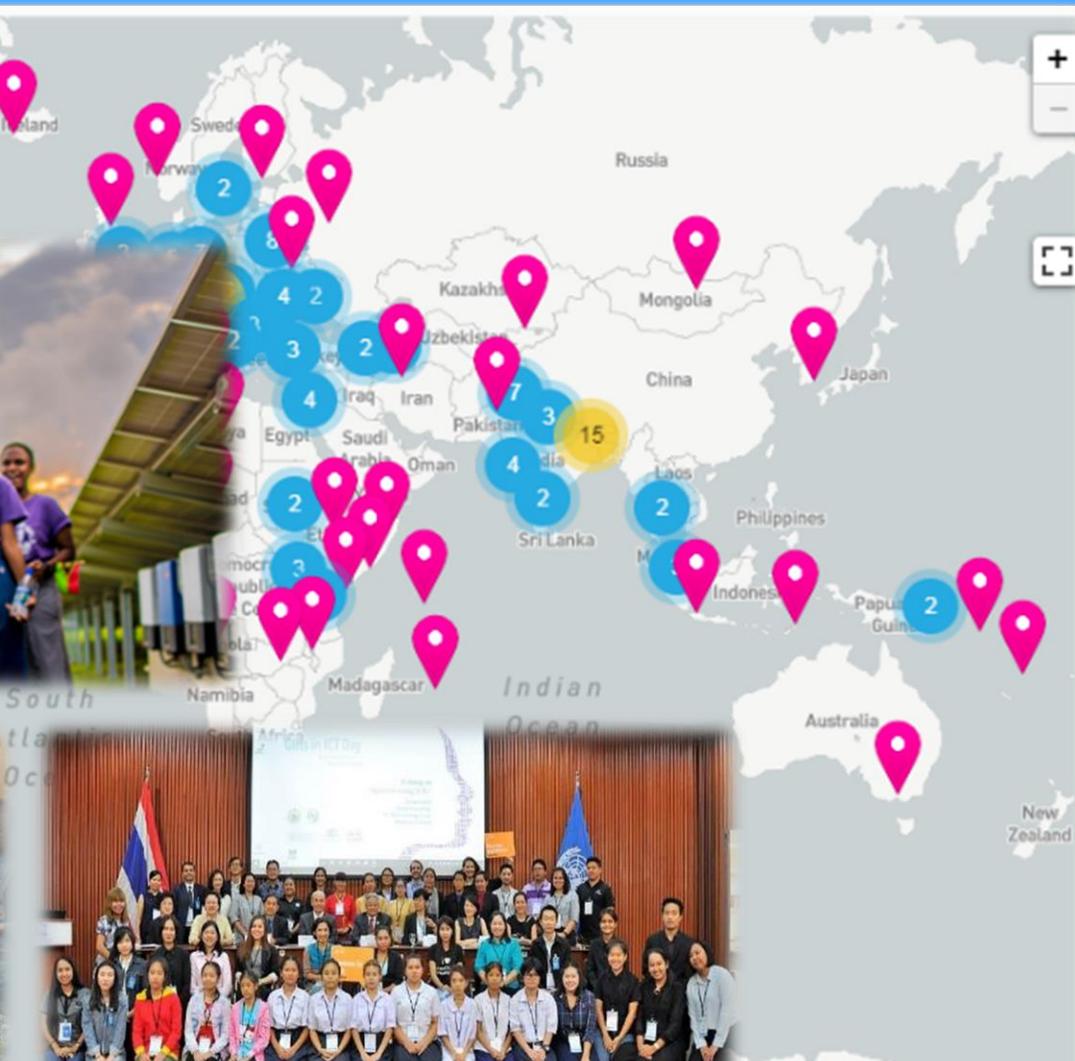
ITU-ILO : Digital Skills for Decent Jobs for Youth Campaign to train 5 million youth with job-ready digital skills

- ILO and ITU are leading the Digital Skills for Decent Jobs Campaign as part of the Global Initiative on Decent Jobs for Youth in order to foster decent and inclusive employment and entrepreneurship opportunities in line with the Sustainable Development Goals.
- Advanced digital skills: related to technology development such as coding, software and app development, network management, machine learning, big data analysis, IoT, cybersecurity or blockchain technology;
- Basic digital skills: related to the effective use of technology, necessary in most professions. They include web research, online communication, use of professional online platforms and digital financial services;
- Soft skills: skills necessary to all professionals to ensure collaborative and effective work in the digital economy. They include leadership, communication and teamwork skills, client-orientation, among others.
- Digital entrepreneurship: digital skills required by entrepreneurs, including online market research, strategic planning and business analysis, using financing and crowdfunding platforms, online marketing, and online networking and establishing mentoring relationships



Ministers of ICT, Labour and Education, national governments, the private sector, training providers, Academia, NGOs, other members of the UN family as well as other interested parties are actively encouraged to participate

Digital Inclusion example- Asia-Pacific



THAILAND

(EXAMPLE)

Enhance employment opportunities for girls and young women in Thailand by imparting employable digital skills relevant for the local job market



Food and Agriculture Organization of the United Nations



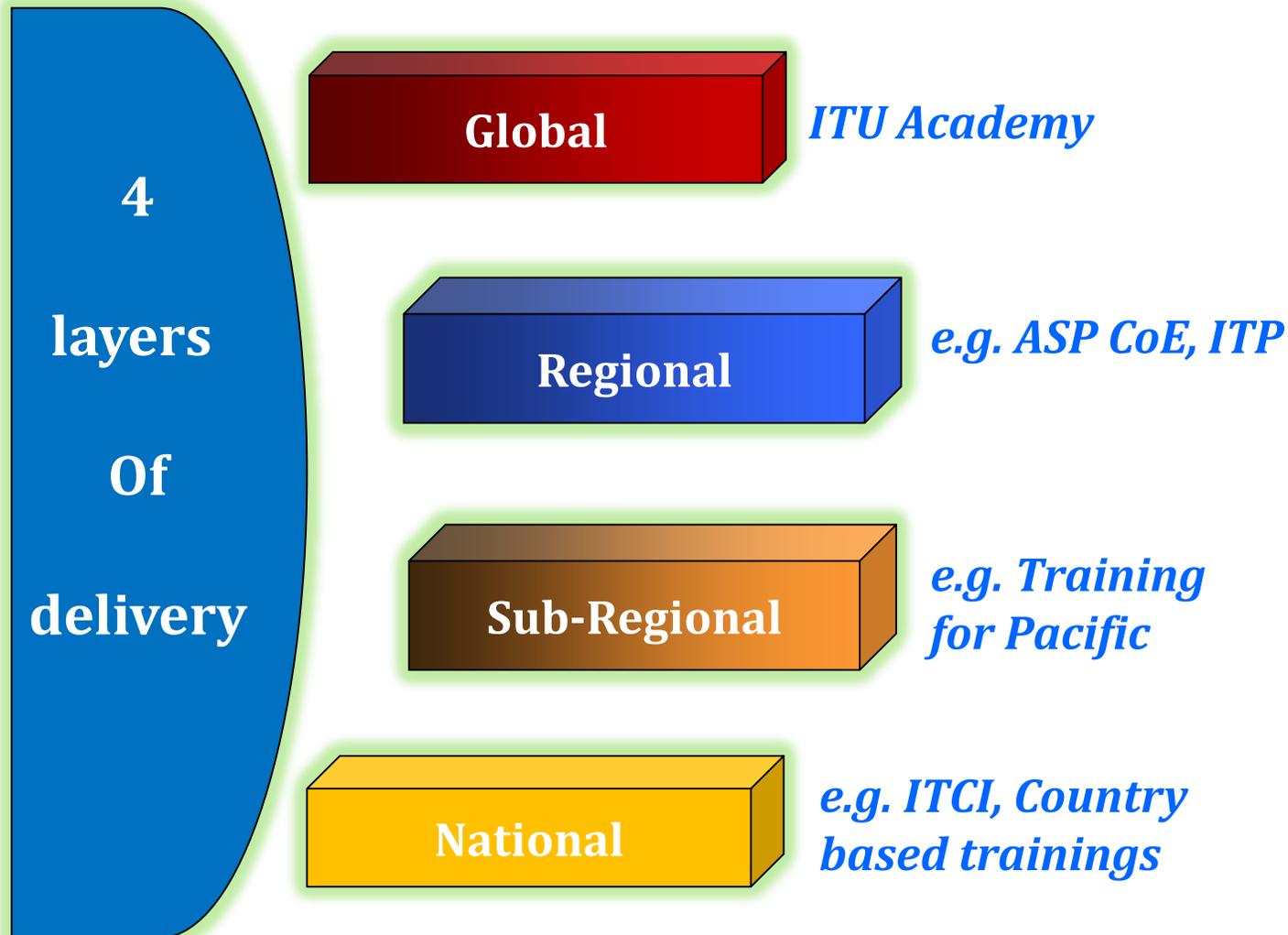
- Around 400 girls trained (2017-19)
- 8 trainings held
- More partners have joined
- Partnership continues in 2019

In 2019, events were held in **102** countries around the world (more than half of ITU member states). In terms of regional distribution, there were 43 events in Africa, 167 events in the Americas, 8 in Arab States, 79 in Asia and the Pacific, 7 in CIS Countries, 76 in Europe and an additional 6 events in other places.

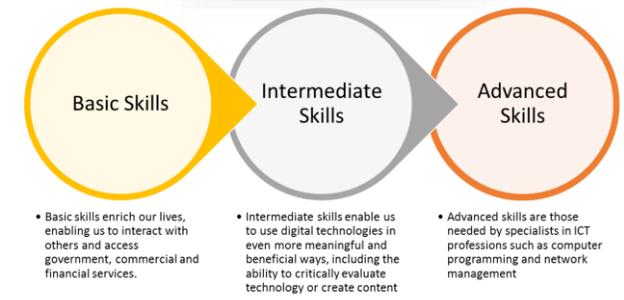
More than 70 events reported for Girls in ICT Day (Asia-Pacific) in 2019

Human capacity building to digital skills development

2018: Around 25 trainings, 1300 participants



2018: sub-regional workshop Pacific



Next steps
National implementation
Project on Digital Skills and Innovation



Overview of the Training Course



Objectives

- The training aims to expand skills policy and training, and defining transferrable skills for a digital future by demonstrating to participants how they can work to address the human and technical capacity challenges involved in digital transformation through enhances digital skills
- Fostering partnerships with academia and ICTs, government agencies, can stimulate social innovation activities that empower their communities to benefit from the digital revolution.



Overview of Training

This four-day program focuses on developing human and technical capacity and empower participants with valuable and practical skills while solving challenges that affect their communities.

Day 1	Day 2	Day 3	Day 4
Opening Ceremony Introductions Social Innovation for Bridging the Digital Divide Emerging Technologies: Opportunities & Risks Startup India Innovations	The Importance of Design Thinking Technology Design & Development Artificial Intelligence Impact on Employment The Future of Blockchain	Cultivating a Culture of Innovation Innovation Culture Challenge Creating Opportunities with Digital Skills Startup Community Development Social Innovation Projects for Digital Transformation	TEAM CHALLENGE: Ideate and innovate. Team Project Presentations Closing Ceremony



Digital Skills Capacity Building Training

YOU ARE HERE [HOME](#) > [ITU-D](#) > [REGIONAL PRESENCE](#) > [ASIA & PACIFIC](#)

SHARE    

The International Telecommunication Union (ITU) and the Department of Telecommunications (DOT), Ministry of Communications, Government of India are organizing "Digital Skills Capacity Building Training" from 29 July to 1 August 2019 in New Delhi, India.

The training aims to expand skills policy and training, and defining transferrable skills for a digital future by demonstrating to participants how they can work to address the human and technical capacity challenges involved in bridging the digital divide through enhances digital skills. This training emphasizes fostering partnerships with academia and ICTs, government agencies, which eventually stimulate social innovation activities that empower communities to benefit from the digital revolution.

This four-day training will focus on developing human and technical capacity and empower participants with valuable and practical skills while solving challenges that affect their communities. Please see draft agenda for details.

To register for the above-mentioned training, participants are kindly requested to register by **30 June 2019** at the latest. The course is offered free of charge and will be conducted in English and paperless. The travel arrangements, accommodation etc. should be made and borne by the participating administration or participants directly.

Practical and general information and entry visa requirements can be found at the webpage here.

Organizers



सत्यमेव जयते
Department of Telecommunications
Ministry of Communications
Government of India



Thank You