

ITU CENTRES OF EXCELLENCE NETWORK OF THE

ARAB STATES REGION

DRAFT REPORT

OF THE

6TH STEERING COMMITTEE MEETING

20 DECEMBER 2021

Online Meeting



1. INTRODUCTION AND OPENING

The 6th Steering Committee Meeting of the ITU Centres of Excellence for Arab States for the 2019-2022 cycle was held online, on 20 December 2021, because of restrictions caused by the Covid-19 pandemic. The Steering Committee Meeting was attended by 16 delegates including Centres of Excellence (CoEs), representatives from 3 Administrations of the Member States hosting CoEs, ITU Academic Members and the ITU Secretariat. The list of participants is attached to this report (Annex 1).

Mr. Ahmed El Raghy, Senior Advisor and Capacity Development focal point for Arab region, BDT/ITU, delivered the opening and welcoming remarks on behalf of Mr. Adel M. Darwish (Regional Director of the Arab Regional Office, BDT/ITU). Mr. El Raghy welcomed the participants conveying the best regards of Mr. Darwish to the meeting and stated that the aim of the meeting, which is mainly the reporting of the implementation of training activities during the year 2021 and the presentation of training plans for the next year 2022. The meeting provides the Centers of Excellence the opportunity to present and discuss their activities, exchange experiences, learn from each other and strengthen their collaboration, with the aim of creating synergies between the network of CoEs in Arab region. He thanked the participants for joining the meeting.

Mr. El Raghy invited Ms. Nur Sulyna Abdullah, Chief, Digital Knowledge Hub Department, ITU/BDT to give her opening remarks on behalf of ITU HQ. Ms. Abdullah greeted the participants and highlighted the objectives of the meeting and expected meeting outcomes (to review the implementation status of the 2021 activities and to approve the 2022 activities emphasizing on quality assurance process of CoE training content, etc.). She also mentioned that 2022 will be a final year of the CoE cycle and urged them to pull out all the stops towards the finish line, challenge themselves to do better than they have been doing. She reiterated that this meeting is to take stock of the past 11 months, to look at what worked and what didn't and see how we can up out game to make sure we can cater for the strategic needs of our target audience.

Finally, she provided updates on the strategic review of the CoE programme that is being done by the ITU this year based on the WTDC resolution 73 on the CoE programme that called for such a review at WTDC-17 in Buenos Aires. She said that in brief the review has been progressing well and will conclude this month and reassured the CoEs that the inputs they provided during the feasibility study interviews as well as during their discussions on this review will be taken into consideration. She hinted that the review would provide the recommendations which may require some changes in the CoE programme.

Then Mr. El Raghy introduced and invited the outgoing Chair, Mrs. Kmaira Ben Jannet, Director General, Tunis International Centre of Environmental Technologies (CITET), Tunisia, to give her opening remarks.

The outgoing Chair, Mrs. Kmaira Ben Jannet, Director General, Tunis International Centre



of Environmental Technologies (CITET), Tunisia, gave her opening remarks. She greeted, welcomed the participants and thanked all CoEs for their remarkable achievements despite the COVID-19 pandemic challenges. She ended by wishing the incoming Chair the best of luck for the coming year 2022.

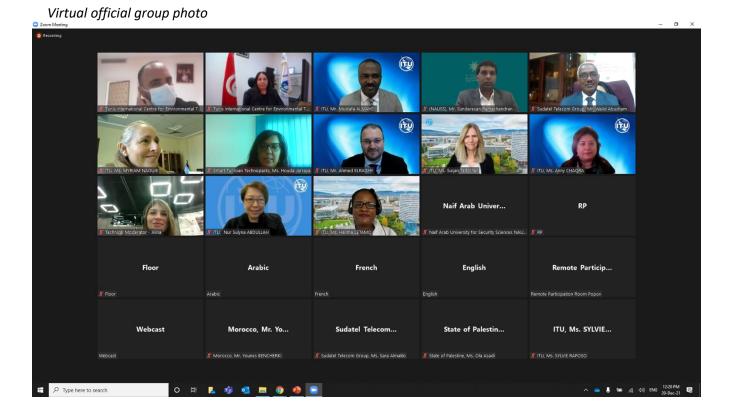


2. CONFIRMATION AND REMARKS BY THE INCOMING CHAIR

The confirmation of the Incoming Chair was led by Mr. Ahmed El Raghy, Senior Advisor and Capacity Development focal point for Arab region, BDT/ITU. Mr. El Raghy oversaw the confirmation of the Steering Committee Members on the proposed nomination of Naif Arab University for Security Sciences (NAUSS)/League of Arab States for year 2022. The meeting confirmed the chairmanship of Naif Arab University for Security Sciences (NAUSS)/League of Arab States for year 2022, represented by Dr. Abdulrazaq Al-Morjan, Director of Centre of Excellence in Cybercrime and Digital Forensics.

Dr. Al-Morjan thanked ITU for organizing the SC meeting and thanked the outgoing Chair for having assumed chairmanship during the most difficult period due the COVID-19 pandemic and its devastating impact on the CoE's elearning methods. He invited ITU to continue providing support to CoEs and highlights the importance of capacity building and skills development for the ICT sector in the Arab region. He thanked the meeting for the nomination and chairs the 6th Steering Committee Meeting of the Arab CoE Network.

Proposed draft agenda was adopted by the meeting (see Annex 2).



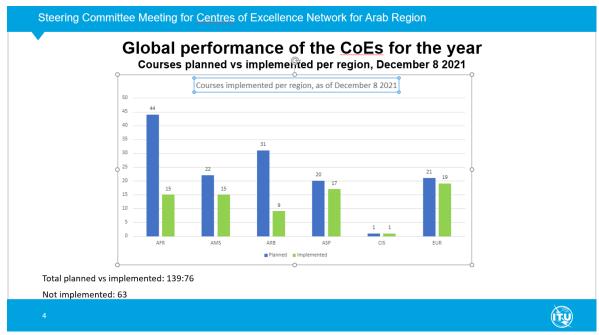


3. Agenda Item 1: Update on CoE strategic issues

Presentation by ITU

Ms. Susan Teltscher, Head of Capacity and Digital Skills Development, ITU/BDT, presented an overview on strategic items issues relating to the implementation of the CoE programme and the process towards the end of the CoE cycle.

i. Global performance of the CoEs for the year



She said that as usual at the end of the year, ITU gives an overview of the courses that were planned and those that were implemented per year and this is as of 8 December. She highlighted a few discrepancies between number of planned courses and number of implemented courses, 139:76, many courses were not implemented and in particular for Africa region but also Arab Region.

She indicated that in this meeting, we would like to hear the issues experienced by some of the CoEs that were not able to implement their courses as planned, brainstorm on these issues and tackle them together. Below are some of those issues:

- Too many courses planned which could not be delivered. Some CoEs have very low implementation rates
- CoEs are expected to deliver the minimum requirements (2 courses per priority area)
- CoEs are expected to engage actively (including participation in SC meetings)
- CoEs that are continuously non-performing will not be considered for the next cycle

ii. CoE strategic review



She informed CoEs and other participants that the meeting that the consultant commenced work in September 2021 and will complete work at the end of 2022.

The following work has been done by the consultant:

- Review of CoE network documents
- Consultative meetings with ITU (HQ and Regional Offices)
- Consultations with CoEs and GCBI members
- Review of information CoEs provided for the Feasibility study

She also pointed out that the strategic review will provide recommendations on the ITU CoE strategy and propose changes to the future operations of the CoE network, and that in the next year's WDTC-21, Resolution 73 will be revised taking into consideration the outcome of the strategic review.

iii. End of cycle activities

She highlighted the activities planned for the end of year cycle:

- Performance evaluation process to be initiated based on the course delivery during the cycle. This will cover:
 - Implementation of courses over the four years
 - Measures taken to address the mid-cycle concerns raised, where applicable
 - Promotional strategies and efforts made to ensure courses have participants
 - Participation in Steering Committee meetings and other CoE activities organised by ITU
 - Performance scores will be taken into consideration for those CoEs who may wish to apply to be part of the next cycle
 - A CoE feedback form will be sent out to all active CoEs to evaluate their experience during the current cycle

iv. CoE webinars

She also gave updates about CoE webinars planned next year

- Over 50% stated that they prefer the webinar to be once every 6 months.
- The survey showed a 50/50 tie on the global vs regional webinars.
- Over 75% stated that the webinars should cover both subject-specific topics and methodology-focused topics.
- For webinar topics on methodology answers were narrowed down to:
 - Social media marketing and promotion, including engagement with participants during and post course delivery.
 - Trends and best practices of online training, including e-learning techniques and pedagogical strategies.
- For subject-based webinar topics the following topics were prioritized:
- IOT, 5G, Cybersecurity, Artificial Intelligence, Beyond 5G.
- Based on this, ITU will plan for two webinars next year (1 in the first half and 1 in the second half of the year)



4. Agenda Item 2: Centres of Excellence presentations: 2021 implementation and training plans for 2022

Presentation by ITU

Firstly, Mr. Ahmed El Raghy, Senior Advisor and Capacity Development focal point for Arab region, BDT/ITU, presented an overview of training courses planned, implemented, registered and certified participants in 2021 and highlights the key challenges faced during 2021 including COVID-19 which resulted in a reduced number of training courses implemented. In 2021, ITU Centres of Excellence for Arab States had offered 31 training courses, out of which 9 were implemented and 22 were cancelled. Mr. Ahmed El Raghy emphasized the need of close cooperation of CoE focal points for the implementation of the CoEs courses despite COVID-19 restrictions. He displayed a slide to compare between 2019, 2020 and 2021 courses status. In 2019 out of 34 training courses planned, only 15 were implemented, adding to 272 people trained and 261 certified. In 2020 out of 29 training courses planned, only 10 were implemented, adding to 215 people trained and 179 certified. In 2021 out of 31 training courses planned, only 9 were implemented, adding to 449 people trained and 103 certified. The Annex 3 shows the implementation of CoE activities in 2021 and Annex 4 shows the implementation of CoE activities in 2020 and Annex 5 shows the implementation of CoE activities in 2019.

Presentations by Centres of Excellence

The Chair invited the CoEs to present their detailed 2021 activities report, including challenges faced in the implementation of training courses and their proposals for the training courses they are planning to deliver in 2022.



NAUSS (Regional Entity), LAS

In 2021, NAUSS was able to deliver the Four planned courses, despite the COVID-19 situation.

ľ	No Course Title	Original dates	Final dates	Delivery Mode	Status	Number of participant s	Fees
1	Ransomware Analysis: file encryption and decryption mechanism		7-8 Apr. 2021	Online	Implemented	57	0 USD
2	Cybersecurity Foundations	21-30-Mar. 2021	30-31 Aug. 2021	Online	Implemented	133	0 USD
3	Ransomware Analysis File Encryption & Decryption		25-26 Oct. 2021	Online	Implemented	92	0 USD
4	Introduction to Digital Forensics		24-25 Nov. 2021	Online	Implemented	108	0 USD

CITET, Tunisia

In 2021, One out of the Twelve online trainings, that had been planned for 2021, was implemented and eleven cancelled, due to COVID-19 situation.

No	Course Title	Original dates	Final dates	Delivery Mode	Status	Number of participant s	Fees
1	Applications of Geographic Information System (GIS) in Environmental Management and Resources Protection -Level 1	8-11 Feb. 2021	12-16 Jul. 2021	Online	Implemented	8	120 USD
2	How to assess your products carbon footprint	24-27 May 2021	14-18 June 2021	F2F	Cancelled	N/A	120 USD
3	How to carry out the Full Life Cycle Assessment	22-25 Mar 2021	2-6 Aug. 2021	Online	Cancelled	N/A	120 USD
4	Management of Electronics and Electrics Equipment Waste* (added in 2021 but not part of 2020 plan)	20-24 Sep. 2021	4-8 Oct. 2021	Online	Cancelled	N/A	120 USD
5	Application of Geographic Information System (GIS) in Environmental Management and Resources Protection -Level 2	13-16 Sep. 2021	4-8 Oct. 2021	Online	Cancelled	N/A	120 USD
6	Environment Impact Assessment		8-22 Oct. 2021	Online	Cancelled	N/A	120 USD
7	ISO 26000 CSR* (added in 2021 but not part of 2020 plan)		1-5 Nov. 2021	Online	Cancelled	N/A	120 USD
8	Environment Impact Assessment		8-11 Nov. 2021	F2F	Cancelled	N/A	120 USD
9	Environment Regulation* (added in 2021 but not part of 2020 plan)		15-19 Nov. 2021	Online	Cancelled	N/A	120 USD
10	Implementation of a Management System for Sustainable Development in Communities (MSSDC) based on ISO 37101 standard		6-10 Dec. 2021	Online	Cancelled	N/A	120 USD
11	How to carry out the Full Life Cycle Assessment	1-5 Nov. 2021	13-17 Dec. 2021	F2F	Cancelled	N/A	120 USD
12	How to assess your products carbon footprint		20-24 Dec. 2021	Online	Cancelled	N/A	120 USD





SUDACAD, Sudan

Three out of eight online trainings, that had been planned for 2021, were implemented, and five cancelled, due to COVID-19 situation and other political issues.

N o	Course Title	Original dates	Final dates	Delivery Mode	Status	Number of participants	Fees
1	Cloud Computing* (added in 2021 but not part of 2020 plan)		16-18 Mar. 2021	Online	Implemented	23	75 USD
2	Agile Project Management for ICT Applications & Services	22-31 Mar. 2021	8-17 Aug. 2021	Online	Implemented	11	75 USD
3	Big Data	27-29 Jul. 2021	24-26 Aug. 2021	Online	Implemented	13	75 USD
4	Risk Management for ICT Applications & Services		21-30 Jun. 2021	Online	Cancelled	N/A	75 USD
5	Computer-aided Spectrum Management		25 Oct. – 25 Nov. 2021	Online	Cancelled	N/A	75 USD
6	Fiber To The Home (FTTH)	21-23 Sep. 2021	14-18 Nov. 2021	Online	Cancelled	N/A	75 USD
7	Ultra-Microwave Broadband Internet Access		23-25 Nov. 2021	Online	Cancelled	N/A	75 USD
8	Internet Governance: Policy and Technical Perspective	21-23 Dec. 2021	5-7 Dec. 2021	Online	Cancelled	N/A	75 USD

S2T, Tunisia

One out of seven online trainings that had been planned for 2021, were implemented and six courses cancelled, due to COVID-19 situation.

No	Course Title	Original dates	Final dates	Delivery Mode	Status	Number of participants	Fees
1	Domain Name System Security Extensions (DNSSEC)		8-14 March 2021	Online	Implemented	4	150 USD
2	IMT-2020/5G Mobile Networks and Systems		15-21 March 2021	Online F2F	Cancelled	N/A	150 USD
3	Certified Fiber Optical Technician		12-16 April 2021	F2F	Cancelled	N/A	150 USD
4	Wireless Networks Security		11-17 May 2021	Online	Cancelled	N/A	150 USD
5	Certified Fiber Characterization Engineer		14-18 June 2021	F2F	Cancelled	N/A	150 USD
6	Infrastructure Solutions for Broadband Applications	22-28 Feb. 2021	23-29 Aug. 2021	Online	Cancelled	N/A	150 USD
7	Security Aspects in Emerging ICT Technologies		12-18 Oct. 2021	Online F2F	Cancelled	N/A	150 USD

TRAINING PLAN 2022

Based on a series of presentations on the training plans for 2022, including details on the content, expected target audience and pricing, the list of 2022 planned trainings has been established.



NAUSS (Regional Entity), LAS

No.	Training course topic	Proposed Dates	Expected number of participants	Mode of Delivery	Fees
1	Cybersecurity Foundation	19-20 Jan. 2022	15	Online	Free
2	Window Forensic Analysis	30-31 March 2022	15	Online	Free
3	Ransomware Analysis: File Encryption and Decryption Mechanism	6-7 June2022	15	Online	Free
4	Introduction to Forensic Programming	5-6 Oct. 2022	15	Online	Free
5	Ransomware Analysis: File Encryption and Decryption Mechanism	7-8 Nov. 2022	15	Online	Free

CITET, Tunisia

No.	Training course topic	Proposed Dates	Expected number of participants	Mode of Delivery	Fees
1	Assessing the Impact of ICT on Climate Change	7-10 March 2022	15	Online	240 USD
2	Assessing the Impact of ICT on Climate Change	5-9 Sept. 2022	15	Online	240 USD
3	The role of Satellite and Radiocommunication in Environmental Monitoring	10-21 Oct. 2022	15	Online	240 USD
4	How to carry out a full Life Cycle Assessment (LCA)	5-16 Dec. 2022	15	Online	240 USD
5	How to carry out a full Life Cycle Assessment (LCA)	16-20 May 2022	15	Online	240 USD

SUDACAD, Sudan

No.	Training course topic	Proposed Dates	Expected number of participants	Mode of Delivery	Fees
1	Agile Project Management for ICT Applications & Services	13-17 March 2022	15	Online	-75 USD
2	Internet of Things (IoT)	15-17 May 2022	15	Online	-75 USD
3	Fiber To The Home (FTTH)	12-16 June 2022	15	Online	150 USD
4	Ultra-Microwave Broadband Internet Access	26-28 July 2022	15	Online	150 USD



5	Project Management for ICT Implementation	21-25 Aug. 2022	15		150 USD
6	Risk Management for ICT Applications & Services	25-29 Sept. 2022	15	Online	150 USD
7	Internet Governance: Policy and Technical Perspective	25-27 Oct. 2022	15	Online	75 USD

S2T, Tunisia

No.	Training course topic	Proposed Dates	Expected number of participants	Mode of Delivery	Fees
1	Optical Transport Networks: DWDM	14-19 Feb. 2022	15	Online	150 USD
2	Optical Access Networks: FTTx	21-26 March 2022	15	Online	150 USD
3	Optical Fiber Characterization	9-14 May 2022	15	Online	150 USD

During this session, during the presentations of CoEs, the following issues were raised:

- The impact of COVID-19 and the importance to of maintaining and improving online training modality, as well as the positive results of the mid-year review of the training plan to mitigate the impact.
- The importance to come up with a better marketing strategy by both ITU and CoEs and counting on the support of the CoE network to promote their respective trainings, without competing among them.
- The importance to promote a stronger cooperation between CoEs, mainly between those that work under the same priority areas.
- Maintained the last year business model.
- Performance of CoEs and the need to follow the process for the validation of training outlines in advance (new ITU Quality Assurance process for training courses/content)
- The relevance of combining soft skills with technical skills addressed by the CoEs in their courses.

5. Agenda Item 3: Approval of the 2022 training plan

Presentation by the Chair

The CoE Chair presented the proposed training plan for 2022 and invited the CoEs to approve the plan. The Chair informed the Committee about the following conditions related the CoE training plan for 2022:

that the training courses, for which the training outlines were not provided, or



which were not already reviewed this year and the training courses which require additional time to complete the Quality of Assurance process, will not be included in the training catalogue for 2022. The request for approval for these courses will be done later by electronic means in consultations with ITU.

- SUDACAD and S2T training outlines are under review according to the Quality of Assurance process
- All approved Courses will be online and any Face-to-Face training need prerequisite approval from ITU.
- CITET training courses under data updating process and will be ready for delivery based on ITU confirmation.

The Chair asked if there are any objection with this proposal and invited ITU Secretariat to provide any clarification if required. There were no objections, so he considered the meeting agreed on the 2022 training plan with the associated conditions.

6. Agenda Item 4: Discussion on promotional activities carried out by CoEs and ITU for the past year

Presentation by ITU

Ms. Halima Letamo, Capacity & Skills Development Officer, ITU/BDT, said that the issue relating to the promotion of courses was discussed during the CoE global meeting and in the previous mid-year steering committee meeting we agreed on a plan to be implemented during the remaining part of the year. She presented a brief overview of ITU's promotional strategy and promotional activities undertaken after last meeting. Currently CoE courses are promoted by:

- CoEs through the use of the CoEs' selected advertising media
- ITU through the ITU Academy platform

These strategies can be enhanced through:

- use promotion tools that are accessible globally and have a world-wide presence.
- multiple promotional strategies used together to complement each other, increasing the chances of reaching different society segments.
- use strategies based on current technologies to reach the market earlier than other providers and in time for the annual training planning of potential clients.
- Intentionally planning and committing to specific promotional activities annually.

During the mid-year Steering Committee meeting, ITU proposed a plan to be implemented and progress reported in this SC meeting. She said that today we are coming together to see what we have been able to achieve in relation to this plan, and then proceed to report on the activities implemented by ITU as shown in the table below.



Activity	Description	List of events	What worked well	Challenges
Include courses as part of events.	If an event is held in X topic, when advertising the event, list the courses linked to that topic which are available on the ITU Academy platform, especially on the event website.	Workshop on Digital Skills Assessment Guidebook for Africa ILO-ITU Joint programme on Boosting decent jobs for you in the digital economy in Africa, Senehal, Cote d'Ivoire, Kenya and Nigeria ITU Regional Forum for Europe on Meaningful Connectivity Accessible Europe 2021: ITU-EC Forum for Europe ITU Regional Innovation Forum for Europe ITU Regional Preparatory Meeting for WIDC-21 for Asia and the Pacific (RPM-ASP) 09 - 10 March 2021, Virtual ITU-Industry Meeting for Asia and the Pacific-27 May, Virtual ITU-Industry Meeting for Asia and the Pacific-8-9 June, Virtual ITU-Industry Meeting for Asia and the Pacific-8-9 June, Virtual Digital Skills Assessment Webinar-13 July 2021 Emerging Technology for Connectivity: Accelerating Digital Transformation in LDCs, LLDCs and SIDS- July 2021 ITU 2016 Jobs (Appl. Vipp. ITU Brown Control Skills TU Buunch a Webinar Series on "Digital Technology Innovations – Case Studies from India and the Asia Pacific Region" ITU 2021 Global Cyber Drill for Asia and the Pacific and CIs Interregional Meeting-15 September, Virtual	Some enquiries on CoE courses which indicate a generation of interest.	Measuring the effectiveness and competition with ICT players in the area of emerging tech space-IoT, AI, Blockchain, etc
Promote participation of CoEs in ITU regional and global capacity development events	Provide a space for CoEs to showcase their work at ITU capacity building events.	 Taller Multisectorial sobre el papel de las TiC para el manejo de desastres y la reducción del riesgo 14 al 16 de septiembre 2021 AFR COE catalogue posted on the events' regional capacity development page Workshop on Digital Sills Assessment Guidebook for Africa ITUR Begional Forum for Europe on Digital Sills Development 1. Asía and the Pacific Regional Development Forum-Developing ICT Capacity in Asía and the Pacific-4th December 2021 - IoT Academy 2. 11 September, 10:30 – 12:30, 2021, Virtual Virtual Information Session on Distributed Ledger Technology (including Blockchain)-CAICT 	CoEs can prepare a presentation and share what is that they do and their area of expertise	Regional events that target only the stakeholders in the region and do not provide reach to the international market
Provide information on review of courses	On the ITU Academy website, provide information on reviews of courses done by attendees for public viewing.	Awaiting CoEs to share testimonials to be uploaded on that page.	Dedicated central place where course praise can be viewed by any visitor of the platform. Greater advertisement not just of the course but also of the CoE.	CoEs need to obtain permission from participants to be featured (inf. required includes picture, name and occupation).
Send push messages on upcoming courses	Provide option for visitors of the ITU Academy to indicate their interest in receiving information on future courses. An update is sent to them once a month on the upcoming courses in the areas of interest they indicated.	Regional twitters Monthly course compaigns Regional course catalogues sent out at the beginning of the year	We have established regular users, esp. among regulators and comm. authorities in various countries, who book group enrolments thanks to these reminders. Growing participation from other regions by 50% in the ASP region	Course dates keep changing making newsletter information obsolete or inconsistent.
Use the Steering Committee (SC) platform to plan promotional strategies and monitor progress	As part of the SC agenda, include a session on recommendations for new promotional strategies and report on progress made	Done hence this Item in the agenda of the SC meetings.	N/A	N/A

The Chair gave the floor to each CoE to talk and present 1 slide for their views on the following 3 questions:

- From the promotional activities shared during the mid-year SC meeting, which ones did you use to advertise/promote your courses?
- That are the two main successes you had with the promotion and what are the two main challenges?
- o How do you evaluate the success of your promotion?

Each CoE talked on the promotional activities carried out last year as follows:

1. SUDACAD (Ms. Sara Elmakki Abdalgadir, Planning & Development Dept.)



Activity	Description	List the names of courses which you promoted using the activity (if none put N/A)	What worked well with this promotion activity?	Which challenges did you face?
CoEs to publish reviews of the courses by their respective attendees	CoEs encouraged to ensure end of course evaluations are analyzed, and results shared with ITU for publishing of the ITU Academy website	1. Agile for ICT. 2. Big Data. 3. CLOUD COMPUTING. 4. Fiber To The Home (FTTH). (Cancelled) 5. Computer Aided Spectrum Management. (N/A) (Cancelled) 6. Ultra-Microwave Broadband Internet Access. (N/A) (Cancelled)	Big Data. CLOUD COMPUTING.	Collecting participants' feedback and evaluation of the program.
CoEs to create social media promotional content.	CoEs to create snapshot videos and or ppt slides (social media compatible) of what the course will be about to be used on social media platforms	7. Internet Governance Policy and Technical Perspective. (N/A) (Cancelled) 1. Agile for ICT. (N/A) 2. Big Data. (N/A) 3. CLOUD COMPUTING. (N/A) 4. Fiber To The Home (FTTH). (N/A) (Cancelled) 5. Computer Aided Spectrum Management. (N/A) (Cancelled) 6. Ultra-Microwave Broadband Internet Access. (N/A) (Cancelled) 7. Internet Governance Policy and Technical Perspective. (N/A) (Cancelled)		
CoEs to use social media to promote courses.	Post at least 1 promotional message per course on 1 social media platform and tag ITU's respective accounts to increase visibility when advertising new courses	1. Agile for ICT. 2. Big Data. 4. Fiber To The Home (FTTH). (Cancelled) 5. Computer Aided Spectrum Management. (N/A) (Cancelled) 6. Ultra-Microwave Broadband Internet Access. (N/A) (Cancelled) 7. Internet Governance Policy and Technical Perspective. (N/A) (Cancelled)	1. Agile for ICT. 2. Big Data.	None.
CoEs to include variety of incentives for taking courses	CoEs can prepare their courses in modular version. If three courses are taken on the same topic one can earn a discount for the third module. Or discount applied for the second course taken with the same CoE etc.	1. Agile for ICT. (N/A) 2. Big Data. (N/A) 3. CLOUD COMPUTING. (N/A) 4. Fiber To The Home (FTTH). (N/A) (Cancelled) 5. Computer Aided Spectrum Management. (N/A) (Cancelled) 6. Ultra-Microwave Broadband Internet Access. (N/A) (Cancelled) 7. Internet Governance Policy and Technical Perspective. (N/A) (Cancelled)		

- SUDACAD highlighted that they depended mainly for their promotion activities on social media (Facebook, twitter) and Bulk SMS services.
- Collecting participants' feedback and evaluation of the program.
- SUDACAD evaluate the success of their promotion activities by the registration rate and the ability to get participation from outside the region.
- SUDACAD achieved a global participation in some of its training activities because of the effective promotion activities
- 2. CITET (Mr. Jawhar Abdelkrim, Marketing and Communication Responsible)





Activity	Description	List the names of courses which you promoted using the activity (if none put N/A)	What worked well with this promotion activity?	Which challenges did you face?
CoEs to publish reviews of the courses by their respective attendees	end of course evaluations are	Application of GIS in environmental management and resources protection (level 1) online 12 to 16-Jul-21 Application of GIS in environmental management and resources protection (level 2) online 4 to 8-Oct-21 How to carry out a full life cycle assessment online 2 to 6-Aug-21 How to Assess Your Products Carbon Footprint online 20 to 24-Dec-21 Environmental Impact Assessment online 8 to 12-Oct-21	participants to fill and send the feedbacks if not they don't taken there Certificates, CITET presents in the start of each training courses an engagements that the participants should	Participants when they finish the courses they will not interested by doing the feedback, participants leave or withdraw from the course during the training course
CoEs to create social media promotional content.	CoEs to create snapshot videos and or pit sides (social media compatible) of what the course will be about to be used on social media platforms	Application of GIS in environmental management and resources protection (level 1) online 12 to 16-Jul-21 Application of GIS in environmental management and resources protection (level 2) online 4 to 8-Oct-21 How to carry out a full life cycle assessment online 2 to 6-Aug-21 How to Assess Your Products Carbon Footprint online 20 to 24-Dec-21 Environmental Impact Assessment online 8 to 12-Oct-21	CITET takes part customer needs in the elaboration of commercial support and in the justifying of the utility of our training program CITET targets to update regularly her services presentation and improve the management of	Lake of material to prepare content of PPT slides or video, if ITU can help us it will be good.
CoEs to use social media to promote courses.	Post at least 1 promotional message per course on 1 social media platform and tag ITU's respective accounts to increase visibility when advertising new courses	Application of GIS in environmental management and resources protection (level 1) online 12 to 16-Jul-21 Application of GIS in environmental management and resources protection (level 2) online 4 to 8-Oct-21 How to carry out a full life cycle assessment online 2 to 6-Aug-21 How to Assess Your Products Carbon Footprint online 20 to 24-Dec-21 Environmental Impact Assessment online 8 to 12-Oct-21	CITET promotes and shares courses via her web page and social media platform 1 or 2 month before the start of training the contents and the invitations letters, CITET aware via email and private message there	CITET need more support via the social media and need that there publications will be sponsored or supported by the ITU social media.
CoEs to include variety of incentives for taking courses	CoEs can prepare their courses in modular version. If three courses are taken on the same topic one can earn a discount for the third module. Or discount applied for the second course taken with the same CoE etc			

- CITET mentioned that they depended mainly for their promotion activities on social media (Facebook, LinkedIn, twitter) also they have a customer's database to communication regularly with them via emails and SMS.
- Responding to the course evaluations survey is must to get Course certificate
- CITET targeted the ICT community on national and regional level via various means to promote their training courses



3. S2T (Ms. Houda Jarraya, ITU Focal Point, Smart Tunisian Technoparks (S2T))

Activity	Description	Medium	What worked well with this promotion activity?	Which challenges did you face?
CoEs to publish reviews of the courses by their respective attendees	CoEs encouraged to ensure end of course evaluations are analyzed, and results shared with ITU for publishing of the ITU Academy website	ITU Academy website	Participants were not interested in fulfilling evaluation forms & sharing their feedback despite the importance for this communication tool to attract future participants for next courses if they are well rated.	To guarantee feedback sharing. We propose that this session is included during the tutoring session as a task in order to involve more participants in the evaluation process before the end of the course and even as a requirement before taking the evaluation test.
CoEs to create social media promotional content.	CoEs to create snapshot videos and or ppt slides (social media compatible) of what the course will be about to be used on social media platforms	Videos and ppt slides	It's more appropriate & could be more achieved for practical trainings based in labs by highlighting the importance of pedagogical tools & practical materials.	We didn't' use it as we achieved only one training workshop last year, Challenges are more linked to the mode of delivery (face to face vs online) of the course rather than to the use of this communication tool.
CoEs to use social media to promote courses.	Post at least 1 promotional message per course on 1 social media platform and tag ITU's respective accounts to increase visibility when advertising new courses	Social media platforms	We are using social media platforms as well as mailing campaign, sharing catalogue & other communication tools with our stakeholders and even for attracting new prospects in order to expand the target market.	No particular challenges faced.
CoEs to include variety of incentives for taking courses	CoEs can prepare their courses in modular version. If three courses are taken on the same topic one can earn a discount forthe third module. Or discount applied for the second course taken with the same CoE e.t.c	Incentives highlighted on course catalogue	We can not adopt this incentive tool.	As a public company, We are not able to offer discounts about courses or to deliver courses for free regarding the specific public management rules that S2T have to follow.

- To guarantee feedback sharing, S2T propose evaluation session is included during the tutoring session as a task in order to involve more participants in the evaluation process before the end of the course and even as a requirement before taking the evaluation test.
- S2T didn't' use social media as a promotion tool as S2T delivered only one training course in 21,
- Challenges are more linked to the mode of delivery (face to face vs online) of the course rather than to the use of this communication tool.
- S2T As a public company, are not able to offer discounts about courses or to deliver courses for free.
- **4. NAUSS** (Mr. Sundaresan Ramachandran, Digital Forensics Specialist, Center of Excellence in Cybercrime and Digital Forensics)



Activity	Description	List the names of courses which you promoted using the activity (if none put N/A)	What worked well with this promotion activity?	Which challenges did you face?
CoEs to publish reviews of the courses by their respective attendees	CoEs encouraged to ensure end of course evaluations are analyzed, and results shared with ITU for publishing of the ITU Academy website	We include training feedbacks for all our courses in 2021 which exist in the ITU Academy Course page. 1. Ransomware Analysis (April 2021) 2. Cybersecurity Foundations (August 2021) 3. Ransomware Analysis (October 2021) 4. Introduction to Digital Forensics (November 2021)	It helps to identify other areas of training participants wish to have.	Adding block in course page for reviews (course ratings) and end of course evaluations for the respective courses not sure whether it can be added to the ITU Academy LMS platform.
CoEs to create social media promotional content.	CoEs to create snapshot videos and or ppt slides (social media compatible) of what the course will be about to be used on social media platforms	N/A For our future courses, We will include 1 PPT slide of 2022 course list with brief description of what course will offer in our course materials to keep participants informed about our future courses.	N/A	N/A
CoEs to use social media to promote courses.	Post at least 1 promotional message per course on 1 social media platform and tag ITU's respective accounts to increase visibility when advertising new courses	N/A For our future courses, We will publish the 2022 ITU courses registration links in our website and our official social media accounts to increase the visibility of the training courses.	N/A	N/A
CoEs to include variety of incentives for taking courses	CoEs can prepare their courses in modular version. If three courses are taken on the same topic one can earn a discount for the third module. Or discount applied for the second course taken with the same CoE e.t.c	Our courses were of free of cost.	In our efforts to increase learning opportunities, we observed that 13 recurrent registrations from participants to more than one course in 2021.	Limited number of trainees are appearing for the online instructor led sessions.

- NAUSS will implement promotion strategy plan for 2022 training activities.
- NAUSS will include 1 PPT slide of 2022 course list with brief description of what course will offer in their course materials to keep participants informed about NAUSS's future courses
- Promotion activities on social media accounts to increase the visibility of the training courses.
- NAUSS confirmed that they will continue to offer their training activities for free.

7. Agenda Item 5: CoE operational Issues

Presentation by ITU

Ms. Halima Letamo, Capacity & Skills Development Officer, ITU/BDT, delivered a presentation on:

- Updates on the planning and implementation of courses
- Updates on the implementation of the quality assurance process
- Updates on the transition from face to face to online courses
- Reminders for CoEs

i. Updates on the planning and implementation of courses

- This year the annual planning has begun earlier than in the previous years due to the QA process
- Some CoEs have submitted their training outlines in time which helped with the planning



- CoEs who have not submitted their outlines for evaluation in time will have their courses not approved during the SC. This will result in:
 - SC approving incomplete training plans for the year which is a waste of SC time
 - Delay in compiling the 6 months/annual training catalogue (both regional and global)
 - Delay in promotion of courses

In the past year

- There were too many course postponements, impossible for HQ to keep track of date changes
- Some CoEs change titles of courses when the courses have been approved. This requires that the course is sent for re-checking by the TP
- Some course topics were outside the mandate of ITU
- Incomplete training outlines were submitted. This means sufficient details were not provided for the TPs to decide on the courses

ii. Updates on the transition from face-to-face to online courses

- All courses on the ITU Academy since March 2020 are now online.
- Some CoEs are still struggling to go fully online due to the nature of their course subjects or due to lack of well-trained tutors, who can manage online delivery.
- Online courses are largely cheaper than face-to-face courses, ranging from 75 USD to 150 USD.
- Some CoEs still run their courses at higher prices and have less participants.
- Most CoEs now use the Moodle Zoom plugin or MS teams when preparing live lectures.

iii.Reminders for CoEs

- Online tutors/trainers must familiarize themselves in advance with the online platform.
- ITU Academy administrators do not create accounts for users and do not enroll participants. Participants should do that on their own.
- The trainers must upload materials, set up quizzes and assignments, forums and chats, and monitor participants, the ITU Academy administrators do not do this. (Trainers can reach out to ITU academy administrators if they need help).
- CoE Coordinators should monitor training and ensure trainers fully engage participants.
- Enrolments for paid courses should occur only after payments are in effect, not before.
- End-of-training report submission, with complete scoring table & financial report, is imperative and should be submitted within a month of the end of the course.

In this sense, the CoEs appreciated the ITU efforts for the development of the operational aspects of the training activities

8. Closing

The meeting ended with closing remarks from Ms. Susan Teltscher, Head of Capacity and Digital Skills Development, ITU/BDT, on behalf of ITU, and the Chair concluded and gave his closing remarks and thanked all participants for their active participation and fruitful contributions. He wished all participants safe and healthy 2022 and declared the meeting closed.



ANNEX 1: LIST OF PARTICIPANTS

• 6th Steering Committee Meeting of the Centres of Excellence, Network for ARB, 20 December 2021

Centres of Excellence:

- Mrs. Kmaira Ben Jannet (Tunis International Centre of Environmental Technologies (CITET))
- Mr. Kamel SAIDI (Tunis International Centre of Environmental Technologies (CITET))
- Mr. Jawhar ABDELKRIM (Tunis International Centre of Environmental Technologies (CITET))
- Mr. Abdulrazaq AL-MORJAN (Naif Arab University for Security Sciences (NAUSS))
- Ms. Ghadi ALZAHRANI (Naif Arab University for Security Sciences (NAUSS))
- Mr. Sundaresan RAMACHANDRAN (Naif Arab University for Security Sciences (NAUSS))
- Ms. Houda JARRAYA (Smart Tunisian Technoparks (S2T))
- Mr. Walid ABUSHAM (SUDATEL Telecommunications Academy (SUDACAD))
- Ms. Sara ALMAKKI (Planning & Development Dept. SUDATEL Telecommunications Academy (SUDACAD))

Observers:

- Mr. Al-Ansari ALMASHAKBEH (Senior Adviser, Telecommunications Regulatory Commission (TRC), Jordan)
- Mr. Abdelaziz TIB (Directeur Central Chargé de la Mission Réglementation, Agence Nationale de Réglementation des Télécommunications (ANRT), Morocco)
- Mr. Younes BENCHERKI (Juriste confirmé, Agence Nationale de Réglementation des Télécommunications (ANRT), Morocco)
- Ms. Ola ASADI (Director of Digital Innovation support, Ministry of Telecommunications & Information Technology, State of Palestine)
- Eng. Iyad IRIQAT (ICT Director, inistry of Telecommunications & Information Technology, State of Palestine)
- Mr. Mohamed CHEMANI (Secretary General, Arab Regulators Network)
- Ms. -Carole Hage (Market & Competition Unit Tariffs Manager, TRA, Lebanon)

ITU Staff members:

- Ms. Sulyna ABDULLAH (Chief, Digital Knowledge Hub Department)
- Ms. Susan TELTSCHER (Head, Capacity and Skills Development Division)
- Mr. Ahmed ELRAGHY (Senior Advisor, Arab Regional Office)
- Mr. Mustafa ALMAHDI (Programme Officer, Arab Regional Office)
- Ms. Elena STANKOVSKA-CASTILLA, (Capacity and Digital Skills Development Officer)
- Ms. Halima LETAMO (Capacity & Skills Development Officer)
- Ms. Guiomar LEVI-SETTI (Junior E-Learning Officer)
- Ms. Sylvie RAPOSO (Capacity Development Admin. Coordinator)
- Ms. Anny CHAQRA (Communications Consultant, Arab Regional Office)
- Mr. Drini REXHA (CTS)
- Ms. Myriam NABIH NAGUIB (Senior Admin. Assistant, Arab Regional Office)



ANNEX 2: AGENDA OF THE 6TH STEERING COMMITTEE MEETING

6th Steering Committee Meeting of the ITU Centers of Excellence Network for Arab Region

20 December 2021 | from 13:00 to 15:30 Cairo Time | Online Meeting

PROVISIONAL AGENDA

Time	Items
12:30 – 13:00	Online networking and testing of video and audio
13:00 – 13:18	 Welcome remarks by ITU (Mr. Ahmed El Raghy on behalf of Mr. Adel Darwish, Regional office, ITU ARB) Remarks by ITU HQ (Ms. Nur Sulyna Abdullah, Chief, Digital Knowledge Hub Department, ITU/BDT) Remarks by the outgoing Chair (Mrs. Kmaira Ben Jannet, Director General, Tunis International Centre for Environmental Technologies) Confirmation of and remarks by the incoming Chair (Dr. Abdulrazaq Al-Morjan, Director of Centre of Excellence in Cybercrime and Digital Forensics, Naif Arab University for Security Sciences)
13:18-13:20	Group picture
13:20-13:40	Agenda Item 1: Update on CoE strategic issues ITU updates CoEs on the issues relating to the implementation of the CoE strategy and the process towards the end of the CoE cycle. • ITU HQ (Ms. Susan Teltscher, Head of Capacity and Digital Skills Development, ITU/BDT) updates on • Global performance of the CoEs for the year • CoE strategic review • End of cycle activities • 2022 CoE webinars Discussion

13:40 - 14:40 International Teleco	Agenda Item 2: Centres of Excellence presentations: 2021 implementation and training plans for 2022:
	ITU will share the current status of implementation for each CoE. EachCoE will report on the implementation of their 2021 activities. Each presentation should cover the courses that were implemented throughout the entire year (number of participants, feedback received, certificates issues etc.), issues faced and lessons learnt, including those from COVID-19.
	Each CoE will also present their proposals for the training courses they are planning to deliver in 2022, including the topics, exact dates, training fees charged, audience targeted etc. The objective of the discussion is to agree on the draft training schedule for 2022.
	 ITU Regional Office (Mr. Ahmed El Raghy, Programme Officer and Capacity Development focal point for Arab region, BDT/ITU)
	 Current status of implementation for All CoEs in the region
	 NAUSS (Mr. Sundaresan Ramachandran, Digital Forensics Specialist, Center of Excellence in Cybercrime and Digital Forensics) CITET (Mr. Jawhar Abdelkrim, Marketing and Communication Responsible) SUDACAD (Ms. Sara Elmakki Abdalgadir, Planning & Development Dept.) S2T (Ms. Houda Jarraya, ITU Focal Point, Smart Tunisian Technoparks (S2T))
14:40 – 14:50	Discussion Agenda Itom 2: Approval of the 2022 training plan:
14.40 - 14.30	 Agenda Item 3: Approval of the 2022 training plan: The CoE Chair presents the proposed training plan for 2022 and invites the CoEs members to approve the plan.
	• Q&A



14:50 – 14:55	Virtual Break
14:55 - 15:15	Agenda Item 4: Discussion on promotional activities carried out by CoEs and ITU for the past year
	 ITU HQ (Ms Halima Letamo, Capacity & Skills Development Officer, ITU/BDT) SUDACAD (Ms. Sara Elmakki Abdalgadir, Planning & Development Dept.) CITET (Mr. Jawhar Abdelkrim, Marketing and Communication Responsible) S2T (Ms. Houda Jarraya, ITU Focal Point, Smart Tunisian Technoparks (S2T)) NAUSS (Mr. Sundaresan Ramachandran, Digital Forensics Specialist, Center of Excellence in Cybercrime and Digital Forensics) Each CoE is expected to present 3 slides to answer the following 3 questions. ITU will also present a brief overview of ITU's promotional strategy: From the promotional activities shared during the mid-year SC meeting, which ones did you use to advertise/promote your courses? That are the two main successes you had with the promotion and what are the two main challenges?
	 How do you evaluate the success of your promotion?
	Discussion
15:15 – 15:25	Agenda Item 5: CoE operational Issues
	- ITU HQ (Ms Halima Letamo, Capacity & Skills Development Officer, ITU/BDT) deliver a presentation which highlights the following operational issues:
	 Updates on the planning and implementation of courses
	 Updates on the implementation of the quality assurance process
	 Updates on the transition from face to face to online courses
	Reminders for CoEs
	Discussion
15:25 -15:30	Closing
	 Closing Remark from ITU HQ (Ms. Susan Teltscher, Head of Capacity and Digital Skills Development, ITU/BDT)
	 Closing Remark from the Chair of the Meeting



ANNEX 3: IMPLEMENTATION OF COE ACTIVITIES 2021 AS OF 20 DECEMBER 2021

Steering Committee Meeting for Centres of Excellence Network for Arab Region

2021 IMPLEMENTATION (1)

25 Trainings Planned in 2020 SC / 6 Trainings added in 2021 / 9 Trainings Implemented in total

449 Registered / 103 Certified

СоЕ	Courses planned	Delivery mode	Start date	End date	Status	Number of participants registered	Number of participants certified	End-of training reports
CITET	Application of GIS in environmental management and resources protection (level ${f 1})$	online	12-Jul-21	16-Jul-21	Implemented	8		
CITET	Application of GIS in environmental management and resources protection (level 2)	online	4-Oct-21	8-Oct-21	Cancelled			
CITET	How to carry out a full life cycle assessment	face-to-face	13-Dec-21	17-Dec-21	Cancelled			
CITET	How to carry out a full life cycle assessment	online	2-Aug-21	6-Aug-21	Cancelled			
CITET	How to Assess Your Products Carbon Footprint	face-to-face	19-Jul-21	23-Jul-21	Cancelled			
CITET	How to Assess Your Products Carbon Footprint Implementation of a Management System for Sustainable Development in Communities (MSSDC) based on ISO 37101 standard* (added in 2021 but not part	online	20-Dec-21		Cancelled			
CITET	of 2020 plan) Environmental Impact Assessment	online face-to-face	6-Dec-21 8-Nov-21	10-Dec-21 11-Nov-21	Cancelled Cancelled			
CITET	Environmental Impact Assessment	online	8-Oct-21	22-Oct-21	Cancelled			
CITET	Management of Electronics and Electrics Equipment Waste* (added in 2021 but not part of 2020 plan)	online	4-Oct-21	8-Oct-21	Cancelled			
CITET	ISO 26000 CSR* (added in 2021 but not part of 2020 plan)	online	1-Nov-21	5-Nov-21	Cancelled			
CITET	Environmental Regulation * (added in 2021 but not part of 2020 plan)	online	15-Nov-21	19-Nov-21	Cancelled			
NAUSS	Cybercrime Foundation	online	17-Mar-21	18-Mar-21	Cancelled			
NAUSS	Ransomware Analysis: file encryption and decryption mechanism* (added in 2021 but not part of 2020 plan)	online	7-Apr-21	8-Apr-21	Implemented	57	12	received
NAUSS	Cybersecurity Foundations	online	30-Aug-21	31-Aug-21	Implemented	133	36	received
NAUSS	Ransomware Analysis: file encryption and decryption mechanism	Online	25-Oct-21	26-Oct-21	Implemented	92	23	received
NAUSS	Introduction to Digital Forensics	Online	24-Nov-21	25-Nov-21	Implemented	108	20	received



Steering Committee Meeting for Centres of Excellence Network for Arab Region

2021 IMPLEMENTATION (2)

25 Trainings Planned in 2020 SC / 6 Trainings added in 2021 / 9 Trainings Implemented in total

249 Registered / 103 Certified

СоЕ	Courses planned	Delivery mode	Start date	End date	Status	Number of participants registered	Number of participants certified	End-of training reports
S2T	5G and IMT 2020 Mobile Networks and Systems	Online Face to face	8-Feh-21	14-Feb-21	Cancelled			
S2T	Domain Name System Security Extensions (DSSEC)	online		14-Mar-21	Implemented	4	3	received
S2T	Wireless Networks Security	online	11-May-21	17-May-21	Cancelled			
S2T	Security aspects in emerging ICT technologies	Online face-to-face	12-Oct-21	18-Oct-21	Cancelled			
S2T	Infrastructure Solutions for Broadband Applications	online	23-Aug-21	29-Aug-21	Cancelled			
S2T	Certified Fiber Optical Technician	face-to-face	12-Apr-21	16-Apr-21	Cancelled			
S2T	Certified Fiber Characterization Engineer	face-to-face	14-Jun-21	18-Jun-21	Cancelled			
SUDACAD	Agile Project Management for ICT Applications & Services	online	8-Aug-21	17-Aug-21	Implemented	11		
SUDACAD	Risk Management for ICT Applications & Services	online	21-Jun-21	30-Jun-21	Cancelled			
SUDACAD	Big Data	online	24-Aug-21	26-Aug-21	Implemented	13		
SUDACAD	Fiber To The Home (FTTH)	online	3-Oct-21	7-Oct-21	Cancelled			
SUDACAD	Computer Aided Spectrum Management	online	25-Oct-21	27-Oct-21	Cancelled			
SUDACAD	Ultra-Microwave Broadband Internet Access	online	23-Nov-21	25-Nov-21	Cancelled			
SUDACAD	Cloud Computing* (added in 2021 but not part of 2020 plan)	online	16-Mar-21	18-Mar-21	Implemented	23	11	received
SUDACAD	Internet Governance: Policy and Technical Perspective	Online	5-Dec-21	7-Dec-21	Cancelled			

13





ANNEX 4: IMPLEMENTATION OF COE ACTIVITIES IN 2020

2020 IMPLEMENTATION:

29 Trainings Planned / 9 Trainings Implemented 205 Registered / 171 Certified

(as of 1 December 2020)

CoE	Courses planned	Delivery mode	Original dates	Final dates	Status	Number of participants registered	Number of participants certified	End-of training reports
CITET	E-waste and the Circular Economy	online	19-21 April 2020	21SEP-02OCT20	cancelled	NA	NA	NA
CITET	Applications of Geographic Information System (GIS) in Environmental Management and Resources Protection (level I)	face-to-face	23-26MAR20	7-10SEP20	implemented	8	7	submitted
CITET	How to carry out a full Life cycle Assessment (LCA) - Postponed to 2021	online	01-04JUN20	12OCT-06NOV10	cancelled	NA	NA	NA
CITET	Smart & Sustainable Cities 24944	online	07-10SEP20		cancelled	NA	NA	NA
CITET	How to assess the carbon footprints of sectors, countries and regions	online	05-08OCT20	7-11DEC20	planned			
CITET	Applications of Geographic Information System (GIS) in Environmental Management and Resources Protection (Level II)	online	09-12NOV20	23-27NOV20	cancelled	NA	NA	NA
CITET	Environmental Impact Assessment	online		14-18DEC20	planned			
NAUSS	Basic Cyber Security Training (CompTIA Security)	face-to-face	29MAR-02APR20		cancelled	NA	NA	NA
NAUSS	Advanced Cyber Security Training CompTIA Security+)	face-to-face	05-09APR20		cancelled	NA	NA	NA
NAUSS	Basic IoT Training	face-to-face	13-17SEP20		cancelled	NA	NA	NA
NAUSS	Ethical Hacking (CIEH)	face-to-face	15-19NOV20		cancelled	NA	NA	NA
S2T	Optical Access Networks FTTH	face-to-face	13-17APR20		cancelled	NA	NA	NA
S2T	Fundamentals of Fiber and Optical Networks	face-to-face	30MAR-03APR20		cancelled	NA	NA	NA
S2T	5G Mobile Networks and Systems	online	01-05JUN20	14-20SEP20	implemented	4	3	submitted
S2T	Cyber Security Awareness & Forensics	online	27-30JUN20	13-19JUL20	implemented	12	8	submitted
S2T	Cyber Security Fundamentals	online	03-07AUG20		cancelled	NA	NA	NA
S2T	Optical Network Design	online	15-19JUN20		cancelled	NA	NA	NA
S2T	Domain Name System Security Extensions (DNSEEC)	online	31AUG-04SEP20	21-27SEP20	implemented	5	4	submitted
S2T	Optical Access Networks and Fiber to X (FTTX) Technologies	online	14-18SEP20	2-8NOV20	cancelled	NA	NA	NA
S2T	Wireless Security	online	02-06NOV20	2-8NOV20	cancelled	NA	NA	NA
S2T	Advanced Technical Overview of DWDM	face-to-face	02-07NOV		cancelled	NA	NA	NA
S2T	Optical Transport Networks: Dense Wavelength Division Multiplexing (DWDM) Technologies	online	07-11DEC20	14-20DEC20	cancelled	NA	NA	NA
SUDACAD	Agile Project Management for ICT Applications & Services	online	24-26MAR20	13-23JUN20	implemented	37	17	submitted
SUDACAD	Software Defined Network (SDN)	online	23-25JUN20	9-16AUG20	implemented	37	30	submitted
SUDACAE	Big Data	face-to-face	28-30JUL20	22-24SEP20	implemented	39	39	submitted
SUDACAD	Fiber To The Home (FTTH)	face-to-face	22-24SEP20	06-08OCT20	implemented	42	41	submitted
SUDACAE	Internet Governance: Policy and Technical Perspective	face-to-face	27-29OCT20		implemented	25	25	submitted
SUCADAE	Ultra-Microwave Broadband Internet Access	online	24-26NOV20	21-24DEC20	planned			_
SUCADAE	Cloud Computing	online	29-31DEC20		planned			



ANNEX 5: IMPLEMENTATION OF COEs ACTIVITIES IN 2019

2019

34 Trainings Planned / 15 Trainings Implemented 272 Registered / 261 Certified

_						Number of	Number of	
COE	Courses planned	Delivery mode	Original dates	Final dates	Status	participants registered	participants certified	End-of training reports
CITET	Waste Electronic and Electrical Equipment (WEEE) Management	face-to-face	NA	NA	cancelled	NA	NA	NA
CITET	Application of GIS in Environmental Management and Resources Protection	face-to-face	25-28NOV19		implemented	10	9	Submitted
CITET	Environmental Management System according to ISO 50001 Standard.	face-to-face	23-26SEPT19		implemented	8	8	Submitted
CITET	ICT and Ecodesign: Assessment of ICT Services Performance by using LCA Tools.	face-to-face	NA	NA	cancelled	NA	NA	NA
CITET	The role of ICT to achieve the UN Sustainable Development Goals (SDG)	face-to-face	NA	NA	cancelled	NA	NA	NA
CITET	TIC & Environment	face-to-face	NA	NA	cancelled	NA	NA	NA
NAUSS	Basic IoT Training	face-to-face	NA	NA	cancelled	NA	NA	NA
NAUSS	Digital Forensics	face-to-face	19-21NOV19		implemented	16	7	Submitted
NAUSS	Ethical Hacking (CIEH)	online instructor-led	NA	NA	cancelled	NA	NA	NA
NAUSS	Fundamentals of Cyber Security	face-to-face	NA	NA	cancelled	NA	NA	NA
NAUSS	Advanced Cyber Security Training (CompTIA Security+)	face-to-face	NA	NA	cancelled	NA	NA	NA
S2T	4G/5G Cellular Mobile Communications Technologies	face-to-face	22-26APR19		implemented	7	7	Submitted
S2T	FTTx Outside Plant Design	face-to-face	6-10MAY19		implemented	3	3	Submitted
S2T	Cyber Security Awareness & Forensics	face-to-face	29APR-3MAY19		implemented	7	6	Submitted
S2T	Cybercrime Management: A Proactive Approach	face-to-face	NA	NA	cancelled	NA	NA	NA
S2T	Smart Cities and IoT	face-to-face	NA	NA	cancelled	NA	NA	NA
S2T	Optical Fiber Characterization	face-to-face	NA	NA	cancelled	NA	NA	NA
S2T	Security of E-Government Services	face-to-face	NA	NA	cancelled	NA	NA	NA
S2T	Optical Network Design	face-to-face	23-27SEP19		implemented	5	5	Submitted
S2T	Digital Proofs and Security of Electronic Transactions.	face-to-face	NA	NA	cancelled	NA	NA	NA
S2T	Domain Name System Security Extensions (DNSSEC)	face-to-face	NA	NA	cancelled	NA	NA	NA
S2T	Wireless Security	face-to-face	NA	NA	cancelled	NA	NA	NA
S2T	Public Key Infrastructure in Depth	face-to-face	NA	NA	cancelled	NA	NA	NA
S2T	Optical Fiber Characterization	face-to-face	NA	NA	cancelled	NA	NA	NA
S2T	Innovations and Security Aspects in ICT Technologies	face-to-face	NA	NA	cancelled	NA	NA	NA
SUDACAL) Big Data	face-to-face	3-5SEP19		implemented	24	24	Submitted
SUDACAD) Big Data (2)	face-to-face	10-12SEP19		implemented	23	23	Submitted
SUDACAD) Software Defined Networking (SDN) and Openflow Protocol Practical Implementation	face-to-face	24-26JUN19		implemented	19	19	Submitted
SUDACAD	Cloud Computing	face-to-face	17-19SEP19		implemented	33	33	Submitted
SUDACAE	O Ultra-Microwave Broadband Internet Access	face-to-face	22-24OCT19		implemented	28	28	Submitted
SUDACAD	Internet Governance: Policy and Technical Perspective	face-to-face	26-28NOV19		implemented	33	33	Submitted
SUDACAD	Computer-aided Spectrum Management	face-to-face	17-19DEC19		implemented	26	26	Submitted
SUDACAD	Project Management for ICT Implementation	face-to-face	10-12 DEC19		implemented	30	30	Submitted
SUDACAD	Artificial Intelligence	face-to-face	NA	NA	cancelled	NA	NA	NA -