ITU CENTRES OF EXCELLENCE NETWORK OF THE

ARAB STATES REGION

DRAFT REPORT

OF THE

4TH STEERING COMMITTEE MEETING

10 DECEMBER 2020

Online Meeting

1. INTRODUCTION AND OPENING

The 4th Steering Committee Meeting of the ITU Centres of Excellence for Arab States for the 2019-2022 cycle was exceptionally held online, on 10 December 2020, because of restrictions caused by the Covid-19 pandemic. The Steering Committee Meeting was attended by 17 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. Adel Darwish, Regional Director of the ITU Arab States Regional Office, delivered the opening remarks on behalf of ITU. Mr. Darwish stated that the aim of the meeting which is mainly the reporting of the implementation of training activities of 2020 and presentation of training plans for 2021. 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 is also highlighted that COVID-19 has demonstrated the urgent need for the role of digital technology in facilitating delivery of online training, which enables learners to participate in training activities without being subject to any restrictions by virtue of their geographical location, the location of trainers, or their different timing. On the other hand, the pandemic emphasized the need for skills compared to the pace of training, changes in teaching and learning approaches, the changing role of academia and industry in light of these developments and the role of digital technology in skills development, which requires a re-evaluation of the prevailing approaches in the field of digital skills development and human resource development in a changing environment for ICTs.

Mr. Darwish thanked the Virtual Host of the meeting, the ITU Centre of Excellence, Tunis International Centre of Environmental Technologies (CITET)-Tunis.

Ms. Susan Teltscher, Head of the Capacity and Digital Skills Development Division of ITU, greeted the participants and highlighted the objectives of the meeting, the main agenda items and expected outcomes (training catalogue for 2021 and quality assurance process of CoE training content, etc.). She also mentioned that this meeting was a mid-cycle meeting and would therefore take stock and review the activities carried out in the network during the first two years of the cycle (2019 and 2020).

The Outgoing Chair, Mr. Rashid Mohamed Osman, Director General, SUDACAD-Sudan gave his opening remarks and thanked all CoEs for their commendable achievements despite having gone through the most difficult and challenging times due the COVID-19 pandemic but which also provided an opportunity for CoEs to accelerate the adoption of the e-learning. He ends by wishing the incoming chair the best of luck for the coming year 2021.

2. CONFIRMATION AND REMARKS BY THE INCOMING CHAIR

The confirmation of the Incoming Chair was led by Ms. Susan Teltscher, Head of the Capacity and Digital Skills Development Division of ITU. Ms. Teltscher oversaw the confirmation of the Steering Committee Chair nominated by the hosting country as per stipulations of the CoE operational guidelines. The meeting confirmed the chairmanship of Tunis represented by Mrs. Kmaira Ben Jannet, Director General, CITET-Tunisia.

Mrs. Kmaira Ben Jannet greeted, welcomed all participants and gave her opening remarks. She thanked ITU for organizing the SC meeting, invited ITU to continue providing support to CoEs and highlighted the importance of capacity building and skills development for the ICT sector in Arab region. She thanked the Outgoing Chair for having assumed chairmanship during some of the most difficult periods given the COVID-19 pandemic and the devastating impact it had on learning. She ended by commending CoEs' work and efforts to continue working in these difficult times.

Mrs. Kmaira Ben Jannet thanked the meeting for the nomination and chaired the 4th Steering Committee Meeting of the CoE Network for Arab States (2019-2022) Cycle. Mrs. Kmaira handed over the meeting to her colleague, Mr. Jawhar Abdelkrim, to chair the meeting on her behalf due to her urgent commitment with the minister.

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

Virtual official group photo

3. CENTRES OF EXCELLENCE PRESENTATIONS: 2020 IMPLEMENTATION AND TRAINING PLANS FOR 2021

Presentation by ITU

Firstly, Eng. Mustafa Almahdi, Programme Officer presented an overview of training courses planned, implemented, registered and certified participants in 2020 and highlights the key challenges faced during 2020 including COVID-19 which resulted in a reduced number of training courses implemented. In 2020, ITU Centres of Excellence for Arab States had offered 24 training courses out of which 9 were implemented and 14 were cancelled and 1 to be delivered before end of 2020. Eng. Almahdi emphasized the need of close cooperation of CoE focal points for implementation of the CoEs courses and highlighted that only 2 CoEs out of 4 in the region were are active which also contributed to the low implementation level of the OP2020 activities and prove the need for improvement of the performance of the network, even despite COVID-19 restrictions. Overall, 208 participants were registered in the trainings delivered by the CoEs, out of which 171 were certified. In comparison to 2019, ITU Centres of Excellence network experienced significant growth of trained and certified people. In 2019 out of 34 training courses planned, only 15 were implemented, adding to 272 people trained and 261 certified. The Annex 3 shows the implementation of CoE activities in 2020 and Annex4 shows the implementation of CoE activities in 2019.

Presentations by Centres of Excellence

The Chair invited the CoEs to present their detailed 2020 activities report, including challenges faced in the implementation of training courses.

SUDACAD, Sudan

Five out of Seven face-to-face/online trainings that had been planned for 2020, were implemented, 1 confirmed to be implemented before end of 2020 and 1 postponed.

No	Course Title	Date	Delivery Mode	Status	Number of participants	Fees
1	Agile Project Management for ICT Applications & Services	13 - 23 June 2020	Online	Implemented	37	75 USD
2	Software Defined Network (SDN)	09 - 16 Aug. 2020	Online	Implemented	37	75 USD
3	Big Data	22 - 24 September 2020	Face to Face	Implemented	39	150 USD
4	Fiber To The Home (FTTH)	06 - 08 October 2020	Face to Face	Implemented	42	150 USD
5	Internet Governance	27 - 29 October 2020	Face to Face	Implemented	25	150 USD

6	Ultra-Microwave Broadband Internet Access	21 - 24 December 2020	Online	Implemented	NA	75 USD
7	*Cloud Computing*	*1 - 4 Feb. 2021*	*Online*	*Postponed*	*NA*	*75 USD*

NAUSS (Regional Entity), Saudi Arabia

In 2020, NAUSS has unable to deliver any of the four planned courses.

No	Course Title	Date	Delivery Mode	Status	Number of participants	Fees
1	Ethical Hacking (CIEH)	4-10MAY20	Face to Face	Cancelled	NA	500 USD
2	Advanced Cyber Security Training (CompTIA Security+)	11MAY-17JUL20	Face to Face	Cancelled	NA	500 USD
3	Basic IoT Training	20-26JUL20	Face to Face	Cancelled	NA	500 USD
4	Basic Cyber Security Training (CompTIA Security)	13JUL-21AUG20	Face to Face	Cancelled	NA	500 USD

CITET, Tunisia

In 2020, One out of Eight face-to-face/online trainings that had been planned for 2020, was implemented and 7 cancelled.

No	Course Title	Date	Delivery Mode	Status	Number of participants	Fees
1	Applications of Geographic Information System (GIS) in Environmental Management and Resources Protection -Level 1	07 - 10 September 2020	Face to Face	Implemented	7	400 USD
2	Application of Geographic Information System (GIS) in Environmental Management and Resources Protection -Level 2	23 - 27 November 2020	Online	Cancelled	NA	100 USD
3	How to assess your products carbon footprint	7 - 11 December 2020	Online	Cancelled	NA	100 USD
4	Environmental Impact Assessment	14 - 18 December 2020	Online	Cancelled	NA	100 USD
5	AM4.1: How to carry out a full Life Cycle Assessment (LCA)	22-25/3/2021	Face to Face	Cancelled	NA	400 USD
6	AM5.2: How to assess the Carbon Footprints of Sectors, Countries and Regions	24-27/5/2021	Face to Face	Cancelled	NA	400 USD
7	Smart and Sustainable cities	31/5 – 11/6/2021	Online	Cancelled	NA	400 USD
8	FM6: E-waste and the Circular Economy	20/09 01/10/2021	Online	Cancelled	NA	120 USD

International Telecommunication Union

S2T, Tunisia

Three out of Five online trainings that had been planned for 2020, were implemented and 2 cancelled.

No	Course Title	Date	Delivery Mode	Status	Number of participants	Fees
1	Cyber security awareness & forensics	13 - 19 July 2020	Online	Implemented	12	150 USD
2	5G Mobile Networks and Systems	14 - 20 September 2020	Online	Implemented	4	150 USD
3	Domain Name System Security Extensions (DNSSEC)	21 - 27 September 2020	Online	Implemented	5	150 USD
4	*Optical Access Networks and Fiber to the X (FTTX) Technologies*	*02 - 08 November 2020 (postponed)*	*Online*	*Cancelled*	*NA*	*150 USD*
5	*Optical Transport Networks : DWDM*	*25 November - 02 December 2020 (postponed)*	*Online*	*Cancelled*	*NA*	*150 USD*

TRAINING PLAN 2021

Based on a series of presentations on the training plans for 2021, including details on the content, expected target audience and pricing, the list of 2021 planned trainings has been established.

SUDACAD, Sudan

No.	Training course topic	Proposed Dates	Expected number of participants	Mode of Delivery
1	Agile Project Management for ICT Applications & Services	March, 22-31	15	Online
2	Risk Management for ICT Applications & Services	June, 21-30	15	Online
3	Big Data	July, 27-29	15	Online
4	Fibre To the Home (FTTH)	September, 21-23	15	Online
5	Computer-aided Spectrum Management	October, 25-27	15	Online
6	Ultra-Microwave Broadband Internet Access	November, 23-25	15	Online
7	Internet Governance	December, 21-23	15	Online

NAUSS (Regional Entity), Saudi Arabia

No.	Training course topic	Proposed Dates	Expected number of participants	Mode of Delivery
1	Cybercrime Foundation	February, 22-31	15	Online
2	Cybersecurity Foundation	March, 21-30	15	Online

CITET, Tunisia

No.	Training course topic	Proposed Dates	Expected number of participants	Mode of Delivery
1	Application of GIS in environmental management and resources protection, level-1	February, 8- 11	15	Online
2	Application of GIS in Environmental management and resources protection, level-1	September, 13-16	15	Online
3	How to carry out a full life cycle Assessment	March, 22-25 November, 1-5	15	Online Face to Face
4	How to Assess Your Products Carbon Footprint	May, 24-27 December, 20-24	15	Face to Face Online
5	Smart and Sustainable Cities	June, 7-11	15	Online
6	Environmental Impact Assessment	September, 20-24 November, 8-11	15	Online Face to Face

S2T, Tunisia

No.	Training course topic	Proposed Dates	Expected number of participants	Mode of Delivery
1	Domain Name System Security Extensions (DNSSEC)	March, 8-14	15	Online
2	Wireless Networks Security	May, 11-17	15	Online
3	Security aspects in emerging ICT technologies	October, 12-18	15	Online Face to Face
4	5G and IMT 2020 Mobile Networks and Systems	February, 8-14	15	Face to Face Online
5	Infrastructure Solutions for Broadband Applications	February, 22-28	15	Online
6	Certified Fiber Optical Technician	April, 12-16	15	Face to Face
7	Certified Fiber Characterization Engineer	June, 14 -18	15	Face to Face

All presentations made are available on the website:
https://academy.itu.int/index.php/centres-excellence/coe-cycles/coe-cycle-2019-2022/steering-committees/4th-steering-committee-meetings/arab.

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.

4. DISCUSSION ON STRATEGIC AND OPERATIONAL ISSUES RELATED TO THE IMPLEMENTATION OF THE COE NETWORK ACTIVITIES, INCLUDING EXTERNAL ASSESSMENT OF ITU CAPACITY DEVELOPMENT ACTIVITIES, PROCESS OF QUALITY REASSURANCE AND GLOBAL COE MEETING

Ms. Susan Teltscher, Head of the Capacity and Digital Skills Development Division of ITU, delivered presentations followed by discussions on new strategic and operations resulting from new changes in ITU managerial perspective for a more Fit4purpose organization. During her intervention, she addressed topics on the ITU feasibility study on the establishment of an ITU training institute, the new Quality Assurance process for CoE training content and the respective workflow for developing CoE training plans and training materials, the participation of ITU staff in CoE training courses, and the proposal to organize a global CoE meeting in 2021.

Ms. Teltscher briefed the Steering Committee on the background of the feasibility study, as well some of the objectives of the study such as identifying existing gaps and areas of improvement in the area of capacity development – including the CoE progamme - and presenting alternative options to improve ITU's work in this field. She also explained that the results of the study may have implications for the future of the CoE programme.

In this sense, the following topics were highlighted and discussed:

- The importance of the work of the ITU Secretariat on the process of quality assurance which requires a closer coordination with CoEs for the presentation and validation of training outlines with the ITU regional leads and Thematic Priority Coordinators before the approval of annual training plans.

- It was agreed that up to two ITU Staff can participate in CoE courses with the aim of strengthening of the process of the quality assurance at no cost of participation. At the end, ITU and CoEs could benefit from the feedback of ITU participants.

- Based on a proposal from SUDCAD, it was agreed that one staff of CoEs can participate in each of the CoEs courses at no cost of participation.

- It was suggested by CoEs to increase the number of meetings to improve coordination and CoEs welcomed the ITU proposal to hold a Global CoE Meeting in 2021, with specific discussions regarding thematic focus of CoEs across regions and possible cooperation opportunities.

- It was recommended to revise the training plan before the final approval of 2021 activities and analyze the feasibility of implementation of all courses planned for the 2021 cycle. It was recommended that CoEs, especially those with lower implementation rates, reconsidered the number of courses outlined.

- NAUSS committed to work via its recently established cybersecurity and cybercrime CoE center with ITU and offered to host ITU activities on cybersecurity areas including global events on cybersecurity global index.

The Steering Committee endorsed all proposals and made the following observations

- CoEs agreed to revise the provided outline and short description of planned trainings by 15 December 2020 to establish the training catalogue for 2021. This catalogue shall be then used as a communication tool around the region.

- The CoEs noted that in the next year the training outlines must be submitted 2 (two) months before the Steering Committee meeting to allow for the internal ITU process to take place smoothly.

- ITU Staff is permitted to participate in CoE courses with no training fee. There should be no expectation that they would perform any other task than learning..

- One staff from each of the CoEs allowed to attend the other CoEs courses without training fee

- Possibility to engage with other CoEs to provide joint trainings: It was decided that CoEs have the sole responsibility in developing partnerships and that the ITU Secretariat may not be regarded in those arrangements.

- Decided to maintained the previous business model of revenue generation (20% of revenue to be transferred to ITU and 80% for CoEs) and courses pricing ranges (75 USD as minimum for online course and 100 USD per day for face to face course).

- CoEs agreed to endorse a virtual global meeting of CoEs to be held in the first semester of 2021, which shall provide discussions to facilitate networking between CoEs with similar thematic focus.

- The Steering Committee agreed to hold its next mid-year review meeting in June. A specific date is yet to be determined. The Meeting will focus on implementation of activities during the first semester and finalize the training plans for the second semester.

5. ADOPTION OF DRAFT REPORT AND ADDITIONAL CONCLUSIONS

The Steering Committee agreed that ITU Secretariat will send the draft outcome report to CoEs for review and inputs and publish it as soon as it has the final approval of SC members, in English. The date of the next meeting of the Steering Committee should be identified for consultations and should target the mid-year revision period in June 2021, which will be a virtual meeting.

For the next face-to-face meeting NAUSS or S2T offered to host it in their premises in December 2021.

6. CLOSING

The meeting ended with closing remarks from Ms. Teltscher on behalf of ITU and the Chair, Mr. Jawhar Abdelkrim. Mr. Abdelkrim concluded and gave his closing remarks and thanks all participants for their active participation and fruitful contributions. He wished all participants safe and healthy 2021 and declared the meeting closed.

ANNEX 1: LIST OF PARTICIPANTS

1) Member States

Morocco (Kingdom of)

Mr. Mustapha BENJILLALI, Institute of Electrical and Electronics Engineers, Inc. (IEEE) and GCBI Member

Sudan

Mr. Adil HASSAN, Telecommunications and Post Regulatory Authority

Ms. Sawsan SIDDIG ELHADI, Telecommunications and Post Regulatory Authority

Tunisia

Ms. Hend BEN HADJI, Ministère des Technologies de la Communication et de l'Economie numérique

Number of participant(s): 4

2) ITU-D Sector Members - Regional and other International Organizations

GSMA

Ms. Sarah GAFFNEY

Number of participant(s): 1

3) ITU-D Sector Members - Recognized Operating Agencies

Saudi Telecom, Saudi Arabia

Mr. Faisal ALMOGHISEEB

Eng. Tariq ALOKILY

Eng. Abdullah ALMESFER

Sudatel Telecom Group, Sudan

Mr. Rashid OSMAN

Mr. Muhanad SULIMAN

Number of participant(s): 5

4) ITU-D Sector Members - Other Entities
Tunisia
Smart Tunisian Technoparks
Ms. Houda JARRAYA

Number of participant(s): 1

5) ITU-D Sector Members - REGORG
League of Arab States
Dr. Reham AHMED ELMAYET

Number of participant(s): 1

6) Academias
Naif Arab University for Security Sciences (NAUSS), Saudi Arabia
Mr. Sundaresan RAMACHANDRAN

Number of participant(s): 1

7) Non Members
Tunis International Centre for Environmental Technologies, Tunisia
Ms. Kmaira BEN JANNET
Mr. Jawhar ABDELKRIM
Mr. Kamel SAIDI
Ms. Rym Ben AMMAR GUIZANI

Number of participant(s): 4

ANNEX 2: AGENDA OF THE 4TH STEERING COMMITTEE MEETING

4th Steering Committee Meeting of the ITU Centres of Excellence for Arab Region

10 December 2020 | 10:00 – 13:00 (Cairo time) |Online Meeting|

DRAFT AGENDA

Time	Items
08:30 – 09:00	**Online networking and testing of video and audio**
09:00 – 09:15	**Opening** • Welcome remarks by Mr. Adel M. Darwish, Regional Director of ITU Arab Regional Office • Remarks by the outgoing Chair, Mr. Rashid Mohamed Osman, Director General, SUDACAD • Confirmation of and remarks by the incoming Chair, Mrs. Kmaira Ben Jannet, Director General, CITET
	Group picture
09:15 – 10:30	**Centres of Excellence presentations: 2020 implementation and training plans for 2021** ITU will briefly share an overview of the status of implementation in the region for 2020. Then each CoE will report on the implementation of their 2020 activities. Each presentation should cover the courses that were implemented against the courses planned 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 2021, including the topics, exact dates, training fees charged, audience targeted etc. CoEs are expected to submit the information on the course description template provided by ITU and ensure that every field in the template is completed, three weeks before the SC meeting. CoEs are expected to deliver at least 2 training courses per priority area per year. In

	addition, CoEs may offer courses on emerging topics outside their priority areas if not covered by any other CoE in the region. The objective of the discussion is to agree on the draft training schedule for 2021.
	• **Presentation by ITU (ARB-RO)**
	  ○ Overview of status of implementation in the region, Eng. Mustafa Almahdi, Programme Officer and Capacity Development focal point for ITU Arab regional Office
	• **Presentation by SUDACAD,** Eng. Mohaned Abdalla Suleiman, Senior Engineer at Planning & Development Dept.
	  ○ Discussion
	• **Presentation by NAUSS,** Dr. Abdulrazaq Al-Morjan, Director of Center of Excellence in Cyber Crimes and Digital Forensics
	• **Presentation by CITET,** Mr. Jawhar Abdelkrim, Marketing and Communication Responsible
	  ○ Discussion
	• **Presentation by S2T,** Ms. Houda Jarraya, ITU Focal Point, Smart Tunisian Technoparks (S2T)
	  ○ Discussion

Coffee break	
10.30 – 11:30	**Discussion on strategic and operational issues related to the implementation of the CoE network activities, including external assessment of ITU capacity development activities, process of quality assurance, ITU staff attending CoE courses and global CoE meeting** • Ms. Susan Teltscher, Head of Capacity and Digital Skills Development, ITU/BDT ○ Discussion
11:30 – 11:55	**Presentation of Draft Report and Adoption**
11:55 – 12:00	**Closing**

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ANNEX 3: IMPLEMENTATION OF COE ACTIVITIES 2020 AS OF 10 DECEMBER 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
SUDACAD	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
SUDACAD	Internet Governance: Policy and Technical Perspective	face-to-face	27-29OCT20		implemented	25	25	submitted
SUCADAD	Ultra-Microwave Broadband Internet Access	online	24-26NOV20	21-24DEC20	planned			
SUCADAD	Cloud Computing	online	29-31DEC20		planned			

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ANNEX 3: IMPLEMENTATION OF COEs ACTIVITIES IN 2019

2019

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

CoE	Courses planned	Delivery mode	Original dates	Final dates	Status	Number of participants registered	Number of 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
SUDACAD	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
SUDACAD	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